# Mario A. Ortez

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#### **EDUCATION:**

#### **Doctor of Philosophy in Agricultural Economics**

Purdue University, West Lafayette, Indiana, U.S., Fall 2022 **Thesis title:** *Essays on Cattle-Derived Food Products: Demand, Pricing, and Investigation into Linkages Between Online Media and Future Prices.* **Advisor:** Prof. Nicole Widmar

#### Master of Science in Agricultural Economics

Kansas State University, Manhattan, Kansas, U.S., Spring 2015 **Thesis title:** *Forecasting Volatility in Agricultural Commodities Markets Considering Market Structural Breaks.* **Advisor:** Prof. Glynn Tonsor

#### **Bachelor of Science in Agribusiness Administration**

Panamerican Agricultural School Zamorano, Valle del Yeguare, Honduras, December 2011 **Thesis title:** *Methodological Guide of Integrated Planification of Agricultural Products Exports. The Case of Quetzali Watermelon Exports from Panama to Europe.* **Advisor:** Prof. Ernesto Gallo and Prof. Marco Vega

#### **ACADEMIC EXPERIENCE:**

July 2024-Present Collegiate Assistant Professor of Agribusiness & Entrepreneurship Virginia Tech, Department of Agricultural and Applied

Areas of Expertise: Agribusiness, Finance, Price Analysis, Consumer Preferences, Farm Management

I provide leadership for the premier undergraduate and graduate agribusiness analytics and entrepreneurship program here at Virginia Tech. Specifically, I am working towards developing and delivering a curriculum that integrates data-driven decision making into traditional agribusiness courses as well as designing experiential learning opportunities for our students.

#### INDUSTRY AND ENTREPRENEURSHIP EXPERIENCE:

June 2015 - Dec 2023

Co-investor in Specialty Coffee Production, Nueva Segovia, Nicaragua.

- Purchased and co-managed two specialty coffee farms in Northern Nicaragua. Enterprise strategic decisions included annual maintenance and expansion capital expenditures, price and sales negotiations, and strategic production and processing practices.
- Cultivated a local and international brand and customer base for the coffee including exports to United States and Saudi Arabia and crafted our product offering to meet diverse and evolving customer needs.
- Negotiated and executed the sale of the farm in late 2023 due to the increasingly vexing political situation in Nicaragua, which has accelerated the

considerable immigration trend out of the country, causing material labor shortages.

August 2022 - July 2024 Investment Associate: Teays River Investments - Zionsville, Indiana.

- As an Investment Associate in the multi-billion dollar firm, I gained experience in sourcing, buying, and operating food and agricultural businesses in the U.S. and overseas. The Investment Firm connects private capital (retirement funds, pension funds, and other sources of private capital) with proven food and agricultural business with the aim of improving efficiencies in the supply chain and create consumer value, in doing so, maximizing value for its investors. My responsibilities included:
  - Monitoring operational and financial results, leading the annual process of modeling and forecasting long-term business plans, leading the report creating and communication efforts to investors and other stakeholders.
  - Collaborating with the executive team of an specific investments towards improving their analytical skills and strategic planning pertaining to operational and financial performance as they continue their transition from a family-owned traditional farming operation to a large-scale, operation controlled by institutional capital, which comes with higher demands for timely financial and operational reporting.
  - Analyzing, condensing, and synthesizing field and plant revenue, cost, and margin information for the different crops and in the different geographies across the globe, as well as understanding sources of variability and tracking them.
  - Working closely and collaboratively with regional management teams to analyze and provide guidance on their business reporting, forecasting, and long-term planning.
  - Analyzing the impact on the value of the investments of the wars, sanctions and counter sanctions, country capital controls and other specific situations in different regions of the world.
  - Analyzing additional investment opportunities either by increasing ownership and achieving controlling level or expanding services offered in new countries.

May 2021 – Aug 2021 Graduate Investment Intern: Teay's River Investments - Zionsville, Indiana.

