



COMP4971C Project Report
(Fall 2018-2019)

Evaluating Analysts' U.S. Market Short Sell Recommendations

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1. Abstract

For decades investors have applied various prediction methods to make educated guesses on the movement of stock prices by closely monitoring the news, studying company histories and analyzing financial statements. Retail investors, individuals who purchase securities for their own personal accounts, are more likely to follow recommendations from online analysts in order to reach a conclusion on whether to buy or sell a stock. This report aims to analyze the short sell recommendations of stocks traded on the American stock exchanges, found on these online websites, and to answer the question of whether retail investors should follow these short recommendations. Two sources of online recommendations will be studied in this project. Muddy Waters, a well-respected short-selling research firm, will help represent the opinion of an independent sell-side company. Seeking Alpha, a popular platform for stock analysts to post both research reports and analysis, will help illustrate a wider variety of short sell opinions as anyone can publish articles on this platform.

2. Disclaimers

2.1. Muddy Waters Disclaimer

Firstly, it is important to note that Muddy Waters does not produce “Short Sell Recommendations”, however in its Terms of Service, Muddy Waters states that one “should assume that as of the publication date of our reports and research, Muddy Waters LLC [...] has a short position in all stocks [...] covered” [1]. For the purpose of this report, Muddy Waters’ reports will be referred to as their short sell recommendations. Secondly, as we will illustrate throughout this report, our findings only cover Muddy Waters’ U.S. stocks which account for 60% of their published reports. The analysis is not representative of Muddy Waters’ portfolio’s total performance.

2.2. Terminology

This report aims to study whether investors should follow specific sell recommendations found online. It therefore examines the profit (financial gain) or loss (financial loss) an investor can incur if they were to sell the stock and buy it back at a later date. The investor would make a profit if the initial price is higher than the final price and would incur a loss if the initial price is lower than the final price. The term return, as used in this report, illustrates the difference in percentage between the initial price and the final price of a stock, shown in the below equation:

$$x \text{ Day Return} = \frac{(\text{Publishing Date Price} - \text{Price After } x \text{ Days})}{\text{Publishing Date Price}} * 100$$

Return, as used in this report, is the percentage change between the price at which the stock is sold and the price at which the stock is bought back. It is thus used interchangeably with either profit if the return is a positive number or loss if the return is a negative number, and helps illustrate how much percentage the investor will receive or lose on their initial investment.

2.3. Assumptions

- All returns, as used in this report, are represented in percentage form
- This report chooses to focus on the U.S. stock market. Thus, only U.S. stocks traded on American stock exchanges (such as NYSE, Nasdaq among others) will be studied in this report
- All the prices extracted are in USD
- Any additional costs such as financing, execution commissions and stock loan fees are not considered in this report as they depend on multiple factors that are not readily available to the general public
- All Box Plot representations are as follows [2]:

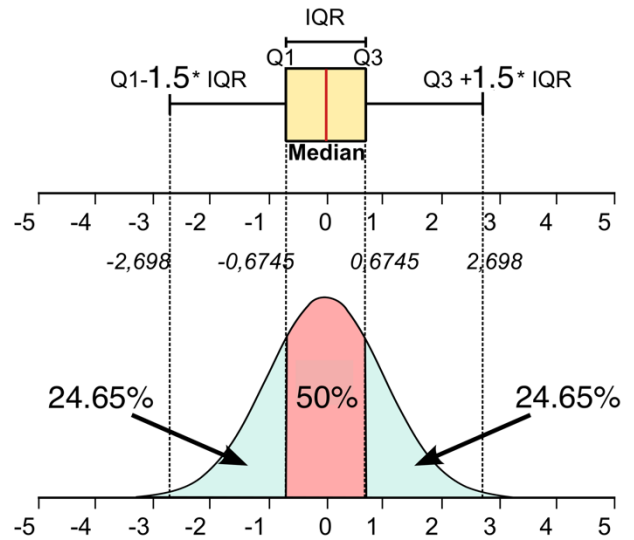


Figure 1: Box Plot Data Illustration

Matplotlib Python library was used to plot the box plots in this report. The median and quartiles are calculated from the input data.

- The Median line, represented in the report by the orange lines, is the middle value of the dataset
- The box extends from the lower quartile to the upper quartile.
 - Q1 (Quartile 1): Upper quartile; the middle number between the ‘minimum’ and the median
 - Q3 (Quartile 3): Lower quartile; the middle number between the ‘maximum’ and the median
- IQR stands for the interquartile range and represents the difference between the lower and the upper quartile: (Q3 – Q1)
- The whiskers extend from the box and represent the ‘minimum’ and ‘maximum’ values. (The terms minimum and maximum are in quotations as there may be outliers that extend from the whiskers)
- Due to some statistical anomalies, the outliers (which represent 0.7% of each dataset) were removed from all box plots in this report to avoid skewed results.

