Comments and Discussions

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This paper considers the effects of corruption (in the forms of illegal kickbacks and embezzlements) by the managers of the Chinese state-owned enterprises (SOEs) on the Chinese economy. It also examines the effectiveness of measures against corruption.

The authors consider a Cournot duopoly game, in which an SOE competes with a private firm. The private firm is a profit-maximizer, whereas in the SOE, as there lacks proper government supervision, the manager contemplates to line her own pockets through corruption.

The production considered in the paper is similar to the mineral water case in the original analysis of Cournot (1838), in which the production cost is assumed to be zero. The authors consider the specific case in which the manager contemplates to embezzle the SOE's assets by exaggerating the production costs. It is also assumed that such a behavior is costly (incurs a transaction cost) and there exists a risk for managers to be caught. Upon detection, the manger is subject to a penalty. Obviously, the manager's corruption depends on the probability of detection and the contents of the penalty.

The other major characteristic of the present paper is that the authors have applied two criteria to evaluate the achievement of the economy. The first criterion is the traditional social surplus used by a social planner; and the second is used by the government, which, in addition to the social surplus, also includes the gross output.

The authors analyze a two-stage game: In the first stage, the government chooses the optimal level of law enforcement; and in the second stage, observing the government's choice, both firms choose their outputs. The authors consider the comparative statics of the model. Important findings include: (1) A rise in the probability of detection lowers the total output, as the SOE's marginal costs rises as a result; (2) A rise in the unit cost of corruption may increase or decrease the total outputs, depending on the conditions shown in Proposition 3.

The most interesting investigation is the examination of corruption's impacts on social welfare. The authors have identified the conditions under which social welfare rises in the presence of corruption, under the two different criteria specified above, respectively.

The present paper contributes to the literature by applying modern economic approaches and methods of analysis to the phenomenon of corruption in SOEs, which has become one of the major social problems in China. However, the Cournot model

that has been applied is rather specific, and the analysis concerning the transitional process is also quite transitory. Nevertheless, I am confident that the authors are capable of conducting, and will be able to benefit from, an analysis on the same issue that is based on a broader perspective.

References

Cournot, Antoine Augustin (1838). *Recherches sur les principes mathématiques de la théorie des richesses*. (translated to English by N.T. Bacon as *Researches into the mathematical principles of the theory of wealth*, 1897).

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