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Education

Iowa State University

Ph.D. Economics

Ames, IA

2008

University of Kansas

MBA. Finance

Lawrence, KS

2003

Jilin University

M.S. Economics

Changchun, China

1996

Jilin University

B.S. Engineering

Changchun, China

1993

Positions Held

Associate Professor

University of Wisconsin-Madison

Dept. of Agricultural & Applied Economics

July 2017 - Present

Faculty Affiliate

University of Wisconsin-Madison

Nelson Institute

Jan. 2011 - Present

Consultant

U.S. Commodity Futures Trading Commission (CFTC)

Office of the Chief Economist

July 2018 - July 2021

Assistant Professor

University of Wisconsin-Madison

Dept. of Agricultural & Applied Economics

Jan. 2011 - June 2017

International Livestock Analyst

Iowa State University

Center for Agricultural & Rural Development

Dec. 2008 - Dec. 2010

Graduate Research Assistant

Iowa State University

Center for Agricultural & Rural Development

Aug. 2004 - Dec. 2008

Graduate Research Assistant

University of Kansas

Ernst & Young Center for Auditing Research

Aug. 2000 - Aug. 2003

Senior Financial Analyst

China Development Bank

May 1996 - May 2000

Research

Journal Articles

He, J., X. Du, and W. Tu. "Can Corporate Digital Transformation Alleviate Financing Constraints?" *Applied Economics*, forthcoming.

Hutchins, J., Y. Gong, and X. Du. "The Role of Animal Breeding in Productivity Growth: Evidence from Wisconsin Dairy Farms." *American Journal of Agricultural Economics*, forthcoming.

- Du, X. and F. Dong. 2023. "Agricultural Policy Uncertainty and Its Impact on Commodity Markets." *Journal of Agricultural and Applied Economics Association* 2(2): 263-277.
- Du, X., Y. Zhao, and A. Brooks. 2023. "Wholesale Price Dynamics in the Evolving Texas Power Grid." *The Electricity Journal* 36(5): 107287.
- Zhang, X., J. Zhou, and X. Du. 2022. "The Impact of Oil Price Uncertainty Shocks on China's Macro-Economy: A DSGE Approach." *Resources Policy* 79: 103080.
- Lu, Q., X. Du, and H. Qiu. 2022. "Adoption Patterns and Productivity Impacts of Agricultural Mechanization Services." *Agricultural Economics* 53(5): 826-845.
- Xu, L. and X. Du. 2022. "Land Certification, Rental Market Participation, and Household Welfare in Rural China." *Agricultural Economics* 53(1): 52-71.
- Yu, C., X. Du, and D. Phaneuf. 2021. "The Impact of the Clean Water Act on Farm Practices: The Case of U.S. Dairy CAFOs." *Journal of Agricultural and Resource Economics* 46(3): 380-400.
- Doshi, G. and X. Du. 2021. "Transmission Integration and the Market for Congestion Revenue Rights: The Case of the Texas Electricity Market." *Energy Journal* 42(5): 247-281.
- Feng, H., X. Du, and D.A. Hennessy. 2020. "Depressed Demand for Crop Insurance Contracts, and a Rationale Based on Third Generation Prospect Theory." *Agricultural Economics* 51: 59-73.
- Price, M., C. Yu, D. Hennessy, and X. Du. 2019. "Are Actuarial Crop Insurance Rates Fair?: an Analysis Using a Penalized Bivariate B-Spline Method." *Journal of the Royal Statistical Society: Series C (Applied Statistics)* 68: 1207-1232.
- Jang, H. and X. Du. 2019. "Evolving Techniques in Production Function Identification Illustrated in the Case of the US Dairy." *Applied Economics* 51(14): 1463-1477.
- Du, X. and O. Rubin. 2018. "Transition and Integration of the ERCOT Market with the Competitive Renewable Energy Zone Project." *Energy Journal* 39(4): 235-260.
- Du, X., D. Hennessy, H. Feng, and G. Aurora. 2018. "Land Resilience and Tail Dependence Among Crop Yield Distributions." *American Journal of Agricultural Economics* 100(3): 809-828.
- Jang, H. and X. Du. 2018. "An Empirical Structural Model of Productivity and Conservation Reserve Program Participation." *Land Economics* 94(1): 1-18 (lead article).
- Du, X., H. Feng, and D. Hennessy. 2017. "Rationality of Choices in Subsidized Crop Insurance Markets." *American Journal of Agricultural Economics* 99(3): 732-756.
- Miao, R., H. Feng, D. Hennessy, and X. Du. 2016. "Assessing Cost-effectiveness of the Conservation Reserve Program (CRP) and Interactions between the CRP and Crop Insurance." *Land Economics* 92(4): 593-617.
- Du, X. and F. Dong. 2016. "Responses to Market Information and the Impact on Price Volatility and Trading Volume: The Case of Class III Milk Futures." *Empirical Economics* 50(2): 661-678.
- Du, X., C. Yu, D.A. Hennessy, and R. Miao. 2015. "Geography of Crop Yield Skewness." *Agricultural Economics* 46(4): 463-473 (lead article).
- Du, X. and T. Runge. 2014. "Price Dynamics in Wisconsin Woody Biomass Markets." *Biomass & Bioenergy* 63: 250-256.

