15 July 2023

RIS

AGENDA

Granular data: new horizons and challenges for central banks

The BoC-IFC satellite seminar on <u>"Granular data: new horizons and challenges for central banks"</u> is co-organized by the Irving Fisher Committee on Central Bank Statistics (IFC) and the Bank of Canada and is held in conjunction with the 64th World Statistics Congress of the International Statistical Institute.

This satellite seminar aims to take an integrated view of the use of granular data by central banks, highlighting the analytical value, the tools and approaches needed to unlock its value as well as the challenges it poses. All meetings are held under the Chatham House Rule unless otherwise noted.

Saturday, July 15, 2023

Opening Notes

Julie Champagne, Managing Director of Corporate Services and Data, Chief Data Officer, Bank of Canada

Introductory remarks: Bank of Canada

Filipe Dinis, Chief Operating Officer, Bank of Canada

Introductory remarks: IFC

Pablo García, Vice Governor of the Central Bank of Chile, Chair of the Irving Fisher Committee on Central Bank Statistics

Session 1: Micro data: general benefits and new insights (papers and presentations)

Chair: Silke Stapel-Weber, Director General Statistics and Chief Data Officer, European Central Bank

Presenters:

- **Luís Teles Dias** and **Lígia Maria Nunes** (Banco de Portugal), "The secret ingredient of being relevant? Microdata. Making the move from ready-made to fresh statistics".
- **Jasminka Dodeva Kovaceva** (National Bank of the Republic of North Macedonia), "Granular statistical data Are we charmed with a blessing or a curse?".
- **Jens Mehrhoff** (International Monetary Fund), "On the need for granular, forward-looking physical risk data to support policy analysis".
- **Tatjana Dahlhaus** and Angelika Welte (Bank of Canada), "Payment habits during COVID-19: Evidence from high-frequency transaction data".
- Tatjana Dahlhaus, Reinhard Ellwanger, Gabriela Galassi and Pierre-Yves Yanni (Bank of Canada),
 "Matching job postings and companies: uncovering the firms that drive the creation of digital jobs".

Session 2a: Data governance and quality (papers and presentations)

Chair: Aurel Schubert, Honorary Professor, Vienna University of Economics and Business, and Chair, European Statistical Governance Advisory Board

Presenters:

- **Jannick Blaschke** and **Christian Hirsch** (Deutsche Bundesbank), "Statistical Disclosure Control (SDC) for results derived from combined confidential microdata".
- **Iker González Crespo** and Pablo Jiménez Segovia (Banco de España), "Missing values imputation for Central Balance Sheets Data Office (CSBO) accounting data".



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- **Eugenia Koblents Lapteva** (Banco de España), "Utility and confidentiality assessment of synthetic company data".
- **Ajit Desai** (Bank of Canada), Anneke Kosse (Bank for International Settlements) and Jacob Sharples (Bank of Canada), "Machine learning framework for pattern recognition and anomaly detection in payments systems".
- Maryam Haghighi and **Vivianne Taillefer** (Bank of Canada), "Data and analytics risk management framework for central banking".

Session 2b: International dimensions (papers and presentations)

Chair: Louis Marc Ducharme, former Chief Statistician and Data Officer, International Monetary Fund

Presenters:

- Amir Khatib (Bank of Israel), "Classification of entities in the foreign exchange market".
- **Matthias Rumpf** (European Central Bank), "Providing access to confidential micro data for cross-country analysis".
- **Massimo Casa** (Banca d'Italia), "Connecting the dots of the international debate on the standardization and granularity of regulatory data".
- **Michael Boutros** (Bank of Canada) and Andrej Mijakovic (European University Institute), "The Macroeconomic Implications of Coholding Liquid Assets and Debt".
- Andrea Carboni, Marco Di Bella and Flavia Ciccioli (Banca d'Italia), "International trade in creative economy: an analysis with granular data".

Session 3a: Macroeconomic perspectives (papers and presentations)

Chair: Roeland Beerten, Chief Statistician, General Statistics Department, National Bank of Belgium

Presenters:

- Guerino Ardizzi, **Giuseppe Bruno**, Roberto Iannaccone, Juri Marcucci, Filippo Moauro, Alessandra Righi and Davide Zurlo (Banca d'Italia), "The use of payment transaction data for economic forecasts."
- **Michael Chernousov** (Federal Reserve Board of Governors), "Retail credit estimates in Federal Reserve Board's G.19 "Consumer Credit" statistical release".
- **Dave Campbell**, Charita Koya, Naveen Rai (Bank of Canada), "Estimating the effects of economic indicators on the language used in the Business Outlook Survey."
- Joshua Brault, Maryam Haghighi (Bank of Canada), Hashmat Khan (Carleton University), and Masoud
 Nasari (Bank of Canada), "Labour productivity in Canada".
- Efrem Castelnuovo (University of Padova), **Kerem Tuzcuoglu** (Bank of Canada) and Luis Uzeda (Bank of Canada), "Sectoral uncertainty".

Session 3b: Prices and monetary policy (papers and presentations)

Chair: Bruno Tissot, Head of Statistics & Research Support (BIS) and Head of IFC Secretariat (Irving Fisher Committee on Central Bank Statistics)

Presenters:

 Charles Martineau, Zissis Poulos, Yuntao Wu, Cameron Thompson, Maryam Haghighi, Jun Yuan, John Hull (FinHub Research Center at the Joseph L. Rotman School of Management, University of Toronto), "Narrative monetary policy uncertainty".



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- **José Manuel Carbó Martinez** and Sergio Gorjón Rivas (Banco de España), "Determinants of the price of bitcoin: An analysis with machine learning and interpretability techniques".
- **Juan José Balsa** and Javiera Vasquez (Banco Central de Chile), "Property classification with administrative data: The case of the Chilean Household price index".
- Younghwan Lee (Bank of Korea), "Estimating effective inflation using scanner data".
- **Jorge Antonio Pozo Sanchez** and Youel Rojas Zea (Central Reserve Bank of Peru), "Financing imbalances and heterogeneous effects of monetary policy".
- **Frank Mayerlen** (European Central Bank), "The Eurosystem's granular data on securities, loans and entities How we use such information today and what we may develop differently next time".

Session 4: Insights on the way forward (papers and presentations)

Chair: Maryam Haghighi, Director, Data Science, Bank of Canada

Panellists shared their views on the value of granular data as well as the challenges their use poses, weighing the trade-offs, and sharing their insights on the future of granular data use by central banks based on their expertise and experience.

Panellists:

- Michelle Alexopoulos, Professor of Economics, University of Toronto, and Bank of Canada Fellow
- **Pablo García**, Vice Governor of the Central Bank of Chile, Chair of the Irving Fisher Committee on Central Bank Statistics
- Jim MacGee, Managing Director, Economic and Financial Research, Bank of Canada
- James Tebrake, Deputy Director, Statistics Department, International Monetary Fund

Closing Remarks