

Political Background and Household Entrepreneurship in China^{*}

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Abstract

The influence of a household's political background on entrepreneurship has attracted considerable attention and is particularly popular in developing countries. However, few empirical papers have investigated the interaction between the political background of households and institutional environments and entrepreneurship. We address the gap by firstly analysing two sets of nationwide survey data, the China Family Panel Studies (CFPS) from 2010 to 2012 and the China Household Finance Survey (CHFS) from 2011 to 2013. After controlling for a number of demographic characteristics, we find that in regions with large local governments and more political intervention, households who have a family member with a political background are more likely to engage in entrepreneurship. Furthermore, because of the effects of the anti-corruption campaign after 2012, the advantages of having a political background for becoming an entrepreneur have, on average, declined, especially in regions with large local governments.

Keywords: Entrepreneurship, Political Background, Local Government Size

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中国家庭政治背景和创业精神

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摘要

家庭政治背景对创业的影响吸引了广泛的关注,这一现象在发展中国家尤其普遍。然而,当前的实证研究很少检验家庭的政治背景与制度环境(政府规模)的交叉效应对创业的影响。我们的文章填补了这方面的空白:首先,我们分析了两个全国性的调查数据,中国家庭动态跟踪调查(2010-2012, CFPS)和中国家庭金融调查(2011-2013, CHFS);通过面板回归分析与熵平衡倾向性得分匹配法,在控制家庭的特征变量后,我们发现政府规模越大的省份,拥有政治背景的家庭更容易创业。同时,地方政府的规模大小在2012年以前对家庭的创业具有正向的影响。进一步地,我们通过事件分析法揭露了不同政府规模下,政治背景变动对家庭的影响。2012年的反腐运动后,政治背景家庭从创业中的获利降低,尤其是在政府规模较高的区域。

关键词: 创业、政治背景、地方政府规模

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I. Introduction

Over the last few decades, many empirical papers have investigated which factors have influences on entrepreneurship (Hurst and Lusardi, 2004; Djankov *et al.*, 2006; Buera, 2008; Quadrini, 2009). Some papers found that social networks are helpful for individuals and households that use their own networks to engage in entrepreneurship (Hoang and Antoncic, 2003). For instance, entrepreneurs often ask for their family networks' financial support at the beginning of their entrepreneurial career (Aldrich *et al.*, 1998), and the successes of entrepreneurs greatly depend on how easily they can obtain the resources they need through their family networks and how efficiently they use these resources (Bhagavatula, 2009).

Political background, one type of social network, has been found to have positive personal and business benefits in both developed and developing countries.⁵ A large number of studies suggest that the rapid growth of China provides evidence of people with a political background using their political status to seek rents.⁶ One of the recent papers, Yu *et al.* (2010), shows that private firms with political connections get more fiscal subsidies than those without political connections and that the poorer the institutional environments are, the stronger the subsidy-acquiring effect of political connections. Xu *et al.* (2013) also find that the political background of family firms can reduce their sensitivity to investment cash flow. In terms of personal benefits, Li *et al.* (2012) find that there is a wage premium of 15% for having parents with a cadre background and that this premium can be the true wage premium of having cadre parents. However, there has been scarce empirical research about the effects of political background on household entrepreneurship in the Chinese economy in regions with different sizes of local government.

Therefore, in this paper, we aim to contribute to the existing literature by examining the effect of a household's political background (i.e. having one or two members working in the government or government-controlled public organisations) on entrepreneurship while considering the size of local government across Chinese provinces. To further understand the interaction between political background and entrepreneurship across institutional environments, we investigate whether political background helps people to become entrepreneurs (to have their own businesses) within provinces with different sizes of local government, measured by government spending in GDP (or fiscal transfers from the central government). To the best of our knowledge, our paper is the first one that uses prominent survey data from both the China Family Panel Studies (CFPS) from 2010 to 2012 and the China Household Finance Survey (CHFS) from 2011 to 2013. Furthermore, we apply a new method, entropy balance propensity score matching, which allows us to evaluate the unbiased effect of treatment even with the existence of confounding factors.

⁵ See Fisman (2001), Chen *et al.* (2005), Khwaja and Mian (2005), Svensson (2005), Faccio (2006), Javorcik and Wei (2009), and Su and Fung (2013).

⁶ See Nee and Matthews (1996), Morduch and Sicular (2000), Peng (2004), Liu (2006), and Chen *et al.* (2014).

This paper contributes to the literature in three ways. First, it finds that in regions with large local governments, people with a political background are more likely to become entrepreneurs, especially those families with members who are civil servants or titled civil servants. Intuitively, in China, political power is highly connected with working in the government (civil servants and titled civil servants) or being a director in a state-owned firm (a cadre). Moreover, there is some uniqueness in the Chinese political environment. There are no local elections above the village level, so local officials do not have to worry about being voted out of office (Xu, 2011). Furthermore, compared with local governments in other countries, Chinese local governments play a much more central role in the local economy: for instance, local Chinese officials have substantial discretion in dealing with land lease rights (Lou, 2008). Gordon and Li (2011) point out that the welfare of local officials is heavily dependent on the amount of government revenue collected (mainly taxation) minus the amount needed to provide services to local residents. Hence, the more residual fiscal profits there are under the control of local officials, the more easily these profits can be used for their personal benefits. Since local government power is not uniform among provincial governments in China, they have different residual fiscal profits: The larger the size of a local government, the more residual fiscal profits it can be in charge of. Hence, the ability to politically intervene might be stronger for a larger local government that governs the households' business region.

Second, we further investigate how the political background of individuals affects their own and their spouses' entrepreneurship, respectively. In most developed countries, men are found on average to be more than twice as active as women in entrepreneurship (Birley, 1989; Wagner, 2007; Verheul *et al.*, 2009). However, besides the impacts of marriage and education, we find that in the regions of China that have large local governments, the political background of females affects the possibility of them engaging in self-entrepreneurship 20 times more than the average in the country as a whole. With regard to husbands' entrepreneurship in China, without considering local government size, even if the female was a titled civil servant, her political background would not help her husband to engage in a business. On the contrary, if the female was a titled civil servant in a household located in a region with large local governments, her political background would increase the probability of her husband running his own business. Our results are consistent with Verheul *et al.* (2006), but we found different influencing factors on female and male entrepreneurship. Verheul *et al.* (2006) used Global Entrepreneurship Monitor data for 29 countries to study the impact of factors on female and male entrepreneurship. They found that some factors, such as unemployment and life satisfaction, have differential impacts on female and male entrepreneurship.

Third, to solve the endogeneity problem, we set up an event study to investigate how changes in the political background of household members influence their household's

entrepreneurship. China initiated a renewed campaign against corruption at the end of 2012. From 2010 to 2014, the number of arrested titled civil servants increased from 4 to 30, and most of these cases involved their family members, who had taken advantage of the official's power to create businesses. The regions with large local governments (such as Sichuan, Shanxi, and Guizhou) were the areas where such cases were most likely to take place: In 2010 and 2011, the percentage of arrested titled civil servants in these provinces was 30%, increasing to 67% in 2013 and 68% in 2014. We find evidence to show that from 2010 to 2012, political background had a positive effect on entrepreneurship. However, from 2011 to 2013, having a political background had a negative influence on household entrepreneurship.

Our paper uses the empirical framework of Jia and Lan (2013) and has extended their study. Jia and Lan (2013) use the Chinese General Social Survey in 2006 to study the overlapping generation effect, that is, the interplay between people whose parents work in the government (cadre parents) and their entrepreneurship across institutional environments in China. They find that having cadre parents from a province with large local governments increases an individual's chances of becoming an entrepreneur. However, our paper mainly focuses on a different research objective, namely, to ascertain whether, if an individual has a political background, this background will help their household members' and household's entrepreneurial career. Moreover, with the advantages of the CFPS and CHFS survey data, we control for individual/household characteristics (education, age, gender, working years, marital status, number of children, minority status, political status of Party members, ethnicity, geographic location (urban, middle, west) and income, especially some important channels affecting entrepreneurship such as initial wealth, net worth, borrowing (credit constraints, and social expenditure).

Our paper also builds on a rich prior literature on political intervention. Government size is often measured by the fiscal spending of the residential province divided by the provincial GDP (Fatás and Mihov, 2003; Ferreira and Gyourko, 2009; Jia and Lan, 2013). Fan *et al.* (2007) use local (provincial) GDP per capita and local fiscal deficit levels as the measure of political intervention to study the relations among regional institutional factors, politically connected CEOs, and the post-IPO stock performance of newly partially privatised firms in China. Their results show that at high regional institutional levels, politically connected CEOs have relatively larger negative effects on the post-IPO stock performances of newly partially privatised firms than they do at low regional institutional levels. Furthermore, Jia *et al.* (2015) study how the promotion chances of Chinese provincial leaders depend on their performance in office and their connections with top politicians (these political connections can be interpreted as significant signs of political power); they employ the following three dimensions of central government support to provincial local governments (political connections): an explicit transfer to provinces, fiscal

transfers from the central to each provincial government, and an implicit transfer to provinces (the loan-to-deposit ratio).

The rest of the present paper proceeds as follows: section II presents the basic econometric model, section III describes the data, section IV presents the empirical results, and section V concludes the paper.

II. Methodology

2.1 Linear Panel Data Regression for Households

Our main hypothesis is that with higher levels of local government power, households with a political background (serving as civil servants, directors or CEOs in state-owned firms, and titled civil servants) are more likely to engage in entrepreneurship than households without a political background.

Our model is based on the empirical framework of Jia and Lan (2013) and has extended their study. We set up the regression as follows:

$$\begin{aligned} \text{entrepreneur}_{ikt} = & \alpha_1 CS_{ikt} + \alpha_2 CS_{ikt} * LGS_{kt} + Prov_k + year_t \\ & + (Prov_k * year_t) + X_{ikt} + X_{ikt} * LGS_{kt} + \varepsilon_{ikt}, \end{aligned} \quad (2.1)$$

where $\text{entrepreneur}_{ikt}$ equals 1 for household i in region k that becomes an entrepreneurial enterprise in year t . CS_{ikt} is an indicator that household i has at least one family member working in government or a state-owned firm in year t . We use data from two databases (CFPS and CHFS) covering two 3-year periods (2010 to 2012 and 2011 to 2013). We define local government size LGS_{kt} as the average share of fiscal spending in GDP in province (region) k during the time interval t de-meaned from the sample mean. α_1 can be interpreted as the effect of households with a political background on entrepreneurship at the mean value of local government size. All the results are robust if we use different measures of local government size such as fiscal transfers from the central government or the loan-to-deposit ratio. A set of region dummies $Prov_k$ controls for local characteristics such as the economic environment and the culture of entrepreneurship.