- Du, X., D. Hennessy, and H. Feng. 2014. "A Natural Resource Theory of U.S. Crop Insurance Contract Choice." *American Journal of Agricultural Economics* 96(1): 232-252.
- Jang, H. and X. Du. 2013. "Price- and Policy-Induced Innovations: The Case of U.S. Biofuel." *Journal of Agricultural and Resource Economics* 38(3): 299-311.
- Du, X. and M. Carriquiry. 2013. "Flex-Fuel Vehicle Adoption and Dynamics of Ethanol Price: Lessons from Brazil." *Energy Policy* 59:507-512.
- Du, X. and M. Carriquiry. 2013. "Spatiotemporal Analysis of Ethanol Market Penetration." *Energy Economics* 38: 128-135.
- Dumortier, J., D. Hayes, M. Carriquiry, F. Dong, X. Du, A. Elobeid, J. Fabiosa, and S. Tokgoz. 2012. "The Effects of Potential Changes in United States Beef Production on Global Grazing Systems and Greenhouse Gas Emissions." *Environmental Research Letters* 7(2): 024023.
- McPhail, L., X. Du, and A. Muhammad. 2012. "Disentangling Corn Price Volatility: the Role of Global Demand, Speculation, and Energy." *Journal of Agricultural & Applied Economics* 44(3): 401-410 (invited paper).
- Du, X., D. Hennessy, and C. Yu. 2012. "Testing Day's Conjecture that More Nitrogen Decreases Crop Yield Skewness." *American Journal of Agricultural Economics* 94(1): 225-237.
- Du, X. and L. McPhail. 2012. "Inside the Black Box: the Price Linkage and Transmission between Energy and Agricultural Markets." *Energy Journal* 33(2): 171-194.
- Du, X. and D. Hennessy. 2012. "The Planting Real Option in Cash Rent Valuation." *Applied Economics* 44(6): 265-276.
- Dumortier, J., D. Hayes, M. Carriquiry, F. Dong, X. Du, A. Elobeid, J. Fabiosa, and S. Tokgoz. 2011. "Sensitivity of Carbon Emission Estimates from Indirect Land-Use Change." *Applied Economic Perspectives and Policy* 33(3): 428-448.
- Du, X., F. Dong, D. Hayes, and T. Brown. 2011. "Assessment of Environmental Impacts Embodied in U.S.-China and U.S.-India Trade and Related Climate Change Policies." *American Journal of Agricultural Economics* 93(2): 537-544 (invited paper).
- Du, X., D. Hayes, and C. Yu. 2011. "Dynamics of Biofuel Stock Prices: A Bayesian Approach." *American Journal of Agricultural Economics* 93(2): 418-425 (invited paper).
- Carriquiry, M., X. Du, and G. Timilsina. 2011. "Second Generation Biofuels: Economics and Policies." *Energy Policy* 39(7): 4222-4234.
- Tepe, F., X. Du, and D. Hennessy. 2011. "Impact of Biofuels Policy on Agribusiness Stock Prices." *Agribusiness: An International Journal* 27(2): 179-192.
- Du, X., C. Yu, and D. Hayes. 2011. "Speculation and Volatility Spillover in the Crude Oil and Agricultural Commodity Markets: A Bayesian Analysis." *Energy Economics* 33(3): 497-503.
- Zhao, H., X. Du, and D. Hennessy. 2011. "Pass-through in United States Beef Cattle Prices." *Empirical Economics* 40(2): 497-508.
- Du, X., D. Hayes, and M. Mallory. 2009. "A Welfare Analysis of the U.S. Ethanol Subsidy." *Applied Economic Perspectives and Policy* 31(4): 669-676.
- Du, X. and D. Hayes. 2009. "The Impact of Ethanol Production on U.S. and Regional Gasoline Markets." *Energy Policy* 37(8): 3227-3234.

