UNIVERSITÀ CATTOLICA DEL SACRO CUORE **Dipartimento di Economia e Finanza**

Working Paper Series

Plunging into the Sea: Ideological Change, Institutional Environments and Private Entrepreneurship in China

Massimo Bordignon, Yanhua Deng, Jian Huang, Jin Yang

Working Paper n. 74

September 2018



Plunging into the Sea: Ideological Change, Institutional Environments and Private Entrepreneurship in China

Massimo Bordignon

Università Cattolica del Sacro Cuore

Yanhua Deng

Nanjing University, China

Jian Huang

Southwestern University of Economics and Finance, China

Jin Yang

Southwestern University of Economics and Finance, China

Working Paper n. 74 September 2018

Dipartimento di Economia e Finanza Università Cattolica del Sacro Cuore Largo Gemelli 1 - 20123 Milano – Italy tel: +39.02.7234.2976 - fax: +39.02.7234.2781 e-mail: dip.economiaefinanza@unicatt.it

The Working Paper Series promotes the circulation of research results produced by the members and affiliates of the Dipartimento di Economia e Finanza, with the aim of encouraging their dissemination and discussion. Results may be in a preliminary or advanced stage. The Dipartimento di Economia e Finanza is part of the Dipartimenti e Istituti di Scienze Economiche (DISCE) of the Università Cattolica del Sacro Cuore.

Plunging into the Sea: Ideological Change, Institutional Environments and Private Entrepreneurship in China

Massimo Bordignon

Department of Economics and Finance, Università Cattolica del Sacro Cuore Milan, Italy

Email: massimo.bordignon@unicatt.it

Yanhua Deng

School of Social and Behavioral Sciences, Nanjing University

Nanjing, China

Email: deng@nju.edu.cn

Jian Huang

School of Public Finance and Taxation, Southwestern University of Economics and

Finance

Chengdu, China

Email: jhuang1@swufe.edu.cn

Jin Yang

School of Public Finance and Taxation, Southwestern University of Economics and

Finance

Chengdu, China

Email: yangjin@swufe.edu.cn

Plunging into the Sea: Ideological Change, Institutional Environments and

Private Entrepreneurship in China

Abstract

This paper examines the integration of Chinese Communist Party membership and

private entrepreneurship in China after 2002, when the Party revised its constitution

and officially removed ideological discrimination against private entrepreneurs. Using

six waves of a nationwide survey of privately owned enterprises in China from 1997

to 2008, we find that the constitutional change led to an exodus of Party members,

and particularly senior officials, into the private sector. On the contrary, very few

private entrepreneurs were admitted to the Party. The exodus of Party members was

more prominent in regions with weaker market-supporting institutions. After the

reform, Party affiliation is also shown to provide considerable private benefits to

entrepreneurs, in the form of easier access to loans from state owned banks, reduced

government expropriation, improved firms' performance. These political rents were

larger in regions with weaker market-supporting institutions.

Key word: Party membership; private entrepreneur; ideology; market institutions;

political rents

JEL CODE: H1, P26

2

1. Introduction

The relationship between the Chinese Communist Party (CCP) and the private sector has changed dramatically along the years. Originally, the Party ideology was strongly anti-capitalist, but the changes in the socio-economic structure of the country induced by the liberalization reforms in the 1980s and the astounding growth of the private sector in the 1990s convinced the CCP leadership of the need to adopt a more consensual relationship. This move was motived by the desire to avoid the formation of potential opposing elites endowed with considerable resources, but also by the necessity to provide better financial opportunities to Party members who might otherwise be lured away to the private sector (Dickson, 2001). This new strategy was given an ideological foundation by the "Three Represents" theory, formulated by then president Jiang Zemin, which acknowledges private entrepreneurs as a main component of "advanced social productive forces" (along with workers and intellectuals) and "builders of socialism with Chinese characteristics".

Following this drastic change in ideology, the CCP constitution was amended in 2002 and the state constitution in 2004. The revision of the Party constitution in 2002 removed ideological discrimination against private entrepreneurship, while the 2004 amendment of state constitution introduced protection of property rights. With the Party reform, members were then encouraged to get involved in the private market and meanwhile private entrepreneurs were allowed to join the Party. This radical change of the CCP's strategy came as a surprise for many members and did not go through without opposition within the Party (e.g. Dickson, 2001, 2007), both at the

Center and at the local level (e.g. Guo et al., 2014). Moreover, the centrally decided reform affected a country where the level of development was differentiated across the territory, with a number of provinces that had already made important steps towards adopting market institutions and several others that lagged behind.

These two facts, the abrupt change in Party ideology and the variations in institutional settings across Chinese provinces, provide us with an ideal quasi-experimental situation to explore the importance of political ties for entrepreneurial activities, thus contributing to a large international literature (see below for a discussion). On the one hand, the change in Party ideology and the removal of discrimination against entrepreneurs allowed Chinese politicians and firms to form connections more easily, raising the empirical questions whether these connections actually mattered for firms' performance and through which mechanisms. On the other hand, it is plausible that these opportunities were distributed unevenly among provinces, given their large variance in terms of market development. This suggests that the role of political ties could have been more important for firms in backward provinces, again contributing to a growing literature discussing the role of institutions on the relationship between business and politics.

We address these questions by using six waves of a national wide survey of privately owned enterprises in China from 1997 to 2008. The survey provides detailed individual information of firm owners and a wide range of information on firm characteristics. We use these data to perform a Difference-in-Difference analysis with the 2002 reform as the discriminating event, and by comparing the effect of the

reform across provinces characterized by different levels of market development. We also carefully control for other confounding contemporary policies that might also have affected the relationship between politics and firms, such as the implementation of the Western Development Program (WDP) and China's accession to the World Trade Organization (WTO).

We obtain several results. First, we show that the change of Party constitution led to a sharp increase in the number of Party members among entrepreneurs, confirming the results of previous analyses on other data sets (e.g. Dickson, 2007). In our survey, the proportion of Party members doubled in the year following the constitutional amendment, moving from 17 to 34%. Notably, the reform had also an asymmetric effect. Rather than recruiting private entrepreneurs into the Party, the reform mainly led to an exodus of Party members into business. About 90% of Party members-cum-entrepreneurs in our survey had already been Party members before starting their business. Interestingly, we also show that Party members who joined the private markets after the reform were statistically different from the Party members who had started their business before the reform. With the removal of the ideological ban against private entrepreneurship, even Party officials holding senior positions and having more managerial experience in running state-owned enterprises could now join the private market without risk of jeopardizing their position and networks within the Party. Clearly, these more senior Party members were also the ones that could more easily use their political connections to promote the performance of their firms.

¹ Private entrepreneurs did also apply to the Party, but only a privileged few (owners of large firms for example) were likely to be accepted. See section 4 for a discussion.

Together with the changed ideological position about private market, this might also help explain our second main result. We show that *after* the reform, but not before it, having an owner affiliated to the Party benefitted the private firms.

Specifically, after the reform, Party affiliation helped private entrepreneurs in securing loans from state owned banks, alleviating government expropriation in the form of extra-legal payments, and improving the general performance of their firms.

This is consistent with the findings by Guo et al. (2014), who also found political rents of Party membership to become more significant only after the CCP changed its ideological orientation towards the private sector.

Finally, in line with our second hypothesis above, we also show that, after the reform, the increase of Party members among private entrepreneurs were significantly larger in provinces with *weaker* institutional environments, as measured by poorer legal protection, lower levels of market development, and higher levels of government corruption. As expected, the benefits for firms of the owner's Party affiliation after the reform were also larger in these provinces.

Our findings then provide support for the widespread concern that the large influx of Party members to the private sector may strengthen the nepotistic relationships between private entrepreneurs and local government officials. More worryingly, if these mechanisms become entrenched, they might create barriers for the development of market and market-supporting institutions, thus reducing potential growth. These issues, together with some corrective steps recently taken by the Chinese government, will be taken up in the concluding session.

Our study speaks to a large body of literature. For instance, the political background of directors, board members, and large shareholders (Agrawal and Knoeber, 2001; Fisman, 2001; Faccio, 2006), their family relationships with politicians (Amore and Bennedsen, 2013), and the role of firm's campaign contributions (Claessens, Feijen and Laeven, 2008; Cooper, Gulen, and Ovtchinnikov, 2010) have been extendedly discussed. Similar to our case, it has also been documented that private benefits of political connections can take on several forms. Preferential access to bank credit (Kwahja and Mian, 2005; Charumilind et al., 2006; Dinc, 2005; Cull et al., 2015), government contracts and subsidies (Goldman et al., 2013; Faccio et al., 2006), and lighter taxation and relaxed regulatory oversight (Adhikari et al., 2006; Correia, 2014; Liu et al., 2013; Bourveau et al., 2014; Chen et al., 2017).

A few studies also explore how benefits of political ties vary with institutional environments. Boubakri et al. (2012) show that political ties are more valuable in less democratic countries, while Faccio (2006) finds that political connections between firms and politician are more prevalent in corrupt countries with barriers to foreign investment. When it comes to China, the work by Li et al. (2008) already demonstrates that membership of communist Party is more crucial for firm performance in regions with weaker market institutions and poorer legal protection.

However, a limit of most of these studies is their cross-national nature (Guo et al., 2014). This does not allow them to provide sufficient evidence on the mechanism via which institutional environments influence the benefits of political connections.

