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Can Firms with Political Connections Borrow More Than Those Without? Evidence from firm-level data for Indonesia*

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Abstract

Using unique firm-level data for manufacturing sectors in Indonesia, we examine how political and economic connections of firms affect their access to finance. We identify the political connections of a particular firm by whether the government owns its shares, whether politicians are on its board of directors, and whether its highly-ranked manager knows any politician personally. We find that politically connected firms are more likely to be able to borrow from state-owned banks. Moreover, being connected to the government raises the probability of being able to borrow as much as needed without any credit constraint. The financial benefit from political connections is more prominent for small and medium enterprises (SMEs) than for large firms. Furthermore, the benefit mostly comes from personal connections with politicians, rather than more formal connections as measured by government ownership or politicians on the boards of directors.

Keywords: Political connections, Credit constraints, Small and medium enterprises, Indonesia
JEL classification: G14; H11; L53

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1 Introduction

The benefits and costs of connections between firms and the government to firm values and performances have been discussed extensively in the literature (i.e. Goldman, Rocholl and So, 2009; Khwaja and Mian, 2005). On the one hand, firms with political connections are found to receive preferential treatments from state-owned banks and other financial institutions in China (Li et al., 2008), Pakistan (Khwaja and Mian, 2005), and Italy (Sapienza, 2004). Faccio et al. (2006), using firm-level data from 35 countries, also find that firms connected with the government are more likely to receive financial assistance from the government when they are distressed. On the other hand, Bliss and Gul (2012) show that politically connected firms have higher leverage and are perceived as being of higher risk by the financial market and audit firms in Malaysia. Thus, literature is still unclear about the role of political connections in firm financing in less developed countries.

This study examines how political connections could affect firms' financing in Indonesia, using a firm-level dataset collected by the authors. It has been found political connection has significant impacts on firm value (Fisman, 2001) and financing patterns (Leuz and Oberholzer-Gee, 2006) of public firms in Indonesia. The government and central bank in Indonesia are making efforts to facilitate small and medium enterprises (SMEs) financing by establishing a public credit bureau, allocating more credit resources towards the SMEs sector and setting up a government guarantee scheme (OECD, 2012). However, SMEs in Indonesia could still face difficulties in bank finance due to factors such as high net interest margins of banks and possible leakages in the government guarantee program, whose main participants are state-owned and regional banks (OECD, 2012; OECD, 2015).

Our study finds that in Indonesia, politically connected firms receive preferential treatments from banks in two ways. First, they are more likely to be able to borrow from state-owned banks. Second, being connected to the government raises the probability of being able to borrow as much as firm's need without any credit constraint. Furthermore, we show that benefits of political connections are significant for SMEs, but not for larger firms. This finding is consistent with other studies' findings that SMEs benefit more from financial development (Love, 2003; Laeven, 2003; Beck et al., 2008). Finally, we find that informal connections to the government, measured by personal relations between firm managers and politicians, play a more important role in providing financial benefits

than formal connections measured by government ownership and politicians in the board of directors.

The contributions of this study are threefold. First, we integrate the discussion of impact of political connections on firm financing into two stages of bank finance. Comparing to many previous studies using firm loan data in which only firms seeking for credits are included, our empirical strategy explicitly solves the sample selection problem. Second, a unique feature of our data is that we can identify different types of political connections. We distinguish between formal and informal political connections, finding larger importance of informal connections. Finally, this study adds to the discussion on effectiveness of government guarantee programs. Although government guarantee programs can be found in most OECD countries (LeLarge et al., 2008), they are rarely discussed by using firm-level data for less developed countries.

2 Conceptual Framework

2.1 Political Connections and Access to Credit

There has been large literature discussing how political connections could affect firm financing in less developed countries. Faccio et al. (2006) find politically connected firms are more likely to be bailed out by banks than non-connected firms during distress. Li et al. (2008) find that being a Communist Party member in China could help private entrepreneurs to obtain easier access to banks and other state institutions.

However, costs of political connections in the financial market are also high. Most notably, bribery costs of creating political connections could be high in less developed countries, as corruption of politicians and bureaucrats may not be stopped by the government due to weak law enforcement (Shleifer and Vishny, 1993). Bribery costs could add to firms' financial costs, which are already high in less developed countries. Moreover, Cole (2009) shows interest rates could be different across regions within a country and across time because of political reasons in India. This variation in interest rates adds some other costs to borrower firms.

