#### **Christian Matthes**

Professor of Economics Indiana University 100 S Woodlawn Ave Bloomington, IN 47405 last changed: October 10, 2024 Email: matthesc@iu.edu

Webpage: https://cm1518.github.io/

#### Personal

- Date of Birth
- August 20th, 1979
- Citizenship
- Germany & United States of America

#### **Current Position**

• Indiana University
Professor of Economics

Bloomington, IN

July 2022 -

#### **Former Positions**

Indiana University

Associate Professor of Economics

Federal Reserve Bank of Richmond

Research Economist and Senior Economist

Universitat Pompeu Fabra

Assistant Professor of Economics

Bloomington, IN
August 2019 - June 2022

Richmond, VA

September 2013 - August 2020

Barcelona, Spain

September 2010 - September 2013

#### Education

New York University

New York, NY

2004-2010

Ph. D., Economics

- M.A., Economics, 2008
- Advisors: Timothy Cogley and Thomas Sargent
- Thesis: Figuring Out the Fed Beliefs about Policymakers and Gains from Transparency

# Goethe University Diplom, Economics

Frankfurt am Main, Germany

1999 - 2004

- Undergraduate Thesis: A Bayesian VAR Analysis Using Priors from a DSGE Model
- Advisor: Volker Wieland

#### **Publications and Accepted Papers**

Severe Weather and the Macroeconomy, American Economic Journal: Macroeconomics, forthcoming

with Hee Soo Kim and Toan Phan

Assessing Macroeconomic Tail Risk, **Economic Journal**, forthcoming with Francesca Loria and Donghai Zhang

Averaging Impulse Responses, **Journal of Monetary Economics**, Volume 146, September 2024 with Paul Ho and Thomas Lubik

Indeterminacy and Imperfect Information, Review of Economic Dynamics, Volume 49, July 2023, Pages 37-57

with Thomas Lubik and Elmar Mertens

How to Go Viral: A COVID-19 Model with Endogenously Time-Varying Parameters, **Journal of Econometrics**, Volume 232, Issue 1, January 2023 with Thomas Lubik & Paul Ho

Learning About Regime Change, **International Economic Review**, Volume 63, Issue 4, November 2022

with Andrew Foerster

Monetary Policy Across Space and Time, Essays in Honor of Fabio Canova, 2022 with Laura Liu and Katerina Petrova

Economic Theories and Macroeconomic Reality, **Journal of Monetary Economics**, Volume 126, March 2022, Pages 105-117 with Francesca Loria and Mu-Chun Wang

Understanding the Size of the Government Spending Multiplier: It's in the Sign, **Review of Economic Studies**, Volume 89, Issue 1, January 2022 with Regis Barnichon and Davide Debortoli

A composite likelihood approach for dynamic structural models, **Economic Journal**, Volume 131, Issue 638, August 2021, Pages 2447–2477 with Fabio Canova

Dealing With Misspecification in Structural Macroeconometric Models, **Quantitative Economics**, Volume 12, Issue 2, Pages 313-350, (lead article) with Fabio Canova

Forecasting the COVID-19 epidemic: the case of New Zealand, **New Zealand Economic Papers**, 2022, Volume. 56, No. 1, 9–16 with Paul Ho and Thomas Lubik

Are the Effects of Financial Market Disruptions Big or Small?, Review of Economics & Statistics,

(2022) 104 (3): 557-570

with Regis Barnichon and Alexander Ziegenbein

Detecting and Analyzing the Effects of Time-Varying Parameters in DSGE Models, **International Economic Review**, February 2020, vol. 61, No. 1 with Fabio Canova and Filippo Ferroni

Functional Approximation of Impulse Responses, **Journal of Monetary Economics**, November 2018, vol. 99, Pages 41-55 with Regis Barnichon

Choosing Prior Hyperparameters, **Journal of Business & Economic Statistics**, 2020, 38:1, 124-136 with Pooyan Amir-Ahmadi and Mu-Chun Wang

Two-sided Learning and Short-Run Dynamics in a New Keynesian Model of the Economy, **Economics Letters**, Volume 159, October 2017, Pages 53-56 with Francesca Rondina

Measurement Errors and Monetary Policy: Then and Now, **Journal of Economic Dynamics and Control**, Volume 79, June 2017, Pages 66-78 with Pooyan Amir-Ahmadi and Mu-Chun Wang

Indeterminacy and Learning: An Analysis of Monetary Policy in the Great Inflation, **Journal of Monetary Economics**, September 2016, vol. 82, pages 85-106 with Thomas Lubik

