



Research Working Papers

Deciphering Federal Reserve Communication via Text Analysis of Alternative FOMC Statements

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A new text-analysis method finds that the wording of FOMC statements can have significant effects on financial markets.

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[Online Appendix](#)

We propose a text-based measure of monetary policy stance that models FOMC statements as convex combinations of dovish and hawkish alternatives, providing a tractable representation of the Committee's position along the policy spectrum. Leveraging staff-drafted alternative statements, we fine-tune a pre-trained language model to capture both quantitative precision and semantic tone. Stance is defined as the product of tone and novelty, and decomposed into expected and surprise components using high-frequency financial data. Surprises arise from shifts in tone relative to expectations or from statement novelty. Our framework enables counterfactuals showing how alternative communication could have moved markets.

JEL Classification: E30, E40, E50, G12

Article Citations

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Related Research

- Ke, Zheng Tracy, Bryan T. Kelly, and Dacheng Xiu. 2019. "Predicting Returns with Text Data." National Bureau of Economic Research, working paper no. 26186, August. Available at <https://doi.org/10.3386/w26186>
- Lunsford, Kurt G. 2020. "Policy Language and Information Effects in the Early Days of Federal Reserve Forward Guidance." American Economic Review, vol. 110, no. 9, pp. 2899-2934. Available at <https://doi.org/10.1257/aer.20181721>

- Nakamura, Emi, and Jón Steinsson. 2018. "High-Frequency Identification of Monetary Non-neutrality: The Information Effect." *Quarterly Journal of Economics*, vol. 133, no. 3, pp. 1283-1330. Available at <https://doi.org/10.1093/qje/qjy004>
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