A set of household characteristics X_{ikt} includes education, age, gender, working years, marital status, number of children, minority status, political status (Party membership), ethnicity, geographic location (urban, middle, west), income, initial wealth, net worth, borrowing (credit) constraints, and social income and expenditure. Moreover, their interactions with measures of local government size, $X_{ikt} * LGS_{kt}$, allow the effects of these observables to vary with the size of the local government. Furthermore, we add a set of time dummies $year_t$ capturing general fluctuations in the macro economy in China over time. We also include all interaction terms between these time dummies and the province dummies.

2.2 Linear Panel Data Regression for Individuals

Another hypothesis is that with larger-sized government, people (either the individuals themselves or their household members) with a political background (serving as civil servants, directors or CEOs in state-owned firms, or titled civil servants) are more likely to help themselves and their household members to start or maintain businesses than people without a political background.

More formally, we combine all specific regressions in Equation (2.1) to test our hypothesis:

$$\begin{aligned} \text{entrepreneur}_{jikt} = & \alpha_3 CS_{jikt} + \alpha_4 CS_{jikt} * LGS_{ikt} + Prov_k + year_t \\ & + (Prov_k * year_t) + X_{jikt} + X_{jikt} * LGS_{ikt} + \varepsilon_{jikt}, \end{aligned} \quad (2.2)$$

where $\text{entrepreneur}_{jikt}$ is 1 for individual j in household i in region k who starts or maintains a business in year t . CS_{jikt} is an indicator that the spouse of j in household i worked in the government. $\hat{\alpha}_3$ can be interpreted as the effect of an individual's political background on his/her spouse's entrepreneurship at the mean value of the local government power measures, while a positive $\hat{\alpha}_4$ suggests that the individual's spouse has a political background; a one standard deviation of local government size above the mean raises the probability of the individual's spouse being an entrepreneur.

X_{jikt} is the same set of household characteristics as in Equation (2.1), but it includes individual characteristics such as age, sex, education, marital status, minority status, geographic location, and political status (e.g. Party membership) for household i in region k at time t . The interactions with LGS_{ikt} allow their effects to vary with measures of local government size.

2.3 Entropy Balance Propensity Score Matching

Since in observational studies, the assignment of subjects to the treatment and control groups is not random, the estimation of the effect of treatment may be biased by the existence of confounding factors. To reduce this bias, Rosenbaum and Rubin (1983) proposed a propensity score matching method based on the idea that the bias is reduced when the comparison of outcomes is performed using treated and control subjects who are as similar as possible. However, one challenge when using the proposed propensity score matching method is that it takes a huge amount of time to find the proper factors that satisfy the balancing property check (Becker and Ichino, 2002) and the propensity score model may be misspecified (Hainmueller, 2012). Moreover, this matching process often fails to jointly balance all of the covariates and in some cases even counteracts bias reduction when the balance of some covariates decreases as a result of the preprocessing (Diamond and Sekhon, 2013; Iacus *et al.*, 2012).

Hainmueller (2012) developed a new method that allows us to reweight a dataset in such a way that the covariate distributions in the reweighted data satisfy a set of specified

moment conditions. Entropy balancing is based on a maximum entropy reweighting scheme to find weights that satisfy a potentially large set of balance constraints, which involves an exact balance on the first, second, and possibly higher moments of the covariate distributions in the treatment and the reweighted control group. Entropy balancing finds a set of weights that satisfies the balance conditions and remains as close as possible (in an entropy sense) to the uniform base weights to prevent any loss of information and retain efficiency for the subsequent analysis.

As is common in the previous literature, we focus on the population average treatment effect on the treated units (PATT) given by $\tau = E[Y(1)|D = 1] - E[Y(0)|D = 1]$, where $Y(D)$ denotes the pair of potential outcomes given the treatment and control conditions. The first expectation can be identified from the treatment group data, but the second one is hard to estimate since it is the expected outcome for the treated units in the absence of the treatment. Rosenbaum and Rubin (1983) show that assuming selection on the observables, $Y(0) \perp D | X$, and overlap, $Pr(D = 1|X = x) < 1$ for all x in the support of $f_{X|D=1}$, where X contains the data of J exogenous pre-treatment covariates. Hence, the PATT can be identified:

$$\tau = E[Y(1) | D = 1] - \int E[Y | X = x, D = 0] f_{X|D=1}(x) dx. \quad (2.3)$$

Consider the simplest case where the treatment effect in the preprocessed data is estimated using the difference in mean outcomes between the treatment and adjusted control group, where

$$E[\overline{Y(0)} | D = 1] = \frac{\sum_{i|D=0} Y_i d_i}{\sum_{i|D=0} d_i}, \quad (2.4)$$

and every control unit receives a weight given by $d_i = \frac{\hat{p}(x_i)}{1 - \hat{p}(x_i)}$, where $\hat{p}(x_i)$ is a propensity score that is estimated with a logistic or probit regression of the treatment indicator on the covariates. However, the propensity score model may be misspecified. Entropy balancing generalises the propensity score weighting approach by estimating the weights directly from a potentially large set of balance constraints.

$$E[\overline{Y(0)} | D = 1] = \frac{\sum_{i|D=0} Y_i w_i}{\sum_{i|D=0} w_i}, \quad (2.5)$$

where w_i is the entropy balancing weight chosen for each control unit. These weights are chosen by

$$\min_{w_i} H(w) = \sum_{i|D=0} w_i \log(w_i | q_i) \quad (2.6)$$

subject to balance and normalizing constraints

$$\sum_{i|D=0} w_i cri(X_i) = m_r, r \in 1, \dots, R, \quad (2.7)$$

$$\sum_{i|D=0} w_i = 1, \quad (2.8)$$

$$w_i \geq 0, \quad (2.9)$$

for all i such that $D = 0$, where $q_i = 1/n_0$ is a base weight and $cri(X_i) = m_r$ describes a set of R balance constraints imposed on the covariate moments of the reweighted control group. The entropy balancing method has several advantages. First, since covariate balance is directly built into the weight function that is used to adjust the control units, it can always improve the covariate balance for the specified moment constraints. Moreover, since the weights generated by entropy balancing vary smoothly across units, they can preserve more of the information from the preprocessed data than conventional propensity score matching methods. Especially, apart from observational studies with binary treatments, entropy-balancing methods can also be used to adjust survey samples to the known characteristics of some target population. Finally, this method saves more time and requires no balancing property check. To further solve the endogeneity problem, we also apply the event study of the anti-corruption campaign.

III. Data

We use two different survey databases: the CFPS from 2010 to 2012 and the CHFS from 2011 to 2013. Both databases give information on Chinese individuals/households at the micro level, including basic demographic characteristics, financial and non-financial assets, liabilities, credit constraints, household spending, income, social security, insurance, and so forth.

The survey samples are mainly distributed in 25 provinces (excluding Tibet, Xinjiang, Inner Mongolia, Hong Kong, and Macao), 80 counties (cities), and 320 villages. Within each survey sample, the CFPS includes Fujian province but excludes Qinghai province, while the CHFS excludes Fujian but includes Qinghai. The CFPS has valid samples of 11,442 households and 26,038 individuals, and the CHFS has valid samples of 6,636 households and 19,484 individuals.

The CFPS and CHFS are different in several ways. For wage income, the CFPS includes dividends in the income while the CHFS defines the wage income as after-tax nominal wage and bonus. Second, the CFPS defines property income as rents from lands, production input, other inputs, and property sales, while the property income in the CHFS includes deposit interest rates, car rents, stock, bond, mutual funds, foreign currency, gold, and so forth. Third, transfer income in the CFPS covers government subsidies, pensions, and

the limited income subsidies, while the CHFS adds more categories to the transfer income, such as unemployment insurance, commercial insurance dividends, commercial pension fund dividends, and other commercial property insurance dividends.

In the CFPS, the entrepreneurship variable is based on the question “What is your main working institution?”. If individuals/households answer “1”, it means “self-employed” and indicates that individuals/households are entrepreneurs. In the CHFS, entrepreneurship information comes from the surveyed households’ answers to the following question: “Last year, was your household engaged in an industrial and commercial management project or not?”. We identify information on individual entrepreneurship by relying on the employees’ responses to questions about the nature of their work: individuals who answer “individual or private enterprises or self-employed individuals” are considered to be entrepreneurs. The civil servant variable comes from the question “What is your occupation code?”. The code 3010100 stands for a person who works at a government institution (Question G307 from CFPS).⁷ In the CHFS, question A3015 asks individuals what kind of institution they work for. The cadre background variable comes from the question “Do you have a position in administration/management, for instance, section chief, director, or manager?” in the CFPS. Question 3009 in the CHFS (“What is your position at work?”) indicates whether an individual has a cadre background. It is important to mention that the term “civil servants” refers to people who work at governmental institutions or state-owned firms; such persons belong to the national bianzhi. Titled civil servants are people who have a higher rank in the system (e.g. heads of offices; bu-, ju-, and chu-level officials). Moreover, the credit constraints variable stands for the survey question “What is the total amount of your loans and what is it used for?” (usage includes real estate, education, medical, durable products, and living expenses), and social spending denotes “How many gifts and cash gifts did you give out last year, and how much are they worth?”.

In Table 1, we give the summary statistics of the initial data. Panel A provides the data summary for the political background and non-political background individual/household scenarios, and panel B presents the data summary for the individual/household scenario among regions with different local government sizes. We also obtain descriptive statistics on the distribution of entrepreneurs among different industry sectors.⁸

IV. Main Results

4.1 Political Background, Local Government Size, and Household Entrepreneurship in the CFPS from 2010 to 2012

In this part, we use the de-meaned fiscal spending/the local GDP as the local government size variable (*LGS*) to explore the interplay between entrepreneurship and

⁷ The survey questions are detailed in Appendix A.1, which is available from the author upon request.

⁸ Details are available from the author upon request.

