

The Political Economy of Private Firms in China*

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Abstract

The sweeping change in political economy associated with the spectacular growth of the private sector in China is rarely studied empirically in the economics literature. This paper fills this gap. The central subject of this paper is the nature of the political economy of the Chinese private sector and of the Communist Party of China during these changes. We empirically examine the dynamics of rent creation from the Party membership and other political connections when the regime is changed from anti-capitalistic to pro-capitalistic. Endogeneity problems are addressed. We identify the causality of rents and the political connections of private entrepreneurs.

Keywords: Party membership, China, political connections, private firms

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“We must and we are determined *to encourage, support and guide the development of the nonpublic sectors of the economy...*”

Jiang Zheming, Speech at the 16th CPC National Congress, 2002

I. Introduction

The spectacular growth of the private sector in China, which started from scratch since the 1990s, is well documented. Changes in politics are essential elements of this growth. However, dynamic aspect of the sweeping change in political economy associated with the growth of the private sector is rarely studied empirically in the economics literature. This paper contributes to the literature in this aspect.

It is important to notice that when “the reform” officially started in the late 1970s and early 1980s, the reform agenda did not allow for setting up private firms, neither for privatization, and the private sector accounted for 0% of the Chinese GDP. Consistently, the Constitution of the Communist Party of China (CPC) [the 1982 version, which codified the reform agenda at that time] is unambiguously anti-capitalism. It declares, “[t]he proletariat dictatorship will inevitably replace the dictatorship of bourgeoisie... Basically, the socialist system has incomparable superiority over the capitalist system ...” (*The CPC Constitution*, 1982). However, the reform agenda has transformed gradually; both the CPC Constitution and the state Constitution were amended in 2002 and 2004, respectively, and the institutions were changed (for the reasons of these changes, see Xu, 2011). The essence of the constitutional amendments is the “Three Represents” theory, which is invented by Jiang Zemin, the party general secretary for 1989 – 2002. According to “Three Represents” theory, CPC should always represent the advanced social productive forces, the advanced Chinese culture and the fundamental interests of the majority people. Among all the three, representing the advanced social productive forces is emphasized as the priority. In particular, owners of non-public sectors was recognized as one of the three major advanced social productive forces (the other two are workers and intellectuals) for the first time by the ‘Three represents’ theory. Embracing entrepreneurs by a communist party, this theory deviates from Marxism, as Mr. Jiang said “..., private entrepreneurs,... are all builders of socialism with Chinese characteristics” (Jiang, 2002a). On policy implementation, Jiang emphasized, “We must and we are determined *to encourage, support and guide the development of the nonpublic sectors of the economy...* [All emphases in the citations in this section and the next section are added by the authors of this paper]”; “nonpublic sectors are important elements of the socialist market economy...” (Jiang, 2002b). The term “non-public” is

used to disguise “private” to avoid a direct contradiction to Marxism. Since then, party members are “encouraged” and “supported” to become private entrepreneurs; entrepreneurs are encouraged to join the party. Soon afterwards, a large number of party members become super rich entrepreneurs within a decade.¹

How could a large group of politically connected people become rich so rapidly within a very short period of time after the 2002/2004 constitutional amendments? This is the central question that we address in this paper. The anecdotes reported by the mass media are massive, many of which imply rent seeking of the party elites when they enter private sector. There are also discussions in political science literature. To our knowledge, however, there is no systematic research, which addresses this dynamic question by looking at nationwide data over the whole period of time. This paper examines the dynamics of rent seeking by Party members when the regime changed from anti-capitalistic to pro-capitalistic. The research is based on nationwide random surveys of private firms, which is designed to represent the population. Given that the Party is the dominant force both in politics and in the national economy in China (the next section elaborates this point), political connections in this paper are captured by a CPC membership or a People’s Congress (PC) membership.² We interchangeably use the terms “political connection” and “political elites.” This paper addresses the major dynamic question by looking at rent-seeking of political elite entrepreneurs in the old regime (before 2002/2004 regime change); and in the new regime (after the 2002/2004 regime change). We identify the causality of rent seeking and the political connections of private entrepreneurs.

Economics literature on the relationships between political connections and economic variables is extensive. A group of economists investigate the economic value of political connections. In a seminal paper, Fisman (2001) reports that the Suharto’s health-related events caused a significant loss in the return on the price of the securities of politically connected firms. Faccio (2006) extends the scope of the investigation to 47 countries, and reveals that the announcement of entering politics

¹ Most of the richest people in China are Communist Party members, and numerous of them are selected (not elected) to the People’s Congress, the legislator. Nevertheless, the most striking phenomenon is that members of the National People’s Congress (NPC) of China have become, by far, the wealthiest in the world, despite the highly incomplete and heavily underestimated data about these elites. The total wealth of the 70 richest members of the NPC of China is US\$90 billion, which is 12 times that of the total wealth of all the members of Congress, Supreme Court, and White House of the United States, which is US\$7.5 billion (Bloomberg, February 27, 2012).

² A PC member may not be a CPC member, but he/she must be pro-CPC because all the PC members are selected by the CPC. Moreover, in terms of social status and power, average PC members are elites at a higher level than average CPC members.

by officers or large shareholders of a company is positively associated with the cumulative abnormal return, which varies depending upon political power. This line of research applied to various countries in different settings, namely, late Victorian Britain (Braggion and Moore, 2011), a longitudinal dataset of Italian companies (Cingano and Pinotti, 2009), Russia's politically connected firms receiving preferential treatments by regional laws and regulations (Slinko, Yakovlev, and Zhuravskaya, 2005), and U.S. firms connected to Geithner as a nominee for Treasury Secretary by President Obama (Acemoglu, Johnson, and Kermani, 2010).

Another group identifies the effect of political connections on access to bank loans and government subsidies. Using data from Pakistan, Khwaja and Mian (2005) claim that politically connected firms are able to borrow 45% more, but they are more likely to default by 50% compared to those without political connections. The findings of Johnson and Mitton (2003) and Faccio, Masulis, and McConnell (2006) support that political connections affect government or bank decisions. The former presents results that the decision on government subsidies is associated with political connections, whereas the latter shows that politically connected firms are more likely to be bailed out.

Some sociological studies document the potential advantages of being a Party member in China. Evidence documented by Walder et al. (2000) shows that joining the Party is a necessary condition to become a leader in China. Li and Walder (2001) reveal that joining the Party in earlier periods of careers brings a difference. Those who have become Party members at an early time of their careers are reported to have significantly higher chances to become social elites, whereas those who are already successful before joining the Party would not bring a difference to their careers by joining the Party. Bian et al. (2001) suggests that everything being equal (i.e., controlling for talents and education/experience backgrounds), Party members have higher chances than non-Party members to become top managers in state-owned enterprises (SOEs). In their investigation of the changes after the massive purges of the "Cultural Revolution," Walder and Hu (2009) argue that party elites, particularly their offspring, recovered much more quickly than others.

Political connections and associated economic performance among Chinese firms have attracted the attention of economists, but there is no consensus among the findings in the literature. This implies further research is necessary. Examining listed firms, Fan et al. (2007) indicate that firms with politically connected top executives of new partially privatized firms are less efficient than other firms in terms of post-IPO performance. In contrast, Peng and Luo (2000) and Francis et al. (2009),

also looking at listed firms, demonstrate that political ties are beneficial to firms in terms of obtaining resources that enhance efficiency. Li et al. (2008) report a positive effect of political connections on firm performance based on one cross-sectional data of private firms collected in 2002. Yet, Chen et al. (2011) and Wu et al. (2012) document the heterogeneous effects of political connections; that is, the performance of SOEs is negatively affected by political connections, whereas that of private firms is slightly or positively affected by political connections. In addition to methodological reasons, there are two major reasons behind the seemingly inconsistent findings in the literature. The first reason is the static nature of the investigations in the literature. Given the reality is changing rapidly it is not surprise that findings about earlier time may not be consistent with the findings about later time. The second reason is the nature of the data used. Most of the data used are not representative. Each of the discoveries from different datasets captures one of the many facets of the reality.

This paper studies dynamics of rent seeking by using a representative dataset. To our best knowledge, this is not only the first in studying rent seeking dynamics in China but also in the literature of political connection in general.³ We discover significant changes of rent seeking associated with the 2002/2004 constitutional amendments. Moreover, we establish causality, which is not only statistically valid but also sensible economically, by carefully addressing the endogeneity and identification problems.

