

PROJECT PROPOSAL

Team 5: Team Neo

The Standard & Poor's 500, commonly called the S&P 500, is a stock market index measuring the stock performance of 500 of the largest companies listed on stock exchanges in the United States.

In this project, we analyze the S&P 500 data to compare the market volatility before and after two significant global events: the COVID-19 pandemic and the Russia-Ukraine conflict. By understanding the fluctuations in the S&P 500, investors and policymakers can better navigate the financial landscape during times of crisis.

To measure and compare the volatility of the S&P 500 index during four distinct periods: before and after the onset of the COVID-19 pandemic, and before and after the escalation of the Russia-Ukraine conflict.

To assess the impact of these events on the financial market, particularly on the S&P 500 index, which is a benchmark for U.S. equities. We plan to use the historical S&P 500 index data (consisting of 3018 observations), including opening, closing, high, and low prices, and trading volume.

SMART Questions

1. How did the S&P 500's overall performance compare in the years leading up to the COVID-19 pandemic (2012-2019) versus the period after its onset (2020-2023)?
2. How has the ongoing Russia-Ukraine conflict (beginning in February 2022) impacted the S&P 500 compared to the period immediately before the war?
3. How does the market volatility during the COVID-19 pandemic compare with the volatility observed during the Russia-Ukraine war?
4. How was the market volatility before major events compared with the volatility observed during major events like COVID and the Russia-Ukraine war?

Data Source:

<https://finance.yahoo.com/quote/%5EGSPC/history/?guccounter=1>

GitHub Repository:

Link: https://github.com/phanindra-max/dats_6101_DS_midproject