Do Severe Penalties Deter Corruption? A Game-Theoretic Analysis of the Chinese Case*

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Abstract
Despite severe punishments such as the death penalty, corruption is not effectively deterred in China. This research discusses the ineffective deterrence of corruption from a game-theoretic perspective. I first form a corruption-investigation game based on Tsebelis’s model on crimes and sanctions. Next I extend the basic model by linking the two players’ payoffs. Finally, I construct a static game of incomplete information by considering different types of investigator. With the unique advantage of game theory, this research finds that to deter corruption, (1) simply increasing the penalty can counterintuitively decrease the frequency of investigation; (2) it is important to promote incentives for the investigator, such as rewarding anticorruption monetarily or politically; and (3) it is also important to maintain a sufficient proportion of officials who have incentives to fight corruption.

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