Our major finding is that the regime change since the 2002/2004 constitutional amendments creates substantial rent seeking opportunities to the political elites. We first find that the politically connected elites did not enjoy statistically detectable rents when the constitutions were anti-capitalistic, i.e. before the 2002/2004 amendments. Here, rent is measured by politically connected entrepreneurs' more accessibility of bank loans than others (it is well documented that bank loans are heavily subsidized and in general private firms are in disadvantages in getting bank loans). We then find, following the constitutional amendments, politically connected entrepreneurs obtain substantially more bank loans than others.

³ Calomiris, Fisman, and Wang (2010) involve dynamics, i.e. impacts of policy changes on the sale of government-owned shares. A main difference between our paper and that of Calomiris, Fisman, and Wang (2010) is that we investigate a more fundamental change in the Constitution on private property rights. In addition, they apply event study method, whereas we conduct cross-sectional comparisons of firms across different periods. There is a growing literature in political science (e.g. Dickson, 2003; 2008), which involves dynamics of political economy in Chinese private sector. But the discoveries in that literature are based on party documents and field works, not nationwide representative data. Moreover, the focuses are different from that of this paper.

To address identification problem, we have deployed several approaches. We instrument CPC/ PC members by two instrument variables. The first IV is the frequency of the key word of the constitutional amendment, “the Three Represents,” appeared in the articles written by the provincial CPC Chief in party periodicals. The essence of “The Three Represents Theory” is to embrace private business (for an elaboration see next section). This instrument carries important economic meanings. On the one hand, although “the Three Represents” is a major ideological/institutional change of the CPC, it is not equally shared by all the party leaders in different provinces. Thus, everything else being equal, in provinces where the party chiefs emphasize and implement more on this principle, party members in those provinces should be further encouraged to enter the private sector and more entrepreneurs in those provinces should be likely to join the party. As a result, in those provinces there should be more party member entrepreneurs than in other provinces. On the other hand, “the Three Represents” principle has no implication to support non-party member entrepreneurs in general. Indeed it is well documented that in general it is always difficult for private firms to obtain bank loans before and after the constitutional amendments. The above two properties imply that this is a valid IV, and indeed these properties are confirmed statistically as well.

Our second IV is the existence of union in a firm. The economic justification of this IV is based on the following observations: a) the party has a policy to encourage party-member entrepreneurs to set up unions in their firms; thus, the existence of union should be positively correlated to the party membership of the entrepreneurs; b) the existence of union in a firm alone would not be directly related to the chance of getting bank loans, since a bank could interpret this as a burden to the firm unless the entrepreneur is politically connected. Both of these two properties for the validity of an IV are confirmed statistically. The results using these IVs confirm the robustness of our basic findings. And the combination of our statistical evidence and institutional analysis (the next Section) suggests that the constitutional amendments have opened doors for party members’ rent-seeking.

To further rule out other alternative interpretations, e.g. a possibility that the correlation we discovered is caused by recruiting effects that successful entrepreneurs, who are able to obtain more bank loans at the first place, are recruited into the party after the amendments, we run similar regressions by excluding all the new Party members, who joined the party after setting up a private business. Our basic findings remain robust. Thus, this alternative interpretation can be ruled out.

To rule out potential selection bias problem with our sample, we have examined the data carefully. We find new party members, i.e. those who joined the party in and after 2002, counted only for 8.2% of all the party members in the sample; whereas 78% of the party members in our sample joined the party before 1996 when private business was still at infant stage and was not recognized by the constitutions (Table 1).

The rest of the paper is organized as follows. Section II discusses the institutional background about the Communist Party vis-à-vis the private sector; and the amendments of the Constitution. Section III introduces the data and provides the basic observations. Section IV presents our baseline results. Section V addresses the endogeneity and identification problems using an instrumental variable approach and excluding the sample that might be affected by reverse causality. Section VI concludes the paper.

II. Institutional Background

The backbone of China's institution is the Communist Party of China (Xu, 2011). The Party controls all levels of governments, which directly determines or deeply influences the allocation of local resources through personnel control. Moreover, the Party determines the appointments of all the most important posts in the state sector, such as the CEOs and presidents of the major banks and the largest SOEs. Nearly all important posts are occupied by Party members; the rest are occupied by Party-trusted non-Party members. Thus, being a Party member, particularly being a veteran Party member, facilitates opportunities for political connections, which can be used for business. Furthermore, the Party controls all levels of the legislature, the People's Congress, from the national down to the county level, mostly through the influence of selecting members of Congress. Literally, all non-Party Congress members must be Party-trusted persons.

The Communist Party has launched economic reforms since 1978. The private sector was not allowed under the communist rule, and a change in this policy was not in the reform agenda. The development of the private sector and privatization occurred after the mid-1990s when the state sector was in deep trouble and when privately owned firms do not have de jure rights (Xu, 2011). The de facto private sector took off rapidly since 1997 when de facto privatization got permission in a disguised way. From 1998 to 2005, the output of the private sector increased by 20 times, and its

share in total GDP increased from only 2.5% in 1998 to nearly 50% in 2009, thus becoming the largest sector in the Chinese economy.

As the private sector, outside of the conventional control sphere of the party, became the major engine of the Chinese economy, and hired more urban employees than other sectors did, the party's weedy leadership in this sector was further weakened. The private sector's share of the nationwide party membership was only 2.8% in 1999, and this share steadily declined further dropped to 1.7% in 2002 (Table 2), when this sector was expanding at an extraordinary speed.

Facing this daunting challenge, the party has to find new ways to exercise its leadership (Jiang, 2000).⁴ At the beginning of 2000, Jiang Zemin proclaimed that entrepreneurs should be recognized as "advanced productive force" (The CPC Maoming City Propaganda Department, 2002),⁵ that Party members should be encouraged to become entrepreneurs, and the Party should legitimately recruit entrepreneurs on a large scale. Jiang said "how to strengthen the leadership of the party in [this sector]" is the most important. For this purpose, we are required to "ensure that the Party plays its role as the leadership core in exercising overall leadership and coordinating the efforts of all," to satisfy entrepreneurs' "reasonable interest requirements." "Ways party organizations playing a central role in politics...should be tailored to the characteristics of the [private] enterprises, and *should be intimately linked to their business operations*" (Jiang, 2000).

The most important legacy of these efforts is the invention of the "Three Represents" theory, which deviates from Marxism by embracing entrepreneurs. In the official report to the 16th CPC National Congress, which codified the "Three Represents" into the Party's constitution, Jiang explained, "... private entrepreneurs,...are all builders of socialism with Chinese characteristics" (Jiang, 2002a). About the importance, Jiang said, "Persistent implementation of the 'Three Represents' is the foundation for building our Party, the cornerstone for its governance and the source of its strength." (Jiang, 2002a). In another occasion in the Congress, Jiang also said, "We must and we are determined to encourage, support and guide the development of the nonpublic sectors of the economy..."; "nonpublic sectors are important elements of the socialist market economy..." (Jiang,

⁴ In 2000, only 17% of private firms in our sample have Party organizations within the firm. In 2004, the *Financial Times* reported that only 1.1% of the private firms in Shanghai had Party organizations. It is likely that the average size of the firms in our sample is larger than the average size of the firms in the population; thus, our sample might be over-representing the firms that have established Party branches.

⁵ The term "productive force" is a central concept in Marxism. The productive forces consist of the means of production, and labor power. The central argument of Marxism is that advanced productive forces determine the progress of an economy, but capitalism inherently and ultimately prevents the advancement of productive forces.

2002b). To avoid a direct contradiction to Marxism, private sector is denoted as non-public sector. Following the amendment of the Party's Constitution, in 2004, the Constitution of the state was also amended to recognize private property rights.

The implementation of the "Three Represents" principle is a high priority of the party, and the way it should be implemented is instructed by Jiang's 2000 and 2002 speeches: "Ways party organizations playing a central role ... *should be intimately linked to their business operations.*" (Jiang, 2000); "We must and we are determined *to encourage, support and guide the development of the nonpublic sectors of the economy...*" (Jiang, 2002). These important points were later further elaborated into various specific local policies by local party officials. The following examples illustrate some concrete suggestions advocated by different local party heads. A Jiangsu local party official wrote, "Solving difficulties in business is the focal point of the party-building task [in private sector]." "We must implement the "Three Represents" by taking practical activities, *we must think what entrepreneurs would think and must worry what entrepreneurs would worry.*" (*The Mass (Qunzhong)*, No.8, 2002). A Zhejiang local party official said "being useful [to the business] is the life of party building task. Thus, we must work very hard ... *to transform the party organization's political force into business productivity.*" (*Zhejiang Today (Jinri Zhejiang)*, No. 13, 2003). Equally importantly, there were a substantial proportion of provincial party chiefs who did not like the idea of encouraging private entrepreneurship but had to implement the policy inactively. The instrument variables that we deployed in the paper explore this variation.

