Doing Business in China:

The Interplay between Parental and Governmental Influence

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Abstract

This paper investigates how the political background of parents matters for children's business ownership in China. Using multiple waves of a nationally representative survey between 2005 and 2012, we first evaluate the advantage of having cadre parents for becoming a business owner. Then, we document that the advantage increases with state involvement in the economy proxied by government spending on business-related activities. We further exploit the Fiscal Stimulus Package in 2009 for exogenous variation in government business spending. Additional evidence from firm-level subsidies and subjective evaluation of factors that matter for success sheds light on the mechanism.

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1 Introduction

Existing literature on entrepreneurship has documented that family background plays a key role in doing business. For instance, business owners are more likely to be from an family with business owners.[1] In this paper, we try to answer related but very different questions. Does the political background of parents matter for the children's probability of becoming business owners? When and in what way does it matter? On the one hand, it might be taken for granted that children whose parents have political connections would benefit from those connections in their business. For instance, the term "crony capitalism" is coined to describe an economy in which political connections determine business success and has been argued to be an important phenomenon in many economies.[2] One the other hand, from the American capitalism to the East Asian capitalism, the importance of political connections could vary substantially depending on how dominant a role that the government plays in the economy (Campos and Root 1996, Zingales 2012), which has not been much tested empirically.

This paper aims to provide empirical evidence as to how parental traits – particularly parents' political background – and the role of the government affect doing business using micro data from China. As an example of fast-changing economy where the state plays a dominant role and the traditional culture esteems family ties, China provides an appropriate research ground to investigate how the interplay of the political economic environment and parental traits affects children's careers. Anecdotal evidence suggests that children who have a parent working in government ("a cadre parent" henceforth) enjoy certain advantages related to running a business in China, which has captured massive media attention.[3] Without

[1] See Lindquist, Sol, and Van Praag (2012) for recent empirical evidence and a literature summary.

[2] See more discussions on crony capitalism in different parts of the world by the Economist (2014).

[3] Among officials convicted of corruption, many cases involve their children who take advantage of the official's power for their own firms. For example, a son of Jiating Li, the convicted former governor of Yunnan province, made a large illegal profit in real estate development (the story is from the Xinhua News Agency, the largest news agency in China, http://news.xinhuanet.com/legal/2004-02/06/content_1300929.htm). The daughter and the son-in-law of Suixin Mu, the convicted former mayor of Shenyang, monopolized the business of billboard ads in the city (the story is from the People's Daily, the most influential official newspaper from the Communist Party of China, http://www.people.com.cn/GB/paper81/4407/499556.html). For more evidence that political connections influence the performance of Chinese firms, see Fan, Wong, and Zhang (2007) and Li et al. (2008).

systematic data analysis, however, it is difficult to know whether this is a general pattern or whether it depends on government policy.

Using multiple waves of a nationally representative survey between 2005 and 2012, we first document a positive correlation between having a cadre parent and the probability of becoming a business owner: having a cadre parents *weakly* increases the probability of being a business owner by about 0.3-0.5 percentage points. This is a sizable effect since business owner is an elite occupation and the mean probability is around two percentage points.

Our main interest, however, is to understand how the role of parental background varies by government involvement in the economy proxies by government spending (the fiscal spending of the residential province divided by the provincial GDP). We focus on this measure for three reasons. First, this measure has been shown to be useful in capturing the influence of the government on economic activities (e.g., Alesina et al. 2002). Second, the variation in government spending often stems from historical legacies such as the importance of state owned enterprises in the 1980s in a province. Thus, as we will document, government spending reflects a government development strategy, which is slow-moving over time. Third, we can exploit a national-level policy shock, namely the Fiscal Stimulus Package launched in 2009, for exogenous variation in government spending.

A main empirical challenge to our study is that government spending may be be correlated with other provincial characteristics such as the stage of development. We address this challenge in several ways. First, one advantage in our context is that we can separate government spending on business activities ("government business spending" henceforth) from that on public goods. We find that a one standard deviation increase in government business spending (2% of GDP) increases the effect of having a cadre parent by another 0.4 percentage points. In contrast, there is no similar pattern with respect to non-business spending such as the expenditure on education, health and social security, implying that the effect of government spending is specific to its involvement in business. Second, our findings hold for provinces with both relatively high GDP per capita and relatively low GDP per

capita, suggesting that our results are not driven by development per se but development strategy by the government. Finally, we find that the effect of cadre parents is larger after the Stimulus Package in provinces with a higher benchmark business spending, thus providing further evidence on the role of government spending.

Our findings are robust to including detailed individual characteristics (education, age, gender and others) as well as their interaction with government spending. Moreover, there is no similar interaction between entrepreneurial parents and government spending, showing that the effect on doing business is specific to the political capital of the parents.

What are the mechanisms underlying these empirical patterns? We consider three broad hypotheses: genetic transmission of traits, human capital accumulation, and social and political connections and find that our results are more consistent with the role of political connections. To further shed light on the mechanism, we show that business spending by the governments is positively associated with subsidies to firms. In addition, we also find that business owners are more likely to identify political connections as a key determinant in career success and this attitude is even more salient in provinces with more government spending on business.

This study contributes to several lines of literature. First, we present evidence of crony capitalism from an inter-generational perspective. Compared with most research on the value of acquired political connections, people with a cadre parent are born with some political connections that are likely to be exogenous.[4] Moreover, we measure parents' job status prior to when their children reach adulthood. While government officials' status is likely to be influenced by their business allies, this definition of parents' status is unlikely to be affected by their children's career years later.[5] Different from the literature on inter-generational

[4]For some examples of the value of acquired political connections in China, such as having friends in government or direct participation in politics, see Li, Meng, and Zhang (2006) and Li et al (2008). More examples beyond China include Fisman (2001), Khwaja and Mian (2005) and Faccio (2006). Desai and Olofsgard (2011) emphasize the costs as well as the benefits of political connections for firms.

[5]Besides contributions to election campaign funds, business people are able to help their political allies in many other ways during transitions in political power. See recent evidence from France (Bertrand et al. 2006), India (Sukhtankar 2012), and China (Lan and Li 2014).

welfare dependency that documents how parental wealth affects children's education and labor market outcome (e.g., Behrman and Rosenzweig 2006), we emphasize how the parents-children link at the micro level gets shaped by macro factors.

Our study joins the empirical works that investigate how parents' job connections affect children's job choice (e.g., Magruder 2010, Kramarz and Skans 2014). The existing studies usually focus on the parents-children link in the same sector. Ours contributes to this line of research by exploring the parents-children link across public-private sectors.

Moreover, the large empirical literature on the determinants of entrepreneurship emphasizes both "entrepreneurial genes" and business environments, but usually separately. We also find that having a business parent increases the chance of becoming a business owner.[6] We complement these studies by investigating how the parents-children link across sectors changes with the role of government.