¹ <http://d.muddywatersresearch.com/tou/>

² <https://towardsdatascience.com/understanding-boxplots-5e2df7bcb51>

3. Data Retrieval

Two python scraping algorithms were run once in order to scrape the short sell recommendations from the websites of Seeking Alpha and Muddy Waters.

3.1. Data Retrieval Flow Chart

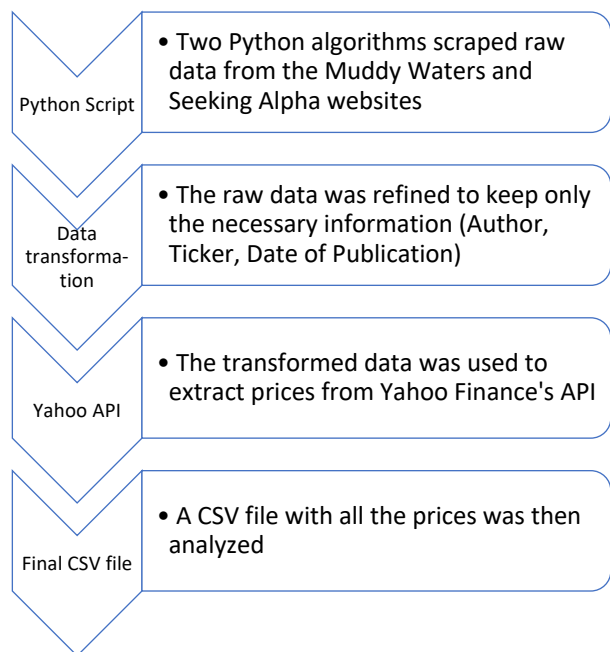


Figure 2: Flowchart for obtaining data

3.2. Seeking Alpha

Short ideas were scraped from the platform “Short Ideas” section. (<https://seekingalpha.com/stock-ideas/short-ideas>)

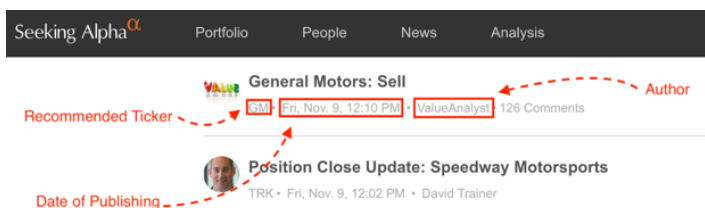


Figure 3: Screenshot of Seeking Alpha's Short Ideas Page

The author of the article, the recommended ticker and the publication date of the article were scraped. The Seeking Alpha CSV file contained a total of 1481 short sell recommendations from 462 authors published between the dates of the 1st of September 2016 and the 21st of June 2017.

3.3. Muddy Waters

Similarly, short ideas were scraped from the Muddy Waters website: (<http://www.muddywatersresearch.com/research/>)

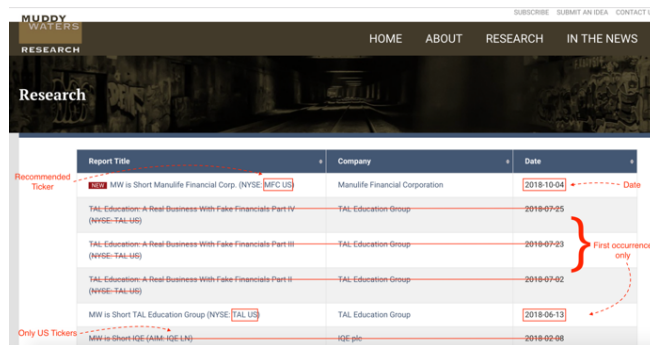


Figure 4: Screenshot of Muddy Waters' Research Page

Data collected included the recommended ticker and the publication date of the article. The initial raw data file was then refined: if the same ticker appeared multiple times, only the first date was kept. This is because Muddy Waters typically releases multiple articles on the same stock over multiple days – with the first article serving as a “teaser” of what is to come. Keeping only the first article published per stock helped illustrate an investor who would sell the stock on the same day as its publishing date. Furthermore, in order to achieve a better comparison between Seeking Alpha and Muddy Waters, only the US tickers were kept for analysis. A total of 16 reports on US tickers were scraped between 10th November 2010 and 4th of October 2018.