With the party's encouragements and supports in both political and economic spheres, a large number of party elites have entered the private sector since the constitutional amendments. In our sample, from the year 2000 to the year 2006, the percentage of party members among entrepreneurs is doubled from about 20% increased to 40%; and 78% of the party-member entrepreneurs have joined the party for at least 10 years (Table 1), i.e. they are veteran party members.

III. Data and Descriptive Statistics

The dataset used in this paper comprises four cross-sectional surveys on the private sector in China. These surveys were conducted in 1995, 2000, 2006, and 2010 through face-to-face interviews. The survey questionnaires and sampling schemes were designed by a research team consisting of

economists and sociologists from the Chinese Academy of Social Sciences and several Chinese universities. The survey series was organized by a CPC central committee department, the United Front Work Department, and two ministry-level central government agencies, that is, the National Association of Industry and Commerce, and the State Administration for Industry and Commerce. This survey series, which is the largest of its kind in China, has traced the development of the private sector in the nation as a whole since the sector began to emerge.

A stratified random sampling procedure is applied to ensure that the survey is representative of the population of the registered private firms in China. The stratifications are based on locations, industries, stages of economic development, and distribution of private firms in urban and rural areas within each location (a city or a county). The surveys covered over one-third of the cities in China. The sample size of the 1995 survey comprises 2,869 private firms located in 160 cities; 3,073 private firms located in 129 cities for the 2000 survey; 3,837 private firms located in 109 cities for the 2006 survey; and 4,624 private firms located in 158 cities for the 2010 survey.

The summary statistics are shown in Table 3, which presents the summary statistics of the financial data of the firms over the four survey years. The statistics indicates that on average, firms owned by CPC or PC members are larger than those owned by non-CPC/ PC owners in terms of sales, number of employees, and equity value for all the years. In particular, the difference in size between the CPC/ PC-owned firms and non CPC/ PC-owned firms was substantially enlarged since 2000. In general, firms owned by CPC members are twice as large as those owned by non-CPC members ones while firms whose owner are PC members were larger at least three times of the firms owned by non-PC members since 2000. Moreover, firms owned by CPC or PC members obtain more bank loans (measured by the bank loan to equity ratio) than the other firms for 2000, 2006 and 2010, when the data are available. However, it does not show obvious difference in terms of the performance (measured by return over equity (ROE) and return over sales (ROS)) between firms owned by CPC/ PC members and those owned by non-CPC/ PC members. The 2006 survey asked when the owner of the firm joined CPC. Panel B of Table 2 reports this information. It shows that about 50% CPC owners joined CPC before 1988 when the private sector was legally recognized for the first time.⁶ Additionally, over 75% CPC owners joined CPC before 1997 when the non-public economy was

⁶ The central government issued the Tentative Stipulations on Private Enterprises (TSPE) in June of 1988. According to TSPE, private enterprises hiring more than eight employees were illegally recognized for the first time in China.

admitted by the 15th CPC congress as an important component of the Chinese Socialist Market Economy for the first time. Only 8.48% of CPC owners joined CPC after 2002. This suggests that most of firm owners in our sample joined CPC before they started private businesses.

IV. Political Connections and Rent-seeking Opportunities: Empirical Results

The amendments of the Constitution of the Party in 2002 and of the Constitution of the state in 2004 have transformed institutional settings for economic agents in China.⁷ Prior to the amendments, private entrepreneurship was illegal under the State Constitution, and was in direct conflict with the Party's ideology and policy. Chinese private enterprises were formally discriminated against SOEs in terms of access to bank loans and other resources (Brendt and Li, 2003). Anyone with political connections (e.g., a PC member or a veteran Party member working in a government agency or SOE) who considers becoming to a private entrepreneur should weigh political and economic risks against economic gains.

In contrast, risks and benefits associated with becoming an entrepreneur might have changed after the amendments to the two Constitutions which legitimized and encouraged private entrepreneurship. Moreover, given the monopolistic position of the government in controlling resources, those PC members or veteran Party members might have preferential treatments in accessing resources thanks to their political connections. Hence, we hypothesize that a turning point occurred in the period of 2003 to 2004 from which political connections became a significant factor in determining business advantages, whereas this factor was not significant before the period.

In order to capture the effects of the constitutional amendments on the rent seeking of entrepreneurs, we focus on bank loan access by private business owners prior to and posterior to 2003/2004. Access to external financial sources is one of the most precious resources for entrepreneurial firms. This scarcity of access to external finance is even more severe with the private sector in China. Moreover, bank loans are heavily subsidized, which made the cost of capital in China be among the lowest in

⁷ The key aspects of the amendments of CPC and PRC are the recognition of the legitimate social status of private entrepreneurs, and encouragement of private entrepreneurship, and the recognition and protection of private ownership, including private businesses, respectively.

the world (Lardy, 2012). Consequently, anyone who is able to obtain bank loans enjoys rent generated by these subsidies.

China's banking system has long been dominated by the four large state-owned banks that mainly serve state-owned enterprises. Even the newly established shareholding banks are not entirely independent from the government, and have biases against lending to private enterprises. By the end of 2000, the bank loans issued to private business were barely accounted for 1% of the total short-term bank loans, whereas the total industrial outputs of private businesses consisted over 5.26% of the total GDP in China during the same period. The bank loans issued to private businesses substantially increased after the constitutional amendments of CPC: it increased by 2.2 times from RMB 65.46 billion in 2000 to RMB 208.1 billion. However, in contrast to the sharp increase in the share of the private sector to total GDP which was about 50% in 2009, bank loans that went to private businesses accounted only for 4.9% of total short-run bank loans in the same year. In other words, bank loan allocation to the private sector disproportionately lagged behind the development of private businesses in China in the last decade. Although there are strong discriminations against the private sector in lending, the interest rate in China is equal to either SOEs or private firms as it is set and fixed by the central bank.

In order to test whether a significant change occurred after the amendment in the Constitution, we regress access to bank loans on CPC/ PC membership using the data of four cross-sections, that is, 1995, 2000, 2006, and 2010,. We use a logit estimation when our dependent variable is a binary one. We estimate the following logit equations:

$$Y = \alpha + \beta(PC \text{ or } CPC) + X\gamma' + \varepsilon \quad (1)$$

$$Y = \alpha' + \beta'(Post \times PC \text{ or } CPC) + X\delta' + \varepsilon' \quad (2)$$

Model (1) is a logit regression for each of the four cross-sections, namely, 1995, 2000, 2006, and 2010. Y refers to **Bank loan** as a dummy variable that equals to one if the firm has bank loans at the time of survey and equals to zero if otherwise. CPC (PC) are a dummy variable that equals to one if the firm's owner is a CPC (PC) member at the time of survey and equals to zero if otherwise. X is a vector of control variables.⁸ In order to measure whether the changes are

⁸ Control variables include entrepreneur-specific factors including age, gender, education, owner's previous experience,

systematically related to the constitutional changes, we also conduct pooled regressions by dividing the four cross-sections into two periods: pre-amendment period (i.e. 1995 and 2000) and post-amendment period (i.e. 2006 and 2010). Model (2) refers to regression specification for the pooled data. '*Post*' is a dummy variable that equals to one if the surveys were conducted after the constitutional amendments (i.e. 2006 and 2010) and equals to zero if the surveys were conducted before the amendments (i.e. 1995 and 2000). A positive association between *Post* and *Bank loan* in Model 1 suggests a higher probability of access to bank loan after the constitutional changes. If the interaction term between *Post* and CPC/ PC membership in Model 2 is positively and significantly correlated with *Bank loan*, it will provide evidence that political elites have higher probability to gain bank loans than those non-political elites after the constitutional amendments. The definitions of the variables used in estimations are presented in the Appendix (Table A1).

