

Alaïs Martin-Baillon

SciencesPo Department of Economics
28 Rue des Saints-Pères,
75007 Paris, France
alais.martinbaillon@sciencespo.fr

Research Interests

Macroeconomics, Heterogeneous Agents, Firms, Business Cycle

References

[XAVIER RAGOT](#) (supervisor) - Sciences Po
Professor - Department of Economics
xavier.ragot@sciencespo.fr

[FLORIN BILBIIE](#) - University of Lausanne
Professor - Department of Economics
florin.bilbiie@gmail.com

[MIRKO WIEDERHOLT](#) - Ludwig-Maximilians-Universität München
Professor - Department of Economics
mirko.wiederholt@gmail.com

[GILLES SAINT-PAUL](#) - Paris School of Economics
Professor - Department of Economics
gstpaulmail@gmail.com

Education

- | | |
|-----------|--|
| 2017-2021 | Ph.D. in Economics (SciencesPo) - ‘Essays on the design of macroeconomic policies in heterogeneous agent models’. Defended on December 6, 2021.
Jury : Florin Bilbiie (president and referee), Jeanne Commault, Axelle Ferriere, Xavier Ragot (advisor), Vincent Sterk (referee), Mirko Wiederholt. |
| 2015-2017 | M.Sc. in Economics ‘Analysis and Policy in Economics’ (APE, Paris School of Economics) |

Research experience

- | | |
|-----------|--|
| 2020 | Sciences Po - Research Assistant for Jeanne Commault - Measuring Consumption Inequality |
| 2016-2017 | Sciences Po - French Economic Observatory (OFCE) - Research Assistant |
| 2015 | Natixis, Research Department - Assistant Econometrician (intern) for Patrick Artus (Chief Economist) |

Teaching

2017-2021	Graduate Macroeconomics 2 - Teaching Assistant for Mirko Wiederholt
2018-2021	Graduate Macroeconomics 3 - Teaching Assistant for Xavier Ragot
2017-2018	Graduate Macroeconomics for Public Policies - Teaching Assistant for Xavier Ragot and Philippe Andrade
2020-2021	Undergraduate Mathematics for Quantitative Social Sciences - Lecturer

Job Market Paper

When should we tax firms ? Corporate fiscal policy with firm heterogeneity

Corporate fiscal policy over the business cycle is carried out in very different ways over time and across countries. Moreover, little is known about how it should be conducted. This paper studies the design of optimal fiscal policy in a heterogeneous firm environment, when the economy is hit by aggregate shocks. It provides tools to understand when and how heterogeneous firms should be taxed or subsidized over cycles. To tackle this issue, I first solve a tractable model which delivers a simple distribution of firms. In this framework, I provide an analytical characterization of the corporate tax rate over the business cycle. Then, using a fully fledged heterogeneous firm model and cutting-edge computational method, I solve for the optimal path of the tax rate in this environment. My main result is that, in both exercises, the variation of the optimal tax rate depends on the expected persistence of the aggregate shock. This is due to the presence of financial constraints that prevent the allocation of capital from being optimal. I show that the magnitude of this problem varies over the business cycle depending on the persistence of the aggregate shock. When the shock is very persistent, this problem decreases and the optimal tax rate is pro-cyclical. On the contrary, when the shock is not persistent, this problem increases and the optimal tax rate is counter-cyclical.

Work in Progress

Should monetary policy care about redistribution ? Optimal fiscal and monetary policy with heterogeneous agents Joint with François Le Grand and Xavier Ragot - *Reject & Resubmit at the Review of Economic Studies*

We derive optimal monetary and fiscal policies in a heterogeneous-agent economy with nominal frictions and aggregate shocks, and allowing for a rich set of fiscal tools. We first theoretically show that when linear taxes on capital and labor are available, there is no redistributive role for monetary policy : monetary policy solely implements price stability. Second, when fiscal tools are incomplete, we find that optimal deviation from price stability is quantitatively very small when the economy is running for a long time, i.e. in a timeless perspective. Redistribution is then mostly a matter of fiscal policy. When fiscal tools are missing, there can be a significant though temporary deviation from price stability when we consider a time-0 problem where the planner is not constrained by past commitment. We provide analytical results using an extended Lagrangian approach applied to incomplete-market models. Quantitative results are derived thanks to a truncated representation of incomplete-market models, which provides a relevant tractable environment.

Firms' Marginal Propensities to Invest

How to stimulate aggregate investment ? There are different transmission channels from macroeconomic policies to firm's investment. Changes in firms' income is an important one. Therefore, designing efficient counter-cyclical policies requires an understanding of how changes in firms' income translate into changes in firms' investment and which firms are the most responsive to such policies. In this paper, I use a new method to estimate firms' marginal propensities (MPIs) to invest out of a transitory liquid income shock. I use a semi-structural method developed in the household literature and I show that this method can overcome difficulties encountered in previous estimations. I also investigate MPIs heterogeneity across firms. I show that firms' MPIs are positive and significantly different from 0. On average, firms use 14.4% of the change in current income caused by a transitory income shock to invest. Moreover, firms that face financial constraints and/or firms that face liquidity constraints have higher MPIs than the ones that don't. Finally, I show that MPIs are very heterogeneous across sectors.

Policy Work

What impact does the CICE have on wages and employment ? An evaluation for the period 2014-2017 on industry data (joint with Bruno Ducoudré, Éric Heyer and Mathieu Plane)
SciencesPo OFCE Working Paper n°25, 2017/10/26

Other Publication

2021 | Helicopter money : beyond myth and magic - (joint with Florin Bilbiie and Gilles Saint-Paul)
Book : Cepremap Collection, Rue d'Ulm Edition

Conferences

2021 | 2021 European Winter Meetings of the Econometric Society (*forthcoming*), SciencesPo Friday Seminar, 52nd Annual Conference of the MMF Society, IAAE 2021 Annual Conference, 23rd INFER Annual Conference, AFSE Annual Congress 2020, SciencesPo Ph.D Econ Seminar

2020 | SciencesPo Friday Seminar

2018 | 50th Annual Conference of the MMF Society

Event Organization

2018 | Macro Reading Group (SciencesPo / OFCE) : "The Macroeconomic Implications of Microeconomic Heterogeneity" (with Édouard Challe and Xavier Ragot)

Grant

2021-2022 | Fellowship - Banque de France / SciencesPo
2020-2021 | Temporary Lecturer - SciencesPo
2017-2010 | SciencesPo Doctoral School Scholarship

Language and Computer Skills

Language | French, English
Computer | Julia, Stata, Matlab, Dynare, Python, EViews