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STATUS INCENTIVES AND CORPORATE GIVING: EVIDENCE FROM CHINA'S POLITICAL REFORM ON PRIVATE ENTERPRISES

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Abstract. In this paper, we estimate the effect of status incentives on charitable giving by exploiting a natural experiment during China's political reform in 2002 that significantly improved the status of private entrepreneurs and their enterprises. We find that exogenous changes in social, political and economic status of private entrepreneurs led to a significant increase in the corporate giving of their privately owned firms. The findings are robust when we use different samples of the data and when we control for a large set of entrepreneurs and firm characteristics in the regression analysis.

1. INTRODUCTION

Corporate giving is the major financial resource for China's philanthropy sector. In 2011, corporate giving accounted for approximately 58% of the total giving amount.[1] Understanding the determinants of corporate giving is important not only for the development of China's philanthropy sector, but also for the promotion of corporate social responsibility. The dominance of corporate giving in China itself is an interesting phenomenon, considering that corporate giving in the United States plays only a minimal role. According to the Giving USA Foundation, in 2013, the largest source of charitable giving came from individuals, at US$241.32bn, or 72% of total giving, followed by foundations (US$50.28bn or 15%) and bequests (US$26.81 billion or 8%), whereas corporate giving reached only US$16.76bn and accounted for 5% of total giving.

In this paper, we study the relationship between entrepreneurs' status incentives and their firms' charitable giving. Status incentive plays an essential role in the economic analysis of charitable giving (Frey and Meier, 2004).[2] The relationship between status incentive and charitable giving, however, is complicated in terms of causal effects (Bracha *et al.*, 2009). On the one hand, higher social status induces people to give more because of intrinsic motives like the sense of responsibility or the external social pressure to be a role model. On

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[1] The data is from the China charity information website: www.chrity.gov.cn.

[2] Status incentives are also important for economic studies, such as mechanism design and conspicuous consumption (Hopkins and Kornienko, 2004; Moldovanu *et al.* 2007; Moldovanu *et al.* 2007; Ghatak and Besley, 2008; Heffetz and Frank, 2011).

the other hand, people might give more in order to gain higher social status or to signal their wealth and prestige (Vesterlund, 2003). Hence, the causal relationship between status incentive and charitable giving can go either way. In this paper, we evaluate the effect of status change on corporate giving, using unique survey data that include detailed social and economic information on private entrepreneurs and their firms. This data set also collects information on status measures and corporate giving during China's economic and political reform between 1996 and 2009.

To estimate the causal effect of status change on corporate giving, we exploit a natural experiment (China's political reform of its private sector around 2002) that led to a significant status improvement of private entrepreneurs and their firms. In China, the political status of private entrepreneurs changed gradually after Deng Xiaoping's 'Southern Tour' in 1992, which initiated a high wave of political and economic reform.[3] The most significant status change started from 1 July 2001, when Zemin Jiang, the general secretary of the Standing Committee of the China's Communist Party (CCP), called for political reform to make 'advanced productive elements' part of the working class, in a speech on 'advanced productive forces, the progressive course of China's culture, and the fundamental interests of the people'. The purpose of the 'Three Represents' is to legitimize the entry of private business owners into the CCP. During this period, the status of private entrepreneurs was greatly elevated, and private property rights were recognized officially in a constitutional format later.[4]

Using data from a unique survey on China's private entrepreneurs and their firms from 1996 to 2009, we find that, after the political reform in 2002, there was a significant increase in the political, social and economic status of private entrepreneurs. Exploring this exogenous change in the various status measures of those private entrepreneurs, we find that the improvement of their status has a significantly positive effect on corporate giving from the firms owned by these entrepreneurs. According to our estimates, a one unit (10%) increase in social, economic and political status results in a 15, 43 and 21% increase, respectively, in the probability of giving. At the intensive margin, a one unit (10%) increase in social, economic and political status leads, respectively, to 13 000, 74 000 and 27 000 (in Chinese yuan) more in corporate giving.

The findings are robust even after controlling for a large set of entrepreneurs and firm characteristics. Similar conclusions were reached for the estimations using both the 2001 and 2003 sample and the full sample. Additional evidence suggests that the positive effect of status improvement on corporate giving largely comes from the social responsibility and reciprocity considerations associated with better recognition of the entrepreneurs' status.

[3] The first major event occurred in 1992–1993, when private entrepreneurs for the first time could be recommended as members of China's Political Consultative Conference. The second is the recognition of the private sector as an important component of the 'socialist market economy' in 1997, at the 15th National Congress of the China's Communist Party.

[4] On 14 March 2004, the Constitution of the People's Republic of China was amended to include guarantees that 'legally obtained private property of the citizens shall not be violated'. This is a significant change for the protection of private ownership.

This paper is part of the growing literature on China's private sector and corporate social responsibility (Hung and Wang, 2014). Private firms have made great contributions to the success of China's economic reform; however, there is little empirical analysis on the development of this sector because of data availability. Guo *et al.* (2014) use data from the same source and explore the same political event to examine the political economy of China's private sector. Their focus is to analyse the dynamics of rent creation from Party membership and other political connections related to the political reform around 2002. The present paper studies the determinants of corporate giving from China's private firms.

This paper uses field data to contribute to the literature on the effect of status concern on charitable giving.[5] The most closely related paper is that of Bracha *et al.* (2009), who identify the causal relationship between status concern and charitable giving based on controlled laboratory experiments. They find that exogenous status (donation-visibility condition) affects donations, and our findings are consistent with theirs; however, there is limited evidence that endogenous status (signalling/seeking status) leads to high donations.

We also contribute to the literature on the motives of corporate giving. There are potentially four different motives behind corporate giving. One is status concern: the personal status of firm owners or the recognition/reputation of firms themselves. The second is to gain political or official connections; firms and owners may use giving as a signal of being socially responsible to gain attention from the government or the public. The third is economic benefit in a sense that giving can be used as a marketing tool. Therefore, firms that are more consumer-based might give more. Finally, private firms and their owners may have pure prosocial preferences or impure altruistic concerns that make them feel good after giving to a charitable cause. In our analysis, we focus more on the motives related to status concern, after controlling for the impact of other motives.