The rest of the paper is organized as follows. Section 2 describes the background and the data. Section 3 presents the main empirical patterns. Section 4 presents further evidence for our interpretation of the mechanism. Section 5 concludes.

2 Background and Data

We combine individual-level surveys with provincial-level and firm-level data in our analysis. Below, we first explain why we examine government spending and the drivers of its variation. Then, we describe the individual-level data. The firm-level data are discussed in Section 4 on the mechanisms.

[6]The empirical literature on entrepreneurship suggests that entrepreneurs are more likely to be from an entrepreneurial family. Some non-cognitive skills that affect entrepreneurship, such as patience and risk tolerance, could be hereditary (Bowles and Gintis 2002), while entrepreneurial parents may also invest more in such skills as a part of the human capital of their children (Doepke and Zilibotti 2013).

2.1 Provincial Variation in Government Spending

We employ provincial government spending, particularly business-related spending to capture government involvement in the economy. We use data on provincial fiscal spending from 2005 to 2012 in our analysis, which include both government consumption and public investment. In China, local fiscal spending is much larger than local fiscal revenue, and is thus a more appropriate measure of the amount of resources controlled and allocated by the local government. Since the tax reform in 1994 that divided tax revenues between local governments and the central government, the majority of tax revenue has been collected by the central government but the majority of fiscal spending remains in local governments.[7]

Since we are interested in government's influence in business, we divide provincial fiscal expenditure into two categories, depending on whether it is directly related to business activities. Government business spending includes expenditures on (i) transportation; (ii) affairs of exploration, power and information; (iii) commerce and services; (iv) housing security; (v) financial supervision; (vi) land and weather; and (vii) affairs of grain and oil reserves. These categories, accounting for 16% of provincial total fiscal expenditure, typically involve subsidies and infrastructural investment. The rest of the expenditures are on education, health care, and other types of public service.

Variation in Government Business Spending What explains the variation in government business spending (defined as the share of business-related expenditure in GDP)? The major part stems from cross-province variation, suggesting that government business spending changes do not change quickly over time. In our study period between 2005 and 2012, the variation in government business spending (defined as the share of business-related expenditure in GDP) is primarily driven by the difference across province instead of the difference over time: provincial fixed effects account for 72% of the variation. The variation

[7]For example, in 2005, while local governments spent 76% of the whole national budget, their revenue only accounted for 48% of the total government revenue (Lou 2008). The gap was filled by transfers from the central government to local governments.

is closely related to the historical legacies in a province, such as the importance of state owned enterprises (SOEs) in the 1980s. In 2007, the last year before the global financial crisis and the following fiscal stimulus, 55% of the cross-provincial variation in government business spending could be explained by the share of SOEs in manufacturing in 1985. The explaining power does not change at all after two decades when we replace the historical SOE share in 1985 with the contemporary data in 2007. These findings are summarized in Appendix Table A1.

Moreover, while the correlation between government business spending and GDP per capita is negative (-0.04), it is not significant (with a p-value of 0.657), suggesting that the variation across provinces cannot be explained by economic development alone. Instead, government business spending captures government involvement in the economy, which is not necessarily strongly correlated with GDP per capita.

The Fiscal Stimulus Package in 2009 In November 2008, as a response to the global financial crisis and the slow-down domestic economy, the Chinese central government announced a fiscal stimulus plan of 4 trillion RMB. Except for the expenditures used in the reconstruction works in the regions destroyed by the 8-magnitude Sichuan earthquake in 2008, 75% of the package went to business-related expenditure.[8] As shown in Panel A of Figure 1, the average business-related spending was about 2.4 percent (of provinciall GDP) prior to the stimulus package and increased to 4.8 percent post the stimulus package. In contrast, Panel B shows that the increase in the other fiscal expenditure was modest and statistically insignificant.

Since provincial-level government business spending is slow-moving, the pre-stimulus government business spending is a good predictor of the post-stimulus spending. Specifically, if we regress the post-stimulus government business spending on pre-stimulus government spending, we obtain a coefficient of 1.869 (with a standard error of 0.173) and a R-squared of

[8]For the breakdown of the stimulus package, announced by the National Development and Reform Commission, see: http://www.eeo.com.cn/ens/finance_investment/2009/03/07/131626.shtml.

0.82. Thus, this national-level stimulus package provides us useful variation in government business spending, which allows us to exploit the heterogeneous effect of the national-level shock by the initial level of government business spending across provinces.

2.2 Individual-level Data: Business Owners & Parental Background

Our individual-level data from the Chinese General Social Survey from 2006 to 2013 (CGSS), a Chinese version of the General Social Survey in the U.S. conducted by the National Opinion Research Center. The CGSS is also a part of the International Social Survey Program (ISSP) that covers 48 countries including the U.S. Started in 2003. The CGSS is a repeated cross-sectional survey, jointly conducted by the Renmin University of China and the Hong Kong Science and Technology University. Our sample includes five waves of the survey conducted in 2006, 2008, 2010, 2012, and most recently in 2013, which collects information in the year before the survey (i.e., 2005, 2007...,2012).[9] A typical wave of the CGSS includes about 10,000 urban and rural households. Given our interest in doing business, we focus on 22,801 urban residents aged between 25 and 80. Our sample covers all the 31 provinces in mainland China and provides a province-level panel data. However, the counties covered are not the same across waves. In particular, the CGSS employs three different sampling designs for the surveys in 2006, 2008, and 2010-present. As a result, we have a county-level panel data only for 2009-2012. We use all the surveys in our analysis and employ the subset between 2009 and 2012 for robustness checks.

Business Owners We focus on the outcome of being *business owners* – people who own a firm and hire employees. The existing literature on entrepreneurship sometimes combines self-employment with business owners as self-employment could also indicate entrepreneurship. We separate these two in our analysis because self-employment could also be driven by necessity rather than opportunity. As shown in Table 1, business owners account for 2.2%

[9]The surveys before 2006 did not ask about the status of being an entrepreneur or parental government background.

of our sample. Since the surveys are implemented at the household level, this number can be considered as 2.2% of the households have business owners. In contrast, 7% of them have self-employed individuals.

Parental Background The parental background we focus on is whether at least one parent works in government or in a public organization affiliated with the government (known as "shi ye dan wei" in Chinese, meaning public institutions). We call it a *cadre parent* for simplicity. We include those in the public institutions because many public institutions are essential branches of the Chinese government, endowed with great power and influence. For example, the three major institutions that supervise and regulate the whole financial sector, the China Banking Regulatory Commission, the China Securities Regulatory Commission, and the China Insurance Regulatory Commission, are not officially a part of the government, but are public institutions. The parents' employer is defined as their employer at the time when the respondent was 14 years old (except for the 2005 data in which it is when the respondent was 18 years old). As reported in Table 1, 19% of the urban households belong to the cadre parent group.

