Research Working Papers

How High Does High Frequency Need to Be? A Comparison of Daily and Intradaily Monetary Policy Surprises

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Daily data can be a reasonable substitute for intraday data in measuring the effects of monetary policy announcements, with some adjustments.

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This paper investigates the utility of daily data in measuring high-frequency monetary policy surprises, comparing various announcement-day asset price changes with their intradaily (30-minute) counterparts. We find that both frequencies are similarly distributed and often highly correlated, particularly for longer-horizon measures. Testing daily surprises for systematic contamination from non-monetary policy news, we find no evidence to suggest that contemporaneous news releases bias their measurement. Empirical applications, including high-frequency passthrough to Treasury yields and proxy SVAR models, suggest that daily surprises produce results comparable to those obtained with intradaily data. Our findings suggest that while intradaily data remains invaluable for certain applications, daily data offers a practical and robust alternative for assessing monetary policy surprises, particularly when the event, or the reaction to it, extends beyond a narrow window, or when intradaily data is unavailable.

JEL Classifications: E43, E44, E52, E58, G14

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Related Research

- Bauer, Michael D., and Eric T. Swanson. 2023. "A Reassessment of Monetary Policy Surprises and High-Frequency Identification." *NBER Macroeconomics Annual*, vol. 37, no. 1, pp. 87–155. Available at https://doi.org/10.1086/723574

- Brennan, Connor M., Margaret M. Jacobson, Christian Matthes, and Todd B. Walker. 2024. "Monetary Policy Shocks: Data or Methods?" Board of Governors of the Federal Reserve System, *FEDS Notes*. Available at https://doi.org/10.17016/feds.2024.011r1

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