The financial market distorted by the political factors could affect economic growth for the following reasons. First, as pointed out by Shleifer and Vishny (1993), high bribery costs would not

only increase financial costs for individual firms, but also hamper aggregate investment and growth. Second, investment will shift from projects that could earn high returns in the market economy to projects with political connections that earn high returns in corrupted economy (Shleifer and Vishny, 1993; Ayyagari et al., 2012). Political connections also distort the risk management of banks. Khwaja and Mian (2005) show that politically connected firms borrow 45 percent more and have 50 percent higher default rates than other firms in Pakistan. They argue the cost of such political rents is 0.3 to 1.9 percent of GDP every year. Similarly, Cole (2009) argues that the lending boom during election years in some politically competitive areas increases the default rate but does not increase production in India. Finally, because credit constraints are one of the most robust obstacles to firm growth (Ayyagari et al. 2008), the political distortion in the financial market could lead to an inefficient allocation of resources.

In summary, the existing literature shows that political connections distort availability and costs of credits. Therefore, we build the benchmark hypothesis to be tested later.

Hypothesis 1. *Political connections are associated with a higher probability that firms receive credits from banks, in particular, from state-owned banks.*

Moreover, instead of only focusing on the effect of political connection on access to bank finance, we would also like to investigate the effect on the entire financing process. Particularly, we want to investigate whether politically connected firms will be more likely to borrow as much as they want, conditional on their having already applied and received approval for their credits. It is likely that political connection may not affect the credit process at the application and approval stage but affect the amount that banks agree to lend.

Hypothesis 2. *Conditional on credit approvals from banks, political connections are associated with a higher probability that firms receive a sufficient amount of credits.*

2.2 Difference between Large Firms and SMEs

Another strand of literature focuses on the difference in credit constraints between SMEs and large firms. By using firm-level survey data from the World Business Environment Survey (WBES), Ayya-

gari et al. (2008) show that SMEs are more likely to suffer from financial obstacles than large firms. Beck et al. (2008) show that growth of SMEs suffer the most from credit constraints.

Indonesia is not an exception. Indonesian SMEs still have difficulties in receiving sufficient loans from banks. Recently, the government implemented policies to facilitate credits to SMEs, such as targeting the share of SMEs in bank loans,[1] providing government guarantees to productive SMEs, and providing information on credit history of SMEs.[2]

Under such conditions, however, political connections may benefit SMEs more than large firms by alleviating credit constraints, because large firms may have access to credits without any political connections. Policies such as financial development are found to have a larger effect on SMEs than on large firms (Love 2003; Laeven 2003). Therefore, we develop the third hypothesis.

Hypothesis 3. *Benefits of political connections shown in Hypotheses 1 and 2 are larger for SMEs than for large firms.*

3 Data

3.1 Data Description

The firm-level survey in Indonesia was conducted between September to December in 2014 in order to investigate information on social and business network, financing and innovation of firms in Indonesia. Targets are randomly drawn from the Manufacturing Industry Directory in 2012 by Centre Bureau of Statistics (BPS). Our final sample includes 296 firms in 17 cities across 5 sectors, after dropping some firms due to lack of information on firm age or employment. In order to investigate whether there is a heterogeneous effect of political connections between SMEs and large firms, we define firms with less than 100 employees, or with less than 50 billion Rupiah annual sales in 2013 as SMEs[3]. Table 2 shows that 83.8% of sample firms are classified as SMEs.

[1] Global Business Guide Indonesia. *An outlook on Indonesia's Microfinance sector.* Retrieve at May 8th, 2015, from http://www.gbgindonesia.com/en/finance/article/2013/an_outlook_on_indonesia_s_microfinance_sector.php

[2] Bank Indonesia. Retrieve at March 8th, 2015, from http://www.bi.go.id/en/perbankan/biro-informasi-kredit/Contents/Default.aspx

[3] The definition of SMEs in Indonesia differs among different institutions. In our analysis, we combine the definitions of the Small Enterprise Act No.9 (revised in 2008) and the Central Statistics Agency (BPS).

3.2 Key Variables for Estimation

To measure connections between firms and the government, we create three different variables. The first one, *Formal Political*, is an indicator equals 1 if the firm has any board member belong to the central or local government, or the firm has shares owned by the central or local government. The second one *Informal Political*, which measures the informal connection with the government, is an indicator equals 1 if the owner, director or a highly-ranked manager interviewed in the survey has a personal relationship with any politician, she can get important information from the government, she feels the firm can get easier approvals from the government than other firms, or the firm receives any financial subsidies from the government. The third one *Political* is a more general measure of connections between firms and the government. It equals 1 if the firm has formal or informal political connections.

In addition, we define measures of the strength of formal and informal political connections. *Formal Strength* equals the percentage of politician in the board of directors of the firm. *Informal Strength* equals the number of *yes* to the four questions used to create *Informal Political*.

The summary statistics are reported in Table 2. The number of firms with political connections is much smaller than that without any connection. The percentages of politically connected firms are 8.4% (*formal*), 10.1% (*informal*) and 11.5% (*political*). The sample means of *Formal Strength* and *Informal Strength* are 0.04 and 0.14, respectively.