We will also compare the role of cadre parents with entrepreneurial parents. Many non-cognitive skills related to entrepreneurship could be hereditary (Bowles and Gintis 2002) or cultivated by entrepreneurial parents (Doepke and Zilibotti 2013), thus having an entrepreneurial parent could indicate certain unobservable entrepreneurial abilities in the children. The information on parental occupations is less precise in 2005 and 2007, where we cannot differ self-employed parents from parents owning business (at the time when the respondent was 14 or 18 years old). Thus, we include both in our baseline analysis and check the robustness by restricting the data to the 2009-2012 only. To differ the two definitions, we call the former "entrepreneurial parents" and the latter "business parents".

2.3 Descriptive Patterns

Before presenting systematic analysis, we present two descriptive patterns using data aggregated at the province level. First, as shown in panel (A) of Figure 2, there is a negative correlation between government business spending and the share of business owners. A one standard deviation increase in government business spending (0.02) decreases the share of business owners by 0.4 percentage points or 20% of the mean. Thus, higher business spending does not imply a better business environment. If anything, it indicates more government interventions that may hinder entrepreneurship.

Second, in contrast with the first pattern, the difference between cadre children and non-cadre children in becoming a business owner is larger in provinces with higher business spending. A one standard deviation increase in government business spending (0.02) increases the difference by about 0.6 percentage points or 30% of the mean. In other words, cadre children enjoy more advantages in provinces with higher business spending. We will test this hypothesis with individual-level information in the next section.

3 Empirical Results

Section 3.1 presents the link between having cadre parents and becoming business owners. Section 3.2 centers on the interaction effect of cadre parents and government spending. Section 3.3 discusses the evidence using the Fiscal Stimulus Package as a natural experiment.

3.1 The Link between Cadre Parents and Doing Business

To summarize the difference in the probability of being a business owner between cadre families and commoner families, we estimate the following regression with various specifications:

$$business_{i,p,t} = \beta_1 cadreparent_{i,p,t} + \theta X_{i,p,t} + province\_year_{p,t} + \varepsilon_{i,p,t}, \quad (1)$$

where $business_{i,p,t}$ a dummy indicating whether an individual i surveyed in province p and year $t$is a business owner. $cadreparent_{i,p,t}$ is a dummy indicating having at least one parent working in government. $X_{i,p,t}$ includes the control variables, such as gender, minority status, college education, marital status and age. We also include a dummy that indicates having an entrepreneurial parent before the respondent reached adulthood. A set of province dummies, year dummies, and their interaction terms (all included in $province\_year_{p,t}$) help control for the general difference in running a business across provinces and over years, due to cultural environment or macro-economic shocks. We cluster the standard errors at the province-year level.[10]

One concern is the endogenous choice of parents' cadre status. If parents could choose a government job in order to help their children to run a business, β_1 would be overestimated due to selection bias. However, this is unlikely in our case. $cadreparent_{i,p,t}$ is the cadre status at the time when i was 14 years old, which had been predetermined before i started a job. Chinese government is a very closed system and the job mobility between governments and other sectors has been low, particularly among older generations. Most cadre parents started to work for governments long time before their children reach the work age or even before their children were born. For example, among government workers who had an adult child in 2005, 83% spent their whole job career in governments and 12% in state-owned enterprises.

Column (1) of Table 2 reports $\hat{\beta}_1$, with province-by-year fixed effects and year fixed effects. Having a cadre parent increases the probability of being a business owner by 0.5 percentage point, a 25 percent increase compared to the sample mean, 0.022. The result becomes slightly weaker after controlling for individual characteristics (column (2)) and county fixed effects (column (3)). One confounding factor is that having a cadre parent is naturally associated with a higher probability of working for the government that mechanically reduces the probability of working as a business owner. The effect of having cadre parents on being a business ownership doubles and becomes more significant if we exclude government jobs

[10]Later, when we use the the variation at the province level only, we cluster the standard errors at the province level.

in the analysis (columns (4)-(6)).

Thus, there is a weakly positive link between having cadre parents and being a business owner when one considers all types of jobs. This link is stronger if one excludes government jobs. Our focus is on whether this link varies greatly across provinces.

3.2 Cadre Parents and Government Spending

The role of a cadre parent in helping running a business depends on local political and economic environment. A resourceful local government could subsidize favored firms, or invest in the sectors in which politically connected firms tend to concentrate, such as infrastructure. This section shows how government spending, particularly those closely related to business activities, enhances the effect of cadre parents.

The Interaction Effect of Cadre Parents and Government Spending To evaluate how government business spending influences the effects of cadre parents on the probability of being a business owner, we focus on the interaction term between the business-related expenditure (as the percentage of provincial GDP) and the indicator of having a cadre parent, $cadreparent_{i,p,t} \times gov\_b_{p,t}$, using the following specification:

$$\begin{aligned} business_{i,p,t} &= \beta_2 cadreparent_{i,p,t} \times gov\_b_{p,t} + \beta_1 cadreparent_{i,p,t} + \theta_1 X_{i,p,t} + \theta_2 X_{i,p,t} \times gov\_b_{p,t} \\ &\quad + province\_year_{p,t} + \varepsilon_{i,p,t.} \quad (2) \end{aligned}$$

Here, we are interested in β_2. We demean the fiscal expenditure from its sample mean. This transformation does not affect the coefficient of the interaction term and the coefficient of cadre parent can be interpreted as the effect of cadre parents at the mean value of the expenditure. We also control for the interactions between the spending and individual characteristics X_{ipt}.

Column (1) of Table 3 shows that at the mean value of business spending, having a

cadre parent increases the probability of being a business owner by 0.5 percentage points, or a 25 percent increase from the sample mean probability of 0.022. This estimate is the same as the estimates in Table 2. When the expenditure increases by one standard deviation (2 percentage points), the effect of having a cadre parent would double, or increase by 0.47 percentage points. The results are very stable when we control for individual characteristics and their interactions with government spending (columns (2)-(3)). Column (4) further shows that the pattern holds when we limit the sample to the data between 2009 and 2012 where the sampling counties are the same across surveys and we can also include county fixed effects.

Placebo Tests There are two main challenges to interpret our findings above as evidence for the effect of $cadreparent_{i,p,t} \times gov\_b_{p,t}$ on becoming a business owner. First, government business spending may be correlated with other provincial characteristics. Second, having a cadre parents may capture other parental characteristics such as more human capital to do business.

To address the first concern, we examine whether other provincial characteristics, such as other types of spending or GDP per capita, exhibit a similar interaction effect and find it not to be the case. Columns (1)-(2) of Table 4 show that the interaction effect of cadre parents and other types of government spending is neither economically nor statistically significant. Columns (3)-(4) show that there is no significant interaction effect between GDP per capita and cadre parents either.

