Mitchell Vaughn
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Department of Economics
Columbia University
420 W 118th St
New York, New York 10027

www.mitchelljvaughn.com
757-608-8545
mjv2146@columbia.edu

Placement Chairs:
Sandra Black, sblack@columbia.edu
Suresh Naidu, sn2430@columbia.edu

Placement Administrator:
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

References

Stephanie Schmitt-Grohe
Columbia University
ss3051@columbia.edu

Martin Uribe
Columbia University
mu2166@columbia.edu

Émilien Gouin-Bonenfant
Columbia University
eg3041@columbia.edu

Research

Job Market Paper: *Sudden Stops with Heterogeneous Agents*

This paper develops a heterogeneous agent model of a small open economy and studies how households differ in their responses to aggregate productivity and interest rate shocks. Poor households display stronger consumption responses to aggregate productivity shocks because they are more likely to be constrained in liquid assets. In contrast, rich households display stronger consumption responses to interest rate shocks because they are more likely to be unconstrained in liquid assets. When the economy experiences a sudden stop, defined as contractionary shocks to productivity and the interest rate, the interest rate effect neutralizes the productivity effect. As a consequence, the sudden stop generates consumption-income elasticities that display little variation along the income distribution, similar to a permanent shock. My finding captures the observed behavior of households in the Mexican Peso Crisis of 1994.

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 risk 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

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

Personal

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