Public Perception and Market Response to the FTX Crypto Exchange Collapse: A Twitter Analysis

Abstract

This study explores the public sentiment surrounding the FTX incident by utilizing advanced sentiment analysis and topic modeling to analyze 300,000 tweets. The research aims to uncover how public perceptions, expressed through social media, correlate with market dynamics during the three phases of the FTX crisis: Before, During, and After the incident. Sentiment analysis revealed significant shifts from positive to predominantly negative sentiments as the crisis unfolded, reflecting the public's response to unfolding events. Topic modeling identified key themes such as financial downfall, geopolitical financial controversies, digital finance innovations, specific crisis events, and regulatory aftermaths, offering insights into the public's concerns and discussions. Regression analysis further demonstrated the impact of past sentiment and market performance on future market behavior, emphasizing the role of sentiment analysis as a predictive tool in financial markets. This paper contributes to the understanding of the interplay between public sentiment and market reactions, highlighting the potential of social media as a real-time barometer of public mood in financial contexts.

Keywords:

Sentiment Analysis, Topic Modeling, FTX, Cryptocurrency, Social Media Analytics

Executive takeaways or practical implications:

- 1. Sentiment analysis predicts cryptocurrency market shifts
- 2. Social media accurately mirrors crisis impact dynamics
- 3. Dual sentiment methods significantly enhance insights
- 4. Public mood strongly influences market responses
- 5. Tweet analysis robustly reveals market trends