To examine the importance of the second concern, we check whether the role of an entrepreneurial parent could be enhanced by government business spending. We find this is not supported by data (columns (5)-(6) of Table 4). If anything, the interaction effect between entrepreneurial parents and business spending is weakly negative. This suggests that entrepreneurial human capital might be crowded out by more government spending. Columns (7)-(8) further show that after controlling for all these interaction effects in columns (1)-(6),

the interaction effect between cadre parents and government business-related spending is still economically large and statistically significant.

In addition, when using working in the government as the outcome variable, we find a positive effect of having a cadre parent but no significant effect of $cadreparent_{i,p,t} \times gov\_b_{p,t}$ (presented in Appendix Table A2). Once again, these results show that our findings are specific to the link between $cadreparent_{i,p,t} \times gov\_b_{p,t}$ and becoming a business owner.

Additional Checks Our finding is about business ownership rather than self-employment. Columns (1)-(3) of Appendix Table A3 show that government spending and cadre parents do not enhance the probability of self-employment – business owners are excluded from this analysis. This is consistent with the fact that self-employment is often driven by necessity rather than economic opportunity.

We can also define entrepreneurial parents by restricting the parents to be business owners only. This information is only available for the subsample between 2009-2012. As shown in columns (4)-(6) of Appendix Table A2, our main results on how government spending and cadre parents affect business owners hold after controlling for this alternative definition of entrepreneurial parents and its interaction with government spending.

Our results are also robust to considering migration. If people interested in doing business move across provinces in response to local fiscal expenditures, *and if* the moving pattern differs across types of parents, our estimates might be biased. However, cross-province migration among urban residents is rare, only 3% in our sample.[11] Our results are robust to restricting the sample to the natives (presented in Appendix Table A4).

[11] In a national survey of domestic migrants in China in 2010 (NPFPCC 2011), cross-province urban migrants only accounted for 8% of all migrants. The number is higher than the 3% in our sample, the percentage of urban migrants among urban residents. The difference is the result of the larger population of urban residents (460 million in 2010) than the population of migrants (221 million in 2010).

3.3 Results Using the Fiscal Stimulus Package

To provide further evidence using over-time variation in government spending, we exploit the the Fiscal Stimulus Package that doubled the business spending immediately after 2008 (recall Figure 1). This policy shock provides a useful context to study how the influence of cadre parents change with government policy within the same province. Specifically, we consider the policy as a national-level shock and assumes that the provinces with a higher business spending in 2005 get affected more. As discussed in Section 2.1., this assumption is supported by the strong correlation between pre-stimulus and post-stimulus business spendings.

We divide the provinces into two groups by the median business spending in the benchmark year of 2005, and examine whether the same policy shock has different impacts across the two groups using a triple difference design as follows:

$$\begin{aligned} business_{i,p,t} &= \beta_3 cadrepar_{i,p,t} \times HighProv_p \times post08_t + +\beta_2 cadrepar_{i,p,t} \times HighProv_p \\ &+\beta_1 cadrepar_{i,p,t} \times post08_t + \beta_0 cadrepar_{i,p,t} \\ &+\theta_3 X_{i,p,t} \times HighProv_p \times post08_t + \theta_2 X_{i,p,t} \times HighProv_p \\ &+\theta_1 X_{i,p,t} \times post08_t + \theta_0 X_{i,p,t} + province\_year_{p,t} + \varepsilon_{i,p,t}, \quad (3) \end{aligned}$$

where $post08_t$ is a dummy variable that is 1 for the three waves of the CGSS data in 2009, 2011 and 2012, 0 for the two waves in 2005 and 2007. $HighProv_p$ indicates whether a province's business spending was above median in 2005. We also allow for a flexible effect of $X_{i,p,t}$ by interacting it with $post08_t$ and $HighProv_p$.

If our earlier hypothesis is correct, we expect to see a positive β_3 because a surge in such fiscal spending encourages people from a cadre family to start a business more in provinces with a higher benchmark spending. This is indeed the case (presented in Table 5). Compared with the provinces with lower benchmark spending, the effect of cadre parents on the probability of being a business owner increases by 1.9 percentage point more after 2008

in the provinces with higher benchmark spending, close to the mean probability (0.022).

Thus, the over-time variation in government spending exhibits the same pattern as the cross-sectional variation.[12] Since the variation we are exploring stems from a national shock which is likely to be exogenous to any specific provincial characteristics, these results provide further support for our findings in Section 3.2.

4 Mechanisms

What are the mechanisms underlying these empirical patterns? There are typically three possible explanations consistent with the advantage of children with cadre parents in doing business: genetic transmission of traits, human capital accumulation, and social and political connections.

Our finding that the advantage depends on government policy (Tables 3 and 5) suggests that the genetic transmission is unlikely to be the main driver unless one assumes that genetic transmission of traits varies by the government's involvement in the economy.

Similarly, it is difficult for human capital accumulation to explain our findings. First, it is unclear why the children could obtain more human capital of doing business due to having cadre parents. Second, we find no similar interaction effect between having a business parent and government spending (Table 4), also refuting this hypothesis.

Thus, our findings are more consistent with the interpretation that the value of cadre parents' connections increases with more government involvement in business. To further shed light on the mechanism, we present two additional sets of evidence based on firm-level information and subjective evaluation.

Additional Evidence I: Government Spending and Firm Subsidy An implicit assumption in our study is that government spending on business matters for firms. Unfor-

[12]This pattern is also consistent with the findings from the literature of "political resource curse": windfalls in government economic resources could increase corruption in developing countries, such as Brazil (Brollo et al., 2013) or China (Chen and Kung, 2016).

tunately CGSS is a household survey and does not include much information on individuals' business. To provide evidence on the link between the government spending and the subsidies received by local firms, we turn to additional data from the second National Economic Census (NEC), conducted in 2008 by the National Bureau of Statistics. The data include about 3.3 million firms in both the manufacturing and the service sector. Panel D of Table 1 shows that about 1 percent of the firms received government subsidies, with a mean of 2.7 million RMB (about 378,000 US dollars).

We examine the correlation between government business spending and firm subsidy using following specification:

$$subsidy_{f,j,p} = \beta_4 gov\_b_p + \theta X_{f,j,p} + industry_j + \varepsilon_{f,j,p}, \quad (4)$$

where $subsidy_{f,j,p}$ is either a dummy of receiving government subsidies or the log amount of subsidies for a firm f in industry j in province p. gov_b_p is the same as in equation (2) for 2008. $X_{f,j,p}$ is a vector of firm characteristics including the log number of employees and the log amount of assets of a firm. It also includes six dummies for different types of ownership structure. $industry_j$ includes 87 industry dummies, based on the 2-digit industry code.

Business-related government spending is significantly correlated with the subsidies firms receive. Columns (1) and (2) of Table 6 show that one standard deviation (or two percentage points) increase in the business spending in local GDP is associated with 0.6 percentage point increase in the probability of receiving subsidies, a large effect compared to the mean probability (1.3 percentage point). As a comparison, other types of fiscal spending are not significantly correlated with subsidy (columns (3) and (4)), confirming that our categorization of the two types of spending is reasonable.