We use two variables to indicate credit constraints in two stages of loan application. First, *Approval* is an indicator equals 1 if the firm receives credits from any of state-owned, private or foreign-owned banks. The second indicator, *Satisfied*, equals 1 if credit the firm received was equal to the amount it expected. Table 2 indicates that 36% of all firms have access to bank credits. Among them, 44% do not receive the amount of bank loans they wanted. These figures imply that even when firms receive bank credits, they are still likely to face credit constraints from their banks. In the second stage, we also use the variable *State Bank* to indicate whether the firm receive its credit from a state-owned bank or not.

We include other firm characteristics in the estimation of credit access and constraints. *Employment* is the log of the number of permanent workers to control firm's size, whereas *Foreign* is

an indicator that takes a value of one if the largest shareholder of the firm is a foreign firm. As the financing cost of banks in Indonesia is high, foreign-owned firms may prefer financing through their internal capital and not utilize the domestic financial market. We control for firm age (*Firm Age*) as well as the current value of firms' purchase of machinery and equipment (*Investment*). In addition, we use the share of direct exports in total sales. As argued in Banerjee and Munshi (2004), the amount of direct exports could be a measure of firm performance since firms will conduct direct export only when they have enough business and production capacity. However, it is possible firms with direct export have more access to alternative source of finance and rely less on bank finance. We also control geographical diversity of firms' business networks using two variables, *Local Client* and *Local Supplier*, which are 1 if the number of clients and suppliers, respectively, in the same province exceeds the corresponding number outside of the province.

4 Empirical Strategy

Since we want to investigate the impact of political connections on firm financing in the whole financing process, we separate the analysis into two stages: loan approval and loan amount setting. We can conduct loan approval analysis on the full sample in the first stage. However, in the second stage estimation, we can only observe firms which actually received approvals from banks. Since there could be private information driving firms self-select into applying for bank loans, we need to control for the selection effect at the second stage. We use the Heckman probit model to explicitly account for this problem.

In the first stage, we look at the impact of political connections on the probability that whether firms receive bank loans. More specifically, we estimate the following equation:

$$\mathtt{Approval}_{ijp} = 1[\alpha + \beta \mathtt{Political}_i + \theta \mathtt{Association} + X_i\gamma + D_j + D_p + u_{1ijp} > 0], \quad (1)$$

where $u_{1ijp} \sim N(0,1)$ is the error term in the first stage estimation. $\mathtt{Approval}_{ijp} = 1$ if firm i at industry j and province p received any bank loan. $1[\cdot]$ is an indicator function. $\mathtt{Political}$ is a variable that indicates political connections of firm i, which is either $\mathtt{Formal\ Political}$, $\mathtt{Informal\ Political}$,

or $Political$. X_i is a vector of firm characteristics. D_j is an industry fixed effect, whereas D_p is a province fixed effect. To reduce the identification concerns, we include the variable $Association$ in Equation 1, a dummy variable which equals 1 if the owner or highly-ranked manager interviewed is a member of non-professional associations such as sport clubs and community associations. $Association$ could be a proxy for the manager's social connectedness which could increase the probability that the firm is acknowledged and accepted by any bank in the first-stage. However, once the firm has been accepted by the bank, the actual available amount and other terms of loans will more likely be affected by information from firms' financial report and banks' direct investigation.

In the second stage, conditional on loan approval, we estimate the equation for credit constraints in loan amount setting:

$$Satisfied_{ijp} = 1[\alpha + \beta Political_i + X_i\gamma + D_j + D_p + u_{2ijp} > 0], \tag{2}$$

where $Satisified_{ijp} = 1$ if the actual amount of credit firm i was equal to its desired amount of credit. And $u_{2ijp} \sim N(0,1)$ is the error term in the second stage estimation. Let $\rho = Corr(u_{1ijp}, u_{2ijp})$, if $\rho \neq 0$, Equation 2 cannot be consistently estimated and a two-step procedure could be applied (Wooldridge, 2010).

5 Results

5.1 Political Connection and Loan Approval

The results from the probit estimation of Equation 1 are shown in Table 3. The estimations are conducted for the whole sample (columns 1-3) and for the subsample of SMEs (columns 4-6). There are three notable findings from the analysis.

First, political connections do not have a significant impact on access to credits in either of the two groups[4]. The results of estimations on *Association*, is positively associated with the probability of receiving bank credits at the 1% significance level. This result shows the importance of social

[4]We also use political board members from ruling parties to proxy formal connections. The estimation results are similar in both stages.

connectedness of top managers in the loan approval stage.