Their findings are also likely to be confounded by unobserved regional heterogeneity, such as social norm, culture, and legal framework. A significant feature of our study is that we focus on a single country undergoing rapid economic transition and in particular going through an important constitutional change. This allows us to thoroughly examine the dynamic interaction of politics and business in a transition economy.

The rest of the paper is organized as follows. Section 2 offers a more detailed institutional background. Section 3 discusses our methodology and presents some preliminary evidence. Section 4 details the data set, including a discussion on Party member recruitment. Section 5 presents our main results, also discussing potential alternative explanations and robustness exercises. Section 6 provides direct evidence on the benefits of political ties for business. Section 7 concludes.

2. Institutional background

Party ideology always has a profound impact on private sector and the business-state ties in China. During the Mao era (1949-1976), the CCP pursued socialist revolution and promoted class struggles nationwide. Private enterprises in China were even eliminated during the period from 1952 to 1977. As the post-Mao reform unfolded, the CCP's strategy shifted to economic modernization. The private sector began to remerge in late 1970s, getting increasingly dynamic and even luring a number of Party members and government employees to quit their iron-rice-bowl (*tiefanwan*) jobs and "plunge into the sea" of business (*xiahai* in Chinese, vividly). Such entrepreneurs

became an important contingent of what are popularly known as the "red capitalists" in China, that is, entrepreneurs with close personal and (or) political ties to the Party state.

However, despite economic reforms, there was still a strong ideological discrimination against the private sector. For a long period, as commercial and property laws were either non-existent or unenforceable (McMillan, 1995), private enterprises were subject to arbitrary harassment by government cadres (Pearson, 1997). To avoid discrimination, many private firms registered themselves as "collective enterprises" (Pearson 1997; Che and Qian 1998; Gore 1998). The disguise of "collective ownership" rendered these firms ideologically acceptable and offered them better access to resources monopolized by state-owned enterprises (Nee, 1992; Naughton 1994; Li, 1996).

After the mid-1990s, the private sector had become the main engine of economic growth while the state-owned sector was suffering an accelerating decline. An increasing number of economic elites had accumulated a large amount of wealth outside the state's control, which was perceived as a potential threat to the political regime. To avoid this scenario, the CCP then attempted to embrace the growing private sector. As already mentioned, during the 16th National Congress of Communist Party in 2002, the Party constitution was revised to legitimize the status of private entrepreneurs. This was a significant change of Party ideology, since for the first time the non-public sector of private and other forms of ownership was officially acknowledged as an important component of the socialist market economy. Private entrepreneurs, previously regarded as exploiters of the working class, were now considered contributors of socialism with

Chinese characteristics. More importantly, the Party adopted an even more open policy encouraging Party members to start their own businesses and allowing private entrepreneurs to join the Party.

The Party's embrace strategy had a significant impact upon the private sector as well as business-state relationship in China. Once the ideological barrier against private sector was removed, entrepreneurs and state bureaucrats soon started to develop a closer intertwining relationship, which was driven by the imperative of generating growth. Consequently, there was a dramatic rise in the number of party members who plunged into the sea of business after the revision of the Party constitution (see the next session for empirical evidence). Little recruitment of new Party members, however, was carried out among private entrepreneurs. An official report by the central organization department in 2005 indicates that only 894 of 2.42 million new recruits in 2004 were private entrepreneurs, while the total number of this population then was 9.49 million.² In other words, the bulk of the increase of red capitalists was due to Party members moving into the private sector rather than vice versa.³ Our own survey data, discussed in section 4, confirms this asymmetry.

It is not clear whether this asymmetric effect was more due to a "demand" effect (private entrepreneurs deciding not to apply to the Party because they did not have the ex-ante connections needed to benefit from this affiliation) or to a "supply" one (the

_

² Similarly, around 1500 new members from the private sector in 2006 while total number of entrepreneurs increased to 12.79 million.

³ According to Dickson (2007), the percentage of those who were included into the Party after going into business merely increased from 13.1 to 15.7 percent, while the percentage of entrepreneurs who were already Party members before they went into business, namely, the *xiahai* entrepreneurs, increased sharply from 25 to 34.2 percent.

Party apparatus de facto discouraging applications of private entrepreneurs in spite of the formal openings in the reform⁴). While probably both played a role, the statistical evidence discussed in Section 4 points more towards a selection effect of Party apparatus on the new members, as only private entrepreneurs with specific characteristics were likely to be accepted in the Party.

The combination of Party membership and entrepreneurship integrated effectively power and wealth in China. Given the monopolistic position of the government in controlling resources, private entrepreneurs who were political elites or former state bureaucrats have preferential treatments in accessing resources (Guo et al., 2014). Party member-cum-entrepreneurs are familiar with how state bureaus work and knowledgeable of the implicit rules governing political activities. They have nurtured not only working relationships but also personal connections crisscrossing the government and the business sector, which allows them to exploit the inconsistencies among laws and regulations in a transition period (Yang, 2004). The political capital possessed by Party members, former political elites in particular, helps businesses reduce regulatory burdens, lower fees and taxes, and grant entrepreneurs easier access to loans, as well as official discretion in granting licenses and permits (Li et al., 2008; Guo et al., 2014; Liu et al., 2013; Chen et al., 2017). Unsurprisingly, a large number of Party members has become super rich entrepreneurs within a decade (Guo, 2014).

The influx of Party members into business arouses wide public concerns. An

_

⁴ The following quote, taken by Dickson (2003: 104), well illustrates the resistance of the Party apparatus towards the new policy "The party's orthodox leftists (who were generally intellectuals or retired officials) immediately rebuked the proposal in a series of open letters. Not only did they challenge the ideological propriety of admitting capitalists into a communist party, they also attacked the personal leadership style of Jiang Zemin". See also Guo et al. (2014) for some further evidence of resistance to the reform by Party local levels.

internal report (allegedly from the Central Party School) indicated that 90% of the ultra-wealthy in China are the children of high-ranking officials. China Comment (banyuetan), an official publication of Xinhua News Agency, expresses concern over the large number of Party members entering the private sector and using the Party membership to nurture political connections crisscrossing the government and business sector. China Youth Daily (February 16, 2005) points out that "one third of private entrepreneurs are Party members is a phenomenon commanding a deeper thought". Some researchers suggest that China's capitalists and government officials have developed a stable set of relationships that is referred to as "crony communism" (Dickson, 2011), which can potentially rot political trust.

It should also be noted that the reform of Party ideology in 2002 was largely an exogenous shock. Not too long before the constitution amendment, the CCP had continued to proclaim that its ultimate goal was to eliminate capitalism. Politically and ideologically incorrect "elements" such as "private entrepreneurs" or capitalists were not allowed to exist in the Party. The revision of Party ideology was even unanticipated by many senior officials.⁵

Moreover, the quality of local institutions differs across provinces in China (Lu and Yao, 2003). This suggests that the degree of exodus of Party members might vary to institutional settings, due to the fact pointed out by Li et al. (2008) that Party membership is more important to firm performance in regions with weaker market

-

⁵ For instance, Zhang Dejiang, the Party secretary of Zhejiang province (and future Chairman of the Standing Committee of the National People's Congress) published an article in 2000, claiming that "it must be crystal clear that private entrepreneurs cannot join the Party." However, he changed his tune after the 16th National Congress and later supported the view that private entrepreneurs should be allowed to join the Party.

institutions and weaker legal protection. The combination of a largely exogenous shock with significant regional institutional variations offers a quasi-experimental situation for our econometric analysis.

3. Models and Preliminary evidence

Our difference-in-differences framework makes use of the variations in the percentage change of "red capitalist" over time and across provinces, to investigate how revision of Party constitution in 2002 and subsequent embrace of the private sector affected the benefits of business-state ties under different institutional environments. Under our framework, provinces are first compared to their pre-constitutional amendment levels, yielding the first level of differences. Subsequently, the differences are compared to each other. This results in a second-level difference and leads to an estimate of the impact of institutional settings upon rent seeking.

The first source of variations in our study originates from the revision of Party constitution in 2002. Figure 1, which is based on the data from National Wide Survey of Privately Owned Enterprises in China (see section 4 for a discussion of this survey), provides some preliminary evidence. As can be seen from Figure 1, the proportion of private entrepreneurs with Party membership was within the range between 17% and 20% during the late 1990s and early 2000s. In 2003, one year after the revision of Party constitution, the proportion rose from 17% in 2001 to 34% in 2003 and since then the number has levelled off.

(Figure 1 inserted here)

As for the second source of variations, in Figure 2 we plot an index of market development (see below for a more detailed explanation) against the percentage change in the proportion of "red capitalists" across the different Chinese provinces. It is evident from the Figure 2 that the growth of "red capitalist" is negatively correlated with the degree of market development of a province. This is consistent with the view that political connections are more valuable for private entrepreneurs in areas with underdeveloped market and weaker market supporting institutions.

(Figure 2 inserted here)

To investigate these relationships more precisely, in the following we study a repeated cross-section model of different firms surveyed before and after the constitution amendment in 2002 of the following form:

$$CCP_{ijkt} = \alpha + \beta INSTIT_{jt} + \rho INSTIT_{jt} \times AFTER2002_i + \pi X_{ijkt} + \beta_j + \beta_t + \beta_k + \theta_{it} + \epsilon_{ijkt}$$

$$(1)$$

where CCP_{ijkt} is a dummy variable which takes value one if the private entrepreneur from firm i, province j, sector k, is affiliated with the CCP in year t, $INSTIT_{jt}$ is an index representing institutional environment for province j, X_{ijkt} is a set of firm and entrepreneur variables, ε_{ijkt} denotes the random noise term. We interact $INSTIT_{jt}$ with $AFTER2002_i$, a time dummy equals to one for interviews occurred after the 2002 amendment and zero before. ρ is our coefficient of interest as

it captures the heterogeneous impacts of the constitution amendment on Party memberships due to the variations in institutional settings across provinces.