In addition, we conduct a series of regressions for

$$Z = \kappa + \lambda(PC \text{ or } CPC) + X\omega' + \mu' \quad (3)$$

$$Z = \kappa' + \lambda'(Post \times PC \text{ or } CPC) + X\eta' + \mu' \quad (4)$$

where Z refers to the ratio of total bank loans to total equity of the firm. In the same way as we estimate Equations (1) and (2), Equations (3) and (4) are estimated using both the annual data of 2000, 2006, and 2010 and the pooled data.⁹

Tables 4 and 5 report the results for logic regressions and OLS regressions, respectively. Columns (1) and (3) of Table 4 show that CPC membership is not associated with bank loan for the years of 1995 and 2000. However, as shown in columns (5) and (7) of the same table, *CPC* is positively and significantly correlated with *Bank loan* for the years of 2006 and 2010, that is, for the post-amendment period. The marginal effect of CPC membership is 0.08 in 2006 and 0.06 in 2010, which means that the probability of obtaining the bank loan is higher for CPC membership entrepreneurs by

and the share of stocks held by owners. We also control age, size, incorporation type, past performance, and the experience of privatization of the firm. Finally, industry and regional effects are also controlled. For the pooled estimations, year fixed effects are controlled as well.

⁹ The data on the amount of bank loan are not available for 1995.

8% in 2006 and 6% in 2010. Moreover, column 9 shows the interaction term between *CPC* and *Post* in the pooled regression determines bank loan significantly and positively.

Similar results regarding the effect of CPC membership on bank loan are obtained from the OLS estimations using the ratio of bank loans over total equity. As shown in Table 5, *CPC* positively influences the dependent variable in 2006 and 2010 (columns (3) to (5)) but not in 2000 (column (1)). At the same time, the interaction term between *CPC* and *Post* is also significantly and positively correlated with bank loans over total equity in the pooled regression. These results suggest that CPC membership did not increase a probability to access to bank loans or help to obtain bank loans during the period before the Party/ State constitutional amendments. Contrastingly, during the period after the Party/State constitutional amendments, firm owners with CPC membership had a significantly higher probability to access bank loans and obtained a larger amount of bank loans over equity than those without CPC membership. The impact of PC membership on access to bank loans shows a similar pattern as is the case of CPC membership. The probability of access to bank loans was higher for firm owners with PC membership in the years of 2006 and 2010. The marginal effect of PC membership on obtaining bank loan is 14% and 18% for the years of 2006 and 2010, respectively. Nevertheless, there are notable differences between the results regarding CPC membership and those regarding PC membership. First, the marginal effects of PC membership on bank loan are higher than those of CPC membership. These results may reflect the fact that PC members are higher level elites than CPC members. Second, in Tables 4 and 5, PC membership enters significantly in determining bank loan in 2000 while CPC membership does not in the same year. One can argue that taking advantage of their more prestigious positions PC members might be able to obtain information on the treatment of private entrepreneurs by the state earlier than CPC members do. When Jiang Zemin proclaimed the recognition of entrepreneurs at the beginning of 2000, a number of PC members might be informed about the profound political and economic implication of such a proclamation. Thus, some entrepreneurs with PC membership moved ahead of the formal changes in the Constitutions. In addition, these intended changes might have affected the lending practice of the banks as well. As the changes were announced and became official after 2002, the effects of PC membership on bank loans might have increased. The larger magnitude in the coefficients on PC membership in 2006 and 2010 compared to that in 2000 may illustrate such effects.

Another interesting observation from the estimations is that the variable *Post* is significantly and negatively correlated with both probability to obtain bank loans and the ratio of bank loans over total

equity, with the exception of column 10 of Table 4. The results imply that, on average, bank loan became less accessible for private businesses after the 2002/2004 constitutional amendments compared to the previous period.

We address possible concerns that our results are driven by some other factors coincidentally associated with the political status of the entrepreneurs. We check such a possibility using various control variables. First, we look at whether or not our results are affected by higher capability of CPC/ PC members in running their businesses than non-CPC-owners. If CPC/ PC members are more capable, they can acquire more bank loan than those owned by non-CPC member owners in 2006 and 2010. To deal with this possibility, we control the past performance of the firm, i.e. '*RoS*', which is measured by the ratio of return to total sales of the firm in the previous year, for the 2006 and 2010 estimations.¹⁰ As shown in Tables 4 and 5, CPC/ PC membership is significantly and positively correlated with bank loan access in 2006 and 2010 even after controlling the firm's previous performance. Second, we check whether or not our results are influenced by connections with the government regardless of political status of firm owners, or inherited connections with the government in the case of privatized SOEs.¹¹ Two variables related to these issues are controlled in the aforementioned regressions. We control the previous working experience of the entrepreneur in our regressions. This dummy variable '*Owner exp*' equals to one if the entrepreneur has previously worked as a civil servant or a manager in an SOE, or has served in the army before starting up a private business. Otherwise, this variable equals to zero. The entrepreneur's previous experience may be a proxy for both her/ his capability and her/ his connections with the governments. Controlling the working experience of the entrepreneur may also help to address the capability assumption mentioned in the previous paragraph. We also control the experience of privatization of SOE in 2006 and 2010 as such information is unavailable for the other years. Firms privatized from former SOEs may have better connections with the local governments, and the owners of such privatized firms are also more likely to be CPC/ PC members. The variable '*Prtvz*' is equal to one if the firm was privatized from a former SOE and equal to zero if otherwise. The results on the significant effects of CPC/ PC membership on bank loan as shown in Tables 4 and 5 are obtained with both firm owner's

¹⁰ Information on the profit and total sales of the firm in previous years is available only for the years of 2006 and 2010.

¹¹ A strong wave of privatization of SOEs in China occurred from the late 1990s (Guo et al., 2010). We investigate whether these inherited relationships with the government allowed privatized SOEs to access to bank loans more easily than the other firms.

experience (*Owner exp*) and the privatized firms from SOEs (*Prtvz*) used as control variables. These indicate that our main findings are robust to the inclusion of such variables and thus reflect the genuine effects of political connections on bank loan. As regards firm owner's experience, having a previous experience in government-affiliated agencies increases the entrepreneur's accessibility to bank loans and the ratio of bank loan over equity for the firm in 2006 and 2010 while it matters neither for probability to access to bank loans nor for the amount of bank loans before the 2002/2004 amendments.

To summarize, we find the effects of the political status on the access bank loans and the amount of bank loans are dynamically associated with the constitutional amendments of CPC and the State in China. Before constitutional changes that officially recognized and encouraged private entrepreneurship, political connections formed by CPC membership or PC membership did not bring substantial benefits to the entrepreneur in acquiring bank loans. In contrast, after the amendments, entrepreneurs with such political connections have significant advantages to obtaining the scarce resources such as bank loan compared to those without such connections.

V. Robustness Check: Addressing Endogeneity

In the previous section we report that the effects of entrepreneurs' political connections on the access to bank loans are associated with the 2002/2004 constitutional amendments. However, there may be alternative competing interpretations to these dynamic effects. In particular, it is possible that the empirical specifications adopted in the previous section suffer from endogeneity of the key variables, that is, CPC/ PC membership. Such endogeneity can be caused by the following reasons: (1) the poor identification of the effect of CPC/ PC membership on bank loan; (2) reverse causality; (3) the different capability of the party member entrepreneurs associated with timing of joining the party; (4) difference in financial constraints between party member entrepreneurs and non- party member entrepreneurs. In this section, we deal with each of these concerns.

Identification issues related to the political rents in 2006 and 2010

First of all, we must make sure that the observed significant relationship between bank loan access and CPC/ PC membership in 2006 and 2010 is not driven by omitted variables. When CPC/ PC membership is used as an independent variable, we implicitly assume its exogeneity to outcomes;

however, this may not be true. The recruitment of CPC/ PC is not random. CPC/ PC members might be more capable than others. If so, the observed significantly more bank loan access by CPC/ PC members in 2006 and 2010 might be driven by the higher ability of CPC/ PC members in those years. Although in the reported regressions the entrepreneur's previous working experience, education and the past performance of the firm have controlled for, certain unobservable factors might still be omitted.

To address this identification concern, we employ the two-staged Least Square estimation procedure to identify CPC/ PC membership effects. In particular, we employ two instrumental variables to identify the effects of political connections. The first one, CVRG, is the frequency of the key words 'Three Represents' shown in articles, covered by the Database of Chinese Communist Party Construction Periodicals, written by the Party Chief of a given province in the past two years before the survey. The Database of Chinese Communist Party Construction Periodical (*Zhonggong Dangjian Qikan Shujuku*) is the largest database of digitalized CPC Periodicals that covers 215 major CPC periodicals starting from 1994. Besides a couple of dozens of national level CPC periodicals published by the CPC central agencies, such as *Qiushi*, *Dangjian* and *Hongqi*, most of the periodicals in the database are published by party committees of all provinces and some major cities. The sub-national level Party periodicals are the major platform for the provincial/municipal party committees to promote major policies. This instrumental variable satisfies the two conditions of exogeneity and relevance. First, the frequency of the phase 'Three Represents' mentioned by the Party Chief implies how much weights are given to this new policy by the provincial level CPC committee. The essence of "The Three Represents Theory" is to embrace private business. We hence expect a higher likelihood of both party members' becoming entrepreneurs in the private sector and private entrepreneurs' joining the party in provinces where provincial Party Chiefs emphasize more on 'Three Represents'. However, the frequency of the phase of 'Three Represents' mentioned by the CPC chief of the province should not be related to the error terms that affecting the individual firms' bank loan access.