Second, the estimations on *Foreign* show that firms' foreign ownership has a significant impact on their financing patterns. In all six columns, foreign ownership are negatively associated with a probability of receiving bank credits. This implies that probably because of high costs of bank financing in the Indonesian financial market, foreign-owned firms are more likely to receive credits from abroad or from their parent firms in the home country.

For other controlling variables, investment is positively associated with a probability of receiving bank credits. The positive correlation could come from both sides. Firms with new fixed assets could have easier access to banks, while firms could invest in new fixed assets after they receive more credits. The variable *Local Supplier* is negatively correlated with the probability of receiving bank credits at the 10% significance level for the subsample of SMEs. This finding shows that SMEs with geographically less diverse suppliers are less likely to receive bank credits.

To further investigate the impact of political connections on different two types of banks, private banks and state-owned banks, we use a multinomial logit model for the first stage estimation[5]. That is, we now have three types of firms in the first stage: firms which receive no bank credit, firms which receive credits mostly from private banks, and firms which receive credits mostly from state-owned banks.

The results for the whole sample are shown in columns (1)-(3) of Table 4, while those for SMEs are in columns (4)-(6). We find that SMEs with informal political connections are more likely to receive credits from state-owned banks, while informal political connections do not have any significant effect on SMEs' receiving credits from private banks. This finding is consistent with previous literature, such as Li et al. (2008) and Cole (2009).

5.2 Political Connections and the Amount of Loans

The results for Equation 2 using a Heckman probit model are shown in Table 5. Similar to the estimation for Equation 1, columns (1)-(3) are for the whole sample, whereas (4)-(6) are for the subsample of SMEs. We find the χ^2 tests reject the null hypothesis that $\rho = 0$ in all three estimations

[5]We drop the variables *Association* and *Direct Export* to reach convergence in our estimations.

on the subsample of SMEs. The results imply that the unobserved factors in the first stage of loan approval could affect the probability of being constrained in the second stage of loan amount setting.

Among the three definitions of political connections, *Informal Political* and *Political* are positively associated with the probability of being financially satisfied for SMEs. Moreover, the economic significance is also large as the marginal probabilities of *Informal Political* and *Political* are 29.5% and 26.3%, respectively, assuming all other covariates at means. However, if we include large firms and estimate Equation 2 using the whole sample, the significance on *Informal Political* and *Political* disappears.

Another interesting finding is that *State Bank* is negatively associated with the probability of being credit constrained at the 1% significance level. State-owned banks often provide credit with lower financial costs and adequate loan amounts. However, credits from state-owned bank require collaterals more strictly.

5.3 Discussion

In summary, we find that political connections alleviate credit constraints of SMEs in particular in different stages of the loan application process. Firms with political connection are more likely to borrow from state-owned banks in the first stage where clients are selected. In the second stage where the amount of credits is determined, firms with political connections are more likely to receive credits of the amount they require.

The benefit of political connections may come from various channels. First, because firms with political connections may be closer to state-owned bank officers, they face lower lobbying costs when they are applying for bank credits. Second, firms with political connections may be closer to government-led investment projects and therefore are easier to receive support from banks. As argued in Faccio, Masulis and McConnell (2006), firms with political connections may receive financial assistance to support them during business trouble and distress. Finally, political connections provide firms easier access to government support policy such as the government guarantee program (KUR) in Indonesia, which could help reduce collateral requirements.

We find informal connections are more important to SMEs than formal connections. One expla-

nation is the definition of formal political connections is based on the existence of politician in board members. We cannot directly observe to what extent firms could benefit from such connections in terms of bank finance. In contrast, the informal connections are more straightforward since our questions are directly related to the easiness to receive private information, government subsidy or approval of licenses.

5.4 Robustness Checks

One concern in the estimation for Equation 1 is that we can not distinguish between firms which apply for loans but rejected and which do not need bank finance. As from Table 3, foreign firms are much less likely to borrow from domestic banks because they have better access to the internal and foreign capital market. If we assume foreign firms are less dependent on domestic banks, by excluding them, we can reduce the concerns that we include firms with no needs for bank finance in our first-stage estimations.

The results of multinomial logit model for the first-stage after excluding firms with foreign ownership are reported in Table 6. In the subsample of SMEs, being politically connected is still associated with higher probability of getting finance from state-owned banks. Moreover, the economic significance is also similar to the result when we do not control for firms without needs for bank finance.

We also use strength of political connection as our alternative measures in the second stage. The variable *Formal Strength* measures firms' closeness with political parties by using the percentage of political board members. The variable *Informal Strength* measures strength of informal connection by using the number of questions answered *yes* in all questions about firms' informal political connections. We repeat the estimation in the previous section and replace the indicators of political connections with strength of political connections. As shown in Table 7, the results are similar to those using indicators of political connection: one degree increase in the informal strength could increase the probability of being financially satisfied by around 16% under 1% significance level for SMEs.

