

Sentiment analysis of financial news on Bloomberg and its impact on the Euro STOXX 50

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Introdução

One of the most debated and controversial topics in finance nowadays is stock market prediction (Jin et al., 2020). Experts are continually attempting to forecast the stock market trends and determine the influencing factors that have an impact on it and to what extent. Despite the Efficient Market Hypothesis (Fama, 1979), the emergence of a behavioral finance perspective has paved the way for new approaches such as sentiment analysis. Evidence shows that incorporating investment sentiment into stock price prediction models increases their predictability (Fedyk, 2024)

Problema de Pesquisa e Objetivo

This study examines the impact of financial news sentiment on the daily returns of the Euro Stoxx 50 index from January 2022 to March 2024. By investigating whether sentiment derived from Bloomberg articles can predict stock returns, the study aims to illuminate how investor psychology, influenced by news, interacts with market performance, particularly in the context of market volatility and lagged returns.

Fundamentação Teórica

Literature highlights the relevance of sentiment in predicting stock market returns and reveals that its application, especially on social media news, significantly influences market performance, with some predicting that market movements are more accurately predicted when public mood is considered. Media sentiment has also been shown to affect volatility and trading volume, often driving prices down when negative. Based on this and the gaps identified in the literature, we analyze the effect of financial news sentiment on the daily returns of the Euro Stoxx 50 index.

Metodologia

To explore the impact of financial news sentiment on the daily returns of the Euro Stoxx 50, sentiment scores were generated using the Loughran-McDonald Lexicon and combined with stock price data for panel regressions analyses. Both fixed and random effects models were considered, with the Hausman test used to select the most suitable model. Additionally, OLS regressions for each year were performed to delve deeper into the temporal dynamics between sentiment and returns.

Análise dos Resultados

The findings demonstrate that in post-COVID era, sentiment had a significant positive effect on returns, suggesting that investor sentiment played a key role during times of increased market uncertainty. The findings indicate that while sentiment impacts market performance, this effect is strongly influenced by volatility levels and prevailing market conditions. Our findings also suggest that rationality declines during periods of high volatility, such as in 2022, while decision-making becomes more rational in more stable and predictable periods, like 2023 and 2024.

Conclusão

From a theoretical perspective, this study highlights the limitations of EMH in explaining market behavior and strengthens the case for behavioral finance. The results emphasize the role of investor psychology in driving market movements, particularly during volatile periods, supporting the idea that traditional finance models are insufficient to explain the price formation process. It makes a strong contribution to the body of knowledge supporting the view that investors and economic agents exhibit limited rationality.

Contribuição / Impacto

This study contributes to the growing body of literature on the dynamic relationship between sentiment and financial markets, underscoring the variable impact of sentiment across different market scenarios and suggesting that traditional models have a limited ability to explain the process of price formation. In fact, findings of this study align more closely with behavioral finance theories than with the Efficient Market Hypothesis (EMH).

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