

Research Statement

My research in international macroeconomics asks how external shocks are transmitted to emerging economies and why countries exposed to the same global disturbance can experience very different outcomes¹. I study these questions by combining empirical evidence with structural models, with a particular focus on uncertainty, trade and financial linkages, and emerging-market vulnerability. My empirical work draws on detailed monthly macroeconomic, financial, and bilateral trade data and uses Structural Vector Autoregressions (SVARs), Panel Vector Autoregressions (PVARs), local projections, and shift-share designs. I complement this evidence with non-linear Dynamic Stochastic General Equilibrium (DSGE) models to study the mechanisms underlying these responses. Together, my projects examine not only whether external shocks matter, but also which economic structures and policy choices shape their transmission.

Job Market Paper: U.S. Financial Uncertainty and Emerging-Market Vulnerability: Evidence from SVAR and Two-Country DSGE Models

The transmission of global financial shocks to emerging economies is a central question in international macroeconomics. A large literature documents how changes in U.S. financial conditions and investor risk appetite generate synchronized movements in capital flows, asset prices, and credit conditions across countries (Rey, 2015; Miranda-Agrippino and Rey, 2020). Yet much of this literature focuses on changes in the level of financial conditions rather than uncertainty about their future evolution. My job market paper asks: *how does U.S. financial uncertainty propagate to an emerging economy, and which structural characteristics make that economy more or less vulnerable to the shock?*

I focus on Mexico because it is deeply integrated with the United States through trade, production networks, and financial markets while retaining important emerging-market features, including sovereign risk and sensitivity to external financing conditions. I first estimate an SVAR using monthly U.S.-Mexico data to trace the responses of equity prices, the exchange rate, trade, and output to U.S. financial uncertainty. Mexico's manufacturing sector is deeply embedded in cross-border supply chains through the maquiladora industry², making it a particularly useful setting for studying the interaction between financial and trade transmission. The empirical responses provide benchmarks for the structural analysis.

I then develop a non-linear two-country New Keynesian DSGE model calibrated to U.S.-Mexico data. The model incorporates a second-moment U.S. financial uncertainty shock, an endogenous debt-elastic sovereign risk premium, nominal rigidities, international trade linkages, and investment adjustment costs³. Because uncertainty operates through the second moment of the financial shock, I solve the model using a third-order perturbation approximation. The model provides a structural interpretation of how foreign financial uncertainty is transmitted through sovereign risk, financing

¹The literature on uncertainty shocks documents substantial effects on investment, output, employment, and financial markets (Bloom, 2009; Baker et al., 2016).

²Maquiladoras are manufacturing plants in Mexico that import intermediate inputs, often from the United States, for assembly or processing and then re-export the finished goods, typically back to the U.S. market.

³The debt-elastic risk-premium specification builds on Schmitt-Grohé and Uribe (2003).

conditions, exchange rates, and domestic activity.

I use structural counterfactuals to identify the characteristics that shape emerging-market vulnerability. Greater reliance on imported consumption and investment goods strengthens exchange-rate pass-through and imported inflation, inducing a stronger monetary response and a larger contraction in activity. I also vary the debt elasticity of the sovereign risk premium and its direct sensitivity to U.S. financial uncertainty. These exercises show how sovereign-risk parameters affect the relative adjustment of external borrowing, exchange rates, trade, and domestic absorption. Greater price flexibility substantially reduces the output response, highlighting the role of nominal rigidities in transmitting foreign uncertainty into real activity.

Finally, I examine alternative monetary-policy rules. A stronger response to inflation limits inflationary pressures and exchange-rate pass-through but produces tighter financial conditions and a larger decline in real activity. Greater emphasis on output stabilization provides some support to real activity while placing additional pressure on financial markets. These counterfactuals reveal a policy trade-off for emerging-market central banks facing external financial disturbances.

The paper connects empirical evidence on international financial uncertainty with a structural framework that explains why the same external disturbance can generate different outcomes across emerging economies. Rather than treating exposure to global financial uncertainty as uniform, the analysis shows how trade exposure, sovereign risk, nominal rigidities, and monetary policy shape both the magnitude and composition of domestic adjustment.

Working Papers

U.S. Policy and Financial Shocks in Latin America: Country-Level Evidence.

Do different forms of U.S. uncertainty propagate through Latin America in the same way? I examine this question using monthly data from 1994 to 2023 for Mexico, Colombia, Brazil, Argentina, and Chile. I estimate country-specific SVARs tracing the responses of financial markets, exchange rates, prices, bilateral trade, and industrial production to U.S. economic policy uncertainty and financial uncertainty⁴.