5.5 Political Connections, Bank Finance and Allocative Efficiency of Capital

One question following our analysis is: if political connections bring benefit to those connected firms in terms of bank finance, what is the consequence of such impacts? If those politically connected firms happen to be more productive with additional capital, then banks' possible preferential treatment towards politically connected firms could help firm's growth and in overall may bring benefits to the economic development. However, if the preferential treatment could not be justified by the improvement of capital allocation, it could be driven by corruption and unfairness in the current economic system and be detrimental for the development of the whole economy.

To investigate this problem, we follow the strategy used in Banerjee and Munshi (2004) and Li et al. (2008) by including an interaction between fixed assets and political connection. The results for the OLS estimation are reported in Table 8. The dependent variable is *Value Added*, which measures firm productivity. The first column is the estimation result on all SMEs. Columns from (2) to (4) are results on SMEs who have access to bank finance. In addition to the tests on capital sensitivity on firm productivity, we also include *State Bank* and *Satisfied* in the estimations to check whether the possible preferential treatment from state-owned banks and less financial constraint on politically connected firms is associated with more productive firms.

From the results reported in Table 8, we cannot find significant evidence showing political connection is associated with improvement in capital allocation in terms of fixed assets and preferential treatments from banks. On the contrary, in the third column, we find firms borrowing from state-owned banks with political connections are associated with lower productivity at the 10% significance level. This adds to our concern that political connection may not lead to better a capital allocation. Instead, credit resources could be channeled from state-owned banks to those politically connected but less productive firms.

6 Conclusion

This paper examines effects of political connections on access to bank credits, using firm-level data for the manufacturing sector in Indonesia. A unique feature of our data is that they contain detailed information on firms' political connections and bank finance for both SMEs and large firms. To

our best knowledge, our study is the first to integrate the role of political connections in access to finance into each of the two loan application processes. We find political connections help SMEs to be approved for credits by state-owned banks. Conditional on credit approvals, SMEs with political connections are more likely to receive credits of the amount they requested. Comparing the subsample of SMEs and the whole sample including larger firms, we conclude that political connections do not alleviate credit constraints of larger firms. In addition, we find that informal political connections based on personal relation between firm managers and politicians are more important than formal political connections based on the presence of politicians in the board of directors. Furthermore, we find weak evidence that political connections do not lead to better capital allocation but instead shift financial resources from state-owned banks to low-productivity firms.

Our results provide several important policy implications to improve access to credits for SMEs in less developed countries. Most notably, our paper adds to the discussion about government-led credit guarantee system in less developed countries. Although there is evidence showing the guarantee program could improve firms' business performance and employment, our research shows that in less developed countries with weak institutions and legal enforcement, a government-led guarantee program could lead to an inefficient allocation of financial resources.

Table 1: Variable Definitions

Variables	**Definition**
Approval	= 1 if the firm received credit from state-owned bank, private bank or foreign bank
Satisfied	= 1 if the firm received the expected amount of credit at year 2013
State Bank	= 1 if the bank lenders is a state-owned bank
Association	= 1 if the top manager is a member of non-professional association
Political	= 1 if the firm has board members belong to the central or local government, it has state-owned capital, or the firm has informal connection to the government
Formal Political	= 1 if the firm has board members belong to the central and local government, or it has state-owned capital
Informal Political	= 1 if the firm has informal connection to the government
Formal Strength	Percentage of board members belong to the central or local government
Informal Strength	Number of questions about informal political connection answered *yes*
Employees	Log(number of permanent employees)
Direct Export	Proportion of direct exports in total sales during the period of 2013
Foreign	= 1 if the firm's largest shareholder is a foreign company
Investment	Log(purchase/addition of machine and equipment + 1)
Firm Age	2013 - firm's founding year
Local Client	= 1 if the firm has larger number of clients in the same province
Local Supplier	= 1 if the firm has larger number of suppliers in the same province
Value Added	Log(annul sales in 2013 - intermediate materials in 2013)
Fixed Capital	Log(current value of machinery, equipment and others in 2013)

Table 2: Summary Statistics

	Obs.	Mean	S.D.	Min	Median	Max
Finance						
Approval	296	0.361	0.481	0.000	0.000	1.000
Satisfied	107	0.561	0.499	0.000	1.000	1.000
State Bank	107	0.234	0.425	0.000	0.000	1.000
Political Connection						
Political	296	0.115	0.319	0.000	0.000	1.000
Formal Political	296	0.084	0.279	0.000	0.000	1.000
Informal Political	296	0.101	0.302	0.000	0.000	1.000
Formal Strength	295	0.041	0.189	0.000	0.000	1.000
Informal Strength	296	0.139	0.471	0.000	0.000	4.000
Firm Characteristics						
Association	296	0.135	0.342	0.000	0.000	1.000
SME	296	0.838	0.369	0.000	1.000	1.000
Fixed Captial	251	8.612	2.267	0.405	8.700	14.509
Value Added	219	8.266	2.076	1.792	8.294	14.883
Employees	296	4.834	1.164	1.609	4.687	8.790
Foreign	296	0.152	0.360	0.000	0.000	1.000
Investment	296	3.203	3.450	0.000	2.398	12.612
Firm Age	296	25.145	13.465	0.000	23.000	96.000
Direct Export	296	0.084	0.236	0.000	0.000	1.000
Local Client	296	0.608	0.489	0.000	1.000	1.000
Local Supplier	296	0.831	0.375	0.000	1.000	1.000