2. DATA

2.1. *Data resource*

The data come from a series of surveys on China's private firms and their owners carried out in 1996, 1999, 2001, 2003, 2005, 2007 and 2009. These surveys were designed by members of China's sociologists, mainly from the Chinese Academy of Social Sciences, and were organized and conducted by the Industry and Commerce Association, a semi-official organization of private firms, operating at different levels (national, provincial, prefectural and county).

The survey respondents were owners of China's private firms. The sampling procedure was conducted among firms registered to the Industry and Commerce Bureau (ICB), with all firms obliged to register. A proportional quota of firms was allocated to each province. Within each province, at least three cities and three counties (for provinces with 10 000 or more registered private firms, at least six cities and six counties) were randomly selected. In each selected city/county, firms were divided into clusters according to urban/rural and industry categories.

[5] Survey of the literature can be found in Andreoni (2006) and Vesterlund (2006).

Firms were randomly selected from each cluster until the quota was met, with at least 1 firm being selected from each cluster. The sampling procedure is available upon request to the authors.

One major concern is the quality of the data, especially whether or not the respondents answered the questions truthfully. The design and data collection procedure are well documented in the survey. Moreover, the researchers worked closely with the registration bureau and carefully monitored the procedure. They also have a procedure to double-check the quality of the data collected. Even with these measures, the respondents might still have had an incentive to manipulate the information they were provided. For example, they might have exaggerated the amount of giving and tended to say positive things about the government. This could positively bias the estimated effect of status on giving in a particular year. This is more likely to occur in the data for all the years. However, it is less problematic for our estimates because we estimate the effect of changes in status on changes in giving, using the data from more than 1 year.

2.2. *Corporate giving*

Figure 1 plots the dynamic change in mean donations and the ratio of firms who give a positive amount in the sample. There appears to be a political donation cycle, which centres on the election/selection time of the National People's Congress and the People's Political Consultative Conference. Over the sample period, there are three re-elections of the representatives in the Congress and the Conference, which take place in 1997, 2002 and 2007. The three pairs of years before and after the selection of representatives are 1996 and 1999, 2001 and 2003, and 2005 and 2009. Comparing to the donations in the years before the selection, the donations in the years after selection jumped. The most salient change occurred between 2001 and 2003, which is also the period of the most

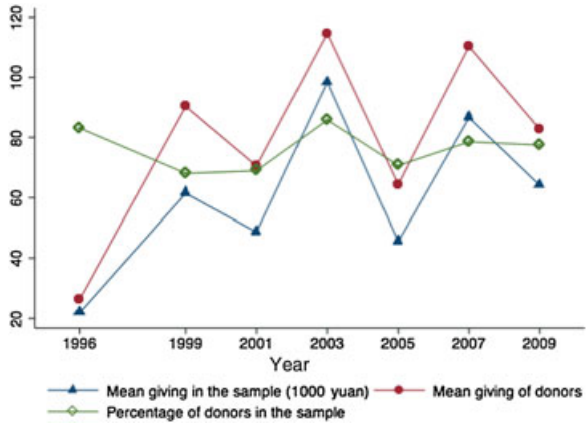

Figure 1. Changes in mean giving and donors' ratio over years [Colour figure can be viewed at wileyonlinelibrary.com]

dramatic political change in terms of the status of private entrepreneurs and their firms.

Table 1 shows the summary statistics of corporate giving from the sample data. In total, 75.7% of the firms give a positive amount. This ratio has an increasing trend between 1996 and 2009. The average level of giving is 63 300 yuan. Over time, the average giving varies from year to year. Apparently, corporate giving is significantly affected by time-varying factors, especially political reform. The median donation of 7730 yuan is much smaller than the mean, 63 300 yuan, which is also reflected by the high standard deviation. Taking the logarithm significantly reduces the skewness of the donation distribution.

2.3. *Status measures*

The status measures used in this study are based on three questions. Respondents were asked to choose the level of their social, political and economic status on a scale of 1 to 10, relative to other people in society. For people in China, social status refers to the social respect received from relatives, peers and the public. Political status reflects the individuals' political influence and connections that are mainly determined by their affiliated government positions and their relationships with government officials. Economic status mainly refers to the level of income and wealth.

There are salient differences among the three status measures in terms of their levels and changes over time. As shown in Figures 2 and 3, both in the 1990s and the 2000s, the political status of private entrepreneurs is much higher than their social and economic status. This implies that, politically, governments endorsed private business for the purposes of economic reform and better economic performance. Social status is the lowest among the three status measures in the 1990s, but after 2001 social status reaches a similar level to the economic status. This implies that social status is more difficult to change compared to political and economic status, because social status relies on the public's perception or

Table 1. Summary statistics of donations by private enterprises

Year	Observations			Donations (10 000 yuan)			Donations (in log)		
	Donor	All	Ratio	Mean	Median	SD	Mean	Median	SD
1996	950	1143	83.1	2.19	0.394	10.2	0.577	0.332	0.763
1999	1163	1709	68.1	6.15	0.784	45.9	0.855	0.579	0.988
2001	1687	2448	68.9	4.86	0.776	18	0.941	0.574	1
2003	1552	1808	85.8	9.84	0.773	67.1	1.03	0.572	1.11
2005	1753	2480	70.7	4.55	0.731	15.8	0.889	0.549	1
2007	2158	2748	78.5	8.66	0.686	72.1	1.07	0.522	1.14
2009	3029	3909	77.5	6.41	0.326	35.3	0.767	0.282	1.08
Total	12 292	16 245	75.7	6.33	0.773	44.7	0.888	0.572	1.05

SD, standard deviation

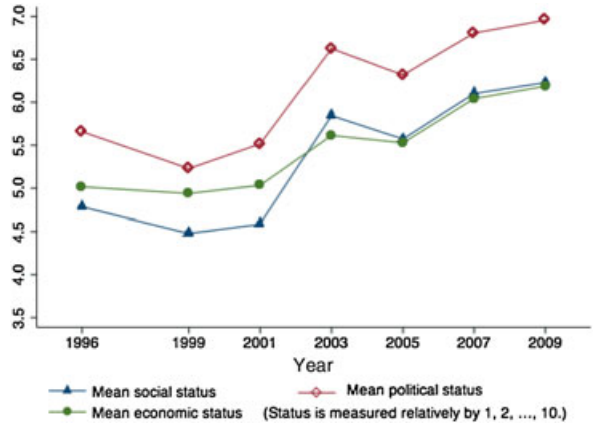

Figure 2. Social, political and economic status of non-donors [Colour figure can be viewed at wileyonlinelibrary.com]

