# Andrea DE Polis

## Personal Data

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WEBSITE: https://andreadepolis.github.io/

# Current Position

Research Affiliate Jan 2024 -

Economic Statistics Centre of Excellence (ESCoE)

Univeristy of Strathclyde

## Professional Experience

Research Economist Sept 2022 -

Fulcrum Asset Management

Research Visiting May 2023

Macro Research Group

Federal Reserve Bank of Chicago

Ph.D. Research Assistant

Jan 2022 - Aug 2022

DG-Research

European Central Bank

Senior Economist May 2021 - Dec 2021

Now-Casting Economic, Ltd

Research intern Sept 2018 - Jan 2018

Monetary Policy and Economic Outlook Directorate

Bank of Italy

#### EDUCATION

# Ph.D. in Finance and Econometrics 2017 - 2023

Supervisors: Prof. Ivan Petrella and Prof. Ana Galvao

Viva Committee: Prof. Andrew Patton and Prof. Anthony Garratt

Warwick Business School, The University of Warwick

MSc in Economics, Cum laude 2015 - 2017

Tor Vergata University of Rome

BSc in Economics 2012 - 2014

Roma Tre University

#### Research Interests

Primary fields: Monetary Economics, Bayesian Econometrics, Macroeconometrics

Secondary fields: Forecasting, Asset Pricing, Financial Econometrics

## Research

#### **Publications**

#### Modeling and Forecasting Macroeconomic Downside Risk

with Davide Delle Monache (Banca d'Italia) and Ivan Petrella (University of Warwick). Journal of Business & Economic Statistics, 42 (3), 1010 - 1025, 2024.

#### Working Papers

The Taming of the Skew: Asymmetric Inflation Risk and Monetary Policy, with Leonardo Melosi (University of Warwick, EUI) and Ivan Petrella (Collegio Carlo Alberto, University of Warwick)

Abstract: Inflation risk in U.S. data varies considerably over time and has often been asymmetric. A model incorporating time-varying asymmetric risk achieves better forecasting accuracy than a state-of-the-art symmetric model, providing results comparable to the performance of professional forecasters. The optimal monetary strategy calls for the Central Bank to counterbalance shifts in the direction of inflation risk by adjusting its inflation target –a strategy we term risk- adjusted inflation targeting (RAIT). By adjusting the modal inflation scenario, the Central Bank can realign average inflation with its desired long-run inflation objective and effectively anchor the private sector's expectations.

**Time-Varying Skewness and Momentum Crashes**, with Daniele Bianchi (Queen Mary University) and Ivan Petrella (Collegio Carlo Alberto, University of Warwick).

Abstract: The return on conventional momentum portfolios exhibits a predominantly negative, time-varying skewness, which deepens during momentum "crashes". This has important implications for the portfolio risk-return trade-off: the relationship between the expected return and volatility is time-varying and depends on conditional skewness. We explore the economic underpinnings of time-varying skewness by timing the capital exposure to a momentum portfolio in response to fluctuations in risk. The results show that a dynamic skewness-adjusted maximum Sharpe ratio strategy outperforms popular volatility targeting approaches. Finally, we show that momentum skewness cannot be fully reconciled with an asymmetric exposure to upside and downside market risk.

Exchange Rate Dynamics and Unconventional Monetary Policies: it's all in the shadows, with Mario Pietrunti (Banca d'Italia). Bank of Italy Temi di Discussione (Working Paper) No.1231.

Abstract: In this paper we estimate an open economy New-Keynesian model to investigate the impact of unconventional monetary policies on the exchange rate, focusing on those adopted since the Global Financial Crisis in the euro area and in the United States. To this end we replace effective, short-term, interest rates with shadow rates, which provide a measure of the monetary stance when the former reach their effective lower bound. We find that since 2009 unconventional monetary policies significantly affected the dynamics of the euro-dollar exchange rate both in nominal and real terms: while the stimulus provided by the Fed prevailed between 2011 and 2014, contributing to the weakening of the dollar, in most recent years the depreciation of the euro mainly reflected the measures adopted by the ECB.

#### Work-in-progress

Testing for Conditional Skewness with Epsilon-Skew-t Distributions.

Common Risks and Common Gaps.

Mixed Frequency Functional VARs for Nowcasting and Structural Analysis, with Gary Koop (University of Strathclyde), Stuart McIntyre (University of Strathclyde), James Mitchell (FRB Cleveand), and Ping Wu (University of Strathclyde).

Real-Time Forecasting with High-Frequency Seasonal Patterns, with Ana Galvão (Bloomberg LP) and Ivan Petrella (Collegio Carlo Alberto, University of Warwick).

