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Research Question:

My study examines the impact of the California Consumer Privacy Act (CCPA) on the financial market, specifically analyzing how investor sentiment towards companies is affected by data privacy laws. The focus is on the Business/Consumer Services and Technology sectors to understand how the CCPA's implications vary across these sectors, different exchanges, and industries.

Significance for Financial Markets and Data Privacy Laws:

As data privacy increasingly influences consumer trust and corporate practices, it's vital to grasp the CCPA's effects. This insight is essential for investors, policy makers, and companies to anticipate how data privacy regulations might shift market behavior and investor trust.

Data Utilized:

I collected stock data from Yahoo Finance for the period from June 28, 2017, to July 8, 2018. To address the absence of historical S&P 500 industry and sector classifications, I supplemented this with sector and industry information from The Wall Street Journal's company list PDFs (contained in data/pdf\_raw\_data folder ) and S&P 500 historical data (in data folder) from GitHub, which was pre-collected by professionals.

Methodological Approach:

I conducted an event study to observe the shifts in stock prices and trading volumes before and after the CCPA was signed. The relationships between variables were visualized using correlation plots, while stock distributions across exchanges were shown with stacked plots. I also employed an interactive box plot to demonstrate the distribution of stock price, volume, and market capitalization in different industries and exchange. The detailed explanations of results are shown in the python files comments.

Key Findings:

The analysis seems to confirm certain behavioral patterns among exchanges and underscores a significant impact of the CCPA signing on trading volumes. The use of interactive plots in the study highlighted a clear trend within trading volumes and three categories, including Exchange, Sector, and Industry, suggesting that data privacy laws profoundly influence investor sentiment. Moreover, an increase in trading before the CCPA event suggests that the market might have anticipated the new law’s signing.

Challenges and Limitations:

A primary challenge was presenting the detailed data from multi-line event plots in an easily readable manner, which led to the exclusion of confidence intervals. This is a considerable limitation, as it means the significance and reliability of my findings are not thoroughly validated.

Future Directions:

Further research is needed to delve deeper into the diverse impacts of the CCPA and to refine the event study model to better distinguish the anticipation effect. The next steps should also include developing a method that strikes a balance between analytical depth and clarity of presentation, particularly for complex financial data affected by regulatory developments.