

## EMPLOYMENT

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**University of Connecticut**  
Postdoctoral Research Associate 2022–

## EDUCATION

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**University of Rochester**  
Ph.D. in Economics 2022 (expected)  
Committee: Yan Bai (advisor), George Alessandria, Travis Baseler, Mark Bills

**University of Rochester**  
M.A. in Economics 2018

**George Mason University**  
B.S. in Economics, summa cum laude 2016

## RESEARCH INTERESTS

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- Macroeconomics, Economic Development, Growth

## WORKING PAPERS

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- Nutrition Demand, Subsistence Farming, and Agricultural Productivity (JMP)
- Intangible Capital, Tangible Misallocation

## TEACHING & EXPERIENCE

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### INSTRUCTOR:

- **Intermediate Macroeconomics** (undergraduate) Summer 2020  
*University of Rochester. Evaluations: overall course rating 4.67/5, teaching skills 4.89/5*
- **Computational Macroeconomics Mini-Course** (graduate) Fall 2019, 2020  
*University of Rochester. A 3-week course for 2nd-year economics PhDs*

### TEACHING ASSISTANT:

- Intermediate Macroeconomics (undergraduate) Fall 2018, Spring 2021

- Macroeconomics II (graduate) Spring 2020
- Economics of Globalization (undergraduate) Fall 2019
- Programming for Analytics (graduate) Summer 2019
- Topics in Microeconomics (undergraduate) Spring 2019

#### RESEARCH ASSISTANT:

- for Mark Bils, University of Rochester 2018–2019  
*RA contribution to: Mark Aguiar, Mark Bils, and Corina Boar, “Who Are the Hand-to-Mouth?” (2021)*

## CONFERENCES & PRESENTATIONS

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- African Meeting of the Econometric Society, Nordic Conference in Development Economics, Young Economist Symposium, Southern Economic Association Annual Meeting 2021

## SKILLS

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- **Computer Skills:** R, Julia, Stata, Matlab, L<sup>A</sup>T<sub>E</sub>X
- **Languages:** English (fluent), Russian (native), Spanish (basic), Latin (basic)

## SCHOLARSHIPS & AWARDS

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- STEG PhD Research Grant (£12,000) 2021
- Graduate Fellowship and Tuition Scholarship, University of Rochester 2016–2021
- Departmental Honors in Economics, George Mason University 2016
- Dean’s List, George Mason University 2012–2016

## REFERENCES

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### **NUTRITION DEMAND, SUBSISTENCE FARMING, AND AGRICULTURAL PRODUCTIVITY**

*Job Market Paper*

In many of the poorest countries, agriculture is unproductive and subsistence farming is widespread. I propose nutrition demand as a mechanism that drives the production decisions of subsistence farmers and ultimately contributes to low aggregate agricultural productivity. I explore this mechanism in a model of farm-operating households facing explicit caloric needs and costly domestic trade, and test the model's predictions on Malawian household-level data. In the model and in the data, the smallest farmers focus their consumption on obtaining calories and specialize their production in unsold staple crops; medium farmers diversify both their diet and their subsistence production; the largest farmers shift consumption to purchased goods by producing and selling marketable farm products. I quantify the aggregate implications of this farm-level product choice using the model. It suggests that lowering trade frictions enough for the average share of output sold by farmers to reach even 50% would make the country's agricultural sector 42% more productive. Half of this increase is caused by the mechanically reduced erosion of output, and the other half by a better alignment of individual farmers' product choice with their comparative advantage rather than their family's nutritional needs or food preferences.

### **INTANGIBLE CAPITAL, TANGIBLE MISALLOCATION**

The role of intangible capital in production is growing relative to conventional capital. This paper considers the implications of this shift on the misallocation of inputs across public US firms. I show that ignoring intangibles leads to an overestimation of misallocation costs by 54%. The degree of this overestimation gets worse over time, which explains most of the measured deterioration in allocative efficiency in the US in recent years. I find that misallocation is almost twice as severe in sectors that use comparatively more intangibles as in sectors relying more on tangible capital. I calibrate a variable markup model in which the outcome of intangible investments is uncertain and markups increase with firm productivity. I find that it can generate a significant portion of the measured misallocation.