Drifts and Volatilities under Measurement Error: Assessing Monetary Policy Shocks over the Last Century, **Quantitative Economics**, July 2016, vol. 7 (2), pages 591-611 with Pooyan Amir-Ahmadi and Mu-Chun Wang

Learning about Fiscal Policy and the Effects of Policy Uncertainty, **Journal of Economic Dynamics** and Control, October 2015, vol. 59, pages 142-162 with Josef Hollmayr

Optimal Disinflation Under Learning, **Journal of Monetary Economics**, May 2015, vol. 72, pages 131-147

with Tim Cogley and Argia Sbordone

Figuring Out the Fed - Beliefs about Policymakers and Gains from Transparency, **Journal of Money**, **Credit & Banking**, 2015, vol. 47(1), pages 1-29 (lead article)

Choosing the Variables to Estimate Singular DSGE Models, **Journal of Applied Econometrics**, 2014, vol. 29(7), pages 1099-1117 with Fabio Canova and Filippo Ferroni

What Drives Inflation in New Keynesian Models?, **Economics Letters**, 2012, vol. 114(3), pages 338-342 with Mu-Chun Wang

A Bayesian Approach to Optimal Monetary Policy with Parameter and Model Uncertainty, **Journal of Economic Dynamics and Control**, 2011, vol. 35(12), pages 2186-2212

### **Working Papers**

The Consumption Origins of Business Cycles: Lessons from Sectoral Dynamics, conditionally accepted, American Economic Journal: Macroeconomics with Felipe Schwartzman

Understanding Instruments in Macroeconomics - A Study of High-Frequency Identification, revise & resubmit, Journal of Business & Economic Statistics with Pooyan Amir-Ahmadi and Mu-Chun Wang

Temporal Aggregation Bias and Monetary Policy Transmission with Maggie Jacobson and Todd Walker

Monetary Policy Shocks: Data or Methods? with Connor Brennan, Maggie Jacobson and Todd Walker

Large Structural VARs with Multiple Sign and Ranking Restrictions, revise & resubmit, Quantitative Economics with Joshua Chan and Xuewen Yu

The Influence of Fiscal and Monetary Policies on the Shape of the Yield Curve with Yoosoon Chang and Fabio Gomez-Rodriguez

Monetary Policy across Inflation Regimes with Valeria Gargiulo and Katerina Petrova

What Does Monetary Policy Do To Different People? with Pooyan Amir-Ahmadi and Mu-Chun Wang

Assessing U.S. Aggregate Fluctuations Across Time and Frequencies with Thomas Lubik and Fabio Verona

#### Other Work

- Practicing Dynare joint with Francisco Barillas, Riccardo Colacito, Sagiri Kitao, Thomas Sargent and Yongs Shin
- Learning about Fiscal Policy Uncertainty with Tim Sablik, Richmond Fed Economic Brief 14-01
- Calculating the Natural Rate of Interest: A Comparison of Two Alternative Approaches with Thomas Lubik, Richmond Fed Economic Brief 15-10
- Time-Varying Parameter Vector Autoregressions: Specification, Estimation, and an Application with Thomas Lubik, Richmond Fed Economic Quarterly, Fourth Quarter 2015
- The Burns Disinflation of 1974 with Thomas Lubik and Tim Sablik, Richmond Fed Economic Brief 16-11

- Beveridge Curve Shifts and Time-Varying Parameter VARs with Thomas Lubik and Andrew Owens, Richmond Fed Economic Quarterly, Third Quarter 2016
- Are the Effects of Monetary Policy Asymmetric? with Regis Barnichon and Tim Sablik, Richmond Fed Economic Brief 17-03
- Are the Effects of Fiscal Policy Asymmetric? with Regis Barnichon and David Price, Richmond Fed Economic Brief 17-09
- The Natural Rate of Unemployment over the Past 100 Years with Regis Barnichon, FRBSF Economic Letter 2017-23
- The Financial Crisis at 10: Will We Ever Recover? with Regis Barnichon and Alexander Ziegenbein, FRBSF Economic Letter 2018-19
- How Likely Is a Return to the Zero Lower Bound? with Thomas Lubik and David A. Price, Richmond Fed Economic Brief 18-09
- Moving Macroeconomic Analysis beyond Business Cycles with Renee Haltom, Thomas Lubik and Fabio Verona, Richmond Fed Economic Brief 19-04
- Monetary Policy across Space and Time with Laura Liu, Katerina Petrova and Jessie Romero, Richmond Fed Economic Brief 19-08
- Forecasting the COVID-19 Pandemic in the Fifth District with Paul Ho and Thomas Lubik, Richmond Fed Regional Matters
- Forecasting the COVID-19 Epidemic for the U.S. with Paul Ho and Thomas Lubik, Federal Reserve Bank of Richmond Special Report
- The Highs and Lows of Productivity Growth with Andrew Foerster and Lily Seitelman, FRBSF Economic Letter 2020-21
- COVID-19 over Time and across States: Predictions from a Statistical Model with Paul Ho and Thomas Lubik, Federal Reserve Bank of Richmond Economic Brief 20-10
- Can Government Spending Help to Escape Recessions? with Regis Barnichon and Davide Debortoli, FRBSF Economic Letter 2021-02