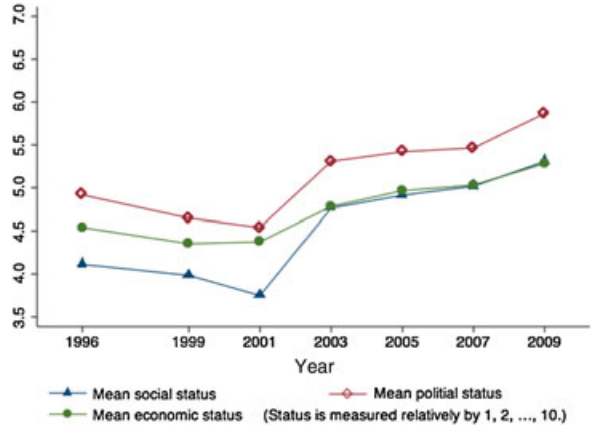

Figure 3. Social, political and economic status of donors [Colour figure can be viewed at wileyonlinelibrary.com]

opinion of private businesses and the owners' wealth, but political and economic status can be improved through government decisions and wealth accumulation.

The dynamic changes in the political, social and economic status of China's private entrepreneurs are illustrated in Figures 2 and 3 for non-donors and donors, respectively. The most striking jump in social status occurred between 2001 and 2003, with an increase of 25% (from 4.01 to 4.92), as shown in Table 2. The political and economic status of private entrepreneurs also increased significantly. Such a change in status appears to be the result of the major ideological change in China around 2002. Most notably, private entrepreneurs were allowed to become members of China's Communist Party. Each of the three measures are much lower for donors than for non-donors,

Table 2. Summary statistics of status change of private entrepreneurs

	Social status			Political status			Economic status		
Year	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
1996	4.23	4	1.85	5.04	5	2.27	4.62	5	1.72
1999	4.14	4	1.92	4.83	5	2.25	4.54	5	1.71
2001	4.01	4	1.98	4.84	5	2.31	4.58	5	1.75
2003	4.92	5	1.87	5.49	5	2.23	4.9	5	1.76
2005	5.11	5	1.85	5.68	5	2.17	5.13	5	1.76
2007	5.25	5	1.86	5.75	5	2.2	5.25	5	1.8
2009	5.51	5	1.93	6.11	6	2.23	5.48	5	1.89
Total	4.88	5	1.99	5.51	5	2.29	5.03	5	1.82

SD, standard deviation.

although the dynamic pattern is similar. This implies that high-status individuals might have less incentive to give.

2.4. *Characteristics of firms and owners*

The survey contains detailed information on the characteristics of firms and their owners. To alleviate the potential identification problems caused by unobservable dynamic confounding factors, we control for a large set of firms and owner characteristics to capture the impact of other motives of charitable giving.

Table 3 shows the summary statistics of the control variables used in the regression analysis. In total, 40.7% of the private entrepreneurs are CCP members; 21% hold representative positions at different levels of the National People's Congress and 34% hold a position in the People's Political Consultative Conference. The majority of the representatives hold a position at the township–county or prefecture level.

Table 3. Ratios with political affiliation among private entrepreneurs

	CCP	Ratio of NPC representative					Ratio of CPPCC representative				
Year	Member	None	L1	L2	L3	L4	None	L1	L2	L3	L4
1996	0.233	0.883	0.0779	0.0315	0.00787	0	0.736	0.169	0.0761	0.0184	0.000875
1999	0.288	0.817	0.112	0.055	0.014	0.00176	0.529	0.315	0.134	0.0222	0
2001	0.369	0.816	0.126	0.049	0.00776	0.000817	0.628	0.235	0.118	0.0172	0.000817
2003	0.44	0.779	0.132	0.0669	0.0216	0.00111	0.621	0.243	0.103	0.031	0.00166
2005	0.459	0.782	0.133	0.0669	0.0157	0.00202	0.719	0.179	0.0907	0.0113	0.000806
2007	0.428	0.763	0.141	0.0721	0.0189	0.00473	0.666	0.207	0.108	0.0178	0.00146
2009	0.477	0.782	0.132	0.0642	0.0138	0.00819	0.685	0.203	0.0939	0.0143	0.00358
Total	0.407	0.794	0.127	0.0607	0.0145	0.00351	0.658	0.219	0.103	0.0179	0.0016

CCP, China Communist Party; CPPCC, Chinese People's Political Consultative Conference; L1, L2, L3 and L4 refer to the representatives at township-county, prefecture, province and national level, respectively; NPC, National People's Congress.

Other personal and firm characteristics can also affect both status incentives and the level of corporate giving by firms. The summary statistics for other personal and firm characteristics, and industrial distribution are shown in Tables 4–6.

Table 4. Characteristics of private entrepreneurs

Year	Gender (Male)	Age	Education (Years)	Income (10 thousand)	Member of industry association	Member of official association	Self manager
1996	0.925	56.4	11.4	9.33	0.0612	0.586	0.0
1999	0.899	43.6	12.6	14	0.108	0.898	0.97
2001	0.893	44.1	13	11.6	0.505	0.864	0.967
2003	0.877	43.8	13.4	19.5	0.586	0.69	0.947
2005	0.87	44.7	13.4	15.2	0.693	0.664	0.916
2007	0.845	45.7	14.4	88.2	0.636	0.721	0.89
2009	0.844	45.9	14	8.81	0.581	0.668	0.83
Total	0.871	45.7	13.4	25.8	0.506	0.728	0.907
Mean	0.871	45.7	13.4	25.8	0.506	0.728	0.907
Median	1	45	12	4.65	1	1	1
SD	0.336	8.89	2.88	887	0.5	0.445	0.29

SD, standard deviation.

