

## EDUCATION

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**University of California, Los Angeles (UCLA)**

*Ph.D. in Economics*

June 2025 (expected)

- Fields: Macroeconomics, International Trade, and Network Economics

**Keio University**

*B.A. in Economics*

2014

## PUBLICATIONS

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### Peer-Reviewed Publication

2023 “Measuring Welfare by Matching Households Across Time.” *the Quarterly Journal of Economics*, with Ariel Burstein and David Baqaee, 139, 533–73.

### Job Market Paper

“Aggregating Distortion in Networks with Multi-Product Firms.” with Antonio Martner

Abstract: We investigate the role of multi-product firms in shaping resource misallocation within production networks and its impact on aggregate total factor productivity (TFP) growth. Using administrative data on product transactions between all the formal Chilean firms, we provide evidence that demand shocks to one product affect the production of other products within the same firm, suggesting that firms engage in joint production. We develop a framework to measure resource misallocation in production networks with joint production, deriving non-parametric sufficient statistics to quantify these effects. Applying the framework to Chile, we find that reallocation effects, considering joint production, explain 86% of the observed aggregate TFP growth for the 2016-2022 period. Ignoring joint production leads to overestimations of resource misallocation.

### Selected Working Papers

2024 “A Sufficient Statistics to Measuring Forward-Looking Welfare.” with Ariel Burstein and David Baqaee.

Abstract: We provide a method to measure welfare in money-metric terms, accounting for future expectations. Our approach relies on two key assumptions: (1) separability of the expenditure function between present and future, and (2) the existence of households without idiosyncratic and undiversifiable risk. We infer expectations about the future from observed consumption-savings choices in a subset of households. Our sufficient statistics methodology accommodates incomplete markets, lifecycle motives, non-rational expectations, non-exponential time discounting, and arbitrary functional forms. Application requires estimates of the intertemporal substitution elasticity, price changes over time, and repeated cross-sectional data on household income, balance sheets, and expenditures. Using PSID data from the United States, we find that static measures overstate cost-of-living increases, especially for younger and poorer households. Our estimates can be used to study the welfare consequences of dynamic stochastic shocks that affect households along different margins and time horizons.

2024 “Growth Accounting in Distorted Open Economies.” with Federico Huneus and Antonio Martner

Abstract: We present a theory for growth accounting in open economies with distortions. In addition to domestic distortions, we include distortions from imported intermediate inputs and from exports. We show that trade can influence aggregate TFP growth through three channels: the distortion of exports, the production network propagation of import distortions, and how imports are accounted for in national accounts. We quantify these forces using administrative firm-to-firm and tax data for the universe of formal firms from Chile between 2005 and 2021. Observed TFP growth is explained by allocative efficiency rather than technological change. International trade accounts for 48% of aggregate TFP growth and all three channels are quantitatively important.

### Work in Progress

“Production Networks and R&D Misallocation,” with Koki Okumura.

“Inventor Mobility, Knowledge Diffusion, and Growth,” with Toshitaka Maruyama and Koki Okumura.

## PROFESSIONAL RESEARCH EXPERIENCE

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### Federal Reserve Board

#### *Dissertation Fellow*

2024

- Completed dissertation and presented research at the Board's seminars, hosted by the Industrial Output section in the Research and Statistics Department

### National Bureau of Economic Research

#### *Research Assistant for David Baqaee and Ariel Burstein*

2022–2024

- RA for “Welfare and Output with Income Effects and Taste Shocks” (Quarterly Journal of Economics, 2022)
  - Constructed price index that recovers welfare for different incomes using Nielsen microdata
- RA for “Network Barriers, and Trade” (Econometrica, 2024)
  - Coded world trade model, including inter-sectoral networks, and calculated a gain from trade

### Bank of Japan

#### *Economist, Economic Research Division, Research and Statistics Departments*

2016–2019

- Developed macroeconomic models for monetary policy meetings (from DSGE to large-scale macro models like FRBUS)
- Head of the consumption sector of the quarterly economic forecast team
- Forecasted time series using Bayesian econometrics

#### *Economist, Policy Planning Division, Monetary Affairs Department and Kanazawa Branch*

2014–2016

- Examined the effect of monetary easing for monetary policy meetings
- Contributed to the regional economic report (analogous to the Fed’s Beige Book)

## AWARDS

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#### *Dissertation Fellowship, Federal Reserve Board*

2024

#### *Dissertation Year Fellowship, UCLA*

2024

#### *Lewis L. Clark Data Collection Award, UCLA*

2024

#### *Doctoral Fellowships, Bank of Japan*

2019–2023

## CONFERENCE PRESENTATIONS

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2024 (\*for scheduled): Comparative Analysis of Enterprise Data (CAED) Conference, Pennsylvania State University; TDB-CAREE, Hitotsubashi University; 58th Annual Canadian Economics Association Meetings; TIGN conference; Global Economic Networks Workshop; Federal Reserve Board: Midwest Macro; BSE Summer Forum; NBER Summer Institute, Macroeconomics Within and Across Borders; GSE-OSIPP-ISER Joint Conference in Economics 2024, Osaka University; 18th North American Meeting of the Urban Economics Association, Georgetown University; EGSC, Washington University in St. Louis; UCLA Marco Proseminar; UCLA Trade Proseminar; Keio University; Washeda University; Hitotsubashi University; SEA 94th Annual Meeting (Nominated PhD student)\*; SED Winter Meeting\*; Firm-level production networks: implications for productivity, global resilience and the twin transition, Bank of Italy\*

Before 2023: Young Economist Symposium, Yale University (2022); 16<sup>th</sup> Economics Graduate Student Conference, Washington University in St. Louis (2021); Asian Development Bank Institute (2018); Banque de France, Paris (2017); Summer Workshop on Economic Theory, Hokkaido University (2018, 2019, 2023)

## UNIVERSITY TEACHING EXPERIENCE

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### UCLA Department of Economics

#### *Teaching Assistant*

- Macroeconomic Theory, Spring 2024
- Exchange Rate Forecast and Currency Portfolio Choice, Fall 2022
- Econometric Theory, Summer 2022

## REFeree SERVICE

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*The Review of Economics and Statistics*

## SKILLS & QUALIFICATIONS

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- Languages: Japanese (native), English (fluent).
- Software: MATLAB, Dynare, Python, and Stata.

## REFERENCES

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### **Ariel Burstein (Co-chair)**

Professor  
Department of Economics  
University of California, Los Angeles  
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### **Hugo Hopenhayn**

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### **David Baqaee (Co-chair)**

Professor  
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### **Saki Bigio**

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