

# **The Effects of Market Uncertainty on Financial Performance and Economic Activity Using SVAR and Kalman Filter Approaches**

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## **Abstract**

This paper aims to establish the impact of market risk on the performance of the financial markets and the level of economic activity. It explores the impact of uncertainty shocks in the S&P 500 index which represents general market sentiment and the yield interest rate which is an indicator of economic activity using the VIX. Some of the significant findings are based on Impulse Response Functions which are within the SVAR model and with the use of Kalman Filter to eliminate noise and seasonality. The results show negative findings between the VIX and the S&P 500 index, which clearly illustrate that a one-percentage-point rise in the VIX results in a decrease in the value of the S&P 500 index by 0.37%. In the same way, the yield interest rate weakens sharply, which is evidence of a decrease in activity within the economy. Thus, these results emphasize the significance of market risks on numerous financial and economic parameters while stressing the significance of risk management.

**Keywords:** *Market Uncertainty, Financial Market, Structural Vector Auto regression, Kalman Filter, Volatility Index (VIX)*