Table 5. Main characteristics of private enterprises

Year	Firm age	Employee number	Asset	Net profit	Sale	Debt/ asset	Revenue/ asset	Wage	Labour Protection	Social security
1996	4.9	86.2	0.	44.3	647	0.	0.	0.485	0.0111	0.0209
1999	6.86	198	1626	121	1872	0.281	0.114	0.626	0.0348	0.0705
2001	7.02	154	977	89	2188	0.181	0.167	0.775	0.0248	0.0461
2003	6.57	202	1843	161	3120	0.212	0.203	0.835	0.0573	0.0827
2005	7.25	197	1413	149	3808	0.219	0.212	1.13	0.175	0.125
2007	8.5	185	3922	220	9029	0.2	0.246	1.55	0.254	0.153
2009	8.67	169	2738	326	5779	1.41	−1.38	1.26	0.176	0.122
Mean	7.49	175	2157	186	4451	0.502	−0.2	1	0.123	0.096
Median	7	50	196	17.2	235	0.1	0.0738	0.753	0.0221	0.0205
SD	4.58	528	67 928	1283	196 001	29.9	43.4	1.79	1.35	0.232

SD, standard deviation.

Table 6. Industrial distribution of private enterprises

Year	Agriculture	Mining	Manufacture	Construction	Retail/ restaurants	Social service	Health *et al.*
1996	0.0385	0.0219	0.396	0.091	0.139	0.056	0.0455
1999	0.0468	0.00995	0.386	0.0626	0.191	0.0521	0.0193
2001	0.0547	0.0135	0.373	0.0592	0.208	0.0498	0.0233
2003	0.0713	0.016	0.356	0.0713	0.198	0.0702	0.0199
2005	0.0625	0.0181	0.408	0.0496	0.221	0.0198	0.023
2007	0.0662	0.02	0.392	0.0506	0.187	0.0193	0.0146
2009	0.077	0.0274	0.367	0.0637	0.235	0.0261	0.0141
Total	0.0631	0.0191	0.381	0.0613	0.205	0.0373	0.0203

In total, 87% of the private entrepreneurs are men, but this percentage decreases over time. The average age is 46 years, and decreases over time. The education level of the private entrepreneurs increases over the years. A total of 42% of the entrepreneurs are connected to an industrial association. Over 70% are members of an official organization of private enterprises (ICA). Approximately 90% of the private entrepreneurs are the managers of their firms; but this ratio has declined significantly over time, which reflects the impact of modern corporate governance in China.

The private firms have become larger according to the number of employees, assets, total sales and net profit. The financial status in terms of the ratios of debt and revenue in total asset has improved. Labour-related expenses, including wages, labour protection and social security, have also increased significantly over time. Of the total firms, 40% are manufacturing firms and 23% are in the retail industry, which includes restaurants.

3. EMPIRICAL RESULTS

We first investigate the determinants of firms' decision to give or not to give. We estimate the following Probit model:

$$P(give_i = 1) = G\Big(\beta_0 + \beta_s status_i + location_i\beta_l + \beta_y year_i + owner_i\beta_o + firm_i\beta_f\Big), \tag{1}$$

where $give_i$ is a dummy variable that is equal to 1 if firm i gives a positive amount and 0 otherwise. $G()$ is the standard normal cumulative distribution function. $status_i$ is the status measure of the entrepreneur who owns firm i and is the main interest of our analysis. $location_i$ is a set of location (province) dummies and $year_i$ captures the time trend. $owner_i$ and $firm_i$ are the vectors of owner and firm characteristics, including owners' income, political position, party member status, official affiliation, education and gender, and firms' assets, revenue and size, industry and headquarter location dummies, and whether the firm has a union.

3.1. *Political reform and status change*

We employ an instrumental variable (IV) approach to resolve the endogeneity problem related to status measures. Specifically, the political reform dummy, which is equal to 1 before 2002 and 0 after 2002, is used as an instrument variable for status change. China's political reform of the private sector in 2002 significantly changed the status of private entrepreneurs and their firms. We assume that the reform is not correlated with the unobservable variables that might affect individual firms' corporate giving, conditional on the control variables.

To justify the use of the political reform in 2002 as an exogenous event that causes changes in status, we report the outcome from the first stage estimation of the two stage least squares (2SLS) procedure in Table 7. The political reform

Table 7. First stage regression

Model variable (status)	Social status		Economic status		Political status	
Sample	2001 and 2003	Full	2001 and 2003	Full	2001 and 2003	Full
reform dummy	0.972***	0.675***	0.336***	0.118*	0.682***	0.330***
	(0.0660)	(0.0639)	(0.0604)	(0.0605)	(0.0747)	(0.0723)
year trend		0.0768***		0.0825***		0.0880***
		(0.00788)		(0.00747)		(0.00893)
Gender	−0.0735	−0.120**	−0.261***	−0.262***	0.0446	−0.0546
	(0.0957)	(0.0470)	(0.0877)	(0.0445)	(0.108)	(0.0532)
CCP party	−0.200***	−0.165***	−0.0145	−0.0439	−0.485***	−0.457***
Member	(0.0651)	(0.0330)	(0.0596)	(0.0313)	(0.0736)	(0.0374)
NPC L3	1.262***	1.096***	0.757	0.624***	1.717***	1.032***
	(0.268)	(0.131)	(0.845)	(0.239)	(0.303)	(0.285)
NPC L2	0.758***	0.589***	0.408	0.297	0.846***	0.200
	(0.278)	(0.136)	(0.847)	(0.241)	(0.314)	(0.288)
NPC L1	0.665**	0.496***	0.500	0.263	0.673**	−0.000586
	(0.290)	(0.142)	(0.851)	(0.245)	(0.328)	(0.292)
firm age	−0.00868	−0.0244***	−0.0126*	−0.0268***	−0.0131	−0.0270***
	(0.00766)	(0.00369)	(0.00702)	(0.00350)	(0.00867)	(0.00418)
industry assoc.	−0.274***	−0.321***	−0.128***	−0.187***	−0.210***	−0.203***
Member	(0.0619)	(0.0350)	(0.0567)	(0.0331)	(0.0701)	(0.0396)
Official	−0.307***	−0.444***	−0.230***	−0.385***	−0.516***	−0.561***
Affiliation	(0.0828)	(0.0405)	(0.0758)	(0.0384)	(0.0937)	(0.0459)
Observations	3830	13 747	3825	13 733	3822	13 696
R^2	0.174	0.206	0.111	0.147	0.214	0.237
F-statistics	12.18	50.56	7.254	33.68	15.72	60.37

Standard errors are in parentheses. Significance level:***$p < 0.01$;**$p < 0.05$;*$p < 0.1$. NPC L1, NPC L2 and NPC L3 indicate, respectively, being the representative at the national, provincial and prefectural level of the National People's Congress. We include all the dummies of industry, province, gender, and political positions and income.

in 2002 has the largest impact on the increase in social status (0.675 using the full sample), then political status (0.330) and, finally, economic status (0.118). The relatively smaller impact on economic status reflects the fact that private enterprises already experienced great economic success even before the political reform in 2002.

