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Education

- Ph.D. in Economics, Indiana University, Bloomington, USA (Expected in May 2008)
  Dissertation Title: "Three Essays on Corruption and Competition: Theory and Evidence"
  Dissertation Chairs: Professor Michael Alexeev and Professor Roy Gardner
- M.A. in Economics, Indiana University, Bloomington, USA (December, 2005)
- B.A. in English Literature and International Trade, Dankook University, Seoul, Republic of Korea (August, 2001)

Fields of Specialization

- Primary fields - Applied Microeconomics: Economics of Governance, Industrial Organization
- Secondary fields - International Trade, Applied Game Theory

Research Interests

- Corruption, Assessment and Analysis of Economic Governance, Industrial Organization, Strategic Trade Policy

Publication and Research Papers

- "Corruption and Product Market Competition: An Empirical Investigation" (with Michael Alexeev): Job Market Paper (Accepted for presentation at the *Midwest Economics Association Conference* in March 2008 in Chicago)
- "Commission Bribery in Public Procurement" (submitted to *Journal of Development Economics*, Accepted for presentation at the *Midwest Economics Association Conference* in March 2008, in Chicago)
- "Endogenous Prize in Public Procurement with Bribes" (with Michael Alexeev)
- "Choice Across the Retaliatory Trade Policies and Politics" (in progress)
- "The Korean Export Insurance System - Its Implications on the Trade Regulations in the Global Trading System" (with Jae Sheen Mah), *Journal of World Trade*, August 2001

Teaching Experience

Associate Instructor (full teaching responsibility): *Indiana University, Bloomington, IN*

- Introduction to Microeconomics (E201), Spring 2006, Fall 2007, and Spring 2008.
- Statistical Analysis for Business and Economics (E370), Spring 2007 and Summer II 2007.

Teaching Assistant: *Indiana University, Bloomington, IN*

- Introduction to Microeconomics (E201), Fall 2005 and Spring 2006
- Introduction to Macroeconomics (E202), Fall 2004 and Spring 2005
- Statistical Analysis for Business and Economics (E370), Fall 2003 and Spring 2004

Professional Experience

- Panel advisor for anticorruption subjects in "The Role of Good Governance in Economic Development: ATHGO's 2nd Annual International Symposium" at the World Bank, August 2007
- Research Assistant in The Institute for Monetary and Economic Research, The Bank of Korea, 2002-2003

Honors / Fellowships

- ATHGO's Scholarship Award, November 2007
- The Korea International Trade Association Competitive Paper Award, December 2000
- Fellowship from the Dankook University, 1998-2001

Professional Affiliations

- American Economic Association, Midwest Economic Association
- American Political Science Association

Computer and Language Skills

- Statistical/Mathematical Packages: STATA, Mathematica, and MATLAB
- Office Suites: Microsoft Office, Scientific WorkPlace
- Languages: English, Korean

Citizenship: Republic of Korea

References

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Dissertation Abstract
"Three Essays on Corruption and Competition: Theory and Evidence"

It is generally considered that more competition might help curb corruption, as rents, which often motivate corrupt agreements, decrease in the degree of competition. However, there has been relatively little theoretical analysis and a dearth of empirical examination of the issue in the literature. In my dissertation I undertake both theoretical and empirical analysis of the relationship between corruption and competition to help fill this gap in the literature. In Chapter I of the dissertation, I construct an imperfectly discriminating winner-pay-all rent-seeking model in order to analyze bribery in public procurement. I then investigate the effect of competition among bribers and the dynamic nature of the bribery game on corruption measured as the total amount of bribes paid. This, so-called commission bribery model, shows that competition, measured as the closeness of the bribers' valuations of the procurement contract, increases corruption. In Chapter II, I extend this model to allow for the corrupt official to determine the attractiveness of the procurement contract to the bidders with a goal of maximizing his bribe revenue. A more attractive contract generates bigger bribes, but it also exposes the corrupt official to a greater possibility of detection and punishment. I then examine the effect of competition on the endogenous value of the procurement contract. In both chapters I compare the results in a commission bribery framework and in more conventional Tullock-type rent-seeking setup. In Chapter III, I construct a model where an official can extort bribes from all firms in a market (i.e., corruption is centralized) and show that product market competition in this setup increases corruption. I also test the relationship between product market competition and corruption using the recently available firm-level data. The test results show that this relationship tends to be positive. The analysis in my dissertation suggests that creating competition in activities vulnerable to corruption may not reduce the amount of corruption.

