RUI SOUSA

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Kellogg Global Hub,
2211 N Campus Dr,
Evanston, IL 60208
United States

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

WORKING PAPERS

The Aggregate Green Elasticity of Substitution

Abstract: We develop a methodology to estimate the aggregate elasticity of substitution between pollutant and non-pollutant energy. Exploiting variation in U.S. states' energy mixes, we estimate an elasticity of 0.59 — statistically closer to unity and significantly smaller than prior studies suggest. This implies that subsidies alone may be insufficient to achieve a long-run energy transition. A model linking aggregate and sectoral elasticities yields an average end-user elasticity of 0.94, with the transportation sector emerging as a key constraint on overall substitutability. We show that increases in clean energy shares do not significantly raise the aggregate elasticity unless sectoral elasticities rise.

EDUCATION

Nova School of Business and Economics, Lisbon, Portugal   2016-2019

- GPA 19/20 (A - top 0.01%)
- 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

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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

Programming Languages: R, Python, Matlab, SQL
Other: LaTeX, Git, VBA
Languages: English, Portuguese (Fluent); French, Spanish (Conversational)