- Performed industry analysis including supply, demand, trade, and industry players in different Agricultural industries.
- Assisted the team with financial due diligence in asset acquisitions. Specific tasks include the historical analysis of sales, pricing, suppliers, balance sheets, and other financials.
- Assisted the team with the preparation of an investment recommendation for Teays's Board for an asset acquisition.

Dec 2017 - June 2019

- Beef Pricing Manager: JBS USA Greeley, Colorado.
- The Pricing team serves as the engine for developing and executing the sales and margin goals for the Beef division, which is on the largest provider of fresh beef in the U.S. and abroad (Production capacity is 28,000 heads of cattle per day; net sales of over US\$ 22 billion and Adjusted EBITDA of almost \$2 Billion in 2019 as reference).

	<ul> <li>The team is in charge of establishing and adapting prices to the rapidly-changing market conditions and working with the sales managers and the sales team more broadly to lead and oversee the execution of the sales and margin goals.</li> <li>The team collaborates closely with the procurement of cattle, logistics and customer service teams to ensure the proper supply of beef is available and timely delivered to customers.</li> <li>I was responsible for the revenue maximization of U.S. based Fed Beef business— Briskets, Navels and Flank primal— as well as the coordination of the contracted formula business for all primal in the beef carcass. Specific responsibilities included pricing in the spot market of boxed beef (deliveries within 21 days from negotiation). Development and negotiation of new formulated contracts (usually annual negotiations where volume and frequency of delivery are determined, but pricing is dictated by market prices at the time of delivery) for blue-chip U.S. based retailers, foodservice and formula business to ensure revenue competitiveness in domestic and international markets.</li> <li>Additionally, I spoke to plant audiences in different U.S. locations about the overall commercial process of beef sales and exports. This was part of the company's</li> </ul>
	<ul> <li>Beef University" initiative which had the objective of strengthening the company culture amongst plant employees.</li> <li>Mentored an intern for one summer for JBS and additionally trained and mentored a new hire for approximately six months.</li> </ul>
April 2016 – Dec 2017	<ul> <li>Beef Pricing Analyst: JBS USA - Greeley, Colorado.</li> <li>My responsibilities encompassed data handling, analysis and reporting related to supply and demand of boxed beef, as well as pushing the sales team to keep the boxed beef inventory fresh.</li> <li>Collaborated with the Information Technology (IT) department, external consultants, and business analytics teams, as the company transitioned from Microsoft Excel to a web-based data visualization interface.</li> </ul>
June 2015 – April 2016	<ul> <li><i>Trainee</i>: JBS USA - Greeley, Colorado.</li> <li>Acquired base experience in the cattle feeding industry, cattle procurement, beef packing house operations, beef pricing and beef exports.</li> <li>Attended quarterly workshops with top industry leaders in the company pertaining to successfully managing and leading a team.</li> </ul>
May 2014 – Aug 2014	<ul> <li><i>Graduate Intern</i>: The Chicago Mercantile Exchange (CME) - Chicago, Illinois.</li> <li>Collaborated closely with the Managing Director of Agricultural Research to determine the depth of cash volumes traded of several commodities in a market overseas to determine the feasibility and desirability of futures contracts for said commodities as a risk management tool.</li> <li>Served as the CME Group's Campus Ambassador to Kansas State University.</li> </ul>
Jan 2012 – Jul 2012	<ul> <li><i>Trainee</i>: INVESA S.A – León, Nicaragua.</li> <li>Gained operational experience in the production of peanuts, sugar cane and cotton, including irrigation systems, pest control, machinery and logistic systems.</li> </ul>
March – April 2011	<ul> <li><i>Trainee</i>: Group of Agro-Exporters Non-Traditional of Panama – Panama.</li> <li>Worked with packing plant logistics, interacted with customers and suppliers.</li> <li>Gained experience with traffic and documentation for fresh fruits exports.</li> </ul>

Jan 2011 – Feb 2011

*Project Manager*: Nahuel Foundation – Quito, Ecuador.Planned, organized, executed, and controlled rural development initiatives for horticultural production.

