

**University of Minnesota - Twin Cities**

Department of Economics  
 4-101 Hanson Hall  
 1925 Fourth Street South  
 Minneapolis, Minnesota 55455  
 U.S.A.

(612) 625-6353  
 (612) 624-0209 FAX

*Placement Director*  
 Fatih Guvenen  
 (612) 625-0767  
 guvenen@umn.edu  
*Placement Coordinator*  
 Catherine Bach  
 (612) 625-6859  
 c-bach@umn.edu

**Curriculum Vitae**  
**Fall 2018**

**SERGIO OCAMPO DIAZ****Personal Data***Address*

4-101 Hanson Hall  
 1925 Fourth Street South  
 Minneapolis, MN 55455

*Contact Information*

Cell: (202) 403-9359  
 E-mail: ocamp020@umn.edu  
 URL: sites.google.com/site/sergiocampod

*Citizenship:* Colombia (F-1 Visa)

**Major Fields of Concentration**

Macroeconomics, Labor Economics, Quantitative Methods

**Education**

<i>Degree</i>	<i>Field</i>	<i>Institution</i>	<i>Year</i>
PhD	Economics	University of Minnesota (expected)	2019
MA	Economics	University of Minnesota	2017
MA	Economics	Pontificia Universidad Javeriana (Bogotá, Colombia)	2012
BA	Economics <i>summa cum laude</i>	Pontificia Universidad Javeriana (Bogotá, Colombia)	2010

**Dissertation**

Title: “A Task-Based Theory of Occupations”  
 Dissertation Advisor: Professor Fatih Guvenen  
 Expected Completion: Summer 2019

**References**

Professor Fatih Guvenen	(612) 625-0767 guvenen@umn.edu	Department of Economics University of Minnesota 4-101 Hanson Hall 1925 Fourth Street South Minneapolis, MN 55455
Professor Loukas Karabarbounis	(612) 625-7504 loukas@umn.edu	
Professor Jeremy Lise	(612) 625-0941 jlise@umn.edu	
Professor Gueorgui Kambourov	(905) 569-4895 g.kambourov@utoronto.ca	Department of Economics University of Toronto 150 George Street Toronto, Ontario Canada M5S 3G7

### Honors and Awards

- 2014, 2108 *Distinguished Instructor*, Department of Economics, University of Minnesota, Minneapolis, Minnesota.
- 2016 *Second Place Third Year Paper Competition*, joint with Keler Marku, Department of Economics, University of Minnesota, Minneapolis, Minnesota.
- 2014 - 2015 *Morton and Alice Silverman Fellowship*, Department of Economics, University of Minnesota, Minneapolis, Minnesota.
- 2012 *Order of Academic Excellence - Masters*, Pontificia Universidad Javeriana, Bogotá, Colombia. This is the highest distinction given by the University.
- 2010 *Outstanding Teaching Assistant*, Pontificia Universidad Javeriana, Bogotá, Colombia.
- 2007, 2009 *Order of Academic Excellence - Undergraduate*, Pontificia Universidad Javeriana, Bogotá, Colombia. This is the highest distinction given by the University.

### Teaching Experience

- Fall 2018 *Writing Assistant*, Department of Economics, University of Minnesota, Minneapolis, Minnesota. Writing Assistant for Economic Development Writing Intensive.
- 2017 - 2018, *Instructor*, Department of Economics, University of Minnesota, Minneapolis, Minnesota.
- 2016 - 2017 *Instructor for Intermediate Macroeconomics and Macroeconomic Policy*.
- Summer 2017, *Instructor*, Department of Economics, University of Minnesota, Minneapolis, Minnesota.
- Summer 2015 *Instructor for Math Refresher Course* for incoming graduate student students. In 2017, shared the responsibility with Dominic Smith.
- Summer 2017 *Instructor*, Pontificia Universidad Javeriana, Bogotá, Colombia. Taught *Dynamic Games and Contracts*.
- 2013 - *Teaching Assistant*, Department of Economics, University of Minnesota, Minneapolis,
- Fall 2014 *Minnesota*. Led recitations for *Principles of Microeconomics* and the graduate level econometrics series.

### Research Experience

- Summer 2016 *Research Assistant*, Research Department, Inter-American Development Bank, Washington, DC. Research assistant for Andres Fernandez.
- 2015 - 2016 *Research Assistant*, Department of Economics, University of Minnesota, Minneapolis, Minnesota. Research assistant for Professor Fatih Guvenen.
- Summer 2014 *Research Assistant*, Research Department, Inter-American Development Bank, Washington, DC. Research assistant for Luca Flabbi.
- 2012 - 2013 *Research Fellow*, Research Department, Inter-American Development Bank, Washington, DC.
- 2010 - 2012 *Economist*, Macroeconomic Modeling Department, Banco de la República (Central Bank), Bogotá, Colombia.
- 2009 - 2010 *Research Assistant*, Macroeconomic Modeling Department, Banco de la República (Central Bank), Bogotá, Colombia.

