

Strategic Analysis of Bureaucratic Corruption

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Abstract

This thesis is a collection of three papers, studying corruption games between private citizens and bureaucrats from the perspective of law enforcement.

The first paper develops a model in which bribe type is endogenous and examines how this choice is affected by asymmetric punishment which is proposed as an instrument of corruption control. It has been argued that this policy can eliminate harassment bribery if both whistle-blowing costs and the stakes are low. In a more realistic environment where bribery is most likely to survive and another type of bribery—non harassment one—coexists, this paper investigates how asymmetric punishment affects the mix of the two bribes. This is analyzed in a setting where bribe size is determined by Nash bargaining, detection of bribery and its type is conducted separately but could be related, and bribery detection rates can be endogenously chosen through whistle-blowing. The feasibility of whistle-blowing has no effect on the fraction of harassment bribery under symmetric punishment. When it is feasible, however, a switch from symmetric to asymmetric punishment leads to either no difference or more non-harassment bribery, which is independent of the relevance of detection of bribery and non-compliance. The result is robust when the legalization of bribe-giving is not feasible to non-harassment bribes.

The second paper takes intermediaries into account and studies the effectiveness of

asymmetric punishment as an anti-corruption strategy. Intermediaries that facilitate corruption between clients and bureaucrats are common in developing economies. Anecdotal evidence shows that intermediary agents are responsible for the greater corruption and welfare loss, and some formal analyses confirm this result in various aspects. By using a game theoretic model, this paper examines the efficacy of asymmetric punishment in combating harassment bribery in the presence of a monopolist intermediary. If asymmetric punishment cannot eliminate direct corruption but ends up with a larger bribe size when whistle-blowing is feasible, this policy leads to a shorter licensing procedure in a bribe only game. However, it strengthens incentives of the bureaucrat to create red tape when the intermediary exists, resulting in a longer procedure.

The third paper studies a petty corruption game with a sequence of entrepreneurs and a set of bureaucrats. In this game, each entrepreneur has a project of which a benefit can be generated only if she acquires approvals from all the bureaucrats simultaneously. The bureaucrats are assumed to take the undominated strategy, demanding a positive bribe based on the take-it-or-leave-it rule. However, their non-approval decisions can be appealed by the entrepreneur by incurring an exogenous legal cost. The work shows that there are multiple equilibria in both one-stage and repeated game. BIME (bribe-income-maximizing-equilibrium), one extreme class of them, is non-monotonic in the reduced legal cost in the long run.

Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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