

# MATTHEW MILLINGTON

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## **EDUCATION**

PhD in Economics, Arizona State University, 2018-present  
Expected completion date: May 2024

## **References:**

Domenico Ferraro, Associate Professor of  
Economics (Chair)  
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Gustavo Ventura, Professor of Economics  
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Economics & Executive Director of  
Undergraduate Programs  
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MS in Economics, Arizona State University, May 2021  
BS in Economics, Brigham Young University, December 2015, cum laude

## **RESEARCH FIELDS**

Macroeconomics, labor economics

## **TEACHING EXPERIENCE**

### **Instructor**

Microeconomic Principles	Spring 2023
Macroeconomic Principles (online)	Spring 2023, Fall 2022, Spring 2022, Fall 2021
Intermediate Macroeconomic Theory*	Summer 2021
Advanced Honors Macroeconomics <sup>†</sup>	Spring 2021

\*In-person/online hybrid

<sup>†</sup>Reassigned to instruct the course for Edward Prescott

### **Teaching Assistant**

Spring 2021	Financial Economics, assisting Rajnish Mehra
Fall 2020	Macroeconomic Principles, assisting Bart Hobijn
Spring 2020	Advanced Honors Macroeconomics, assisting Edward Prescott
Spring 2020	Analysis of US Economy, assisting Bart Hobijn
Fall 2019	Economic Development, assisting Stephie Fried
Fall 2019	Macroeconomic Principles, assisting Joanna Girante

## Undergraduate Advising

Spring 2021      Honors Thesis Committee Member for Jack Fuller and Justin Fink

## HONORS

2021      Best Third-Year Paper Presentation  
2021      Distinguished Economics Graduate Instructor  
2021      John W. Teets Outstanding Graduate Teaching Assistant

## CONFERENCES AND SEMINARS

2023      ASU Macroeconomics Workshop, Global Labor Organization-Journal of Population  
Economics Global Conference (virtual)  
2022      Midwest Macro Fall Meetings (Southern Methodist University, Dallas, TX), ASU  
Macroeconomics Workshop  
2021      ASU Macroeconomics Workshop, Ohanian-Hansen UCLA Workshop

## RESEARCH ASSISTANT EXPERIENCE

2021      Research Assistant for Edward Prescott, Federal Reserve Bank of Minneapolis  
2016-2018      Research Assistant for Joseph Price, NBER

## PUBLICATIONS

“Changes in Parental Gender Preference in the USA: Evidence from 1850 to 2019” (2023) with Todd R. Jones and Joseph Price, *Journal of Population Economics*, 36(4), 3057-3070.

## WORKING PAPERS

“On-the-Job Search, Human Capital Formation, and Lifecycle Wages” ([Job Market Paper](#))

**Abstract:** I build an equilibrium lifecycle model of wages that combines human capital accumulation with on-the-job search in a frictional labor market. In the model, heterogeneous workers endogenously invest in human capital accumulation and search effort while firms post jobs. I discipline the model using microdata from the SIPP. Using the calibrated model, I show that (1) on-the-job search is the driving force behind lifecycle wage growth, (2) heterogeneous human capital accumulation is the driving force behind lifecycle wage dispersion, and (3) there is significant heterogeneity in how workers approach increasing their wages over the life cycle. Then, I use the model as a laboratory to study the effects of tax and transfer progressivity. An increase in progressivity decreases wages, primarily due to reduced on-the-job search effort. Furthermore, interactions between human capital, search, and job posting amplify the decrease in wages. Surprisingly, increasing progressivity has little effect on wage dispersion because the effects from the human capital and search channels offset each other.

“Duration Dependence and Unemployment Persistence”

**Abstract:** The unemployment rate is persistent over the business cycle; its persistence is evident after recessions as the unemployment rate decreases slowly to its previous level. However, when calibrated, standard search models do not generate realistic persistence, but rather predict that, after shocks, unemployment quickly converges back to its steady state level. Simultaneously, in the data, workers who have been unemployed for a longer period of time are less likely to find a job, a fact known as duration dependence.

I embed duration dependence in a basic search model and show that it significantly increases the persistence of the unemployment rate over the business cycle. Intuitively, after recessions, the composition of the unemployment pool shifts to the long-term unemployed, and since they have lower job finding rates, the shift in composition decreases the aggregate job finding rate and slows recovery. The effect is mitigated if (a) unobserved heterogeneity drives the appearance of duration dependence or (b) a job separation shock characterizes the recession.

## **WORK IN PROGRESS**

“Stopgap Jobs: Search and Temporary Jobs”

**Abstract:** Only 2% of workers in the US have a temporary contract, but 10% of unemployment inflows and outflows involve temporary jobs. Using data from the SIPP and CPS Contingent Worker Supplement, I document that temporary jobs are consistent with “stopgap” behavior; workers tend to use temporary jobs as a short-term solution during an unemployment spell. I insert temporary jobs in a search-and-matching model with incomplete asset markets and calibrate the model to US data. In the model, workers accept temporary jobs if they have been unemployed for some time and their assets are low. I show that a model which does not take temporary jobs into account significantly understates the cost of unemployment because it attributes all job finding to permanent jobs, which are superior to temporary jobs.

## **PROGRAMMING SKILLS**

Python, MATLAB, Stata, LaTeX