## Essays on the Political Economy of Corruption and Anti-corruption: Evidence from China

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## Summary

Corruption has long been an endemic problem for China, where although significant advances in economic development have been achieved, the concomitant institutional reforms have lagged too far behind to establish a satisfactory institutional and legal environment. Institutional factors are plausibly the primary cause for the rampant corruption in China, including the one-party authoritarian regime without election, and the lack of an autonomous legal system and independent news media. Corruption is widespread in almost every aspect of government-business interactions. This doctoral thesis systematically studies the political economy of corruption and anti-corruption by empirically examining the effects of corruption (anti-corruption) on efficiency, resource allocation, government expropriation, innovation and welfare in China.

Chapter 2, titled "Can Corruption Really Function as 'Protection Money' and 'Grease money'? Evidence from Chinese Firms", directly investigates the "grease money" and "protection money" effects of corruption based on the Chinese firm survey data. First, we identify a significantly positive effect of bribes on firm profitability only for non-stateowned enterprises (non-SOEs). Further empirical analysis shows that this positive effect mainly exists in less contract-intensive industries and simple goods industries. Then we find that corruption functions as "protection money" for non-SOEs by showing that bribes can lower effective tax rates. We further show that bribes can help non-state firms circumvent red tape and increase their probability of obtaining government procurement contracts, thereby validating the "grease money" hypothesis. Our results suggest that both two effects of corruption exist for non-SOEs in China, which identify a new profitenhancing factor in the non-state sector in recent years.

Chapter 3, titled "How Does Anti-corruption Affect Corporate Innovation? Evidence from Recent Anti-corruption Efforts in China", investigates the effect of anti-corruption on the financing of and investing in innovation by using a detailed dataset of Chinese listed companies from 2009 to 2015. Applying the system GMM to deal with the potential endogeneity of anti-corruption efforts, we find that stronger anti-corruption efforts make firms more likely to acquire external funds, mainly the long-term debt. Moreover, we show that firms located in provinces with stronger anti-corruption efforts invest significantly more of their newly acquired funds in R&D and generate more patents. Further empirical tests suggest this positive and statistically significant effect almost comes entirely from the current massive anti-corruption campaign launched by President Xi Jinping since 2013. We further try to distinguish the "expropriation hypothesis" from the "rent seeking hypothesis". The former refers to the mechanism of anti-corruption mitigating the expropriation problem, which otherwise make firms reluctant to innovate due to the high probability that their rents generated from risky innovative activity will be expropriated by corruptprone bureaucrats. The latter refers to the substitution of innovation for rent seeking due to the rising cost of corruption and the depreciated value of relational capital induced by the campaign. Our results show that only firms without political connections, non-SOEs, firms operating in non-regulated industries and younger firms benefit from the stronger anti-corruption efforts, all supportive of the former hypothesis.

Chapter 4, titled "Anti-corruption, Safety Compliance and Mining Accidents: Evidence from China", evaluates the impact of the on-going anti-corruption campaign launched by President Xi since 2013 on coal mine mortality in China by using a unique provinciallevel dataset on coal mines from 2004 to 2015. We apply a difference-in-differences (DD) identification that exploits the temporal and spatial variation in anti-corruption intensity induced by the nationwide anti-corruption campaign. To this end, we first construct an anti-corruption index (ACI) based on the data of crackdowns on high-ranking government officials. We find evidence that provinces with stronger exposure to the anti-corruption campaign have experienced a significantly larger decrease in coalmine death rates. Our results survive a battery of robustness checks. We also examine the heterogeneity in the treatment effects across the entire distribution of the outcome variable using the quantile difference-in-differences estimation as well as the heterogeneous effects induced by media exposure and the "No safety, No Promotion" policy.

Further evidence suggests that stronger intensity of safety inspections induced by the campaign is one of the potential channels through which anti-corruption reduces fatality rates. Last but not least, we find the campaign has significantly raised the costs and lowered the profits of the industry, consistent with our conjecture that stronger exposure to the campaign could make coalmine firms less likely to shirk on safety expenditures.

Finally, we conclude in Chapter 5 with policy implications.