Table 1 Summary Statistics on Data

	Mean	St. Dev.	5%	25%	50%	75%	95%
Panel A							
Individual							
Education	7.273	4.784	0	6	9	9	15
Education+	13.37	3.534	6	12	15	16	16
Personal Income	10331.4	19826.6	0	0	5000	13000	36000
Personal Income+	27838.1	21969.5	5520	15000	25000	35000	60000
Working Years	8.619	12.515	0	0	1	15	36
Working Years+	12.23	9.13	1	4	11	19	28
Household							
Net Worth	4.859	1.292	2.699	4.556	5.1	5.76	5.983
Net Worth++	5.182	1.2	3.447	5.061	5.481	5.756	6.188
Financial Ratio	0.011	0.397	0	0	0	0	0.009091
Financial Ratio++	0.017	0.087	0	0	0	0	0.121039
Credit Constraint	0.404	1.287	0	0	0	0	4.39794
Credit Constraint++	0.596	1.603	0	0	0	0	5.176091
Total Assets	486044.2	1020000	5000	42900	137000	591000	996199
Total Assets++	475344.6	604027.8	20500	149992	327996	592399	1565999
Panel B							
Individual							
Education(S)	13.5	3.5	6	12	15	16	16
Education(M)	13.4	3.7	9	12	15	16	16
Education(L)	13.2	3.3	6	12	15	16	16
Personal Income(S)	28305.7	22074.5	6000	14000	24000	30000	60000
Personal Income(M)	28478.7	26927.9	4000	10000	24600	36000	80000
Personal Income(L)	26320	10913	7200	20000	25300	32000	43000
Working Years(S)	12.38	9.12	1	4	11	19	28
Working Years(M)	10.89	8.42	0	4	10	17	24
Working Years(L)	14.35	9.88	1	5	15	22	31
Household							
Net Worth(S)	5.208	1.235	1.699	5.176	5.57	5.766	6.035
Net Worth(M)	5.3	1.0435	4.057	5.169	5.494	5.775	6.265
Net Worth(L)	4.94	1.36	0	4.82	5.304	5.567	5.953
Financial Ratio(S)	0.024	0.123	0	0	0	0.004	0.255
Financial Ratio(M)	0.014	0.049	0	0	0	0	0.109
Financial Ratio(L)	0.01	0.034	0	0	0	0	0.052
Credit Constraint(S)	0.633	1.71	0	0	0	0	5.477121
Credit Constraint(M)	0.459	1.377	0	0	0	0	4.30103
Credit Constraint(L)	0.752	1.75	0	0	0	0	5
Total Assets(S)	460560.7	380117.5	25005	173200	404000	605799	1084996
Total Assets(M)	603598.9	875664.3	16000	161000	350000	599992	1940203
Total Assets(L)	291123.3	275518.9	7000	102000	225499.5	406001	977000

Notes: Panel A gives the data summary for the political background (denoting '+' and '++') and non-political background individual/household scenarios, and panel B presents the data summary for the individual/household scenario among regions with different sizes of local government, shown by small (S), medium (M) and large (L).

Table 2 Household Entrepreneurship, Political Background, and Local Government Size in the CFPS

	(1)	(2)	(3)	(4)	(5)	(6)
<i>civilserv</i>	0.234*** (-13.03)	0.199*** (-7.99)			0.199*** (-7.6)	0.212*** (-7.04)
<i>civilservG</i>		8.710*** (-2.91)			8.580** (-2.72)	7.058* (-1.95)
<i>cadre</i>	0.0287*** (-2.83)		0.0383*** (-2.83)		0.0228* (-1.8)	0.0273** (-2.39)
<i>cadreG</i>			0.335 (-0.4)		0.757 (-0.61)	-0.722 (-0.63)
<i>civilswT</i>	-0.037 (-1.48)			0.0415 (-1.45)		-0.0158 (-0.47)
<i>civilswTG</i>				3.037* (-1.89)		9.372** (-2.54)
<i>localgov</i>		1.015*** (-3.14)	1.460*** (-3.15)	1.439*** (-3.13)	1.037*** (-3.26)	1.073*** (-3.51)
<i>age</i>	-0.0014 (-0.94)	-0.0012 (-0.81)	-0.0014 (-0.97)	-0.0014 (-0.95)	-0.0012 (-0.82)	-0.0013 (-0.88)
<i>edu</i>	-0.0009 (-0.36)	-0.0007 (-0.27)	-0.0003 (-0.14)	-0.0004 (-0.17)	-0.0007 (-0.26)	-0.0008 (-0.31)
<i>workyear</i>	-0.0003 (-1.24)	-0.0002 (-1.17)	-0.0002 (-1.04)	-0.0002 (-0.94)	-0.0003 (-1.31)	-0.0003 (-1.25)
<i>rural</i>	-0.0536*** (-7.54)	-0.0520*** (-7.38)	-0.0492*** (-7.09)	-0.0498*** (-7.22)	-0.0515*** (-7.28)	-0.0515*** (-7.25)
<i>income</i>	0.203*** (-3.1)	0.292*** (-3.17)	0.324*** (-3.66)	0.323*** (-3.49)	0.298*** (-3.45)	0.295*** (-3.44)
<i>networth</i>	0.0169*** (-8.45)	0.0344*** (-3.28)	0.0358*** (-3.59)	0.0357*** (-3.54)	0.0341*** (-3.29)	0.0337*** (-3.25)
<i>socialspend</i>	0.61 (-1.3)	2.15*** (-4.86)	2.05*** (-4.48)	2.09*** (-4.54)	2.14*** (-4.82)	2.15*** (-4.84)
<i>creditconst</i>	0.0968 (-1.04)	0.14 (-1.58)	0.163* (-1.81)	0.162* (-1.81)	0.14 (-1.58)	0.13 (-1.56)
<i>incomeG</i>		-10 (-1.39)	-18.9** (-2.08)	-17.9* (-1.93)	-13.7* (-1.71)	-10 (-1.59)
<i>networthG</i>		-3.23* (-1.86)	-3.15* (-1.91)	-3.13* (-1.87)	-3.18* (-1.86)	-3.12* (-1.82)
<i>socialspendG</i>		-259*** (-6.66)	-215*** (-4.96)	-216*** (-4.99)	-261*** (-6.59)	-260*** (-6.40)
<i>creditconG</i>		17.2*** (-2.9)	18.4*** (-2.93)	17.9*** (-2.82)	17.3*** (-2.84)	16.9** (-2.77)
<i>Tdum</i>	-0.0673*** (-10.38)	-0.0784*** (-9.85)	-0.0706*** (-7.40)	-0.0691*** (-7.31)	-0.0795*** (-10.09)	-0.0795*** (-10.06)
<i>cons</i>	0.235** (-2.68)	0.226** (-2.61)	0.234** (-2.69)	0.237** (-2.68)	0.224** (-2.61)	0.230** (-2.66)
<i>Control</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>ControlwG</i>	No	Yes	Yes	Yes	Yes	Yes
<i>FixEffect</i>	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table reports the interplay between entrepreneurship and households with a political background among regions with different sizes of local government, measured by the fiscal spending divided by the local GDP, when using the CFPS (China Family Panel Survey) data from 2010 to 2012. All regressions include a set of provincial dummies, time dummies, and all their interactions. Standard errors are clustered at province level, and the number of clusters is 28. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

families with a cadre background among different sizes of local government.⁹ In Table 2, we show that the local government size variable is significant even after controlling for the demographic variables, including education, age, gender, working years, marital status, number of children, minority status, political status (Party membership), ethnicity, geographic location (urban, middle, west), income, initial wealth, net worth, borrowing (credit) constraints, and social income and expenditure. The first column gives the result when there are no influence of local government size on families with a cadre background.

We can see that the probability of carrying out entrepreneurial activities or having a firm is larger for a household that has a member who is a cadre (directors or managers in firms) or public servant (*civilserv*) than for a household that does not have a member with a cadre background. Interestingly, if the household has a member who is a titled civil servant (*civilswT*), this does not help the family to carry on a business.

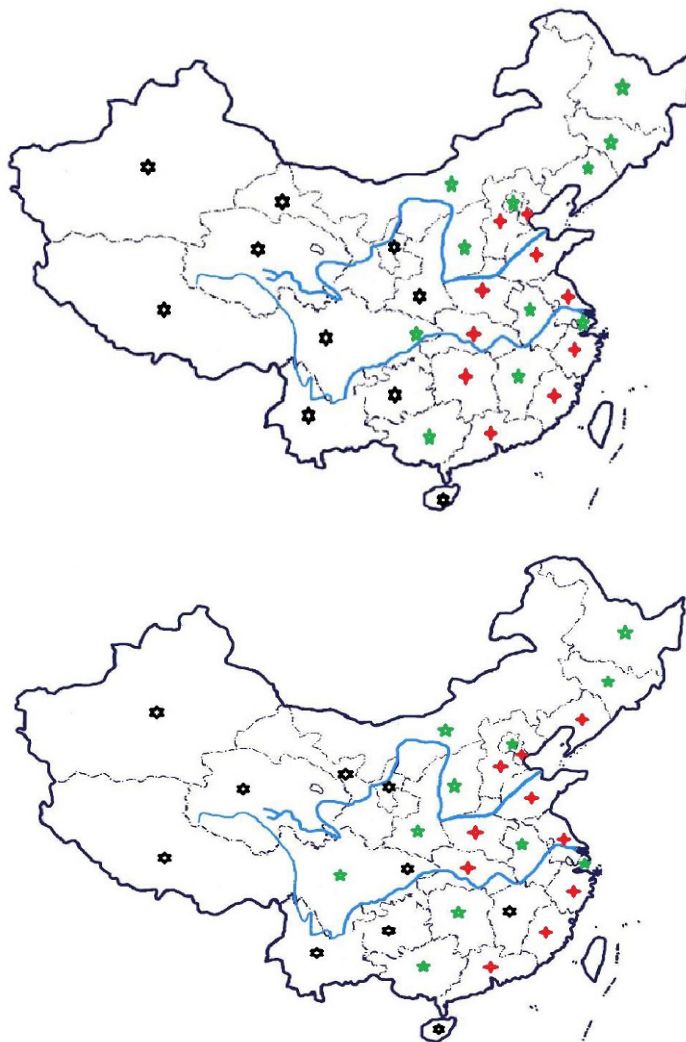
From the second column to the sixth column, we add the local government size variable and its interaction terms with family characteristics. First, in Table 2, local government size (the fiscal spending/the local GDP) shows a positive effect on household entrepreneurship: the greater the local government size, the higher the probability of households becoming entrepreneurs or holding any firms. Second, in the regions with large local governments, a civil servant background (any household member being a civil servant in the public sector) is of help to households in doing business. Especially, if family members are titled civil servants in the regions with large local governments, the probability of households doing business will be more or less twice that of households with family members who are civil servants (although the civil servant with a “title background” does not have any effect on entrepreneurship if we do not control for the size of the local government). Furthermore, the time dummy (*Tdum*) is negative, which indicates that from 2010 to 2012, there was a decreasing trend of entrepreneurship probability for those households with a political background.

Figures 1 and 2 give us a direct picture of local government size from 2010 to 2012. In the figures, the black stars stand for regions with large local governments (high fiscal spending/local GDP) and the red stars stand for the regions with small local governments.

We also apply entropy balance propensity score matching to test the ‘net’ effect of political background on entrepreneurship among regions with different sizes of local government. Table 3 shows that the families with a political background obtain a larger population average treatment effect especially in the regions with large local governments (high fiscal transfers and high fiscal spending/GDP regions).

⁹ We also obtain the results by using fiscal transfers from the central government to a local government as the measure of local government size. The results are shown in Appendix, which is available from the author upon request.

