Mitchell Vaughn
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Amy Devine, aed2152@columbia.edu

Education

Columbia University *PhD. Candidate in Economics* 2018 - Present
Expected Completion: May 2024
M.Phil. in Economics 2021
M.A. in Economics 2020

University of Virginia 2014-2018
B.A. in Mathematics, With Distinction

Research

Job Market Paper: *Sudden Stops with Heterogeneous Agents*

I develop a model that features idiosyncratic income risk and study how households differ in their response to aggregate shocks. Low income households respond more strongly to an aggregate productivity shock because they are more likely to be constrained in liquid assets. High income households respond more strongly to an interest rate shock because they are more likely to be unconstrained in liquid assets. In a sudden stop that combines a productivity decrease and interest rate increase, the interest rate effect neutralizes the productivity effect, so that households display little heterogeneity in their consumption responses. My finding captures the behavior of households observed in the Mexican Tequila Crisis and the 2011 Euro crisis.

The Pure Effects of Household Heterogeneity

Heterogeneous agent models typically introduce idiosyncratic income risk, financial frictions, and recalibrate the impatience of households. I study the effect of each term. Idiosyncratic income risk has no significant effect on the aggregate dynamics of the model. Heterogeneity and financial frictions generate empirically realistic marginal propensities to consume, but fail to significantly change the aggregate responses of consumption. Decreasing the impatience of households is necessary to generate significantly stronger aggregate consumption responses relative to a representative agent model.

Income Risk in Emerging Markets

I introduce idiosyncratic income risk into a small open economy model that features an occasionally binding income constraint. Income risk generates poor households that borrow up to the constraint to smooth over their low income state. This differs from representative agent models that require a depressed aggregate state for the representative household to interact with the constraint. As a consequence, the model displays a higher average marginal propensity to consume and volatility of aggregate consumption. The improvements disappear when the collateral constraint is removed from the model. The model with income heterogeneity fails to generate sudden stops. This occurs as the income shock generates rich households that are able to consumption smooth throughout crises.

Borrowing Constraints and Output Volatility

I study a small open economy that experiences stochastic volatility in its output endowment and is subject to a collateral constraint. I show that an increase in volatility induces a substantial precautionary savings response by households. Stochastic volatility increases the frequency of crises in a decentralized economy that overborrows due to a pecuniary externality. A socially optimal economy that lacks an externality does not experience an increase in crises.

Teaching Experience

Intermediate Macroeconomics, with Xavier Sala-I-Martin	Fall 2019, Fall 2021
Ph.D. Macroeconomics I, with Xavier Sala-I-Martin	Fall 2020, Fall 2022
Money and Banking, with Tri Vi Dang	Spring 2020, Spring 2022, Spring 2023
International Macroeconomics, with Stephanie Schmitt-Grohe	Spring 2021
Grader for Ph.D. Econometrics II	Spring 2020, Spring 2021

Awards

Dissertation Fellowship, Columbia University	2023
Vickery Award for Best Third Year Paper, Runner Up	2021

Personal

Programming: Python, Matlab, Dynare, Julia, R, ViM

References

Stephanie Schmitt-Grohe	Martin Uribe	Émilien Gouin-Bonenfant
Professor of Economics	Professor of Economics	Assistant Professor of Economics
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