

# LUKAS B. FREUND

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## Placement Officers

Prof. Tiago Calvacanti

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## Placement Coordinator

Louise Cross

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## GRADUATE STUDIES

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### PhD Economics, University of Cambridge

2018 -

Main advisor: Vasco Carvalho

Research visits: LSE (2021/2022), Princeton (2022/2023), Chicago (March 2023)

Expected completion date: June 2024

### References:

Prof. Vasco Carvalho  
Department of Economics  
University of Cambridge  
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Prof. Wouter Den Haan  
Department of Economics  
London School of Economics & Political Science  
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Prof. Luis Garicano  
School of Public Policy  
London School of Economics & Political Science  
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Prof. Richard Rogerson  
Department of Economics  
Princeton University  
rdr@princeton.edu

## FIELDS

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Primary: Macroeconomics

Secondary: Labor economics, Inequality, Computational Methods

## PRIOR EDUCATION

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### MPhil Economics, University of Oxford

2016 - 2018

Graduated with distinction and prize for best thesis

### BA Philosophy, Politics, and Economics, University of Oxford (Balliol College)

2012 - 2015

Graduated with double first-class honours

## JOB MARKET PAPER

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### Superstar Teams: The Micro Origins and Macro Implications of Coworker Complementarities

Recent studies attribute the rise in wage inequality primarily to widening pay disparities between rather than within firms. I develop a novel theory to quantitatively explain this fact. The theory has three core features: production takes place in teams; workers are heterogeneous in talent and are specialized in specific tasks; and labor markets are frictional. Specialization endogenously generates coworker complementarity: talented workers gain more from more talented colleagues. This creates an incentive for assortative matching, fostering dispersion in average wages across firms. Search frictions prevent perfect sorting in equilibrium, though. Using administrative panel data for Germany, I measure complementarities, validate key mechanisms, and structurally estimate the model. I argue that specialization has intensified since the mid-1980s, and show that coworker complementarities and talent sorting have strengthened concurrently, aligned with the theory's predictions. According to model exercises, this explains ~40% of the observed increase in the between-firm share of wage inequality, and contributed to elevated firm-level productivity dispersion. Rising complementarities also worsened aggregate output costs from coworker mismatch, but endogenously increased sorting partly mitigated this effect.

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**PEER-REVIEWED PUBLICATIONS**


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**The Risk-Premium Channel of Uncertainty** (with H. Lee & P. Rendahl)

*Review of Economic Dynamics, forthcoming (2023)*

This paper studies the role of macroeconomic uncertainty in a search-and-matching framework with risk-averse households. Heightened uncertainty about future productivity reduces current economic activity even in the absence of nominal rigidities. A risk-premium mechanism accounts for this result. As future asset prices become more volatile and covary more positively with aggregate consumption, the risk premium rises in the present. The associated downward pressure on current asset values lowers firm entry, making it harder for workers to find jobs and reducing the supply of goods. With nominal rigidities the recession is exacerbated, as a more uncertain future reinforces households' precautionary behavior, which causes demand to contract. Counterfactual analyses using a calibrated model imply that unemployment would rise by less than half as much absent the risk-premium channel. The presence of this mechanism implies that uncertainty shocks are less deflationary than regular demand shocks, nor can they be fully neutralized by monetary policy.

**Volatile Hiring: Uncertainty in Search and Matching Models** (with W. Den Haan & P. Rendahl)

*Journal of Monetary Economics, Vol. 123 pp. 1-18 (2021)*

In search-and-matching models, the nonlinear nature of search frictions increases average unemployment rates during periods with higher volatility. These frictions are not by themselves sufficient to raise unemployment following an increase in perceived uncertainty; though they may do so in conjunction with the common assumption of wages being determined by Nash bargaining. Importantly, option-value considerations play no role in the standard model with free entry. In contrast, when the mass of entrepreneurs is finite and there is heterogeneity in firm-specific productivity, a rise in perceived uncertainty robustly increases the option value of waiting and reduces job creation.

**Workers, Capitalists, and the Government: Fiscal Policy and Income (Re)Distribution** (with C. Cantore)

*Journal of Monetary Economics, Vol. 119 pp. 58-74 (2021)*

We propose a novel two-agent New Keynesian model to study the interaction of fiscal policy and household heterogeneity in a tractable environment. Workers can save in bonds subject to portfolio adjustment costs; firm ownership is concentrated among capitalists who do not supply labor. The model is consistent with micro data on empirical intertemporal marginal propensities to consume, and it avoids implausible profit income effects on labor supply. Relative to the traditional two-agent model, these features imply, respectively, a lower sensitivity of consumption to the composition of public financing; and smaller fiscal multipliers alongside pronounced redistributive effects.

