## RUAIRIDH SOUTH

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### EDUCATION

## PhD Economics (ongoing)

Sep 2019 - May 2025 (expected)

Princeton University.

• Area of focus: Quantitative Macroeconomics

#### Master's Degree in Economics and Finance

2017 - 2019

Einaudi Institute for Economics and Finance and LUISS Guido Carli. 110/110 cum laude.

• Ranked overall best student in cohort.

## **BA Philosophy, Politics and Economics**

2014 - 2017

Hertford College, University of Oxford. First Class Honours.

## WORKING PAPERS

## **Aggregate Consumption and Housing Transaction Taxes**

- Predicted house purchase probabilities using a 20 million row transactions dataset, then used the results in an event-study model to study the impact of tax policy.
- Developed specialized numeric code to solve the partial differential equation system generated by a housing purchase decision model with transaction costs.

#### The Network Origins of Firm Dynamics (with J. Boehm, E. Oberfield and M. Waseem)

- Developed an algorithm to efficiently model the dynamic buyer-supplier relationships between up to 2.5 million firms and calibrated the model to the Indian manufacturing sector.
- Built a pipeline to efficiently analyze and visualize the large-scale data generated by the simulation, allowing us to rapidly iterate on model features.

#### Rising House Prices and Falling MPCs

- Analyzed employment and spending time series data using the generalized method of moments to estimate local average marginal propensities to consume.
- Used these empirical results to discipline a quantitative model examining the relationship between housing costs and macroeconomic volatility.

#### Professional Experience

# Bank of England, Postgraduate Intern

Summer 2018

Developed an R package to streamline data visualization for banking supervisors.

#### **UK Foreign and Commonwealth Office**, Economics Intern

Summer 2016

• Completed a research project on business environment reforms that was incorporated into the business case for a £30m overseas development program.

#### TEACHING ASSISTANTSHIPS

Introduction to Macroeconomics Fall 2021, Fall 2022, Fall 2023, Fall 2024

Microeconomic Theory: A Mathematical Approach Fall 2022

### Further Information

**Languages** English (native)

**Software** Python (Pandas, JAX, NumPy), Julia, R

Citizenship British