# **TIAGO BERNARDINO**

www.tiagobernardino.com tiago.bernardino@iies.su.se

#### **Personal Information**

#### **Office Contact Information**

Citizenship: Portuguese Data of birth: October 24, 1996 Phone: (+351) 965 147 956 Institute for International Economic Studies Stockholm University 106 91 Stockholm, Sweden

### **Research and Teaching Fields**

Macroeconomics: Monetary and Fiscal Policy; Public Economics

#### **Education**

2020-2026 <sup>e</sup>	IIES - Stockholm University, Ph.D. in Economics
2022-2023	London School of Economics, Visiting Ph.D. Student
2017-2019	Nova School of Business and Economics, M.Sc. in Economics
2014-2017	Nova School of Business and Economics, B.Sc. in Economics
2016	Bocconi University, Visiting Student

#### References

#### **Kurt Mitman**

IIES, Stockholm University +46 (0)8 16 30 57 kurt.mitman@iies.su.se

#### Per Krusell

IIES, Stockholm University +46 (0)8 16 30 73 per.krusell@iies.su.se

#### Ricardo Reis

London School of Economics +44 (0)20 795 7508 r.a.reis@lse.ac.uk

#### Job Market Paper

#### Structural Transformation and the Transmission of Monetary Policy

This paper examines how structural transformation – the shift of economic activity toward services – affects the transmission of monetary policy. I document two key empirical facts about the service sector with relevance for the propagation of changes in the nominal interest rate: (i) service prices adjust less frequently than goods prices, and (ii) high-income households allocate a larger share of their expenditure to services than low-income households. To understand how these two channels matter for monetary policy, I develop a two-sector heterogeneous-agent New Keynesian model with non-homothetic preferences. The model matches the long-run sectoral reallocation toward services and key moments of the U.S. consumption, income, and wealth distributions. I find that the shift toward services between 1970 and 2019 amplified the effects of monetary policy: the same contractionary shock leads to a 21% larger fall in aggregate consumption and a 5% higher welfare loss. These losses are concentrated among low-wealth households.

#### **Publications**

The Full, Persistent, and Symmetric Pass-Through of a Temporary VAT Cut with Ricardo Duque Gabriel, João Quelhas, and Márcia Silva-Pereira **Journal of Public Economics (2025)** 

Asset Liquidity and Fiscal Consolidation Programs (pre-Ph.D.) **Notas Económicas (2020)** 

#### **Working Papers**

### Monetary Policy and Household Portfolio Composition

with Pedro Brinca, Ana Melissa Ferreira, Hans Holter, Luís Teles Morais, and Mariana N. Pires

How does monetary policy affect household portfolio composition? Resorting to highly granular data on the balance sheets of Norwegian households, we analyze how their wealth portfolios change in response to well-defined monetary policy shocks. We document three empirical facts on the aggregate response of households after a 1 percentage point increase in the policy rate. i) The total value of households' portfolios decreases by 4.1% two years after the shock; ii) monetary policy tightening decreases the risk exposure of portfolios, in particular the value of stocks, bonds, and mutual funds; iii) stock market participation is unaffected by monetary policy, but those who already own stocks increase their holdings. We find pronounced heterogeneity in the responses, noting these additional facts: iv) the drop in risky asset values is mostly driven by the wealthiest 10 percent, while a short-term positive response of safe assets comes from middle-class households' portfolios; v) middle-aged homeowners benefit from a short-term house price appreciation, but for younger households, the effect becomes negative over time, indicating that tighter policy delays entry into home ownership.

# The Costs of Building Walls: Immigration and the Fiscal Burden of Aging in Europe with Francesco Franco and Luís Teles Morais

In low-fertility societies with regular immigration of young workers, reducing inflows disproportionately raises dependency ratios as native populations shrink. This creates a convex policy frontier: restricting migration raises fiscal costs at an increasing rate. We quantify this mechanism using a population model combined with novel estimates of immigrants' fiscal contributions in Euro area countries. Eliminating immigration raises the fiscal burden of aging by 16%, while doubling inflows reduces it by only 9%. The convexity generates large cross-country differences in fiscal gains from immigration, complicating common European policy design. Increasing fertility does not provide comparable relief.

