

RUI SOUSA

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CURRENT POSITION

Northwestern University, Evanston, IL

2021-2027 (Exp.)

PhD Student

- Master of Arts, 2022

PAST EMPLOYMENT

London School of Economics, London, United Kingdom

Sep 2020 - Sep 2021

Research Assistant - Centre For Macroeconomics

- Advisors: Profs. Benjamin Moll & Ricardo Reis

European Central Bank, Frankfurt Am Main, Germany

Jun 2018 - Sep 2021

Analyst, Jun 2019 - Sep 2020

- Crisis Management - Quantitative Cluster

Trainee, Jun 2018 - Jun 2019

- Stress Test Modelling

Banco BPI, Lisbon, Portugal

Jun 2017 - Aug 2017

Intern, Private Banking

RESEARCH

Working Papers

- The Aggregate Green Elasticity of Substitution (**Draft**)

Abstract: We introduce a new strategy to estimate the aggregate elasticity of substitution between polluting and non-polluting energy. Exploiting variation in US states' energy mixes, we obtain an elasticity of 0.50 — significantly lower than prior studies. This challenges the notion that the energy transition can occur without compromising economic growth. A bottom-up model links aggregate to sectoral elasticities, highlighting transportation as a key constraint. Crucially, aggregate elasticity dynamics depend more on micro-level substitution patterns than on the distribution of the energy mix. Consistent with this, we find no evidence of rising substitutability over the past decade despite rapid clean energy adoption.

Work in Progress

- The Distributional Effects of Climate Change

EDUCATION

Nova School of Business and Economics, Lisbon, Portugal

2016-2019

- GPA 19/20 (A)
- Exchange Program at Copenhagen University

University of Porto, Porto, Portugal

2013-2016

- GPA 18/20 (A)

TEACHING

Northwestern University, Evanston, IL

2022-2024

Teaching Assistant

- Intermediate Macroeconomics, Prof. Robert Gordon
- International Finance, Prof. Richard Walker
- American Economic History since 1865, Prof. Benjamin Chabot
- American Economic History before 1865, Prof. Benjamin Chabot

Nova School of Business and Economics, Lisbon, Portugal

2018

Teaching Assistant

- Intermediate Macroeconomics, Profs. João Duarte & Pedro Brinca

SCHOLARSHIPS & AWARDS

- PhD Scholarship, Fundação para a Ciência e a Tecnologia, 2025-2026
- Nova SBE Novo Banco Master's Scholarship (#1), 2016-2019
- FEP Belgium Trip Award (top 3 cohort students), 2015

SKILLS

- Time-series Econometrics
- Microeconometrics
- Dynamic Equilibrium Models
- **Programming Languages:** R, Python, Matlab, SQL
- **Languages:** English, Portuguese (Fluent); French, Spanish (Conversational)