









6th Conference on "Nontraditional Data, Machine Learning, and Natural Language Processing for Macroeconomics" ECONDAT 2024 Fall Meeting

Rome, November 13th-14th, 2024

(Banca d'Italia's Conference Center "Carlo Azeglio Ciampi" – Via Nazionale, 190, 00184 - Rome)

All times are CET

PROGRAM

Wednesday, 13th November 2024

8:00 - 8:45	Registration
8:45 – 9:00	Welcome address
	Chiara Scotti (Deputy Governor, Banca d'Italia)
9:00 – 10:00	Keynote Lecture 1
	Moderator: Giuseppe Bruno (Banca d'Italia)
	"On Quantum Efficient Estimation and Filtering of Stochastic Volatility Models"
	Eric Ghysels (University of North Carolina at Chapel Hill)
10:00 – 10:30	Coffee break
10:30 – 11:45	Session 1: Central Bank Communication 1
	Moderator: Marta Crispino (Banca d'Italia)
	Reputation for Confidence
	Laura Gáti (European Central Bank), Amy Handlan (Brown University)
	Discussant: James Chapman (Bank of Canada)
	Embracing the Future: Tense Pattern and Forward-Looking Monetary Policy
	Andrea Guerrieri D'Amati (University of Warwick), Gavin Hasall (University of Warwick)

Discussant: Johannes Zahner (Goethe University Frankfurt)

11:45 – 13:00 Session 2: Central Bank Communication 2

Moderator: Silvia Vori (Banca d'Italia)

Four Facts about International Central Bank Communication

<u>Christoph Bertsch</u> (Sveriges Riksbank), Isaiah Hull (BI Norwegian Business School), Robin Lumsdaine (Kogod School of Business, American University; Erasmus University Rotterdam; NBER; Tinbergen Institute, Center for Financial Stability), Xin Zhang (Sveriges Riksbank)

Discussant: Sabina Marchetti (Banca d'Italia)

Gauging the Sentiment of Federal Open Market Committee Communications through the Eyes of the Financial Press

Paul Cordova (Columbia University), Michiel De Pooter (Federal Reserve Board of Governors), <u>Olesya Grishchenko</u> (Federal Reserve Board of Governors)

Discussant: Moritz Pfeifer (University of Leipzig)

13:00 – 13:15 Session 3: Poster session 1 (brief overview)

Moderator: Sabina Marchetti (Banca d'Italia)

13:15 – 14:45 Lunch and Poster Session 1

14:45 – 16:00 Session 4: Inflation and payments

Moderator: Leland Crane (Federal Reserve Board)

Mixing it up: Inflation at risk

Maximilian Schröder (European Central Bank)

Discussant: Alex Tagliabracci (Banca d'Italia)

Liquidity Optimization in Gross Settlement Systems with Quantum Reordering: Application to Target2

Valerio Astuti (Banca d'Italia), Adriano Baldeschi (Banca d'Italia), Luca Bastianelli (Banca d'Italia), Giuseppe Bruno (Banca d'Italia), <u>Ajit Desai</u> (Bank of Canada), Danica Marsden (Bank of Canada), Riccardo Russo (Banca d'Italia)

Discussant: Ronald Heijmans (De Nederlandsche Bank)

16:00 – 16:30 **Coffee Break**

16:30 – 17:45 Session 5: Inflation and Large Language Models

Moderator: Christopher Kurz (Federal Reserve Board)

Expectation formation in Large Language Models

Nikoleta Anesti (Bank of England), <u>Edward Hill</u> (Bank of England), Andreas Joseph (Bank of England)

Discussant: Leland Crane (Federal Reserve Board)

Reddit's Pulse on US Inflation: Forecasting with Large Language Models

Andrea Del Monaco (Banca d'Italia), <u>Luigi Longo</u> (JRC, European Commission), Juri Marcucci (Banca d'Italia), Irene Tafani (IMT School for Advanced Studies Lucca)

Discussant: Paul Soto (Federal Reserve Board)

17:45 – 19:00 Session 6: NLP and macro finance

Moderator: Francesco Corsello (Banca d'Italia)

Unusual Financial Communication - Evidence from ChatGPT, Earnings Calls, and the Stock Market

Lars Beckmann (University of Muenster), Heiner Beckmeyer (University of Münster), Ilias Filippou (Washington University in St. Louis), <u>Stefan Menze</u> (University of Münster), Guofu Zhou (Washington University in St. Louis)

Discussant: Xin Zhang (Sveriges Riksbank)

