YANGGUANG (SUNNY) HUANG

CONTACT

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EDUCATION

PhD, Economics, University of Washington, Seattle, 2016 (expected).
M.A, Economics, University of Washington, Seattle, 2014.
M.A, Economic Policy, Boston University, 2011.
B.A, Economics, Sun Yat-sen University, Guangzhou, 2009.
Visiting student, University of California, Los Angeles, 2009.

WORKING PAPERS

My research interests are in the areas of empirical industrial organization and applied microeconomics.

1. "Detecting Quality Manipulation Corruption in Scoring Auctions: A Structural Approach", 2015. (Job market paper)

2. "Hybrid Mechanism: Theory, Practice and Empirical Analysis" (with Quan Wen), 2015. (Under review)

3. "Procurement Auctions under Quality Manipulation Corruption" (with Jijun Xia), 2015.

WORKS IN PROGRESS

1. "An Empirical Analysis of Unbalance Pricing of Roundtrip Airline Tickets".

COFERENCE PRESENTATION

2015, Chinese Economists Society Annual Conference,
     University of Michigan, Ann Arbor, Michigan.
2015 The 26th International Conference on Game Theory,
     Stony Brook University, Stony Brook, New York.

TEACHINGS

Introduction to Microeconomics (Instructor)
Introduction to Macroeconomics (TA)
Introduction to Econometrics (TA)
Microeconomic Analysis I (TA, PhD level)
Microeconomic Analysis II (TA, PhD level)
Microeconomic Analysis III (TA, PhD level)
Econometrics I (TA, PhD level)
Econometrics II (TA, PhD level)

PROFESSIONAL ACTIVITIES

2010, Research Assistant, Boston University.
2008-2009, Research Assistant, Sun Yat-sen University.

Referee: *Economics Bulletin*

HONORS AND AWARDS

2014, Graduate Teaching Award, University of Washington.
2014, Henry T. Buechel Memorial Fellowship, University of Washington.
2011, George & Pearl Corkery Memorial Scholarship, University of Washington.
2009, Excellent Bachelor Degree Thesis Awards, Sun Yat-sen University.
2007, Lingnan Trustee Scholarship, Lingnan College.
2006, 2007, 2008, Academic Scholarship (3 times), Sun Yat-sen University.
2005, Kaisi Scholarship, Sun Yat-sen University.

REFERENCES

Quan Wen (co-chair)
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Fahad Khalil
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MISCELLANEA

Statistical software skill: R, STATA, Matlab, GUASS, Eviews.
Language: English (fluent)., Mandarin (native), Cantonese (native).

ABSTRACTS

1. "Detecting Quality Manipulation Corruption in Scoring Auctions: A Structural Approach"

Scoring auctions are widely used to support the procurement of items that differ in quality. These auctions are particularly susceptible for corruption because the quality assessment usually requires special expertise that the buyer does not have, which necessitates the participation of a skilled intermediary procurement agency to evaluate quality. Corruption via quality manipulation arises when the procurement agency is bribed to elevate quality score of a seller. It causes a systematic distortion of bids and such distortion is testable. This paper proposes a structural estimation method of scoring auction data and three tests for detecting corruption. We apply them to study a series of server room scoring auctions in China. We find empirical evidence for the primary implications of the theoretical model and some signs of corruption in sub-samples with high quality weight scoring rules and large engineer's estimated costs.

2. "Hybrid Mechanism: Theory, Practice and Empirical Analysis"
   (Submitted)

We study a hybrid mechanism that combines auction and lottery to allocate indivisible goods. One advantage of hybrid mechanism is to balance efficiency, revenue, and equality. In this model, players self-select into a multi-unit auction with unknown number of bidders. We characterize one symmetric Bayesian Nash equilibrium where auction participants use a monotone bid function. Based on this equilibrium, we identify structural primitives of the model from observables, from which we are able to quantify various performance measures. We then apply the model to analyze the hybrid mechanism adopted in Guangzhou to allocate new vehicle licenses. Our analysis shows that Guangzhou's practice increases equality by 10-fold at a cost of $1.45 million revenue every month.

3. "Procurement Auctions under Quality Manipulation Corruption"

Scoring auctions and price-only auctions with minimum quality standards are two most popular auction formats in procurement of differential quality projects. Quality manipulation corruption arises when the procurement agency is bribed to elevate quality score of a corrupted firm. We analyze how a buyer design the optimal scoring rule under corruption. With corruption, the buyer can be better off using minimum quality auctions and might use a scoring rule overstating its quality preference. Moreover, under some condition, the buyer's payoff is maximized with positive amount of corruption. The optimal mechanism depends on the scope of corruption: the buyer may pick a mechanism inducing efficient firm to win by giving out more rent, or allow the corrupted firm wins but procure at lower quality.

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