3.4. Yahoo Finance Prices

Both CSV files from Seeking Alpha and Muddy Waters were then used to retrieve data from Yahoo Finance’s API. Timing was not considered when extracting prices due to the fact that Muddy Waters does not include the time of the article’s publication. In order to hypothesize the idea that an investor would short sell a stock on the same date as the article was published, the following closing prices were extracted:

- Publishing Date Price
- Price after 1 trading day
- Price after 7 trading days
- Price after 30 trading days
- Price after 90 trading days
- Price after 360 trading day

The prices following the date of publication aim to illustrate holding periods (i.e., holding the stock for 1 trading day, 7 trading days, 30 trading days, 90 trading days and 360 trading days). Trading days were used as a stock’s price does not fluctuate over the weekend or on public holidays.

4. Seeking Alpha: Data Analysis

4.1. Overview

A total of 1481 short sell recommendations published between 1st September 2016 and 21st June 2017, 462 authors and 591 unique stocks were scraped from Seeking Alpha's website.

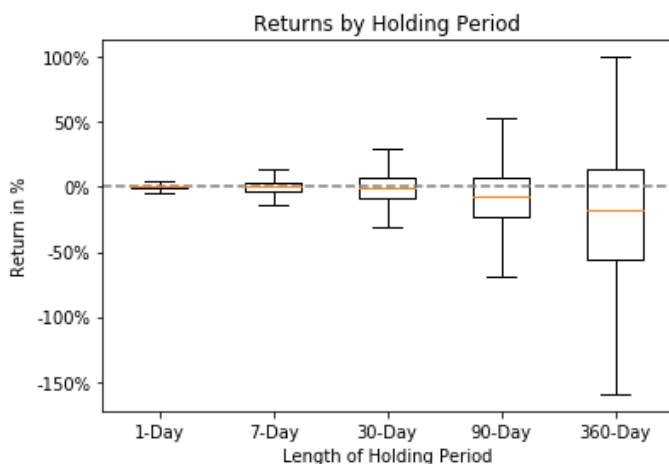


Figure 5: Box Plot of Seeking Alpha's Returns by Holding Period

The above boxplot illustrates the overall return of 1481 recommendations from the 462 Seeking Alpha analysts. This represents the hypothetical return of an individual who followed every single Seeking Alpha recommendation published during the period from 1st September 2016 to 21st June 2017.

As we can see from the above, the median values (represented by the orange line) for the three shorter holding periods are close to 0%, indicating that the short recommendations produce an equal number of profits and losses. However, for the more extended holding periods of 90 and 360 days, we can observe that the median values are below 0, suggesting that the recommendations produced a financial loss. The broader range of returns boasted by the longer periods is due to the idea that a stock's price can change more drastically over a longer period than a shorter one.

4.2. Most Recommended Stocks

Many inexperienced investors gravitate towards stocks that they know or have heard about on other social media platforms such as Twitter. Thus, they rely more on the popularity of the stock than any fundamental or technical analysis. In this part of the report, let us explore whether the popularity of the stock (the number of recommendations a stock has) is correlated to its returns.

Out of the 1481 recommendations scraped from Seeking Alpha, 591 were of unique stocks. From the below pie chart, we can see that 91.7% of the stocks were recommended less than or equal to 3 times. This means only 8.3% of the stocks were recommended 4 or more times.



Figure 6: Pie Chart Illustrating the Number of Times a Unique Stock was Recommended

The most recommended stock by Seeking Alpha analysts was Tesla, with 17.8% of the total short recommendations. The second most recommended stock, DRYS, falls far behind with 2.9% of the total recommendations.

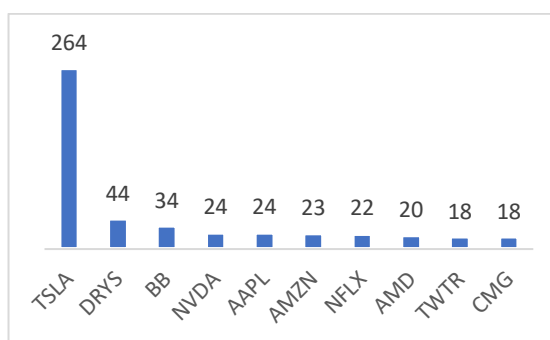


Figure 7: Top 10 Most Recommended Stocks by Seeking Alpha Analysts

The popularity of Tesla can be partly due to the incessant media coverage of Elon Musk and his infamous Twitter rants [3]. The constant outpouring of articles on Tesla and its CEO gives the company more exposure putting it on the radar of many analysts and investors. Let us study how well the top 10 recommended stocks perform.