The Technological Origins of Medium-run Fluctuations

Joseba Martinez (London Business School), <u>Johan Moen-Vorum</u> (London Business School), Haroon Mumtaz (Queen Mary, University of London)

Discussant: Luigi Gifuni (University of Strathclyde)

20:00 Social Dinner (by invitation) - Terrazza Monti, Via Nazionale 82, 00184 Rome

Thursday, 14th November 2024

8:30 – 9:45 Session 7: Inflation and machine learning

Moderator: Andreas Joseph (Bank of England)

Density forecasts of inflation: a quantile regression forest approach

Joan Paredes (European Central Bank), <u>Michele Lenza</u> (European Central Bank), Inès Moutachaker (INSEE)

Discussant: Dalibor Stevanovic (Université du Québec à Montréal)

Blockwise Boosted Inflation: non-linear demand and supply determinants of inflation using machine learning

<u>Marcus Buckmann</u> (Bank of England), Galina Potjagailo (Bank of England), Philip Schnattinger (Bank of England)

Discussant: Francesco Corsello (Banca d'Italia)

9:45 - 10:15 **Coffee break**

10:15 – 11:15 **Keynote Lecture 2**

Moderator: Juri Marcucci (Banca d'Italia)

"Inference for Regression with Variables Generated from Unstructured

Stephen Hansen (University College London)

11:15 – 12:30 Session 8: Nontraditional data

Moderator: Fabrizio Venditti (Banca d'Italia)

Short and Variable Lags

Gergely Buda (Barcelona GSE), Vasco Carvalho (University of Cambridge and CEPR), Giancarlo Corsetti (European University Institute and CEPR), Joao B. Duarte (Nova School of Business and Economics), Stephen Hansen (University College London), Afonso Moura (Nova School of Business and Economics), <u>Alvaro Ortiz</u> (BBVA), Tomasa Rodrigo (BBVA), Jose V. Rodriguez Mora (University of Edinburgh), Guilerme Alves da Silva (Nova School of Business and Economics)

Discussant: Marco Bernardini (Banca d'Italia)

The Internationalization of RMB: Evidence from a Chinese Online Platform on International Trade

Jack Chen (International Monetary Fund), George Cui (University of Michigan), Kailin Gao (University of International Business and Economics), <u>Ting Lan</u> (International Monetary Fund), Haolin Li (International Monetary Fund), Yang Liu (International Monetary Fund), Xiaohan Shao (International Monetary Fund), Anya Yang (Goethe University)

Discussant: Marco Errico (Banca d'Italia)

12:30 – 12:45 Session 9: Poster session 2 (brief overview)

Moderator: Cristina Angelico (Banca d'Italia)

12:45 – 14:15 **Lunch and Poster Session 2**

14:15 – 16:00 Panel discussion on "Al and Generative Al"

Moderator: Stephen Hansen (University College London)

El Bachir Boukherouaa (IMF), Elena Ferretti (Prometeia),

Leonardo Gambacorta (BIS), Lea Samek (OECD),

Uljan Sharka (iGenius), Giovanni Trappolini (Sapienza University of Rome)

16:00 – 17:15 **Session 10: Climate, Media and NLP**

Moderator: Ricardo Correa (Federal Reserve Board)

Climate Risks and Economic Activity in France: Evidence from Media Coverage

<u>Hamza Bennani</u> (Nantes University), Quentin Bro de Comères (Central Bank of Ireland), Oussama Houari (University of Nantes/University of Poitiers)

Discussant: Riccardo Russo (Banca d'Italia)

International Climate News

Maria Jose Arteaga Garavito (Bocconi University), Riccardo Colacito (The University of North Carolina at Chapel Hill and NBER), Mariano Croce (Bocconi University, CEPR, IGIER and Baffi-Carefin), Biao Yang (Shanghai Jiao Tong University)

Discussant: Cristina Angelico (Banca d'Italia)

17:15 – 18:30 **Farewell Aperitif**

Note: <u>Presentations</u>: <u>20 minutes</u>; <u>Discussions</u>: <u>10 minutes</u>; Response and further questions: 5 minutes; poster presenters will have 1 minute/1 slide to present the main idea of their paper in the brief overview.