Du, X., D. Hennessy, and W. Edwards. 2008. "Does a Rising Biofuels Tide Raise All Boats? A Study of Cash Rent Determinants for Iowa Farmland under Hay and Pasture." *Journal of Agricultural & Food Industrial Organization* 6(2): Article 7 (invited paper).

Book Chapters

Carriquiry, M., X. Du, and G. Timilsina. 2014. "Production Costs of Biofuels." In *The Impacts of Biofuels on the Economy, Environment, and Poverty: A Global Perspective*, D. Zilberman and G.R. Timilsina eds. Springer, New York.

Grants

- 2023-2027. AFRI/USDA. *Understanding the Meat Supply Chain Network: The Impact of Supply Disruptions on Food Insecurity and Nutritional Inequality*. (lead PI, with F. Wu, C. Yu, and D. Hennessy)
- 2021-2022. Center for Cross-Border Threat Screening (CBTS), Department of Homeland Security. *Sustainability and Risk Management of Meat Supply Chains in a COVID-19 World*. (lead PI, with D. Hennessy)
- 2021-2022. Graduate School Research Committee Award, University of Wisconsin-Madison. *Dynamics and Sustainable Management of the U.S. Meat Supply Chains*. (PI)
- 2021-2023. Wisconsin Consortium for Organic Research and Education. *Retail Competition, Marketing, and Opportunities for Organic Food in the Upper Midwest*. (lead PI, with B. Barham, P. Mitchell, and A. Stevens.)
- 2015-2019. USDA Hatch Grant. *Spatiotemporal Analysis of Dairy Farms Profitability and Distributional Impacts of USDA's Dairy Producer Margin Protection Program*. (lead PI, with B. Gould).
- 2016-2017. Graduate School Research Committee Award, University of Wisconsin-Madison. *A Network Perspective on Globalization and its Impact on the U.S. Commodity Markets*. (PI).
2015. Educational Innovation, University of Wisconsin-Madison. *Using Real-Time Simulated Trading and Cohort Groups in the Commodity Markets Class*. (PI)
- 2015-2016. Graduate School Research Committee Award, University of Wisconsin-Madison. *Short- and Long-Term Impact of Intermittent Renewable Energy on Deregulated Electricity Market: The Case of Wind Power in the ERCOT Market*. (PI).
- 2013-2017. NIFA/USDA. *Adaptation of Agroecosystems to Climate Change at the Edge of the U.S. Cornbelt*. (co-PI, with D. Hennessy, H. Feng, L. Janssen, A. Akyuz, M. Wimberly, and P. Wolter).
- 2014-2015. Graduate School Research Committee Award, University of Wisconsin-Madison. *Assessing Different Drivers in a Network of Infrastructure for Adaption to Climate Change*. (PI).
- 2011-2013. USDA Hatch Grant. *Understanding the Economic Linkages between Energy and Agriculture: The Case of Biofuels*. (PI).
- 2011-2012. Wisconsin State Energy Office. *Wisconsin Strategic Bioenergy Feedstock Assessment*. (co-PI, with T. Runge and G. Radloff).