Both shocks are followed by declines in financial markets and real activity, although the magnitude and persistence of the responses vary across countries. Financial uncertainty generally produces larger and more persistent responses than economic policy uncertainty. Mexico and Colombia exhibit relatively large output responses, whereas Argentina and Brazil experience larger contractions in bilateral trade with the United States. Chile displays comparatively smaller output effects but a distinct increase in inflation and interest rates following financial uncertainty.

I further examine these cross-country patterns in relation to countries' trade relationships with the United States. Mexico, Colombia, and Chile have relatively stronger and more institutionalized U.S. trade ties, while Argentina and Brazil are more oriented toward Mercosur and other major trading partners. The comparison shows different patterns of adjustment across these economies:

⁴Economic policy uncertainty follows [Baker et al. \(2016\)](#), while financial uncertainty follows [Ludvigson et al. \(2021\)](#).

countries with stronger U.S. trade ties exhibit relatively larger responses along some real and financial margins, while the Mercosur economies experience larger contractions in bilateral U.S. trade. Overall, the results show that U.S. uncertainty is not transmitted uniformly across Latin America and that countries differ in both the magnitude and composition of their adjustment.

Common Shocks, Unequal Responses: Shift-Share PVAR Evidence from Latin America and Asia.

Why do economies facing the same global shock respond so differently? I study this question across five Latin American economies: Argentina, Brazil, Chile, Colombia, and Mexico; and five Asian economies: India, Indonesia, Malaysia, the Philippines, and Thailand. The two regions provide a useful comparison because they differ in trade structure, financial exposure, commodity dependence, and monetary-policy responses to external shocks.

Using monthly data from 2002 to 2023, I estimate a PVAR and construct country-specific exposure measures by interacting common U.S. uncertainty shocks with predetermined bilateral trade and financial weights. The exposure weights are calculated over a pre-estimation period so that they capture countries' pre-existing economic relationships with the United States. This shift-share approach allows a common U.S. disturbance to generate different effective exposures according to countries' trade and financial linkages.

The results show a broad contraction across emerging economies but substantial regional heterogeneity. Latin American economies experience larger exchange-rate depreciation, inflationary pressures, and monetary tightening, while Asian economies generally display greater scope for countercyclical monetary responses. These patterns are consistent with differences in exchange-rate pass-through, external exposure, trade structure, and domestic policy responses across the two regions. The results show that a common global disturbance need not produce a common emerging-market adjustment and highlight the importance of examining how external exposure interacts with domestic economic characteristics.

Trade Policy Uncertainty Across Borders: Evidence from Local Projections and SVARs in the United States and China (with Ali Mahmoud).

Trade-policy uncertainty raises a related international question: does uncertainty originating in one major economy affect its trading partner in the same way that it affects the domestic economy? Using monthly U.S. and Chinese data, we employ local projections and SVARs to study the domestic and cross-border effects of U.S. and Chinese trade-policy uncertainty.

The results reveal substantial asymmetries in transmission. U.S. trade-policy uncertainty has relatively muted domestic real effects but generates larger and more persistent responses in China, while Chinese trade-policy uncertainty produces broader effects on U.S. activity. Responses in investment, trade, financial markets, and exchange rates show how uncertainty originating in one economy can generate larger or more persistent effects abroad than at home. This project extends my research agenda from financial uncertainty to policy-driven disturbances and examines how close production and trade relationships transmit uncertainty across major economies.

Who Bears Uncertainty? Heterogeneous Labor Outcomes.

Aggregate uncertainty shocks may weaken the labor market, but their effects need not be distributed equally across workers. This paper examines how economic policy and financial uncertainty affect U.S. labor-market outcomes across gender, ethnicity, and educational attainment. Using monthly data from 1990 to 2023 and SVAR methods, I study responses in unemployment and labor-force participation across demographic groups.

The results reveal substantial heterogeneity. Black workers and individuals with lower educational attainment experience larger adverse labor-market responses. The gender pattern also changes across periods: men are generally more affected during recessions, while including the COVID-19 period shifts the larger unemployment response toward women. The paper therefore shows that aggregate labor-market responses can mask substantial differences in how uncertainty affects different groups of workers.

Ongoing and Future Research

Across my research, I find that common U.S. shocks generate markedly different outcomes across emerging economies, reflecting differences in trade exposure, financial frictions, sovereign risk, and policy space. Building on this finding, I plan to extend the structural framework of my job market paper beyond Mexico to economies with different trade, financial, and policy structures and use cross-country counterfactuals to identify which mechanisms generalize and which characteristics strengthen resilience. Latin America's closer U.S. linkages and more limited policy space relative to many Asian economies motivate this comparative agenda. Growing up in the highly open economy of the Philippines further motivates my broader goal of understanding how developing economies can better withstand global disturbances.