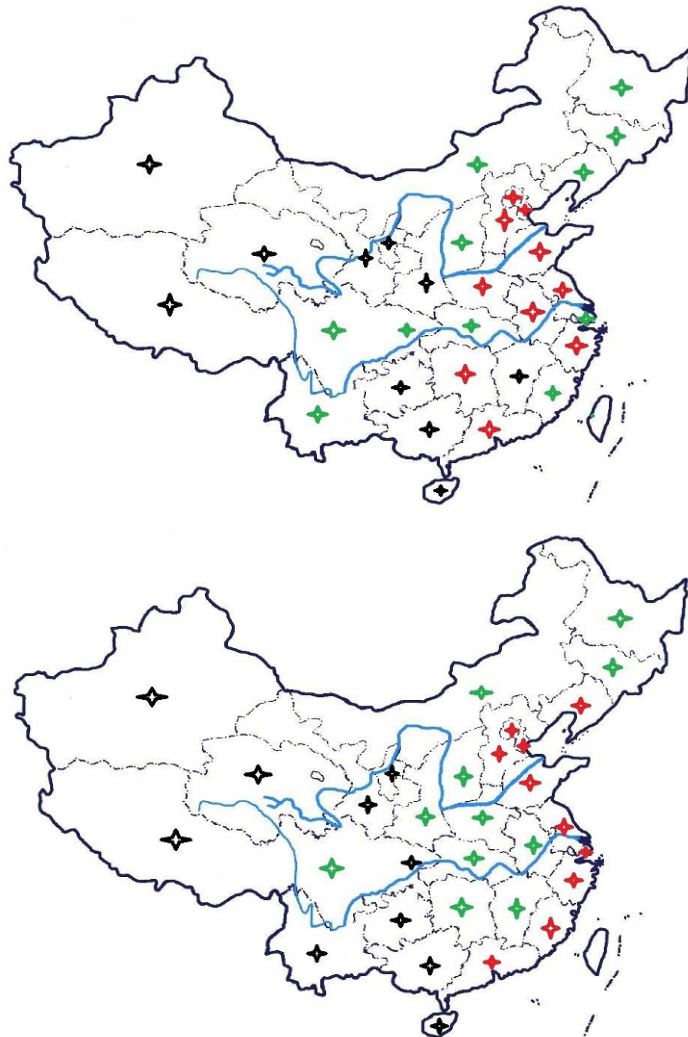
Figure 1 Government Size (Fiscal Spending/GDP) 2010-2012



Notes: The figure shows local government size measured by fiscal spending divided by local GDP from 2010 to 2012. The black stars stand for the regions with large local governments (high fiscal spending/local GDP), the green stars denote the regions with medium size local governments, and the red stars are the regions with small local governments.

Specifically, among regions with different sizes of local government, if a household has a member who is a director, a manager, or a titled civil servant, it will be more possible for it to carry on a business on its own. Moreover, if a household is located in a region with large local governments, the chance of this household doing business is, on average, bigger than that of a household located in a region with small local governments. Comparing this to 2010, the families with a political background still have advantages in carrying out their own businesses in the regions with large local governments, but these effects have decreased.

Figure 2 Government Size (Fiscal Transfers) 2010-2012



Notes: The figure shows local government size measured by the fiscal transfers to the local government from 2010 to 2012. The black stars stand for the regions with large local governments (high fiscal spending/local GDP), the green stars denote the regions with medium size local governments, and the red stars are the regions with small local governments.

Table 3 Household Entrepreneurship, Political Background, and Local Government Size in the CFPS

	Small Local Government Size		Large Local Government Size	
	ATT	tValue	ATT	tValue
Panel A: 2010				
Fiscal Spending/GDP				
Cadre	0.261***	(-11.21)	0.305***	(-8.09)
Civil Servant	0.139*	(-1.72)	0.101***	(-2.96)
Civil Servant w/Title	0.069*	(-1.67)	0.069	(-1.23)
Fiscal Transfer				
Cadre	0.297***	(-7.65)	0.252***	(-10.13)
Civil Servant	0.131***	(-3.11)	0.877***	(-2.77)
Civil Servant w/Title	0.0385	(-0.76)	0.841*	(-1.81)

Panel B: 2012				
Fiscal Spending/GDP				
Cadre	-0.807***	(-5.72)	-0.786*	(-1.87)
Civil Servant	-0.45	(-0.98)	0.562***	(-17)
Civil Servant w/Title	0.0851	(-0.19)	0.227**	(-2.45)
Fiscal Transfer				
Cadre	-0.271	(-0.79)	-0.784***	(-5.67)
Civil Servant	0.5	(-1.18)	-0.455***	(-17.88)
Civil Servant w/Title	0.115	(-0.25)	0.136***	(-2.63)

Notes: Using entropy balancing propensity score matching, the table reports the interplay between entrepreneurship and households with a political background among regions with different sizes of local government, measured by the fiscal spending divided by the local GDP and the fiscal transfer from the central government, when using CFPS (China Family Panel Survey) data from 2010 to 2012. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

4.2 Political Background, Local Government Size, and Individual Entrepreneurship in the CFPS from 2010 to 2012

In this part, we study, for the different sizes of local government, the case where one family member has a cadre background and whether this member can then help herself/himself or her/his family members to become an entrepreneur. Although this paper has already found that there are more possibilities for households who have a cadre background to carry on a business by themselves, on average, 58% of the households' head members in the pool are male. Hence, it is reasonable for us to ask the further question of whether an individual's cadre background is of help in being an individual entrepreneur. If so, are there any other individual personal factors that affect the chances of doing business? We should mention that, due to the survey questionnaire, the questions "having one's own business" and "being a civil servant in the government" cannot be chosen simultaneously. Therefore, we only consider a background such as director or manager to study the effect of having a cadre background on an individual's entrepreneurship.

Table 4 uses the fiscal spending divided by the local GDP as a measure of local government size to investigate individual entrepreneurship and cadre background in regions with different sizes of local government. We present four types of identification, and within each of them we investigate the probability of males and females engaging in entrepreneurship.

Without political influence, having a cadre background, such as being a director or being a manager, helps both males and females in their entrepreneurship or business. Besides the traditional channels influencing entrepreneurship, such as wealth, credit constraints, and income, we find that marriage and education are quite important. An individual who gets married obtains more chances to do businesses on their own. Moreover, the education effect is different for males and females: the higher the level of education possessed by a male, the lower the chances that he will carry on his own business, while the more years of education possessed by a female, the higher the probability that she will be an entrepreneur. Furthermore, social spending (social income) affects male entrepreneurship.

More interesting results are evidenced when we add political influences. We find that the cadre background of a female, especially in regions with large local governments, affects the probability of her being an entrepreneur or doing business: the probability is 20 times that of the average female (without political influence). Similarly, marriage and education are quite important for a female to become an entrepreneur in regions with large local government. For example, in the regions with large local governments, marriage and education multiply the effect on female entrepreneurship by 50 and 40, respectively. To look at other political influences on individual entrepreneurship, we use fiscal transfers to measure local government size.¹⁰ The table shows that political influence matters for individual entrepreneurship: the larger the size of local government, the more likely it is that individual people can become entrepreneurs.

We now look at how political background influences individual entrepreneurship from another perspective: whether an individual's spouse is of help in enabling him/her to become an entrepreneur or carry on her/his own businesses.

Table 5 shows five types of identification: after controlling for the female's and the male's own personal information, we study how female and male partners can contribute to their spouses' entrepreneurship. The second and the third columns in Table 5 give the results on whether the male or the female in any household was a civil servant, a director, a manager, or a titled civil servant, respectively. We find that if the female was a titled civil servant, her political background would not help her husband to do business. However, when the local government size factor is added, we find that local government size is quite significant for influencing individual entrepreneurship: the higher the local government size, the easier it is for an individual to run a business. Interestingly, if the male (female) was a civil servant, his (her) political background cannot be statistically distinguished as increasing the probability of his wife (her husband) becoming an entrepreneur, but if the female was a titled civil servant (a director or a manager) in a household located in a region with large (small) local governments, her political background will increase the chances of her husband being an entrepreneur by 6.522% (3.567%). Moreover, on average, the titled civil servant background of a female will not help her husband to carry out his own business, but in regions with large local governments, this background contributes to increasing the probability of her husband carrying out his own business. Although most of the traditional factors or the personal information of a female cannot explain her spouse carrying out entrepreneurial activities, female human capital (education) plays a positive role in increasing the husband's likelihood of being an entrepreneur, especially in regions with small local governments.

Similar to the channel of increasing male entrepreneurship, social spending (social income) also makes males influence their spouses' entrepreneurship. Compared with 2010,

¹⁰ Details are shown in Appendix A.3, which is available from the author upon request.

Table 4 Individual Self-entrepreneurship, Political Background, and Local Government Size in the CFPS

