

Frantisek Masek

Personal webpage [here](#).

PERSONAL DATA

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RESEARCH INTERESTS

Macroeconomics: Monetary Policy, Heterogeneous Agents, Expectations Formation, Financial Frictions

Causal Inference: Spillovers in Comparative Case Studies, SUTVA Violation

EDUCATION

Sapienza University of Rome 2020-Expected 2025

Ph.D. Candidate in Economics, Department of Economics and Law

University of Chicago October 2022-March 2023

Research Visiting Stay

Vienna University of Technology April 2023 - June 2023

Research Visiting Stay

Prague University of Economics and Business 2017-2019

Master's Degree in Economic Analysis, Faculty of Economics

Prague University of Economics and Business 2013-2017

Bachelor's Degree in Economics and Economic Policy, Faculty of Economics

PROFESSIONAL EXPERIENCE

National Bank of Slovakia July 2024-continuing

Senior Researcher, Research Division

European Central Bank July 2023-June 2024

Ph.D. Traineeship, Directorate General Research

FIO Bank 2020

Junior Economist, Dealing Department

WORKSHOPS

Tools for Macroeconomists, University of Oxford 2021

Tutors: Wouter den Haan, Petr Sedlacek, and Pontus Rendahl

Causal Inference Summer School, University of Trento 2022

Tutors: Alessandra Mattei, Veronica Ballerini

WORKING PAPERS

Macroeconomics

Households' Inflation Expectations and Consumption in New Keynesian Models: The Role of Heterogeneity (JMP; Draft coming soon)

I disentangle the assumptions underlying the consumption response to changes in inflation expectations within the New Keynesian (NK) framework. The standard positive consumption response relies on implausibly strong general equilibrium effects and a muted negative real income channel, particularly when inflation expectations are not accompanied by expectations of nominal wage growth. I decompose the total effect into an intertemporal substitution channel and an income channel, under the empirically supported assumption that inflation expectations do not fully pass through to nominal wage expectations. In the Representative Agent NK (RANK) model, consumption still increases due to the profit income channel. By contrast, in a stylized Heterogeneous Agent NK (HANK) model, the total effect may turn negative if the profit channel is dampened and the disconnect between inflation and nominal wage expectations is sufficiently strong. I also examine the role of the wealth effect, which can strengthen the case for a negative total consumption response.

Presented: Directorate General Research (*European Central Bank, DGR Brown Bag Seminar, Frankfurt*), 56th Annual Conference of the Money, Macro and Finance Society (*University of Reading, Reading*), 28th International Conference on Macroeconomic Analysis and International Finance (*University of Crete, Crete*), 6th Behavioral Macroeconomics Workshop (*Heidelberg University and Bamberg University, Heidelberg*), ERMAS 2024 (*Babeş-Bolyai University and National Bank of Romania, Cluj-Napoca*), 4th Sailing Macro Workshop (*Sapienza University of Rome, Ortygia-Siracusa*), 3rd Naples School of Economics PhD and Post-Doctoral Workshop (*NSE, Naples*), Workshop on Households' Inflation Expectations (*Czech National Bank, Prague*).

Average Inflation Targeting: How far to look into the past and the future? (ECB working paper link here) - submitted

with Jan Zemlicka

Winner of the Karel Engliš Prize for the best paper on the Czech economic policy awarded by the Czech Economic Society within the Young Economist of 2022 Award.

We analyze the optimal window length in the average inflation targeting rule within a Behavioral THANK model. The central bank faces an occasionally binding effective lower bound (ELB) or persistent supply shocks, and can also use quantitative easing. We show that the optimal averaging period is infinitely long given a conventional degree of myopia. Finite yet long-lasting windows dominate for higher cognitive discounting; i.e., the makeup property is shown to be qualitatively resistant to deviation from rational expectations. We point out that the optimal window may depend on the speed of return to the target path. We solve the model both locally and globally to disentangle the effects of uncertainty due to the ELB. The welfare loss difference between solution techniques is considerably decreasing in the degree of history dependence.

