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Matthias Hänsel

Contact Information
Maltgatan 12, Lgh 1312
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Personal Information
Citizenship: Germany
Date of Birth: September 17, 1994
Website: https://mhaense1.github.io

Education

Stockholm School of Economics
PhD in Economics — Spring 2025 (expected)

New York University
Visiting PhD Student — Jan. 2023 – May 2023

Tilburg University
Research Master (MSc) in Economics (*with distinction*) — Aug. 2017 – July 2019

University of Cologne
BSc in Economics — Oct. 2013 – Sep. 2016

Research Interests

Macroeconomics, Heterogeneous Agents, Monetary & Fiscal Policy, Labor Markets, Numerical Methods

Professional Experience

European Central Bank — *Frankfurt, Germany*
PhD trainee in the Supply Side, Labor and Surveillance (SSL) division — Jul. 2022 – Nov. 2022

German Council of Economic Experts — *Wiesbaden, Germany*
Intern at the Scientific Staff — May 2016 – Jun. 2016

ifo Institute for Economic Research — *Munich, Germany*
Intern at the ifo Center for Public Finance and Political Economy — Mar. 2016 – Apr. 2016

ecoprog GmbH — *Cologne, Germany*
Working Student at an Environmental Technology consultancy — Jan. 2015 – Jan. 2017

Teaching Experience

Firms, Miscallocation and the Macroeconomy (MSc level)
Teaching Assistant for Ass. Prof. Sampreet Goraya — Spring 2022

Dynamic Macroeconomic Analysis (MSc level)
Teaching Assistant for Ass. Prof. Kelly Ragan — Spring 2021

Macroeconomics I (PhD level)
Teaching Assistant for Prof. Lars Ljungqvist — Spring 2021

Skills

Programming: Julia, Matlab, R, Stata, LaTeX
Languages: German (native), English (fluent), Swedish (intermediate), French (intermediate)

Publications

Hänsel (2024): "Solving the Diamond–Mortensen–Pissarides model: A hybrid perturbation approach", *Economics Letters*, 236, 111621. DOI: https://doi.org/10.1016/j.econlet.2024.111621

Working Papers

Idiosyncratic Risk, Government Debt and Inflation [Link]

Abstract: How does public debt matter for price stability? If it is useful for the private sector to insure idiosyncratic risk, government debt expansions can increase the natural rate of interest and create inflation. As I demonstrate using a tractable model, this holds in the presence of an active Taylor rule and does not require the absence of future fiscal consolidation. Further analysis using a full-blown 2-asset HANK model reveals the quantitative magnitude of the mechanism to crucially depend on the structure of the asset market: under standard assumptions, the effect of public debt on the natural rate is either overly strong or overly weak. Employing a parsimonious way to overcome this issue, my framework suggests relevant effects of public debt on inflation under active monetary policy: In particular, persistently elevated public debt may make it harder to go the "last mile of disinflation" unless central banks explicitly take its effect on the neutral rate into account.

HANK faces Unemployment
(with Agostino Consolo, ECB) [available upon request]

Abstract: Since the advent of Heterogeneous Agent New Keynesian (HANK) models, countercyclical unemployment risk has been deemed an important amplification mechanism for business cycles shocks. Yet, the aggregate effects of such "unemployment fears" are hard to pin down: We thus revisit this issue in the context of a rich two-asset HANK model, proposing new ways to isolate their general equilibrium effects and tackle the long-standing challenge of modelling wage bargaining in this class of model. While unemployment fears can exert noticeable aggregate effects, we find their magnitude to depend importantly on the distribution of firm profits. Households' ability to borrow stabilizes the economy. Our framework has also implications for policy: In the aftermath of an adverse energy price shock, fiscal policy can help reduce the hysteresis effects on unemployment and most households gain if the central bank accommodates an employment recovery at the cost of higher inflation.

