

Statement of Research

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With a focus and strength on Industrial Organization, Law and Economics, Environmental Economics, and Sports Economics, I am passionate about finding life-relatable research ideas and converting these ideas into solid research projects with applied theory and empirical (causal inference) methods. My dissertation, which was completed and received in July 2021 by the graduate school of the University of Connecticut, studies the strategic behaviors between two parties of conflicting interests. For my thesis, I studied the private enforcement in China against counterfeit producers. I explored one strategy that the government can take to further their profit from land-acquisition projects in another dissertation chapter and one strategy that land-deprived households can employ in response to unfair acquisition of their land.

Completed Dissertation:

The leading chapter of my dissertation provides a decisive answer to an unsettled controversy: whether Chinese law should disallow counterfeit hunters. To deter counterfeiting, Chinese law entitles compensation, excessive to the original price, to the affected buyers. This “overcompensation policy” causes the emergence of counterfeit hunters, regulation-savvy buyers who purposefully purchase counterfeits for compensation. Using static games of incomplete information as an extension to Grossman and Shapiro’s seminal research in counterfeiting, I found that compared to a society without any enforcers against counterfeits, enabling counterfeit hunters results in an improvement in total welfare. However, social welfare is higher if the law only entitles compensation to informed buyers with genuine consumption purposes.

Also, raising compensation to the highest possible level diminishes both the proportion of producers that counterfeit and the proportion of buyers that hunt counterfeits. The reduction of either proportion leads to improvement in social welfare. Therefore, this project enriches the law and economics literature in reproducing Landes and Posner’s advocacy (public enforcement is preferable to private enforcement) and Becker and Stigler’s maximal-fine result in a context that has never been visited. I plan to submit this paper to the *Asian Journal of Law and Economics* for publication.

In the second chapter, I explored the profitability of one strategy that the government may employ during land acquisitions (using its eminent domain power). Aware that the acquisition-affected household may over-invest in their land according to the preannounced scale of acquisition, the government may renege on the plan. The government, assumed of a profit-maximizing purpose, can alter its acquisition decision contingently on the household’s investment. Using a dynamic game of complete information, I found that this strategy is not profitable to the government. By performing non-compliance to the planned acquisition, the government loses its leading advantage.

In the third chapter, I studied the household’s resistance against undercompensation, expanding from a unilateral model where the magnitude of resistance is solely dependent on undercompensation, to a bilateral model where the household may strategically add more resistance efforts. In the bilateral case, I studied the simultaneous game where the government and the household move under imperfect information, the dynamic game where the household’s resistance is dependent on undercompensation while the government is unaffected by resistance, and the dynamic game where the government yields to resistance. In Chapters 2 and 3, I found that a lump-sum compensation

valued at the optimal investment induces optimal decision on acquisition scale by the government and optimal decision on resistance-investment by the household. These enrich the literature of eminent domain by exploring a strategy that has not been visited (Chapter 2) and by formalizing a concept (Michelman's "demoralization cost") with an economic model (Chapter 3). I have been collaborating on these essays with Thomas Miceli, an elite economist in eminent domain. I plan to prepare for the publication of these essays at the *International Review of Law and Economics*.

Research in Progress

My ongoing research is on more diverse topics. One project on sports economics is empirical. It investigates the causal effect of a quick win in the preceding round on the winning percentage in the subsequent round in the NBA playoffs, controlling for the age of the main squad, the rank of the team in regular seasons, the final conference the team belongs to, and the season fixed effect. This provides an answer to the unsettled puzzle: whether is more important for competition in NBA playoffs between the resting time and the hot-handedness. My answer to this puzzle helps teams to improve their performance in the final by better strategizing between rest and momentum of competition. I have had conversations with an empirical professor at UConn for future collaboration.

In addition, I have a theoretical project on second-degree price discrimination. This project investigates how YouTube, the monopolist in providing online video streaming services, expands its profits via a membership where subscribers can avoid advertisements. YouTube viewers self-select on whether to subscribe according to their tolerance to advertisements and willingness to pay for the ad-free experience. This membership mechanism alone is a profiting source of YouTube, but it also functions as a measure of second-degree price discrimination to further expand YouTube's revenue from functioning as an advertising platform. Unlike the traditional price discrimination in which the self-selection process of consumers could mean loss of profit to the monopoly, this membership converts the viewers' opting out of advertisement into a profitable area of YouTube. This is an innovative insight into price discrimination. This project will also guide dominant firms like YouTube to better strategize between two mutually-influential revenue measures, such as advertisement and membership. I have some conversations on establishing coauthorship with a professor at Trinity College where she will be responsible for the empirical part of the project. We aim this project at the *International Journal of IO*.

Long-Run Plan

In a further prospect, I plan to expand the "conflict model" in sports economics to explore the multi-dimensional competition, depreciation of competency (due to aging), and the feasible career length dynamically determined by the average competition level in a sports league. I also plan to empirically evaluate the effect of the "no hand-checking rule" in NBA competition on fouls, injuries, and three-pointers. I will extend the counterfeit study with a general equilibrium model that applies the pollution haven theory of environmental economics to study the international trade of counterfeits, specifically, those exported from China to the developed countries whose producers escape due legal consequence for being out of the jurisdiction of the latter. I will seek opportunities of presenting these projects at IO, Law and Economics, Sports Economics symposiums while maturing these projects. The long-run goal is to publish in top-tier field journals.