Table 3: Political connections and loan approval: probit estimation in the first stage

	Whole			SME		
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Var.	Approval	Approval	Approval	Approval	Approval	Approval
	ME/SE	ME/SE	ME/SE	ME/SE	ME/SE	ME/SE
Political	-0.076			-0.047		
	(0.159)			(0.154)		
Formal Political		-0.070			-0.096	
		(0.121)			(0.070)	
Informal Political			-0.039			-0.049
			(0.157)			(0.156)
Association	0.279***	0.275***	0.271***	0.364***	0.374***	0.363***
	(0.082)	(0.079)	(0.080)	(0.081)	(0.106)	(0.088)
Employees	0.039	0.036	0.038	0.040	0.036	0.040
	(0.033)	(0.034)	(0.033)	(0.047)	(0.047)	(0.046)
Foreign	-0.294***	-0.292***	-0.290***	-0.355***	-0.361***	-0.355***
	(0.083)	(0.077)	(0.082)	(0.105)	(0.104)	(0.105)
Investment	0.028***	0.029***	0.028***	0.027***	0.029***	0.027***
	(0.003)	(0.004)	(0.003)	(0.008)	(0.009)	(0.008)
Firm Age	-0.002*	-0.001	-0.002	0.002	0.002	0.002
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)
Direct Export	-0.157	-0.155	-0.157	-0.174	-0.175	-0.175
	(0.105)	(0.099)	(0.106)	(0.123)	(0.118)	(0.122)
Local Client	0.032	0.035	0.031	0.054	0.055	0.054
	(0.024)	(0.025)	(0.021)	(0.051)	(0.054)	(0.052)
Local Supplier	-0.114	-0.120	-0.114	-0.140*	-0.144*	-0.140*
	(0.095)	(0.091)	(0.098)	(0.085)	(0.082)	(0.083)
Observations	296	296	296	248	248	248
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R-Sq.	0.145	0.144	0.144	0.176	0.177	0.176
Log-Likelihood	-165.596	-165.711	-165.830	-134.345	-134.140	-134.348

Notes: * Significant at 10%; ** significant at 5%; *** significant at 1%. This table presents results from probit models. The dependent variable is *Approval*, which equals one if the firm received credit from state-owned bank, private bank or foreign bank in 2013. Equations (1)-(3) present the results of estimation on the full sample. Equations (4)-(6) present the results of estimation on the SMEs sample. For each equation, each column reports the marginal effects (ME) and standard errors (SE) for each variable supposing all other covariates are at the sample mean level. Standard errors in parentheses are clustered at industry level.

Table 4: Multinomial logit estimation in first stage

	Whole			SME		
Dependent Var.	No Bank ME/SE	Private ME/SE	State-owned ME/SE	No Bank ME/SE	Private ME/SE	State-owned ME/SE
Informal Political	-0.023	0.013	0.010	-0.034	0.008	0.026*
	(0.088)	(0.084)	(0.015)	(0.086)	(0.092)	(0.014)
Employees	-0.022	0.026	-0.004	-0.024	0.029*	-0.005
	(0.024)	(0.019)	(0.008)	(0.029)	(0.017)	(0.015)
Foreign	0.212***	-0.149***	-0.063*	0.269***	-0.202***	-0.067*
	(0.048)	(0.052)	(0.035)	(0.069)	(0.062)	(0.040)
Investment	-0.021***	0.017***	0.005***	-0.024***	0.017***	0.007***
	(0.003)	(0.004)	(0.001)	(0.006)	(0.006)	(0.001)
Firm Age	0.001***	-0.002***	0.000	-0.000	-0.001	0.001**
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)
Local Client	-0.031***	0.014	0.017	-0.049	0.022	0.027
	(0.008)	(0.014)	(0.017)	(0.038)	(0.045)	(0.018)
Local Supplier	0.086	-0.085	-0.001	0.098**	-0.089**	-0.009
	(0.068)	(0.057)	(0.027)	(0.049)	(0.044)	(0.031)
Observations	296	296	296	248	248	248
Province FE	Yes			Yes		
Industry FE	Yes			Yes		
Log-Likelihood	-219.002			-183.460		

Notes: * Significant at 10%; ** significant at 5%; *** significant at 1%. This table presents results from multinomial logit models. The dependent variable is *Financial Types*, which equals zero if the firm did not receive any bank finance, equals one if the firm received credit from private bank, equals two if the firm received bank finance from state-owned bank in 2013. Equations (1)-(3) present the results of estimation on the full sample. Equations (4)-(6) present the results of estimation on the SMEs sample. For each equation, each column reports the marginal effects (ME) and standard errors (SE) for each variable supposing all other covariates are at the sample mean level. Standard errors in parentheses are clustered at industry level.

