Mehmet Furkan Karaca

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CONTACT
INFORMATION

Department of Economics Michigan State University Email: karacame@msu.edu

mehmetfurkankaraca@gmail.com

486 W. Circle Drive **Phone:** +1 (517) 481-0223

110 Marshall-Adams Hall Website: sites.google.com/view/mehmet-furkan-karaca

East Lansing, MI 48824 Citizenship: Turkish

PLACEMENT **OFFICERS**

Placement Director Academic Program Coordinator Soren Anderson sta@msu.edu Jay Feight feightja@msu.edu

+1 (517) 355-0286 +1 (517) 355-6579

REFERENCES

Raoul Minetti (chair) Department of Economics Michigan State University +1 (517) 355-7349 minetti@msu.edu

Luis Araujo **Qingqing Cao** Department of Economics Michigan State University +1 (517) 355-7583

araujolu@msu.edu

Department of Economics Michigan State University +1 (517) 432-4978

caoqq@msu.edu

EDUCATION

Ph.D. in Economics

Michigan State University

2023 (expected)

M.A. in Economics

 Michigan State University ■ Koc University, Istanbul, Turkey 2019 2016

B.S. in Economics

■ TOBB University of Economics and Technology, Ankara, Turkey

2014

RESEARCH **INTERESTS**

Macroeconomics, Financial Economics, Technological Change and Innovation

JOB MARKET PAPER

"Credit Reallocation and Technological Change"

(with Raoul Minetti and Pierluigi Murro)

This paper studies the impact of the dynamic process of credit reallocation on aggregate innovative activities. To draw out theoretical predictions, we build a model with financial and matching frictions and investigate the consequences of lenders' credit reallocation decisions on borrowers' innovation choices. We show that an intensification of the credit reallocation process improves the matching between lenders and innovative firms but, overall, it disrupts innovation activities. Using a novel data set on bank balance sheets and the number of patents in Italian local markets (provinces) during a period of great economic growth and tighter banking regulation, we construct measures of credit reallocation and examine their effect on innovation. Consistent with the predictions of the model, we find that an increase in credit reallocation depresses innovative activity while aggregate credit growth helps to expand it.

WORKING PAPERS

"Credit Reallocation, Dividend Payout and Innovation"

This paper studies the effect of credit reallocation on dividend payouts and, ultimately, innovation in an economy with heterogeneous firms. I build on the intuition that innovative firms tend to pay higher dividends with the expectation of better future performance, while higher dividend payouts reduce the possibility of higher R&D investments leading to a lower level of innovation. At the same time, banks can play a 'Schumpeterian' role of creative destruction through reallocating credit to more innovative firms. My aim is to explore the underlying mechanism in a general equilibrium framework. In addition, I investigate the relationship employing the number of patents to measure firm innovation and the debt levels to calculate firm level measures of credit reallocation.

"Innovation and Interest Rates: The Role of Patent Collateralization" (with Qingqing Cao and David Hong)

We investigate the role interest rates play in the decision making process of firms' innovation and capital expenditures. More precisely, evidence suggests firms have been placing their patents as collateral for loans in greater frequency. This brings up the possibility of asymmetric collateralization values between physical capital and loans which is the prime mechanism we aim to explore. Subsequently, we shall test the generated theoretical hypotheses to matched firm patent value US data. More explicitly, we use USPTO's patent assignment database to see which patents are used as collateral and match patents with the Innovation (Patent) Valuation Database. We posit a lower interest rate environment is more stimulative for innovation via the lending channel.

WORK IN PROGRESS

"Bank Capital Structure and Credit Reallocation in the Knowledge Economy"

I study the composition of bank assets and loan portfolios during the transition of the real sector to a knowledge economy. Annual Historical Bank Data from FDIC reveals two important facts: intangible asset holdings of U.S. commercial banks and savings institutions have increased dramatically over the past four decades, and the composition of loan portfolios has shifted from commercial and industrial loans to real estate loans. I aim to show that the compositional shift in loan portfolios are driven by the rise in bank intangible asset holdings which is a result of the transition to a knowledge economy and are not simply the results of financial innovations, higher mortgage demand, or deeper bond markets over the same time period.