A second direction of my research studies how relatively less-open economies can broaden and diversify their external markets. Building on my work on U.S.-China trade policy uncertainty, I plan to examine countries such as Argentina and identify potential trading partners based on production complementarities and comparative advantage. I am particularly interested in whether diversification across trading partners can reduce dependence on individual external markets and strengthen resilience to disruptions in existing economic relationships. This project extends my research from understanding how international linkages transmit shocks toward examining how the structure of those linkages can itself be changed.

I am also working with James Kemper and Murad Latifov on *The World Cup Superstar Effect: Dynamic Pricing and Information Shocks in Secondary Ticket Markets*. Using secondary ticket-market data surrounding Lionel Messi and the 2026 FIFA World Cup, we study how new information about a globally prominent player and sporting event affects prices and market activity. This project extends my interest in uncertainty and information shocks to a more disaggregated market setting and allows me to study how new information is incorporated into prices in real time.

References

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Teaching Statement

My interest in economics began with my curiosity about the economic issues I encountered in the news growing up in the Philippines. Hearing about inflation, GDP, and unemployment made me want to understand what these measures meant and how economic changes affected people's everyday lives. My professors deepened this interest by showing me that economics is not simply a collection of concepts and models, but a way of understanding the choices people make and the forces that shape our lives. Their ability to make complex ideas intuitive and relevant has strongly influenced my approach to teaching. As an instructor, I strive to make economics approachable by starting with intuition and familiar, real-world examples before introducing formal concepts. I find teaching especially rewarding when students begin to connect economic ideas to the world around them and gain confidence in their ability to understand it. I hope to instill in my students the same curiosity and appreciation for economics, while helping them recognize that economics is not simply something learned in a classroom, but a way of making sense of the world they live in.

Teaching Philosophy

My approach to teaching is based on the belief that economics should be intuitive, relatable, and connected to the world students experience. I begin with intuition and familiar examples before introducing formal concepts and models so that students understand not only *what* an economic relationship is, but also *why* it works. When introducing demand, for example, I begin with students' own purchasing decisions before developing the demand curve and the reasoning behind it. This gives students an intuitive foundation before moving to graphical and formal analysis.

My interest in international economics also shapes the way I approach teaching. I enjoy learning about different cultures and customs, and I bring these perspectives into the classroom to illustrate how economic principles operate across countries. I also use current events and insights from my own research to show students how the concepts they learn can be used to study real-world economic questions. These examples help students connect individual decisions and market behavior to broader economic outcomes and recognize how developments in one country can affect others.

Students also learn in different ways and paces, I use several approaches to reinforce understanding. I begin classes with a brief review of previous material and use graphs and color to make economic relationships easier to follow. I regularly ask questions and check students' understanding so that I can adjust the pace when needed. When students are hesitant to ask questions during class, I make myself available afterward and encourage them to use office hours for additional support.

I believe that students can learn substantially from one another. I incorporate small-group activities when appropriate, giving students opportunities to work through economic ideas together, explain their reasoning, and compare approaches. I also incorporate incentives into classroom participation, allowing students to experience firsthand a principle that is central to economics: behavior responds to incentives. I value student feedback and use it to identify what is working, build on my strengths, and adjust my teaching when students' needs call for a different approach. Ultimately, I want to create a classroom where students feel comfortable participating, asking questions, learning from one another, and developing the confidence to apply economic reasoning beyond the classroom.

Teaching Experience and Interests

My interest in teaching developed well before I entered the university classroom. At home, I often helped my younger siblings with their subjects. These experiences taught me that knowing the material is only part of teaching; explaining an idea in a way that makes sense to someone else requires patience and flexibility. In high school, I was selected to serve as a student teacher where I taught Home Economics, and I also volunteered with programs that provided educational activities for children from low-income families. In college, I continued to develop this interest, participating in tutoring sessions for students taking economics courses.

At Texas Tech University, I have developed this early interest into formal teaching experience across several economics courses. I have served as the Instructor for ECO 2305: Principles of Economics (Spring 2025) and ECO 2301: Principles of Economics: Microeconomics (Fall 2025, Spring 2026, and Fall 2026). My Spring and Fall 2026 sections each enroll more than 100 students. As the primary instructor, I am responsible for all aspects of the course: organizing the course materials, delivering lectures, designing assessments, grading, and communicating with students. Teaching these courses has strengthened my ability to manage both small and large classes, explain economic concepts in different ways, and adapt my instruction to students with different levels of preparation.