Table 5: Probit estimation in second stage with Heckman correction

	Whole			SME		
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Var.	Satisfied ME/SE	Satisfied ME/SE	Satisfied ME/SE	Satisfied ME/SE	Satisfied ME/SE	Satisfied ME/SE
Political	0.077			0.263**		
	(0.103)			(0.119)		
Formal Political		-0.109			-0.035	
		(0.181)			(0.165)	
Informal Political			0.118			0.295**
			(0.124)			(0.134)
State Bank	-0.176*	-0.166*	-0.174**	-0.227***	-0.213***	-0.223***
	(0.101)	(0.100)	(0.095)	(0.053)	(0.062)	(0.053)
Employees	-0.038	-0.046	-0.038	-0.083*	-0.097**	-0.085*
	(0.058)	(0.065)	(0.058)	(0.043)	(0.039)	(0.044)
Foreign	0.130	0.146	0.127	0.019	0.047	0.026
	(0.126)	(0.127)	(0.126)	(0.177)	(0.195)	(0.175)
Investment	0.002	0.002	0.003	0.027*	0.023	0.027
	(0.010)	(0.010)	(0.011)	(0.016)	(0.018)	(0.016)
Firm Age	-0.002	-0.002	-0.003	0.002	0.000	0.002
	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Direct Export	0.021	0.023	0.025	-0.007	0.001	-0.000
	(0.209)	(0.181)	(0.207)	(0.110)	(0.110)	(0.112)
Local Client	0.077	0.079	0.076	0.137	0.159	0.139
	(0.088)	(0.090)	(0.087)	(0.159)	(0.174)	(0.161)
Local Supplier	-0.106	-0.085	-0.112	-0.090	-0.046	-0.091
	(0.110)	(0.095)	(0.109)	(0.123)	(0.090)	(0.125)
Observations	296	296	296	248	248	248
χ^2 Test	1.786	1.257	2.052	17.387	10.235	20.531
P-value of χ^2 Test	0.181	0.262	0.152	0.000	0.001	0.000
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Log-Likelihood	-226.593	-226.758	-226.681	-183.443	-184.897	-183.173

Notes: * Significant at 10%; ** significant at 5%; *** significant at 1%. This table presents results from Heckman probit model. The dependent variable is *Satisfied*, which equals 1 if credit the firm received at year 2013 was equal to the amount it expected. Equations (1)-(3) present the results of estimation on the full sample. Equations (4)-(6) present the results of estimation on the subsample of SMEs. For each equation, each column reports the marginal effects (ME) and standard errors (SE) for each variable supposing all other covariates are at the sample mean level. Standard errors in parentheses are clustered at industry level. χ^2 Test is a Wald test of independence between estimations in two stages under the null hypothesis that $\rho = 0$.

Table 6: Multinomial logit estimation in first stage (excluding foreign-owned firms)

	Whole			SME		
Dependent Var.	No Bank ME/SE	Private ME/SE	State-owned ME/SE	No Bank ME/SE	Private ME/SE	State-owned ME/SE
Informal Political	-0.036	0.024	0.011	-0.039	0.013	0.027*
	(0.095)	(0.094)	(0.014)	(0.091)	(0.100)	(0.014)
Employees	-0.002	0.006	-0.004	-0.017	0.021	-0.004
	(0.025)	(0.021)	(0.008)	(0.025)	(0.014)	(0.016)
Investment	-0.025***	0.021***	0.005***	-0.024***	0.017***	0.007***
	(0.003)	(0.004)	(0.001)	(0.006)	(0.006)	(0.001)
Firm Age	0.001	-0.001	0.000	0.000	-0.001	0.001***
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.000)
Local Client	-0.021	-0.001	0.023	-0.045	0.009	0.036**
	(0.015)	(0.005)	(0.018)	(0.032)	(0.036)	(0.017)
Local Supplier	0.071	-0.066	-0.005	0.108**	-0.093**	-0.015
	(0.058)	(0.044)	(0.028)	(0.050)	(0.042)	(0.030)
Observations	251	251	251	215	215	215
Province FE	Yes			Yes		
Industry FE	Yes			Yes		
Log-Likelihood	-197.226			-170.585		