The status of private entrepreneurs has improved significantly over the years, as shown in Table 7. Being a representative at the different levels of the National People's Congress (the most important political congress in China) has contributed substantially to entrepreneurs' status. The representatives at higher levels of Congress have higher status. Interestingly, CCP membership, as well as membership of industrial and official associations, is negatively correlated with the status measures, which indicates that low-status entrepreneurs attempt to improve their status through being members of political and official organizations.

Overall, the results in Table 7 are intuitive and provide additional support for our identification strategy; that is, to use the exogenous status change created by China's political reform to estimate the causal effect of status change on corporate giving.

Table 8. Estimation results on giving decision with controls: Two-stage least squares

Explanatory variable (status)	Social status		Economic status		Political status	
Sample	2001 and 2003	Full	2001 and 2003	Full	2001 and 2003	Full
social_status	0.148***	0.196***				
	(0.0188)	(0.0297)				
economic_status			0.429***	1.121*		
			(0.0923)	(0.599)		
political_status					0.211***	0.404***
					(0.0328)	(0.102)
year trend		−0.0269***		−0.104*		−0.0475***
		(0.00452)		(0.0566)		(0.0125)
owner gender	0.0194	0.0250*	0.121**	0.295*	0.000251	0.0236
	(0.0266)	(0.0152)	(0.0515)	(0.165)	(0.0325)	(0.0254)
owner age	−0.00205*	−4.34e-05	−0.00757***	−0.00634	0.00113	0.00522***
	(0.00112)	(0.000584)	(0.00230)	(0.00391)	(0.00143)	(0.00167)
years of edu.	0.00472	0.00481**	0.00443	0.0183*	0.00307	0.00410
(owner)	(0.00324)	(0.00191)	(0.00550)	(0.00998)	(0.00399)	(0.00321)
CCP party	0.0800***	0.0691***	0.0568*	0.0861*	0.153***	0.222***
Member	(0.0182)	(0.0114)	(0.0305)	(0.0449)	(0.0265)	(0.0496)
Constant	−0.140	53.64***	−0.953	203.9*	−0.479	93.52***
	(0.513)	(8.920)	(0.917)	(110.3)	(0.639)	(24.55)
Observations	3830	13 747	3825	13 733	3822	13 696
F	7.475	13.80	2.605	1.109	4.994	4.927

Significance level:***$p < 0.01$;**$p < 0.05$;*$p < 0.1$. We include all the dummies of industry, province, gender, and political positions and income. We include all the dummies of industry, province, gender, political positions and income.

3.2. *Status change and corporate giving*

Use of the standard IV probit estimator might not be appropriate because the endogenous variable status measure is discrete.[6] The reason is that the IV probit estimator and its inference rely on the continuity assumption of the endogenous variable. Still, we can think of our status measures as proxies to a continous variable between 1 and 10. As a robustness check, the results of IV Probit are presented later. Hence, we estimate a model on the decision of giving using the standard 2SLS approach and use the 2SLS estimates as the benchmark results.

According to Table 8, the estimated causal effect of a one unit (10%) increase in social status on giving probability is 14.8 and 19.6%, respectively, for the sample of 2001 and 2003 and the sample of all years. Because our status measure is based on a scale of 1 to 10, the one unit (10%) increase refers to a change from one level to the next: for example, 5 to 6, or 6 to 7. To put this into perspective, we can look at the change of social status for non-donors, as

[6] The reason is that the IV probit estimator and its inference rely on the continuity assumption of the endogenous variable. Still, we can think of our status measures as proxies to a continous variable between 1 and 10. As a robustness check, the results of IV Probit are presented later.

shown in Figure 2. From 2001 to 2003, the social status had an approximate 1.4-unit increase, from 4.5 to 5.9, which leads to a 20.76% increase in the probability of giving.

The unit change of economic status has the largest impact on the giving probability, with a 42.9% increase using the sample from 2001 and 2003. Economic status reflects the increase of income and wealth, which might have a direct and strong impact on giving. The estimated impact of political status is in between the social and economic status. The relative quantitative impact of the three types of status on giving implies that economic and political incentives have a larger impact on the giving decision. This is in line with the findings of the charitable giving literature on the importance of private benefits to charitable giving (Sieg and Zhang, 2012).

To highlight the importance of dealing with the endogeneity problem of status and the impact of different methodologies, Table 9 presents the results from the standard probit and the IV probit estimation with all the control variables we have in the data, including individual and firm characteristics, year trend, and industrial and provincial fixed effects. As shown in columns 2 and 3 of Table 8, the estimated effects of social status on giving using 2SLS are similar to those using the IV probit model.

The probit model, suffering from the endogeneity problem, generates a significant negative estimate of the impact of status improvement on corporate giving. This suggests a negative correlation between social status and the probability of giving. The interpretation is that people who already have a higher social status might give less because giving more might not contribute much to their social status. However, when we use the IV estimation, we obtain a significant positive effect in all the different specifications. This indicates that exogenous change in social status has a positive causal effect on the likelihood of corporate giving, although the correlation between social status and corporate giving is positive.

3.3. *Robustness analysis*

The main identification challenge using the political reform dummy as an IV is that other important factors affecting corporate giving might change at the same time as the political reform, such as the economic performance of private firms and the change in the social culture of giving. To rule out other possible interpretations, we consider an additional four sets of control variables related to different motives behind corporate giving. One is political and official affiliations, which might generate social pressure for people and their firms to give. The second is individual characteristics, such as income, gender, age and education, and firm characteristics, including organization format, firm size and profitability. The third are potential private economic benefits from giving. To control for the impact of such factors, we add both industry and location dummy variables. Finally, private firms and their owners may have pure altruistic or prosocial preference, for which we use labour protection and compensation to capture their impact on giving.

