Jim Cramer’s *Mad Money* Portfolio Characteristics

Interest

- Intrigued in the potential profit in the stock market
- Credibility of *Mad Money*
- Using Comp Sci for data analysis
Current Literature

- Mr. Cramer’s effect on the Stock Market
- All Segments of the show
- Short term Returns are highest for “Cramer’s strongest buy recommendations”

Research Gap

- Consistency of returns when compared with S&P 500
- Categorization of returns by Market Capitalization and Sector
- Dispersion of stocks to show reliability
Research Question

- What are the characteristics of a *Mad Money* portfolio, and how does it perform based on these characteristics when compared with the S&P 500 index?

Defining Characteristics

- Percent Change of S&P 500 and stocks
- Market Capitalization
- Sector of market
- Accounting for dividends
Null Hypothesis
\( (H_0) \)

- *Mad Money* performs better than the S&P 500

Alternate Hypothesis
\( (H_a) \)

- The difference in growth between the portfolio and the index is not significant and the portfolio is a representative sample of the market
Methods

- Repeats treated as separate stocks
- 251 Business Days = one year
- Python used for data manipulation and calculations
  - Yahoo Finance API
  - THESTREET.COM

Beta Coefficient and Variance
Python - Pandas Library

- Tool used to combine and arrange data for every stock
  - Found Percent change of each stock over 2 years (502 BD)
  - Output spreadsheet with average return of all stocks based on initial recommended date
  - Spreadsheet with return in comparison to S&P 500 index
## Results

- 88 stocks recommended from second two quarters of 2016

## Tests Used

- Variance
- Interquartile Range
- Percent Change
- Beta Coefficient
## Population Information

<table>
<thead>
<tr>
<th>Sector</th>
<th>% of Total</th>
<th>Market Capitalization</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>27.27%</td>
<td>Micro Cap</td>
<td>0.00%</td>
</tr>
<tr>
<td>Materials</td>
<td>3.41%</td>
<td>Small Cap</td>
<td>10.23%</td>
</tr>
<tr>
<td>Consumer Defensive</td>
<td>11.36%</td>
<td>Mid Cap</td>
<td>7.95%</td>
</tr>
<tr>
<td>Consumer Cyclical</td>
<td>21.59%</td>
<td>Large Cap</td>
<td>60.23%</td>
</tr>
<tr>
<td>Communication Services</td>
<td>2.27%</td>
<td>Mega Cap</td>
<td>20.45%</td>
</tr>
<tr>
<td>Industrials</td>
<td>10.23%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare</td>
<td>6.82%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>10.23%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Services</td>
<td>6.82%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Results - Compared with Index

Stock, Stock w/Index, Index

- Growth of Stock
- Stock with Index
- Growth of Index

Business Days From Recommendation Date
Synopsis

- Worse than market for firsts
  100 BD
- *Mad Money* portfolio
  marginally better than market
- Large portfolio that can represent market

Graph

![Graph showing stock growth comparison with index](image-url)
Results - Cross-Sector analysis

Return by Sector

- Technology
- Materials
- Consumer Defensive
- Consumer Cyclical
- Communication Services
- Industrials
- Healthcare
- Energy
- Financial Services
Synopsis

- Large Variance
- Technology and Consumer Cyclical combine to make up 75.05% of returns
  - 50% of portfolio
Results - Return by Market Capitalization

Small Cap, Mid Cap, Large Cap and Mega Cap

- Small Cap
- Mid Cap
- Large Cap
- Mega Cap
Synopsis

- Mega Cap and Large Cap stocks responsible for more than 98% of positive returns
- Only 80% of stocks recommended
Statistics

- $\beta = 0.84$
- P-Value = 0.14
  - Accept $H_a$
- Variance for Index ($\sigma^2 = 0.016$)
- Variance for stocks ($\sigma^2 = 0.107$)
- Range after 502 BD (-83.3% to +146.2%)
Conclusion

- Portfolio is representative sample of market
- Growth is not evenly distributed
- Portfolio is riskier than index and has similar returns
References