To alleviate the concern of omitted variables, we include a set of firm-level covariates throughout empirical analysis. These include *Asset*, as measured by the logarithm of total fixed asset, *Firm age* as measured by number of years since the establishment, *Employee* as measured by the logarithm of employment size. To control for the human capital of the entrepreneurs, we also include their *Education* as measured by year of schooling, and *Former SOE* manager experiences, which is a dummy variable taking value one if the private entrepreneur formerly worked as a manager in state-owned enterprises or township and village enterprises, and zero otherwise. Furthermore, we control for provincial, industrial, and yearly fixed effects, which are represented by β_j , β_k , and β_t , as well as province-specific time trend, which is denoted by θ_{jt} .

Institutional quality at the provincial level is measured, respectively, by indices of market development, corruption and legal environment. The first indicator is the *marketization index* computed by Fan and Wang (2011) to measure local market quality; it includes measures of the development of private sector, the relationships between local government and market, the development of financial market and factor market, and the development of market intermediaries. Given the central role played by local government in distributing economic resources in China, such as bank credit or land permits, we expect connections with the Party to be more helpful for private entrepreneurs in areas where markets are less developed.

The second indicator quantifies the level of corruption in local government using the *proportion of local cadres being prosecuted for corruption* in each province. We expect that in provinces with severe corruption and power abuse, political connection can shelter private entrepreneurs from government expropriation and harassment.

Finally, to measure the effectiveness of local legal protection, we construct a legal index using the *number of lawyers in a province weighted by its population*. A higher percentage of lawyers grants private firms more confidence on the possibility to resolve business disputes through the local legal system and with less reliance on political connections (Li et al., 2008).

The institutional indexes $INSTIT_{jt}$ are allowed to be time-variant. The use of contemporary values for the institutional indexes might however be problematic as they could change as an outcome of the reform, introducing a potential reverse causality problem. To tackle this problem, we construct a time-invariant variable for each institutional index, by taking the average value of the yearly indicators over 1997-2001, that is, before the reform of Party constitution. By doing so, we are able to examine effectively whether Party elites respond differently to constitution amendment and policy change due to variations in pre-reform institution. However, to assess the robustness of our conclusions, we also re-estimate equation (1) by substituting the time-invariant variable with one year lagged value for each institutional index. These regression results based on lagged indices are presented in the Appendix (Table A2) and are not different from those using time-invariant institutional indices.

One main concern about inferences when using a Difference-in-Difference approach is whether the data processes generating the treatment and control group outcomes followed "common or parallel trends" prior to the treatment. Differences in the post-treatment period can only be ascribed to the treatment when this assumption holds. In our case, there could be an estimation bias if a larger exodus of Party members characterized provinces with a high degree of development *prior* to the revision of Party constitution. To check for this, we divide our sample into two groups, high marketization and low marketization, by score in the marketization index with respect to the median. As is apparent from Figure 3, there was no significant difference in the proportion of Party member entrepreneurs between the two types of provinces before the Party constitution reform.

(Figure 3 inserted here)

To confirm further this graphical evidence, in Table 2 we examine whether the percentage change of "red capitalists" in low marketization provinces is statistically different from that in high marketization provinces. As shown in Table 2, the growth of Party member entrepreneurs in both types of provinces is very close to zero and not significantly different from each other before 2002. However, after the constitutional amendment, the growth of Party member entrepreneurs rises dramatically in both types of provinces and the growth rate in low marketization provinces is statistically higher than that of high marketization provinces. This indeed suggests parallel trends prior to 2002 and different trends after. Nonetheless, as already mentioned, province-specific time trends are included in our difference-in-difference analysis to minimize the estimation bias due to varying time trends at provincial level.

(Table 2 inserted here)

Another issue about our inference concerns human capital endowment. Because of the Party selection process, Party members might be endowed with a higher level of human capital. One may therefore argue that provinces witnessing a larger exodus of Party members after 2002 could be just the ones where the returns to human capital were higher. However, this alternative explanation seems unwarranted. One would expect that the areas with a higher return to human capital should be the ones with more market institutions, while, on the contrary, Table 2 indicates that Party membership was more important where markets were less developed. However, to take into account this potentially confounding factor, we include in all regression models a number of human capital measures for private entrepreneurs, including their education and managerial experiences.

Showing that less market-developed regions witnessed a larger increase in red capitalists after the Party constitutional amendment is not sufficient to argue that this effect was due to the presence of higher political rents in these provinces. Some evidence of the mechanisms at work, showing the benefits for private entrepreneurs of having a stronger connection with the Party system, is also needed.

To this aim, we first test whether Party member entrepreneurs are subject to a lower level of expropriation in the form of extralegal payments collected by local governments. ⁶ Belonging to the Party might then provide entrepreneurs with a protection against those abusive practices.

⁶ Extralegal payments (*Tanpai* in Chinese) refer to administrative charges imposed discretionally on firms by local governments. In transition economies, extralegal fees collected by local authorities impose a disproportionate burden on private firms due to their informality and arbitrariness (Fisman and Svensson, 2007; Johnson et al., 2000).

Secondly, we test whether Party membership helps private entrepreneurs to get better access to loans from state-owned banks and other state institutions. It is well known that in China private firms tend to be discriminated against for access to credit, as state-owned banks dominate financial market and they prefer to lend to state owned firms (Brandt and Li, 2003; Cull and Xu, 2003). Belonging to the Party might then mean getting easier and better access to credit.

Finally, we examine whether affiliation to the Party ultimately helps private entrepreneurs to enhance firm profitability in general, given all potential benefits that this affiliation might bring to the company. We use return on equity (ROE) as our general performance measure.

For each form of return, we then estimate the model in equation (2) below, running regressions separately for the pre- amendment and the post- amendment sample.

$$RETURN_{ijkt} = \gamma + \tau CCP_{ijkt} + \pi INSTIT_{jt} + \varphi CCP_{ijkt} \times INSTIT_{jt} + \delta X_{ijkt} + \omega_j + \omega_k$$

$$+ \omega_t + \vartheta_{jt} + \mu_{ijkt}$$
(2)

Note that CCP_{ijkt} , $INSTIT_{jt}$ and X_{ijkt} in equation (2) have the same meaning as those in equation (1). Provincial, industrial, and yearly fixed effects are represented by ω_j , ω_k , and ω_t while province-specific time trend is denoted by ϑ_{jt} . We expect the variable CCP_{ijkt} to have a significant effect on returns in the post amendment period only and a stronger effect in the provinces with weak institutions, as measured by φ , the coefficient of the interaction between CCP_{ijkt} and $INSTIT_{jt}$. Once again, we first estimate equation (2) using time-invariant values for institutional indices and

we then we re-estimate using one year lagged values and present these results in the Appendix (see Table A4).

4. Data set

The firm level data used in this study originates from six waves of National Wide Survey of Privately Owned Enterprises in China sponsored by All-China Federation of Trade Unions, which cover random sample of private firms from 1996, 1999, 2001, 2003, 2005, and 2007.⁷ The survey was jointly conducted by the China Society of Private Economy at Chinese Academy of Social Sciences, the All China Industry and Commerce Federation, and the United Front Work Department of the Chinese Communist Party (the CCP). To achieve a balanced representation of private firms across all regions and industries in China, multistage-stratified random sampling was employed.

The survey was carried out through intensive interviews with firm owners. It provides detailed individual information of firm owners, including family background, education attainment, occupational history, political status, political ties and experience, and a wide range of information on firm characteristics, such as firm size, firm age, and basic financial background. This dataset is perhaps the best publicly available one to study Party members' participation in the private sector in China.

The data we use for constructing the three provincial level institutional indices are

_

⁷ The surveys were conducted in 1997, 2000, 2002, 2004, 2006 and 2008 but they collect information from the previous year. Thus, the firm information in our data corresponds to 1996, 1999, 2001, 2003, 2005 and 2007. Every year firms in the survey are re-sampled nationally, thus the data set is a repeated cross-section data.

collected from various sources. The index of marketization is from *NERI Index of Marketization of China's Provinces in 2011* developed by Fan and Wang (2011). The index of corruption is computed by the data from *Procuratorial Yearbook of China*. The index of legal environment is from *Chinese Yearbook of Lawyers* of various years.

Table 3 presents summary statistics for the main variables of interest taken from our dataset. As shown in the table, a substantial proportion (31.9%) of private entrepreneurs in our dataset were CCP members. On average, private firms were 6.7 years old and had 48 employees. Private entrepreneurs' average year of schooling was around 13 years and 26% of private entrepreneurs had possessed managerial experiences in state-owned enterprises (SOE) before starting their own private firms. In addition, the data shows that private firms exhibit large variation in terms of access to bank credit and government expropriation. As also shown in Table 3, local institution environments exhibit substantial variations across provinces in China. For instance, the index of marketization is 0.32 in the least developed province and 7.12 in the most developed province. The provincial average of lawyer-population ratio is 1.1 per 10,000, with the maximum being 4.8 and the minimum 0.38.

