Tobias Kawalec

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Education

University of Oxford, Nuffield College — Oxford, United Kingdom
DPhil in Economics; supervisors: Prof Michael McMahon and Prof Martin Ellison — *Oct. 2022 – Apr 2026*

- Preliminary thesis title: **Essays on Information Frictions in Macroeconomics**

University of Oxford, Nuffield College — Oxford, United Kingdom
MPhil in Economics; grade: Distinction — *Oct. 2020 – Jul 2022*

Goethe-University Frankfurt am Main — Frankfurt, Germany
BSc Economics and Business Administration, major in Economics, grade: 1.1 (Valedictorian) — *Apr. 2016 – Aug 2019*

Experience

Stipendiary Lecturer/Graduate Teaching Assistant — Sep 2022 – Jun 2025
University of Oxford — *Oxford, United Kingdom*

- Provision of tutorials for undergraduate students in 'Core Macroeconomics' and 'Prelims Macroeconomics' at The Queen's College (as Stipendiary Lecturer) and Exeter College, as well as for graduate students in MPhil 'Core Maroeconomics'

Research Assistant, Department of Economics — Jul 2022 – Sep 2022
University of Oxford — *Oxford, United Kingdom*

- Under the supervision of Prof. Michael McMahon
- Development of a dynamic general equilibrium model with inventories and non-linearities in supply chains (see details below)

Research Intern, Department of International Finance and Macroeconomics — Jul 2021 – Sep 2021
Kiel Institute for the World Economy — *Kiel, Germany*

- Under the supervision of Prof. Christoph Trebesch, supporting empirical research on sovereign debt and default
- First research project focused on the determinants of lending to sovereign entities from private and public debtors, establishing differences in discriminatory lending criteria in lending
- Second research project explored the predictability of arrears arrangements as well as their incidence with the size of outstanding commitments for repayment

Research Assistant, Department of Market Design — Mar 2020 – Jul 2020
ZEW Institute for European Economic Research — *Mannheim, Germany*

- Co-development of a research project on the the effects of self-deception in decision-making
- Fully independent implementation of the related human decisionmaking experiment using Python (oTree) and Django, front-end development using PHP and JS

Intern in Supervisory Bank Stress Testing and Research — Sep 2019 – Mar 2020
Deutsche Bundesbank — *Frankfurt, Germany*

- Improving methods relating to stress tests of less-significant banking institutions
- Automation of the data gathering and cleaning process for the EBA's stress test of large European banks in R
- Participation in research projects on the determinants of bid-ask spreads using Bloomberg Terminals and R

Student Research Assistant — Sep 2018 – June 2021
Chair of Macroeconomics and Labor Markets (Prof. Leo Kaas), Goethe-University Frankfurt — *Frankfurt, Germany*

- Main topic: Linkages between frictional and heterogeneous product and labor markets in German firms
- Utilization of federal data from the German National Statistical Office
- Implementation of state-of-the-art economic methods in Stata

Departmental and Voluntary Work — Mar 2017 – Jun 2022
Goethe-University Frankfurt & University of Oxford — *Frankfurt, Germany; Oxford, United Kingdom*

- Spokesman/Head of the Student Council, representing *all* Economics students (Goethe-University Frankfurt)
- Treasurer of the Clarendon Scholars' Association (University of Oxford)
- Student Representative for the MPhil in Economics (University of Oxford)

Working Papers and Ongoing Projects

Debt Indexation and the Fiscal Theory of the Price Level December 2024

- In this paper, we analyze the importance of *inflation-indexation* of a part of the stock of government debt. We first establish that the degree to which uncovered sovereign spending shocks are inflationary is increasing in the share of inflation-indexed debt in the overall government debt portfolio. We leverage this finding to introduce inflation-indexed debt in a model of the Fiscal Theory of the Price Level (FTPL), where we show that: (i) even absent further frictions, inflation-indexed debt makes the price level backward-looking (i.e., it becomes a state variable), (ii) it tightens bounds that pin down 'active fiscal policy', and (iii) in a calibrated HANK model, a one percentage point increase in the share of inflation-indexed debt in overall government debt increases the volatility of the response of inflation to government spending by up to 4% relative to a no-indexed debt baseline case in a world of fiscal dominance.

Towards a Bullwhip Theory of Supply Chains *(joint w/ Michael McMahon, draft coming soon!)* June 2024

- **Abstract:** Despite widespread discussion in the Operations Research literature of the relevance and importance of the 'bullwhip effect' as a magnifying determinant of supply chain volatility, the topic is rarely discussed in macroeconomic production frameworks. The few discussions of it in economics have tended to be empirical in nature. This paper lays the groundwork for an economic theory of the bullwhip effect, providing an intuitive model of firms in supply chains and laying out potential use-cases of the model. With the bullwhip effect, inventories lead to greater instability of value-added, with the corollary that inventory management improvements reduce volatility to the extent that they improve the flow of information along the supply chain.

Technology Information Transmission under Rational Inattention *(draft available upon request)* March 2023

- **Abstract:** A consensus on the causes of the productivity paradox shaping the macroeconomic environment since the Great Financial Crisis has yet not been determined. This paper proposes a new mechanism explaining muted aggregate growth and business cycle dynamics through a model of firm-to-firm innovation spillovers under decreased costs of acquiring information about other firms and the macroeconomic environment. The model identifies the effects of reduced costs of information on relative firm market power as one of the main driving forces behind the partial slowdown of output growth in response to technological shocks. Empirical evidence from a structural estimation of technological shocks using a Vector Autoregression is shown to support the model's main conjecture.

Scholarships and Certificates

Department of Economics, University of Oxford | *5th year bursary* September 2024 – June 2025

Nuffield College Scholarship | *Scholarship providing living allowance* October 2020 – June 2024

Clarendon Fund Scholarship | *Underwriting tuition at the University of Oxford* October 2020 – June 2024

GRE General Test | *Q 170/170 (96th perc.), V 158/170 (80th perc.), AWA 6.0/6.0 (99th perc.)* November 2019

TOEFL iBT Test | *Total score: 119/120 points* November 2019

Deutschland-Stipendium | *German Scholarship for Academic Excellence* October 2017 – September 2019

Christa-und-Norbert-Walter-Scholarship | *Funding for semester abroad* August 2017 – December 2017

Dean's List Membership | *For excellent academic performance* July 2016 – August 2019

Other information

Programming: Python, R, Matlab, Julia
Software: Stata, LaTeX, MS Office
Financial databases: Bloomberg, Refinitiv Eikon
Languages: German (native), Polish (native), English (professional), Spanish (beginner)
Citizenship: German, Polish
Other interests: Handball (incl. refereeing), Ballroom Dancing, Travelling, Geography and Transportation

Oxford, December 3, 2024