2010-2011. Faculty Research Grant, Embassy of Canada. *Carbon Embodiment in U.S.-Canada Trade and Related Policies Analysis*. (lead PI, with F. Dong).

Honors and Awards

Associate Editor, *Agricultural Economics*, 2020-Present.

Editorial Council, *Journal of Agricultural and Applied Economics*, 2020-2022.

Associate Editor, *Economics Bulletin*, 2020-2022.

Renk Chair in Agribusiness, 2019-2022.

Outstanding *American Journal of Agricultural Economics* Article Award - Honorable Mention, 2017.

Madison Teaching and Learning Excellence (MTLE) Fellow, University of Wisconsin-Madison, 2013-14.

University Housing Honored Instructor Award, University of Wisconsin-Madison, Spring 2014.

Amber Waves Award: Best Findings (with L. McPhail), Economic Research Service, USDA, 2012.

Finalist, Agricultural & Applied Economics Association (AAEA) annual poster competition, July 2008 (with D. Hennessy).

Quinn Popcorn Foreign Trade Scholarship, Iowa State University, 2007-2008.

E.O. Heady Award for Academic Excellence in Agricultural Economics, Iowa State University, 2005-2006.

Teaching

University of Wisconsin-Madison.

- Commodity Markets (AAE 322; Undergraduate), Spring 2012-2023.
- Energy Economics (AAE/Econ 671; Graduate), Fall 2011, 2012; Spring 2014-2020.
- Machine Learning in Applied Economic Analysis (AAE 722; Graduate), Summer 2019-2021; Fall 2022-2023.
- Foundations of Agricultural Economics (AAE 641; Graduate), Spring 2022.

Hanoi University of Agriculture, Vietnam. Commodity Markets (2 weeks), December 2011.

Iowa State University. Principles of Microeconomics (Econ 101), Summer 2008.

Presentations

NBER Conference on “The Rise of Global Supply Chains”, December 2021.

The International Symposium of Quantitative Economics, Jilin University, Changchun, China, 2018, 2020-2021.

The Summer Forum of the China Economics Annual Conference, Changchun, China. July 2019.

Departmental Seminar, Department of Economics, Iowa State University, March 2019.

The International Conference of the Association of Korean Economic Studies on Korea and the World Economy, Jeju, Korea, June 2018.

Departmental Seminar, Agricultural and Consumer Economics, University of Illinois, Feb. 2017.

Iowa EPSCoR Energy Policy Seminar, December 2014.

Energy Hub Annual Fall Conference, University of Wisconsin-Madison, November 2014.

Heartland Environmental and Resource Economics Workshop, November 2014.

Applied Economics Workshop, University of Wisconsin-Madison, Fall 2012, Spring 2014, 2016.

International Conference of Agricultural Economists, August 2012.

Wisconsin Bioenergy Summit, October 2011.

Department Seminar, University of Wisconsin-Madison, March 2010.

Allied Social Science Associations (ASSA) Annual Meeting, January 2010.

Agricultural & Applied Economics Association (AAEA) Annual Meeting, July 2008-2015.

Energy/Agricultural Economics Workshop, Iowa State University, December 2008, March 2010.

Advising

Main Advisor for Ph.D.

Heesun Jang (AAE), fall 2015. Thesis title “Essays on Agricultural and Resource Economics.” Assistant Professor, Department of Economics, Jeonbuk National University, Korea.

Charng-Jiun Yu (AAE; with B. Gould), spring 2020. Thesis title “Essays on Pricing and Policy in the U.S. Dairy Industry.” Economist, Amazon, Seattle, WA.

I-Chun Chen (AAE; with P. Mitchell), spring 2021. Thesis title “Applications of Demand Analysis in U.S. Agriculture for Policy and Marketing: Crop Insurance, Russet Potatoes and Fluid Milk.” Senior Quantitative Analyst, TD Bank, Cherry Hill, NJ.