"The Macroeconomic Implications of Lending Favoritism by Public Sector Banks" (with Yogeshwar Bharat and David Hong)

Lending favoritism by public sector banks is well-documented in the literature. We aim to micro-found the lending decision-making process of both private and public sector banks and to postulate the macroeconomic implications of a recessionary shock. Utilizing matched bank firm Indian data via the Reserve Bank of India, we aim to test the evidence of such behavior by measuring the degree of credit reallocation/misallocation across sectors.

"Nonlinear Knowledge Production and Patent Disclosures: A General Equilibrium Treatment Effects Approach"

(with Nick Brown and David Hong)

We aim to explore the incentives for firms to hide or reveal their innovations under a general equilibrium framework. To that end, appropriate derivations of an econometric estimator with the aim of alleviating sample selection bias and accounting for spillover effects in a general equilibrium treatment effect framework is our objective. A potential policy change we are considering is the passage of the Asset-Backed Securities Facilitation Act in Delaware in 2002 and the passage of the American Inventor's Protection Act of 1998 as well.

"Supply Chain Induced Inflation: Input-Output Framework with Empirical Evidence from Turkey"

(with David Hong and Mehmet E. Samci)

We build on the framework that studies the optimal monetary policy under a multi-sector economy with input-output linkages. We aim to extend the production network framework and include empirical evidence from matched bank-firm Turkish data. The novelty of our approach is the inclusion of micro-level input-output data that is also recorded at the Central Bank of the Republic of Turkey. We are currently underway in the process to receive permission to access said data.

REFEREE	Oxford Economic Papers	
PRESENTATIONS	Midwest Macroeconomics Fall Meeting	2022
	Michigan State Macro Group Seminar Series	2021
	Michigan State Red Cedar Conference	2020
SKILLS	Language	
	Turkish (native), English (fluent)	
	Software	
	■ STATA, R, MATLAB, L ^A T _E X, Gephi.	
HONORS AND	Dissertation Completion Fellowship, Michigan State University	2023
AWARDS	Supplemental Research Fellowship, Michigan State University	2022
	Best Advanced Research Fellow, AEA Summer Program	2020
	The Scientific and Technological Research Council of Turkey Scholarship	2014 - 2016
	Koç University Graduate Fellowship, M.A., Koç University	2014 - 2016
	Certificate of High Honor, TOBB University of Economics and Technology	2014
	Full Scholarship, B.S., TOBB University of Economics and Technology	2009 - 2014
	Ranked 97^{th} in the National University Entrance Exam (OSS)	2009

TEACHING **EXPERIENCE**

Michigan State University

- Graduate Teaching Assistant
 - Spring 2022 · Macroeconomics
- Undergraduate Instructor
 - Money, Banking and Financial Markets, Online

Summer 2019

- Undergraduate Teaching Assistant
 - Advanced Macroeconomics
 - · Macroeconomics and Public Policy

Spring 2021, Fall 2020

Fall 2022, Fall 2021, Summer 2021, Spring 2021, and Fall 2020

• Intermediate Macroeconomics • Intermediate Microeconomics

Summer 2021, Fall 2018, Fall 2017

· Introduction to Macroeconomics

Spring 2018 Spring 2020, Fall 2019, Spring 2019

AEA Summer Program

Research Fellow for Advanced Level Research Methods

Summer 2020

■ Tutor for Advanced Microeconomic Theory

Summer 2020

Koç University

- Undergraduate Teaching Assistant
 - Intermediate Macroeconomics

Spring 2017, Fall 2016, Spring 2016, Fall 2015

Spring 2015

· Principles of Economics • Intermediate Microeconomics

Fall 2014

RESEARCH **EXPERIENCE**

Center for Social Policy Research, TOBB University of Economics and Technology

 Assistant Researcher Sep 2013 - Aug 2014

Foreign Economic Relations Board (DEIK), Istanbul, TURKEY

 Research Intern, Strategy and Communication Councellorship Jan 2012 - May 2012

UNIVERSITY	Department of Economics Advisory Committee Member, MSU	2019 - 2020
SERVICE	Economics Graduate Student Organization Board Member, MSU	2019 - 2020
	Graduate Economics First-Year Mentor, MSU	2019 - 2020
	MSU Turkish Student Association President	2018 - 2019