# SEBASTIAN GRAVES

JULY, 2024

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#### **Current Appointments**

| 2024 -         | Assistant Professor, University of Cambridge  |  |  |
|----------------|---|--|--|
| Education      |   |  |  |
| 2015 - 2020    | PhD in Economics, NYU   |  |  |
| 2014 - 2015    | MSc in Economics, LSE (Distinction, Sir John Hicks Prize for Outstanding Performance) |  |  |
| 2009 - 2012    | BA in Economics, University of Cambridge (First Class Honours)                        |  |  |
| Previous Emplo | yment   |  |  |
| 2020 - 2024    | Economist/Senior Economist, Federal Reserve Board (Parental Leave: 2021, 2023)        |  |  |
| 2019           | Dissertation Fellow, Federal Reserve Board  |  |  |
| 2016 - 2019    | Research Assistant for Thomas Sargent and Simon Gilchrist                             |  |  |
| 2012 - 2014    | Economist, European Economics Research, Goldman Sachs                                 |  |  |
| Publications   |   |  |  |

#### 1. Does Unemployment Risk Affect Business Cycle Dynamics?

#### AEJ: Macroeconomics, Accepted

Abstract: In this paper, I show that the decline in consumption during unemployment depends on both liquid and illiquid wealth; that unemployment predicts illiquid asset withdrawal, primarily when households have few liquid assets; and that increased idiosyncratic unemployment risk leads to a rise in saving overall, but also to a decline in investment in illiquid assets. Motivated by these new findings, I embed endogenous unemployment risk in a two-asset heterogeneous-agent New Keynesian model. The model is consistent with the new evidence and suggests that aggregate shocks are amplified by a flight-to-liquidity when unemployment risk rises, particularly when monetary policy is constrained.

# The Inflationary Effects of Sectoral Reallocation (with Francesco Ferrante and Matteo Iacoviello) Journal of Monetary Economics, November 2023

Abstract: The COVID-19 pandemic has led to an unprecedented shift in household consumption expenditures from services to goods. This paper studies the effect of such demand reallocation in a multi-sector New Keynesian model featuring input-output linkages and frictions to increasing factor inputs in the form of hiring costs. These costs hamper the adjustment of the supply of goods in response to the shift in demand, causing inflationary pressures which propagate through the production network. The inflationary effects of the demand reallocation shock are amplified by the fact that goods prices are more flexible than those of services. We take the model to the data and estimate a version that allows for reallocation shocks, idiosyncratic productivity shocks at the sectoral level, and an aggregate labor supply shock. The demand reallocation shock can account for a large portion of the rise in U.S. inflation in the aftermath of the pandemic.

#### 3. The State-Dependent Effectiveness of Hiring Subsidies

#### AEJ: Macroeconomics, April 2023

*Abstract:* The responsiveness of job creation to shocks is procyclical, while the responsiveness of job destruction is countercyclical. This new finding can be explained by a heterogeneous-firm model in which hiring costs lead to lumpy employment adjustment. The model predicts that policies that aim

to stimulate employment by targeting the job creation margin, such as hiring subsidies, are significantly less effective in recessions: These are times when few firms are near their hiring threshold and many firms are near their firing threshold. Policies that target the job destruction margin, such as employment protection subsidies, are particularly effective at such times.

4. *Unemployment Insurance Financing as a Uniform Payroll Tax* (with Jonathon Hazell, Walker Lewis and Christina Patterson)

#### AEA Papers & Proceedings, May 2022

Abstract: In the United States, unemployment insurance is financed by taxes levied on employers. We develop a model to decompose UI taxes into a firing tax component, levied on firms that layoff workers, and a uniform payroll tax component, levied on all firms regardless of their layoffs. We develop a novel methodology to measure the two components and document a number of facts about the uniform payroll tax component: it is large, accounting for just under half of UI taxes, it rises significantly after recessions, and it is more cyclical in states with poorly funded UI system.

#### **Working Papers**

1. *The Labor Demand and Labor Supply Channels of Monetary Policy* (with Christopher Huckfeldt and Eric Swanson)

Abstract: Monetary policy is conventionally understood to influence labor demand, with little effect on labor supply. We estimate the response of labor market flows to high-frequency changes in interest rates around FOMC announcements and Fed Chair speeches and find evidence that, in contrast to the consensus view, a contractionary monetary policy shock leads to a significant increase in labor supply: workers reduce the rate at which they quit jobs to non-employment, and non-employed individuals increase their job-seeking behavior. Holding such supply-driven labor market flows constant, the overall decline in employment from a contractionary monetary policy shock becomes twice as large.

