

Congress Project

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Our Goal

Our goal is to see monitor the United States Congress's stock portfolio and see if there is any corruption going on. We want to see if they more than the average stock trader and see if there is any evidence of insider trading.





Collecting the Data

- We imported a house and senate api that got their stock information
- We used a standard api to collect stock information for each stock the Congress people made



Cleaning

Highlights:

- transaction amount (high end)
- dropped non-stock transactions
- dropped partial sales
- used adjusted close price

Feature Engineering

- two versions - total market exposure and cumulative profit/loss
- daily to-date profit/loss
- daily basis
- date indexed dataframe summing those values.

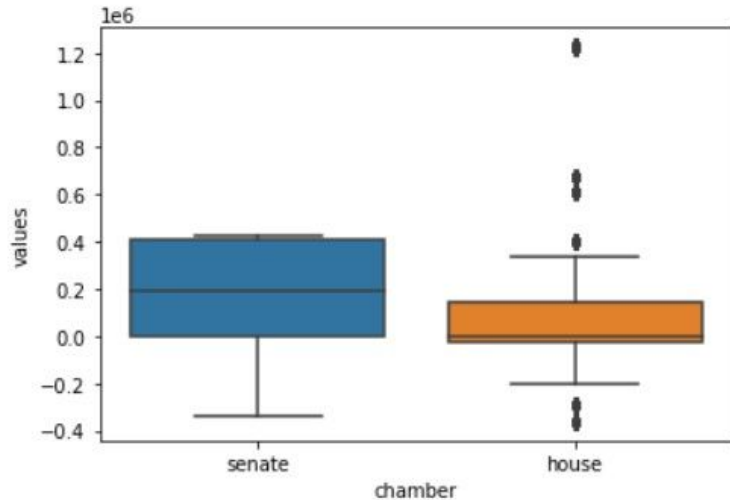




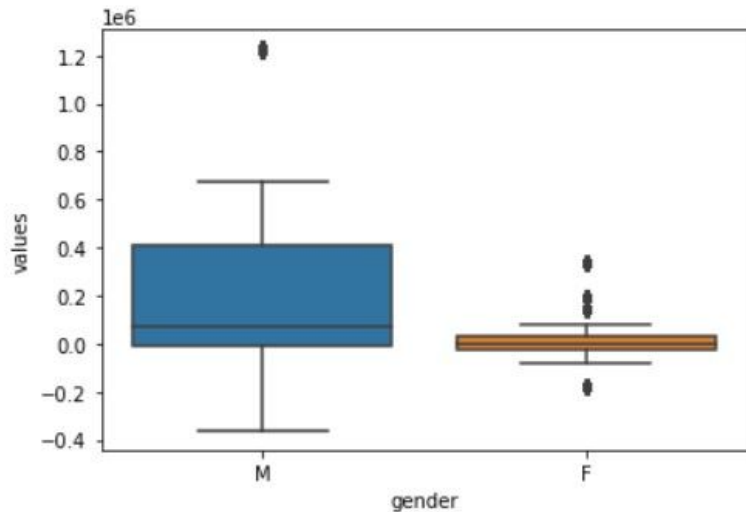
Notable Findings

- Only 2 Congressmen (Michael T. McCaul and Greg Gianforte) made over \$1,000,000 in their stock portfolio
- Just 27.72% of Congress people made a profit in their stock portfolio
- We found that 3/18/2020 was the most traded day. This was right around the time the COVID 19 pandemic started in the USA.

Amount by Chamber

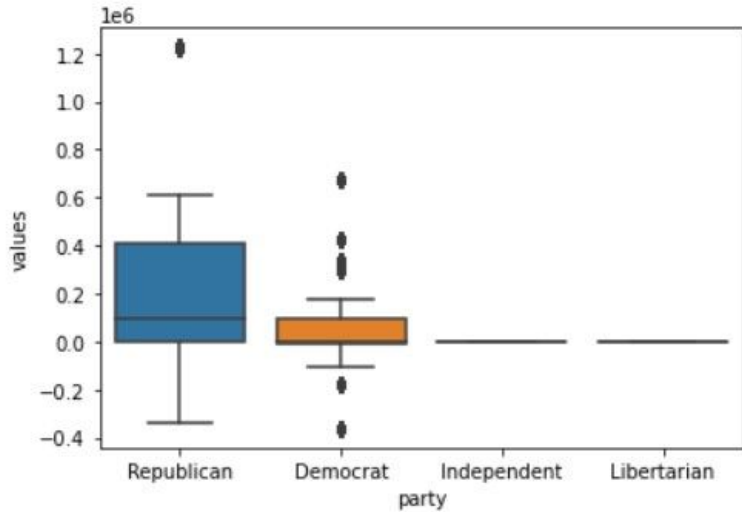


Senators seem to make more than the House members



Amount by Gender

Males in Congress seem to make more than females.

