Bira Zhahadai

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Graduate Studies

Ph.D., Economics, North Carolina State University — Expected June 2022
Dissertation: "Essays on Business Cycles in Emerging Market Economies"
Advisor: Professor James Nason

M.A., Economics, North Carolina State University — 2016

Undergraduate Study

BS., Economics, Northeastern University — 2009-2013

Research Fields

Primary: Macroeconomics, International Economics
Secondary: Applied Time Series (Macroeconometrics)

Research Papers

"Are Business Cycles in Emerging Market Economies Alike?" (Job Market Paper)Link

This paper explores the predictions of real business cycle theory on the roles of total factor productivity (TFP) and financial shocks to explain business cycles in emerging market economies (EMEs). I obtain evidence about TFP, price of capital, risk premium, and collateral constraint shocks by estimating structural vector autoregressions (SVARs) on a Brazilian sample from 1999Q1 to 2018Q4 and a Mexican sample from 1997Q1 to 2018Q4. On each sample, two SVARs are estimated. One SVAR is identified by short-run restrictions, and the other is grounded on a long-run identification. Estimates of the SVARs show which shocks matter most for explaining business cycle dynamics in Brazil and Mexico is sensitive to identification. Next, the Brazilian and Mexican business cycles are markedly different, as the contributions of shocks to aggregate fluctuations vary across the two countries. At last, TFP shocks are the main driver of business cycle movements in Brazil and Mexico conditional on the long-run identification. Hence, the findings of this paper suggest although not all business cycles are alike in EMEs, TFP shocks remain the primary driving force of aggregate fluctuations in EMEs.

"Productivity Shocks, Financial Frictions, and Business Cycles in Emerging Market Economies" (Work in Progress)

This paper addresses the question of whether business cycles in emerging market economies (EMEs) are best explained by the permanent total factor productivity (TFP) shock hypothesis or financial frictions. I build a small open economy (SOE) real business cycle (RBC) model with a permanent TFP shock to investigate the role of financial frictions at generating business cycles. The financial frictions are a Kiyotaki and Moore (1997) collateral constraint and an endogenous risk premium in the world real interest rate. The interaction of these financial frictions creates a business cycle propagation mechanism for the TFP shock in the SOE-RBC model that matches aggregate fluctuations in EMEs. The evidence for this is calibrating the SOE-RBC model to a Brazilian sample from 1999Q1 to 2018Q4 yields theoretical responses to the TFP shock that resemble responses to identified supply shocks estimated on the Brazilian sample. These results support the hypothesis that permanent TFP shocks are the main source of business cycle fluctuations in EMEs.

Teaching Experience

- **Course Instructor** North Carolina State University
  - *Principles of Macroeconomics (Undergraduate)* Fall 2016 and 2017, Spring 2019
  - *Fundamentals of Economics (Undergraduate)* Summer 2017
- **Teaching Assistant** North Carolina State University
  - *Macroeconomics I (Ph.D.)* Fall 2017
    Instructor: Professor Giuseppe Fiori.
  - *Macroeconomics II (Ph.D.)* Spring 2018
    Instructor: Professor Nora Traum.
  - *Macroeconomics II (Ph.D.)* Spring 2019
    Instructor: Professor Ayse Kabukcuoglu Dur.

Professional Experience

- **Truelight Energy** Boston, MA
  - Data Analyst. Winter 2013-Spring 2014
- **American Institute for Economics Research** Great Barrington, MA
  - Research Assistant. Summer 2013
- **Property and Portfolio Research** Boston, MA
  - Research Assistant. Summer and Fall 2011

Conference

- **Southern Economics Association 91st Annual Meeting** November 2021

Skills

- **Computing**
  - Julia, Matlab, R, Stata, and LaTeX.
- **Languages**
  - English, Mongolian, and Chinese.

References

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