(Table 3 inserted here)

4.1 The selection and self-selection of Party members

The survey also contains other aspects of interest that are worth exploring for the analysis of this paper, concerning the selection of Party members and the characteristics

of Party members who joined the private market after the reform. First, as already anticipated, nearly 90% of the private entrepreneurs with Party membership indicated that they joined the CCP *before* they started their private firms. This is consistent with the evidence (from a different source) reported in section 2. It means that the lift of the ideological ban against private entrepreneurship in the Party induced by the 2002 reform had an asymmetric effect. The sharp increase in the number of "red capitalist" was more the result of an exodus of Party members towards business than the result of the recruits of private entrepreneurs into the Party.

Table 4, built using the data of the survey, helps understanding the factors at play. Part A of the Table shows that Party member and non-Party member entrepreneurs displayed statistical significant differences even *before* the 2002 reform. Party members were more educated and with a larger working experience in the public sector. However, these differences became even *larger* after the reform, implying that education and managerial experience played a larger role in the selection into the Party. This is confirmed by Table A1 in the Appendix that shows that private entrepreneurs successfully applying to become Party members after the reform were more likely to be owners of large firms, educated, male and with already some experience as manager of public firms. As anticipated, this points more to a selection effect by the Party on new members than to a lack of interest by private entrepreneurs to join the Party.

It is noted that Part A of Table 4 also suggests a different self-selection by original Party members in the private markets after the reform. Part B of the Table below confirms this. It shows that original Party members entering the private sector after the

2002 constitutional change were statistically different from Party members who started private business before 2002. After the reform, they were more likely to be senor cadres, former SOE managers, and village leaders.

(Table 4 inserted here)

Clearly, with the removal of the ideological ban against private entrepreneurship, even Party officials holding senior positions, and with larger managerial experience in running SOE enterprises, could now join the private market without risk of jeopardizing their position within the Party and many actually did. This is relevant for our analysis because one would expect that these more senior Party members were also the ones that could more easily use their political connections to promote the performance of their firms, as their previous work experience in the government or state-owned enterprises allowed them to establish important connections with key Party and government officials. This is consistent with the results of the surveys reported in Dickson (2011). In his 1999 survey, roughly one third of entrepreneurs acknowledged that Party membership might provide advantages in business. In his 2005 survey, however, this percentage dramatically rose to 57%.

5. Plunging into the sea: main results

This section presents the main results from our empirical analysis of Equation (1).

Regression results are presented in Table 5. The dummy variable *After2002* is

interacted respectively with marketization index, cadre corruption index, and lawyer-population ratio.

As the table shows, all estimates of these interaction terms are statistically significant and the sign of these estimates are in accordance with our expectation. Specifically, it is more likely for an entrepreneur to be a Party member in provinces with lower degrees of marketization, higher levels of government corruption and less legal development. The size of the estimates of the institutional indices are also nontrivial. For instance, the point estimate of marketization index is -0.0142, which implies that one-standard-deviation (1.47) increase in marketization will reduce the likelihood of Party member to open his own business by 2.1% after the revision of the Party constitution. To give a more intuitive interpretation, if Ningxia, an inland province in the western part of China, improved its marketization level (2.55) to that of coastal province Guangdong (7.12), the probability for Ningxia entrepreneurs to be affiliate with the Party would decline by 6.5%. This would amount to a one quarter of decrease relative to the sample average.

(Table 5 inserted here)

We conduct several robustness tests of our baseline estimates. First, since our sample includes both veteran Party members and newly recruited Party members who joined in the Party after they set up their firms, one potential concern with our baseline regressions is that our results might be driven by new recruitments instead of entry of veteran Party members. To address this issue, we re-estimate our baseline specifications by excluding newly recruited Party members. The regression results reported in panel

A of Table 6 show that our baseline results are robust.

Second, it takes many selection procedures before one candidate is successfully admitted to the Party. The whole process involves self-selection, daily monitoring, closed-door evaluation, and probationary examination, which may take at least one or two years to be completed. As a result, using Party membership may under-estimate the rent-seeking incentives of private entrepreneurs as it takes a long time to join in the Party. To address this potential concern, we construct a new dependent variable that covers both formal Party members and non-Party member who have submitted application to the Party and re-estimate our baseline specification. As reported in panel B of Table 6, we find that our key estimation results remain stable after including Party applicants.

(Table 6 inserted here)

Next, we address the possibility that our empirical findings were driven by other policy changes, such as the implementation of the Western Development Program (WDP) and China's accession to the World Trade Organization (WTO) that happened concurrently with the change of Party ideology. The WDP sought to increase central government fiscal and credit support, improve investment environment through deregulation and accelerated enterprise reforms, with both domestic private and foreign invested firms to enjoy increased access. This could bring more business opportunities to the western provinces and increase the benefits of business-state ties. Similarly, China's accession to WTO in 2001 could lead to province-specific policies related to

the trade liberalization, depending on the reliance of each region's development on export. The effects from these policy changes during the study period might then confound our findings.

As a robustness test for the effect of WDP, we re-run our regressions by excluding observations from the Western Provinces. The results are reported in Panel A of Table 7. As shown in the table, they are consistent with our findings in the previous regressions. To check for the validity of the main results to China's participation in the WTO, we re-run our regressions by including the provincial export intensity, which captures the reliance of a region's development on export, and its interaction with the After2002 dummy. The results presented in Panel B of Table 7 show that China's entering the WTO is unlikely to be the driving force of our main findings.

(Table 7 inserted)

6. Political rents

In this section, we provide evidence for the benefits to private firms of having political ties. We first test whether the change in Party ideology produces *heterogeneous impacts* in different industries where the importance of government connection is likely to differ. As we noted already, as stated-owned banks dominate the financial market in China, private firms face more severe financial constraint than state-owned firms and foreign firms (Brandt and Li, 2003; Cull and Xu, 2003). Given the central role of government in distributing financial resources, political connections might then help firms to alleviate their financial constraint (Cull et al., 2015). As a

result, we expect that political ties to be more valuable in industries with higher reliance on external finance. Consequently, Party members should have stronger incentive to enter in industries with high financial constraints to harvest the benefits of political connections.

To test this hypothesis, we split our sample into two types of industries according to their degree of financial constraint and check if there indeed was a higher influx of red capitalists into the more financially constrained sector by running again our model in equation (1). We measure financial constraint as the average gap between amount of external finance and firms' capital demand for turnover in an industry, all data reported in the Survey. Results from this exercise are reported in Table 9. As can be seen, consistently with our prediction we find that the regression coefficients are more significant for high-level, financially constrained industries whenever we divide the sample by using sample mean or sample median.

(Table 8 inserted here)

Next, we run the model in Equation (2), testing whether private entrepreneurs affiliated with the Party are less likely to suffer government expropriations in the form of extralegal payment, have better access to loans from state-owned banks and other state institutions and own firms with a higher return on equity (ROE). Results using the marketization index as provincial institutional variable are reported in Table 9.8

Consistent with the findings of Guo et al. (2014), the results in the table show that

⁻

⁸ To save space, we do not report the results using corruption index and legal index. We find that the patterns are similar with marketization index but the estimates are weaker. The complete set of results is available upon request.

the Party amended its constitution in 2002. However, after the amendment that grants private entrepreneurs political legitimacy and the selection effect we discuss previously, private entrepreneurs with Party membership are associated with less government expropriation, better access to bank loans, and ultimately better profitability. Moreover, we find that the returns of Party members are statistically larger for private entrepreneurs in areas with less developed market, as expected.

(Table 9 inserted here)

7. Concluding remarks

In this paper, we studied the effect of an ideological reform in China that fundamentally changed the relationships between the CCP and private entrepreneurs. Exploiting the largely unexpected revision of Party constitution in 2002 and the variance of market development across Chinese provinces, we examined the dynamics of rent seeking induced by the reform. Our study enriches a vast international literature on the advantages for business of political ties that however is typically based on cross-section studies in a static setting. We found that the embrace of private entrepreneurs by the Party significantly increases the flow of senior Party members into the private sector. The effect was larger in areas with under-developed market, more corrupted government, and less legal protection. After the reform, Party membership allowed private entrepreneurs, particularly those in provinces characterized by weak market institutions, to enjoy considerable rents, such as alleviating government expropriation,

improving access to credit, and promoting firm profitability.

Our findings warrant the concern that the large influx of Party members to the private sector may strengthen the nepotistic relationships between entrepreneurs and government officials. By running business in the private sector, Party elites continue to translate their political power and personal connections into various forms of economic advantage. This is alarming, since such practice can rot political trust of the rank and file. Furthermore, entrenched nepotistic ties may create barriers for the development of market and market-supporting institutions, because those privileged entrepreneurs prefer the status quo and tend to stall reforms, which would ultimately undermine the potential for further growth. On a more positive note, however, our findings demonstrated that marketization and efficient legal system can serve to curb rent-seeking behaviors, which offers us a potential solution to tackle the problem.

It should also be noted that recent developments in China might lead to a change of the relationship between private entrepreneurs and the Party. The ongoing tough anti-corruption campaign has already made great efforts to shut off the channels through which government officials and firms can exchange favors. Meanwhile, new regulations, for example, in October 2013 the CCP's Organization Department having issued a notice to prohibit dual employment of government officials in listed firms. These new developments call for further studies in the future.

