

November 6, 2024

# Matthias Hänsel

## Contact Information

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12079 Stockholm  
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## Personal Information

Date of Birth: September 17, 1994  
Citizenship: Germany  
Website: <https://mhaensel.github.io>

## EDUCATION

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### 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

## REFERENCES

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### Prof. Lars Ljungqvist (Advisor)

Stockholm School of Economics  
Lars.Ljungqvist@hhs.se

### Prof. David Domeij (Advisor)

Stockholm School of Economics  
David.Domeij@hhs.se

### Prof. Tore Ellingsen

Stockholm School of Economics  
Tore.Ellingsen@hhs.se

### Dr. Agostino Consolo

European Central Bank  
Agostino.Consolo@ecb.europa.eu

## RESEARCH INTERESTS

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

## RELEVANT PROFESSIONAL EXPERIENCE

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### European Central Bank

PhD trainee in the Supply Side, Labor and Surveillance (SSL) division

*Frankfurt, Germany*

Jul. 2022 – Nov. 2022

### German Council of Economic Experts

Intern at the Scientific Staff

*Wiesbaden, Germany*

May 2016 – Jun. 2016

### ifo Institute for Economic Research

Intern at the ifo Center for Public Finance and Political Economy

*Munich, Germany*

Mar. 2016 – Apr. 2016

## TEACHING EXPERIENCE

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### Firms, Misallocation 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

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**Software:** Julia, Matlab, R, Stata, MS Office, L<sup>A</sup>T<sub>E</sub>X

**Languages:** German (native), English (fluent), Swedish (intermediate), French (intermediate)

## PUBLICATIONS

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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

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### **Idiosyncratic Risk, Government Debt and Inflation** [*Job Market Paper*]

Abstract: How does public debt matter for price stability? If it is useful for the private sector to insure idiosyncratic risk, even transitory government debt expansions can exert upward pressure on interest rates and create inflation. As I demonstrate using an analytically 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 quantitative 2-asset HANK model reveals the magnitude of the mechanism to crucially depend on the structure of the asset market: under common assumptions, the interest rate effects of public debt are either overly strong or overly weak. After disciplining this aspect based on evidence regarding its long-term relationship with treasury returns, my framework indicates relevant short-run effects of public debt on inflation under active monetary policy: In particular, in the HANK model the mechanism can account for US inflation remaining elevated in 2023 and afterwards.

### **HANK faces Unemployment**

(with Agostino Consolo, ECB) [ECB Working Paper 2953]

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.

### **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.

### **Monetary Policy Transmission, Central Bank Digital Currency, and Bank Market Power**

(with Hanfeng Chen and Hiep Nguyen, both Uppsala University) [Draft]

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.

## PRESENTATIONS

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### 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
- European Central Bank, Research Task Force on Heterogeneity in Macroeconomics and Finance 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

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<b>Deep Learning for Solving and Estimating Dynamic Models</b> Econometric Society Summer School in Dynamic Structural Econometrics	<i>Lausanne, Switzerland</i> August 2023
<b>Heterogeneous-Agent Macro in the Sequence Space</b> EABCN Training School, taught by Ludwig Straub	<i>Mannheim, Germany</i> June 2022
<b>Modern Macro, Money, and International Finance</b> EABCN Training School, taught by Markus Brunnermeier	<i>online</i> June 2021
<b>Numerical Methods</b> SciencesPo PhD course, taught by Florian Oswald	<i>online</i> Spring 2021

## SCHOLARSHIPS & AWARDS

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<b>Hedelius Scholarship</b> , Jan Wallanders och Tom Hedelius Stiftelse SEK 500,000 grant for PhD studies abroad	2021
<b>Koopmans Scholarship</b> , CentER Graduate School Monthly scholarship for Research Master students at Tilburg University	Aug. 2017 – July 2019
<b>Dean's Award for Outstanding Academic Achievements</b> Best 5% of Economics B.Sc. cohort at the University of Cologne	2015