#### Visiting Positions

University of Chicago

Chicago, IL

Visiting Student

Winter Quarter 2007

Federal Reserve Bank of Atlanta, Research Department

Atlanta, GA

Visiting Scholar

Summers 2007 - 2011, May 2012

Federal Reserve Bank of New York

New York, NY

Visiting Scholar

August 2010 - September 2010

Deutsche Bundesbank

Frankfurt am Main, Germany

Visiting Scholar June 2011 - August 2011, June 2012 - August 2012, June 2013 - August 2013

Federal Reserve Bank of Richmond

Richmond, VA

Visiting Scholar

September 2011

Bank of Finland
Visiting Scholar

Helsinki
November 2011

## **Teaching and Research Fields**

Macroeconomics, Econometrics, Monetary Economics

#### **Research Interests**

Monetary and Fiscal Policy, Learning and Imperfect Information, Econometric Analysis of Dynamic Equilibrium Models, Bayesian Econometrics

## **Teaching Experience**

Macro I (1st year PhD class)	Indiana University
Empirical Macro (2nd year PhD class)  Fall 2020, Fall 2021, Spr	Fall 2024 Indiana University ing 2023, Spring 2024
Reading Group for Macro PhD Students	Indiana University ing 2021, Spring 2022
Econometrics II (masters/advanced undergraduate level) Fall 2019,	Indiana University Spring 2021, Spring 2022
Time Series Econometrics (2nd year PhD class)  Spring 2016, Spr	University of Virginia ing 2017, Spring 2018
Short Course on Time-Varying Parameter Models $ullet$	Bundesbank Summer 2013
•	versitat Pompeu Fabra 1, Fall 2011, Fall 2012
Advanced Macro II (1st year PhD class)  Univ	versitat Pompeu Fabra Spring 2011
• • • • • • • • • • • • • • • • • • • •	versitat Pompeu Fabra 1, Fall 2011, Fall 2012
Reading Group for Macro PhD Students  Univ	versitat Pompeu Fabra Fall 2010 - Fall 2012
- organized with Kristoffer Nimark	

## Awards, Grants & Honors

Henry Mitchell McCracken Fellowship, NYU	2004-2008
CV Starr Fellowship, NYU	2009
Juan de la Cierva Fellowship, Spanish Ministry of Science and Education	2012-2013
Faculty Assistance in Data Sciene Grant, IU	2021
Fellow, Society for Economic Measurement	2022
Fellow, International Association for Applied Econometrics	2022