References

- Adhikari, Ajay, Chek Derashid and Hao Zhang. 2006. "Public Policy, Political Connections, and Effective Tax Rates: Longitudinal Evidence from Malaysia." *Journal of Accounting and Public Policy*, 25(5), 574-595.
- Amore, Mario Daniele and Morten Bennedsen. 2013. "The Value of Local Political Connections in a Low-Corruption Environment." *Journal of Financial Economics*, 110(2), 387-402.
- Boubakri, Narjess, Omrane Guedhami, Dev Mishra and Walid Saffar. 2012. "Political Connections and the Cost of Equity Capital." *Journal of Corporate Finance*, 18(3), 541-559.
- Bourveaua, Thomas, Renaud Coulombb and Marc Sangnierc. 2014. "Political Connections and Insider Trading." Working paper.
- Brandt, Loren and Hongbin Li. 2003. "Bank Discrimination in Transition Economies: Ideology, Information, or Incentives?" *Journal of Comparative Economics*, 31(3), 387-413.
- Charumilind, Chutatong, Raja Kali and Yupana Wiwattanakantang. 2006. "Connected Lending: Thailand before the Financial Crisis." *The Journal of Business*, 79(1), 181-218.
- Che, Jiahua and Yingyi Qian. 1998. "Institutional Environment, Community Government, and Corporate Governance: Understanding China's Township-Village Enterprises." *Journal of Law, Economics, & Organization*, 1-23.
- Chen, Donghua, Yuyan Guan, Tianyu Zhang and Gang Zhao. 2017. "Political Connection of Financial Intermediaries: Evidence from China's IPO Market." *Journal of Banking & Finance*, 76, 15-31.
- Claessens, Stijn, Erik Feijen and Luc Laeven. 2008. "Political Connections and Preferential Access to Finance: The Role of Campaign Contributions." *Journal of Financial Economics*, 88(3), 554-580.
- Cooper, Michael J, Huseyin Gulen and Alexei V Ovtchinnikov. 2010. "Corporate Political Contributions and Stock Returns." *The Journal of Finance*, 65(2), 687-724.
- Correia, Maria M. 2014. "Political Connections and Sec Enforcement." *Journal of Accounting and Economics*, 57(2), 241-262.
- Cull, Robert, Wei Li, Bo Sun and Lixin Colin Xu. 2015. "Government Connections and Financial Constraints: Evidence from a Large Representative Sample of Chinese Firms." *Journal of Corporate Finance*, 32, 271-294.
- Cull, Robert and Lixin Colin Xu. 2003. "Who Gets Credit? The Behavior of Bureaucrats and State Banks in Allocating Credit to Chinese State-Owned Enterprises." *Journal of Development Economics*, 71(2), 533-559.
- Dickson, Bruce J. 2003. *Red Capitalists in China: The Party, Private Entrepreneurs, and Prospects for Political Change*. Cambridge University Press.

- Dickson, Bruce J. 2007. "Integrating Wealth and Power in China: The Communist Party's Embrace of the Private Sector." *The China Quarterly*, 192, 827-854.
- Dickson, Bruce. 2011. "Who Consents to the 'Beijing Consensus'? Crony Capitalism in China." In S. Philip Hsu, Yu-Shan Wu, and Suisheng Zhao, eds., *In Search of China's Development Model: Beyond the Beijing Consensus*. New York: Routledge, 189-203.
- Dinç, I Serdar. 2005. "Politicians and Banks: Political Influences on Government-Owned Banks in Emerging Markets." *Journal of Financial Economics*, 77(2), 453-479.
- Faccio, Mara. 2006. "Politically Connected Firms." *The American Economic Review*, 96(1), 369-386.
- Faccio, Mara, Ronald W Masulis and John McConnell. 2006. "Political Connections and Corporate Bailouts." *The Journal of Finance*, 61(6), 2597-2635.
- Fan, Gang, and Xiaolu Wang. 2011. NERI Index of Marketization of China's
- Provinces 2011. Beijing: Economic Science Press.
- Fisman, Raymond. 2001. "Estimating the Value of Political Connections." *The American Economic Review*, 91(4), 1095-1102.
- Fisman, Raymond and Jakob Svensson. 2007. "Are Corruption and Taxation Really Harmful to Growth? Firm Level Evidence." *Journal of Development Economics*, 83(1), 63-75.
- Goldman, Eitan, Jörg Rocholl and Jongil So. 2013. "Politically Connected Boards of Directors and the Allocation of Procurement Contracts." *Review of Finance*, 17(5), 1617-1648.
- Gore, Lance. 1998. Market Communism: The Institutional Foundation of China's Post-Mao Hyper-Growth. Oxford University Press, USA.
- Guo, Di, Kun Jiang, Byung-Yeon Kim and Chenggang Xu. 2014. "Political Economy of Private Firms in China." *Journal of Comparative Economics*, 42(2), 286-303.
- Johnson, Simon, Daniel Kaufmann, John McMillan and Christopher Woodruff. 2000. "Why Do Firms Hide? Bribes and Unofficial Activity after Communism." *Journal of Public Economics*, 76(3), 495-520.
- Khwaja, Asim Ijaz and Atif Mian. 2005. "Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market." *The Quarterly Journal of Economics*, 120(4), 1371-1411.
- Li, David D. 1996. "A Theory of Ambiguous Property Rights in Transition Economies: The Case of the Chinese Non-State Sector." *Journal of Comparative Economics*, 23(1), 1-19.
- Li, Hongbin, Lingsheng Meng, Qian Wang and Li-An Zhou. 2008. "Political Connections, Financing and Firm Performance: Evidence from Chinese Private Firms." *Journal of Development Economics*, 87(2), 283-299.
- Liu, Qigui, Jinghua Tang and Gary Gang Tian. 2013. "Does Political Capital Create Value in the IPO Market? Evidence from China." *Journal of Corporate Finance*, 23, 395-413.

- Lu, Susan F and Yang Yao. 2003. "The Effectiveness of the Law, Financial Development, and Economic Growth in an Economy of Financial Depression: Evidence from China." Stanford Center for Research on Economic Development and Policy Reform, Working Paper, (179).
- McMillan, John. 1995. "China's Nonconformist Reform." *Economic transition in Eastern Europe and Russia: Realities of reform*, 419-433.
- Naughton, Barry. 1994. "Chinese Institutional Innovation and Privatization from Below." *The American Economic Review*, 84(2), 266-270.
- Nee, Victor. 1992. "Organizational Dynamics of Market Transition: Hybrid Forms, Property Rights, and Mixed Economy in China." *Administrative Science Quarterly*, 1-27.
- Pearson, Margaret M. 1997. *China's New Business Elite: The Political Consequences of Economic Reform.* University of California Press.
- Yang Keming. 2004. "Institutional holes and entrepreneurship in China."
- The Sociological Review, 52 (3), 371-389

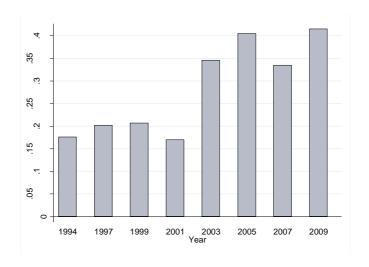


Figure 1 Proportion of entrepreneurs affiliated with the Party

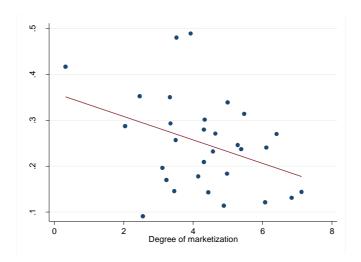


Figure 2 Marketization and percentage change of Party member entrepreneurs

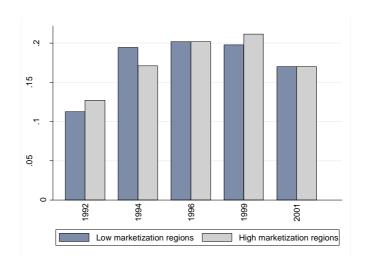


Figure 3 Percentage of private entrepreneurs affiliated with the Party before 2002

Table 1 Definitions of variables

Variable name	Definition
ССР	A dummy variable which equals 1 if an entrepreneur is a Party
	member, and 0 otherwise
Extralegal payment ratio	Firm's extralegal payment charged by local government cadres
	divided by firm's revenue
ROE	Return on equity
Bank loan	Total amount of loans currently borrowed from state-own
	banks by the firm
Asset	Total amount of firm asset
Firm age	The age of the firm since it registered as a private firm
Employee	Size. of firm employment
Entrepreneur's education	Entrepreneur's year of schooling
Former SOE manager	A dummy variable taking value one if the private entrepreneur
	formerly worked as a manager in state-owned enterprises or
	township and village enterprises, and zero otherwise
Marketization index	NERI Index of Marketization of China's Provinces 2011
Corruption index	Number of local cadres being prosecuted for corruption
	divided by number of government employee
Legal index	Lawyers population ratio

Table 2 Growth Rate of Party membership before and after 2002

	Growth rate of Party membership among private				
	entrepreneurs				
	Low marketization regions	High marketization regions	Difference		
Before 2002	-0.0040	-0.0025	-0.0015		
After 2002	0.2796	0.2191	0.0605*		

Table 3 Summary statistics

Variable	Obs	Mean	Std.Dev.	Min	Max
CCP membership	15737	0.319	0.466	0	1
Extralegal payment ratio	8254	0.0084	0.0374	0	1
ROE	10219	0.271	0.537	-0.300	4
Bank loan	11134	279	643	0	2750
Asset (log)	11782	5.320	1.910	-11.50	18.40
Firm age	15012	6.750	4.360	0	31
Employees (log)	15298	3.980	1.460	0	9.900
Year of schooling	15679	13.40	3.090	0	19
Former SOE manager	13413	0.263	0.440	0	1
Marketization index	31	4.320	1.470	0.320	7.130
Corruption index	31	33.80	9.330	11.30	49.30
Legal index	30	1.110	0.879	0.381	4.830

Notes: Data source: The firm level data comes from National Surveys of Privately Owned Enterprises in China. Marketization index comes from *NERI Index of Marketization of China's Provinces 2011*; No. of local cadres being prosecuted for corruption is from *Procuratorial Yearbook of China* of various year; No. of lawyers in a province is from *Chinese Yearbook of Lawyers* of various years. See table 1 for variable definition.

