

Mitchell VanVuren

October 2024

CONTACT INFORMATION

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CURRENT APPOINTMENT

Postdoctoral Associate, Yale Research Initiative on Innovation and Scale (Y-RISE), Yale University (since 2022)

EDUCATION

PhD in Economics, University of California, San Diego, 6/2022

Committee: Valerie Ramey (Co-chair), David Lagakos (Co-chair), Karthik Muralidharan, Titan Alon, Juan Herreño

B.S., Mathematics and Economics, University of Oregon, 2016

REFERENCES

David Lagakos, Boston University, lagakos@bu.edu

Kevin Donovan, Yale University, kevin.donovan@yale.edu

Mushiq Mobarak, Yale University, ahmed.mobarak@yale.edu

FIELDS OF INTEREST

Macroeconomics, Growth and Development, Healthcare, Computation

PUBLICATIONS

“Macroeconomic Effects of COVID-19 Across the World Income Distribution” with Titan Alon, Minki Kim, and David Lagakos, IMF Economic Review, August 2022

WORKING PAPERS

“Optimal Labor Market Policy in Developing Countries: A General Equilibrium Analysis”, October 2024

(Job Market Paper)

Workers in developing countries face substantial constraints to job search. Many policies aim to lower search barriers and expand the wage sector, but the efficiency and optimality of these policies remain unclear. This paper develops a search-and-matching model that incorporates key features of developing economies including a large self-employment sector, savings-constrained households, and capital-constrained firms. Four search externalities --- two positive and two negative --- emerge, leading to inefficiency. After estimating the model using an experiment that provided search subsidies to job seekers in Ethiopia, I find that the optimal policy is a tax that substantially increases the cost of search, rather than a subsidy.

“Macroeconomic Effects of “Free” Secondary Schooling in the Developing World”, October 2023

with Junichi Fujimoto and David Lagakos

(Revise and Resubmit at *AEJ: Macroeconomics*)

This paper studies the macroeconomic effects of publicly funded (‘free’) secondary schooling in the developing

world. Our analysis is based on an over-lapping generations model of human capital accumulation that we estimate to match experimental evidence on the effects of scholarships for poor but talented students in Ghana. The model predicts that nationwide free secondary schooling increases average education levels but reduces GDP per capita in the long run. The human capital gains from free schooling in the model are offset by lost income during schooling years, negative selection of new students, and reductions in fertility by high-ability households.

“Aggregate Effects of Public Health Insurance Expansion: The Role of Delayed Medical Care”, June 2024

(Revise and Resubmit at *International Economic Review*)

Many older adults in the United States delay medical treatment until they qualify for Medicare at age 65. This can greatly increase their healthcare costs as they forgo cheaper earlier treatment, replacing it with more expensive care later. This paper studies the aggregate implications of delayed care focusing on the effects of expanding access to public health insurance before age 65. I build an overlapping generations model with rich household heterogeneity that is estimated to match quasi-experimental evidence on delayed care. My results indicate that the cost-savings are small, and expansion is unlikely to pay for much of its cost.

“How Should Policy Responses to the COVID-19 Pandemic Differ in the Developing World?”, June 2020

with Titan Alon, Minki Kim, and David Lagakos

The COVID-19 pandemic has already led to dramatic policy responses in most advanced economies, and in particular sustained lockdowns matched with sizable transfers to much of the workforce. This paper provides a preliminary quantitative analysis of how aggregate policy responses should differ in developing countries. To do so we build an incomplete-markets macroeconomic model with epidemiological dynamics that features several of the main economic and demographic distinctions between advanced and developing economies relevant for the pandemic. We focus in particular on differences in population structure, fiscal capacity, healthcare capacity, the prevalence of “hand-to-mouth” households, and the size of the informal sector. The model predicts that blanket lockdowns are generally less effective in developing countries at reducing the welfare costs of the pandemic, saving fewer lives per unit of lost GDP. Age-specific lockdown policies, on the other hand, may be even more potent in developing countries, saving more lives per unit of lost output than in advanced economies.

“A Sparse Endogenous Grid Method for Quickly Solving Medium-Dimension Economic Models”, April 2024

Sparse grids are useful for solving large economic models but require knowledge of the value function at carefully chosen gridpoints. Endogenous grid methods avoid numerical optimization but relinquish control over the grid on which updated values are returned. This paper presents a method that resolves this tension, allowing both to be implemented together. The envelope condition provides a guess of the policy function that can be used to control the grid on which the updated value function is known. Although not correct in general, this guess will be correct after convergence is achieved, ensuring that the fixed point of the method solves the desired Bellman equation. The result is a fast and robust method for solving medium-dimension economic models.

RESEARCH IN THE FIELD/DATA COLLECTION IN PROGRESS

“Does Unreliable Electricity Hold Back Technology Adoption and Growth?”

with Eric Hsu, Mushfiq Mobarak, and Anne Wambugu

Does unreliable electricity hold back economic modernization by discouraging technology adoption? This project answers this question by measuring the effect of long-run differences in electrical reliability. We leverage the presence of “feeder borders” in Nairobi, Kenya where two distinct medium-voltage powerlines meet. Buildings along these borders can be geographically adjacent, separated by only a small path, but “electrically distant”, experiencing very different levels of reliability. Using administrative data on the universe of feeder-level outages in Kenya, we identify over 200 borders that exhibit large, persistent differences in reliability. Comparing technology usage and economic

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outcomes for households and firms residing near these borders (surveys in progress) allows us to measure the causal impact of reliability differences.

GRANTS

2024: International Growth Center Grant, \$73,700 (for “Does Unreliable Electricity Hold Back Technology Adoption and Growth?”)

2023: PEDL Exploratory Research Grant, \$47,700 (for “Does Unreliable Electricity Hold Back Technology Adoption and Growth?”)

TEACHING

Lecturer, Yale School of Management: Probability and Statistics - Supplementary (2022, 2023)

Lecturer, University of California, San Diego: Data Analytics for the Social Sciences (2018, 2019)

Teaching Assistant, University of California, San Diego: Graduate Macro A, Macro A, Macro B, Principles of Macroeconomics, Principles of Microeconomics

PROFESSIONAL ACTIVITIES

Presentations

2024: NBER SI (Economic Growth), SED Winter Meeting, MEA Annual Meeting

2023: ASSA Annual Meeting, SED Annual Meeting, Midwest Macro, NEUDC, University of Connecticut, YRISE Annual Conference

2022: NBER SI (Economics Growth), University of Minnesota 3M Reading Group, Midwest Macro, NEUDC

2021: SED Annual Meeting, LAEF Welfare & Inequality in the 21st Century, The Federal Reserve Bank of Minneapolis Junior Scholar Conference

Referee Service

Journal of Political Economy, European Economic Review, Review of Economic Dynamics, Journal of Development Economics, World Bank Economic Review, Journal of Macroeconomics

OTHER INFORMATION

Citizenship: United States