MKT15

Evaluating the Impact of Macroeconomic Variables on U.S. Stock Market Performance: Insights from VAR Analysis

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Abstract

The US stock market, a foundation of global finance, has experienced exceptional instability. These dynamics highlight the need for sophisticated tools to understand and predict market behavior. This research employs the Vector Auto Regression (VAR) model to analyze relationships between key indicators. The dataset is divided into training and test sets, comprising the final 30 days.

The key findings reveal that the model demonstrated high explanatory power for all variables, with adjusted R-squared values exceeding 0.98. Significant short-term dependencies were observed among the variables, particularly for DXY, oil, and gold prices.

This research contributes to the understanding of the complex interplay between currency, commodity, and bond markets while highlighting the challenges in short-term forecasting of these financial variables. Future studies may explore non-linear modeling techniques or incorporate additional exogenous variables to enhance predictive accuracy.

Conference Track

Marketing