

Analysis of the Stock Market's recovery from the Spring 2020 Covid downturn.

Between Feb. 12 and March 23, the Dow lost 37% of its value. Although the market has since recovered, there are still lots of useful questions to examine from the last 2 market years. These questions include:

- At the time of the downturn, financial advisors stressed to stay invested through the downturn at all costs. Was this the right strategy? Could a well timed exit and entrance strategy have brought in better returns?
- Which industries have recovered from this downturn the best? Are there leading and lagging industries that we can gain insight from?
- The 2021 financial calendar year's defining moment was the rise of the retail investor and the "meme stocks". What effect did this phenomenon have on the larger cap S&P 500 stocks?

These are just a few of the financial questions that can be analyzed by looking and exploring the past 2 years of stock data. These questions are important, because these have been very impactful years in the financial markets, and by gaining insight into how the markets were affected we can gain knowledge into potential future events.

Data Sources:

- I will use the S&P 500 database from stockmarketmba.com. This database has good categorical information about all 505 companies in this wide index. The S&P 500 is one of the 3 most commonly used indexes that track the market as a whole. It suits the purposes of this analysis much better than the smaller Dow Jones index, and the massive Nasdaq composite that would be unwieldy to analyze.
- For historical data, I will use the `yfinance` python package to scrape historical data for the last two years for each of the S&P 500 stocks. This will allow me to create an additional database of historical data that we can use for our analysis.

Some possible visualizations we can generate from this data, include color coded scatter plots to show how various industries have recovered over the past 2 years. We can also run regressions to show what factors have been most highly correlated with recovery. We can also use line charts to compare various exit and reentry strategies, and how they would have performed over the last two years, with the actual historic performance of the S&P 500. More visualizations will be generated based off of the facts that we discover while exploring this data.