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Curriculum Vitae
Fall 2020

YUKI YAO

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Citizenship: Japan (F-1 Visa)

Major Fields of Concentration

Macroeconomics, Firm Dynamics, Public Finance

Education

Degree	*Field*	*Institution*	*Year*
PhD	Economics	University of Minnesota (expected)	2021
Masters.	Economics	University of Minnesota	2018
Masters	Economics	University of Tokyo Graduate School of Economics	2014
Masters	Public Policy	University of Tokyo Graduate School of Public Policy	2011
Bachelors	Engineering	University of Tokyo	2009

Dissertation

Title: "Essays on Macroeconomics with Oligopolistic Competition"
Dissertation Advisor: Professor Ellen McGrattan
Expected Completion: Summer 2021

References

Professor Ellen McGrattan	(612) 625-6714 erm@umn.edu	Department of Economics University of Minnesota 4-101 Hanson Hall
Professor Anmol Bhandari	(612) 625-0511 bhandari@umn.edu	1925 Fourth Street South Minneapolis, MN 55455
Professor Erzo Luttmer	(612) 625-5054 luttmer@umn.edu	

Honors and Awards

2020 - 2021 *Bruce and Mildred Mudgett Fellowship*, University of Minnesota, Minneapolis, Minnesota
Summer 2020 *Graduate Research Program Partnership Fellowship*, University of Minnesota, Minneapolis, Minnesota
2015 - 2017 *Japan-IMF Scholarship for Advanced Studies*, International Monetary Fund, Washington, D.C.

Teaching Experience

Fall 2018 *Teaching Assistant/Grader*, Department of Economics, University of Minnesota, Minneapolis, Minnesota. Assisted Professor Anmol Bhandari with undergraduate *Advanced Game Theory and Applications.*

Research Experience

June 2019 - August 2019 *Summer Intern*, Asia-Pacific Department, International Monetary Fund, Washington, D.C.
August 2018 - May 2019 *Research Analyst*, Research Department, Federal Reserve Bank of Minneapolis, Minneapolis, Minnesota. Research assistant for Dr. Fabrizio Perri.
June 2017 - July 2018 *Research Assistant*, Department of Economics, University of Minnesota, Minneapolis, Minnesota. Research assistant for Professor Anmol Bhandari.
March 2014 - March 2015 *Seasonal Analyst*, Global Macro Research, Goldman Sachs, Japan

Papers

"Aggregate Implications of Merger Policy," job market paper
"Oligopoly and Efficiency," with Erzo G.J. Luttmer
"Taxation of Paid- and Self-Employment," with Anmol Bhandari and Ellen McGrattan

Computer Skills

Python 3, Fortran (advanced), java (intermediate)

Languages

Japanese, English

Abstracts

"Aggregate Implications of Merger Policy," job market paper

How should we design merger policy? While this question has been frequently investigated in the Industrial Organization literature, Macroeconomic evaluation of merger policy is rarely done. To this end, we build a multi-industry macroeconomic model with oligopolistic competition. The model captures a typical lifecycle of industries; it starts with a few firms, then have many firms, and experiences a shakeout, and a smaller number of firms survive. The richness of the industry lifecycle allows us to trace out how a typical merger analysis is conducted and how it disagrees with the planner's perspective. When the industry is old, mergers are detrimental to consumers because it allows firms to obtain large market power and they limits production. On the other hand, merger opportunities induce

entries at the early stage of an industry lifecycle. Death and birth of industries generate heterogeneity of industries in terms of age. The planner cares about productions all the industries, some of which are young and others of which are old. The heterogeneity creates a discrepancy between the industry view and the macroeconomic view of merger policy. If a merger analysis of an industry is conducted at a later period of the lifecycle, the antitrust authority finds tougher regulation is more favorable than the planner does, leading bias towards older industries.

"Oligopoly and Efficiency," with Erzo G.J. Luttmer

We describe a model of long-run growth with a growing measure of industries, and discrete numbers of differentiated goods within each industry. A pioneer entrepreneur can start a new industry by creating an initial prototype blueprint and an industry-specific fixed asset. In every industry, this asset can be combined with labor to create blueprints for new differentiated goods in the same industry. In addition, blueprints in a particular industry can also be combined with labor to produce blueprints for new differentiated goods in the same industry. Given the right blueprint, the technology for producing a particular differentiated good is linear in labor only. A Roy model governs the supplies of entrepreneurial activity and labor. Household preferences imply a constant elasticity of substitution between differentiated goods within an industry that is strictly larger than the constant elasticity of substitution across the composite goods produced by the various industries. In the allocation chosen by a social planner, new industries grow towards stochastic steady states that have more variety when the gap between these two elasticities is small. Long-run growth is governed by population growth and the elasticity of substitution across industries only. Within-industry variety only affects the level of the balanced growth path. When households do not value leisure, the allocation chosen by the social planner can be implemented by assigning both the initial prototype blueprint and the industry-specific fixed asset to the pioneer entrepreneur, who then acts as a monopolistic competitor with producers in other industries. Alternative market arrangements produce the same long-run growth rate, but balanced growth paths may differ quite significantly in terms of levels. In particular, we consider a strong antitrust policy that enables entry into existing industries by assigning the industry-specific fixed asset to households and forcing incumbents to spin off any blueprints above a low threshold. This policy closely approximates the allocation chosen by the planner if the supply elasticity of entrepreneurial activity is zero. When this elasticity is positive, the antitrust regime produces too few industries and too many varieties within industries. The cost in terms of steady state consumption can be large when there is a substantial gap between the within- and across-industry elasticities of substitution.

"Taxation of Paid- and Self-Employment,"with Anmol Bhandari and Ellen McGrattan

We compute optimal tax rates on income from paid- and self-employment and find estimates for both that are much lower than current estimates of marginal labor tax rates in the United States. This finding is based on a model of occupational choice with labor inputs allocated to production and to the building of business sweat capital—brands, customer bases, client lists and other intangible assets. With greater opportunities to substitute across sectors and activities, taxes become more distortionary and optimal tax rates will in general be lower. Our model incorporates an additional role for tax policy to induce a better allocation of hours, with more hours employed in the diversified C-corporate sector relative to the undiversified private business sector. Furthermore, at an optimum, those that choose self-employment are highly productive owners with significant sweat capital.