Table 9. Results (marginal effects) on giving decision with controls: Probit

Model	Probit	IV probit	Probit	IV probit	Probit	IV probit
Sample	2001 and 2003	2001 and 2003	Full	Full	2001 and 2003	2001 and 2003
social_status	−0.0133***	0.137***	−0.0169***	0.152***	−0.00948**	0.131***
(owner)	(0.00343)	(0.00951)	(0.00201)	(0.0119)	(0.00465)	(0.0148)
Age	−0.00153*	−0.00171*	−0.000351	−0.000204	−0.00199*	−0.00231*
(owner)	(0.000865)	(0.000901)	(0.000437)	(0.000439)	(0.00117)	(0.00121)
years of edu.	0.00520**	0.00314	0.00419***	0.00329**	0.00396	0.00203
(owner)	(0.00257)	(0.00266)	(0.00145)	(0.00146)	(0.00363)	(0.00373)
owner as	0.0342***	0.0248***	0.0139***	0.0106***	0.0291***	0.0152
dec. maker	(0.00685)	(0.00725)	(0.00355)	(0.00359)	(0.00918)	(0.00978)
firm age	0.00459***	0.00507***	0.00690***	0.00934***	0.00401*	0.00431*
	(0.00173)	(0.00176)	(0.000914)	(0.000899)	(0.00230)	(0.00236)
emp. num.	0.000416***	0.000372***	0.000104***	0.000108***	0.000297***	0.000295***
	(4.92e-05)	(4.26e-05)	(1.50e-05)	(1.23e-05)	(7.15e-05)	(6.25e-05)
party (CCP)	0.0509***	0.0625***	0.0335***	0.0510***	0.0475**	0.0534***
Member	(0.0140)	(0.0145)	(0.00784)	(0.00780)	(0.0192)	(0.0199)
ind. assoc.	0.0438***	0.0665***	0.0455***	0.0792***	0.0482***	0.0824***
Member	(0.0135)	(0.0140)	(0.00816)	(0.00821)	(0.0179)	(0.0185)
official assoc.	0.0505***	0.133***	0.0732***	0.138***	0.0800***	0.116***
Member	(0.0182)	(0.0195)	(0.00983)	(0.00992)	(0.0263)	(0.0264)
Union					0.0641***	0.0677***
(in firm)					(0.0205)	(0.0211)
Salary					0.00265***	0.00291***
(workers)					(0.000943)	(0.000883)
Obs.	3823	3823	13 747	13 747	2247	2247
log likelihood	−1782	−9386	−6766	−33992	−1028	−5467
chi2_exog		173.0		103.3		69.21

Standard errors are in parentheses. Significance level:***$p < 0.01$**$p < 0.05$*$p < 0.1$. Columns 2–5 include dummies of industry, province, gender, and political positions, and income. Column 6–7 include additional controls such as firm type and headquarter location. IV, instrumental variable.

Among the control variables, owners' years of education, and firms' age and employment size have significantly positive effects on corporate giving. If the firm owner is the major decision maker, a CCP member or holds industrial association membership, the firm is more likely to give. If a firm has a workers' union, is a member of an official association (ICA), or if workers' salary is high, the firm is also more likely to give. All these estimates are intuitive and reasonable.

Most of the estimates from other control variables are not significant and are not reported in Table 9, but are available upon request. Because of a lack of space, we also omitted the estimated fixed effects of firm type, industry, location, headquarter location and political position dummies. It is important to note that, in all the estimated specifications, we included the same set of control variables for the purpose of comparability, unless otherwise stated.

The lack of information on the control variables explains the drop in observation numbers when they are included in the estimates. As a robustness check, we run the regression on the giving decision without control variables, in order to

test the impact of sample size (missing information) and the impact of control variables.

Column 2 of Table 10 shows the IV probit estimates using the data from years 2001 and 2003. A one unit (10%) status improvement makes people more likely to give (13% higher), which is very close to the estimate with additional controls. Including the data for all years, the results in column 4 show that the positive effect of a status increase on giving is much smaller (5%) but statistically significant. The first stage and reduced-form estimation outcomes are shown in columns 5 and 6. The instrument is strong and the *F*-statistics are high. The reduced-form estimation suggests that the political reform in 2002 has a large and significant positive effect on status, which is 9.1 to 11.6% higher after the reform.

Another potential problem with the data is the missing information on corporate giving. The missing values for corporate giving could be interpreted as firms giving nothing because firms might choose not to report the information to avoid the embarrassment of giving nothing. Hence, we need to perform a robustness check by treating those missing values as zero giving. We redo every regression analysis with the same specifications. The results (available upon request) are still consistent with what we have reported in previous sections.

3.4. *The determinants of giving amount*

To evaluate the determinants of the amount of giving, we estimate a Tobit model with the latent variable $giveamt_i$ expressed as follows:

$$giveamt_i = \beta_0 + \beta_s status_i + location_i\beta_l + \beta_y year_i + owner_i\beta_o + firm_i\beta_f + u_i. \quad (2)$$

We again explore the exogenous status change of private entrepreneurs caused by the political reform in 2002 to deal with the endogeneity problem related to status measures.

Table 10. Results on the decision of giving without controls: Probit

	(1)	(2)	(3)	(4)	(5)	(6)
Model	Probit	IV probit	Probit	IV probit	First stage	First stage
Sample	2001 and 2003	2001 and 2003	All years	All years	2001 and 2003	All years
ocial status	−0.0302***	0.131***	−0.0340***	0.0476***		
	(0.00327)	(0.00759)	(0.00170)	(0.00559)		
reform dummy					0.908***	1.158***
					(0.0599)	(0.0320)
Observations	4256	4256	16 245	16 245	4256	16 245
ll	−2297	−11 015	−8810	−42 265	−8842	−33 559
chi2_exog		243.1		216.8		
F					229.8	1313

The dependent variable is a dummy, equal 1 if a firm give a positive amount, otherwise 0. Standard errors are in parentheses. Significance level:***$p < 0.01$**$p < 0.05$*$p < 0.1$. The estimates from probit and instrumental variables (IV) probit are the marginal effects.