Haein Kim (Environment & Resource, Nelson Institute), spring 2022. Thesis title “Accelerating Renewable Transitions of Power Sectors: Options and Challenges.” Research Associate, Center for Sustainability and the Global Environment, University of Wisconsin-Madison.

Licheng Xu (AAE), spring 2022. “Three Essays on the Policy-Induced Effects on Household Welfare and Community Development.” Assistant Professor, Department of Economics, Beijing Normal University.

Karin Wu (AAE), expected spring 2024.

Yating Gong (AAE), expected spring 2024.

Yuhan Wang (AAE)

Main Advisor for Masters

Entong Jiu (AAE), spring 2017. Thesis title “An Empirical Analysis of Crop Insurance Demand: Evidence from Corn Insurance in the Midwest.” Consultant, Centrec Consulting Group, Champaign, IL.

Reed Wuttke (AAE), summer 2017. Thesis title “Dynamic Hedge Ratio in Agricultural and Energy Markets Through Time-Varying Copulas.” Trader, Green Plains Renewable Energy, Omaha, NE.

Yue Zhao (AAE), spring 2019. Ph.D. Iowa State University.

Committee Member for Ph.D.

Hongsheng Jie (Economics), spring 2012; Haixi Li (Economics), summer 2012; Do-il Yoo (AAE), fall 2012; Toshi Onuma (Economics), summer 2013; Pedro Hancevic (Economics), summer 2014; Dun Zhe (AAE), summer 2014; Huiming Wang (AAE), summer 2017; Shuwei Zeng (AAE), fall 2019; Yun Hang (Environment & Resource, Nelson Institute), spring 2020; Yuji Saikai (AAE), spring 2020; Adria Brooks (Electrical & Computer Engineering), summer 2020; Becca George (Economics), spring 2021; Yihan Li (Environment & Resource, Nelson Institute), spring 2022; Jiarui Zhang (AAE), spring 2022; Yeon Ju Baik (Economics), spring 2022.

Service

University Service and Committees

Academic Planning Council (CALS): 2023-2026

Personnel committee (AAE): 2011-2012, 2014-2015

Graduate committee (AAE): 2015-2016, 2017-2020, 2023-2024

Undergraduate committee (AAE; Chair): 2020-2023

Faculty senator/alternate: 2013-2014, 2015-2016, 2017-2018

IT committee (AAE): 2013-2014

Renk council (AAE): Spring 2015

Energy Analysis and Policy (EAP) faculty committee (Nelson Institute): 2011-2020.

Service in Profession

Reviewer, USDA-AFRI Foundation Program-Agriculture Economics and Rural Communities, 2015, 2016; Netherlands Organisation for Scientific Research 2019; The Agricultural and Applied Economics Association Annual Meetings, 2012-2019.

Refereeing for *Agricultural Economics*, *Agricultural Systems*, *American Journal of Agricultural Economics*, *Applied Economics*, *Applied Economic Perspectives and Policy*, *Australian Journal of Agricultural and Resource Economics*, *BioEnergy Research*, *Canadian Journal of Agricultural Economics*, *Economics Bulletin*, *Emerging Markets Finance and Trade*, *Energy Economics*, *Energy Journal*, *Energy Policy*, *Energy Sources (Part B: Economics, Planning, and Policy)*, *Environment, Development and Sustainability*, *Environmental Science & Technology*, *European Review of Agricultural Economics*, *Food Policy*, *Frontiers in Plant Science*, *International Journal of Production Economics*, *International Journal of Sustainable Transportation*, *International Review of Finance*, *International Review of Financial Analysis*, *Journal of Agricultural and Applied*

Economics, Journal of Agricultural and Applied Economics Association, Journal of Agricultural and Resource Economics, Journal of Agricultural Economics, Journal of Banking and Finance, Journal of Commodity Markets, Journal of Futures Markets, Journal of Industrial Ecology, Land Economics, Nature Communications, Resource Policy, North American Journal of Economics and Finance, Review of Behavioral Finance, Review of Financial Economics, Water Resources and Economics.