## ACADEMIC EXPERIENCE

June 2019 – July 2022	<ul> <li><i>Graduate Research Assistant</i>: Purdue University - West Lafayette, Indiana.</li> <li>Research Assistant to Dr. Nicole Widmar.</li> </ul>
	• Assisted with experimental design, survey design, and data collection in Widmar's research team on topics related to consumer buying behavior, animal
	<ul> <li>welfare, technology adoption, and veterinary services.</li> <li>Led survey data collection, used SAS for experimental design, Qualtrics for survey design, Kantar (a large opt-in panel database) to elicit responses to the survey. Lastly, Excel and Stata were used for the analysis of the data obtained.</li> <li>Compiled and analyzed online media-derived data using Netbase, an AI-Powered Consumer and Market Intelligence provider, and future/cash prices of meat and milk to investigate causality.</li> <li>Assisted with the survey design, experimental design, and data collection of a Pakistan-based research project investigating consumer willingness to pay for chicken treated with phages as an alternative to antibiotics.</li> </ul>
	• During my time with Prof. Widmar's research team I had the privilege to mentor and train a newer team member on survey development and data curation.
Aug 2013 – May 2015	<ul> <li>Graduate Research Assistant Kansas State University - Manhattan, Kansas.</li> <li>Research Assistant to Dr. Glynn Tonsor.</li> <li>Performed calculation and analysis of implied volatility, historical volatility, and realized volatility from futures prices of corn, soybeans, wheat, live cattle, feeder cattle, and lean hogs.</li> <li>Performed statistical analysis to identify market structural changes in the mentioned markets. Softwares: Stata and SAS.</li> <li>Assisted the Department with the paperwork, arrival, and mentoring of several interns from Zamorano University.</li> </ul>
Jul 2012 – Jul 2013	<ul> <li>Visiting Scholar: The Ohio State University – Wooster, Ohio.</li> <li>Performed research on the production of healthy and safe vegetables using integrated pest management strategies.</li> <li>Strengthened my knowledge of vegetable production systems and data analysis skills through SAS package.</li> </ul>
Jan 2008 – Dec 2011	<ul> <li>Student Worker: Learn by doing program at Zamorano University – Honduras.</li> <li>Acquired hands-on experience in operations within agriculture, food processing and agribusiness, all of those applied to a wide range of grains, fruits, vegetables, and livestock. <ul> <li>Agriculture: seed production, farm machinery, irrigation systems, biotechnology, and organic agriculture. Experience in animal sciences such as dairy cattle, beef cattle, swine, apiculture, aquaculture, and poultry.</li> <li>Food Processing: processing meat, milk, honeybees, vegetables, fruits, and grains.</li> <li>Environment: learned forest establishment and management, sawmills, environmental management and monitoring, geographic information</li> </ul> </li> </ul>

	<ul> <li>systems, ecology, water conservation, and water quality.</li> <li>Business Management: experienced administration of the full value chain of agricultural products.</li> </ul>
March – April 2011	Trainee: Group of Non-Traditional Agro-Exporters of Panama – Panama
	• Worked with packing plant logistics and interacted with customers and suppliers. Gained experience with traffic and documentation for fresh fruit exports.
Jan 2011 – Feb 2011	<ul> <li><i>Project Manager</i>: Nahuel Foundation – Quito, Ecuador</li> <li>Planned, organized, executed, and controlled rural development initiatives for horticultural production.</li> </ul>
TEACHING EXPERI	ENCE
March 2024	<ul><li><i>Guest Lecturer</i>. Purdue University. Invited by: Zachary Neuhofer</li><li>Introduction to Data Analytics AGEC 20201.</li></ul>
	• I shared about modern data analytics tools and how they are used in food and agricultural industries.
April 2023	<ul><li><i>Guest Lecturer</i>. Western Illinois University. Invited by: Prof. Graciela Andrango</li><li>Agribusiness Management AGEC 349.</li></ul>
	• I shared with the students my wide array of experiences in food and agricultural companies as well as in academia. The objective was to give students a glimpse of different ways their future career paths could take.
April 2023	<ul> <li><i>Guest Lecturer</i>. West Virginia University. Invited by: Prof. Ana Claudia Sant'Anna</li> <li>Agricultural Finance ARE 461.</li> <li>I shared with the students my experiences in food and agricultural companies as well as in academia. The objective was to give students an overview of different opportunities for their future career paths.</li> </ul>
Spring 2022	<ul> <li>Guest Lecturer. Purdue University. Invited by College of Veterinary Medicine</li> <li>The lecture was centered around cattle and dairy economics as well as other related topics. Specific content included:         <ul> <li>My research program in the field</li> <li>Economic foundations</li> <li>Current events shaping agricultural markets</li> <li>Farm decision making</li> </ul> </li> </ul>
Fall 2021	<ul> <li><i>Guest Lecturer</i>. Purdue University. Invited by: Prof. Jayson Lusk</li> <li>AGEC 296 – Careers in Agribusiness and Ag Econ</li> <li>I shared with the students my experiences purchasing and renovating a specialty coffee farm as well as opening markets for our coffee.</li> <li>I spoke to the students about the variety of roles which I have held in industry and academia in the U.S. and abroad.</li> </ul>
Jan 2020 – May 2022	<ul> <li>Graduate Teaching Assistant: Purdue University - West Lafayette, Indiana</li> <li>Prof. Nicole Widmar's AGEC 310 - Farm Management. Spring 2020, 2021 &amp; 2022</li> </ul>