Chapter I: Commission Bribery in Public Procurement

The existing rent-seeking models do not adequately explain some typical bribery cases in public procurement. In these bribery cases, we observe that the actual payment of the promised bribes is contingent on winning the contract, and that corrupt officials determine the winner not only by the amount of the bribe, but also by other considerations such as political favoritism and nepotism. To reflect these features, I develop an *imperfectly discriminating winner-pay-all rent-seeking* model with asymmetric valuations of a procurement contract, the so-called commission bribery model. I then investigate how the intensity of competition and the dynamic nature of bribery influence corruption measured as the official's expected bribe revenue. The analysis shows that (i) corruption increases as the valuations become more symmetric (i.e., as competition increases); and (ii) corruption is greater in a simultaneous-move game than in a sequential-move game, which implies that the official prefers a simultaneous-move bribery while the bribers prefer a sequential-move bribery competing for the second move. In addition, I compare the properties of the commission bribery model and those of the Tullock rent-seeking model, in which all the bribers pay regardless of their success in winning the prize. In the commission bribery model, the underdog, as well as the favorite, increases his spending as the rival's valuation increases, while, in the Tullock model, the bid of the favorite increases with the rival's valuation but the bid of the underdog decreases with the rival's valuation. This generates several other interesting results that are comparable between these two models.

Chapter II: Endogenous Prize in Public Procurement with Bribes
(with Michael Alexeev)

We develop a model of bribery in public procurement, in which a corrupt official has the ability to determine the valuation of the procurement contract to the bidders by, for example, setting the price of the contract higher (overpricing) or making contract terms easier to fulfill. While the bidders are willing to pay greater bribes to obtain a more valuable contract, the official runs the risk of being punished that increases in the attractiveness of the contract. The official's goal is to maximize his bribe revenue net of expected costs of punishment. We solve this model and characterize its comparative statics both in the commission bribery framework and in the Tullock-type contest. Also, we investigate how the value of the contract is affected by the degree of competition among bribers in both setups. The analysis shows that the degree of the overpricing becomes greater as the number of bribers increases and this effect is more pronounced in the Tullock contest than in the commission bribery.

Chapter III: Corruption and Product Market Competition: An Empirical Investigation
(with Michael Alexeev, Job Market Paper*)*

In this Chapter, we expand our focus from government procurement to conventional markets and examine the relationship between the intensity of competition among firms in these markets and the amount of bribes the firms pay to the officials. The existing literature on this issue usually assumes that corruption is decentralized in the sense that one official deals with one firm, so that the officials do not take into account the effect that the bribe they demand from "their" firms may have on the rest of the market. In general, these models arrive at ambiguous results with respect to whether product market competition increases or decreases corruption. Unlike this literature, we model centralized corruption where all firms in a given market are dealing with the same official or a group of colluding officials. That is, in our model bribes function much like a commodity tax. Our model predicts that corruption measured as the share of sales firms pay in bribes (the so-called bribe tax) increases in the intensity of competition. Given the dependence of the effect of product market competition on corruption on the degree of centralization of corruption and on other factors, it becomes particularly important to conduct an empirical investigation of this effect. Two earlier empirical studies on this issue used country-level data and concluded that competition tends to decrease corruption. Country-level data, however, provide only a small number of observations on highly aggregated indicators, making it difficult to measure the intensity of competition and isolate the effects of different factors on corruption measures. Moreover, cross-country regressions are subject to potentially serious simultaneity biases. We use observations on several thousand firms from about 60 countries obtained from the World Business Environment Survey 2000 to demonstrate that greater competition experienced by firms tends to be associated with greater bribe tax in the specific industries where these firms operate. In obtaining our results, we control for various firm characteristics and overall level of corruption in the country. Our results are robust to a number of specifications, including the use of different measures of competition and corruption and instrumental variable estimation.