Presented: Fall 2022 Midwest Macroeconomics Conference (*Southern Methodist University, Dallas*), 2023 ERMAS Conference (*University of Bucharest and National Bank of Romania, Bucharest*), 2023 Expectations in Dynamic Macroeconomic Models Conference (*Vienna University of Technology and Austrian National Bank, Vienna*), Barcelona Ph.D. Workshop on Expectations in Macroeconomics (*Barcelona School of Economics, Barcelona*), 2nd Ventotene Workshop in Macroeconomics (*Sapienza University of Rome, Ventotene*), SASCA Ph.D. Conference in Economics (*Ca' Foscari University of Venice and University of Sassari, Venice*).

Rational expectations, bounded rationality, and aggregate uncertainty in macroeconomic models (working paper link here) - submitted

The aggregate uncertainty substantially affects the behavior of rational expectations equilibrium (REE) macroeconomic models. Utilizing the standard New Keynesian model with occasionally binding constraint, I show that the role of the uncertainty is extensively sidelined even with a slight deviation from the REE. It almost disappears when using empirically relevant expectations formation. When macroeconomists use empirically disciplined expectations formation, solution techniques that abstract from the uncertainty may not lose much compared to true rational expectation solutions that take the uncertainty into account.

Presented: ERMAS 2025 (*Alexandru Ioan Cuza University of Iași and National Bank of Romania, Iași*).

Housing Market Inefficiencies and the Role of Borrower-Based Macroprudential Policy (Draft coming soon)

with with Jan Klacso, Reiner Martin, M. Udara Peiris, and Dimitrios P. Tsomocos

Causal Inference

Spatial Synthetic Difference-in-Differences (working paper link here)

with Renan Serenini

Presented: 2023 American Causal Inference Conference (*The Society for Causal Inference, Austin*), Meeting of Young Economists 2023 (*The European Association of Young Economists, Torino*), 45th Meeting of the Brazilian Econometric Society (*Brazilian Econometric Society, Rio de Janeiro*), Workshop on Econometric Theory and Applications in Siena (*University of Siena, Siena*).

The Economic Costs of the War in Donbas for the Affected Ukrainian Regions (working paper link here) - submitted

with Renan Serenini

Presented: 39th meeting of the European Economic Association (*Barcelona School of Economics, Barcelona*).

PUBLISHED WORK

Measurement of the Economics Knowledge of the Czech High School Students *The Journal of Economic Education (published version here; started as a pre-doctoral work)*

with Pavel Potuzák and Renan Serenini

TEACHING

Macroeconomics III. (Graduate)(Syllabus here) 2025

Teaching the whole course, Prague University of Economics and Business

- Real Business Cycle Models.
- Perturbation methods, Projection Methods, Dynamic Programming.
- Intro into New Keynesian Models.

Macroeconomics (Ph.D.)(some materials here) 2022

Teaching assistantship for Marco Di Pietro, Sapienza University of Rome

- New Keynesian models.
- Perturbation methods, Projection Methods, Dynamic Programming, Incomplete Markets Models.

Monetary Macroanalysis (Graduate) 2021

Teaching assistantship for Van Quang Tran, Prague University of Economics and Business

- Perturbation methods.

Applied Macroeconomics and Policy (Graduate) 2021

Teaching assistantship for Massimiliano Tancioni, Sapienza University of Rome

- Estimation methods for DSGE models.

Monetary Economics (Graduate) 2021

Teaching assistantship for Marco Di Pietro, Sapienza University of Rome

- New Keynesian models.

AWARDS

The Karel Englis Prize for the best paper on the Czech economic policy awarded by the Czech Economic Society within the Young Economist of 2022 Award.

- **Name of the article:** Average Inflation Targeting in a Behavioral Heterogeneous Agent New Keynesian Model

GRANTS AND FELLOWSHIPS

Fellowship for Foreign Nationals Educated Abroad 2020-2024

Sapienza University of Rome

Mobility Grant 2023

Sapienza University of Rome

Research Initiation Projects 2021

Sapienza University of Rome

SKILLS AND ADDITIONAL INFORMATION

Languages:

Czech-native proficiency, English-full professional proficiency, Italian-beginner

Software:

Matlab, R, Stata, Eviews, and basics of Python and Julia; software platform Dynare embedded in Matlab; LaTeX; terminals Bloomberg or Thomson Reuters Eikon