Sophia Kazinnik

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Education

University of Houston | Houston, TX May 2017
Ph.D. in Economics

Tel Aviv University | Tel Aviv, Israel May 2009
B.A. in Economics

Research Interests

- Financial Stability, Supervision and Regulation, Cyber Risk
- NLP, Unstructured Data, Central Bank Communication

Experience

Sr. Quantitative Analyst | Federal Reserve Bank of Richmond June 2019 – Present

- Led a review of quantitative models for financial stress testing exercises (CCAR) as a quant lead on the Operational Risk horizontal evaluation team (HET)
- Led a development and implementation of Natural Language Processing (NLP) based tools for various supervisory purposes based on large sets of text data
- Developed a cyber risk definition and classification framework for financial risk management

Quantitative Fellow | Federal Reserve System June 2017 – June 2019

- Worked with teams across the Federal Reserve System (FRB New York, FRB Boston, and the Board) on a variety of internal risk modeling projects
- Created and automated an NLP-based reporting tool

Graduate Instructor | University of Houston Sep. 2013 – May 2017

- Taught undergraduate courses in Economics

Publications

Text Mining Methodologies with R: An Application to Central Bank Texts

- With Jonathan Benchimol and Yossi Saadon; *Machine Learning with Applications, Volume 8,* 2022

Monetary Policy Rules in Practice: The Case of Israel

- With David Papell; *International Review of Economics and Finance, Volume 76,* 2021

Working Papers

Let's Face It: Quantifying the Impact of Nonverbal Communication in FOMC Press Conferences

- With Filippo Curti; *SSRN link*

News and Networks: Using Text Analytics to Assess Bank Networks During COVID-19 Crisis

- With Daniela Scida, Cooper Killen, and John Wu; *SSRN link*

Federal Reserve Communication and the COVID-19 Pandemic

- With Jonathan Benchimol and Yossi Saadon; *Covid Economics (Issue 79)*, 2021

Text-Based Measures of Central Bank Transparency

- With Jonathan Benchimol and Yossi Saadon; *link*

User Experience, Visual Aesthetics, and Content of Central Bank Websites

- With Filippo Curti

Work in Progress

Animal Spirits in Regulation: Evidence from Banking

- With David Aldama-Navarrette, Filippo Curti, and Anne Hansen

You Got Hacked: What Can We Learn From 100,000 Cyber Attacks?

- With Matteo Crosignani, Filippo Curti, Marco Macchiavelli, and Andre Silva

Cyber Risk in the Financial Sector

- With Filippo Curti, Jeff Gerlach, and Nika Lazaryan

Conferences, Presentations, and Invited Talks

Talks: FRS Quantitative Skills Conference 2021; The 4th Women in Quantitative Finance Conference 2021; ABA Risk Conference 2021; Risk.Net 2020; ABA Risk Conference 2019; ORX 2019; FRS Quantitative Skills Conference 2020, 2019, 2018; FRB Richmond Cyber Risk Conference 2019 (co-organizer and panelist)

Select Conferences and Seminars (⋆ denotes co-author presentation):
System Conference on Financial Institutions, Regulations, and Markets (scheduled)
System Econometrics Meeting 2022 (scheduled) ⋆
WFC 2022
WEAI 97th Annual Conference 2022
RiskLab/BoF/ESRB Conference on Systemic Risk Analytics 2022
York University Finance Seminar 2022
SFA Annual Meeting 2021 ⋆
FMA Annual Meeting 2021
Columbia University Econometrics Seminar
University of Reading Economics Seminar
52nd Annual Conference of the Money, Macro and Finance Society 2021 ⋆
The 11th RCEA Money, Macro & Finance Conference 2021 ⋆
NBER Summer Institute (Monetary Economics) 2021 ⋆
11th Portuguese Finance Network Conference 2021 ⋆
Central Bank Research Association Annual Meeting (CEBRA) 2021 ⋆
WEAI 96th Annual Conference 2021
NBU/NPB Annual Research Conference 2021
AEA/ASSA 2021 Annual Meeting ⋆
AEA/ASSA 2020 Annual Meeting ⋆

Professional Service

Ad-Hoc Referee:
Economic Inquiry
American Economic Review
Journal of Finance
Latin American Journal of Central Banking

Technical Skills

Coding: R, Python, Stata, Matlab, SQL/SAS
Other: NLP (e.g., BERT, topic modeling, sentiment analysis), Unstructured Data (video/audio/text), ML (PyTorch/Keras), Time Series Econometrics, Financial Risk Modeling

Languages

Languages: English, Hebrew, Ukrainian, Russian