2. Time Averaging Meets Labor Supplies of Heckman, Lochner, and Taber (with Victoria Gregory, Lars Ljungqvist, and Thomas Sargent)

Revise & Resubmit, Review of Economic Dynamics

Abstract: We incorporate time-averaging into the canonical model of Heckman, Lochner, and Taber (1998) (HLT) to study retirement decisions, government policies, and their interaction with the aggregate labor supply elasticity. The HLT model forced all agents to retire at age 65, while our model allows them to choose career lengths. A benchmark social security system puts all of our workers at corner solutions of their career-length choice problems and lets our model reproduce HLT model outcomes. But alternative tax and social security arrangements dislodge some agents from those corners, bringing associated changes in equilibrium prices and human capital accumulation decisions. A reform that links social security benefits to age but not to employment status eliminates the implicit tax on working beyond 65. High taxes with revenues returned lump-sum keep agents off corner solutions, raising the aggregate labor supply elasticity and threatening to bring about a "dual labor market" in which many people decide not to supply labor.

#### **Conference and Seminar Presentations**

\* scheduled

2024: Queen Mary, Cambridge, Johns Hopkins, Fed System Equitable Growth Conference (discussant), CREi\*

2023: Workshop on Empirical Monetary Economics (OFCE/Sciences Po), SEA Annual Meeting, Fed System Committee on Macroeconomics (FRB San Francisco), MMF Annual Conference, CEBRA Annual Meeting (discussant)

2022: Bank of Finland/CEPR Conference: Monetary Policy in the Post-Pandemic Era, Cleveland Fed/ECB: Inflation: Drivers and Dynamics Conference, European Commission/CEPR Conference: The COVID-shock and the new macroeconomic landscape, Midwest Macro Conference (Utah State), International Research Forum on Monetary Policy (discussant), ASSA

2020: UCSD, Northwestern (Kellogg), Rutgers, Federal Reserve Board, HEC Montréal, Federal Reserve Board External Webinar Series

2019: Federal Reserve Board, WashU Economics Graduate Student Conference, NYU

2018: Young Economist Symposium

# Referee

AEJ: Macroeconomics; American Economic Review; European Economic Review; Journal of Economic Dynamics and Control; Journal of Money, Credit and Banking; Macroeconomic Dynamics; Review of Economic Dynamics; Review of Economic Studies; Review of Economics and Statistics

# **Teaching Experience**

| 2020 & 2021   | Data Analysis and Financial Literacy in R (Econ-181), Howard U., Project Advisor |
|---------------|--|
| 2018 (Fall)   | Statistics (ECON-UA 18), NYU, TA for Timothy Roeper                              |
| 2018 (Spring) | Statistics (ECON-UA 18), NYU, TA for Meixia Ruderman                             |
| 2017 (Fall)   | Developing Country Growth (MBA), NYU, TA for Michael Spence                      |
| 2017 (Spring) | Macroeconomics II (PhD), NYU, TA for Mark Gertler & Simon Gilchrist              |
| 2014 - 2015   | Economics A (EC100), LSE, TA for Alan Manning & Mohan Bijapur                    |

# Fellowships and Awards

| 2015 - 2020 | MacCracken Fellowship, NYU   |
|-------------|--|
| 2015        | Sir John Hicks Prize for Outstanding Performance in MSc Economics, LSE   |
| 2011 - 2012 | Sir Henry Tomkinson Scholarship, Sir Arthur Arnold Scholarship, Ellen McArthur Scholarship, Lilian Knowles Prize (x2), University of Cambridge |

#### References

| Simon Gilchrist   | Professor of Economics    | NYU                   | sg40@nyu.edu              |
|-------------------|---------------------------|-----------------------|---------------------------|
| Thomas Sargent    | Professor of Economics    | NYU                   | thomas.sargent@nyu.edu    |
| Matteo Iacoviello | Senior Associate Director | Federal Reserve Board | matteo.iacoviello@frb.gov |