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Causes of corruption: Evidence from China

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ABSTRACT

This study explores the causes of corruption in China using provincial panel data. Using both fixed effects and instrumental variables approaches, we find that provinces with greater anti-corruption efforts, higher educational attainment, historic influence from Anglo-American church universities, greater openness, more access to media, higher relative wages of government employees and a greater representation of women in the legislature are markedly less corrupt; whereas social heterogeneity, regulation and resources abundance breed substantial corruption. We also find that fiscal decentralization depresses corruption significantly. Finally, we identify a positive relationship between corruption and economic development in China, which is driven primarily by the transition to a market economy.

1. Introduction

Since the establishment of the People's Republic of China in 1949, corruption has vexed the national leadership. Prior to 1978, attempts to control corruption were made primarily through mass movements, and occasionally by severe deterrents such as the 1952 execution of two senior officials, Qingshan Liu and Zishan Zhang. Since the launch of economic reforms, corruption has become even more widespread and exists at every level of China's political system. Even the Chinese government has admitted that corruption "is now worse than during any other period since New China was founded in 1949. It has spread into the Party, into Government administration and into every part of society, including politics, economy, ideology and culture" (Liang, 1994, p. 122). The seriousness of this problem is exemplified by the recent charges against three members of the Politburo, Xitong Chen, Liangyu Chen and Xilai Bo.[1]

Corruption in contemporary China, the largest transitional and developing country, has generated much literature, in sociology, political science and economics (Cai, Fang, & Xu, 2011; Gong, 2006; Wedeman, 2004; White, 1996; Yao, 2002). This research has identified several possible causes of corruption, including political institutions, the judicial system and the cultural environment. However, no empirical study yet exists that comprehensively analyzes the economic underpinnings of corruption in China. Rather, the majority of extant studies on the causes of corruption are cross-national investigations that use subjective survey data (Bertrand &

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[1] It is reported that Bo's wife, Kailai Gu, planned to transfer money overseas, and poisoned the British businessman Neil Heywood after he threatened to expose her plan.

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Mullainathan, 2001; Knack, 2006; and Treisman, 2000). As Treisman (2007) admits, however, perception-based data actually reflect impressions of corruption intensity rather than corruption itself, meaning that the data are correlated with survey respondents' beliefs and other social and economic conditions. Moreover, the substantial number of unobservable or unmeasurable differences in institutions and cultures between countries makes it difficult for cross-country analyses to solve the problem of omitted variable bias.

Such disadvantages in cross-country research can be mitigated by the use of an objective within-country data set that eliminates the subjective data bias and, despite some regional differences, also provides a higher level of homogeneity that moderates the omitted variable bias. Surprisingly, few studies on the causes of corruption employ within-country data. Using similar American state-level data sets, Goel and Nelson (1998) and Fisman and Gatti (2002a) investigate the effect on corruption of government size and decentralization respectively. Also using U.S. data, Leeson and Sobel (2008) find that states struck frequently by natural disasters tend to be more corrupt because disaster relief increases resources available for abuse. Svensson (2003) and Cai et al. (2011) use firm-level data to explore the "micro" causes of corruption in Uganda and China respectively. Specifically, Cai et al. (2011) investigate the institutional causes of corruption among Chinese firms, although they mainly focus on the negative effect of corruption on firm productivity.

In this paper, we adopt both fixed-effect and instrumental variable approaches to identify the causes of corruption in China using provincial panel data. Besides confirming most cross-country findings in a more controlled setting, our study makes three important contributions to the literature. First, we identify a positive relationship between corruption and economic development in China, one that stems from the current transition process. Second, we obtain novel within-country evidence on the depressive effect of the Anglo-American colonial heritage, the contributory effect of abundant natural resources, and the depressive effect of female representation in politics on corruption. Third, we find that even in a non-democratic country, access to controlled media keeps corruption in check to some extent.

The paper is organized as follows: Section 2 reviews previous research on the causes of corruption, Section 3 empirically determines the causes of corruption in China, and Section 4 presents our concluding remarks.

2. Determinants of corruption

According to Jain (2001), there are three prerequisites for corruption: bureaucratic discretionary power, the association of this power with economic rents, and deterrence as a function of the probability of being caught and penalized. Whereas the first two preconditions determine the benefits of corruption, the third influences the cost of corruption; therefore, regional characteristics that affect these preconditions determine its local incidence (Becker, 1968).

Bureaucratic discretionary power over the allocation of resources is particularly important for the existence of corruption and, according to Rose-Ackerman (1978), frequently arises during the enforcement of regulations. That is, because bureaucrats can assign themselves the discretion to distribute resources when setting and implementing regulations, more regulations mean more discretionary power and thus a higher incidence of corruption. In contrast, levels of corruption can be expected to decrease if controlled economies become more marketized. Governmental discretionary power can also be influenced by decentralization, although the relationship between decentralization and corruption is still being debated. According to Brennan and Buchanan (1980) and Weingast (1995), decentralization introduces competition between local governments, thereby reducing bureaucratic profits from corruption. On the other hand, Shleifer and Vishny (1993) argue that since decentralization causes the dispersion of government power, bureaucrats who are not coordinated will over-extract rents from firms. Treisman (2000), using a dummy variable that reflects whether a state is federal, finds that federal states are seen as more corrupt. Fisman and Gatti (2002b), however, provide cross-country evidence that fiscal decentralization in government expenditure is significantly correlated with lower corruption. Using American data, they also identify a positive relationship between corruption and the proportion of a state's expenditure derived from federal transfers (Fisman & Gatti, 2002a).

Obviously, rational individuals pay bribes to government officials only if they can reap higher benefits from doing so. Hence, economic rents related to discretionary powers are a necessary condition for corruption. Indeed, Ades and Di Tella (1999) show that countries where firms have higher rents tend to be more corrupt. One concentrated and easily expropriable activity of particularly high rents is natural resource exploitation (Sachs & Warner, 2001), which echoes Leite, Weidmann (1999) empirical finding that the incidence of corruption depends positively on natural resource abundance. Treisman (2000), on the other hand, finds no strong evidence that fuel and mineral exports are positively correlated with corruption. Another source of economic rent is a lack of competition: economic rents decrease when economic activities are marked by intensive competition. Ades and Di Tella (1996, 1999) use the country's openness measured by the share of imports in the GDP to indicate firms' external competition, and find that economic openness is negatively correlated with levels of corruption. Treisman (2000) and Gerring and Thacker (2005) also identify a similar relationship between trade openness and corruption.

The deterrence of corruption is a joint function of the probability of detection and punishment once caught, a probability that is affected by several factors. First, higher income levels accelerate the spread of education and democratic institutions, thereby enabling individuals to better identify corrupt behaviors and punish official malfeasance. Regions with richer and more educated citizens are assumedly less corrupt. According to Treisman (2007), the negative relationship between the incidence of corruption and income level is the strongest and most consistent finding of empirical studies on corruption (see also Ades & Di Tella, 1999; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1999; Treisman, 2000). The probability of being caught also depends on the effectiveness of the country's legal system. For instance, La Porta et al. (1999) argue that the common law systems in Britain and its former colonies are more effective in protecting property rights and enforcement than civil law systems, which would imply that the probabilities of