#### **Seminars and Conference Presentations**

- 2024: NY Fed, International Forum on Monetary Policy (discussant), European Stability Mechanism, Bank of Korea International Conference, RISE Workshop, Bank of Canada
- 2023: Carribean Macroeconometric Conference, Bundesbank Spring Conference, University of Surrey, King's College Macro Workshop, Conference in Honor of Joon Park, LMU München, Tübingen, Kiel, Würzburg, ECB, De Nederlandsche Bank, Schumpeter Seminar Berlin
- 2022: ASSA (discussant), Royal Economic Society Annual Conference, St. Louis Fed Time Series Workshop, Surrey Macro Workshop (discussant), Czech National Bank Research Open Day (discussant), Bamberg Workshop on Behavioral Macro, NBER Summer Institute (EFFE), ESOBE (Salzburg), Midwest Econometrics Group Annual Meeting, Dallas Fed/NBER DSGE Workshop, Seoul National University
- 2021: Queen Mary, Richmond Fed, North American Summer Meetings of the Econometric Society, CEF, IAAE, CEBRA, NBER Summer Institute (EFSF), ESOBE, SEACEN, Riksbank, IWH-CIREQ-GW Macroeconometric Workshop, Notre Dame, King's College, EC<sup>2</sup>, Osaka University, Conference on Computational and Financial Econometrics
- 2020: SBIES, Philadelphia Fed Real-Time Data Workshop, National University of Singapore, Drautzburg-Nason FFM workshop, Richmond Fed Workshop on Climate Change (discussant), European Winter Meetings of the Econometric Society, Conference on Computational and Financial Econometrics
- 2019: Bank of Finland Workshop on Empirical Macroeconomics, University of Hamburg, Society for Economic Dynamics Annual Meeting (St. Louis), "Modelling The Macroeconomy in Risky Times" Workshop (St. Louis), Philadelphia Fed/NBER DSGE Workshop, "New Approaches for Modelling Expectations in Economics" Conference (London, discussant), Bank of England
- 2018: Atlanta Fed, Cleveland Fed, Norges Bank Workshop on Nonlinear Models, Penn, St. Louis Fed Time Series Workshop, UVa-FRBR Research Jamboree, University of Hong Kong, Hong Kong University of Science & Technology, HKUST Macro Workshop, NBER Summer Institute (EFFE), Indiana, Texas A&M, Richmond Fed Fiscal Policy Workshop, William & Mary
- 2017: NC State, Federal Reserve System Macro Day Ahead Meeting (San Antonio), University of Illinois, SBIES (St. Louis), Barcelona GSE Summer Forum (Time Series), EUI conference on Time-Varying Parameter Models (Florence), Society for Economic Dynamics Annual Meeting (Edinburgh), CEF (New York), Workshop on Expectations in Dynamic Macroeconomic Models (St. Louis), Dallas Fed, Philadelphia Fed/NBER DSGE Workshop, Midwest Macro (Pitt)
- 2016: 9th International Forum on Monetary Policy (Frankfurt), Bank of England Workshop on Time-Varying Coefficient Models, Society for Economic Dynamics Annual Meeting (Toulouse), Federal Reserve System Macro Meeting (Cincinnati), Chicago Fed/NBER DSGE Workshop, ESOBE (Venice), Midwest Macro (Kansas City), ECB, Bundesbank
- 2015: William & Mary, EUI Workshop on Time-Varying Coefficient Models, Oxford, Bank of England, NYU Alumni Conference, Society for Economic Dynamics Annual Meeting (Warsaw), NBER Summer Institute (EFSF), Econometric Society World Congress (Montreal), Board of Governors, Cirano-Philadelphia Fed Real-Time Data Workshop (Montreal)
- 2014: UVa-FRBR Research Jamboree, Midwest Macro (University of Missouri), CEF (Oslo), IAAE (London), NBER Summer Institute (EFSF), Philadelphia Fed Real-Time Data Workshop, Chicago Fed/NBER DSGE Workshop, Midwest Macro (Miami), SEA (Atlanta)

- 2013: Riksbank, Universitat Autonoma de Barcelona, University of Hamburg, Mannheim Workshop in Quantitative Macro, Banco de España Workshop on Expectations and Macroeconomics (Madrid, discussant), Joint Central Bank Conference (Cleveland, discussant), Midwest Macro (Minneapolis), Federal Reserve System Macro Meeting (Boston)
- 2012: CREATES (Aarhus University), Atlanta Fed, Midwest Macro (Notre Dame), Konstanz Seminar on Monetary Theory and Policy (discussant), CEF (Prague), Bundesbank, Bank of Canada, Kansas City Fed, Dynare Conference (Zürich), CEMFI, Riksbank, UPF, ECB conference on "Debt, Growth and Macroeconomic Policies" (discussant)
- 2011: ECB, HECER (Helsinki, 2 ×), Magyar Nemzeti Bank (Budapest), Norges Bank, Norwegian School of Management, CREI conference on Information, Beliefs and Expectations in Macroeconomics (discussant), Canadian Economics Association Annual Meeting (Ottawa), Society for Economic Dynamics Annual Meeting (Ghent), Bundesbank, Richmond Fed, NBP conference "DSGE and beyond" (Warsaw), Bank of Finland, ECB conference on "Information, Beliefs and Economic Policy", Conference on Computational and Financial Econometrics (London)
- 2010: Emory, Richmond Fed, Federal Reserve Board, Pompeu Fabra, Tilburg, Paris School of Economics, Dallas Fed, Dynare Conference (Helsinki), DNB-ECB-RUG Conference on Central Bank Communication (Amsterdam), CFS conference on Macroeconomic Modeling and Policy Analysis (Frankfurt, discussant)
- 2009: Atlanta Fed, NYU

