STOCK MARKET AND BEHAVIORAL FINANCE

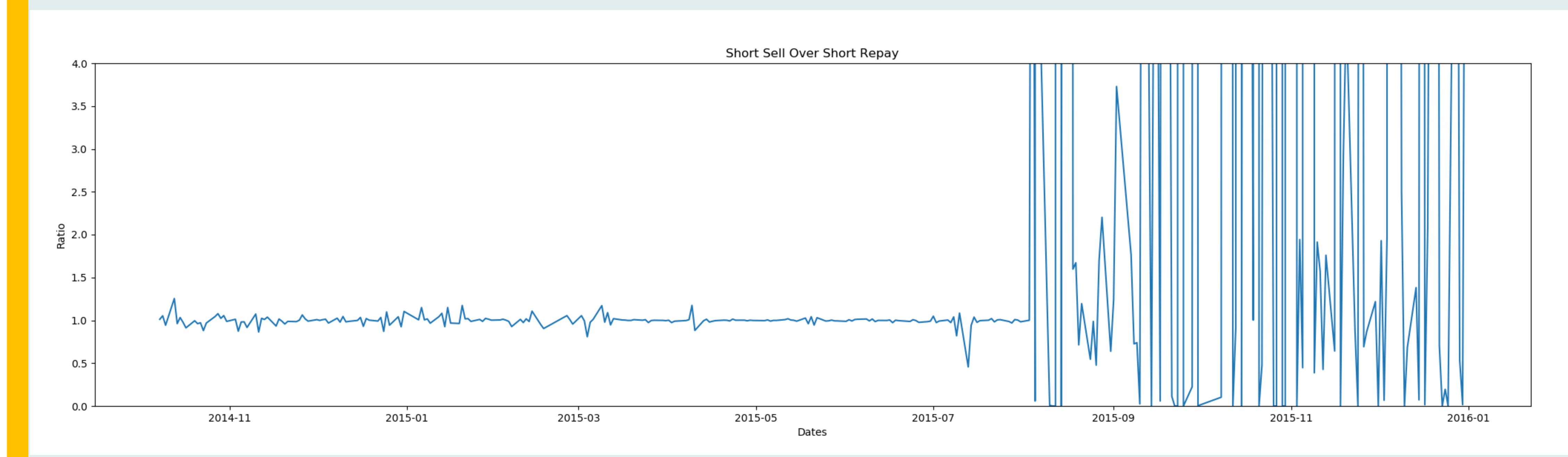
INTRODUCTION

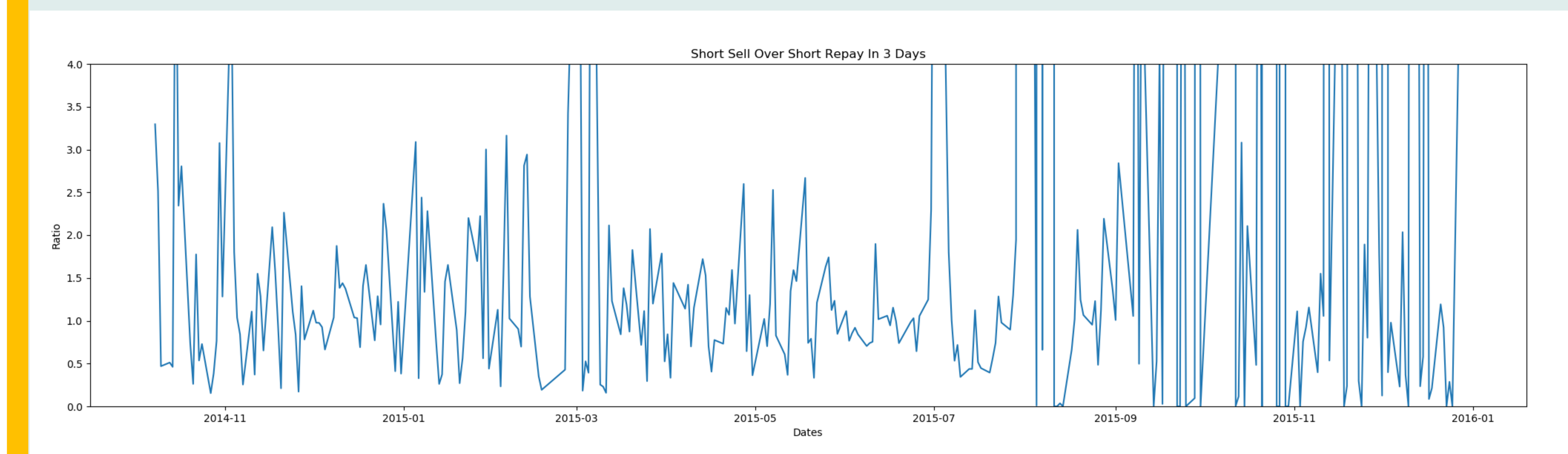
- In 2015, the Shanghai Stock Exchange (SSE) crashed after years of prosperity.
- Unlike other stock markets, SSE releases daily short sale and margin trade data, facilitating data acquisition and analysis.
- It is important to investigate investor behavior during (and after) times of crisis to get a better understanding of how a actors in the market behave when it is failing.