The second instrumental variable is the existence of labor union in a firm. The economic justification of this IV is based on the following observations. According to China's Labor Union Law adopted in 2001, every organization should set up a labor union including non-SOEs and the unions are controlled by the government. However, the law requires that most of the funding of the union comes from the enterprise: every unionized firm has to pay 2 percent of its payroll to the local branch of

‘All-China Federation of Trade Unions’ (ACFTU) and 0.5 percent of its payroll to finance its own union. Therefore, a union needs the consent of the management to be set up within a firm. In practice, not all private firms followed the laws by setting up a union. By the end of 2009, only 53 percent of urban workers are Union members. As unionization is encouraged by the Party, we expect CPC/ PC members are more likely to unionize their firms. However, the existence of labor union in a firm alone should not be directly related to the chance of getting bank loans since this could be interpreted in different ways by a bank, e.g. as a burden to the firm unless the entrepreneur is politically connected.

Table 6 reports the two-stage probit model regressions (a la Newey, 1987) for accessibility of bank loan when the CPC/ PC membership is instrumented by *Union* and *CVRG*. The first stage regression results in Panel B of Table 6 confirm that instrumental variables *Union* and *CVRG* are significantly and positively correlated to CPC and PC memberships. The Wald tests of exogeneity are significant for all the models that suggest that our instrumental variables are valid and the two-stage probit models are properly identified. Panel A of the table presents the estimation results of the second stage, in which the CPC/ PC membership is instrumented using *Union* and *CVRG*. It shows that both CPC and PC memberships are positively and significantly correlated with the bank loan dummy.¹² This indicates the causality that political connections increase the accessibility of bank loans after the amendments.

Table 7 shows 2SLS regressions for bank loan over equity ratio. With two instrumental variables, we are able to run Sargan test (Sargan, 1958). The first stages estimations are reported in Panel B. It shows that the Anderson Cannon Correlation statistics are significant, which confirms the relationship between the instrumental variables, *CVRG* and *Union*, and CPC/ PC membership is sufficiently strong. Moreover, the Sargan statistics for all the models range from 0.15 to 0.99 that suggest the null hypothesis is not rejected, thus statistically confirm the exogeneity of the instrumental variables. Panel A of Table 7 reports the second stage estimations of the 2SLS regressions. It shows that both CPC and PC memberships are positively and significantly correlated with the bank loan over total equity ratio. This confirms the causality that political connections bring more bank loans to politically connected firms after the amendments.

Reverse causality

¹² We only focused on 2006 and 2010 because the political elites have received more bank loans during these years.

Another concern is a potential reversed causality that party member entrepreneurs might join the Party to obtain bank loan more easily. Or, they might be recruited into the party because they were already successful, which may appear more access to bank loans. (next subsection deals with this and so we should delete this). In order to address this issue, we repeat the regressions using a subsample of CPC/ PC members excluding those recruited after they set up private businesses. The data on year when CPC members joined the party are available only in the 2006 survey, which we use in these regressions. In this way, our estimates are sharpened by focusing on the veteran Party members or the true political elites that have remained in the Party for a long time. Table 8(a) presents the results of the OLS and the logit estimations. Columns (1) and (2) are for the CPC members, whereas Columns (3) and (4) are for the PC members. The results show that both *CPC* and *PC* memberships are still significantly and positively associated with *Bank loan* and *Bank loan/ equity* in the logit and OLS estimations, respectively. The results for the subsample are consistent with those of the whole sample found in the previous section. Table 8(b) reports the 2SLS and two-stage logit models for *Bank loan/ equity* and *Bank loan* respectively by using the two instrumental variables. Again, the results are consistent with those from the OLS and logit estimations for the whole sample. This confirms that the veteran Party members obtain more bank loans than the others in 2006, i.e. after the amendments.

Selection bias caused by the timing of joining the Party

When a party member entrepreneur joined the party might have implications on his/her motives, on his/her capabilities, and on how deep he/she is connected etc., which imply potential selection bias problem. Some specific concerns are that individuals who joined the party earlier might be more capable of running businesses (although we have controlled entrepreneurs' capabilities, e.g. their previous experiences etc.), or better connected¹³; whereas, after the amendment in 2002, party recruiting was aggressive and less selective, which might have implications for lower capabilities. To address this issue, we look into the information on when a party member entrepreneur joined the Party, and how this timing affects the rent seeking outcomes. Table 1 shows; that according to the data from the survey conducted in 2006, those who joined the party in and after 2002, who can be

¹³ For instance, joining CPC could be an investment if an individual anticipates of running private business in the future. Or, the effect of the CPC membership may take time to carry materialize in the form of preferential treatment like Fraser et al. (2006) point out that "political ties (like other relationships in the non-western world) take a long time to develop". One might argue even further that this delayed effect may be the reason that an entrepreneur who joined the party in the late 1990s would not be able to extract significant rent until later.

called new party members, counted for only 8.5% in the sample. Contrastingly, more than 78% of the party member entrepreneurs in the sample are veteran party members joined the party before 1996 when private business was not legal.

Given the small proportion of the cohort of new party members, our conjecture is that the impact of this cohort to the overall results should be limited. To test this formally based on these data, we construct a dummy variable *CPC_Post2002* that equals to one if party member entrepreneur joined the Party in or after 2002, and equals to zero otherwise. Table 9 reports the estimation results. As shown in Column (2) and (4), the related interaction term is insignificant in both regressions. This confirms our conjecture.

Although it is possible that joining the party earlier would cultivate political connections deeper, it is also reasonable to argue that there must be a decreasing return to scale for this political connection cultivation process. Given the overwhelming majority party members in our sample are veteran member, our conjecture is that there will be a decreasing return to scale for cultivating connections by joining the party and thus marginal changes in how long one has stayed in the party should not have a significant impact. To test our hypothesis, we construct a variable *CPC_Age*, which measures the duration of the party membership. We add the interaction term between *CPC* and *CPC_Age* into the regressions. As seen in Column (1) and (3) of Table 9, the interaction term involving *CPC_Age* is statistically insignificant. This also confirms our conjecture.

Omitted variable: Financial constraints

Finally, a potential alternative argument is that the significant relationship we discovered is driven by more financial constraints faced by the party member entrepreneurs than the others. Our approach to address this concern is based on well documented fact that bank loans are very precious for private firms. For example, in 2010 when the private sector accounted for half of the total GDP in China, only less than 5% of the total bank loans went to private sector. To test whether party member entrepreneurs are more financially constrained than others, we conduct the regressions on whether they have borrowed from informal financial sector. Loans from the informal financial sector charge much higher interest rates and bear much higher risks.¹⁴ Firms without serious financial constraints

¹⁴ The financial sector in China is highly regulated. Most informal lending is not legal. Nonetheless, informal lending has surged as small businesses are often eschewed by the nation's major state-owned banks, which lend mainly to major SOEs (*Wall Street Journal*, March 14, 2012). According to the UBS report, the informal loans could be between two

tend to avoid these high-cost, high-risk loans. Table 10, the regression results for 1995, 2000, and 2006 (relevant data are unavailable for 2010), indicates that the party member entrepreneurs were indifferent from others in involving informal lending activities. Moreover, we find firms owned by party member entrepreneurs are more likely to distribute dividends than other firms. All of these findings suggest that party member entrepreneurs were not financially more constrained than others.

VI. Conclusion

The existing studies on political connections are mostly restricted to a static setting. In a rapidly changing world like China, errors associated with missing the dynamics may be very large. By studying dynamics of political connections, this paper makes a contribution to the literature.