#### Other Activities

- Associate Editor, Journal of Business and Economic Statistics
- Associate Editor, Quantitative Economics (2018-2024)
- Associate Editor, Jahrbücher für Nationalökonomie und Statistik
- Co-editor (with J. Dolado and L. Gambetti), Advances in Econometrics volume in honor of Fabio Canova
- Referee for: B.E. Journal of Macroeconomics, Economic Journal, Journal of Monetary Economics, Journal of the European Economic Association, Economic Inquiry, Journal of Economic Dynamics and Control, International Journal of Central Banking, Economics Letters, Journal of Political Economy, European Economic Review, Oxford University Press, Bulletin of Economic Research, American Economic Journal: Macroeconomics, Journal of Money, Credit & Banking, Review of Economic Studies, International Economic Review, Review of Economics & Statistics, Macroeconomic Dynamics, Journal of Business & Economic Statistics, Journal of Econometrics, Quantitative Economics, Econometrica, Journal of Applied Econometrics, Journal of Financial and Quantitative Analysis, American Economic Journal: Economic Policy, Oxford Bulletin of Economics & Statistics, Journal of Economic Literature, Empirical Economics, International Journal of Forecasting, Review of Financial Studies, Energy Economics, Journal of International Economics
- Grant reviewer for: European Research Council, National Science Foundation, Irish Research Council
- External evaluator of candidates for the University of Helsinki, 2012
- Dissertation/third-year committee member and/or letter writer:

- 1. Sara Riscado (EUI), 2012, Bank of Portugal
- 2. Fernando Jose Perez Forero (UPF), 2013, Central Bank of Peru
- 3. Andrew Hanson (UNC), 2020, University of Tennessee
- 4. Maggie Jacobson (IU), 2020, Federal Reserve Board of Governors
- 5. Wandi Zhang (IU), 2020, Citigroup
- 6. Fabio Gomez-Rodriguez (IU), 2021, Lehigh University
- 7. Geeta Garg (IU), 2021, JP Morgan Chase
- 8. Won Suk Chung (IU), 2021, Bank of Korea
- 9. Xiaoxue (Shirley) Song (IU), 2022, Morgan Stanley
- 10. Seokil Kang (IU), 2022, Bank of Korea
- 11. Matt Bush (IU), 2023, Department of Homeland Security
- 12. Kelin Lu (IU), 2023, Huazhong University of Science and Technology
- 13. Cesar Salinas (IU), 2024, Universidad del Pacífico
- 14. Byung Goog Park (IU), 2024, Bank of Korea (chair)
- 15. Jonathan Leslie (IU), 2024, MITRE
- 16. Hyeyun Cho (IU), 2024, Analysis Group
- 17. Alireza Marahel (IU), 2024, Keystone
- 18. Hee Soo Kim (IU), ongoing (chair)
- 19. Do Yeon Pyun (IU), ongoing
- 20. Seongbo Sim (IU), ongoing (chair)
- 21. Nayeon Kang (IU), ongoing (chair)
- 22. Ellie Cothren (IU), ongoing (co-chair, joint with Todd Walker)
- 23. Po-Shyan Wu (IU), ongoing (chair)
- 24. Vladimir Menshikov (IU), ongoing (co-chair, joint with Todd Walker)
- 25. Joy Erdenemandakh (IU), ongoing
- 26. Nayoung Lee (IU), ongoing (co-chair, joint with Todd Walker)
- 27. Anthony Vecchia (IU), ongoing (chair)
- 28. Ryan Byun (IU), ongoing
- Honors thesis supervisor:
  - 1. Christian Sayers (2020, joint with Stefan Weiergräber)
- Co-organizer, Barcelona GSE workshop on Time Series Analysis in Macro and Finance (June 2013)
- Co-organizer, Richmond Fed workshop on Fiscal Policy and Macroeconomics (October 2018)
- Scientific committee member, annual meeting of the International Association of Applied Econometrics (IAAE) 2020, 2022, 2023
- Program committee member, annual meeting of the International Association of Applied Econometrics (IAAE) 2021, 2024
- Program committee member, Midwest Macro Meeting Fall 2024

- Department service at IU: Macroeconomics Subcommittee (2021 ), Faculty Review Committee (2022 2024), Executive Committee (2024 )
- University service at IU: College Dissertation Fellowship Committee (2023)
- Co-organizer (with Toan Phan, FRB Richmond) of an online reading group on climate change and economics, 2021