

EDUCATION

Texas A&M University

College Station, TX

Doctorate of Philosophy, Agricultural & Natural Resource Economics

December 2017

Advisors: Henry L. Bryant & John B. Penson, Jr.

- Dissertation: A Good-Deal Bound & Asymmetric Income Response Approach to Valuing Cropland; Analyzing the Relationship between Access to Liquidity & the Stability of the Agriculture and Natural Resource Business Sector
- Focuses: Finance, Econometrics, Investment in Natural Resources & Agriculture, Forecasting

Loyola University Chicago

Chicago, IL

Bachelor of Business Administration, Finance and Economics

May 2012

Magna cum Laude (GPA 3.8)

WORK EXPERIENCE

The Real Estate Center at Texas A&M, Assistant Research Scientist January 2018 – Present

- Develop economic and real estate related research for Texas land markets. Applying econometric methods and techniques to perform data analysis and statistical modeling. Forecast trends in Texas land markets.
- Communicate research findings through written reports, quarterly articles in the Tierra Grande Journal and other publications. Present findings to relevant boards and constituents largely within the state of Texas and at the Center's conferences.

Real Property Analytics, Real Estate Consultant

June 2015- Present

- Develop damage and rebuttal opinions in substantial class action and mass tort litigation involving thousands of properties.
- Methodologies used for analysis of real-property impacted by environmental contamination include multiple regression, paired sales analysis, and case study analysis.
- Rebuttal responsibilities include critiquing opposing experts' methodologies and analysis of results given the expert's data and statistical software code.
- Work with counsel and other experts to convey statistical results in an intuitive manner, addressing the meaning and implications of statistical results for use in trials and depositions.

The Wonderful Company, Summer Strategy Consultant

June 2017- August 2017

- Consult the business units' presidents and senior management directly. Structure and implement critical strategic, operational and organizational initiatives to drive optimization in the business units for high-impact results.
- Managed expansion opportunities for the largest pomegranate processor in the United States. Analyzed growth through acquisition and a contract supplier program. Responsibilities focused predominantly on the due diligence of post-acquisition logistics for the company. Developed go-to-market strategies and post purchase profitability analysis. Also, addressed long-term production planning to expand capacity for the business' most profitable products.

Agricultural and Food Policy Center, *Research Assistant*
2017

June 2015- May

- Primary responsibility is the development of a farm and crop land valuation tool using a real option, lattice framework. The model values land by allowing the income to land and discount rate to evolve according to varying risky states of the world. The outcome will provide hedging opportunities for the long-term position of owning farmland using short-term positions in the income that is derived from the land.
- Complimentary research performed on the relationship between credit and farm sector stability addressing the various boom-and-bust cycles in the agriculture sector. Measuring the marginal effects of various factors on the stability of a market and forecasting the effect of future changes in the macro-agricultural and natural resource business sector.
- Experience using Holt-Winters, structural, auto-regressive integrated moving average and vector auto-regression forecast modeling and model goodness of fit analysis.
- Python, Stata, EViews and Simetar used to execute the modeling and forecasting.

Federal Reserve Bank of Chicago, *Consultant*

August 2016

- Worked directly with the Regional Business Economist developing the pattern of events leading up to several of the past boom-and-bust cycles of the agricultural business sector. Primarily, debt and capital expenditures were considered as leading factors of downturns in the agricultural economy. Ordinary least square and seemingly unrelated regression models modeled the structural relationship.
- Stata was primarily used for the statistical analysis.

Texas A&M University, *Lecturer*

January 2013-May 2015

- Following one semester of teaching assistant responsibilities was appointed an instructor position. Have been the primary instructor of two courses.
- Developed coursework, tests and lesson plans for a 300-level finance course focusing on financial management and investment tools. Instructed 113 students and managed a teaching assistant.
- Taught a 200-level math and statistics intensive course for 200 students. Lectured and directed labs four times a week which involved both instructing and explaining topics as well as managing exercises for students to execute the knowledge gained in the lectures. Managed a team of two teaching assistants and two lab assistants.
- Creativity in communication was necessary in both courses due to the various mastery levels and backgrounds of the students.