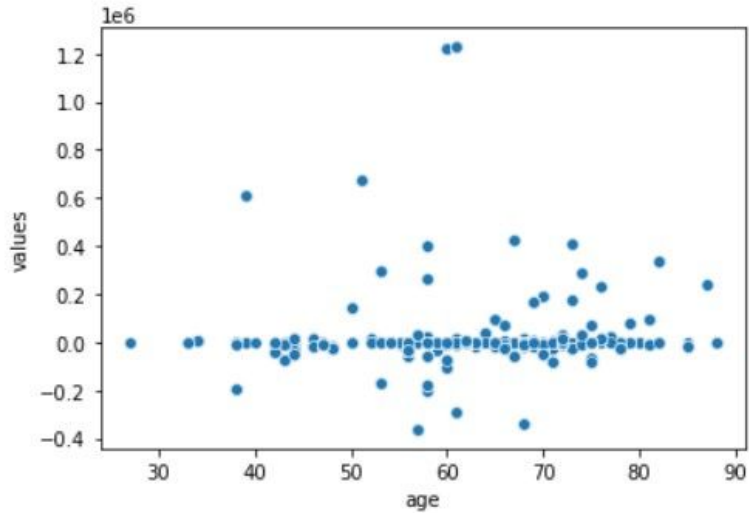


Amount by Political Party

This shows that the Republicans tend to make more in stock trades than the Democrats

Portfolio Value by Age

This shows the distribution of earnings by age.



Conclusion

Representatives don't seem to make better trades than us.

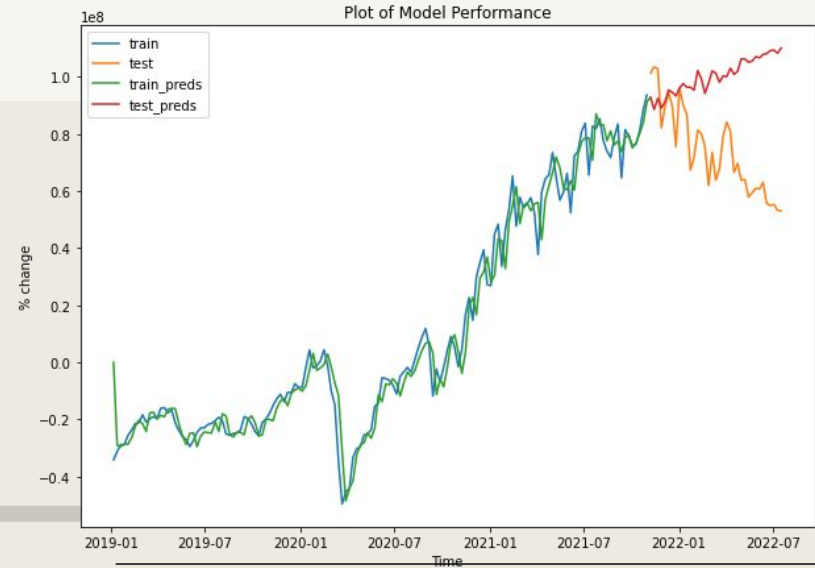
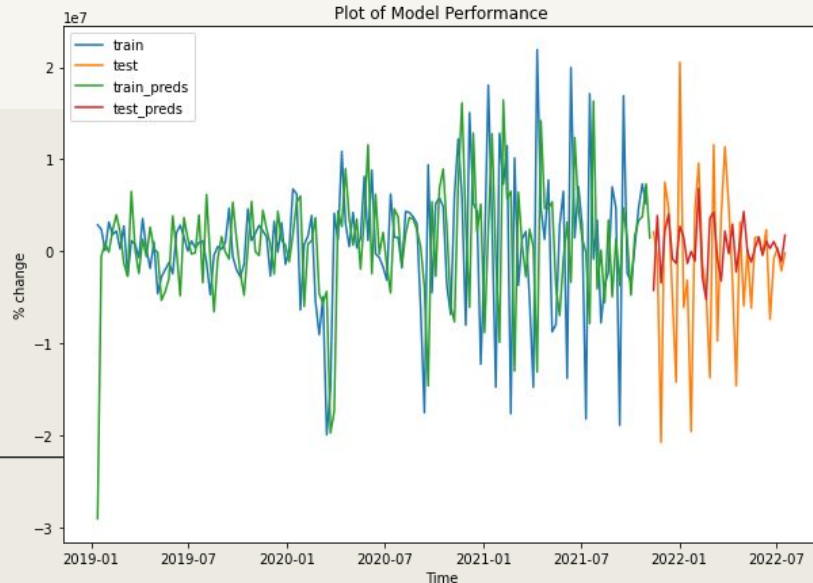
From Jan 2, 2014 to July 15, 2022, the S&P 500 is up 111%. An index fund would have outperformed the legislators by a lot.

Forecasting

- With our data analyzed, we moved forward to trying to predict the returns of congress
 - As it turns out, not easy:
 - May go too granular, very intense cpu-wise, long waits
 - Need to control for stationarity
 - Forecasting stocks is notoriously hard
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Forecasting

- MSE: 1,092,081,789,303,923.6



Question?