# The Heterogeneous Effects of Supply Shocks in Necessity Goods with Pedro Brinca, Saman Darougheh, and Márcia Silva-Pereira

We study the efficacy of price subsidies – implemented via lower value-added taxes – in addressing sectoral supply shocks in the presence of non-homothetic preferences and imperfect pass-through. In our heterogeneous-agent model, sectoral shocks generate recessions in both necessity and luxury goods, with necessity recessions imposing larger costs on the bottom 30% of the income distribution. A subsidy that lowers the price of necessity goods is welfare-reducing: high-income households respond disproportionately even though these goods account for a smaller share of their consumption. By contrast, cash transfers mitigate the effects of sectoral supply shocks. Central to our findings is that the model aligns closely with the empirically observed non-homothetic behavior of households and the imperfect pass-through, which we also document.

# Why VAT Pass-Through Varies Across Countries: The Role of Market Power with Pedro Brinca, Saman Darougheh, and Márcia Silva-Pereira

We show that VAT pass-through rates depend systematically on market concentration using data from 16 European countries covering 1999-2019. Low-concentration industries exhibit 40% contemporaneous pass-through to consumers, while high-concentration industries show near-zero transmission. Cross-country differences explain 72% of the variation in market concentration. This heterogeneity accounts for 16% of cross-country variation in pass-through rates.

## **Other Writtings**

"Public Finances: an Intergenerational Perspective" (study on the Portuguese public finances sustainability) with Francesco Franco, Luís Teles Morais, and João Jalles

"Um ano depois do IVA zero: o que aprendemos e o que não aprendemos?" (op-ed about VAT 0 policy) with Márcia Silva-Pereira

"Um Nobel sobre a Democracia" (op-ed about the 2024 Nobel prize laureates work)

#### **Professional Activities**

Research Assistantships	RA to Francesco Franco (2018/19) RA to José Tavares (2017/18)
Referee Activity	Portuguese Economic Journal, Journal of Pension Economics and Finance
Research Visits	Banco de Portugal (2024, 2025), Danmarks Nationalbank (2023), London School of Economics (2022/23)
<b>Department Service</b>	Brown Bag seminars organizer (2023-2025), Ph.D. Welcome committee (2021)
Conferences Organized	SUDSWEC 2024, IMDb SI 2024
Presentations	

2025	Portuguese Tax Authority; University of Mannheim; Stockholm University; BSE Summer Forum; ENTER Jamboree; IMDb SI; PEJ; Banco de Portugal; Graduate Workshop on Heterogeneous Agent Macroeconomics; SUDSWEC; Doctoral Workshop on Quantitative Dynamic Economics
2024	Lisbon Migration Economics Workshop; Stockholm University; IMDb SI; GPEARI/GEE; PEJ; SUDSWEC; Swedish Conference in Economics; Workshop of the ESCB Network of Microsimulation Modelling; 3 <sup>rd</sup> Conference "Portuguese Around the World: Central Banking Edition"
2023	60 <sup>th</sup> Annual Meetings of the Public Choice Society; LSE; PEJ; SUDSWEC; 12 <sup>th</sup> Ph.D. Workshop in Finance; Stockholm University
2022	Stockholm University; PEJ

### **Teaching Experience**

2021	Macroeconomics, TA for Roine Vestman (Stockholm University)
2018-2020	Principles of Macroeconomics, TA for José Costa and José F. Machado (Nova SBE)
2018-2019	Intermediate Macroeconomics, TA for Pedro Brinca and João B. Duarte (Nova SBE)
2017	Calculus I, TA for Maria H. Almeida (Nova SBE)

# Honors, Scholarships, and Fellowships

2022	Research visit grant, Jan Wallander and Tom Hedelius Foundation (SEK 490 000)
2020	Ph.D. Scholarship, Portuguese Foundation for Science and Technology
2019	Award "Best Teaching Assistant", Nova SBE
2017	Nova Fellowship for Excellence. Nova SBE
2016	Erasmus scholarship, UNL
2014	Award "Best 35 new students", Nova SBE

# Language Knowledge

Computer: MATLAB, LaTeX, Python, Stata

Human: Portuguese (native), English (fluent), French, Italian, and Spanishn (beginner)