### Working Papers

- "A Task-Based Theory of Occupations," job market paper
- "Use It or Lose It: Efficiency Gains from Wealth Taxation," with Fatih Guvenen, Burhan Kuruscu, Gueorgui Kambourov, and Daphne Chen
- "Robust Contracts in Common Agency Games," with Keler Marku
- "The Macroeconomics of Self-employment: Occupations of Last Resort," with Juan Herreño

### Presentations

- "A Task-Based Theory of Occupations," presented at the Dissertation Interns Workshop of the St. Louis Federal Reserve, St. Louis, Missouri, August, 2018.
- "Use It or Lose It: Efficiency Gains from Wealth Taxation," presented at the Annual Meeting of the Society for Economic Dynamics, Edinburgh, Scotland, June 2017.

### Computer Skills

Fortran, Matlab

### Languages

English (fluent), Spanish (native)

## **Abstracts**

“A Task-Based Theory of Occupations,” job market paper

I develop an assignment model of occupations with multidimensional heterogeneity in production tasks and worker skills. Tasks are distributed continuously in the skill space whereas workers have a discrete distribution with a finite number of types. Occupations arise as a bundle of tasks optimally assigned to a type of worker. The model allows us to study how occupations evolve—i.e., changes in their boundaries, wages, employment, among others—in response to changes in the economic environment, making it useful for analyzing the implications of automation, skill biased technical change, off shoring, skill upgrading by workers, among others. I characterize how the wages and marginal product of workers, substitutability between worker types, and the labor share depend on the assignment. In particular, I show that these properties depend on the productivity of workers in tasks along the boundaries of their occupations. As an application, I study the rise in automation observed in recent decades. Automation is modeled as a choice of the optimal size and location of a mass of identical robots in the task space. The firm trades off the cost of the robots, which varies across the space, against the benefit of reducing mismatch between tasks’ skill requirements and workers’ skills. The model rationalizes observed trends in automation, and delivers implications for changes in wage inequality, unemployment, labor share, among others.

“Use it or Lose It: Efficiency Gains from Wealth Taxation,” with Fatih Guvenen, Burhan Kuruscu, Gueorgui Kambourov, and Daphne Chen

This paper studies the quantitative implications of wealth taxation (tax on the stock of wealth) as opposed to capital income taxation (tax on the income flow from capital) in an overlapping-generations incomplete-markets model with rate of return heterogeneity across individuals. With such heterogeneity, capital income and wealth taxes have opposite implications for efficiency and some key distributional outcomes. Under capital income taxation, entrepreneurs who are more productive, and therefore generate more income, pay higher taxes. Under wealth taxation, on the other hand, entrepreneurs who have similar wealth levels pay similar taxes regardless of their productivity, which expands the base and shifts the tax burden toward unproductive entrepreneurs. This reallocation increases aggregate productivity and output. In the simulated model calibrated to the U.S. data, a revenue-neutral tax reform that replaces capital income tax with a wealth tax raises welfare by about 8% in consumption-equivalent terms. Moving on to optimal taxation, the optimal wealth tax is positive, yields even larger welfare gains than the tax reform, and is preferable to optimal capital income taxes. Interestingly, optimal wealth taxes result in more even consumption and leisure distributions (despite the wealth distribution becoming more dispersed), which is the opposite of what optimal capital income taxes imply. Consequently, wealth taxes can yield both efficiency and distributional gains.

“The Macroeconomics of Self-employment: Occupations of Last Resort,” with Juan Herreño

We document three facts about self-employment (SE) in developing economies. First, SE is prevalent among low-income households. Second, transitions across occupations are common and liquidity-constrained agents transition more into SE. Finally, SE declines when salaried work opportunities emerge. Models that predict positive selection into self-employment are at odds with these facts. We augment a macro-development model by interacting unemployment risk and credit frictions. Poor-Unemployed agents become SE to earn subsistence income regardless of their entrepreneurial ability. A large share of the labor force operates unproductive businesses due to low job-finding rates from SE. Making safety nets more generous increases welfare by 2% and reduces self-employment.

“Robust Contracts in Common Agency Games,” with Keler Marku

We consider a game between several principals and a common agent, where principals design contracts that are robust to misspecification of the agent’s technology. Principals evaluate contracts on the worst-case performance over all possible technologies. We show that a pure strategy equilibrium always exists by constructing a pseudo-potential for the game. Equilibrium contracts are linear in total output and imply that all players receive a share of total output. The higher the share accruing to the agent, the more efficient the outcome of the game. The efficiency of the competitive outcome relative to collusion depends crucially on the ability of principals to offer side-payments to one another through the agent. Lastly, we consider an application to the taxation of multinationals. We show that a flat tax on domestic and foreign profits with a full deduction of foreign taxes provides the best worst-case guarantee for each country.