	Self-entrepr. Male	Self-entrepr. Female	Self-entrepr. Male	Self-entrepr. Female	Self-entrepr. Male	Self-entrepr. Female	Self-entrepr. Male	Self-entrepr. Female
<i>cadre</i>								
<i>age</i>	-0.00170*** (-13.02)	-0.000555*** (-5.28)	-0.00167*** (-12.45)	-0.000561*** (-5.39)	0.0597*** (-4.64)	0.0858*** (-3.51)	0.0488*** (-3.27)	0.0824*** (-3.18)
<i>party</i>	-0.0295*** (-4.93)	-0.0259*** (-2.63)	-0.0329*** (-5.83)	-0.0342*** (-3.01)	-0.00161*** (-12.57)	-0.000512*** (-4.89)	-0.00158*** (-11.87)	-0.000515*** (-5.02)
<i>west</i>	-0.0180* (-1.84)	-0.0043 (-0.60)	-0.0169* (-1.71)	-0.0049 (-0.69)	-0.0371*** (-5.99)	-0.0344*** (-3.27)	-0.0374*** (-6.25)	-0.0415*** (-3.52)
<i>workyear</i>	-0.0000189*** (-6.97)	-0.0000103*** (-6.80)	-0.0000172*** (-6.07)	-0.00000665*** (-3.41)	-0.0000174*** (-6.41)	-0.00000836*** (-5.38)	-0.0000157*** (-5.57)	-0.0000451** (-2.23)
<i>marriage</i>	0.0628*** (8.87)	0.0273*** (8.52)	0.0594*** (8.83)	0.0244*** (6.65)	0.0594*** (8.53)	0.0264*** (8.4)	0.0563*** (8.51)	0.0234*** (6.48)
<i>edu</i>	-0.0005 (-0.99)	0.00112*** (3.99)	-0.0008 (-1.41)	0.000855** (-2.24)	-0.000768* (-1.67)	-0.000985*** (-3.61)	-0.00103* (-1.90)	0.000726** (2.02)
<i>income</i>	0.0135 (-0.17)	0.13 (0.82)	0.282*** (2.68)	0.34 (-1.41)	-0.073 (-0.67)	-0.0754 (-0.53)	0.207* (-1.67)	0.15 (-0.68)
<i>networth</i>	0.000448 (-1.04)	0.00053 (1.21)	0.00185*** (4.64)	0.00129*** (-3.49)	0.00042 (-1.03)	0.0005 (-1.2)	0.00176*** (-4.55)	0.00124*** (-3.4)
<i>creditconstr</i>	-0.0637** (-2.06)	-0.0506** (-2.27)	-0.0878*** (-3.05)	-0.0624*** (-3.16)	-0.08** (-2.52)	-0.0578** (-2.45)	-0.0997*** (-3.50)	-0.0695*** (-3.36)
<i>socialspend</i>	-1.58** (-2.55)	-0.4 (-1.50)	-1.61*** (-2.62)	-0.4 (-1.60)	1.57*** (-2.58)	-0.4 (-1.48)	-1.61*** (-2.64)	-0.4 (-1.57)
<i>rural</i>	-0.0182** (-2.45)	-0.232*** (-3.40)	-0.0159** (-2.14)	-0.0235*** (-3.52)	-0.0162** (-2.27)	-0.0222*** (-3.41)	-0.0143** (-1.99)	-0.0226*** (-3.51)
<i>localgov</i>			0.618* (-1.73)	0.656** (-2.27)			0.623* (-1.7)	0.895* (-1.7)
<i>cadreG</i>							1.733 (-1.57)	1.441* (-1.83)
<i>marriageG</i>			0.920* (-1.93)	1.013*** (-3.68)			0.841* (-1.74)	1.048*** (-3.75)
<i>eduG</i>			0.0092 (-0.21)	0.0407** (-2.23)			0.00408 (-0.09)	0.0383** (-2.22)
<i>incomeG</i>			-0.000063*** (-2.83)	-0.00012*** (-2.87)			-0.000063*** (-2.79)	-0.00013*** (-3.00)
<i>networthG</i>			0.347*** (-4.4)	0.228*** (-5.13)			0.332*** (-4.4)	0.221*** (-5.08)
<i>creditconG</i>			6.6 (-0.89)	7.2 (-1.45)			6.1 (-0.81)	6.7 (-1.3)
<i>socialspendG</i>			-4 (-0.07)	10 (-0.29)			-4 (-0.07)	8.6 (-0.24)
<i>Tdum</i>	-0.0011 (-0.14)	0.00418 (-1.25)	-0.0143 (-1.32)	-0.0025 (-0.43)	-0.0046 (-0.39)	0.00262 (-0.82)	-0.0174* (-1.65)	-0.0038 (-0.68)
<i>cons</i>	0.114*** (-10.74)	0.0501*** (-5.47)	0.118*** (-9.97)	0.0568*** (-5.53)	0.112*** (-10.39)	0.0494*** (-5.48)	0.116*** (-9.53)	0.0558*** (-5.53)
<i>Control</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ControlwG</i>	No	No	Yes	Yes	No	No	Yes	Yes

Notes: The table presents the interplay between individual self-entrepreneurship and individuals with a political background among regions with different sizes of local government, measured by the fiscal spending divided by the local GDP, when using the CFPS (China Family Panel Survey) data from 2010 to 2012. All regressions include a set of provincial dummies, time dummies, and all their interactions. Standard errors are clustered at province level, and the number of clusters is 28. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 5 Spouses' Entrepreneurship, Political Background, and Local Government Size in the CFPS

	(1)		(2)		(3)		(4)		(5)	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<i>Civilserv</i>	-0.01 (-0.75)	0.0167 (-0.73)	-0.0079 1.103 (-1.04)	0.0061 -0.31 -2.028 (-1.36)			-0.0102 1.435 (-1.22)	0.00618 (-0.31) -1.859 (-1.23)	-0.0102 0.23 (-0.14)	0.0171 (-0.74) -2.538 (-1.47)
<i>civilservG</i>										
<i>Cadre</i>	0.00655 (-1.32)	0.015 (-1.08)			0.00703 (-1.3) -0.608 (-0.96)	0.0203 (-1.19) -3.081* (-1.87)	0.0079 (-1.4) -0.759 (-1.10)	0.0203 (-1.18) -3.050* (-1.84)	0.00812 (-0.887 (-1.14) 0.00037 (-0.02) 2.167 (-0.88)	0.023** (-2.28) -3.298* (-1.90) -0.0739** (-2.29) 6.091** (-2.21)
<i>civilswT</i>	0.00162 -0.08	-0.0687** (-2.34)								
<i>civilswTG</i>										
<i>Localgov</i>										
<i>Age</i>	-0.00035*** (-3.21)	-0.0005*** (-4.24)	0.811** (-2.43)	0.716* (-1.94)	0.806** (-2.39)	0.706* (-1.92)	0.813** (-2.42)	0.705* (-1.91)	0.814** (-2.43)	0.706* (-1.91)
<i>Party</i>	-0.0056 (-0.68)	-0.037*** (-3.1)	-0.0003*** (-3.11)	-0.0005*** (-4.24)	-0.0003*** (-3.13)	-0.0005*** (-4.12)	-0.0003*** (-3.12)	-0.0005*** (-4.15)	-0.0003*** (-3.12)	-0.0005*** (-4.14)
<i>West</i>	-0.009 (-1.31)	-0.014** (-2.02)	-0.006 (-0.66)	-0.042*** (-4.00)	-0.008 (-0.94)	-0.046*** (-3.79)	-0.007 (-0.82)	-0.048*** (-3.95)	-0.007 (-0.82)	-0.047*** (-3.90)
<i>Workyear</i>	-0.0005*** (-5.10)	-0.0007*** (-4.40)	-0.0005*** (-4.70)	-0.0006*** (-3.81)	-0.0005*** (-4.76)	-0.0006*** (-3.77)	-0.0005*** (-4.77)	-0.0006*** (-3.78)	-0.0005*** (-4.76)	-0.0006*** (-3.79)
<i>Rural</i>	-0.018*** (-3.09)	-0.015*** (-3.46)	-0.018*** (-3.06)	-0.015*** (-3.45)	-0.018*** (-3.06)	-0.015*** (-3.49)	-0.018*** (-3.04)	-0.015*** (-3.49)	-0.018*** (-3.05)	-0.015*** (-3.47)
<i>Edu</i>	0.0004 (-1.53)	0.0003 (-0.71)	0.0006** (-2.07)	0.0004 (-1)	0.0005* (-1.82)	0.0004 (-0.93)	0.0005* (-1.87)	0.00053 (-0.91)	0.00053 (-0.86)	0.0004 (-0.91)
<i>Network</i>	0.00002 (-0.22)	-0.00003 (-0.34)	0.00016 (-0.82)	-0.00002 (-0.13)	0.000155 (-0.83)	-0.00001 (-0.09)	0.000157 (-0.84)	-0.000014 (-0.09)	0.000161 (-0.85)	-0.000014 (-0.09)
<i>Creditconst</i>	-0.0262 (-0.60)	-0.00591 (-0.14)	-0.0259 (-0.58)	-0.0118 (-0.29)	-0.0288 (-0.67)	-0.0121 (-0.30)	-0.0279 (-0.63)	-0.0123 (-0.30)	-0.0278 (-0.63)	-0.012 (-0.29)
<i>Socialspend</i>	-0.4 (-1.63)	-0.4 (-1.05)	-0.431* (-1.86)	-0.5 (-1.14)	-0.431* (-1.87)	-0.5 (-1.15)	-0.431* (-1.87)	-0.5 (-1.15)	-0.433* (-1.88)	-0.5 (-1.15)
<i>eduG</i>			-0.0524 (-1.19)	-0.0904** (-2.07)	-0.0412 (-0.97)	-0.0808* (-1.84)	-0.0455 (-1.06)	-0.0786* (-1.84)	-0.0447 (-1.03)	-0.0776* (-1.82)
<i>socialspendG</i>			-0.00002 (-0.31)	-0.00008 (-1.17)	-0.00002 (-0.32)	-0.00008 (-1.20)	-0.00002 (-0.32)	-0.00008 (-1.20)	-0.00002 (-0.33)	-0.00008 (-1.20)
<i>creditconstG</i>			2.5 7.7	7.7	2.9	7.9	2.8	8	2.8	7.9
<i>networkG</i>			-0.038 (-0.38)	-0.0021 (-0.02)	-0.043 (-0.43)	-0.003 (-0.03)	-0.042 (-0.42)	-0.042 (-0.42)	-0.042 (-0.42)	-0.042 (-0.42)
<i>Tdum</i>	-0.0141*** (-3.06)	-0.0337*** (-5.77)	-0.0211*** (-3.86)	-0.0376*** (-4.49)	-0.0219*** (-3.97)	-0.0376*** (-4.50)	-0.0215*** (-3.95)	-0.0376*** (-4.52)	-0.0215*** (-3.95)	-0.0377*** (-4.53)
<i>Cons</i>	-0.0754*** (-9.75)	0.0986*** (-11.93)	0.0771*** (-9.43)	0.0987*** (-10.39)	0.0776*** (-9.34)	0.0991*** (-10.3)	0.0772*** (-9.35)	0.0992*** (-10.31)	0.0773*** (-9.32)	0.0991*** (-10.31)
<i>Control</i>	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ControlwG</i>	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table presents that the interplay between individual entrepreneurship and having a spouse with a political background among regions with different sizes of local government, measured by the fiscal transfer from the central government, when using CFPS (China Family Panel Survey) data from 2010 to 2012. All regressions include a set of provincial dummies, time dummies, and all their interactions. Standard errors are clustered at province level, and the number of clusters is 28. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

individual entrepreneurship decreased on average in 2012. We also use fiscal transfers as a measure of local government size, and find the evidence that local government size affects individual entrepreneurship even after controlling for demographic factors.¹¹ The table shows that after controlling for their personal information, the educational level of both males and females increases their spouses' chances of being entrepreneurs in the regions with small local governments. Moreover, the civil servant background of males and females has opposite effects on their spouses' entrepreneurship with different sizes of local government; yet the directorial or managerial background of a male or a female has a positive influence in regions with small local governments. Moreover, we use entropy balance propensity score matching to show whether the net effects on spouses exist if their husbands or wives have a civil servant or cadre background.