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**WORK IN PROGRESS**


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**Frictional worker and firm dynamics with two-sided heterogeneity** (project title), with T. Ifergane

**Ideas Are Harder to Manage**, with V. Carvalho

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**ACADEMIC EXPERIENCE**


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**Teaching**

Teaching Assistant, Computational Tools for Macroeconomists Summer School	2020, 2022
TA for Professors Den Haan, Rendahl, and Sedlacek	
The Essentials & Advanced Tools; course content available online	
Undergraduate Supervisor, University of Cambridge	2018 - 2020
Intermediate macroeconomics (2 <sup>nd</sup> year undergraduate); teaching evaluations available online	

**Research assistance**

Research Assistant to Prof. Wouter Den Haan	Mar. 2020 - Sept. 2020
Research Assistant to Prof. Sophocles Mavroeidis	Summer 2018

## PROFESSIONAL ACTIVITIES

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### **Presentations: conferences and seminars**

2023 (incl. scheduled): Harvard Growth Lab, CRC TR 224 Workshop on Labor Markets III, CEPR Annual Meeting of the Macroeconomics and Growth programme  
 2022: University of Aarhus, Stanford Institute for Theoretical Economics Conference, OECD, 17<sup>th</sup> Swiss Economists Abroad Conference  
 2021: Institut für Makroökonomie und Konjunkturforschung, 2021 Meetings of the Royal Economic Society  
 2020: 24<sup>th</sup> Conference Theories & Methods in Macroeconomics (cancelled), 10<sup>th</sup> Annual Search and Matching Conference (poster session, cancelled), 23<sup>rd</sup> Central Bank Macro Modelling Workshop  
 2019: Nuffield Centre for Applied Macro Policy 3<sup>rd</sup> Annual Conference, Nordic Summer Symposium in Macroeconomics (discussion), Bank of England, Int. Association for Applied Econometrics Conference

### **Refereeing**

*Econometrica*, *Journal of Political Economy* (2x), *Review of Economic Studies*, *BE Journal of Macroeconomics*, *Economica*, *European Economic Review* (3x), *Macroeconomic Dynamics*, *Oxford Economics Papers* (2x), *Review of Economic Dynamics*

### **Other service activities**

Co-coordinator, Applicant Mentoring Programme (Cambridge)	2021-2023
PhD students representative, Cambridge Faculty of Economics	2021
Co-convenor, Cambridge Macro Reading Group	2020 & 2021
Co-organizer, Heterogeneity and Monetary Policy after COVID-19 Mini Conference	Nov. 2020

## PROFESSIONAL EXPERIENCE

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<b>Research Intern &amp; External Consultant</b> , OECD (remote/Paris, France)	Jul. 2021 - Dec. 2023
<b>Academic Visitor</b> , Bank of England (London, UK)	2020
<b>PhD Intern</b> , Bank of England (London, UK)	Jun. 2019 - Sept. 2019
<b>Research Intern</b> , Deutsche Bundesbank (Frankfurt, Germany)	Jul. 2017 - Aug. 2017
<b>Analyst</b> , Pimco (London, UK)	Aug. 2015 - Jul. 2016

## GRANTS, AWARDS & SCHOLARSHIPS

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<b>Keynes Fund Grant</b> , Faculty of Economics University of Cambridge	2021
<b>Procter Fellowship to Princeton University</b> , Procter Fund Awarded in 2021; visit delayed to AY 2022/2023 due to COVID-19 pandemic	2021
<b>Gates Scholarship</b> , Gates Cambridge Trust	2018
<b>Short-listed for Examination Fellowship</b> , All Souls College Oxford	2018
<b>George Webb Medley Prize</b> (best MPhil Economics thesis), University of Oxford	2018
<b>Klaus Murmann Scholarship</b> , Stiftung der Deutschen Wirtschaft	2013 - 2015 & 2016-2020

**PUBLIC WRITING & NON-REFEREED PUBLICATIONS**

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**Wait and See: The Labour Market Implications of Economic Uncertainty** (with W. Den Haan and P. Rendahl)  
*VoxEU Column, September 2021*

**COVID-Induced Uncertainty: Implications for Unemployment, Inflation, and Policy** (with P. Rendahl)  
*Cambridget INET Special Issue, May 2020*

**Banks do not Create Money out of Thin Air** (with P. Rendahl)  
*VoxEU Column, December 2019*

**The Productivity Paradox - A Survey**  
*Dezernat Zukunft, October 2018*

**EXTRACURRICULARS**

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**Curator**, Global Shapers Cambridge Hub (WEF Initiative) 2019 - 2020

**President**, Balliol College Middle Common Room 2017 - 2018

**Student Representative (Politics & Economics)**, University of Oxford 2013 - 2014 & 2016 - 2017

**OTHER RELEVANT INFORMATION**

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**Programming skills:** Matlab, Python, Stata

**Finance skills:** Passed Chartered Financial Analyst (CFA) Level 1 Exam

**Languages:** German (native), English (native proficiency), French (basic)

**Citizenship:** British, German, Swiss