Table 4 Characteristics of entrepreneurs before and after 2002

Part A Characteristics of Entrepreneurs before and after the reform: Party vs. Non-party member								
	Before 2002			After 2002				
	Party	Non-party	Diff.	Party	Non-party	Diff.		
	member	member		member	member			
Senior cadre	0.131	0.059	0.072***	0.142	0.049	0.093***		
Former SOE manager	0.309	0.201	0.108***	0.498	0.178	0.32***		
Village leader	0.148	0.0577	0.090***	0.208	0.047	0.161***		
College education	0.375	0.344	0.031**	0.578	0.481	0.097***		

Part B Characteristics of party members entering private sector: Before vs After 2002 Before 2002 **After 2002** Diff. 0.09*** Senior cadre 0.162 0.252 Former SOE manager 0.501 0.552 0.051** Village leader 0.202 0.239 0.037* 0.52*** Year of schooling 14.28 14.80

Notes: Significance levels 0.1, 0.05 and 0.01 are noted by *, **, and ***, respectively.

Table 5 Regressions: Local institutions and Party members' entry into the private sector

	(1)	(2)	(3)
		Party membership	
After2002×Marketization index	-0.0142**		
	(0.0067)		
Marketization index	0.0211		
	(0.0212)		
After2002×Corruption index		0.0025***	
		(0.0010)	
Corruption index		0.0010	
•		(0.0032)	
After2002×Legal index		(,	-0.0176**
			(0.0082)
Legal index			-0.0027
Legar mack			(0.0084)
Control	Yes	Yes	Yes
Sector	Yes	Yes	Yes
Year	Yes	Yes	Yes
Province	Yes	Yes	Yes
Province-specific time trend	Yes	Yes	Yes
Observations	11,184	11,238	11,215
R-squared	0.178	0.179	0.179

Notes: Standard errors are clustered at the provincial level and reported in parentheses. Significance levels 0.1, 0.05 and 0.01 are noted by *, **, and ***, respectively. All regressions control for firm attributes (includes firm asset, firm age, employment size) and entrepreneur attributes (includes entrepreneur's education level and managerial experience in state-owned firms) as well as industrial, year, provincial fixed effects and province-specific time trends.

Table 6 Robustness tests for alternative measures

Robustness Test A	Dependent variable: Xiahai entrepreneurs					
	(1)	(2)	(3)			
After2002×Marketization index	-0.0149**					
	(0.0067)					
Marketization index	0.0198					
	(0.0223)					
After2002×Corruption index		0.0028***				
		(0.0010)				
Corruption index		0.0004				
		(0.0033)				
After2002× Legal index			-0.0148*			
			(0.0082)			
Legal index			-0.0037			
			(0.0084)			
Sector	Yes	Yes	Yes			
Year	Yes	Yes	Yes			
Province	Yes	Yes	Yes			
Province-specific time trend	Yes	Yes	Yes			
Observations	10,612	10,660	10,640			
R-squared	0.166	0.167	0.167			
Robustness Test B	D					
Robustiless Test D	Dependent variabl	le: Party membershi	p or applicants			
Robustness Test B	(1)	(2)	p or applicants (3)			
	-	•				
	(1)	•				
After2002×Marketization index	-0.0146**	•				
After2002×Marketization index	-0.0146** (0.0068)	•				
After2002×Marketization index Marketization index	-0.0146** (0.0068) 0.0309	•				
After2002×Marketization index Marketization index	-0.0146** (0.0068) 0.0309	(2)				
After2002×Marketization index Marketization index After2002×Corruption index	-0.0146** (0.0068) 0.0309	0.0029***				
After2002×Marketization index Marketization index After2002×Corruption index	-0.0146** (0.0068) 0.0309	0.0029*** (0.0010)				
After2002×Marketization index Marketization index After2002×Corruption index Corruption index	-0.0146** (0.0068) 0.0309	(2) 0.0029*** (0.0010) 0.0021				
After2002×Marketization index Marketization index After2002×Corruption index Corruption index	-0.0146** (0.0068) 0.0309	(2) 0.0029*** (0.0010) 0.0021	(3)			
After2002×Marketization index Marketization index After2002×Corruption index Corruption index After2002×Legal index	-0.0146** (0.0068) 0.0309	(2) 0.0029*** (0.0010) 0.0021	-0.0210**			
After2002×Marketization index Marketization index After2002×Corruption index Corruption index After2002×Legal index	-0.0146** (0.0068) 0.0309	(2) 0.0029*** (0.0010) 0.0021	-0.0210** (0.0084) 0.0160*			
After2002×Marketization index Marketization index After2002×Corruption index Corruption index After2002×Legal index Legal index	-0.0146** (0.0068) 0.0309	(2) 0.0029*** (0.0010) 0.0021	-0.0210** (0.0084)			
After2002×Marketization index Marketization index After2002×Corruption index Corruption index After2002×Legal index Legal index Sector	(1) -0.0146** (0.0068) 0.0309 (0.0210)	(2) 0.0029*** (0.0010) 0.0021 (0.0032)	-0.0210** (0.0084) 0.0160* (0.0088) Yes			
After2002×Marketization index Marketization index After2002×Corruption index Corruption index After2002×Legal index Legal index Sector Year	(1) -0.0146** (0.0068) 0.0309 (0.0210) Yes Yes	(2) 0.0029*** (0.0010) 0.0021 (0.0032) Yes Yes	-0.0210** (0.0084) 0.0160* (0.0088) Yes Yes			
After2002×Marketization index Marketization index After2002×Corruption index Corruption index After2002×Legal index Legal index Sector Year	(1) -0.0146** (0.0068) 0.0309 (0.0210) Yes Yes Yes Yes	(2) 0.0029*** (0.0010) 0.0021 (0.0032) Yes Yes Yes Yes	-0.0210** (0.0084) 0.0160* (0.0088) Yes Yes Yes			
After2002×Marketization index Marketization index After2002×Corruption index Corruption index After2002×Legal index Legal index Sector Year Province Observations	(1) -0.0146** (0.0068) 0.0309 (0.0210) Yes Yes	(2) 0.0029*** (0.0010) 0.0021 (0.0032) Yes Yes	-0.0210** (0.0084) 0.0160* (0.0088) Yes Yes			

Notes: Standard errors are clustered at the provincial level and reported in parentheses. Significance levels 0.1, 0.05 and 0.01 are noted by *, **, and ***, respectively. All regressions control for firm attributes (includes firm asset, firm age, employment size) and entrepreneur attributes (includes entrepreneur's education level and managerial experience in state-owned firms) as well as industrial, year, provincial fixed effects and province-specific time trends.

Table 7 Robustness tests for alternative policies

Panel A: Excluding Western provinces	Depende	nt variable: Party n	membership		
	(1)	(2)	(3)		
After2002×Marketization index	-0.0172*				
	(0.0092)				
Marketization index	-0.0360***				
	(0.0125)				
After2002×Corruption index		0.0041***			
		(0.0011)			
Corruption index		-0.00012			
		(0.0013)			
After2002×Legal index			-0.0190**		
			(0.0085)		
Legal index			-0.0022		
G	***	X 7	(0.0086)		
Sector	Yes	Yes	Yes		
Year	Yes	Yes	Yes		
Province	Yes	Yes	Yes		
Province-specific time trend	Yes	Yes	Yes		
Observations	8,905	8,905	8,905		
R-squared	0.172	0.173	0.172		
Panel B: Controlling for export intensity	Depende	nt variable: Party n	nembership		
	(1)	(2)	(3)		
After2002×Marketization index	-0.0380**				
	(0.0186)				
Marketization index	0.0374				
	(0.0286)				
After2002×Corruption index		0.0023**			
		(0.0010)			
Corruption index		0.0011			
		(0.0032)			
After2002×Legal index			-0.0128		
			(0.0118)		
Legal index			-0.0044		
T	0.0002	0.0020	(0.0086)		
Export/GDP	-0.0002	0.0020	0.0045		
A fra = 2002 \(\text{F} =	(0.0078)	(0.0063)	(0.0063)		
After2002×Export/GDP	-0.0075	-0.0249*	-0.0126		
Sector	(0.0400) Yes	(0.0145) Yes	(0.0209) Yes		
Year	Yes	Yes	Yes		
Province	Yes	Yes	Yes		
Province-specific time trend	Yes	Yes	Yes		
Observations	11,184	11,238	11,215		

R-squared 0.184 0.179 0.179

Notes: Standard errors are clustered at the provincial level and reported in parentheses. Significance levels 0.1, 0.05 and 0.01 are noted by *, **, and ***, respectively. All regressions control for firm attributes (includes firm asset, firm age, employment size) and entrepreneur attributes (includes entrepreneur's education level and managerial experience in state-owned firms) as well as industrial, year, provincial fixed effects and province-specific time trends.