Table 6 Individual Entrepreneurship, Background, and Local Government Size in the CFPS

	Small Local Government Size		Large Local Government Size	
	ATT	tValue	ATT	tValue
Panel A: 2010				
Fiscal Spending/GDP				
Male Cadre	0.0618***	(-5.29)	0.0606***	(-3.82)
Female Cadre	0.0918***	(-4.59)	0.107***	(-3.24)
Male Civil Servant	0.0175	(-1.43)	0.0417	(-1.4)
Female Civil Servant	0.0806**	(-2.34)	0.04	(-0.94)
Male Civil w/Title	0.037	(-1.41)	0.0327***	(-5.94)
Female Civil w/Title	0.0553***	(-22.60)	0.0451***	(-14.63)
Fiscal Transfers				
Male Cadre	0.0555***	(-3.99)	0.0618***	(-5.54)
Female Cadre	0.144***	(-4.33)	0.18*	(-1.84)
Male Civil Servant	-0.971**	(-2.03)	0.0175*	(-1.83)
Female Civil Servant	0.0909**	-2.16	0.0465*	(-1.88)
Male Civil w/Title	-0.981**	(-2.00)	0.0435	(-0.85)
Female Civil w/Title	-0.0413***	(-6.23)	0.0572***	(-20.47)
Panel B: 2012				
Fiscal Spending/GDP				
Male Cadre	0.0346***	(-5.8)	0.0229***	(-3.95)
Female Cadre	0.0272***	(-4.0)	0.0225	(-0.16)
Male Civil Servant	0.0365**	(-2.43)	0.0462*	(-1.9)
Female Civil Servant	0.037	(-1.35)	0.0667	(-0.31)
Male Civil w/Title	0.0615**	(-2.26)	0.0314	(-1.01)
Female Civi w/Title	0.0249***	(-15.23)	0.0307***	(-19.65)
Fiscal Transfers				
Male Cadre	0.0249***	(-4.21)	0.0353***	(-4.64)
Female Cadre	0.0332***	(-3.52)	0.018	(-0.09)
Male Civil Servant	0.0225	(-1.57)	0.0531**	(-2.4)
Female Civil Servant	0.0333	(-1.16)	0.0213	(-0.15)
Male Civil w/Title	0.0247***	(-14.12)	0.0727**	(-2.05)
Female Civil w/Title	0.0259***	(-14.17)	-0.0306***	(-18.69)

Notes: The table uses entropy balance propensity score matching to show whether the net effects on spouses exist if their husbands or wives have a political background when using CFPS (China Family Panel Survey) data from 2010 to 2012. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

¹¹ Details are provided in Appendix A.4, which is available from the author upon request.

Table 6 shows that, using both measures of local government size, a female with a civil servant or cadre background can help her husband be an entrepreneur. In regions with large local governments, female titled civil servants increase the probability of their spouses becoming entrepreneurs by 0.0572 and 0.0451. In 2012, this net effect decreased, especially in the regions with large local governments (as measured using fiscal transfers): the probability declined from 0.0572 to -0.0306. We propose the following explanation for this decrease. Although the anti-corruption campaign did not start until November 2012 when Xi took office as leader of the Communist Party, the campaign had come to public attention and substantially heated up since early 2012. Prime Minister Wen Jiabao issued a new call for the government to end the culture of graft lest it lead to the end of Communist Party rule in China, as former Politburo member Bo Xilai had been ensnared in intertwined corrupt and criminal accusations in February 2012 (*New York Times*, 16 April 2012). Meanwhile, pressure accumulated from public opinion and several major social media across the world (e.g. Bloomberg, 1 June 2012; BBC, 17 June 2011; Xinhua News, 6 Sept 2011, 26 July 2012, and 21 August 2012), and the Chinese government launched several anonymous websites for citizens to report bribery. Thus, our result may capture this decreasing time trend of the effect of political power on entrepreneurship in the pre-campaign stage when using the 2010-2012 CFPS data.

4.3 Political Background, Local Government Size, and Household Entrepreneurship in the CHFS from 2011 to 2013

We use another survey database, the CHFS from 2011 to 2013, to investigate the impact of political background on entrepreneurship.

Column 1 of Table 7 shows that in the absence of local government size, both civil servant and cadre backgrounds affect the probability of households owning or starting their own business, but negative effects are observed (-2.97% and -4.48%) from 2011 to 2013 except for those households with titled civil servants (2.01%).

From the second column to the fifth column in Table 7, we add the local government size measures as interaction terms to investigate the influence of political background on household entrepreneurship after controlling for households' characteristics and their interaction terms with the local government size measures. Although being a civil servant still aids family members' entrepreneurship in general, a standard deviation increase in local government size raises the chances of being an entrepreneur by about 50%. This indicates that political connections (background) are more of a help to members of a household becoming entrepreneurs in regions with large local governments than in regions with smaller local governments. The chances of families with members who are titled civil servants carrying out their own businesses are 7.88% higher than those of normal families, but an increase of one standard deviation in the local government size measure lowers this inclination by about 170%. This means that the political background of titled civil servants

helps their family members to own their own businesses more in regions with smaller local governments than in regions with larger local governments.

Table 7 Household Entrepreneurship, Political Background, and Local Government Size in the CHFS

	(1)	(2)	(3)	(4)	(5)
<i>civilserv</i>	-0.0297** (-2.52)	-0.0412** (-2.56)			-0.0496*** (-3.89)
<i>civilservG</i>		-0.0568 (-0.03)			2.68** (-2)
<i>cadre</i>	-0.0448*** (-5.26)		-0.0543*** (-4.15)		-0.0572*** (-4.61)
<i>cadreG</i>			1.563 (-0.66)		2.39 (-1.09)
<i>civilswT</i>	0.0201* (-1.82)			0.0423* (-1.8)	0.0788*** (-3.47)
<i>civilswTG</i>				-4.13 (-1.47)	-8.599*** (-2.74)
<i>localgov</i>	-2.458 (-1.13)	-2.645 (-0.79)	-2.744 (-0.82)	-2.686 (-0.81)	-2.783 (-0.83)
<i>Tdum</i>	0.0274 (-0.78)	0.0313 (-0.82)	0.0359 (-0.95)	0.0311 (-0.83)	0.0352 (-0.93)
<i>Control</i>	Yes	Yes	Yes	Yes	Yes
<i>ControlwG</i>	No	Yes	Yes	Yes	Yes

Notes: The table reports the interplay between entrepreneurship and households with a political background among regions with different sizes of local government, measured by the fiscal spending divided by the local GDP, but uses a different survey database, namely, the CHFS (China Household Finance Survey) from 2011 to 2013. All regressions include a set of provincial dummies, time dummies, and all their interactions. Standard errors are clustered at province level, and the number of clusters is 28. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

These results, however, shows the negative effect of having a political background on household entrepreneurship. We suggest that the reason for this is the effect of the anti-corruption campaign. On 15 November 2012, Xi Jinping was elected to the post of General Secretary of the Communist Party and Chairman of the CPC Central Military Commission, making him, informally, the paramount leader of the Communist Party of China. He has initiated further market economic reforms and a renewed campaign against corruption and has governed with a greater emphasis on the law and legal institutions. Table 8 presents hand-collected data on arrested titled civil servants retrieved from authorised Chinese newspapers from 2010 to 2014.

We report the service regions of those civil servants in the last two columns of Table 8. From 2010 to 2014, the number of arrested titled civil servants increased from 4 to 30. The main charge against them was corruption by using their political power to obtain personal

Table 8 Arrested Civil Servants Holding Provincial Titles

Time of Arrest	Family Name	Age	Ethnicity	Sex(M/F)	Education	Serving Region	Local Gov.
2010	Z	59	Han	M	BA	Zhejiang	Small
2010	Z	60	Han	M	M	Top	Central
2010	S	63	Han	M	M	Jiangxi	Large
2010	L	62	Han	M	BA	Neimenggu	Large
2011	L	62	Han	M	M	Top	Central
2011	L	68	Han	M	BA	Top	Central
2011	L	60	Han	M	M	Sichuan	Large
2011	T	68	Man	M	M	Jilin	Medium
2011	H	61	Man	M	BA	Shandong	Small
2012	L	59	Man	M	M	Sichuan	Large
2013	L	61	Man	M	M	Top	Central
2013	N	61	Man	M	M	Anhui	Medium
2013	G	66	Man	M	M	Sichuan	Large
2013	W	54	Meng	M	M	Neimenggu	Large
2013	L	62	Han	M	BA	Guangxi	Large
2013	J	60	Han	M	M	Top	Central
2013	J	58	Han	M	PhD	Jiangsu	Small
2013	L	55	Han	M	M	Guizhou	Large
2013	C	65	Han	M	M	Hubei	Medium
2013	G	59	Han	M	BA	Hubei	Medium
2013	C	61	Han	M	M	Jiangxi	large
2013	T	57	Han	M	M	Hunan	Medium
2013	L	60	Han	M	BA	Top	Central
2013	Y	62	Han	M	M	Top	Central
2013	L	64	Han	M	BA	Sichuan	Large
2014	J	49	Han	M	BA	Hainan	Large
2014	Z	60	Han	M	M	Shanxi	Large
2014	J	62	Man	M	PhD	Shanxi	Large
2014	S	53	Han	M	PhD	Yunan	Large
2014	Y	58	Han	M	PhD	Jiangxi	Large
2014	S	59	Han	M	M	Top	Central
2014	M	50	Han	M	PhD	Qinghai	Large
2014	T	61	Tujia	M	M	Chongqing	Large
2014	Y	68	Han	M	M	Hunan	Medium
2014	Z	60	Han	M	PhD	Jiangxi	Large
2014	S	67	Han	M	M	Top	Central
2014	D	59	Han	M	M	Shanxi	Large
2014	L	63	Han	M	BA	Shanxi	Large
2014	W	51	Han	M	PhD	Guangdong	Small
2014	X	72	Han	M	BA	Top	Central
2014	T	60	Han	M	BA	Hainan	Large
2014	H	60	Han	M	M	Anhui	Small
2014	Z	60	Han	M	BA	Yunnan	Large
2014	W	62	Han	M	PhD	Tianjin	Small
2014	C	60	Han	M	PhD	Liaoning	Medium
2014	Z	73	Han	M	BA	Top	Central
2014	C	53	Han	M	M	Shanxi	Large
2014	N	60	Han	M	M	Shanxi	Large
2014	B	55	Han	F	BA	Shanxi	Large
2014	B	69	Han	M	BA	Top	Central
2014	R	58	Han	M	PhD	Shanxi	Large
2014	S	54	Han	M	PhD	Neimenggu	Large
2014	Q	62	Han	M	BA	Henan	Medium
2014	H	59	Han	M	PhD	Top	Central
2014	Z	69	Han	M	BA	Jiangsu	Small

Notes: The table presents the data on titled civil servants whose arrests were reported in authorised Chinese newspapers from 2010 to 2014. The data are hand-collected from published newspapers. **Top** stands for individuals who worked in the central government in Beijing. **Local Gov.** denotes the local government size according to the fiscal spending divided by local GDP in the corresponding years.