Conditional on receiving some subsidy, an increase of one standard deviation in the business spending is also associated with 38% increase in the amount of subsidies (column (5)).

Thus, these findings show that business-related government spending does matter for firm subsidy. This evidence, it should be noted, addresses only one of many types of resources potentially affected by government spending.

Additional Evidence II: Attitudes towards Career Success Besides government subsidy, business-related fiscal spending is also correlated with the attitude of business owners towards the government. The CGSS survey data in 2005 also includes subjective evaluation on the determinants of career success. Panel C of Table 1 lists four determinants of career success covered by the survey: connections with power, hard work, luck, and ambition. Each factor is rated as one of the following: "essential", "very important", "important", "not very important", "not important at all", and "hard to say or cannot choose". For each factor, we code the answer of "essential" as 1 and the rest as 0. Table 1 shows that on average, luck is regarded to be less essential than the rest. We use this information to examine how government spending affects people's perception on what determines one's career success.

To see how the evaluations of business owners differ from other people, we run the following regression for each of the four determinants: political connection, hard work, ambition, and luck.

$$determinant_{i,p} = \beta_5 business_{i,p} + \beta_6 business_{i,p} \times gov\_b_p + \theta X_{i,p} + province_p + \varepsilon_{i,p.} \quad (5)$$

Because only one wave of the CGSS surveys contains such self-evaluations, this regression is across individuals i in province p. $business_{i,p}$ is a dummy variable that is 1 for business owners. When the dependent variable is "political connections/power", we expect both β_5 and β_6 are positive. When the dependent variable is another factor, such as "luck", we do not have a prior on the signs of the coefficients. $X_{i,p}$ is the same set of demographic variables as in equation (1).

Column (1) of Table 7 shows that on average, business owners are 9 percentage points more likely to see political connections as a key determinant in career success. When business

spending increases by one standard deviation (2 percentage points), this effect doubles. For the other three determinants in columns (3)-(8), however, neither the average effect of being a business owner nor its interactive effect with government spending is positive and significant.

These findings provide further support for the interpretation of our finding: the value of cadre parents' connections increases with more government involvement in business, which is well recognized by individuals.

5 Conclusion

While there exists an extensive literature on the importance of political connections, few studies have paid attention to the interaction of individual characteristics and government policies. In this study, we first document the advantage of children with cadre parents in doing business. More importantly, we show that the effect of parental background on children's involvement in business is affected by the government's involvement in the economy. Even a national-level stimulus package can have different impacts on doing business depending on the initial level of government spending. These findings provide new perspectives to the existing literature by studying the parents-children link across public-private sectors and examining how the micro link gets shaped by macro environment.

There is one important limitation of this project: we cannot directly compare the performance of the business owned by cadre children versus that owned by commoners and cannot claim that the former is necessarily more inefficient. To conduct such a comparison, one needs to link individuals with their business, which can open new avenues of research.

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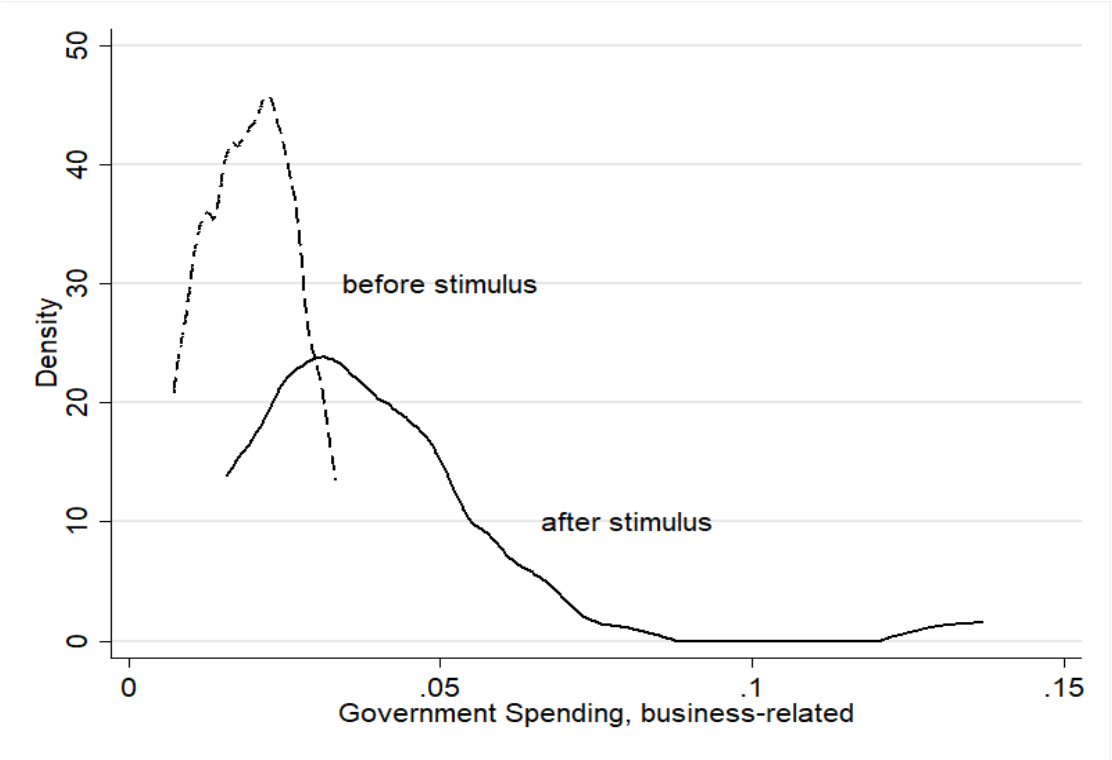
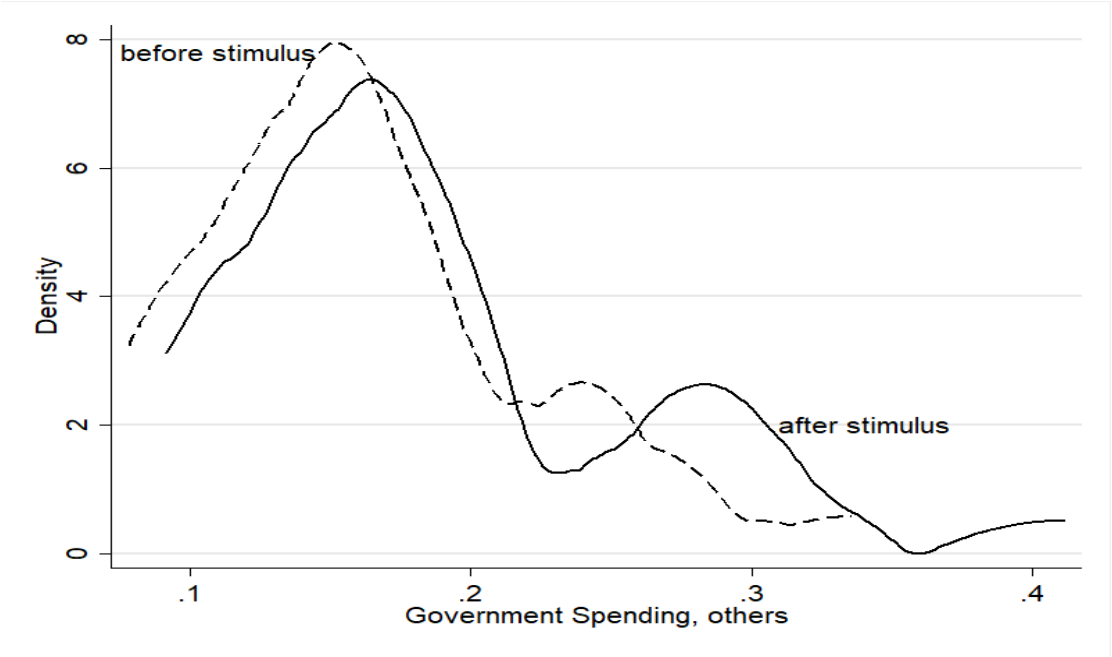
Figure 1 Fiscal Spending As a Share of GDP across Provinces, 2007-2012

