



BANK OF ENGLAND

CCBS



Centre for Central Banking Studies

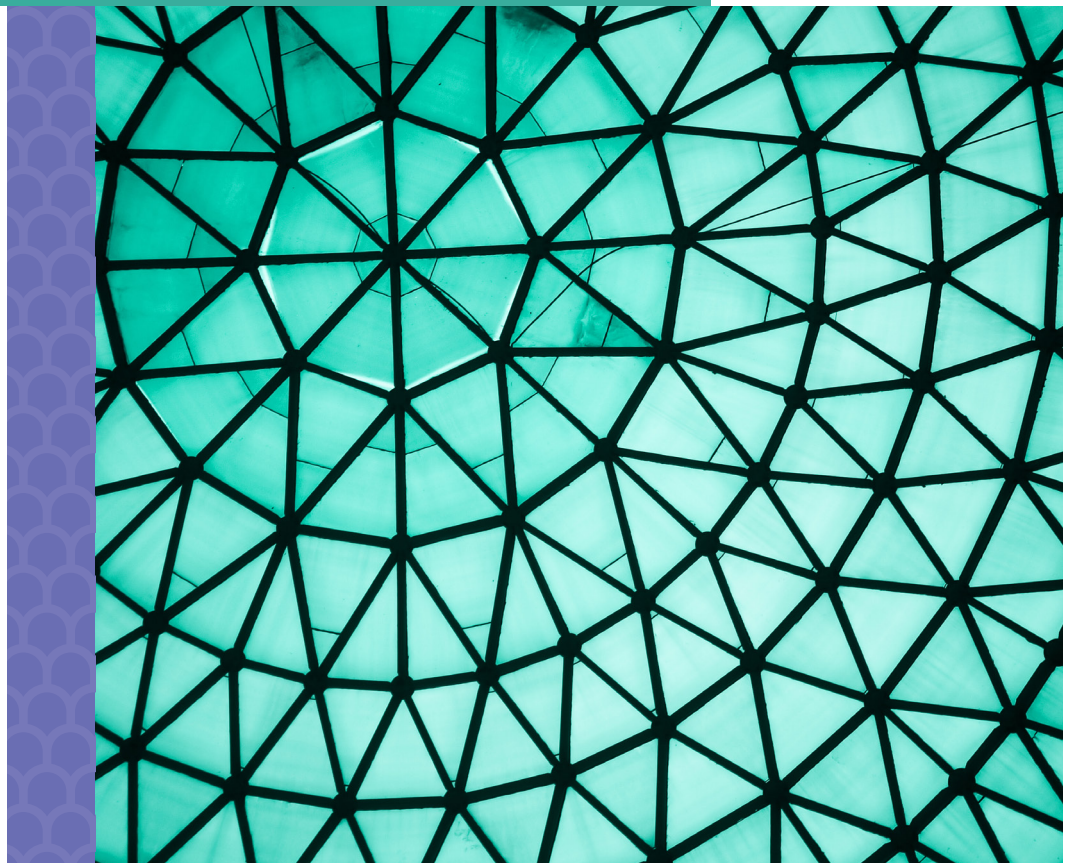
Advanced analytics: new methods and applications for macroeconomic policy

21–22 July 2022

Organising Committee: Andrew Blake and Andreas Joseph (Bank of England), George Kapetanios and Fotis Papailias (King's College London) and Michele Lenza, Chiara Osbat and Diego Rodriguez (European Central Bank)



EUROPEAN CENTRAL BANK



The Centre for Central Banking Studies (Bank of England), the European Central Bank and King's College London are jointly organizing the Advanced analytics: new methods and applications for macroeconomic policy Workshop on 21-22 July 2022.

This hybrid event will be hosted onsite at the Bank of England and virtually on MS Teams. Guidelines on accessing the workshop via MS Teams will be sent to registered virtual attendees at a later date.

NOTE: All times are **BST (British Summer Time)**.

Day 1

Thursday 21 July 2022

08:15 – 09:00 BST Registration and coffee

09:00 – 09:15 BST Opening remarks

Chair: Diego Rodriguez (European Central Bank)
Huw Pill (Chief Economist, Bank of England)

Session 1: empirical monetary policy identification (I)

09:15 – 10:45 BST Identifying monetary policy shocks: a natural language approach

Thomas Drechsel (University of Maryland) with S. Borağan Aruoba

Discussant: Xiang Li (Halle Institute for Economic Research)

Voting right rotation, behavior of committee members and financial market reactions: evidence from the U.S. Federal open market committee

Michael Ehrmann (European Central Bank) with Robin Tietz and Bauke Vissier

Discussant: Xinfen Han (Bank of Canada)

10:45 – 11:00 BST Break

Session 2: novel approaches to macroeconomics

Chair: Juan Mateos-Garcia (Nesta)