Table 9 Household Background Changes and Entrepreneurship

Panel A: Changes in Civil Servant Background				
	Number	<i>Entrepreneur</i>	Number	Percent
<i>civilserv</i> to <i>civilserv</i>	6	0 to 0	2	33.33%
		1 to 0	1	16.67%
		0 to 1	1	16.67%
<i>civilserv</i> to non-political background	166	1 to 1	2	33.33%
		0 to 0	139	83.73%
		1 to 0	12	7.23%
		0 to 1	6	3.61%
non-political background to <i>civilserv</i>	586	1 to 1	9	5.42%
		0 to 0	211	36.01%
		1 to 0	48	8.19%
		0 to 1	198	33.79%
		1 to 1	129	22.01%
Panel B: Changes in Cadre Background				
<i>cadre</i> to <i>cadre</i>	182	0 to 0	134	73.63%
		1 to 0	15	8.24%
		0 to 1	14	7.69%
		1 to 1	19	10.44%
<i>cadre</i> to non-political background	178	0 to 0	99	55.62%
		1 to 0	32	17.98%
		0 to 1	12	6.74%
		1 to 1	35	19.66%
non-political background to <i>cadre</i>	478	0 to 0	328	68.62%
		1 to 0	42	8.79%
		0 to 1	44	9.21%
		1 to 1	64	13.39%
Panel C: Changes in Titled Civil Servant Background				
titled to titled <i>civilserv</i>	0	0 to 0	\	\
		1 to 0	\	\
		0 to 1	\	\
		1 to 1	\	\
titled to non-political background	48	0 to 0	43	89.58%
		1 to 0	1	2.08%
		0 to 1	1	2.08%
		1 to 1	3	6.25%
non-political background to titled <i>civilserv</i>	68	0 to 0	20	29.41%
		1 to 0	5	7.35%
		0 to 1	30	44.12%
		1 to 1	13	19.12%

Notes: The table shows the statistical descriptions for changes in the political background of households and their entrepreneurship. Panel A presents the households in the CPFS survey data that were tracked in both 2010 and 2012, and Panel B shows households in the CHFS survey data that were tracked in both 2011 and 2013. *Entrepreneur* denotes entrepreneurship: If it equals 1, it means that households started or held their own businesses; if it is 0, it means there were no households engaging in entrepreneurship.

benefits, and most of these cases involved family members who had taken advantage of the official's power to create businesses. Within each year, the regions with large local governments were the most likely areas in which to find corruption: In 2010, 50% of the

titled civil servants who were found guilty of corruption were from such regions; the figure increased to 67% in 2011 and 68% in 2014. Hence, we propose that because of President Xi's campaign against corruption, political background can no longer help household members share the benefits associated with such a background, especially in those households in regions with large local governments.

Furthermore, we look at the statistical descriptions of households that are tracked from 2010 to 2012 in the CPFS and from 2011 to 2013 in the CHFS survey data. Table 9 presents the results on the changes in the backgrounds of households and their entrepreneurship.

In Panel A, we study the relation between three political background changes and changes in household entrepreneurship from 2010 to 2012, and Panel B presents the corresponding results from 2011 to 2013.

Specifically, Panel A shows that from 2010 to 2012, on average, 33.79% of the households that changed from a non-civil-servant background to a civil-servant background during this period started businesses (36.54% (32.28%) in regions with large (small) local governments). Of these households, 22.01% kept their businesses. For those households that changed from a non-civil-servant background to a titled civil servant background, there were on average 44.12% of households that started new businesses and 19.12% of households that kept their current businesses, within which 48.98% and 31.38% of households in the regions with small and large local governments, respectively, started new businesses, and 16.33% and 26.32% of households in the regions with small and large local governments, respectively, kept their current businesses. It should be noted that for those households with a non-civil-servant background in the regions with small local governments, an average of 4% of households started new businesses and 6% of households kept their current businesses.

From 2011 to 2013, only 10.53% of households that changed from a non-civil-servant background to a civil servant background started businesses in the regions with small local governments; no such households started new businesses in the regions with large local governments, and neither did households changing from a non-civil-servant background to a titled civil servant background. For the households with a non-civil-servant background, there were no big changes in their entrepreneurship: In the regions with small (large) local governments, on average, 6% (7%) of households started new businesses and 7% (5%) of households kept their current businesses.

4.4 Local Government Size, Political Background, and Individual Entrepreneurship in the CHFS from 2011 to 2013

We also examined how political background, together with local government size, can help individual entrepreneurship.

Table 10 shows that local government size positively influences individual entrepreneurship possibilities even when we control for the cadre background of males and

females. With regard to females, if a female was a director or a CEO in a state-owned company, her position would not help her to gain more chances of carrying out her own businesses. Moreover, for those females living in the regions with large local governments, education becomes important in positively contributing to entrepreneurship. However, this is not the case for males. From 2011 to 2013, marriage positively affected male entrepreneurship, especially for those living in the regions with large local governments. The influence of education on male entrepreneurship is different from its influence on females. To be more specific, an increase of one standard deviation in the size of the local government raises the chances of being an entrepreneur by about 30% given the number of years of education attained.

Table 10 Self-Entrepreneurship, Political Background, and Local Government Size in the CHFS

	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
<i>cadre</i>	-0.0994*** (-12.32)	-0.0472*** (-4.68)	-0.101*** (-12.31)	-0.0475*** (-4.62)
<i>cadreG</i>			-2.205 (-1.26)	-0.0706 (-0.03)
<i>localgov</i>			13.47*** (-4.59)	5.722*** (-2.07)
<i>age</i>	-0.00233*** (-10.48)	-0.00224*** (-12.06)	-0.00245*** (-10.97)	0.00226*** (-12.15)
<i>ageG</i>			-0.158*** (-3.77)	-0.101*** (-2.84)
<i>marriage</i>	0.019*** (-3.3)	0.00099 (-0.19)	0.0444*** (-8.43)	0.00266 (-0.35)
<i>marriageG</i>			-7.941*** (-7.39)	-0.475 (-0.30)
<i>edu</i>	0.000953 (-1.35)	-0.00034 (-0.64)	0.000614 (-0.87)	-0.00047 (-0.87)
<i>eduG</i>			0.303*** (-2.22)	-0.0431*** (-0.41)
<i>Tdum</i>	0.0211 (-1.5)	0.00369 (-0.08)	0.0434*** (-4.07)	0.014 (-0.28)
<i>Control</i>	Yes	Yes	Yes	Yes
<i>ControlwG</i>	No	No	Yes	Yes

Notes: The table presents the interplay between individual self-entrepreneurship and individuals with a political background among regions with different sizes of local government, measured by the fiscal spending divided by the local GDP. It uses a different survey database, the CHFS (China Household Finance Survey) from 2011 to 2013. All regressions include a set of provincial dummies, time dummies, and all their interactions. Standard errors are clustered at province level, and the number of clusters is 28. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 11 Individual Entrepreneurship, Political Background, and Local Government Size in the CHFS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	M-F	F-M	M-F	F-M	M-F	F-M	M-F	F-M	M-F	F-M
<i>civilserv</i>	0.0205 (-1.08)	-0.0106 (-0.35)	0.00588 (-0.48)	0.0123 (-0.51)					0.0191 (-1)	-0.013 (-0.43)
<i>civilservG</i>			2.045 (-0.82)	-1.457 (-0.30)					2.127 (-0.55)	1.135 (-0.19)
<i>cadre</i>	-0.0125* (-1.76)	-0.01 (-0.82)			-0.0126* (-1.85)	-0.00403 (-0.34)			-0.0119* (-1.66)	-0.00902 (-0.73)
<i>cadreG</i>					-2.783* (-1.95)	-1.253 (-0.49)			-3.227* (-2.14)	-0.622 (-0.23)
<i>civilswT</i>	-0.0175 (-0.71)	0.0767 (-1.57)					-0.00627 (-0.41)	0.0497* (-1.91)	-0.0169 (-0.69)	0.0686* (-1.81)
<i>civilswTG</i>							1.374 (-0.44)	5.329* (-1.90)	1.54 (-0.31)	5.9** (-2.6)
<i>localgov</i>			7.106*** (-2.72)	16.92*** (-5.63)	6.838*** (-2.62)	16.97*** (-5.64)	7.054*** (-2.7)	16.88*** (-5.62)	6.973*** (-2.67)	16.93*** (-5.63)
<i>Tdum</i>	0.0656*** (-16.55)	0.108*** (-23.69)	0.0857*** (-9.44)	0.123*** (-11.78)	0.0861*** (-9.48)	0.123*** (-11.77)	0.0857*** (-9.44)	0.123*** (-11.8)	0.086*** (-9.47)	0.123*** (-11.79)
<i>Control</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ControlG</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table presents the interplay between individual entrepreneurship and having a spouse with a political background among regions with different size local government, measured by the fiscal transfer from the central government. It uses a different survey database, the CHFS (China Household Finance Survey) from 2011 to 2013. All regressions include a set of provincial dummies, time dummies, and all their interactions. Standard errors are clustered at province level, and the number of clusters is 28. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

In Table 11, we further study whether individual political background affects an individual's spouse's chances of owning their own businesses.

Mainly, the husband's cadre background (director or CEO in a state-owned firm) lowers the probability of his wife becoming an entrepreneur. With the interaction of local government size effects, a 20% increase in local government size lowers the probability of a female becoming an entrepreneur by about 5% on average if her husband is a director or CEO in any state-owned firm. From 2011 to 2013, the wife's political background (titled civil servant) helped her husband to become an entrepreneur. Moreover, in the regions with large local governments, the political background of the female influences the probability of her husband starting or maintaining his own business.

4.5 Local Government Size, Political Background, and Business Revenues

In this part, we answer two questions: (1) whether the revenues of the firms of households with a civil servant or cadre background are higher than those of the firms of households with a non-civil-servant or non-cadre background (and that is why most household members want to become civil servants); (2) how households with a civil servant or cadre background differ from households with a non-civil-servant or non-cadre background (and whether these differences may help explain why the firms' revenues differ).

To answer the first question, we investigate whether the background factors can contribute to their revenues in part and in whole from their own businesses.

The second and third columns in Table 12 show that local government size positively affects firm revenue: In the regions with large local governments, firms earn higher revenues than firms in the regions with small local governments. Compared to 2010, revenues decreased in 2012. In the third and fourth columns, we take the natural log for both shared revenues and total revenues. Local government size positively correlates to revenues. However, both a civil servant background and a titled civil servant background help households to earn more from their own businesses than households without such backgrounds. In particular, these households with a political background can make more revenues in the regions with small local governments than in the regions with large local governments. This indicates that the investment environment may be better in the regions with small local governments. Moreover, total household income positively influence the amount of household revenue gained from household businesses.

We also test the hypothesis that among all households that already have their own businesses, having a civil servant or cadre background will help them to enter the top 20% category in terms of firm revenue.