Table 8 Financial constraints and Party members' entry into the private sector

	(1)	(2)	(3)	(4)	(5)	(6)
	Part	y member	ship	Party membership		
	Lo	w financia	lly	Hi	gh financial	ly
	constr	ained indu	stries	const	rained indus	stries
After2002×Marketization index	0.0188			-0.0157**		
	(0.0199)			(0.0076)		
Marketization index	-0.0106			0.0328		
	(0.0341)			(0.0303)		
After2002×Corruption index		0.0005			0.0027**	
		(0.0030			(0.0011)	
Corruption index		-0.0003			0.0032	
		(0.0051			(0.0046)	
After2002×Legal index			-0.0183			-
			(0.0257)			(0.0095)
Legal index			-0.0249			-0.0030
			(0.0230)			(0.0098)
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Province	Yes	Yes	Yes	Yes	Yes	Yes
Province-specific time trend	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,087	1,087	1,076	8,941	8,993	8,982
R-squared	0.170	0.170	0.169	0.189	0.190	0.191

Notes: Standard errors are clustered at the provincial level and reported in parentheses. Significance levels 0.1, 0.05 and 0.01 are noted by *, **, and ***, respectively. All regressions control for firm attributes (includes firm asset, firm age, employment size) and entrepreneur attributes (includes entrepreneur's education level and managerial experience in state-owned firms) as well as industrial, year, provincial fixed effects and province-specific time trends.

Table 9 Market development and returns to Party membership

	(1)	(2)	(3)	(4)	(5)	(6)
	Extralegal payment ratio		Ban	k loan	ROE	
	Before	After	Before	After	Before	After
ССР	0.0033	-0.0169**	-73.50	778.2**	0.000	0.633***
	(0.0040)	(0.0075)	(81.46)	(326.2)	(0.0742)	(0.122)
CCP×Marketization index	-0.0007	0.0023*	21.58	-142.4**	0.00246	-0.119***
	(0.0008)	(0.0014)	(15.27)	(59.90)	(0.0139)	(0.0232)
Marketization index	-0.00159	0.0036	16.21	8.759	-0.0519	-0.0058
	(0.0020)	(0.0046)	(48.42)	(226.8)	(0.0446)	(0.0606)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Province	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,421	3,228	4,603	3,597	4,712	5,045
R-squared	0.072	0.049	0.316	0.135	0.158	0.127

Notes: Standard errors are clustered at the provincial level and reported in parentheses. Significance levels 0.1, 0.05 and 0.01 are noted by *, **, and ***, respectively. All regressions control for firm attributes (includes firm asset, firm age, employment size) and entrepreneur attributes (includes entrepreneur's education level and managerial experience in state-owned firms) as well as industrial, year, and provincial fixed effects.

Appendix

Table A1 Regressions of selection effect by the Party on new member

	(1)	(2)
	New Party	New Party member
	member	or new application
Ln asset	0.0006	-0.0024
Lii asset	(0.0038)	
Eiro aga	0.00167	(0.0041) -0.0009
Firm age		
I	(0.0010)	(0.0012) 0.0119*
Ln employee	0.0173***	
E-mala damana	(0.0051)	(0.0062)
Female dummy	-0.0320***	-0.0305*
V	(0.0113)	(0.0162)
Years of schooling	0.0029*	0.0071***
F .	(0.0015)	(0.0014)
Former cadre	0.0202	0.0339**
_	(0.0168)	(0.0165)
Former manager	0.0806***	0.0688***
	(0.0111)	(0.0106)
Congress membership	-0.0055	0.0073
	(0.0126)	(0.0136)
Marketization index	-0.0119***	-0.0109***
	(0.0019)	(0.0016)
Corruption index	0.0014**	0.0045***
	(0.0006)	(0.0007)
Legal index	-0.0138**	-0.0097
	(0.0057)	(0.0116)
Sector	Yes	Yes
Year	Yes	Yes
Province	Yes	Yes
Constant	0.117***	0.0216
	(0.0288)	(0.0369)
Observations	7,060	7,895
R-squared	0.096	0.038

Notes: The sample excludes entrepreneurs who were already Party members before starting their business. Congress membership denotes entrepreneur's memberships in the People's Congress or People's Political Consultative Conference at any level. Standard errors are clustered at provincial level and reported in parentheses. Significance levels 0.1, 0.05 and 0.01 are noted by *, **, and ***, respectively. All regressions control for industrial, year, provincial fixed effects.

Table A2 Regressions on entry of Party members using lagged institutional index (one-year lagged)

	(1)	(2)	(3)		
	Party membership				
A.S. 2002. M. L	0.0157**				
After 2002×Marketization index	-0.0157**				
	(0.0073)				
Marketization index	0.0192				
	(0.0132)				
After 2002×Corruption index		0.0029***			
		(0.0008)			
Corruption index		-0.0015*			
		(0.0008)			
After 2002×Legal index			-0.0204**		
			(0.0102)		
Legal index			0.0166		
			(0.0161)		
Sector	Yes	Yes	Yes		
Year	Yes	Yes	Yes		
Province	Yes	Yes	Yes		
Province-specific time trend	Yes	Yes	Yes		
Constant	-0.0870	0.184***	0.583***		
	(0.0742)	(0.0415)	(0.0532)		
Observations	8,360	9,654	8,416		
R-squared	0.227	0.206	0.220		

Notes: Standard errors are clustered at provincial level and reported in parentheses. Significance levels 0.1, 0.05 and 0.01 are noted by *, **, and ***, respectively. All regressions control for firm attributes (includes firm asset, firm age, employment size) and entrepreneur attributes (includes entrepreneur's education level and managerial experience in state-owned firms) as well as industrial, year, provincial fixed effects and province-specific time trends.

Table A3 Robustness tests for one-year lagged institutional index

	(1)	(2)	(3)	(4)	(5)	(6)
_	Pa	rty members	hip	Pa	arty membersl	nip
]	Low financiall	у]	High financiall	y
	con	strained indus	tries	cor	nstrained indust	tries
After 2002 ×Marketization index	0.0143			-0.0192***		
	(0.0177)			(0.0071)		
Marketization index	-0.0307			0.0271*		
	(0.0322)			(0.0139)		
After 2002×Corruption index		0.0013			0.0030***	
		(0.0026)			(0.0010)	
Corruption index		-0.0011			-0.0012	
-		(0.0024)			(0.0009)	
After 2002×Legal index			-0.0025			-0.0134
			(0.0247)			(0.0106)
Legal index			-0.0205			0.0038
			(0.0504)			(0.0204)
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Province	Yes	Yes	Yes	Yes	Yes	Yes
Province-specific time trend	Yes	Yes	Yes	Yes	Yes	Yes
Observations	944	1,072	893	7,884	8,920	7,979
R-squared	0.187	0.171	0.191	0.200	0.191	0.199

Notes: Standard errors are clustered at provincial level and reported in parentheses. Significance levels 0.1, 0.05 and 0.01 are noted by *, **, and ***, respectively. All regressions control for firm attributes (includes firm asset, firm age, employment size) and entrepreneur attributes (includes entrepreneur's education level and managerial experience in state-owned firms) as well as industrial, year, provincial fixed effects and province-specific time trends.

Table A4 Benefits of Party membership using one-year lagged institutional index

	(1)	(2)	(3)	(4)	(5)	(6)
	Extralegal payment		Bank	Bank loan		OE
	ra	tio				
	Before	After	Before	After	Before	After
CCP	0.0005	-0.0171**	-75.14	558.1**	0.0394	0.673***
	(0.0042)	(0.0067)	(72.04)	(276.3)	(0.0653)	(0.118)
CCP×Marketization index	-0.0001	0.0016*	14.52	-94.47*	-0.0035	-0.121***
	(0.0008)	(0.0008)	(8.980)	(49.23)	(0.0081)	(0.0218)
Marketization index	-0.0013	-0.0007	2.082	-95.63	0.0304	0.0510*
	(0.0010)	(0.0048)	(53.36)	(65.03)	(0.0485)	(0.0267)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Sector	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Province	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,621	3,228	4,603	3,596	4,712	3,847
R-squared	0.061	0.039	0.309	0.116	0.146	0.121

Notes: Standard errors are clustered at the provincial level and reported in parentheses. Significance levels 0.1, 0.05 and 0.01 are noted by *, ***, and ****, respectively. All regressions control for firm attributes (includes firm asset, firm age, employment size) and entrepreneur attributes (includes entrepreneur's education level and managerial experience in state-owned firms) as well as industrial, year, and provincial fixed effects.