AgriLogic Insurance Services, *Assistant Research Analyst*

June 2013-July 2013

- Managed the development of a new commodity insurance products as hedging alternatives for agriculture producers.
- Analyzed the investment effectiveness and feasibility of other new and existing commodity insurance products.
- Estimate expected loss amounts using stress tests of varying risk inputs.

Texas A&M University, Teaching Assistant

August 2012-May 2015

- Assistantship positions ranged from senior level, capstone courses in corporate finance and pricing analysis to fundamentals in economics and finance. Responsibilities ranged from the management of grading to development and execution of review sessions.

PUBLICATIONS & PRESENTATIONS

Hardin, Erin M. (2017) “Common Ground; Comparing Midwest and Texas Cropland,” *Tierra Grande*; 24

Paper Presentation at the 2017 Southern Agricultural and Applied Economics Associations Annual Conference

- Erin M Hardin and Justin R. Benavidez; “Forecasting Rent Prices in a More Uncertain Future”

Paper Presentation at the 2017 Southern Agricultural and Applied Economics Associations Annual Conference

- Erin M Hardin and John B. Penson; “Ability to Pay and Agriculture Sector Stability”

Paper Presentation at the 2016 Southern Agricultural and Applied Economics Associations Annual Conference

- Erin M Hardin and Henry L. Bryant; “A Real Options Approach to Valuing and Hedging Cropland Obligations”

Paper Presentation at the 2015 Agriculture and Applied Economics Association Annual Conference

- Erin M. Hardin, Henry L. Bryant, and John B. Penson; “Farmland Valuation: The Return of a Bubble and the Possibility for Hedging”

Poster Presentation at the 2013 Southern Agricultural Economic Association Annual Conference

- Erin M. Hardin, J. Mark Welch, John R. C. Robinson; “Case Studies of Crop Market Forward Curves”

Paper Presentation at the 2016 Southern Agricultural Economic Association Annual Conference

- Chengcheng Fei, Chen Gao and Erin M Hardin, “Understanding the Relationship between Price and Volume: A Demand Analysis Framework Using Exchange Traded Funds”

LEADERSHIP EXPERIENCE

Graduate Advisory Committee, *Student Representative* 2015-Present

- Appointed by professors and students to represent the students' perspectives on a committee of Professors and department officials who decide structural changes and additions to the graduate department and degree. Given equal vote when deciding issues and changes.

Symposium for Agricultural and Applied Economics Research, *Chair* 2014- 2016

- Initiated and planned a conference for Texas A&M students, former students, professors and outside speakers to present research and industry insight through oral and poster presentations.
- Student presenters compete for outstanding oral and poster presentation awards. Presenters are assessed on the quality of research presented and presentation technique by a committee of professors.

Graduate Student Association, *President* 2014- 2016

- Inaugurated and managed networking events for graduate students and faculty. Events emphasize the necessity of growing community in the department to encourage collaboration and research opportunities among students and professors.
- Lead a student initiative to overhaul the graduate department's website. Goals were to make it a better recruitment tool for prospective students, a more efficient place for students to find information and more attractive to possible employers of graduating students.
- Developed a successful tutoring service for graduate students to assist undergraduates.
- Lead an initiative to establish a high functioning and efficient learning computer lab for graduate students to perform research and analysis and to study.

Seminar Series, *Chair* 2014- 2016

- Primary contact and recruiter of prominent professors, industry leaders and former students for educational presentations and networking events.
- The weekly presentations are on leading research topics, research methodologies, industry fields, and applied agricultural and natural resource topics.

SKILLS, ACTIVITIES & INTERESTS

Technical Skills: Python, Stata, EViews, Simetar, MS Excel, PowerPoint, and Word

Activities and Organizations: American Legion Auxiliary, fly fishing, waterfowl hunting, cooking, gardening and hiking.