The central issue being addressed by this paper is about the impact of the constitutional amendments on the relationship between political connections and economic rents before and after the regime changes in China. Numerous anecdotes report that since the constitutional amendments political elites benefit from their political connections by obtaining scarce resources when they become private entrepreneurs. But this dynamics is not explored in any systematic way in the literature. Concretely, our systematic empirical work addresses the following questions. (1) In the old regime, which is anti-capitalistic, compared to commoners, do political elites enjoy rents when they enter the private sector? (2) After the regime is changed to more pro-capitalistic, do political elites enjoy rents when they enter the private sector? (3) What is the rent seeking mechanism?

Based on a firm level dataset collected from nationwide random sampling surveys over 15 years, we find the following dynamics of rent seeking. In the old regime, the Party social elites did not enjoy statistically detectable rents. Controlling for all other factors (e.g., characteristics of the individuals, firms, industry, location, etc.), the bank loans the Party social elites obtained are similar to those obtained by other entrepreneurs. However, the rent became significant after the constitutional amendments. In the new regime, firms owned by Party social elites obtained significantly more bank loans compared to other firms. By identifying the large majority of these party member entrepreneurs as veteran party members and by instrument party members by the party policies, we not only

trillion yuan and four trillion yuan in total, or \$316 billion to \$632 billion, which is slightly less than 10% of the country's GDP in 2011. Without legal protection, entrepreneurs who borrow informal loans not only take legal risks, but also pay a reported annualized lending rate of 14% to 70% for loans (reported by Credit Suisse, September 2011).

establish the evidence of rent seeking after the regime change, but also identify the causality and the mechanism. Through the channel of our instrument (the “Three Represents”), which captures how strong a province push forward the regime change, our evidence indicates that the basic policy of the new regime is the cause for fast growing rent seeking in Chinese private sector.

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Table 1: Years when CPC member joined CPC (2006 sample)

Year	Number	%	Cumulative %
1951-1996	996	77.51	77.51
1997-2001	230	14.01	91.52
2002-2006	109	8.48	100
Total	1285	100	100

Table 2: Growth of China's Private Sector and the Share of CPC Members

Year	Private Industrial Enterprises			Share of CPC Members	
	Gross Output (100 million Yuan)	Share of GDP (%)	Share of National Industrial Output (%)	CPC Members in SOE Sector (%)	CPC Members in Private Sector (%)
1998	2082.9	2.47	3.07	32.37	2.76
1999	3244.6	3.62	4.46	32.37	2.40
2000	5220.4	5.26	6.09	31.89	2.29
2001	8760.9	7.99	9.18	32.63	1.86
2002	12950.9	10.76	11.69	31.88	1.70
2003	20980.2	15.45	14.75	29.09	3.08
2004	35141.3	21.98	17.42	28.26	3.60
2005	47778.2	25.83	18.99	27.95	3.87
2006	67239.8	31.08	21.24	27.75	4.15
2007	94023.3	35.37	23.21	27.40	4.55
2008	136340.3	43.41	26.87	27.17	4.71
2009	162026.2	47.58	29.55	-	-

Sources: *China Statistical Yearbook, 1999-2010*; *Selected Statistics of Communist Party of China, 1921-2010*, Beijing: Dangjian Duwu Press 2011

Table 3: Summary Statistics for 1995, 2000, 2006, 2010

Variables	Year of the surveys	CPC Owner		PC Owner		Non CPC/ PC Owner		Full Sample	
		Mean	S.D	Mean	S.D.	Mean	S.D.	Mean	S.D.
Age of firm	1995	4.32	2.64	5.9	4.26	4.53	3.66	4.61	3.72
	2000	5.82	3.86	6.80	4.21	6.51	5.9	6.48	4.00
	2006	7.4	4.4	8.4	4.5	6.6	4.3	7.04	4.4
	2010	8.9	4.5	10.2	4.2	7.9	4.7	8.7	4.7
State share (%)	1995	1.2	5.4	1.02	4.98	0.68	3.97	0.77	4.27
	2000	0.3	2.0	0.0	0.0	0.0	0.0	0.2	2.3
	2006	0.8	4.9	0.6	3.6	0.3	2.9	0.5	3.8
	2010	0.4	3.8	0.3	2.8	0.2	2.8	0.3	3.3
CEO share (%)	1995	89.9	23.0	87.7	25.2	92.0	20.5	91.4	21.0
	2000	72.6	30.4	75.5	28.8	81.0	25.6	78.2	27.7
	2006	64.5	28.3	67.3	26.6	70.2	25.4	68.2	26.7
	2010	61.7	29.5	64.3	28.7	67.3	28.2	65.2	28.8
Sales (RMB mil)	1995	6.7	19.6	11.9	23.9	5.3	14.1	5.6	14.9
	2000	18.6	39.8	28.2	49.8	9.9	26.9	15.9	37.0
	2006	53.9	118.6	86.9	145.7	21.4	57.3	39.2	96.8
	2010	74.9	182.3	122.6	242.1	33.1	114.4	57.8	160.1
No. of employees	1995	104.0	177.3	160.7	224.9	80.7	149.9	85.0	153.2
	2000	216.3	636.6	319.3	730.2	92.5	230.9	171.1	637.2
	2006	209.1	423.5	357.1	548.5	106.0	262.5	157.9	348.7
	2010	198.4	381.0	320.1	491.8	94.3	255.3	157.2	341.3
Equity (RMB mil)	1995	2.7	7.1	4.8	10.6	2.1	6.3	2.4	6.8
	2000	9.4	21.3	13.7	26.2	4.5	12.8	7.8	19.7
	2006	12.2	24.6	20.6	32.6	7.1	18.6	10.2	22.6
	2010	21.8	46.8	35.6	59.9	10.1	33.1	17.4	42.5
Bank loan/equity	1995	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2000	0.6	0.9	0.7	1.0	0.3	0.7	0.5	0.8
	2006	0.7	1.7	0.9	1.8	0.4	1.2	0.6	1.5
	2010	0.9	2.5	1.1	2.5	0.7	2.0	0.8	2.3
Bank loandummy	1995	0.21	0.41	0.20	0.40	0.19	0.39	0.2	0.4
	2000	0.48	0.50	0.52	0.50	0.34	0.47	0.38	0.49
	2006	0.56	0.50	0.68	0.47	0.38	0.49	0.46	0.50
	2010	0.62	0.49	0.74	0.44	0.46	0.50	0.55	0.50
ROE	1995	0.62	1.19	0.68	1.27	0.68	1.34	0.65	1.27
	2000	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3
	2006	0.3	0.6	0.4	0.7	0.3	0.5	0.3	0.6
	2010	0.4	0.8	0.4	0.8	0.3	0.7	0.3	0.8
ROS	2006	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2
	2010	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2
Union	2006	0.58	0.49	0.72	0.45	0.33	0.47	0.45	0.50
	2010	0.53	0.50	0.66	0.47	0.29	0.45	0.42	0.49

Table 4: Logit Regression on Whether the Firm Has Bank Loans

Dependent: Bank loan	1995		2000		2006		2010		Pooled	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Owner C.										
CPC	.125 (.133)		.071 (.081)		.191*** (.072)		.146** (.062)			
PC		.018 (.187)		.215** (.100)		.354*** (.080)		.479*** (.075)		
CPC*Post									.234*** (.070)	
PC*Post										.872*** (.086)
Gender	-.153 (.157)	-.103 (.164)	-.162 (.101)	-.064 (.124)	-.184* (.104)	-.258*** (.099)	-.027 (.089)	-.012 (.095)	-.279*** (.087)	-.292*** (.092)
Edu	.017 (.019)	.030 (.021)	-.018* (.011)	-.006 (.015)	.005 (.014)	.005 (.013)	.008 (.012)	-.002 (.013)	.025** (.011)	.018 (.012)
Age	-.009 (.006)	-.006 (.006)	-.009** (.004)	-.012** (.005)	-.009* (.004)	-.008* (.004)	-.004 (.004)	-.001 (.004)	-.008** (.004)	-.007* (.004)
Owner shr	-.006*** (.002)	-.005* (.002)	-.012 (.124)	.026 (.158)	.000 (.001)	.000 (.001)	.001 (.001)	.000 (.001)	-.012*** (.001)	-.011*** (.001)
Owner exp	.032 (.175)	-.040 (.194)	.060 (.071)	.035 (.088)	.148** (.074)	.187*** (.070)	.243*** (.091)	.293*** (.010)	.289*** (.069)	.327*** (.072)
Firm C.										
Age	.022 (.014)	.012 (.015)	-.015* (.008)	-.016 (.010)	.026*** (.010)	.024*** (.009)	.028*** (.007)	.025*** (.008)	.068*** (.007)	.061*** (.007)
Size	.005 (.003)	.004 (.003)	.004*** (.001)	.006*** (.002)	.032 (.005)	.030 (.005)	.020 (.003)	.020 (.003)	-.011 (.006)	-.100 (.006)
Org	.036 (.114)	-.027 (-.126)	.172** (.069)	.135 (.087)	.147* (.082)	.099 (.079)	.217*** (.076)	.204** (.081)	.249*** (.066)	.201*** (.071)
Privtz					.008 (.127)	.037 (.125)	-.215* (.129)	-.279* (.146)		
ROS (t-1)					-.128 (.089)	-.119 (.086)	.133 (.164)	.083 (.176)		
Control V.										
Post									-.172* (.088)	-.096 (.091)
Ind. Eff.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reg. Eff.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Const	.067 (.463)	-0.196 (.501)	1.291*** (-.307)	1.360*** (-.402)	.238 (.354)	.190 (.343)	-.102 (.303)	-.135 (.328)	.748*** (.253)	.546** (.268)
N	997	860	1865	1252	1707	1819	2135	1896	6302	5666
pseudo R ²	.047	.047	.037	.038	.113	.114	.116	.139	.125	.130

