FURKAN SARIKAYA

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PLACEMENT INFORMATION

Placement Director: Galina Vereshchagina   galinav@asu.edu   (+1) 319-541-4104
Placement Coordinator: Laura Talts   ltalts@asu.edu   (+1) 480-727-7931

EDUCATION

Ph.D., Economics, Arizona State University, 2025
M.A., Economics, Sabanci University, Turkiye, 2019
B.A., Economics, Bogazici University, Turkiye, 2016

REFERENCES

Gustavo Ventura	**Galina Vereshchagina**	**Domenico Ferraro**
Professor	Associate Professor	Assistant Professor
Arizona State University	Arizona State University	Arizona State University
gustavo.ventura@asu.edu	galinav@asu.edu	domenico.ferraro@asu.edu

RESEARCH INTERESTS

Macroeconomics, Economic Development, Firm Dynamics, Human Capital Formation

RESEARCH PAPERS

"Major Choice and the Aggregate Effects of College Subsidies" (Job Market Paper) *Link*
Higher education subsidies are primarily distributed through need-based programs, without differentiating by college major. However, labor market outcomes vary significantly across majors. Science and Engineering graduates tend to earn the highest wage premiums and face the lowest unemployment rates, while there is a strong prior pattern of ability selection into these majors. I study the aggregate effects of higher education subsidies, taking into account key differences across college graduates by major. These differences include ability selection, patterns of skill formation, and frictions in post-college labor markets. I develop an equilibrium labor market search model with two-sided multidimensional heterogeneity and endogenous college and major decisions. In my model, individuals are initially sorted into college majors based on their multidimensional abilities (math, verbal, and social) and preferences. These decisions lead to differential human capital accumulation across all ability dimensions. I use data from the NLSY79 and O*NET to calibrate the model, which I then use to evaluate the effects of subsidies targeted at specific college majors. My findings indicate that Science and Engineering and Business and Economics majors demonstrate limited responsiveness to subsidies compared to Humanities and Social Sciences majors. This is because Humanities and Social Sciences majors tend to attract individuals who might otherwise opt out of college. The expenditure-neutral, welfare-maximizing subsidy scheme, which allows for differential subsidies based on college major while maintaining fixed total subsidy costs, leads to a 0.5% increase in overall welfare. This policy also results in a 35% increase in the number of Science and Engineering graduates.

"Incomplete Tax Enforcement, Managerial Quality and Economic Development" (Working Paper)
Link
Using establishment-level World Bank Enterprise Surveys, I document the following trends: (i) the average tax noncompliance rate, defined as the ratio of unreported sales to total sales, decreases with GDP per worker, (ii) the tax noncompliance rate is size-dependent, i.e., small establishments conceal a higher fraction of their sales than large establishments, (iii) the level of this size-dependency diminishes as GDP per worker increases. To examine the implications of these findings for managerial quality and aggregate output, I develop a modified version of Lucas's span-of-control model in which managers invest in their managerial skills and choose how much of their income to report to the government after considering the risk of getting inspected by tax officials. The results reveal that incomplete tax enforcement significantly diminishes economy-wide managerial quality, with the magnitude of this impact escalating with the level of size-dependency in tax noncompliance. For instance, transitioning from the benchmark economy, calibrated to U.S. data, to an economy similar to Brazil's tax enforcement regime leads to an approximate 23 percent reduction in average managerial quality and roughly a 3 percent decrease in output.

"Informality and the Life Cycle of Plants" joint with M. Nazim Tamkoc and Jesica Torres, (Working Paper) *Link*
In this paper we first exploit five waves of the Mexican establishment census to estimate the life cycle of formal and informal plants. We show that formal plants not only start their life cycle with three times more workers relative to informal plants, but also grow at a faster rate. While formal establishments more than double their size during their life cycle, informal plants increase their size only by 66 percent. We then develop a general equilibrium model to quantify the aggregate losses from the marked differences in growth rates between formal and informal plants. In our model, plants grow by investing on their productivity. Informality arises as a result of size-dependent regulations, which we capture as tax enforced only among larger firms. In equilibrium, informal plants exhibit flatter life cycle profiles to avoid detection and thus lower their tax burden. In a revenue-neutral experiment where the effective tax rate does not vary with size and plants do not have incentives to operate informally, aggregate output increases by 13 percent relative to the baseline. Changes in the selection of entrepreneurs and steeper life cycle profiles account for these gains.

"Subsistence Self-Employment and Unemployment Benefits" joint with Sujan Bandyopadhyay, (Work in Progress-draft coming soon)
We examine the interaction between unemployment benefits and subsistence self-employment in developing countries, where limited opportunities in formal labor markets push low-productivity individuals into self-employment. We develop a model that incorporates occupational choices, search frictions, and borrowing constraints, allowing individuals to choose between wage work, own-account work, and entrepreneurship. Our model highlights how low-wealth, low-ability individuals select into own-account work due to their inability to sustain the search for wage employment in a frictional labor market. Calibrating the model to Mexico, we explore the effects of introducing U.S.-style unemployment benefits. Our results indicate that if own-account workers can conceal their employment status, unemployment benefits lead to an excessive increase in own-account work and a reduction in aggregate output. However, when employment status is effectively monitored, unemployment benefits can reduce subsistence self-employment by 15 percentage points and generate significant output gains of nearly 2%.

TEACHING EXPERIENCE

Department of Economics, Arizona State University

<u>Instructor</u>

Macroeconomic Principles	Summer 2024

<u>Teaching Assistant</u>

Microeconomic Principles	Fall 2020, Fall 2023, Spring 2024
Intermediate Macroeconomic Theory	Spring 2021
Introduction to Econometrics	Fall 2021, Fall 2022, Spring 2022, Spring 2023
Financial Economics	Spring 2023, Spring 2024
Money and Banking	Fall 2023

Department of Economics, Sabanci University

<u>Instructor</u>

Graduate Math Bootcamp	Summer 2017, Summer 2018

<u>Teaching Assistant</u>

Macroeconomics I	Spring 2017, Spring 2018, Summer 2017
Public Economics	Fall 2016, Fall 2018
Statistical Modelling	Spring 2017

OTHER EMPLOYMENT AND SERVICES

RA to Dr. Gustavo Ventura	2022
RA to Dr. Gustavo Ventura	2023
Referee for *Economic Modelling*	2022

HONORS, SCHOLARSHIPS AND FELLOWSHIPS

Southern Economic Association, Graduate Student Award	2024
Graduate College Travel Award	2023
Arizona State University, CASEE Fellowship	2019-2020
Sabanci University Full Merit Scholarship	2016-2019
Bogazici University, Alper Orhon Econometrics Award	2016
Bogazici University, Honor Graduate	2016

SEMINARS AND CONFERENCES

Southern Economic Association, 94rd Annual Meeting (Scheduled)	2024
Arizona State University, Macroeconomics Workshop	2023
Utah State University, Midwest Macroeconomics Meeting	2022
Arizona State University, Macroeconomics Workshop	2022

SKILLS

Technical: Python, Stata, Matlab
Language: Turkish (native), English (fluent)