

Jinho Jung

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- EDUCATION**
- Ph.D., Agricultural Economics** May, 2019 Expected
Purdue University, West Lafayette, IN, USA
- Dissertation: Market Power and Spatial Price Discrimination in Agricultural Procurement Markets: Evidence from the Corn Procurement in Indiana
- Major Advisor: Dr. Juan P. Sesmero
- M.Sc., Agricultural Economics** May, 2014
Purdue University, West Lafayette, IN, USA
- Master’s Thesis: Economic and Policy Analysis for Solar PV Systems in Indiana
- Major Advisor: Dr. Wallace E. Tyner
- B.Sc., Metallurgical Engineering** February, 2010
Yonsei University, Seoul, Republic of Korea

- FIELDS OF CONCENTRATION**
- Ph.D.**, Agricultural Business, Empirical Industrial Organization, Structural Estimation
M.Sc., Energy, Resource, and Environmental Economics

Jung’s research focuses on efficiency and distributional implications of policies affecting food and agricultural markets under imperfect competition. To address these issues his research involves estimation of structural models of oligopsonistic intermediation with differentiated products. This methodological strategy permits quantification of policy and market structure counterfactuals which are of the utmost importance in modern food and agricultural markets. Specific applications of his research shed light into the spatially explicit effects of corn procurement by oligopsonistic large processors, as well as the effect of consolidation (and its spatial patterns) among them, mostly corn ethanol firms.

- PEER-REVIEWED PUBLICATIONS**
- Sesmero, J. P., Jung, J., and Tyner, W. E., 2016, “Cost-effectiveness of policies supporting solar panels in Indiana”. *Energy Policy*. 93, 80-95.
- Jung, J. and Tyner, W. E., 2014, “Economics and policy analysis for solar PV systems in Indiana”. *Energy Policy*. 74, 123-133.

**EXTENSION
PUBLICATIONS**

Jung, J. and Tyner, W. E., 2015, "Economic and Policy Evaluation of Solar Energy for Indiana Business and Residential Applications". *Purdue Extension Publication RE-9-W*.

**WORKING
PAPERS**

- Market Power and Spatial Price Discrimination in Agricultural Procurement Markets: Evidence from the Corn procurement in Indiana (**Job Market Paper**)

Summary: Market power exertion in agricultural procurement markets has long concerned producers and policy makers. Such concern is stirred by the geographically localized nature of these markets which can result in input price markdown and reduced farm revenues, as well as spatial price discrimination. Quantification of market power and price discrimination in this context requires estimation of structural parameters based on spatially disaggregated data, circumscribed by appropriately defined market boundaries. A major hurdle for estimation of structural parameters is the unavailability of such data at the firm level. We implement a recently proposed estimation strategy to circumvent the unavailability of firm-level data and estimate firm-level structural parameters with spatially disaggregated market-level data. We focus our analysis on corn procurement in the State of Indiana, where we observe substantial longitudinal and cross-sectional variation in market structure in the 2004-2014 period. Careful examination of reduced form evidence suggests a structure in which dominant firms face an upward sloping supply and compete with a competitive fringe. Therefore, we develop and estimate a dominant firms/competitive fringe structural model of oligopsonistic competition. Our results suggest corn ethanol plants and wet milling plants engage in markdown, but not in sensible spatial price discrimination. They also show that efficiency losses associated with markdown are small but distributional implications are large. Counterfactual analyses show that deviations from the competitive benchmark affect the Pareto-ranking of instruments targeting upstream and downstream stages of the vertical supply chain, a pervasive feature of agricultural policies.

- Passthrough of Downstream and Upstream Support Policies in Oligopsonistic Markets: Evidence from the Corn procurement in Indiana

Summary: A relatively small subset of the vast literature looking at ethanol policies recognized important interactions between policies supporting corn supply and policies supporting ethanol demand. However, such analyses assumed perfect competition. We re-examine the issue of interactions between downstream and upstream policies in the context of oligopsonistic procurement markets. Our results indicate that market power can greatly affect the relative cost-effectiveness of these policies, as well as the nature of their interactions. For example, a downstream policy supporting corn demand mostly benefits ethanol industries under market power which is contradictory to an initial aim of biofuel policies of assisting economic development of rural areas.

- Market Structure and Cost-Effectiveness of Ethanol Policies

Summary: Economic theory suggests that not all consolidations are created equal. Consolidations between producers of relatively close substitutes tend to have a stronger

dampening effect on competition than consolidations between producers of weaker substitutes. We examine this issue on the procurement side (in contrast to much of the literature that has focused on market power downstream) in the market for corn procurement where the degree of product differentiation is determined by spatial distance. We find strong evidence in favor of theoretical predictions. This has important regulatory implications in the sense that the effect of merges on competition hinges upon the spatial pattern of consolidations.

**CONFERENCE
PRESENTATIONS**

AAEA Annual Conference, Chicago, IL, Aug 2017. “Market power in feedstock procurement and economic effects of corn ethanol.”

AAEA Annual Conference, San Francisco, CA, July 2015. “Cost-effectiveness of policies supporting solar panels in Indiana.”

AAEA Annual Conference, San Francisco, CA, July 2015. “Economic and Policy Evaluation of Solar Energy for Indiana Business and Residential Applications.”

**CONFERENCE
POSTER
PRESENTATIONS**

The Heartland Workshop on Environmental and Resource Economics, Urbana-Champaign, IL, September 2018. “Market Power and Spatial Price Discrimination in Agricultural Procurement Markets: Evidence from the Corn Ethanol Industry in Indiana.”

**WORKSHOP
PRESENTATIONS**

Seminar Speech at Inner Mongolia Agricultural University, Hohhot, Inner Mongolia, China, November 6th, 2018. Market Power and Spatial Price Discrimination in Agricultural Procurement Markets: Evidence from the Corn Procurement Market in Indiana.”

Purdue Extension Workshop of Solar Energy Applications for Agriculture, Shipshewana, IN, March 2016. “Economic and Policy Evaluation of Solar Energy for Indiana Business and Residential Applications”

Advisory Council Meeting, Center for Commercial Agriculture, West Lafayette, IN, January 2016. “Economic and Policy Evaluation of Solar Energy for Indiana Business and Residential Applications”

Purdue Extension Workshop of Solar Applications for Agricultural, Huntingburg, IN, June 2015. “Economic and Policy Evaluation of Solar Energy for Indiana Business and Residential Applications”

REVIEW SERVICE

Peer-Reviewed Journal

- Agricultural Economics (1)
- Energy Policy (1)
- Journal of Cleaner Production (1)

- Renewables: Wind, Water, and Solar (1)
- Utility Policy (1)

Conference Abstract

- Agricultural and Applied Economics Association in 2018

WORKING EXPERIENCES

Research Assistant 2014 – current
 Dept. of Agricultural Economics, Purdue University, West Lafayette, IN

Military Service (Private – Sergeant) 2006 – 2008
 The United States Forces Korea (USFK), 2nd Infantry Division, Camp Hovey, Dongducheon, Republic of Korea
 - KATUSA (Korean Augmentation To the United States Army) soldier, See https://en.wikipedia.org/wiki/Korean_Augmentation_To_the_United_States_Army

AWARDS and HONORS

Scholarship, LG Display (LG Phillips LCD), Seoul, Republic of Korea 2005

OTHER INFORMATION

Language: English (Fluent), Korean (Native), Japanese (Intermediate)
 Software Skills: C++, GAMS, R, ArcGIS, MATLAB, STATA

REFERENCES

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 Purdue University
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 James and Lois Ackerman Professor
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