

Discussion: three papers on Nontraditional Data & Statistical Learning with Applications to Macroeconomics

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Disclaimer: The views expressed here are solely my own and do not reflect the views of the Board of Governors of the Federal Reserve System or of any other person associated with the Federal Reserve System.

A nice, coherent collection of work

Applying NLP, the authors

- ▶ gauge the objectives in policy making (Lumsdaine and van Dieijen)
- ▶ provide information about market sentiments (Rho, Fernandez and Palma)
- ▶ examine the spread of ideas that in turn shape economic events (Hulla, Bertscha and Zhang)

Unique advantages of textual data

- ▶ What can we learn from textual analysis that is not otherwise available?
 - ▶ in concept: well motivated
 - ▶ in performance: could be explored further

What Say They About Their Mandate? A Textual Assessment of Federal Reserve Speeches

Fed officials' speech \Rightarrow whether the Fed adopted a third mandate of ensuring financial stability

- ▶ An important, intensely debated topic
- ▶ Incredibly thorough analysis
- ▶ A very appealing narrative

Questions

- ▶ Shifts in focus in policy making vs. changes in economic circumstances
 - ▶ Example: drop in “price stability” post-2008
- ▶ Financial stability as a third mandate vs. a Fed responsibility vs. a means to achieve the dual mandate
 - ▶ Fed responsibilities: conducting monetary policy, promoting financial stability, fostering payment system efficiency, promoting consumer protection, and supervising and regulating financial institutions,
 - ▶ Dual mandate: monetary policy objectives
 - ▶ Was/is financial stability part of objectives for *monetary policy*?
 - ▶ Bernanke (2006-2014): “use the right tool for the job”
- ▶ What they say vs. what they do

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Order and Chaos in Business Cycle Narratives

Entropy in newspaper articles \Rightarrow properties of narratives giving rise to economic fluctuations

- ▶ Exciting new field
- ▶ Creative application

Questions

- ▶ Understanding the measurement: linking within-topic entropy to convergence of a narrative, especially in its relation to business cycle.
 - ▶ an easily expressed explanation of events
 - ▶ a core contagious element
- ▶ Understanding the main result: dominant narratives emerge during booms and fragmented narratives during contractions

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A Sentiment-based Risk Indicator for the Mexican Financial Sector

Tweets from verified agency accounts in Spanish \Rightarrow public sentiment in the Mexican financial sector

- ▶ Creative use of Twitter data in non-English language
- ▶ Incredibly thorough execution (retweets, Mexico vs. global, etc)
- ▶ Thoughtful writeup re. usefulness and caveats

Questions

- ▶ Sentiment vs. economic substance
 - ▶ sentiment: tone/concern/emotion
 - ▶ financial stress and/or risks
- ▶ Future directions depending on the interpretation
 - ▶ Sentiment: survey measures; equity market movement unjustified by fundamentals

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Wrapping up

- ▶ Tightly linked work that spans important areas for which textual data has unique advantages
- ▶ Highly informative in ways that deepen our understanding and invite follow-up work
- ▶ Clever approach using textual data
- ▶ Would appreciate further fine-tuning in interpretation of measures and implications