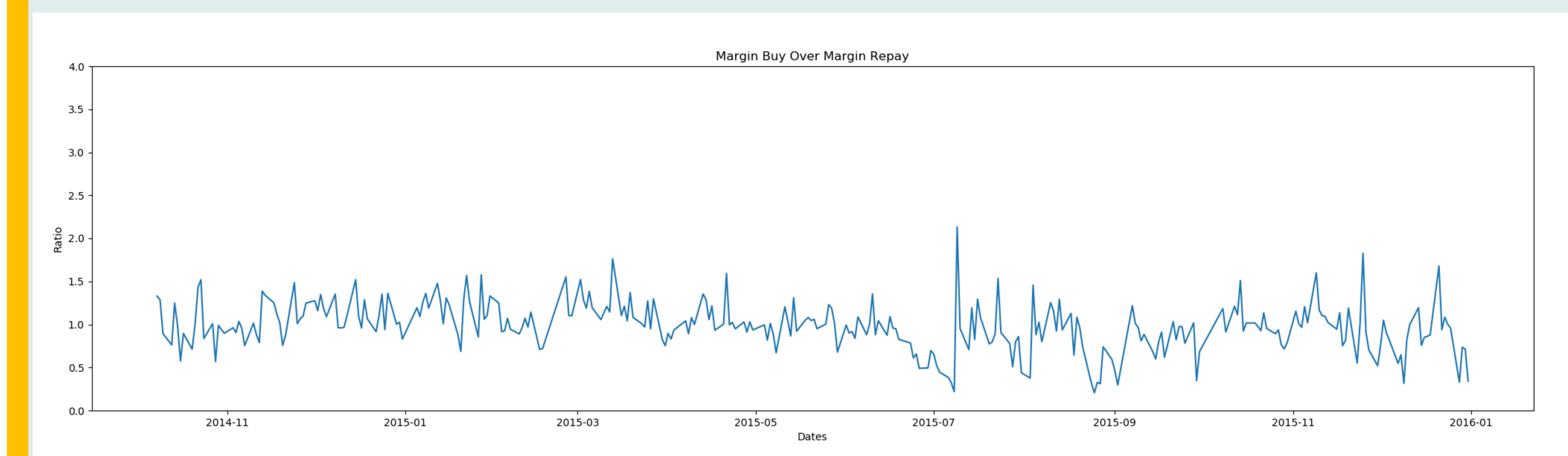
METHODS

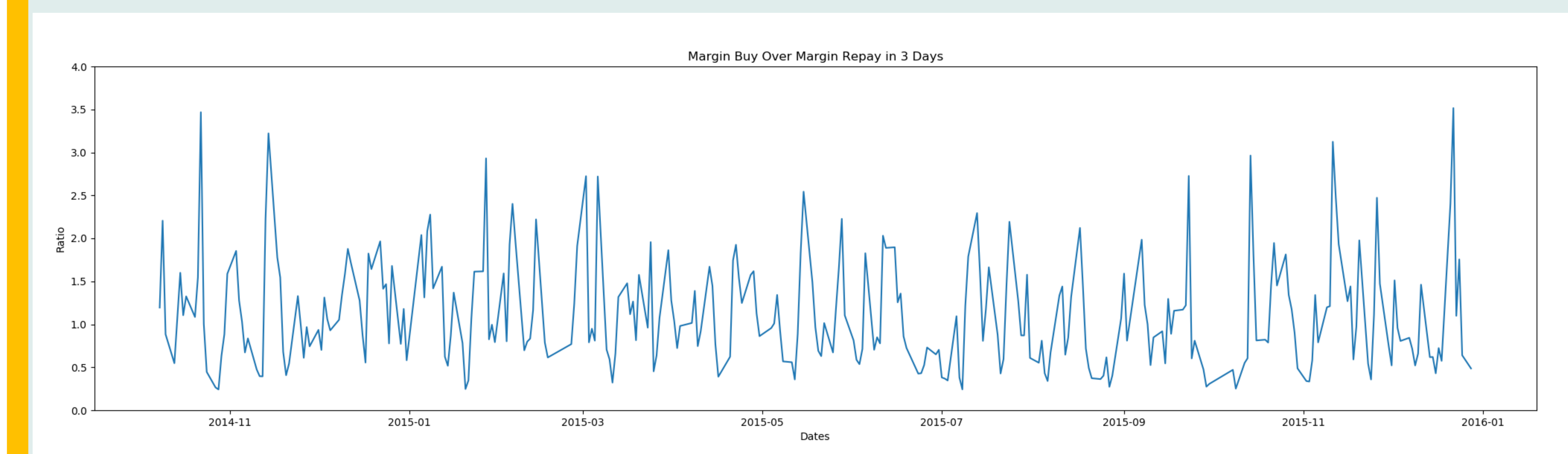
- Calculate short sale/short buyback and margin buy/margin repay ratios.
- Compare ratios with different time delays.
- In Python, loop through different five day time windows to determine what strategy is preferred in a given span.
- Using NumPy and matplotlib libraries in Python, graph our findings to help visualize the information.

RESULTS









CONCLUSION

- Before and during the crash, investors remained confident in the market.
- This confidence is indicated by the fact that they generally exited short positions on the same day they entered them.
- After the crash, short sale ratios are less uniform, like margin ratios, which points to a loss of assurance.
- Part of this change in behavior could be due to the new existence of a precedent.

DISCUSSION

- The code used to analyze specific stocks can be extrapolated to investigate large numbers of stocks.
- Gaps and possible errors in the dataset may have effected the analysis.
- With more detailed data, like the specific positions of each trader, would lead to more thorough conclusions.
- Confounding variables like changes in federal regulations may also have impacted investor behavior.