(A): Business-related Spending



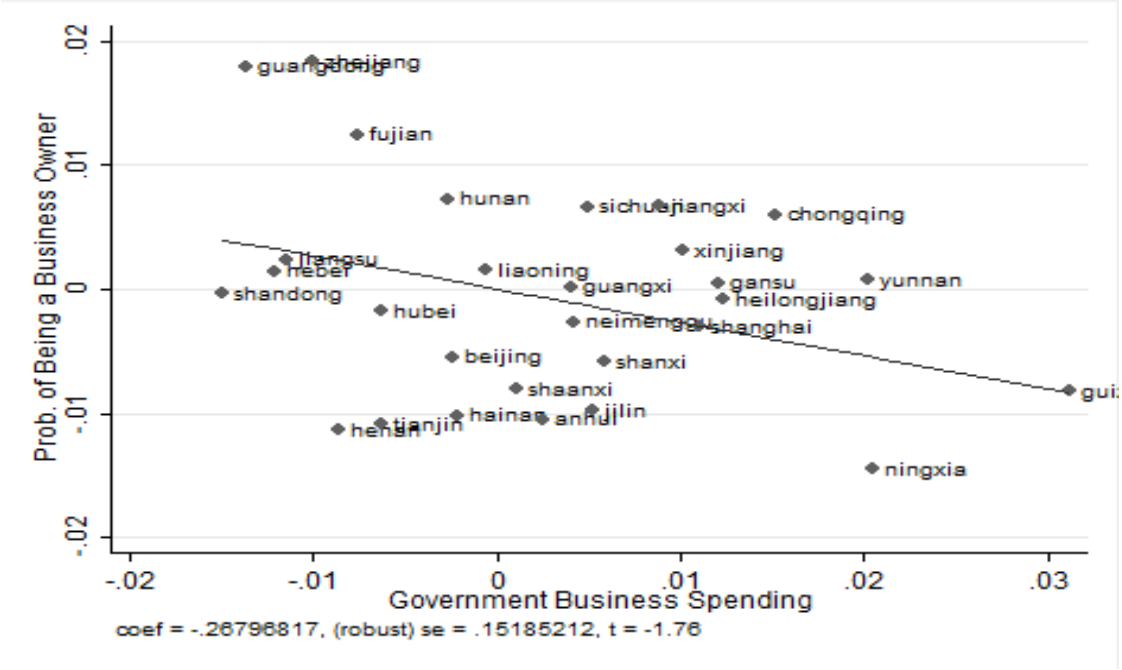
(B): Other Types of Spending



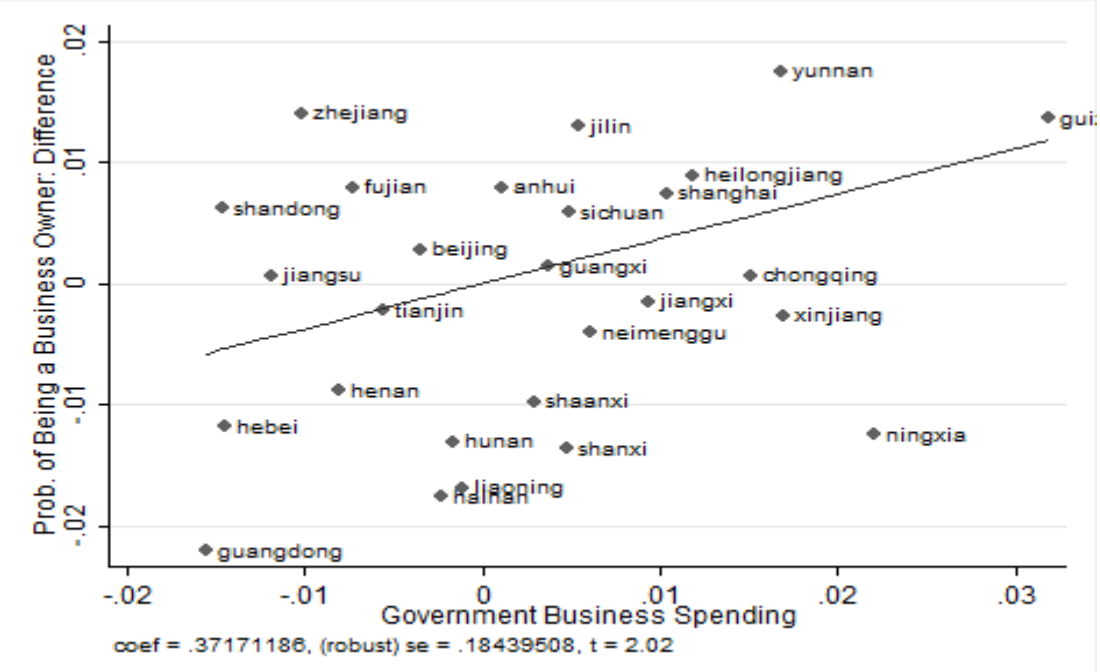
Notes: These figures plot the distribution of government spending (share of GDP) across provinces between 2007 and 2012. The dashed lines are the shares before the Stimulus Package in 2009 and the solid line are the shares in 2009 and after. The business-related fiscal spending increase significantly after the Stimulus Package, while other spending only increases modestly and statically insignificantly.

Figure 2: Descriptive Patterns

(A) Probability of Being a Business Owner vs. Government Business Spending



(B) Difference between Cadre Children and Others in Being a Business Owner



Notes: Panel (A) shows that the share of business owners is lower in provinces with higher business spending. Panel (B) shows that the difference between cadre children and commoner children increases with government business spending. Outliers are excluded in these two figures.