	<ul> <li>Guest Lecture: International Farm Management</li> <li>Addressed coffee enterprise differences at the international level, conventional vs. differentiated production and profitability.</li> <li>Developed a homework assignment focused on data analytics tools to assist in strategic decision-making in the meat industry.</li> <li>Assisted with grading along with coordinating and working alongside undergraduate students who were employed to assist in this class.</li> </ul>
Jan 2020 – May 202	<ol> <li>Graduate Teaching Assistant: Purdue University's Agricultural Economics and Indiana University's Kelly School of Business. Online MS-MBA dual degree.</li> <li>Teaching Assistant to Prof. Allan Gray's AGEC 686 - Agribusiness Strategy. Spring 2021.         <ul> <li>This class was case study-based, and I had the privilege to participate, facilitate, provide feedback, and grade the development of assignments from each case study.</li> </ul> </li> <li>Teaching Assistant to Prof. Roman Keeney's AGEC 685 - Quantitative Managerial Decision Making. Fall 2020 &amp; 2021         <ul> <li>Worked on the development of class material, assisted students in homework assignments, and assisted with overall class grading.</li> <li>Guest Lecture: Data analytics and availability and their role in research. The lecture gave the industry professional students a glimpse of what higher education research, including data sources and analytical methods, can do for industry practitioners. I used my own Doctoral research to illustrate.</li> </ul></li></ol>
Sept 2017	<ul> <li>Hosted a JBS USA two-day workshop on Risk Management and Education</li> <li>The workshop was for K-State's Center for Risk Management, Education, and Research (CRMER), which I had been a member of while at K-State.</li> <li>I initiated conversations with JBS executives on the idea of offering this opportunity to K-State students and served as liaison to make the visit happen.</li> <li>The workshop included visiting one of the largest feedlots in the U.S. (Five Rivers Cattle, at the time owned by JBS, but spun off since), and seminars by JBS's Head of Risk Management, Head of Beef Pricing, and Fed Beef Chief Financial Officer.</li> </ul>
2016 – 2019	<ul> <li>JBS USA Teaching Opportunities.</li> <li>During my tenure at JBS, I was selected to develop and present seminars to plant employees from the Fed Beef Plants in Greeley, Colorado, and Hyrum, Utah.</li> <li>The seminars were in the context of "Beef University", which was a JBS initiative to provide outstanding plant employees with information on an all-encompassing overview of the beef plant in the beef industry so that they can be better leaders in their work environments.</li> <li>My seminars were centered around the different pricing structures utilized to sell beef, the composition of the customer base (biggest customers and their individual preferences), customer types (retail, food service, distributors), and brand value amongst other topics.</li> <li>Plant employees would leave the seminars with a better understanding of the "corporate" efforts to increase product quality, consistency, and timeliness of delivery. All this through better understanding of the markets.</li> </ul>

2010 – 2011Teaching Assistant: Zamorano University, Honduras.<br/>Courses: Macroeconomics, Finance, and Crop Protection.