Table 11 summarizes the results from the Tobit model estimation that uses the political reform dummy as the IV for status. According to the results in columns 2 and 3, a one unit (10%) increase in social status leads to 92 000 and 13 000 yuan more corporate giving, for the sample from 2001 and 2003 and the sample from all years, respectively. For a one unit increase, economic status has the largest effect on the increase in corporate giving, 27 000 and 74 000 yuan, respectively; the effects of an increase in political status are 13 000 and 27 000 yuan, respectively. These estimates are statistically significant and economically large.

Similar to the findings from the estimation on the giving decision, the estimation without using IV generates a negative correlation between status measures and the giving amount. The estimates, however, become significantly positive after we use the IV estimation. This indicates that the endogeneity problem exists in both the decision of whether or not to give and the decision of how much to give.

Among the control variables, the time trend is negative, which means average corporate giving declines over time. If the firm's owner has more years of education or is a party member, the firm gives more; the firm's age, its employment size and its membership of an industrial or official association all have positive effects on corporate giving.

Table 11. Estimation results on giving amount with controls: Tobit

Model variable (status)	Social status		Economic status		Political status	
Sample	2001 and 2003	Full	2001 and 2003	Full	2001 and 2003	Full
social_status	9.194***	12.94***				
	(1.962)	(3.206)				
economic_status			26.74***	74.37*		
			(7.366)	(42.57)		
political_status					13.15***	26.71***
					(3.042)	(8.528)
year trend		−1.628***		−6.777*		−2.989***
		(0.486)		(4.025)		(1.049)
years of edu.	0.945***	0.739***	0.931**	1.636**	0.844**	0.698***
(owner)	(0.340)	(0.206)	(0.441)	(0.710)	(0.372)	(0.269)
CCP party	4.983***	5.269***	3.557	6.420**	9.568***	15.35***
Member	(1.903)	(1.229)	(2.436)	(3.189)	(2.459)	(4.149)
firm age	0.335	0.715***	0.594**	2.392**	0.429*	1.117***
	(0.223)	(0.150)	(0.302)	(1.189)	(0.245)	(0.288)
emp. num.	0.0327***	0.0226***	0.0389***	0.0417***	0.0316***	0.0234***
(firm)	(0.00177)	(0.00116)	(0.00322)	(0.0126)	(0.00188)	(0.00167)
industrial assoc.	2.846	5.847***	3.739	15.60*	3.087	7.115***
Member	(1.837)	(1.482)	(2.439)	(8.130)	(2.009)	(2.189)
official assoc.	12.07***	14.18***	15.39***	37.10**	16.04***	23.41***
Member	(2.676)	(2.137)	(3.924)	(17.18)	(3.406)	(5.362)
Observations	3830	13 747	3825	13 733	3822	13 696
chi2	685.2	1231	404.3	225.1	578.4	724.8
chi2_exog	35.12	25.75	29.43	21.54	30.93	22.23

Standard errors are in parentheses. Significance level:***$p < 0.01$**$p < 0.05$*$p < 0.1$. 2). Columns 2–5 include dummies of industry, province, gender, political positions and income. Column 6–7 include additional controls such as firm type, headquarter location and other observables.

4. CONCLUDING REMARKS

In this paper, we identified and quantified the effect of status incentives on corporate giving by exploiting a natural experiment of China's political reform on its private sector in 2002. The reform generates significant exogenous changes or improvement in the social, economic and political status of private entrepreneurs. Using a series of unique survey data on China's private entrepreneurs and their firms from 1996 to 2009, we find that exogenous changes in social, political and economic status of private entrepreneurs lead to a significant increase in the corporate giving of their privately owned firms. The findings are robust when we use different samples of the data and when we control for a large set of entrepreneurs and firm characteristics in the regression analysis. One policy implication of our findings is that status should be given to people who deserve it, which will benefit society by encouraging people to give back and be socially responsible.

There are different possible mechanisms for status improvement to lead to more charitable giving. One possibility is that better status might make people feel being more respected and, hence, they will offer something back to society; this is a reciprocity motive. Second, better status might generate intrinsic motives like self-esteem, or social responsibility. The third possibility is external social pressure from being a high-status person that might force people to give more unwillingly.

In two of the surveys, there is one question that asks respondents to identify their motives for charitable giving. Among all the choices, the majority (78%) of entrepreneurs choose making contributions for a better society as the most important motive of giving; 14% indicate returning the favour or thanking the government and society as the most important reason to give. Others specify motives such as maintaining good relations with government, firm reputation and government pressure as the most important reason to give. Based on this limited information, the finding that better status leads to more giving is more about the sense of social responsibility and reciprocity, rather than social pressure or private benefits. The data, however, does not allow a rigorous analysis of the mechanism.

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APPENDIX: RANDOMIZATION PROCEDURE OF THE SURVEY

Proposal of Sampling Survey conducted by Chamber of Commerce

1. The data of total registered number, together with the distribution of local private companies in terms of location and industry can be collected by the Chamber of Commerce at district level under close collaboration with the Municipal Chamber of Commerce.
2. The sampling process should be conducted in various phases with different focuses, such as ①**Distribution of Location**; ②**Distribution of Industry etc**.
3. **Detailed Sampling Guidance and Example**:

Phase 1: Determine the total sampling size (denoted W) upon discussion with the General Assemble Team (e.g. W = 100).
Phase 2: For province, city or autonomous region-wise investigation, the survey should be selected in one provincial capital (or city) and one county that is less well-developed. For municipalities directly under the central government, the sampling survey can be conducted district-wise or county-wise:

$$District\ \ Sampling\ \ Size\ A = W^{*}\frac{Total\ \ Number\ \ of\ \ Companies\ \ in\ \ the\ \ City\ \ or\ \ Country}{Total\ \ Number\ \ of\ \ Companies\ \ in\ \ Selected\ \ City\ \ or\ \ Country}$$

For example, two cities (or county), namely A and B, selected from one province have 10 000 private companies altogether, out of which, A, has 4000 private companies. Then the district sampling size is:

$$a = 100^{*}\frac{4000}{10000} = 40$$

Phase 3: Determine the number of surveys needed in accord with the Urban–Countryside Ratio. Based on the total number of private companies of county A by the end of 2005, obtain the