# PRESENTATIONS

- 2024: The Frontier of Monitoring and Forecasting Macroeconomic and Financial Risk (SOFiE, National Bank of Belgium), 31st Annual Symposium of the Society for Nonlinear Dynamics and Economics (University of Padova), ESCoE Economic Measurement Conference (University of Manchester), University of Verona, HM Treasury\*.
- 2023: Federal Reserve Bank of Chicago, 12th European Central Bank Conference on Forecasting Techniques, Society for Financial Econometrics (Sungkyunkwan University, Seoul), International Association for Applied Econometrics (BI Norwegian Business School), Money, Macro & Finance Network, 5th International Workshop in Financial Econometrics (Bahia, Brazil), Bank of England, Centre for Macroeconomics (LSE), 17th International Conference on Computational and Financial Econometrics (HTW Berlin).
- 2022: CEBRA (Pompeu Fabra University), ECB, RCEA Conference on Recent Developments in Economics, Econometrics and Finance (University of Cyprus), Fulcrum Asset Management.
- 2021: Warwick Business School, Economics Statistics Center of Excellence, International Association for Applied Econometrics (Erasmus School of Economics), 7th RCEA Time Series Workshop, International Symposium of Forecasters, 11th RCEA Money, Macro and Finance Conference, NBER-NSF SBIES (University of St. Louis), European Economic Association (University of Copenhagen), Örebro University.
- 2020: University of Warwick, 28th Annual Symposium of the Society for Nonlinear Dynamics and Econometrics (Zagreb University), University of Cyprus, Conference on Real-Time Data Analysis, Methods and Applications (FRB Philadelphia), 2nd Vienna Workshop on Economic Forecasting 2020 (IHS), EC2 confederence (CREST & ESSEC).
- 2019: 13th International Conference on Computational and Financial Econometrics (University of London).

### Referee activity

American Economic Review: Insights, Journal of Applied Econometrics, Journal of Economic Dynamics and Control, International Journal of Forecasting, The Manchester School, International Review of Financial Analysis

# SCHOLARSHIPS AND HONORS

WBS bursary, Warwick Business School, University of Warwick	2017 - 2021
Award for Outstanding Contribution to Teaching, Warwick Business School	2020 & 2021
Particularly deserving "Giorgio Mortara" candidate, Bank of Italy	2017
C.S.R. Pettinari scholarship	2017

<sup>\*:</sup> scheduled.

# TEACHING EXPERIENCE

TEACHING EXPERIENCE	2010 2021
Empirical finance (MSc), Warwick Business School Teaching assistant for Dr. Daniele Bianchi (2018 - 2019) Teaching assistant for Dr. Ganesh Viswanath-Natraj (2019 - 2021)	2018 - 2021
Research methods (MSc), Warwick Business School Teaching assistant for Prof. Roman Kozhan (2018 - 2019) Teaching assistant for Dr. Gi H. Kim (2010 - 2021)	
<b>Time series</b> (BSc), Economics dept., University of Warwick Teaching assistant for Dr. Alexander Karalis Isaac	2018 - 2019
Econometrics (MSc), Warwick Business School Teaching assistant for Prof. Gianna Boero and Dr. Thomas Martin	2019 - 2020
<b>Econometrics</b> (MSc), Economics dept., University of Warwick Teaching assistant for Prof. Manuel Bagues	2020 - 2021
<b>Applied Multiple Regression Analysis</b> (PhD), Warwick Business School Teaching assistant for Prof. Ana Galvão	2021
Advanced training	
Nowcasting & Models for Mixed Frequency Data International Institute of Forecasters, 4th annual forecasting summer school Lecturer: M. Marcellino (Bocconi University)	Jul 2021
Recent Development in Financial Econometrics Italian Econometric Society summer school Lecturers: A. Patton (Duke University) and K. Sheppard (Oxford University)	Jul 2018
Time Series Econometrics Lecturer: A. C. Harvey (Cambridge University)	May 2017
Bayesian Methods for Macroeconomics Lecturer: G. Koop (Strathclyde University)	Apr 2017
Bayesian Econometrics Lecturer: M. D. Weeks (Cambridge University)	Mar 2017
Can you speak Matlab? Working with Time and Frequecy in Matlab	Mar 2017
Can you speak Matlab? Solving optimization problems with Matlab	Mar 2016
Computer Skills	
Advanced Knowledge: MATLAB, STATA, LATEX, BEAMER, OFFICE PARTICLE RICHARD RICH	
LANGUAGES	
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Italian (native), English (fluent), Spanish (intermediate), French (basic)

# REFERENCES

Prof. IVAN PETRELLA Collegio Carlo Alberto

 $\bowtie$  ivan.petrella@wbs.ac.uk

Dr. James Mitchell
Vice President, Research Department
Federal Reserve Bank of Cleveland

igames.mitchell@clev.frb.org

Prof. Leonardo Melosi
Department of Economics
University of Warwick

□ leonardo.melosi@warwick.ac.uk

Dr. Ana Beatriz Galvão Global Modelling Team Bloomberg Economics ⋈ ana.b.galvao@pm.me