4th conference on "Non-traditional Data, Machine Learning, and Natural Language Processing in Macroeconomics"
October 3 – 4, 2022
Stockholm, Sweden

Preliminary Program

Monday October 3rd

08:00 – 08:50	Lunch/Coffee and registration
08:50 – 09:00	Opening remarks

Session I
Chair: Xin Zhang

09:00 – 09:45	"Asset Pricing with Neural Networks: Significance Tests" *Hasan Fallahgoul*, Vincentius Franstianto, and Xin Lin
	Discussant: Daniele Bianchi
09:45 – 10:30	"Machine Learning Panel Data Regressions with Heavy-tailed Dependent Data: Theory and Application" Andrii Babii, Ryan T. Ball, Eric Ghysels, and *Jonas Striaukas*
	Discussant: Arturas Juodis
10:30 – 11:00	Coffee break

Session II
Chair: James Chapman

11:00 – 11:45	"Nowcasting Norwegian Household Consumption with Debit Card Transaction Data" *Knut Are Aastveit*, Tuva Marie Fastbø, Eleonora Granziera, Kenneth Sæterhagen Paulsen, and Kjersti Næss Torstensen
	Discussant: Ajit Desai
11:45 – 12:30	"National Accounts in a World of Naturally Occurring Data: A Proof of Concept for Consumption" Gergely Buda, Vasco Carvalho, Stephen Hansen, *Alvaro Ortiz*, Tomasa Rodrigo, and Jose V. Rodriguez Mora
	Discussant: Christopher Kurz

Keynote talk and lunch
Chair: Ricardo Correa

12:30 – 13:30	"Toward robust communication of modeling results" *Jessica Hullman*

13:30 – 14:00	Coffee break
14:00 – 15:00	Panel discussion: Efficiency and governance of ML/AI
	Salla Franzen, Paolo Giudici, Anton Korinek, and *Beju Shah*

Session III
Chair: Giuseppe Bruno

15:00 – 15:45	"The Central Bank Crystal Ball: Temporal information in monetary policy communication" David Byrne, Robert Goodhead, *Michael McMahon*, Conor Parle
	Discussant: Ulf Söderström
15:45 – 16:15	Coffee break
16:15 – 17:00	"'Liked', 'Shared', 'Commented': Central Bank Communication on Facebook and Twitter" Yuriy Gorodnichenko, *Tho Pham*, and Oleksandr Talavera
	Discussant: James Brookes
17:00 – 17:45	"Reading between the lines - Using text analysis to estimate the loss function of the ECB" *Markus Haavio*, Pirkka Jalasjoki, Juha Kilponen, Ilona Vänni, and Maritta Paloviita
	Discussant: Juri Marcucci
19:30 – 21:30	Conference dinner (by invitation)

Tuesday October 4th

08:00 – 09:00	Coffee and registration

Session IV
Chair: Isaiah Hull

09:00 – 09:45	"Estimating HANK Models with Neural Networks" *Hanno Kase*, Leonardo Melosi, and Matthias Rottner
	Discussant: Kieran Larkin
09:45 – 10:30	"Deep Reinforcement Learning in a Monetary Model" Mingli Chen, *Andreas Joseph*, Michael Kumhof, Xinlei Pan, Rui Shi, Xuan Zhou

	Discussant: Giuseppe Bruno

10:30 – 11:00	Coffee break

Session V
Chair: Maryam Haghighi

11:00 – 11:45	"A Neural Phillips Curve and a Deep Output Gap" *Philippe Goulet Coulombe*
	Discussant: Marcin Zamojski

11:45 – 12:30	"Measuring Firm-Level Inflation Exposure: A Deep Learning Approach" *Sudheer Chava*, Wendi Du, Agam Shah, and Linghang Zeng
	Discussant: Diana Gabrielyan

12:30 – 14:00	Lunch and Poster Session

Poster presentations

John D. Baker	"Assessing the Credibility of Central Bank Signals: The Case of Transitory Inflation"
Salim Baz	"What is the Value of Financial News?"
Mauricio S. Moreno	"Climate-Related Disclosures in the UK Financial Sector and its Determinants"
Lena Müller	"Talking in a language that everyone can understand? Transparency of speeches by the ECB Executive Board"
Kim Ristolainen	"A Thousand Words Tell More Than Just Numbers: Financial Crises and Historical Headlines"
David Van Dijcke	"Vacancy Posting, Firm Balance Sheets, and Pandemic Policy Interventions"

Keynote talk
Chair: Ulf Söderström

14:00 – 15:00	"Monetary policy communication: Insights from social media" *Michael Ehrmann*

Session VI
Chair: Juri Marcucci

15:00 – 15:45	"Quantum Natural Language Processing for Classification of Receipt Descriptions" Noorain Noorani, Sarah Blanchette, Omar Chikhar, Jean-Frederic Laprade, Stella Wang, Zachary Zanussi, and *Vladimir Skavysh*
	Discussant: Isaiah Hull

15:45 – 16:15	Coffee break
16:15 – 17:00	"Better Prediction at the Cost of Attribution: The Case of Classifying News" Nelson Rayl and *Nitish Sinha* Discussant: Taeyoung Doh
17:00 – 17:45	"Climate Risk and Commodity Currencies" Felix Kapfhammer, *Vegard H. Larsen*, and Leif Anders Thorsrud Discussant: Olesya Grishchenko

Time allocation

Presentation: 25 minutes
Discussion: 10 minutes
Q&A: 10 minutes

Local organising committee

• Isaiah Hull, Research Division, Sveriges Riksbank
• Lena Sundvall, Research Division, Sveriges Riksbank
• Ulf Söderström, Research Division, Sveriges Riksbank
• Xin Zhang, Research Division, Sveriges Riksbank

Scientific committee

• Daniele Bianchi, Sveriges Riksbank and Queen Mary University of London
• Giuseppe Bruno, Division of IT support for Economics and Statistics, Bank of Italy
• James Chapman, Banking and Payments Department, Bank of Canada
• Ricardo Correa, Division of International Finance, Federal Reserve Board
• Ajit Desai, Banking and Payments Department, Bank of Canada
• Olesya Grishchenko, Division of Monetary Affairs, Federal Reserve Board
• Maryam Haghighi, Information Data and Analytics Services, Bank of Canada
• Isaiah Hull, Research Division, Sveriges Riksbank
• Christopher J. Kurz, Division of Research and Statistics, Federal Reserve Board
• Sabina Marchetti, International Economics and Relations Directorate, Bank of Italy
• Juri Marcucci, Economic Research Department, Bank of Italy
• Xin Zhang, Research Division, Sveriges Riksbank