Before becoming an Instructor of Record, I served as a teaching assistant across both introductory and quantitatively advanced economics courses. I was a teaching assistant for undergraduate econometrics (ECO 4305) and graduate econometrics (ECO 5314), where I reviewed assessments, held office hours for students who needed additional help, and assisted students with course projects using R. These projects required students to apply econometric methods, produce empirical results in R, and interpret their findings, giving me experience helping students connect econometric concepts with applied data analysis. I later served as a teaching assistant for ECO 2305 with the Chair of the Department of Economics and subsequently became the lead teaching assistant for ECO 2305. These roles gave me experience working with students at different stages of the economics curriculum and helped me learn how to explain economic ideas at different levels of technical depth.

The department's teaching workshops have also played an important role in my development as an instructor. In these workshops, graduate instructors select an economic topic and teach it as they would in their own classrooms, after which faculty members and fellow graduate students provide feedback on the lesson. I find these workshops particularly valuable because they expose me to different approaches to common teaching challenges and encourage me to reflect critically on my own teaching. They have reinforced my view that effective teaching develops through practice, reflection, feedback, and a willingness to try new approaches.

My teaching experience has prepared me to contribute across the economics curriculum. I am comfortable teaching Principles of Economics and am particularly interested in teaching macroeconomics, international economics, trade economics, econometrics, and other courses that fit departmental needs. I would bring experience independently managing large introductory classes, supporting students in quantitatively demanding undergraduate and graduate courses, and connecting economic theory with current events and empirical research. Regardless of the course, my goal is to help students develop economic intuition rather than simply memorize results, build confidence in analyzing economic questions, and apply economic reasoning beyond the classroom.

Teaching Evaluation

This document reports the course evaluation results of my teaching in the Department of Economics at Texas Tech University. For each course, I served as the primary Instructor for sections ranging in size from small classes to large lectures of 100+ students. I fully managed all aspects of course design and delivery, including conducting three hours of lectures each week and designing all assessments. The rating scale for each index below is from 1 (Strongly Disagree) to 5 (Strongly Agree). A summary of the results is shown in the following table. Detailed reports of my teaching are attached to the application.

Class	Instructor	A	B	C	D	E	F	G	H
Spring 2025: ECO2305 Prin. of Economics	Lissa De Mesa	4.6	4.6	4.7	4.6	4.6	4.6	4.6	4.5
	ECO Dept. Average	4.5	4.5	4.5	4.4	4.4	4.5	4.4	4.4
Fall 2025: ECO2301 Prin. of Econ.: Microeconomics	Lissa De Mesa	4.6	4.6	4.8	4.6	4.7	4.6	4.7	4.5
	ECO Dept. Average	4.5	4.5	4.5	4.4	4.4	4.5	4.4	4.4
Spring 2026: ECO2301 Prin. of Econ.: Microeconomics	Lissa De Mesa	4.3	4.4	4.4	4.4	4.3	4.4	4.3	4.3
	ECO Dept. Average	4.5	4.5	4.5	4.4	4.4	4.5	4.4	4.4

Note:

A: Course assignments facilitated learning

B: Course was organized

C: Opportunities to be successful in course

D: Overall course helped learn required concepts/skills

E: Instructor presented material in way that helped engage in course

F: Instructor helped to understand relevance of course content

G: Instructor tailored instructions/lessons to variety of perspectives

H: Overall, Instructors teaching methods helped to learn course content

Comments by Students:

- “Professor Lissa Andrea Fermin De Mesa is a great professor and teacher. You can tell she enjoys to teach and cares about her students. She emphasizes asking questions and goes at a steady pace that makes it easy to take notes and learn. She also gives great examples that apply to the real world.”
- “She provides relevant examples in class of the subject material and even stays up to date with current issues... She asks plenty of questions to keep the class mostly engaged and uses colors that help to visualize and understand the many graphs in the course.”
- “The instructor, Lissa, was very helpful in helping me comprehend the material and was very clear and organized in her lectures. She gave a lot of resources and opportunities to us in order to be successful...”
- “I really like Professor De Mesa! She is really passionate about economics and want all her students to understand it! I really like her teaching style.”

- “She is very good at going into detail on everything and great at giving examples. She really tries to help you prepare for the exams.”
- “She was very interactive, always helpful, and great at making the information easily digestible.”
- “I absolutely loved the way she teaches, the examples are funny and helps the content really stick to my brain.”
- “After we learned a topic she would have a short summary the next class. She also opened up the space for us to ask questions and gave many opportunities...”