Table 1 Summary Statistics

Variable	Mean	Standard Dev
A. CGSS 2005-2012, N=22,801		
Business owner	0.022	0.146
Cadre parents	0.192	0.394
Entrepreneurial parents	0.068	0.252
College	0.259	0.438
Female	0.504	0.5
Married	0.928	0.258
Ethnic Minorities	0.060	0.237
B. Provincial Characteristics 2005-2012		
Provincial government business-related spending over GDP	0.029	0.020
Provincial government other spending over GDP	0.151	0.067
C. Key Determinants in Career Success, from CGSS 2005, N=4,690		
Connection with powerful officials	0.248	0.432
Hard work	0.324	0.468
Luck	0.104	0.305
Ambition	0.348	0.476
D. Firm Characteristics, from the Economic Census in 2008, N=3,298,048		
Probability of receiving subsidy	0.013	0.113
Log(1+subsidy)	0.070	0.655
Log(subsidy) for subsidy recipients (N=42,296)	5.426	2.092
Log(number of employees)	2.393	1.442
Log (value of asset)	7.440	2.114

Notes: This table presents the summary statistics for the main variables. CGSS covers both urban and rural households. We focus on the urban ones.

Table 2 Average Effect of Cadre Parents on the Prob. of Being a Business Owner (Dependent Var.: Business Owner =0/1)

	(1)	(2)	(3)	(4)	(5)	(6)
	All			Excluding Governmental Job		
Cadre Parents	0.005*	0.003	0.004	0.013***	0.009**	0.009**
	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)
Entrepreneurial Parents		0.014**	0.014**		0.015**	0.017**
		(0.006)	(0.007)		(0.007)	(0.008)
Female		-0.018***	-0.017***		-0.023***	-0.021***
		(0.003)	(0.003)		(0.003)	(0.003)
Minority		0.012**	0.018**		0.015**	0.021**
		(0.005)	(0.008)		(0.007)	(0.010)
College		-0.001	-0.002		0.012**	0.010**
		(0.003)	(0.004)		(0.005)	(0.006)
Married		0.017***	0.020***		0.024***	0.027***
		(0.004)	(0.004)		(0.005)	(0.005)
Age		-0.001***	-0.001***		-0.001***	-0.001***
		(0.000)	(0.000)		(0.000)	(0.000)
Province FE*Year FE	Y	Y	Y	Y	Y	Y
County FE, 09-12 Only			Y			Y
Observations	22,801	22,801	15,015	17,857	17,857	11,617
R-squared	0.014	0.022	0.032	0.019	0.029	0.043

Notes: This table shows that having cadre parents is weakly associated with the probability of being a business ownership (columns (1)-(3)). The correlation is stronger if one excludes government jobs (columns (5)-(7)). Standard errors are clustered at the province-year level. Significance level: **p<0.1, **p<0.05, ***p<0.01*.

Table 3 Interactive Effects of Cadre Parents and Government Business Spending

(Dependent Var.: Business Owner =0/1)

	(1)	(2)	(3)	(4)
Cadre Parent * Business Spend.	0.234**	0.236**	0.272**	0.261**
	(0.111)	(0.115)	(0.113)	(0.118)
Cadre Parent	0.005*	0.002	0.002	0.002
	(0.003)	(0.003)	(0.003)	(0.003)
Female		-0.018***	-0.018***	-0.017***
		(0.002)	(0.002)	(0.003)
Minority		0.012**	0.011*	0.015*
		(0.005)	(0.006)	(0.009)
College		-0.001	-0.001	-0.001
		(0.003)	(0.003)	(0.004)
Married		0.016***	0.016***	0.020***
		(0.004)	(0.004)	(0.005)
Age		-0.001***	-0.001***	-0.001**
		(0.000)	(0.000)	(0.000)
Province FE*Year FE	Y	Y	Y	Y
Business Spd*Individual. Char.			Y	Y
County FE, 09-12 Only				Y
Observations	22,801	22,801	22,801	15,015
R-squared	0.014	0.022	0.022	0.032

Notes: This table shows that the advantage of having a cadre parent in doing business is stronger in provinces with a higher share of business-related fiscal spending in GDP. Standard errors are clustered at the province-year level. Significance level: **p<0.1, **p<0.05, ***p<0.01*.

Table 4 Placebo Tests Using Other Interaction Effects

(Dependent Var.: Business Owner =0/1)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Cadre Parent * Business Spend.							0.276*	0.324**
							(0.144)	(0.142)
Cadre Par. * Gov. Other Spend.	0.048	0.055					-0.030	-0.034
	(0.047)	(0.053)					(0.059)	(0.060)
Cadre Par. * GDP Per Capita			-0.000	-0.000			-0.000	-0.000
			(0.001)	(0.001)			(0.001)	(0.001)
Entrepreneurial Parent					0.015**	0.013**	0.016***	0.014**
					(0.006)	(0.006)	(0.006)	(0.006)
Entrepreneurial Parent * Business Spend.					-0.444**	-0.432**	-0.392*	-0.374*
					(0.200)	(0.193)	(0.208)	(0.201)
Cadre Parent	0.005*	0.002	0.005*	0.002			0.006**	0.003
	(0.003)	(0.003)	(0.003)	(0.002)			(0.003)	(0.003)
Province FE*Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Individual. Char.		Y		Y		Y		Y
Business Spd*Individual. Char.		Y		Y		Y		Y
Observations	22,801	22,801	22,801	22,801	22,801	22,801	22,801	22,801
R-squared	0.014	0.022	0.014	0.022	0.015	0.023	0.015	0.023

Notes: This table shows that the interaction effect in Table 3 is specific to (cadre parent * business spending). There is no such an effect of the interaction terms (cadre parent*other spending) or (cadre parent*GDP per capita), nor of (business parent*business spending). Standard errors are clustered at the province-year level. Significance level: **p<0.1, **p<0.05, ***p<0.01*.