11:00 – 12:30 BST A long-run anatomy of task exposures to technology

Joseba Martinez (London Business School) with Johan Moen-Vorum

Discussant: Johannes Zahner (Marburg Centre for Institutional Economics)

Estimating Nonlinear Heterogeneous Agent Models with neural networks

Matthias Rottner (Deutsche Bundesbank) with Hanno Kase and Leonardo Melosi

Discussant: Ed Hill (Bank of England)

12:30 – 13:30 BST Lunch

13:30 – 14:30 BST Keynote: Surveying over 100 million people world-wide with Meta: Global Covid-19 Trends and Economic Impacts

Frauke Kreuter (University of Maryland & LMU Munich)

Chair: Andreas Joseph (Bank of England)

Session 3: Central bank communication

Chair: Rafael Wildauer (University of Greenwich)

14:30 – 16:00 BST More than words: Fed chairs' communication during congressional testimonies

Xinfen Han (Bank of Canada) with Michelle Alexopoulos, Oleksiy Kryvtsov and Xu Zhang

Discussant: Aakriti Mathur (Bank of England)

The effects of central bank digital currency communication and associated social media sentiment on cryptocurrency markets

Iulia Cioroianu (University of Bath) with Shaen Corbet, Charles Larkin and Les Oxley

Discussant: Alvaro Ortiz (BBVA)

16.00 – 16.30 BST Break

Session 4: machine learning for macroeconomic forecasting

Chair: Nicolas Woloszko (OECD)

16:30 – 18:00 BST Forecasting CPI inflation components with hierarchical recurrent neural networks

Jonathan Benchimol (Bank of Israel) with Oren Barkan, Itamar Caspi and Eliya Cohen, Allon Hammer and Noam Koenigstein

Discussant: Luigi Palumbo (Università degli Studi della Tuscia)

An interpretable machine learning workflow with an application to economic forecasting

Andreas Joseph (Bank of England) with Marcus Buckmann

Discussant: Philippe Goulet Coulombe (Université du Québec à Montréal)

18.00 – 19.30 BST Reception and poster session

- **Forecasting GDP in Europe with textual data** by Luca Barbaglia (European Commission) with Sergio Consoli and Sebastiano Manzan (virtual quick talk)
- **The informative value of central banks talks: a topic model application to sentiment analysis** by Maria Paola Priola (Prometeia) with Annalisa Molino, Giacomo Tizzanini and Lea Zicchino (virtual quick talk)
- **Sparse temporal disaggregation** by Alex Gibberd (Lancaster University) with Luke Mosley and Idris Eckley
- **Can alternative data improve the accuracy of factor model nowcasts?** By Radu Gabriel Cristea (University of Cambridge)
- **A neural Phillips curve and a deep output gap** by Philippe Goulet Coulombe (Université du Québec à Montréal)
- **Modelling equity transitions as bursty processes** by Isobel Seabrook (Financial Conduct Authority), Paolo Barucca and Fabio Caccioli
- **Nowcasting the Italian food inflation using online prices** by Luigi Palumbo (Università degli Studi della Tuscia) and Juri Marcucci and Federico Crescenzi
- **Reinforcement Learning Assisted Outlier Detection for Costly to Verify Data** by Michiel Nijhuis (De Nederlandsche Bank) and Iman Van Lelyveld

19.45 – 21.30 BST Evening dinner (by invitation only)

Day 2

Friday 22 July 2022

09:00 – 09:30 BST Registration and coffee

Session 5: high-dimensional data

Chair: Arthur Turrell (Office for National Statistics)

09:30 – 11:00 BST National accounts in a world of naturally occurring data: a proof of concept for consumption

Álvaro Ortiz (BBVA) with Gergely Buda, Vasco Carvalho, Stephen Hansen, Tomasa Rodrigo and José Rodríguez Mora

Discussant: Nicolas Woloszko (OECD)

Saved by the bell? Equity market responses to surprise Covid-19 lockdowns and central bank interventions

Aakriti Mathur (Bank of England) with Rajeswari Sengupta and Bhanu Pratap

Discussant: Iulia Cioroianu (University of Bath)

11:00 – 11:15 BST Break

Session 6: empirical monetary policy identification (II)

Chair: George Kapetanios (King's College London)

11:15 – 12:45 BST How does BigTech credit affect monetary policy transmission?

Xiang Li (Halle Institute for Economic Research) with Yiping Huang, Han Qiu and Changhua Yu

Discussant: Jonathan Benchimol (Bank of Israel)

State-dependent macroeconomic policy effects: a varying-coefficient VAR

Adrian Ochs (University of Cambridge) with Christian Rörig

Discussant: Parley Ruogu Yang (University of Cambridge)

12:45 – 13:00 BST Closing remarks

Oscar Arce (Director General Economics, European Central Bank)

13:00 – 14:00 BST Networking lunch

For event information or queries, please contact:

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