ROHAN SHAH

Email: shah.1252@osu.edu

Department of Economics, 410 Arps Hall, 1945 North High Street, Columbus, Ohio, USA

Telephone: +44 7521 315 467 (preferred) or +1 614 674 9626

Website: https://app.scholarsite.io/rohan-shah

Nationality: British (F1 Visa)

Research and Teaching Interests: Macroeconomics, Monetary Economics, Antitrust Economics, and Industrial Organisation

Software Skills: Stata, Matlab, Fortran, Eviews

EDUCATION

The Ohio State University **2017 - present**

PhD Economics Expected Completion: May 2023

Dissertation: *Essays in Macroeconomics*

Committee: Aubhik Khan (chair), Julia Thomas, Kyle Dempsey

MA Economics (awarded) 2018

University of Warwick **2004 - 2008**

MSC Economics (with Distinction) 2007 - 2008

BSC Economics (1st Class Honours) 2004 – 2007

WORKING PAPERS

Boosting Innovation or Entry: What Works Best? (Job Market Paper)

RESEARCH IN PROGRESS

Firm Size Distribution and the Increase in Aggregate Mark-ups, with Michael Carter

Endogenous Distancing with Aggregate Uncertainty, with Saloni Dattani and Pedro Serôdio

Innovating Recoveries

TEACHING EXPERIENCE

Graduate Teaching Assistant **2018 – present**

PhD Macro Theory 1A Winter 2019, 2020, 2021

Principles of Microeconomics Spring 2020

Principles of Macroeconomics Spring 2019

Economics and Maths Tutor at The Access Project **2014 - 2017**

CONFERENCES AND INVITED PRESENTATIONS

2022

Cleveland State University; The Federal Reserve Bank of Kansas City; Midwest Macro Autumn Conference

2021

Institute for Humane Studies Graduate Conference; The Central Bank of the Dominican Republic

2020

1st Institute for Humane Studies Graduate Conference; The Bridwell Institute for Economic Freedom at Southern Methodist University Workshop series (presented by co-author)

FELLOWSHIPS, GRANTS, AND AWARDS

Federal Reserve Bank of Kansas City PhD Dissertation Fellowship 2022

Professor J. Graham Smith Memorial Prize in Applied Economics, Ohio State University 2022

Concurrences Antitrust Writing Awards Finalist 2022

Daniel Searle Fellowship, The Institute for Humane Studies 2021

Thomas W Smith Fellowship, The Institute for Humane Studies 2020

University Fellowship, Ohio State University 2017-2018

ACADEMIC SERVICE

Organiser, OSU macro grad student workshop Summer 2020

RELEVANT EXPERIENCE

Graduate Research Assistant, for Julia Thomas and Aubhik Khan 2021 – 2022

Consultant, RBB Economics 2008 – 2017

REFERENCES

Aubhik Khan
Department of Economics
The Ohio State University
614-247-0097
khan.247@osu.edu

Julia Thomas
Department of Economics
The Ohio State University
614-247-0094
thomas.2108@osu.edu

Kyle Dempsey
Department of Economics
The Ohio State University
614-292-4198
dempsey.164@osu.edu

Jun Nie
Economic Research
Federal Reserve Bank of Kansas City
Jun.Nie@kc.frb.org

Peter McAdam
Economic Research
Federal Reserve Bank of Kansas City
Peter.McAdam@kc.frb.org

PAPER ABSTRACTS

Boosting Innovation or Entry: What Works Best? (Job Market Paper)

I study the effectiveness of policies that try to boost output by incentivising firm Research and Development (R&D). I estimate the effect of a firm's own, and the aggregate level of, R&D on a firm's productivity and find negative spillovers from higher aggregate R&D. I then develop a dynamic general equilibrium model that uses this estimated R&D-productivity relationship. My model is the first to enable the examination of the effect of fiscal policies when heterogeneous firms make decisions over R&D, physical capital, and debt subject to a collateral constraint that distinguishes between physical capital and R&D. I find that policies incentivising firm R&D have a small effect on output due to the negative spillovers from higher aggregate R&D. A policy to subsidise entry instead of R&D achieves twice the boost to output as do R&D-focused policies because it does not result in large negative spillovers. I also find that permanent R&D subsidies or permanent entry subsidies can speed up the economy's recovery from a financial recession, but temporary subsidies have no effect on this recovery time.

Endogenous Distancing with Aggregate Uncertainty, with Saloni Dattani, and Pedro Serôdio

We extend the standard SEIR model to include consumption and labour decisions of households to capture endogenous variations in the transmission rates of a viral infection in the presence of aggregate uncertainty about policy intervention. We explore and contrast the economic and epidemiological effects of various policy interventions: a baseline laissez-faire decentralised equilibrium with no policy intervention, severe restrictions, moderate restrictions, and a conditional lockdown based on the number of hospital admissions. We find that accounting for agents' uncertainty regarding the timing and size of any restrictions being imposed has substantial effects on the outcomes of those policies. For example, even in the laissez-faire baseline case, accounting for this uncertainty means that agents' endogenous responses to increasing infections are smaller than they would be in the absence of this uncertainty. This effect is driven by agents having some non-zero expectation regarding the imposition of a future lockdown and associated reduction in utility, such that they compensate by not reducing their consumption and labour responses by as much as they would without this uncertainty.

Firm Size Distribution and the Increase in Aggregate Mark-ups, with Michael Carter

The size-distribution of firms in the US has shifted rightward over the previous 40 years, such that BDS data indicate the average size of a firm has increased by almost 20% between 1978 (21 employees, on average) and 2016 (25 employees). At the same time, there is evidence (such as that in De Loecker, Eeckhout & Unger (2020)) that firm mark-ups have increased by as much as 27% over the period 1986 - 2016. We investigate the extent to which the rightward shift in the firm-size distribution can explain the increase in mark-ups using a model of heterogeneous firms with endogenous entry and exit. Firms in our model charge a mark-up that varies according to their size via the Kimball aggregator, which allows us to examine the effect of different distributions of firms on the average mark-up. We calibrate our model to match the firm-size distribution in each of 1986 and 2016 and find that the changes in firm size over that timeframe imply an increase in mark-up of 17%. In other words, changes in the firm-size distribution can explain roughly 63% of the observed change in mark-ups over the same period.