The Organizing Committee: Giuseppe Bruno (Banca d'Italia), Juri Marcucci (Banca d'Italia)

The Scientific Committee: Cristina Angelico (Banca d'Italia), Valentina Aprigliano (Banca d'Italia), Tomaz Cajner (Federal Reserve Board), Carolina Camassa(Banca d'Italia), James Chapman (Bank of Canada), Ricardo Correa (Federal Reserve Board), Leland Crane (Federal Reserve Board), Marta Crispino (Banca d'Italia), Valerio Della Corte (Banca d'Italia), Ajit Desai (Bank of Canada), Aldo Glielmo (Banca d'Italia), Maryam Haghighi (Bank of Canada), Andreas Joseph (Bank of England), Christopher Kurz (Federal Reserve Board), Sabina Marchetti (Banca d'Italia), Gabriele Rovigatti (Banca d'Italia), Paul Soto (Federal Reserve Board), and Xin Zhang (Sveriges Riksbank).

Poster Session 1

- 1) "Mining the gap: Extracting firms' inflation expectations from earnings calls", by Allan Dizioli*
 *International Monetary Fund
- 2) "**Rethinking GPR**", by Irma Alonso-Alvarez^{*}; Marina Diakonova^{*}; Javier Pérez^{*} and <u>Pedro Piqueras</u>^{*}

*Banco de España

- 3) "The Central Bank's Role in Shaping Household Inflation Expectations Through the Media", by <u>Jasper Bär</u>* and Christian-Albrechts*

 *Universität zu Kiel
- 4) "*Distributional Dynamics*", by Christian Bayer^{*}; <u>Luis J. Calderon</u>^{*}; Moritz Kuhn[⋄] *University of Bonn; [⋄]University of Mannheim
- 5) "Whispers in the Oil Market: Exploring Sentiment and Uncertainty Insights", by Luigi Gifuni*

 * University of Strathclyde
- 6) "Inflation Expectations in the Social Media Age", by Benjamin Born*; Hrishbh Dalal*; Nora Lamersdorf*; Jana-Lynn Schuster*; and Sascha Steffen⁶; *Frankfurt School of Finance & Management; ⁶ESMT European School of Management
- 7) "Turbulent Times: Capturing Social Unrest In the News", by Flora Haberkorn*; April Patel*; Zach Proom*; Abhi Uppal*
 *Federal Reserve Board
- 8) "**Some Unpleasant Monetary Algorithms**", by Moritz Pfeifer*, and Vincent Marohl* *University of Leipzig; *Columbia University

Poster Session 2

- 1) "Monetary Policy in the Media Spotlight: Sentiments, Signals, and Economic Impact", by Firmin Ayivodji*; Etienne Briand^{\()}; Kevin Moran[#]; Dalibor Stevanovic^{*}
 *Université de Montréal; \(^\text{Université du Québec \(^\text{A}\) Montréal; \(^\text{Université Laval}\)
- 2) "Developing a Sentiment-Based Inflation Expectations Index using LLMs", by Mina Mikhael*; Karim Afifi*; and Seif Helal*

 * Central Bank of Egypt
- 3) "The Sentiment Hidden in Italian Texts through the lens of a new dictionary", by Giuseppe Bruno*; Juri Marcucci*; Donatella Sforzini⁽⁾; Marco Scarnò^(#)
 Banca d'Italia; ^()CINECA; *FAO
- 4) "Whose Inflation Rates Matter Most? A DSGE Model and Machine Learning Approach to Monetary Policy in the Euro Area", by Daniel Stempel*; Heinrich Heine*; and Johannes Zahner * University Düsseldorf; * Goethe University Frankfurt
- 5) "Dynamic Landscape of Monetary Policy Communication in India", by Shweta Kumari*, and Sandhya Kuruganti*

 * Reserve Bank of India
- 6) "Indexing and Visualization of Climate Narratives Using BERT and Causal Extraction", by Noriyasu Kaneda^{*}; and Hiroki Sakaji[◊]
- Bank of Japan; ♦ Hokkaido University
- 7) "*Measuring Dollar Funding Shortage*", by <u>Maylin Sun</u>*

 * International Monetary Fund
- 8) "*The pay and non-pay content of job ads*", by Richard Audoly^{*}; Manudeep Bhuller[◊]; and <u>Tore</u> Adam Reiremo[#]
- * Federal Reserve Bank of New York; ⁰University of Oslo, Statistics Norway, CEPR, IZA, CESifo; *University of Oslo
- 9) "*Emotion in Euro Area Monetary Policy Communication and Bond Yields: The Draghi Era*", by <u>Dimitrios Kanelis</u>*; and Pierre L. Siklos[◊]

* Deutsche Bundesbank; * Wilfrid Laurier University