8th International Academic Conference on Management and Economics

CONFERENCEME
INTERNATIONAL ACADEMIC CONFERENCE ON MANAGEMENT AND ECONOMICS

23 - 25 August 2024

Oxford, United Kingdom

Modeling Cryptocurrency Market Volatility During FOMC Announcements: Evidence from High-Frequency Data

Barış Falay
Koç School, Istanbul, Turkey

Abstract

This study investigates the impact of Federal Open Market Committee (FOMC) announcements on cryptocurrency market volatility using high-frequency data. Realized Variance (RV) is used to measure cryptocurrency market volatility, with a focus on Bitcoin (BTC). Using a dataset of over 3.4 million observations, our results indicate that cryptocurrency market volatility significantly increases on FOMC announcement days. Furthermore, we show that intraday volatility is not stable during the FOMC announcement period, with notable fluctuations both before (11 am) and after (3 pm) the key monetary policy announcement. The empirical evidence provides the reaction of the cryptocurrency market to macroeconomic policy news, offering valuable insights for investors, policy makers, and researchers.

Keywords: Realized Volatility, Cryptocurrency, High-frequency data, FOMC