Expected Investigation Number in Urban District:

$$B = A^{*}\frac{Number\ \ of\ \ Companies\ \ in\ \ the\ \ City}{Number\ \ of\ \ Companies\ \ in\ \ the\ \ District}$$

Expected Investigation Number in Countryside:

$$C = A^{*}\frac{Number\ \ of\ \ Companies\ \ in\ \ the\ \ Countryside}{Number\ \ of\ \ Companies\ \ in\ \ the\ \ District}$$

For example, suppose A have 3200 private companies in urban districts and 800 in the countryside, then

Expected Investigation Number in Urban District:

$$B = 40^{*}\frac{3200}{4000} = 32;$$

Expected Investigation Number in Countryside:

$$C = 40^{*}\frac{800}{4000} = 8.$$

Phase 4: Determine the total survey number needed according to the distribution of industries within urban districts and the countryside, respectively. Based on the distribution of private companies of county A in terms of industry by the end of 2005, obtain

Expected Investigation Number in Urban District of Certain Industry:

$$b_i = b*\frac{Number\ \ of\ \ Companies\ \ of\ \ the\ \ Industry\ \ in\ \ Urban\ \ District}{Total\ \ Number\ \ of\ \ Companies\ \ in\ \ Urban\ \ District};$$

Expected Investigation Number in Countryside:

$$C_i = C*\frac{Number\ \ of\ \ Companies\ \ of\ \ the\ \ Industry\ \ in\ \ Countryside}{Total\ \ \ \ Number\ \ of\ \ Companies\ \ inCountryside}.$$

For example, suppose out of the 3200 private companies in urban districts of county A, 1600 of them are in the manufacturing industry, 200 are in construction, 100 are in transportation, 860 are in commerce and catering, 200 are in servicing and 240 are in other industries. Then, among the private companies of county A,

Expected Investigation Number in Manufacture Industry

$$b_1 = 32*\frac{1600}{3200} = 16;$$

Expected Investigation Number in Construction Industry:

$$b_2 = 32*\frac{200}{3200} = 2.$$

Expected Investigation Number in Transportation Industry:

$$b_3 = 32^{*}\frac{100}{3200} = 1;$$

Expected Investigation Number in Commerce and Catering Industry:

$$b_4 = 32^{*}\frac{860}{3200} = 8.6{\approx}9(round\ \ up).$$

Expected Investigation Number in Servicing Industry:

$$b_5 = 32 * \frac{200}{3200} = 2.$$

Expected Investigation Number in Other Industry:

$$b_6 32 * \frac{240}{3200} = 2.4 \approx 2(round \quad up).$$

Phase 5: Select the companies being surveyed by Equal Distance Principle.

For example, suppose county A now has 3200 private companies in urban districts, out of which 1600 are in the manufacturing industry. How do we select the 16 sample companies out of the 1600 companies? Calculate the sampling interval by $\frac{1600}{16} = 100$, which means that 1 out of every 100 companies is to be selected as the sample company being surveyed. Numbering the 1600 manufacturing companies as 1, 2, 3, …, 1600 and randomly selecting one number, e.g. 135, then number 135, 235(by 135 + 100 = 235), 335(by 235 + 100 = 335), 435, 535, 635, 735, 835, 935, 1035, 1135, 1235, 1335, 1435, 1535, 35 (as 1535 + 100 = 1635 is out of the range between 1 and 1600, treat the 1600 companies as the closed circle, then 1635 – 1600 = 35) will be the companies being selected.

(1) Suggested Approach for Special Condition:

> The team may consider proceeding to the former number if the owner (or major investor) is not reachable, or not cooperative enough to accomplish the survey during the survey period. For example, if company No. 135 refuses to cooperate, then proceed to survey No. 134. If company No. 134 still refuses to cooperate after much communication, then consider proceeding to No. 136. However, such adjustment should be approved by the person in charge of the sampling survey of the region.

(2) Proposal of sampling survey conducted by Industry and Commerce Bureau: The sampling method is relatively simpler given that the name and registering place of the private companies are available to the bureau.

Step 1: Numbering the private companies of each connecting point respectively.
Step 2: Adopting the 'Simple Random Sampling Approach' by deriving sampling distance K by dividing sampling amount W (determined by general office) by the number of private companies at each connecting point N.
Step 3: Randomly select a number M_1 out of all company being surveyed.
Step 4: Select another number M_2 out of the population such that $M_2 = M_1 + K$. Select M_3.

By $M_3 = M_1 + 2K$, $M_4 = M_1 + 3K$ … until $M_w = M_1 + (w - 1)K$. There are altogether W companies (No. M_1, M_2, … , M_w) selected, which satisfies the

requirement to select W companies out of N private companies. Such random sampling ensures the sample a good representation to all companies being investigated.

For example, suppose a connecting point has $N = 1105$ private company registered. The sampling amount demanded by general office $W = 50$. Then the sampling distance $K = \frac{1105}{50} = 22.1$Randomly select the 1st company being selected (M_1): e.g. No. 356.

Then select

$$M_2 = M_1 + K = 356 + 22.1 = 378.1 \approx 378 \ \ (rounding)$$
$$M_3 = M_1 + 2K = 356 + 2 \times 22.1 = 400.2 \approx 400 \ \ (rounding)$$
$$M_4 = M_1 + 3K = 356 + 3 \times 22.1 = 422.3 \approx 422 \ \ (rounding)$$

$$\vdots$$
$$M_6 = M_1 + 5K = 356 + 5 \times 22.1 = 466.5 \approx 467$$
$$\vdots$$
$$M_{50} = M_1 + (50 - 1)K = 356 + (50 - 1) \times 22.1 = 333.9 \approx 334 \ \ (rounding),$$

which makes up the sample of 50 companies.

Suggested Approach for Special Condition:

The team may consider proceeding to former number if the owner (or major investor) is not reachable, or not cooperative enough to accomplish the survey during the survey period. For example, if company No. 334 refuses to cooperate, then proceed to survey No. 333. If company No. 333 still refuses to cooperate after much communication, then consider proceeding to No. 335. However, such adjustment should be approved by the person in charge of the sampling survey of the region.