• I was selected by the titular Professor in each course to be a part of their team of Teaching Assistants and assist with course structure, lecture development and grading.

### PEER-REVIEWS ACADEMIC PUBLICATIONS

**Ortez, M,** Taylor Thompson, Valerie Kilders, and Nicole Olynk Widmar (2024). Quantifying Demand and Willingness to Pay for Local Food Production. *Q Open*, Volume 4, Issue 1. (LINK)

**Ortez, M,** Tor N. Tolhurst, Nathan M. Thompson, Nicole Olynk Widmar (2023). Not all Beef-Cut Price Shocks are Alike: Disentangling Supply and Demand Shocks in the US Beef Market. *Journal of the Agricultural and Applied Economics Association*. 1–16 (LINK)

**Ortez, M,** Nicole Olynk Widmar, Mindy Lyn Mallory, Christopher Allen Wolf, Courtney Bir (2022). Online media in dairy markets: a US dairy futures market study. *Agricultural Finance Review*. Vol. 83 No. 1, pp. 168-185. (LINK)

**Ortez, M,** Nicole Olynk Widmar, Nathan M. Thompson, Yuan H. Brad Kim (2022). Valuation of dry and wet aged beef by U.S. consumers. *QOpen*. Volume 2, Issue 1. (LINK)

**Ortez, M,** Nicole Olynk Widmar, Nathan M. Thompson, Yuan H. Brad Kim (2022). What do U.S. consumers care about regarding beef and its supply chain?. *Meat Science*. Volume 187. (LINK)

**Ortez, M,** Nathan M. Thompson, Nicole Olynk Widmar (2021). Filet Mignon: It's What's for Dinner? COVID-19 Impacts on the Relative Wholesale Prices of beef cuts. *Choices*. 4<sup>th</sup> Quarter 2021. (LINK)

**Ortez, M**, Courtney Bir, Nicole Olynk Widmar, Jonathan Townsend (2021). Dairy Product Purchasing in Households with and Without Children. *JDS Communications*. 2(1), 7-12. (LINK)

*Highlight:* this publication was deemed of broad relevance by the American Dairy Science Association and on January 15, 2021 a Press release (LINK) was dispatched from their desk about our findings which generated a variety of media attention both in the U.S. and overseas including on Hoard's Dairyman (LINK), Oklahoma State University News (LINK), News Medical Life Sciences, (LINK), Food Technology & Manufacturing (LINK), Dairy Industries International (LINK), Med India (LINK) amongst others.

**Ortez, M**., C. Bir, N.O. Widmar, C.A. Wolf (2020). Perceptions of Prominent Animal Welfare and Veterinary Care Organizations in the United States. *Animals*. 10(3), 472. (LINK)

Bir, C., **M. Ortez**, N.O Widmar, C.A. Wolf, C. Hansen and F.B. Ouedraogo. Familiarity and Use of Veterinary Services by US Resident Dog and Cat Owners. *Animals* .10 (3), 483. (LINK)

**Ortez, M**. and G.T. Tonsor (2016). Structural Change and Forecasting of Agricultural Commodity Realized Volatilities. *International Journal of Business and Applied Social Science*. 2:1-18. (LINK)

## **ARTICLES IN PROGRESS**

Jung, J., Laura Barrett, Nicole Olynk Widmar and **Mario Ortez**. Public Perceptions of Universities as Public Entities during the COVID-19 Pandemic Era. *Submitted to Higher Education Quarterly*.