Working Paper del Dipartimento di Economia e Finanza

- 1. L. Colombo, H. Dawid, *Strategic Location Choice under Dynamic Oligopolistic Competition and Spillovers*, novembre 2013.
- 2. M. Bordignon, M. Gamalerio, G. Turati, *Decentralization, Vertical Fiscal Imbalance, and Political Selection*, novembre 2013.
- 3. M. Guerini, *Is the Friedman Rule Stabilizing? Some Unpleasant Results in a Heterogeneous Expectations Framework*, novembre 2013.
- 4. E. Brenna, C. Di Novi, *Is caring for elderly parents detrimental to women's mental health? The influence of the European North-South gradient*, novembre 2013.
- 5. F. Sobbrio, Citizen-Editors' Endogenous Information Acquisition and News Accuracy, novembre 2013.
- 6. P. Bingley, L. Cappellari, *Correlation of Brothers Earnings and Intergenerational Transmission*, novembre 2013.
- 7. T. Assenza, W. A. Brock, C. H. Hommes, *Animal Spirits, Heterogeneous Expectations and the Emergence of Booms and Busts*, dicembre 2013.
- 8. D. Parisi, *Is There Room for 'Fear' as a Human Passion in the Work by Adam Smith?*, gennaio 2014.
- 9. E. Brenna, F. Spandonaro, *Does federalism induce patients' mobility across regions?* Evidence from the Italian experience, febbraio 2014.
- 10. A. Monticini, F. Ravazzolo, Forecasting the intraday market price of money, febbraio 2014.
- 11. Tiziana Assenza, Jakob Grazzini, Cars Hommes, Domenico Massaro, *PQ Strategies in Monopolistic Competition: Some Insights from the Lab*, marzo 2014.
- 12. R. Davidson, A. Monticini, *Heteroskedasticity-and-Autocorrelation-Consistent Bootstrapping*, marzo 2014.
- 13. C. Lucifora, S. Moriconi, *Policy Myopia and Labour Market Institutions*, giugno 2014.
- 14. N. Pecora, A. Spelta, Shareholding Network in the Euro Area Banking Market, giugno 2014.
- 15. G. Mazzolini, The economic consequences of accidents at work, giugno 2014.
- 16. M. Ambrosanio, P. Balduzzi, M. Bordignon, *Economic crisis and fiscal federalism in Italy*, settembre 2014.
- 17. P. Bingley, L. Cappellari, K. Tatsiramos, *Family, Community and Long-Term Earnings Inequality*, ottobre 2014.
- 18. S. Frazzoni, M. L. Mancusi, Z. Rotondi, M. Sobrero, A. Vezzulli, *Innovation and export in SMEs: the role of relationship banking*, novembre 2014.
- 19. H. Gnutzmann, *Price Discrimination in Asymmetric Industries: Implications for Competition and Welfare*, novembre 2014.
- 20. A. Baglioni, A. Boitani, M. Bordignon, *Labor mobility and fiscal policy in a currency union*, novembre 2014.
- 21. C. Nielsen, Rational Overconfidence and Social Security, dicembre 2014.
- 22. M. Kurz, M. Motolese, G. Piccillo, H. Wu, *Monetary Policy with Diverse Private Expectations*, febbraio 2015.
- 23. S. Piccolo, P. Tedeschi, G. Ursino, *How Limiting Deceptive Practices Harms Consumers*, maggio 2015.
- 24. A.K.S. Chand, S. Currarini, G. Ursino, Cheap Talk with Correlated Signals, maggio 2015.
- 25. S. Piccolo, P. Tedeschi, G. Ursino, *Deceptive Advertising with Rational Buyers*, giugno 2015.

- 26. S. Piccolo, E. Tarantino, G. Ursino, *The Value of Transparency in Multidivisional Firms*, giugno 2015.
- 27. G. Ursino, Supply Chain Control: a Theory of Vertical Integration, giugno 2015.
- 28. I. Aldasoro, D. Delli Gatti, E. Faia, *Bank Networks: Contagion, Systemic Risk and Prudential Policy*, luglio 2015.
- 29. S. Moriconi, G. Peri, *Country-Specific Preferences and Employment Rates in Europe*, settembre 2015.
- 30. R. Crinò, L. Ogliari, Financial Frictions, Product Quality, and International Trade, settembre 2015.
- 31. J. Grazzini, A. Spelta, An empirical analysis of the global input-output network and its evolution, ottobre 2015.
- 32. L. Cappellari, A. Di Paolo, *Bilingual Schooling and Earnings: Evidence from a Language-in-Education Reform*, novembre 2015.
- 33. A. Litina, S. Moriconi, S. Zanaj, *The Cultural Transmission of Environmental Preferences: Evidence from International Migration*, novembre 2015.
- 34. S. Moriconi, P. M. Picard, S. Zanaj, *Commodity Taxation and Regulatory Competition*, novembre 2015.
- 35. M. Bordignon, V. Grembi, S. Piazza, Who do you blame in local finance? An analysis of municipal financing in Italy, dicembre 2015.
- 36. A. Spelta, A unified view of systemic risk: detecting SIFIs and forecasting the financial cycle via EWSs, gennaio 2016.
- 37. N. Pecora, A. Spelta, Discovering SIFIs in interbank communities, febbraio 2016.
- 38. M. Botta, L. Colombo, *Macroeconomic and Institutional Determinants of Capital Structure Decisions*, aprile 2016.
- 39. A. Gamba, G. Immordino, S. Piccolo, *Organized Crime and the Bright Side of Subversion of Law*, maggio 2016.
- 40. L. Corno, N. Hildebrandt, A. Voena, Weather Shocks, Age of Marriage and the Direction of Marriage Payments, maggio 2016.
- 41. A. Spelta, Stock prices prediction via tensor decomposition and links forecast, maggio 2016.
- 42. T. Assenza, D. Delli Gatti, J. Grazzini, G. Ricchiuti, *Heterogeneous Firms and International Trade: The role of productivity and financial fragility*, giugno 2016.
- 43. S. Moriconi, Taxation, industry integration and production efficiency, giugno 2016.
- 44. L. Fiorito, C. Orsi, Survival Value and a Robust, Practical, Joyless Individualism: Thomas Nixon Carver, Social Justice, and Eugenics, luglio 2016.
- 45. E. Cottini, P. Ghinetti, *Employment insecurity and employees' health in Denmark*, settembre 2016.
- 46. G. Cecere, N. Corrocher, M. L. Mancusi, *Financial constraints and public funding for eco-innovation: Empirical evidence on European SMEs*, settembre 2016.
- 47. E. Brenna, L. Gitto, *Financing elderly care in Italy and Europe. Is there a common vision?*, settembre 2016.
- 48. D. G. C. Britto, *Unemployment Insurance and the Duration of Employment: Theory and Evidence from a Regression Kink Design*, settembre 2016.
- 49. E. Caroli, C.Lucifora, D. Vigani, *Is there a Retirement-Health Care utilization puzzle?* Evidence from SHARE data in Europe, ottobre 2016.
- 50. G. Femminis, From simple growth to numerical simulations: A primer in dynamic programming, ottobre 2016.
- 51. C. Lucifora, M. Tonello, Monitoring and sanctioning cheating at school: What works? Evidence from a national evaluation program, ottobre 2016.

- 52. A. Baglioni, M. Esposito, *Modigliani-Miller Doesn't Hold in a "Bailinable" World: A New Capital Structure to Reduce the Banks' Funding Cost*, novembre 2016.
- 53. L. Cappellari, P. Castelnovo, D. Checchi, M. Leonardi, *Skilled or educated? Educational reforms, human capital and earnings,* novembre 2016.
- 54. D. Britto, S. Fiorin, Corruption and Legislature Size: Evidence from Brazil, dicembre 2016.
- 55. F. Andreoli, E. Peluso, So close yet so unequal: Reconsidering spatial inequality in U.S. cities, febbraio 2017.
- 56. E. Cottini, P. Ghinetti, *Is it the way you live or the job you have? Health effects of lifestyles and working conditions*, marzo 2017.
- 57. A. Albanese, L. Cappellari, M. Leonardi, *The Effects of Youth Labor Market Reforms: Evidence from Italian Apprenticeships*; maggio 2017.
- 58. S. Perdichizzi, Estimating Fiscal multipliers in the Eurozone. A Nonlinear Panel Data Approach, maggio 2017.
- 59. S. Perdichizzi, *The impact of ECBs conventional and unconventional monetary policies on European banking indexes returns*, maggio 2017.
- 60. E. Brenna, Healthcare tax credits: financial help to taxpayers or support to higher income and better educated patients? Evidence from Italy, giugno 2017.
- 61. G. Gokmen, T. Nannicini, M. G. Onorato, C. Papageorgiou, *Policies in Hard Times:* Assessing the Impact of Financial Crises on Structural Reforms, settembre 2017.
- 62. M. Tettamanzi, E Many Pluribus Unum: A Behavioural Macro-Economic Agent Based Model, novembre 2017.
- 63. A. Boitani, C. Punzo, Banks' leverage behaviour in a two-agent New Keynesian model, gennaio 2018.
- 64. M. Bertoni, G. Brunello, L. Cappellari, Parents, Siblings and Schoolmates. The Effects of Family-School Interactions on Educational Achievement and Long-term Labor Market Outcomes, gennaio 2018.
- 65. G. P. Barbetta, G. Sorrenti, G. Turati, Multigrading and Child Achievement, gennaio 2018.
- 66. S. Gagliarducci, M. G. Onorato, F. Sobbrio, G. Tabellini, *War of the Waves: Radio and Resistance During World War II*, febbraio 2018.
- 67. P. Bingley, L. Cappellari, Workers, Firms and Life-Cycle Wage Dynamics, marzo 2018.
- 68. A. Boitani, S. Perdichizzi, *Public Expenditure Multipliers in recessions. Evidence from the Eurozone*, marzo 2018.
- 69. M. Le Moglie, G. Turati, *Electoral Cycle Bias in the Media Coverage of Corruption News*, aprile 2018.
- 70. R. Davidson, A. Monticini, *Improvements in Bootstrap Inference*, aprile 2018.
- 71. R. Crinò, G. Immordino, S. Piccolo, Fighting Mobile Crime, giugno 2018.
- 72. R. Caminal, L. Cappellari, A. Di Paolo, *Linguistic skills and the intergenerational transmission of language*, agosto 2018.
- 73. E. Brenna, L. Gitto, *Adult education, the use of Information and Communication Technologies and the impact on quality of life: a case study,* settembre 2018.
- 74. M. Bordignon, Y. Deng, J. Huang, J. Yang, *Plunging into the Sea: Ideological Change, Institutional Environments and Private Entrepreneurship in China*, settembre 2018.