Stefan Girstmair

Curriculum Vitae

Große Seestraße 44
Frankfurt am Main, 60486
(+49) 15901398469
stefan.girstmair@gmail.com
stefangirstmair.github.io

Research Interests

Macroeconomics

- Monetary Economics
- Forecasting
- Bayesian Econometrics

Professional Experience

September 2024– **Senior Economist**, Bank of Lithuania - Applied Macroeconomic Research Division, Vilnius

January 2024–May 2024 **Consultant**, ECB - European Central Bank - Forecasting and Policy Modelling Division (DGE), Frankfurt am Main
Continue the work on the model established during the traineeship and co-author a paper describing its features.

May 2023–September 2023 **PhD-Trainee**, ECB - European Central Bank - Forecasting and Policy Modelling Division (DGE), Frankfurt am Main
Developing a linked version of the semi-structural ECB-MC model mainly used for forecasting and policy analysis.

October 2018– **Graduate Research and Teaching Assistant**, *Chair of International Macroeconomics and Macroeconometrics*, Goethe University, Frankfurt am Main

July 2015 **Intern**, OeNB - Austrian National Bank - Economic Analysis Department, Forecasting, Vienna
Updating a database used for forecasts as well as computations for internal and external papers. Using ECB, Statistik Austria, and Eurostat data.

July 2014 **Intern**, OeNB - Austrian National Bank - Economic Analysis Department, Forecasting, Vienna
Data processing to help write a paper on labor productivity developments in Austria compared to the U.S.. Main work on setting up and analyzing the database.

Education

2017–2024 **Ph.D. in Economics**, *Graduate School of Economics, Finance and Management*, Goethe University
Thesis title: *"Essays in Macroeconomics"*, Advisors: Prof. Michael Binder and Prof. Volker Wieland

2015–2017 **M.Sc. Economics**, *Institute for Advanced Studies (IHS)*
Thesis: *"Unemployment in Austria: Job Losing and Job Finding"*

2012–2015 **B.Sc. Economics**, *University of Vienna*
Thesis: *"The Curse of Natural Resources: A Survey and Two Cases"*

Reserach

The Effect of New Housing Supply in Structural Models: A Forecasting Performance Evaluation, *ECB Working Paper Series No. 2895*,

Abstract: This paper investigates the importance of including data on new housing supply in Dynamic Stochastic General Equilibrium (DSGE) models in forecasting the Great Financial Crisis (GFC), focusing on the U.S. While existing models have added a financial sector and real estate sector, they have largely overlooked housing supply. I develop an extended DSGE model that includes both the financial sector and endogenous housing supply and show that forecasting accuracy significantly improves when data on new houses is included. Robustness checks confirm the importance of these additions to the model. The findings highlight the necessity of combining model extension and housing supply data for accurate forecasting during economic crises. I identify negative housing demand shocks and escalating adjustment costs as primary drivers of the GFC, propagating into the real economy and accelerating through the financial sector. Additionally, this paper addresses the zero lower bound challenge in modeling forward guidance using a regime change approach.

Determinacy in Multi-Country DSGE Models: The Role of Pricing Paradigms and Economic Openness, *Dynare Working Paper Series No. 82*,

Abstract: This paper examines determinacy properties in a multi-country open economy framework, focusing on the impacts of dominant currency pricing (DCP), producer currency pricing (PCP), and local currency pricing (LCP) on monetary policy effectiveness. Utilizing a New Keynesian model with three symmetric economies, each guided by Taylor rules, the study extends the framework of Gopinath et al. (2020) to analyze how these pricing paradigms interact with central bank policies to achieve economic stability. The investigation highlights that higher economic openness amplifies interactions among central banks' policies, complicating the attainment of determinacy. DCP significantly constrains policy parameters ensuring determinacy, particularly in open economies. Conversely, PCP and LCP offer relatively larger determinacy regions, allowing for greater domestic policy control. The findings emphasize the critical role of pricing paradigms and economic openness in formulating effective monetary policies. This study provides essential insights for central banks and policymakers in enhancing global economic stability through tailored policy recommendations based on the chosen pricing paradigm.

A Policy-Relevant Structural Macroeconomic Model for Emerging Market Economies with Illustration for Vietnam, *Together with Michael Binder, Le Van Ha and Anh H. Le*,

Abstract: To conduct policy analysis, for advanced economies usually numerous microfounded, institutionally relatively detailed, structural macroeconomic models are available. For emerging market economies, in contrast, there tends to be a lack of models of this type that contain the requisite institutional detail to forecast on par with reduced-form time-series models and carry out credible policy analysis. This paper considers as an example of an emerging market economy Vietnam, and introduces a New Keynesian-Dynamic Stochastic General Equilibrium (NK-DSGE) model that depicts Vietnam as an open economy that interacts with the U.S. and the rest of the world. We incorporate various institutional characteristics that we argue are representative for emerging market economies at least in Asia. These include: (i) international trade occurs within the global value chain and under the dominant currency pricing paradigm; (ii) there is a diverse production sector in the domestic economy that comprises privately-owned, state-owned, and foreign direct investment firms facing asymmetric financial frictions; and (iii) monetary policy in part pursues an exchange-rate target. We document that the estimated model can forecast core macroeconomic variables on par (and, at least partially, better) than a state-of-the-art Bayesian Vector Autoregressive model, and thus argue that our model can be fruitfully used for policy analysis. Among the main implications of our model are that while Vietnam's output losses stemming from contractionary domestic monetary policy shocks are larger than prior structural models would suggest, the transmission of foreign shocks to the Vietnamese economy is weaker.

Additional Education

June 2024 **Heterogeneous-Agent Macroeconomics**, *Goethe Macro Training School*, Adrien Auclert, Matthew Rognlie, and Ludwig Straub

August 2023 **Machine Learning in Macroeconomics**, *ECB*, Jesus Fernandez-Villaverde

August 2019 **Optimal Fiscal and Monetary Policy**, *Study Center Gerzensee*, Mikhail Golosov

Teaching

Solution, Identification, and Estimation of DSGE Models, *PhD-Level, Prof. Michael Binder*, Teaching Assistant

- Winter 2023/24
- Winter 2022/23
- Winter 2021/22
- Winter 2019/20

Macroeconomics 1 (BMAK), *BSc-Level, Prof. Michael Binder*, Teaching Assistant

- Winter 2023/24
- Winter 2022/23
- Winter 2021/22
- Winter 2020/21
- Winter 2018/19

Software and Databases Skills

Advanced Matlab, Dynare, Office, Git

Proficient R, Stata, Julia

Languages

German Native

English Excellent command

French	Beginner
Korean	Beginner

References

Michael Binder
Professor of International Macroeconomics and Macroeconometrics
Goethe University Frankfurt
House of Finance, Campus Westend
Theodor-W.-Adorno- Platz 3
60323 Frankfurt am Main
✉ mbinder@wiwiw.uni-frankfurt.de

Matteo Ciccarelli
Head of Forecasting and Policy Modelling Division
European Central Bank
Sonnemannstraße 20
60314 Frankfurt am Main
✉ matteo.ciccarelli@ecb.europa.eu

Volker Wieland
Professor of Monetary Economics
IMFS - Goethe University Frankfurt
House of Finance, Campus Westend
Theodor-W.-Adorno-Platz 3
60323 Frankfurt am Main
✉ wieland@imfs-frankfurt.de