Table 5: OLS Regression on Bank Loan over Equity Ratio

Dependent Var:	2000		2006		2010		Pooled	
Bank loan/equity	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Owner chrctcs</i>								
CPC	.072 (.076)		.403*** (.145)		.316* (.184)			
PC		.507*** (.087)		.551*** (.154)		.740*** (.203)		
CPC * Post							.345*** (.100)	
PC * Post								.678*** (.114)
Gender	-.170 (.117)	-.058 (.136)	-.279 (.220)	-.342 (.210)	-.059 (.277)	-.194 (.285)	-.282** (.137)	-.392*** (.145)
Edu	-.025** (.013)	-.025* (.015)	.034 (.028)	.045* (.027)	.047 (.036)	.053 (.037)	.023 (.017)	.033* (.018)
Age	-.008* (.004)	-.011** (.005)	-.027*** (.009)	-.021** (.009)	-.021* (.012)	-.019 (.012)	-.016*** (.006)	-.015** (.006)
Owner shr	-.216* (.118)	-.206 (.145)	.001 (.003)	.001 (.003)	.003 (.003)	.002 (.003)	.001 (.002)	.001 (.002)
Owner exp	.051 (.069)	.126 (.081)	.363** (.149)	.421*** (.140)	.421 (.259)	.585** (.270)	.228** (.098)	.336*** (.103)
<i>Firm chrctcs</i>								
Age	-.020** (.008)	-.027*** (.009)	.042** (.020)	.036* (.019)	.103*** (.021)	.093*** (.022)	.059*** (.010)	.053*** (.010)
Size	.023*** (.008)	.017* (.010)	.047*** (.007)	.041*** (.007)	.027*** (.005)	.023*** (.005)	.031*** (.003)	.028*** (.004)
Org	.141** (.070)	.101 (.083)	.296* (.169)	.274* (.163)	.383* (.231)	.310 (.241)	.327*** (.101)	.267** (.109)
Privtz			.034 (.250)	.075 (.246)	-.462 (.369)	-.554 (.397)		
ROS (t-1)			.075 (.179)	.066 (.172)	-1.119** (.516)	-1.096** (.531)		
<i>Control vars</i>								
Prd							-.934*** (.174)	-.802*** (.183)
Ind. Eff.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reg. Eff.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Const	1.531*** (.309)	1.201*** (.371)	-.505 (.712)	-.873 (.688)	-1.287 (.899)	-1.347 (.938)	.222 (.381)	-.084 (.407)
N	1031	726	1715	1827	1922	1733	4980	4571
pseudo R ²	.034	.056	.044	.042	.026	.030	.025	.029

Table 6 : Two-stage Probit Regressions for Bank Loan in 2006 and 2010

Panel A. Second Stage of Two-stage Probit Model: Dependent Var: Bank loan				
	2006		2010	
	(1)	(2)	(3)	(4)
Owner C				
CPC	3.805*** (.862)		5.659*** (1.444)	
PC		2.984*** (.575)		2.210*** (.428)
Gender	.053 (.174)	-.403*** (.130)	.615** (.259)	-.015 (.110)
Edu	-.031 (.023)	-.014 (.017)	-.075** (.034)	-.022 (.016)
Age	-.048*** (.012)	-.016*** (.006)	-.060*** (.017)	-.009* (.005)
Owner shr	.003 (.002)	-.001 (.002)	.006** (.003)	-.002 (.001)
Owner exp	-.845*** (.263)	.116 (.091)	-.701** (.315)	.233** (.115)
FirmC				
Age	.030* (.016)	.016 (.012)	.044*** (.016)	.005 (.010)
Size	.000*** (.000)	.000 (.000)	.000** (.000)	.000*** (.000)
Org	.110 (.131)	-.028 (.105)	-.108 (.188)	.075 (.099)
Privtz	-.550** (.241)	.168 (.162)	-1.425*** (.420)	-.531*** (.178)
Ros (t-1)	-.156 (.141)	.016 (.113)	-.780* (.434)	-.064 (.207)
Control				
Ind. eff.	Yes	Yes	Yes	Yes
Reg. eff.	Yes	Yes	Yes	Yes
Const	1.268** (.614)	.320 (.440)	1.547** (.788)	.308 (.394)
N	1707	1819	2135	1896
Prob>chi2	0.0000	0.0000	0.0000	0.0000
Panel B. First Stage of The Two-stage Probit Model: Test of the IVs				
	2006		2010	
	(1) CPC	(2) PC	(3) CPC	(4) PC
IVs				
Union	.263*** (.074)	.575*** (.081)	.168*** (.065)	.621*** (.075)
CVRG	.051*** (.014)	.027* (.014)	.067*** (.021)	-.004 (.024)
N	1707	1819	2135	1896
Pseudo R-sq	0.177	0.148	0.106	0.137
Prob>chi2	0.0000	0.0000	0.0000	0.0000
Wald test of exogeneity.	0.00	0.0000	0.0000	0.0000

Table 7: 2SLS Regressions for bank loan over equity in 2006 and 2010

Panel A. Second Stage of 2SLS: Dependent Var: Bankloan/equity				
	2006		2010	
	(1)	(2)	(3)	(4)
<i>Owner C</i>				
CPC	1.957*** (.697)		3.544** (1.393)	
PC		1.688*** (.549)		2.032*** (.713)
Gender	.069 (.141)	-.131 (.122)	.349 (.253)	-.141 (.180)
Edu	.007 (.019)	.022 (.016)	-.029 (.035)	.022 (.026)
Age	-.033*** (.009)	-.014*** (.005)	-.049*** (.017)	.022*** (.008)
Owner shr	.002 (.002)	.00 (.002)	.006** (.003)	.001 (.002)
Owner exp	-.339 (.214)	0.125 (.086)	-.521* (.315)	.101 (.183)
<i>Firm C</i>				
Age	.011 (.013)	2.95-e4 (.012)	.056*** (.016)	.0242 (.016)
Size	2.06-e5*** (5.22-e6)	6.58-e6 (7.34-e6)	1.13-e5*** (4.07-e6)	4.04-e6 (4.57-e6)
Org	.099 (09.106)	.059 (.101)	-.186 (.191)	-.116 (.162)
Privtz	-.279 (.194)	.095 (.153)	-.893** (.406)	-.533* (.290)
ROS (t-1)	.122 (.114)	.198* (.108)	-1.446*** (.414)	-1.090*** (.341)
<i>Control Var</i>				
Ind. eff.	Yes	Yes	Yes	Yes
Reg. eff.	Yes	Yes	Yes	Yes
Const	.850* (.495)	.146 (.416)	1.725** (.807)	.859 (.630)
N	1715	1827	1922	1733
Prob > F	0.0000	0.0000	0.0000	0.0000
Panel B. First Stage of 2SLS: Test of the IVs				
	2006		2010	
	(1) CPC	(2) PC	(3) CPC	(4) PC
<i>IVs</i>				
Union	.089*** (.024)	.145*** (.020)	.060** (.024)	.186*** (.023)
CVRG	.016*** (.004)	.007* (.004)	.027*** (.008)	-.002 (.007)
N	1715	1827	1922	1733
R-sq	.221	.152	.137	.151
P	0.0000	0.0000	0.0000	0.0000
Anderson Canon corr.	0.00	0.00	.0001	0

Sargan stat	.996	.453	.24	.15
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Note: Estimations in first stage were conducted with the full set of the explanatory variables used in 2nd stage but presented without the results for the sake of the space. The full results are available upon the request.