Monetary Policy Transmission, Central Bank Digital Currency, and Bank Market Power
(with Hanfeng Chen and Hiep Nguyen, both Uppsala University) [Link]

Abstract: Interest rates on new central bank digital currencies (CBDCs) can be expected to enter the monetary policy toolkit soon. Using an extended Sidrauski (1967) model featuring an oligopsonistic banking sector, we study the complex transmission of interest rates on CBDC, which generally involve both direct and indirect effects. This is because a CBDC rate cut does not only affect the rate on the CBDC itself, but also induces the non-competitive deposit providers to adjust their spreads, as the new substitute for their products becomes relatively less attractive. A calibration exercise suggests that the indirect effects depend strongly on the sources of deposit market power: If driven by high concentration, they substantially amplify the aggregate effects of the CBDC policy rate, both in response to transitory shocks as well as regarding its long-run welfare effects. This contrasts them with policies directed at the banking sector which are weakened by a less competitive deposit market.

Solving Bewley Models with Bilateral Wage Bargaining [available upon request]

Abstract: Search-and-Matching models with incomplete markets à la Bewley appear challenging to solve, as standard wage bargaining protocols imply workers' wages to depend on their wealth. In fact, I demonstrate that they can be analyzed quickly by building on the Endogenous Grid Method (EGM), particularly if one uses a novel *Match-Integrated Endogenous Grid Method* (MIEGM): Its key feature is that it obtains worker- and firm value functions jointly instead of solving an outer functional fixed point problem. I show that this fast algorithm can be applied to a variety of models, including set-ups with endogenous separations or intensive margin labor supply. Additionally, the joint solution procedure facilitates studying aggregate shocks and transition dynamics using recent Sequence Space methods.

Presentations

2024 (including scheduled)

- European Central Bank, DG Economics Seminar
- 17th RGS Doctoral Conference in Economics
- 3rd Riksbank PhD Workshop in Money and Finance
- University of Mannheim, Doctoral Colloquium
- SSE PhD Workshop
- Midwest Macroeconomics Meeting
- ENTER Jamboree, Université Libre de Bruxelles
- North American Summer Meeting of the Econometric Society
- XXVII Vigo Workshop on Dynamic Macroeconomics
- EEA-ESEM
- VfS Annual Conference

2023

- NYU PhD Student Macro Lunch Seminar
- SSE PhD Workshop
- Stockholm-Uppsala Doctoral Student Workshop in Economics (SUDSWEC)
- 12th National PhD Workshop in Finance, Swedish House of Finance (SHoF)
- Fed St. Louis-JEDC-SCG-SNB-Conference on Heterogeneity and Macroeconomics of Labor Markets (*Poster session*)
- Macro PhD Seminar, Uppsala University
- Brownbag seminar, Stockholm School of Economics

2022

- Brownbag seminar, Stockholm School of Economics
- SSE PhD Workshop
- IIES Macro Group, Stockholm University
- European Central Bank, Workshop on Heterogeneity in Macroeconomics
- European Central Bank, Supply Side, Labor and Surveillance (SSL) division

Additional Coursework / Training

Deep Learning for Solving and Estimating Dynamic Models — *Lausanne, Switzerland*
Econometric Society Summer School in Dynamic Structural Econometrics — August 2023

Heterogeneous-Agent Macro in the Sequence Space — *Mannheim, Germany*
EABCN Training School, taught by Ludwig Straub — June 2022

Modern Macro, Money, and International Finance — *online*
EABCN Training School, taught by Markus Brunnermeier — June 2021

Numerical Methods — *online*
SciencesPo PhD course, taught by Florian Oswald — Spring 2021

Scholarships & Awards

Hedelius Scholarship, Jan Wallanders och Tom Hedelius Stiftelse
SEK 500,000 grant for PhD studies abroad — 2021

Koopmans Scholarship, CentER Graduate School
Monthly scholarship for Research Master students at Tilburg University — Aug. 2017 – July 2019

Dean's Award for Outstanding Academic Achievements
Best 5% of Economics B.Sc. cohort at the University of Cologne — 2015

References

Available upon request.