Table 5 Cadre Parents after the 2008 Fiscal Stimulus Package

(Dependent Var.: Business Owner =0/1)

	(1)	(2)	(3)
Cadre Par. * High Benchmark*After 2008	0.019*	0.019*	0.021*
	(0.011)	(0.012)	(0.012)
Cadre Parent	0.004	0.001	0.001
	(0.008)	(0.008)	(0.008)
Cadre Par. * High Benchmark	-0.008	-0.009	-0.009
	(0.010)	(0.010)	(0.010)
Cadre Par. * After 2008	-0.002	-0.003	-0.002
	(0.009)	(0.009)	(0.009)
Province FE*Year FE	Y	Y	Y
Individual. Char.		Y	Y
Individual. Char. * High Benchmark*After 2008 (including all pairwise interactions)			Y
Observations	22,801	22,801	22,801
R-squared	0.014	0.022	0.023

Note: "High benchmark" is a dummy which is 1 for provinces with a government spending related to business higher than the national median in 2007 (the last year before the stimulus package). "After 2008" is a dummy for years after 2008. The triple interaction shows that the advantage of having a cadre parent in doing business is stronger after the 2008 fiscal stimulus in provinces with a higher benchmark business spending. All pairwise interaction terms between "high benchmark" and "after 2008" are absorbed by the interactions between province FE and year FE. Standard errors are clustered at the province-year level. Significance level: **p<0.1, **p<0.05, ***p<0.01.*

Table 6 Correlation of Government Spending and Subsidies in Firm Census 2008

	(1)	(2)	(3)	(4)	(5)
Subsidy	0/1	0/1	0/1	0/1	ln(Sub), subsidy recipients
Business Spending	0.304**	0.315**			19.113**
	(0.148)	(0.150)			(6.958)
Other spending			0.041	0.049	
			(0.033)	(0.031)	
ln #Employee		0.004***		0.004***	0.139***
		(0.001)		(0.001)	(0.027)
ln Asset		0.002***		0.002***	0.517***
		(0.000)		(0.000)	(0.029)
GDP Per Capita		0.001**		0.001**	-0.139***
		(0.001)		(0.001)	(0.033)
Industry FE	Y	Y	Y	Y	Y
Ownership FE		Y		Y	Y
Observations	3,298,048	3,227,383	3,298,048	3,227,383	42,292
R-squared	0.098	0.102	0.098	0.102	0.345

Notes: This table shows that government business spending is positively correlated with subsidies for firms, using firm census data in 2008. Standard errors are clustered at the province level. Standard errors are clustered at the province level. Significance level: **p<0.1, **p<0.05, ***p<0.01*.

Table 7 Self-evaluations of the Key Determinants in Career Success

	(1) Power	(2) Power	(3) Hard Work	(4) Hard Work	(5) Ambition	(6) Ambition	(7) Luck	(8) Luck
Business Owner	0.091**	0.126***	0.072*	0.054	0.010	0.002	-0.005	-0.017
	(0.040)	(0.034)	(0.041)	(0.042)	(0.045)	(0.039)	(0.018)	(0.016)
BusinessOwner*Business Spending		5.428**		-2.916		-1.217		-1.894
		(2.291)		(3.330)		(2.880)		(1.130)
Province FE	Y	Y	Y	Y	Y	Y	Y	Y
Individual. Char.	Y	Y	Y	Y	Y	Y	Y	Y
Observations	4,690	4,690	4,690	4,690	4,690	4,690	4,690	4,690
R-squared	0.100	0.101	0.067	0.067	0.073	0.073	0.034	0.035

Notes: The dependent variable is a dummy variable if a respondent considers the factor listed in the first row as an "essential" determinant in career success. This table shows that business owners appreciate power more, especially in provinces with high business spending. The individual characteristics include gender, college education, ethnic minority status, marriage status, and age. Standard errors are clustered at the province level. Significance level: **p<0.1, **p<0.05, ***p<0.01*.

Table A1: Variations in Government Business Spending

Panel A: Business Spending in 2005,2007, 2009,2011,2012		
Province FE	Yes	
R-squared	0.718	
N	144	
Panel B: Business Spending in 2007		
SOE share in 1985	0.043***	
	(0.008)	
SOE share in 2007		0.026***
		(0.005)
R-squared	0.545	0.544
N	27	27

Notes: Panel A shows that in our sample period, provincial fixed effects account for 72% of variation in government business spending. The provincial panel data are not balanced because some provinces are not covered in every wave of the CGSS.

Panel B shows that across provinces, government business spending is positively related to the share of SOEs in manufacturing. Furthermore, 55% of the cross-provincial variation in government business spending in 2007 could be explained by the share of SOEs in 1985. The explaining power does not change at all after two decades when we use the contemporary SOE share in 2007. In these regressions, we only use the provinces that are covered in the 2007 wave of the CGSS. We drop Beijing from the regressions because its SOE share in 1985 is not available.

Table A2 Interactive Effects of Cadre Parents and Government Business Spending

(Dependent Var.: Government Worker =0/1)

	(1)	(3)
Cadre Parent * Business Spend.		-0.013
		(0.375)
Cadre Parent	0.144***	0.116***
	(0.009)	(0.009)
Female		-0.029***
		(0.006)
Minority		-0.008
		(0.017)
College		0.291***
		(0.016)
Married		0.073***
		(0.014)
Age		0.004***
		(0.000)
Province FE*Year FE	Y	Y
Business Spd*Individual. Char.		Y
Observations	22,801	22,801
R-squared	0.057	0.140

Notes: This table shows that having a cadre parent increase the likelihood of working in government. This effect, however, does not change with the share of business-related fiscal spending in GDP. Standard errors are clustered at the province-year level. Significance level: **p<0.1, **p<0.05, ***p<0.01.*

Table A3: Robustness Checks Related to Self-employment

	(1) Self-employed (0/1)	(2) Business Owner (0/1), 09-12 only
Cadre Parent * Business Spend.	0.013	0.236*
	(0.328)	(0.119)
Cadre Parent	-0.015***	0.003
	(0.005)	(0.003)
Province FE*Year FE	Y	Y
Individual Characteristics	Y	Y
Business Spd*Individual. Char.	Y	Y
Business Spd*Business Parent		Y
County FE, 09-12 only		Y
Observations	22,801	15,015
R-squared	0.066	0.033

Notes: Column (1) shows that cadre parents and business spending do not increase the probability of self-employment, using the data excluding business owners. In our baseline analysis, we cannot tell apart whether the parents are business owners or self-employed. Column (2) reports the results using the subsample we can tell whether the parents are business owners and show that our baseline holds after controlling for this variable and its interaction with business spending. Standard errors are clustered at the province-year level. Significance level: **p<0.1, **p<0.05, ***p<0.01*.

Table A4 Interactive Effects of Cadre Parents and Government Business Spending, in the Sample of Natives (Dependent Var.: Business Owner =0/1)

	(1)	(2)	(3)
Cadre Parent * Business Spend.	0.245**	0.289**	0.301***
	(0.112)	(0.111)	(0.110)
Cadre Parent	0.002	0.002	0.002
	(0.003)	(0.003)	(0.003)
Province FE*Year FE	Y	Y	Y
Individual Characteristics	Y	Y	Y
Business Spd*Individual. Char.		Y	Y
County FF, 09-12 only			Y
Observations	22,086	22,086	14,505
R-squared	0.022	0.022	0.033

Notes: Using the same specifications as in columns (3) - (5) in Table 3, this table shows that our main finding holds after excluding migrants. Standard errors are clustered at the province-year level. Significance level: *$p<0.1$, **$p<0.05$, ***$p<0.01$.