MARTIN SHU

Department of Economics, Boston University
270 Bay State Road, Boston MA 02215 USA
Cell: (857) 930-9175
Email: syshu@bu.edu
Website: martinshu.com

EDUCATION

Boston University, Boston MA, USA
    Ph.D., Economics, May 2022 (Expected)
    Dissertation Title: *Essays on Worker Heterogeneity and Its Macro Implications*
    Committee: David Lagakos (co-chair), Pascual Restrepo (co-chair), Kevin Lang

Hong Kong University of Science and Technology (HKUST), Hong Kong, China
    M.Sc., Economics (Research Preparation Concentration), 2016
    B.Sc., Mathematics and Economics, *First Class Honors*, 2014
    Minor in Humanities, Outstanding Performance Award, 2014

FIELDS OF INTEREST

Macroeconomics, Development Economics, Labor Economics

WORKING PAPERS

"Selection, Structural Transformation, and the Cost Disease of Services," August 2021 (Job Market Paper)
"The Role of Micro Data in Understanding Structural Transformation," (with David Lagakos), STEG Pathfinding Papers 8, August 2021
"Possibility of Consumer Inspection and Quality of Experience Goods," (with Yuk-fai Fong and Xiaoxuan Meng), March 2019

WORK IN PROGRESS

"Selection, Labor Share, and Income Inequality"
"Dynastic Occupations and Economic Development" (with Siddharth George and David Lagakos)

PRESENTATIONS

Green Line Macro Meeting, Boston MA, September 2021
Macroeconomics Dissertation Workshop, Boston University, 2019-2021

RESEARCH ASSISTANTSHIP

Research assistant to David Lagakos, Fall 2020 – Summer 2021
Research assistant to Jin Wang, Spring 2016
Research assistant to Yong Wang, Summer 2013 – Fall 2015

TEACHING ASSISTANTSHIP

Teaching assistant to David Lagakos, STEG Virtual Course "Key Concepts in Macro Development", Center for Economic Policy Research, March 2021
Teaching Fellow, Introductory Macroeconomic Analysis (Undergraduate), Boston University, Fall 2017 – Spring 2020

AWARDS & FELLOWSHIPS
   Research Fellowship, Boston University, 2020-2021
   Teaching Fellowship, Boston University, 2017-2020
   Dean's Fellowship, Boston University, 2016-2017
   MSc (Econ) Scholarship for Research Preparation, HKUST, 2015
   MSc (Econ) Student Merit Scholarship, HKUST, 2015
   Hong Kong SAR Government Scholarship, 2013
   Dean's List, HKUST, 2012-2014
   University Scholarship, HKUST, 2011 & 2013

LANGUAGES
   Mandarin (native), English & Cantonese (fluent), French & Japanese (basic)

PROGRAMMING
   STATA, MATLAB, Dynare, LaTeX

CITIZENSHIP/VISA STATUS
   Hong Kong, China
   F1-Student

REFERENCES

Professor David Lagakos
Department of Economics
Boston University
Phone: (617) 358-8903
Email: lagakos@bu.edu

Professor Pascual Restrepo
Department of Economics
Boston University
Phone: (617) 353-6824
Email: pascual@bu.edu

Professor Kevin Lang
Department of Economics
Boston University
Phone: (617) 353-5694
Email: lang@bu.edu

Selection, Structural Transformation, and the Cost Disease of Services
(Job Market Paper)

This paper evaluates quantitatively how reallocation of heterogeneous workers contribute to sectoral labor productivity growth. Business and public services have dominated employment growth in advanced economies while manufacturing declined. I show with individual-level panel data that reallocated manufacturing workers earn more than average in business services but less than average in public services, supporting an explanation that self-selection of workers enlarges the gap of labor productivity growth between different service sectors. I build a quantitative multi-sector model of selection that explicitly allows for new workers to have higher skill levels compared to incumbent workers. The new framework generalizes the class of models used in the macro development literature. I calibrate the model to U.S. individual-level panel data and show that selection explains about 17% of the observed labor productivity growth in manufacturing and business services, and about 52% of the labor productivity decline in public services between 1989 and 2019. Contrary to the hypothesis in the literature, sizable gaps in labor productivity growth remain between sectors after accounting for the selection effect.

The Role of Micro Data in Understanding Structural Transformation
(with David Lagakos)

This paper reviews the use of micro-level data for research on structural transformation. We survey the literature on the topics of cross-country productivity gaps, within-country gaps, labor markets, land markets, and infrastructure, and summarize how the use of micro-level data enhances our understanding of structural transformation that is otherwise hard to achieve with aggregate-level data. We suggest several areas that may benefit from more use of micro-level data. Our recommendations on data effort include collecting more panel data over longer years, especially from developing countries, complementing current time use surveys with data from developing countries, and improving the measurement of non-agricultural output. Relatedly, better measurement of physical and business capital is desired. Lastly, we note the rising trend of joining experimental data with structural models, and encourage more studies to takes advantage of the strength of both approaches.

Possibility of Consumer Inspection and Quality of Experience Goods
(with Yuk-fai Fong and Xiaoxuan Meng)

We refine the classification of search goods and experience goods by the probability of the consumer conducting pre-purchase inspection. If the consumer conducts a lot of search before deciding to purchase, then the product is said to be more of a search good. If the consumer rarely or never searches before purchase, then the product is said to be more of an experience good. In a dynamic model where a monopolist firm sells to a sequence of short-lived consumers, reductions in search costs through a critical value induce consumers to search for information on product quality and encourages the firm to start producing high-quality products with positive probability. Further reductions in search costs decrease the frequency of consumer search and increase the probability of the firm producing high-quality goods. The firm earns more profits if it absorbs all search costs instead of letting the consumers bear all costs.