

## Personal information

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Web <https://gregorboehl.com>  
Nationality German

## Research Interests

Primary Dynamics of inequality, macro/monetary theory, financial fragility  
Secondary Heterogeneous agents, projection methods, nonlinear dynamics

## Position

Since 2017 **IMFS, Goethe University Frankfurt**  
**Post-Doc** Macroeconomic Model Comparison Initiative (MMCI) joint project with Hoover Institution/Stanford

## Education

2013 – 2017 **CeNDEF, University of Amsterdam** and **BiGSEM, Bielefeld University**  
**PhD** European Doctorate in Economics Erasmus Mundus (EDEEM) Program  
Courses at Tinbergen Institute  
Supervisors: Cars Hommes (UvA) and Herbert Dawid (Bielefeld U.)  
**Thesis:** *Macrofinance Dynamics, Heterogeneity, and Policy Design*

2011 – 2012 University of Granada, Spain  
Master: Economics MSc in Economics, Supervisor: Nikos Georgantzis, U. of Reading, UK

2007 – 2010 Humboldt University Berlin & TU Dresden, Germany  
Bachelor: Economics & Social Science BSc in Economics, Supervisor: Lutz Weinke, HU-Berlin

## References

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## Achievements & Grants

2017 Student price of the Society of Computational Economics  
2014 – 2017 Bielefeld Graduate School in Economics and Management (BiGSEM) Scholarship  
2013 – 2014 German Research Foundation (DFG) Fellowship, SFB 882 “*From Heterogeneities to Inequalities*”

## Working Papers (Selection)

### Monetary Policy and Speculative Stock Markets ([Job Market Paper](#))

This paper studies the macroeconomic consequences when potentially speculative stock prices affect macroeconomic aggregates and whether monetary policy can mitigate potential spillovers from financial markets. I augment a model with financial constraints on working capital with stock markets, where excess volatility of these markets is endogenously amplified through behaviorally motivated financial speculation. The presence of credit constraints links asset returns to optimal leverage and the price level. I estimate this model to match key moments of European data. The endogenous process of financial market speculation and the feedback from asset prices to the price level are key features to replicate and explain these moments. Standard monetary policy rules can be shown to induce a dynamic feedback loop that amplifies stock price volatility. Numerical analysis suggests that central banks can offset the impact of speculation on either output or inflation by carefully targeting asset prices, but not on both, and can furthermore dampen excess volatility of stock prices. However, the scope of such policy to stabilize economic activity is limited narrowly due to its undesirable response to non-financial shocks.

### Can Taxation Predict US-Top-Wealth Share Dynamics? (with Thomas Fischer, Lund U.)

Yes, the level of capital gains taxation has high explanatory power. We develop a micro-founded portfolio-choice model where idiosyncratic return risk and disagreement in expectations on asset returns generate an analytically tractable fat-tailed Pareto distribution for the top-wealthy. Wealth concentration is dampened by the degree of capital gains taxation. The model is estimated using Kalman filtering and provides good out-of-sample forecasts for both levels and dynamics of wealth concentration in the USA. We show that the tax rate explains historical trends in wealth inequality precisely, and make predictions about the future evolution.

### On the Evolutionary Fitness of Rationality in Financial Markets (with Cars Hommes, UvA)

This work analyses the interaction of perfectly rational agents in a market with coexisting boundedly rational traders. Whether an individual agent is perfectly rational or boundedly rational is determined endogenously depending on each types market performance. Perfect rationality implies full knowledge of the model including the non-linear switching process itself. Policy function iteration is used to find a recursive minimal state variable solution of the highly nonlinear system and I show that this solution is not necessarily bounded. Depending on the parameterization, agents' interaction can trigger complicated endogenous fluctuations that are well captured by the solution algorithm. In such financial market setup rational agents might adapt sentiment beliefs and so fail to mitigate speculative behavior, and boundedly rational agents are not necessarily driven out of the market. While up to a certain point the presence of fully rational agents tends to have stabilizing effects it may later amplify endogenous fluctuations.

More work in progress on my personal website <https://gregorboehl.com>.

## Work Experience

Since 2016 IT/Computing	Center for Nonlinear Dynamics in Economics and Finance (CeNDEF) Server cluster maintenance and administration
2012 – 2013 IT Consultant	Freelance activity (based in Gothenburg, Sweden and Berlin, Germany) Focus on DACH market entry of francophone tech-startups and IT development
2011 – 2012 Social Worker	Youth-educational center <i>Kurt Löwenstein Haus</i> Workshops with socially deprived young people
2008 – 2011 Professional Musician and Guitar Instructor	Professional guitar player Cooperation e.g. with <i>Universal Music Group</i> and <i>HitmenMusic</i> , teaching at <i>Musikschule Dresden KOMMA, Die</i>

## Teaching

Feb – March 2017	Mathematical Economics for Econometricians, Bachelor & Master level
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## Computer Skills

Programming languages  
IT/Development/Web

Python, Julia, C, R, Java, JavaScript, Matlab, Mathematica, Unix shell  
HPC, cluster & server maintenance (Unix-like), system administration, operation of web servers, SQL, HTML

## Languages

Mother tongue  
Other languages

**German**  
English (fluently), Spanish (fluently), French, Swedish, Dutch

## Talks Given

- 2017
- Cattaneo Conference on Inequalities, Bologna
  - 23rd International Conference on Computing in Economics and Finance (**CEF**), New York
  - Goethe University Frankfurt (invited seminar)
  - Norges Bank, Oslo (invited seminar)
- 2016
- 4st Meeting of the German Network for New Economic Dynamics (**GENED**), Bamberg
  - DNB Learning Conference** “Expectations in Dynamic Macroeconomic Models”, Amsterdam
  - Annual **EDEEM** Meeting, Lisbon
  - 22nd International Conference on Computing in Economics and Finance (**CEF**), Bordeaux
  - 21st Annual Workshop on the Economic Science with Heterogeneous Interacting Agents (**WEHIA**), Castellon
  - Hamburg Complexity Workshop
  - CeNDEF** Lunch Seminar, Amsterdam
- 2015
- 2nd Meeting of the German Network for New Economic Dynamics (**GENED**), Darmstadt
- 2014
- 20nd International Conference on Computing in Economics and Finance (**CEF**), Oslo