Table 8: Veteran CPC-member owners & access to bank loan, 2006**(a) OLS and Logit estimations on bank loan accessibility**

	(1) Bank loan	(2) Bank loan/equity	(3) Bank loan	(4) Bank loan/equity
CPC	.214*** (.077)	.445*** (.155)		
PC			.361*** (.083)	.564*** (.160)
N	1641	1641	1753	1753
Chi-sq	263.70	215.63	283.09	218.78
P	0.000	0.000	0.000	0.000

(b) 2SLS estimations on bank loan accessibility**Panel A 2nd stage of 2SLS**

	(1) Bank loan	(2) Bank loan/equity	(3) Bank loan	(4) Bank loan/equity
CPC	4.383*** (1.105)	2.314*** (.866)		
PC			2.933*** (.587)	1.646*** (.565)
N	1641	1641	1753	1753
Chi-sq/Wald-chi2	107.17	2.98	179.53	3.49
P	0.0000	0.0000	0.0000	0.0000

Panel B first stage of 2SLS

	CPC	CPC	PC	PC
Union	0.082*** (.024)	0.145*** (.021)		
CVRG			0.013*** (.004)	0.006 (.004)
N	1641	1641	1753	1753
R-sq	0.257	0.257	0.152	0.152
P	0.0000	0.0000	0.0000	0.0000
Anderson Canon corr.	0.0000	0.0000	0.0000	0.0000
Sargan stat	.4743	.4743	0.3980	0.3980

Notes: Estimations were conducted with the full set of the explanatory variables but presented without the results on the other variables for the sake of the space. In 2SLS, CVRG and Union were used as instrumental variables.

Table 9: Duration and Timing of Being CPC member and Bank Loan Access, 2006

	(1)	(2)	(3)	(4)
	Bank loan/equity	Bank loan/equity	Bank loan	Bank loan
Owner C				
CPC	.445* (.238)	.383** (.152)	.316* (.196)	.322*** (.124)
CPC*CPC_age	-.003 (.012)		-.001 (.010)	
CPC*CPC_Post2002		.132 (.301)		-.034 (.255)
Gender	-.253 (.219)	-.274 (.220)	-.264 (.172)	-.297* (.172)
Edu	.036 (.028)	.035 (.028)	.002 (.023)	.002 (.023)
Age	-.025** (.010)	-.027*** (.009)	-.014* (.008)	-.015** (.007)
Owner shr	.001 (.003)	.001 (.003)	.001 (.002)	.001 (.002)
Owner exp	0.323** (0.152)	0.368** (0.150)	.220* (.125)	.239* (.123)
Firm C				
Age	.043** (.020)	.042** (.020)	.042** (.017)	.042** (.016)
Size	4.60-e5*** (7.41-e6)	4.73-e5*** (7.20-e6)	7.86-e5*** (1.23-e5)	6.84-e5*** (1.13-e5)
Org	.281* (.169)	.298* (.169)	.198 (.136)	.218* (.135)
Prvtz	-.023 (.252)	.035 (.250)	.032 (.211)	.037 (.208)
Ros (t-1)	.098 (.180)	.075 (.179)	-.165 (.148)	-.190 (.146)
Control V				
Ind. Eff	Yes	Yes	Yes	Yes
Reg. Eff.	Yes	Yes	Yes	Yes
Const	-.563 (.734)	-.534 (.715)	.377 (.604)	-.758 (.599)
N	1686	1715	1678	1707
pseudo R-sq	.041	.044	.115	.115
chi2	202.6	219.6	267.5	272.5
p	4.34e-27	2.71e-30	2.01e-41	2.10e-42

Table 10: Logit Regressions on Whether the Firm has Informal Loans

Dependent Var: Informal Loan	1995		2000		2006		Pooled	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Owner chrcts								
CPC	.110 (.132)		.035 (.077)		-.022 (.124)		.078 (.102)	
PC		.207 (.178)		-.036 (.094)		.017 (.136)		-.008 (.123)
Gender	-.248 (.162)	-.196 (.168)	-.235** (.104)	-.275** (.127)	-.119 (.191)	-.083 (.175)	-.409*** (.144)	-.402** (.161)
Edu	.032* (.019)	.034 (.021)	.000 (.009)	-.017 (.015)	-.045** (.023)	-.051** (.022)	.000 (.014)	-.018 (.018)
Age	.017*** (.006)	.015** (.006)	-.009** (.004)	-.009* (.005)	-.002 (.008)	-.002 (.007)	-.001 (.005)	-.000 (.006)
Owner shr	-.002 (.002)	-.000 (.003)	-.467*** (.117)	-.381** (.148)	.002 (.002)	.002 (.002)	-.001 (.003)	.001 (.003)
Owner exp	.095 (.166)	.235 (.175)	.172** (.068)	.160* (.084)	.342*** (.126)	.316*** (.115)	.299*** (.095)	.315*** (.111)
Firm chrcts								
Age	-.026* (.015)	-.026* (.016)	.000 (.008)	.010 (.010)	-.028* (.015)	-.024* (.014)	-.021* (.011)	-.014 (.013)
Size	-.001 (.004)	-.001 (.004)	-.031*** (.010)	-.016 (.012)	.000 (.006)	.000 (.006)	.000 (.001)	.000 (.001)
Org	-.043 (.115)	-.025 (.126)	.027 (.067)	.092 (.084)	.231 (.147)	.182 (.137)	.081 (.089)	.167 (.105)
Privtz					.140 (.192)	.130 (.190)		
Control vars								
Yr Eff.							Yes	Yes
Ind. Eff.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reg. Eff.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Const	-1.562*** (.464)	-1.971*** (.512)	.508* (.289)	.390 (.382)	-1.104** (.561)	-1.021* (.537)	-1.305*** (.457)	-1.656*** (.525)
N	1135	966	1824	1227	2027	2178	5044	4426
pseudo R ²	.029	.027	.031	.029	.054	.051	.169	.178

Appendix: Table A1: Definition of variables

	Variables	Definition
Dependent variables	Bank loan	A dummy variable that equals to one if the firm has bank loans at the time of the survey and equals to zero if otherwise
	Bank loan/ Equity	The ratio of the bank loans to total equity of the firm in the survey year
	CPC_app	a dummy variable that equals to one if the entrepreneur has submitted an application to join CPC (2006 survey) or has the desire to join CPC (2010 survey) at the time of survey and equals to zero if otherwise
	Informal loan	a dummy that equals to one if the firm has borrowed from informal lending at the time of survey and equals to zero if otherwise (only for 1995, 2000, 2006).
Independent Variable: post constitutional amendments	Post	a dummy variable that equals to one if the survey was conducted after 2002 (in 2006 and 2010 in our sample) and equals to zero if otherwise (in 1995 and 2000 in our sample)
Independent variables: owner characteristics	CPC	a dummy variable that equals to one if the entrepreneur of the firm is a CPC member at the time of the survey and equals to zero if otherwise.
	PC	a dummy variable that equals to one if the entrepreneur of the firm is a PC member at the time of the survey and equals to zero if otherwise.
	Gender	a dummy variable that equals to one if the entrepreneur is a female and equals to zero if otherwise
	Edu	the total schooling years of the entrepreneur
	Age	the age of the entrepreneur at the time of the survey
	Owner shr	the percentage of equity held by the entrepreneur in total shares
	Owner exp	a dummy variable that equals to one if the entrepreneur once worked as a civil servant or a manager of a SOE firm, or, served in army before he/she started this business and equals to zero if otherwise.
	CPC_Post2002	a dummy variable that equals to one if the CPC member joined the Party after 2002
	CPC_age	the duration of the CPC membership (since he/she joined the Party at the time of survey by year)
Independent variable: firm characteristics	Age	the age of the firm at the time of the survey
	Size	the total sales of the firm in the survey year
	Org	a dummy variable that equals to one if the firm is a limited liability company and equals to zero if otherwise
	Prvtz	a dummy variable that equals to one if the firm was privatized from a State-owned enterprise and equals to zero if otherwise
	ROS	the return over sales of the firm
Instrumental Variables	Union	a dummy variable that equals to one if the firm has a labor union at the time of survey
	CVRG	The frequency of the word ‘three represents’ shown in the articles written by the CPC chief of a given province covered by the Database of CPC Construction Periodicals in the past two years before the survey.