Mitchell Vaughn
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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

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.

The Pure Effects of Heterogeneity

Heterogeneous agent models typically introduce heterogeneity, financial frictions, and recalibrate the impatience of households. We study the effect of each term. Pure heterogeneity has no significant effect on household or aggregate consumption policies. 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.

Household Heterogeneity and Sudden Stops

I introduce income heterogeneity into a small open economy model that features an occasionally binding collateral constraint. Income heterogeneity generates poor households that borrow up to the constraint to smooth over their income shock. 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.

Why Do Rich Households Not Consumption Smooth During Sudden Stops?

We develop a model that features household heterogeneity and study the heterogeneous responses of households to aggregate shocks. The consumption-income elasticity to a productivity shock is decreasing in income because poor households are more likely to be constrained in asset holdings. The consumption response to an interest rate shock is increasing in income as income rich households are more likely to be unconstrained in asset holdings and respond directly to interest rate changes. In a sudden stop that combines a productivity contraction and an interest rate increase, the decreasing productivity effect is overwhelmed by the increasing interest rate effect. As a consequence, the observed consumption-income elasticity is increasing in income. Our finding captures the lack of consumption smoothing by rich households during Latin American sudden stops and the Euro crisis.

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

Vickery Award for Best Third Year Paper, Runner Up	2021

Personal

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

References

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