

Renkun Yang

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Citizenship and Visa Status

China (F-1 visa)

Education

Ph.D. Economics, The Ohio State University, 2021 (expected)
Dissertation: "Essays on Mechanism and Information Design"
Committee: Lixin Ye (co-chair), Paul J. Healy (co-chair), Yaron Azrieli, John Rehbeck
M.S. Economics, University of Wisconsin Madison, 2014
B.A. Economics, Peking University, 2013

Teaching and Research Fields

Primary fields: Microeconomic Theory, Mechanism Design, Information Economics
Secondary fields: Industrial Organization

Research Papers

"The Termination Clause as a Sequential Screening Device" (**Job Market Paper**)

In a takeover setting in which buyers arrive sequentially and the value uncertainty is resolved over time, we show that a termination clause can serve as a device for the target firm to sequentially screen the initial buyer. The initial buyer with an optimistic estimate accepts a contract with a high floor price and high termination fee to mitigate future competition; a pessimistic initial buyer, in contrast, chooses to stay flexible by accepting a low floor price and low termination fee. This clause also extracts rents from the late buyers by providing the initial buyer with a bid advantage. We characterize the revenue-maximizing termination contract and compare it to two benchmarks, the optimal static auction after all buyers are present and the optimal dynamic mechanism, both analytically and numerically. When the initial signal of the early buyer is sufficiently noisy, the optimal termination contract outperforms the static auction and achieves approximately optimal revenue. Our results provide a rationale for the prevalent use of go-shop provisions in the mergers and acquisition market.

"Competitive Product Tests under Minimum Quality Standards"

We consider a vertical oligopoly market in which (i) two firms have their products tested publicly before launch, and (ii) a minimum quality standard (MQS) is imposed. Firms choose the accuracy of their product tests, balancing two competing incentives: hiding information makes it easier to pass the MQS, while revealing information softens price competition through differentiation. In the unique symmetric equilibrium, each firm chooses a test that fully reveals high qualities and pools middle qualities around the MQS. For the regulator, the MQS reduces efficiency through reduced trade, but increases consumer surplus through intensified price competition.

"Information Design in Vertical Oligopolies"

We consider an oligopoly model where firms choose how much quality information to release before involving in the price competition. In particular, firms have credibility and full flexibility in the choice of signal structures regarding their own products. In the new product release case, a "pass or fail" information structure is optimal: the entrant only reveals whether its product quality exceeds a certain threshold. In the competitive disclosure case, both firms disclose more to avoid Bertrand-type

price competition. We characterize the symmetric information equilibrium and identify sufficient conditions a full revelation equilibrium. We find that competition always results in excessive information compared to the consumer-optimal and the socially optimal information structures.

Research in Progress

“Dynamic Assignment with Limited Commitment” with OSub Kwon

We study optimal dynamic mechanism design when transfers are not allowed and the principal cannot commit to future allocations. Specifically, the principal (she) decides in each period whether to allocate a good to the agent (he), whose private value evolves over time. The efficiency-maximizing principal bears a cost of allocation that is not internalized by the agent. The optimal mechanism in the two-period model has two main features. First, the principal elicits truthful report from the low-type agent in the first period by promising him one unit in the second period. Second, to fulfill this promise the principal strategically garbles (without observing) the agent's initial report. As the time horizon expands, the efficiency loss from both the noisy communication and the distortion of future allocation is backloaded and vanishes in the infinite horizon limit.

Conference and Seminar Presentations

July 2021 (scheduled)	World Congress of the Game Theory Society
August 2020	(Virtual) World Congress of the Econometric Society
June 2020	(Virtual) Conference on Mechanism and Institution Design
May 2020 (cancelled)	Midwest Economic Theory Conference, Greenville
April 2020 (postponed)	Shwartz Lecture Boot Camp, Evanston
March 2020 (cancelled)	Midwest Economic Association Annual Conference, Evanston
October 2019	Midwest Economic Theory Conference, St. Louis
July 2019	The 30th International Conference on Game Theory, Stony Brook
June 2019	China Meeting of the Econometric Society, Guangzhou
May 2019	Midwest Economic Theory Conference, Bloomington
March 2019	Midwest Economic Association Annual Conference, St. Louis

Research Experience and Other Employment

Summer 2019, 2018	Research assistant for Professor Lixin Ye, OSU
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Professional Activities

Referee for: *Journal of Economic Theory, Games and Economic Behavior*

Honors, Scholarships, and Fellowships

2020	Departmental Citation for Excellence in Teaching (DCET), OSU
2019	Burton-Abrams Dissertation in Economics Award, OSU
2015-2016	University Fellowship, OSU
2012-2013	Robin Lee Scholarship, PKU

Teaching Experience

Independent Instructor	
Autumn 2020	Intermediate Microeconomics (non-calculus based)
Autumn 2018	Intermediate Microeconomics (calculus based)
Recitation Leader	
Spring 2020, 2019, 2018	Ph.D. Microeconomic Theory IIA, Professor Lixin Ye
Autumn 2019	Principles of Macroeconomics, Dr. Darcy Hartman
Autumn 2017	Principles of Microeconomics, Dr. Ida Mirzaie
Spring 2017	Principles of Microeconomics, Dr. Darcy Hartman
Autumn 2016	Principles of Macroeconomics, Dr. Jefferey Buser

References

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