Notes: * Significant at 10%; ** significant at 5%; *** significant at 1%. This table presents results from multinomial logit models by excluding foreign-owned firms. The dependent variable is *Finance Types*, which equals zero if the firm did not receive any bank finance, equals one if the firm received credit from private bank, equals two if the firm received bank finance from state-owned bank in 2013. Equations (1)-(3) present the results of estimation on the full sample. Equations (4)-(6) present the results of estimation on the SMEs sample. For each equation, each column reports the marginal effects (ME) and standard errors (SE) for each variable supposing all other covariates are at the sample mean level. Standard errors in parentheses are clustered at industry level.

Table 7: Probit estimation in second stage with strength measures of political connection

	Whole		SME	
	(1)	(2)	(3)	(4)
Dependent Var.	Satisfied	Satisfied	Satisfied	Satisfied
	ME/SE	ME/SE	ME/SE	ME/SE
Formal Strength	-0.225		-0.145	
	(0.176)		(0.184)	
Informal Strength		0.075***		0.159***
		(0.013)		(0.026)
State Bank	-0.184*	-0.176*	-0.240***	-0.246***
	(0.107)	(0.095)	(0.091)	(0.083)
Employees	-0.058	-0.053	-0.129**	-0.133**
	(0.076)	(0.074)	(0.066)	(0.067)
Foreign	0.212	0.228	0.248	0.303*
	(0.167)	(0.176)	(0.184)	(0.176)
Investment	-0.003	-0.006	0.010	0.009
	(0.007)	(0.006)	(0.015)	(0.014)
Firm Age	-0.002	-0.002	0.001	0.001
	(0.004)	(0.004)	(0.005)	(0.005)
Direct Export	0.060	0.063	0.081	0.092
	(0.144)	(0.190)	(0.072)	(0.076)
Local Client	0.068	0.079	0.145	0.157
	(0.105)	(0.094)	(0.199)	(0.189)
Local Supplier	-0.071	-0.090	-0.017	-0.050
	(0.093)	(0.091)	(0.087)	(0.122)
Observations	99	99	85	85
Province FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Pseudo R-Sq.	0.112	0.109	0.131	0.146
Log-Likelihood	-60.832	-61.036	-51.216	-50.293

Notes: * Significant at 10%; ** significant at 5%; *** significant at 1%. This table presents results from probit models. The dependent variable is *Satisfied*, which equals 1 if credit the firm received at year 2013 was equal to the amount it expected. Equations (1)-(2) present the results of estimation on full sample. Equations (3)-(4) present the results of estimation on the SMEs sample. For each equation, each column reports the marginal effects (ME) and standard errors (SE) for each variable supposing all other covariates are at the sample mean level. Standard errors in parentheses are clustered at industry level.

Table 8: Political connections and allocative efficiency of capital

	(1)	(2)	(3)	(4)
	Value Added	Value Added	Value Added	Value Added
Dependent Var.	β/SE	β/SE	β/SE	β/SE
Political	0.423	1.725	0.596	-0.097
	(1.693)	(0.840)	(0.329)	(0.726)
Political × Fixed Capital	-0.108	-0.155		
	(0.175)	(0.093)		
State Bank			0.652*	
			(0.274)	
Political × State Bank			-0.902*	
			(0.397)	
Satisfied				-0.310
				(0.184)
Political × Satisfied				0.746
				(0.612)
Fixed Captial	0.465***	0.729***	0.735***	0.712***
	(0.086)	(0.100)	(0.100)	(0.126)
Employees	0.072	-0.082	-0.130	-0.133
	(0.091)	(0.147)	(0.190)	(0.106)
Foreign	0.514**	0.641	0.726	0.797
	(0.173)	(0.546)	(0.750)	(0.438)
Firm Age	0.004	-0.011	-0.014*	-0.013*
	(0.008)	(0.006)	(0.005)	(0.005)
Direct Export	0.152	-0.034	0.189	0.110
	(0.178)	(0.514)	(0.446)	(0.536)
Local Client	0.436**	0.308	0.306	0.274
	(0.138)	(0.237)	(0.152)	(0.266)
Local Supplier	0.252	-0.637*	-0.593	-0.650
	(0.322)	(0.293)	(0.310)	(0.416)
Observations	172	66	66	66
Province FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
R-Sq.	0.490	0.642	0.662	0.648

Notes: * Significant at 10%; ** significant at 5%; *** significant at 1%. This table presents results from OLS models. The dependent variable is *Value Added* as defined in Table 1 . Equations (1) present the results of estimation on SMEs. Equations (2) to (4) present the results of estimation on SMEs which have bank finance. Standard errors in parentheses are clustered at industry level.

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