## OTHER PUBLICATIONS AND ENGAGEMENT (SELECTED)

**Ortez, M**. (2022). Consumers' Knowledge and Willingness-to-Pay for Wet-Aged and Dry-Aged Beef. *Letter 15*. Purdue's Consumer Corner. (LINK)

Ortez, M. (2022). Food Production and Population Growth: A Cautionary Tale. PAER-2022-17. Purdue Agricultural Economics Report (LINK)

**Ortez, M.** (2021). Divergent Market Movements on Varying Beef Cuts. Letter 38. Purdue's Consumer Corner. (LINK)

**Ortez, M.** (2021). A Gentle Critique of Agricultural Supply Theory. *PAER-2021-5*. Purdue Agricultural Economics Report (LINK)

**Ortez, M.**, Nguyen C., & Neuhofer, Z. (2021). Sustainability, productivity, and market access of smallholder sugarcane farmers: The Case of Central America. *PAER-2021-7*. Purdue Agricultural Economics Report (LINK) **Ortez, M**. (2020). In Favor of Differentiation. *Letter 14*. Purdue's Consumer Corner. (LINK) **Ortez, M**. (2020). Thoughts on Value, Cost and Price. *Letter 26*. Purdue's Consumer Corner. (LINK)

# EDITORSHIP AND LEADERSHIP ROLES (SELECTED)

- *Lead Editor*. Purdue Agricultural Economics Report-Graduate Student Research Issue (2022). (LINK) *Panelist at the 2022 Ag Council's Spring Leadership Retreat*. Purdue Agricultural Council. Spring 2022
- Agricultural Economics Senator to the Purdue Graduate Student Government. 2020-2021 Term.
- Guest Editor. Purdue Agricultural Economics Report-Graduate Student Research Issue (2021). (LINK)
- *Guest Expert*. The Grower and the Economist Podcast (2020). Why Small Producers Should Pick Specialty Production. Available Online <u>here</u>.
- President of the organizing committee of the 4<sup>th</sup> Regional Congress of Economics Business and Administration, Zamorano University, Honduras, 2010.

#### AWARDS AND HONORS (SELECTED)

- 2019 Purdue's Ross Fellowship for academic excellence
- 2014 Ag Commodity Research & Product Development internship at CME Group, 2014.
- CME Group Campus Ambassador to Kansas State University, 2014.
- Graduate Research Assistantship, Kansas State University 2013.
- Student Fellow, Center for Risk Management Education and Research, Kansas State University, 2013. (LINK). I journaled about some of the industry engagements and activities that the Center facilitates to its fellows in the Center's blog page:
  - Applications for the Food Security Challenge. Co-written with Shelby Hill (June 2014) (LINK)
  - Tales from Global Grain North America 2014 (April 2014) (LINK)
  - Student Fellows Met the CRMER's Advisory Council (April 2014) (LINK)
  - Is risk good or bad? (April 2014) (LINK)
  - CRMER 2014-2015 student fellows visit MetLife Agricultural Investments Central Regional Office (February 2014) (LINK)
  - Co-author "Vegetable Disease Management Report", The Ohio State University, 2012. (LINK)
- Gamma Sigma Delta Honor Society of Agriculture member, 2011.

• Scholarship winner for undergraduate studies, Zamorano 2008-2011.

#### COURSES AND SEMINARS ATTENDED (SELECTED):

- Introduction to Corporate Finance (MGMT 413) from Purdue's Krannet School of Management (Renamed Mitchell E. Daniels, Jr. School of Business since). Spring 2022
- Dairy Markets and Policy (AEM 3040) From Cornell University. Spring 2020
- Multi-State Dairy Quality Conference. Jointly Hosted by Indiana, Kentucky, Michigan, Ohio, November 2020
- Agricultural Policy and Outlook Conference. The Ohio State University, Online, November 2020
- 2020 Consumer Expenditure Surveys Microdata Users' Workshop. U.S. Bureau of Labor Statistics, July, 2020.
- IFAMA Agribusiness and Food World Forum and Symposium, South Africa, 2014.
- Global Grain North America, Chicago, IL, 2014.
- Tomato Disease Workshop, The America Phyto pathological Society. The Ohio State University, Wooster, OH, 2012.
- Pest and Disease Diagnostic for International Trade and Food Security, a short course. The Ohio State University, Wooster, OH, 2012.
- Americas Food and Beverage Show, Miami, FL, 2011.
- Expositor at EXPOCOMER 2011 Business. Panama City, 2011.

## LANGUAGES

Spanish: Native proficiency English: Bilingual proficiency