Table 13 shows that among all the households with their own businesses, the firms of households with a cadre background have a higher probability of earning more revenues

Table 12 Household Revenue from Own Businesses

	Revenue	Total Revenue	Log(Revenue)	Log(Total Revenue)
<i>civilserv</i>	1022070 (-1.09)	856698 (-0.9)	1.343 (-1.26)	1.919*** (-2.95)
<i>civilservG</i>	-100000000 (-1.43)	-100000000 (-1.32)	-507.4*** (-9.69)	-258.9*** (-4.05)
<i>cadre</i>	7588.7 (-0.11)	5164.1 (-0.05)	-6.739 (-0.79)	-0.206 (-0.60)
<i>cadreG</i>	3950790 (-0.43)	1174151 (-0.11)	3834.9 (-0.75)	28.83 (-0.92)
<i>civilswT</i>	-627675 (-1.68)	-619841.5* (-1.87)	2919.33*** (-10.13)	2886.73*** (-11.46)
<i>civilswTG</i>	140000000 (-1.25)	130000000 (-1.14)	2884.4* (-1.93)	-517.6*** (-3.54)
<i>localgov</i>	37070194.9** (-2.38)	37389651.5** (-2.38)	153.2** (-2.32)	80.79** (-2.73)
<i>age</i>	9357.6 (-0.5)	6355 (-0.32)	-8.668 (-0.26)	-0.171 (-0.67)
<i>edu</i>	46337 (-0.66)	31714.2 (-0.44)	57.98* (-1.71)	17.05 (-0.57)
<i>west</i>	-181276 (-0.74)	-336597 (-1.55)	2.446 (-0.01)	79.78 (-0.28)
<i>party</i>	-155824.1** (-2.14)	-258697.7*** (-3.17)	41.43 (-0.69)	0.346 (-0.96)
<i>workyear</i>	-8090.4** (-2.26)	-11074.7** (-2.53)	0.00323 (-0.05)	-0.0455*** (-3.01)
<i>rural</i>	333314.2** (-2.06)	357338.9** (-2.32)	-1.143 (-1.51)	0.448** (-2.38)
<i>income</i>	1.933** (-2.55)	2.095** (-2.72)	-7.00E-07 (-0.04)	0.00000637*** (-2.93)
<i>networth</i>	-0.0591 (-0.41)	-0.0467 (-0.30)	-0.00000876** (-2.77)	-0.0000008 (-1.35)
<i>socialspend</i>	6.83** (-2.32)	6.361** (-2.28)	0.000596* (-1.82)	0.0000009** (-2.07)
<i>creditconst</i>	1.865 (-1.5)	1.671 (-1.15)	-0.00002 (-1.02)	-0.0000006 (-0.36)
<i>incomeG</i>	-92.7 (-0.88)	-21.34 (-0.19)	0.00624*** (-2.94)	-0.0005 (-1.60)
<i>networtG</i>	-6.24 (-0.19)	-9.517 (-0.28)	-4.00E-05 (-0.07)	-0.000682*** (-5.38)
<i>socialspendG</i>	222.7 (-0.47)	134.8 (-0.27)	0.00649 (-0.43)	-0.0002 (-0.16)
<i>creditconG</i>	-123.4 (-1.48)	-157.1* (-1.74)	-0.00877*** (-3.38)	-0.00114*** (-6.76)
<i>Tdum</i>	-920393.0** (-2.48)	-974081.2** (-2.54)	11.25 (-0.17)	-2.334*** (-4.17)
<i>cons</i>	-261915 (-0.20)	339750 (-0.25)	358.9 (-0.26)	18.27 (-1.65)
<i>Control</i>	Yes	Yes	Yes	Yes
<i>ControlwG</i>	Yes	Yes	Yes	Yes

Notes: The table presents the factors that contribute to households owning shares of the revenues and total revenues from their own businesses. Local government size is measured as the fiscal spending divided by the local GDP. All regressions include a set of provincial dummies, time dummies, and all their interactions. Standard errors are clustered at province level, and the number of clusters is 28. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

than households without such a background, especially the households with a civil servant or titled civil servant background. The net effect of holding businesses for titled civil servants households is 0.973 higher than that for households without a political background, but their revenues decreased substantially in 2012.

To answer the second question, we focus on the gift market and test the hypothesis that households with a civil servant or cadre background will have more social expenditure on direct and indirect relatives and spending on non-relatives than households without a political background. We measure social income and spending by using survey questions such as “What is the cash value of gifts that you received last year (festival gifts, weddings and funerals, education, and others)?” and “What is the cash value of gifts that you gave to direct relatives, indirect relatives, and non-relatives?”.

Table 13 Differences in Household Revenue from Own Businesses

Individual shared revenues from own businesses	(1)	(2)	(3)	(4)	(5)	(6)
ATT	0.00435	-0.043	0.00965**	-0.134	0.008*	-0.12
tValue	(-1.04)	(-0.30)	(-2.06)	(-0.97)	(-1.75)	(-0.2)
Total revenues from own businesses						
ATT	0.0261**	-0.05	0.0598***	-0.297**	0.973*	0.0143
tValue	(-2.29)	(-0.21)	(-6.02)	(-2.03)	(-1.94)	(-1.14)

Notes: The table presents the differences in revenue between households with a political background and households without a political background that have their own businesses when using entropy balancing propensity score matching. Local government size is measured as the fiscal spending divided by the local GDP. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

(1) a household with a civil servant background, 2010;

(2) a household with a civil servant background, 2012;

(3) a household with a cadre background, 2010;

(4) a household with a cadre background, 2012;

(5) a household with a titled civil servant background, 2010;

(6) a household with a titled civil servant background, 2012.

In Table 14, we show that, after controlling for household characteristics such as region, income, net worth, financial assets, age, and so on, social spending is quite significant for households with a political background. Specifically, if households have members who are civil servants, they will spend 3,338 renminbi more on gifts than a household without a political background; if a household has members who have a background of being a director or CEO in state-owned firms, it spends 1,191.2 renminbi more. However, if the household has members who are titled civil servants, they spend less money on the gift market than households without such a background. Moreover, the size of the local government negatively influences total social spending on the gift market but positively affects the social spending on direct relatives such as parents and children.

Table 14 Household Social Income and Expenditure

	<i>sitotal</i>	<i>sidirect</i>	<i>siindirect</i>	<i>sinonrelatives</i>	<i>sstotal</i>	<i>ssdirect</i>	<i>ssiindirect</i>	<i>ssnon-relatives</i>
<i>civilserv</i>	603 (-0.96)	-0.0082 (-0.43)	0.00963 (-0.51)	0.0324* (-1.74)	3338.7*** (-4.93)	-0.0211 (-1.16)	0.0141 (-0.69)	0.0401** (-2.55)
<i>civilservG</i>	-79863 (-0.56)	-4.324 (-0.99)	-2.727 (-0.63)	5.013 -1.18	-520557.2*** (-3.36)	-0.131 -0.03	-8.946* (-1.93)	-2.762 (-0.77)
<i>cadre</i>	343.8 (-0.93)	0.0286** (-2.53)	0.0169 (-1.52)	0.0413*** (-3.76)	1191.2*** (-2.98)	0.0494*** (-4.6)	0.0169 (-1.41)	0.0155 (-1.24)
<i>cadreG</i>	-13500 (-0.15)	9.738*** (-3.43)	7.513*** (-2.7)	3.459 (-1.26)	-105492 (-1.05)	-7.513*** (-2.79)	4.267 (-1.42)	3.448 (-1.48)
<i>civilswT</i>	-383.2 (-0.46)	-0.0093 (-0.36)	-0.0025 (-0.10)	-0.0285 (-1.15)	-2426.2*** (-2.68)	-0.0029 (-0.12)	0.0188 (-0.69)	-0.0023 (-0.11)
<i>civilswTG</i>	159909 (-0.84)	4.923 (-0.84)	5.847 (-1.02)	4.86 (-0.86)	623710.3*** (-3.03)	3.94 (-0.71)	-1.195 (-0.19)	0.337 (-1.48)
<i>Localgov</i>	-182017 (-1.57)	-5.527 (-1.55)	1.743 (-0.5)	15.09*** (-4.38)	-572667.5*** (-4.55)	25.03*** (-7.4)	-1.828 (-0.48)	4.181 (-1.43)
<i>Tdum</i>	2506.7*** (-5.27)	0.119*** (-8.13)	0.466*** (-32.52)	0.238*** -16.84	2120.3*** (-4.11)	-0.374*** (-27.00)	-0.08*** (-5.17)	-0.12*** (-10.03)
<i>Control</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ControlwG</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table shows the interplay of social income and expenditure from direct and indirect relatives and non-relatives among households with a political background and households without a political background. Local government size is measured as the fiscal spending divided by the local GDP. **sitotal**: total amount of social income; **sidirect**: whether the family receives social income from direct relatives such as parents, children, and so forth; **siindirect**: whether the family receives social income from indirect relatives such as cousins, son-in-laws, and so forth; **sinonrelatives**: whether the family receives social income from people who are not relatives. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

As shown in Figure 1 and Figure 2, provinces with small local governments are the eastern coastal regions (relatively richer regions), and the negative relation between local government size and social spending on the gift market indicates that families in the regions with small local governments spend relatively more on the gift market than families in the regions with large local governments, and they also socialise more with each other. Furthermore, we use the relevant variable, “*ssdirect*” (a dummy variable), to ask which relatives people usually spend money on in the gift market. Hence, we obtain that families with political power in the regions with large local governments spend more on their relatives (e.g. parents and children) than households with a political background in regions with small local governments. This result is consistent with results in Jia and Lan (2013) which find that in regions with large local governments, children whose parents have political power are more likely to become entrepreneurs. To sum up, we find that families in regions with small local governments socialise more often, and are more open, with others in their distant relatives circle than families in the regions with large local governments.

Interestingly, in the regions with large local governments, households with civil servant or director family members even spend more on gifts than households with these cadre backgrounds in the regions with large local governments. On the other hand, a titled civil servant background yields more social spending on the gift market in the regions with large local governments than in the regions with small local governments. Intuitively, since social spending (especially on the gift market) works as a channel to gain higher political rank and power, those who have already benefited from it (in our case, the titled civil servants) must endogenously have a higher incentive. This is empirically consistent with our other findings.

V. Conclusion

In this paper, we investigate whether if a household member has a political background, this background will help other members of the household to become entrepreneurs across regions with large local governments and regions with small local governments in China. By firstly using both CPFS and CHFS survey data from 2010 to 2013, we find that in regions with large local governments, those households with family members who have a political background are more likely to engage in entrepreneurship. Furthermore, those households in which the female has a political background can more easily help themselves and the husband to become entrepreneurs in the regions with large local governments.

We show that because of an anti-corruption policy at the end of 2012, the advantages of families with a political background have been mitigated and even having a political background reduces a household's probability of engaging in entrepreneurship. We also find evidence that households with a political background usually obtain higher business revenues than households without such a background, especially in the regions with large local governments, and they strengthen their connections through social expenditure channels: sending gifts to their indirect relatives or non-relatives.

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