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EDUCATION

- **Ph.D. Candidate in Economics**, Texas Tech University, Lubbock, TX (Expected: 2026).
  Dissertation Topic: Essays in Environmental and Energy Economics in OECD Countries
  Dissertation Committee Chair: Dr. Misak G. Avetisyan.
  Committee Members: Dr. Xiaohan Ma, Dr. Victoria Hang.
- **M.A. in Economics**, Texas Tech University, Lubbock, TX (2025).
- **M.A. in Economics**, University of Benghazi, Libya (2012).
  Thesis: Policies for Improving the Investment Climate in Libya
- **B.Sc. in Economics**, University of Benghazi, Libya (2005).

EMPLOYMENT

- Assistant Professor in Economics, University of Benghazi, Libya (2012–2019).
- Lecturer in Economics, University of Benghazi, Libya (2006–2012).

TEACHING INTERESTS

- Principles of Macroeconomics and Microeconomics.
- Intermediate Macroeconomics and Microeconomics.
- Environmental and Energy Economics.
- Monetary Theory and Banking.
- Introduction to Econometrics, Time Series Econometrics, and Forecasting.

RESEARCH INTERESTS

- Environmental and Energy Economics.
- Environmental Policy and Regulation.
- Uncertainty Shocks and Macroeconomic Dynamics.
- Applied Macroeconomics, Time-Series Econometrics, and Forecasting.

RESEARCH EXPERIENCE

Dissertation Essay 1 Topic:

Job Market Paper

"Dynamic Relationship Between Economic Growth, Inflation, and CO_2 Emissions in OECD Countries: Evidence from a Panel VAR Model."

I analyze data from 38 OECD countries between 1996 and 2022 using a Panel Vector Autoregression (PVAR) framework estimated with the Generalized Method of Moments (GMM). Unlike traditional approaches that focus on pairwise relationships, this methodology treats all variables as endogenous, capturing their dynamic interdependencies. The results reveal a bidirectional causality between GDP and inflation, indicating that economic expansions create inflationary pressures while inflation responds by influencing growth through consumption and investment channels. Moreover, while economic growth initially raises emissions, structural adjustments over time dampen this effect. I also find a two-way relationship between CO_2 emissions and inflation, with significant impacts in Europe and Asia but muted responses in the Americas and the Middle East, underscoring the importance of regional economic structures and energy dependence.

Dissertation Essay 2

Topic: **"Uncertainty Shocks and Their Macroeconomic and Environmental Impacts: Evidence from Selected OECD Countries."**

I investigate how different forms of uncertainty shape both economic performance and environmental outcomes. Building on recent advances in measuring uncertainty, I analyze five distinct indices: Oil Price Uncertainty (OPU), Monetary Policy Uncertainty (MPU), Trade Policy Uncertainty (TPU), Climate Policy Uncertainty (CPU), and the Energy-Related Uncertainty Index (EUI). Using a combination of the local projection method and simulations from the GTAP computable general equilibrium model, I examine their effects on GDP, inflation, and CO_2 emissions in the United States, Australia, Luxembourg, Turkey, and the Rest of the World between 1996 and 2022. The results show that uncertainty shocks consistently slow economic activity, with OPU and EUI leading to the sharpest contractions in GDP. Inflationary responses are heterogeneous: while EUI and CPU often lower inflation by reducing aggregate demand, TPU tends to increase price pressures through higher trade costs. Importantly, some uncertainty shocks reduce CO_2 emissions, primarily through declines in fossil fuel consumption, though these environmental benefits are accompanied by reductions in economic output.

Dissertation Essay 3

Topic: **"Energy and Macroeconomic Shocks: Dynamic Implications for CO_2 and non-CO_2 Emissions in Selected OECD Countries."**

I examine how various macroeconomic and energy-related shocks influence both carbon dioxide and non-carbon greenhouse gases (methane and nitrous oxide). Using data from 1996–2022 for Australia, Luxembourg, Turkey, and the United States, I employ the local projection method to estimate the dynamic responses of emissions to shocks in renewable energy consumption, fossil fuel use, population growth, trade openness, and government expenditure. The results highlight heterogeneous responses across countries and gases. For instance, renewable energy expansion reduces CO_2 emissions in Australia but raises them in the United States, where renewables often complement rather than replace fossil fuels. Fossil fuel shocks typically increase non-CO_2 emissions in Turkey, while population growth reduces emissions in emerging economies but has more mixed effects in advanced ones. Trade and fiscal policy shocks also yield varied environmental outcomes, underscoring the importance of economic structure in shaping the emission patterns of both CO_2 and non-CO_2 gases.

WORKING PAPERS AND PAPERS IN PROGRESS

- **Paper 1:** "Productivity, Diversification, and FDI in MENA: Perspectives from Panel VAR and Local Projections Methods."
- **Paper 2:** "The Impact of Recent U.S. Tariff Policies on Trade, Welfare, and Economic Development in the MENA Region."

CONFERENCE ATTENDANCE

- Midwest Macroeconomics Meeting, Texas Tech University, Lubbock, Texas, November 10–12, 2023.

TEACHING EXPERIENCE

University of Benghazi, Libya

Principles of Microeconomics	Fall & Spring 2012–2019.
Principles of Macroeconomics	Fall & Spring 2012–2019.
Intermediate Macroeconomics	Fall & Spring 2012–2019.
Intermediate Microeconomics	Fall & Spring 2012–2019.
Monetary Theory and Banking	Fall & Spring 2016–2019.

HONORS & SCHOLARSHIPS

- Full Doctoral Scholarship from the University of Benghazi to pursue a Ph.D. in Economics at Texas Tech University, 2022–2026.
- Texas Tech Graduate Student Research Support Award, fall 2025 semester.

TECHNICAL SKILLS

- **Programming Languages:** Stata, R, LaTeX.
- **Software:** Global Trade Analysis Project (GTAP).

LANGUAGES

- Fluent in English and Arabic.

PROFESSIONAL AFFILIATIONS

- American Economic Association (AEA).
- Transportation & Public Utilities Group (TPUG).

REFERENCES

- **Dr. Misak G. Avetisyan**
  Associate Professor & Associate Chair, Department of Economics
  Texas Tech University
  Misak.Avetisyan@ttu.edu 806.834.6156.
- **Dr. Xiaohan Ma**
  Associate Professor & Director of Graduate Studies, Department of Economics
  Texas Tech University
  Xiaohan.Ma@ttu.edu 806.834.8373.
- **Dr. Victoria Hang**
  Assistant Professor, Department of Economics
  Texas Tech University
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