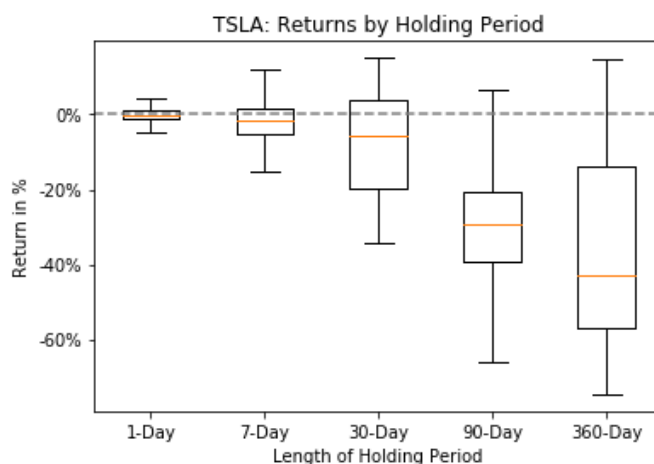


Figure 8: Box Plots of TSLA Returns by Holding Period

³ <https://www.cnbc.com/2018/08/07/tesla-says-no-final-decision-has-been-made-to-take-company-private.html>

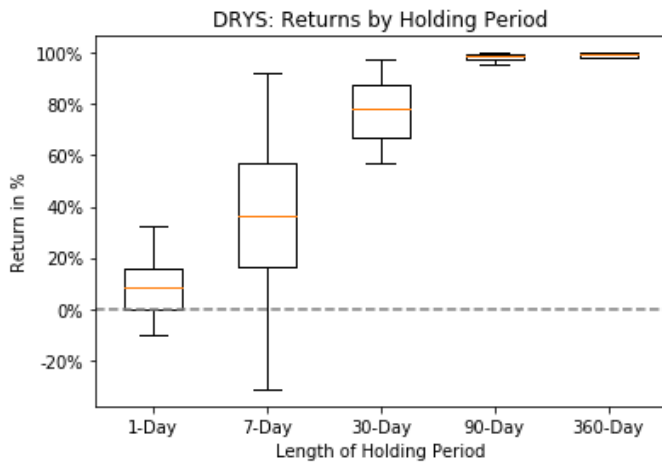


Figure 9: Box Plots of DRYS Returns by Holding Period

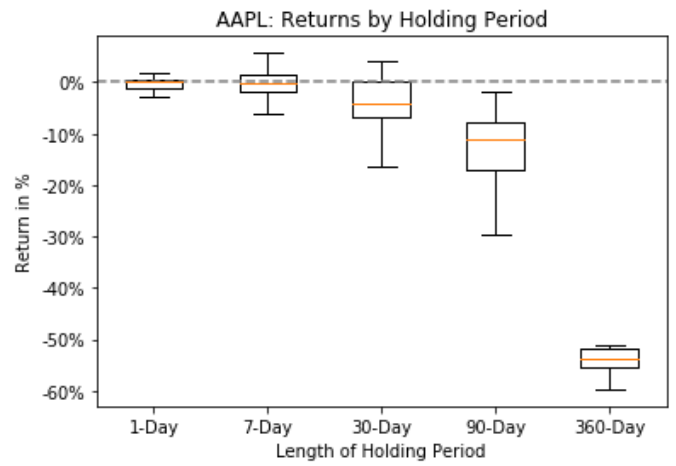


Figure 12: Box Plots of AAPL Returns by Holding Period

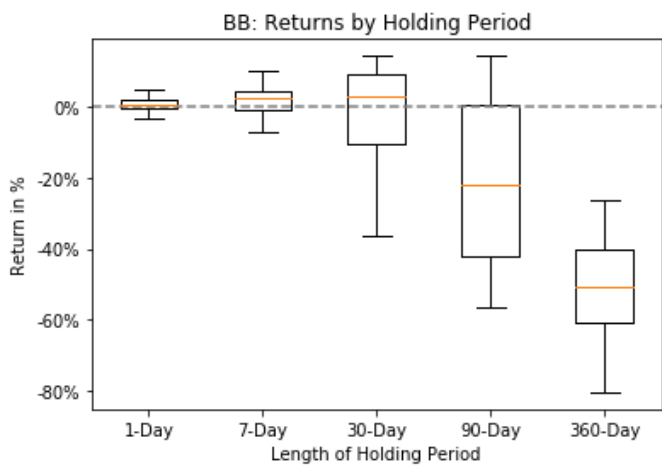


Figure 10: Box Plots of BB Returns by Holding Period

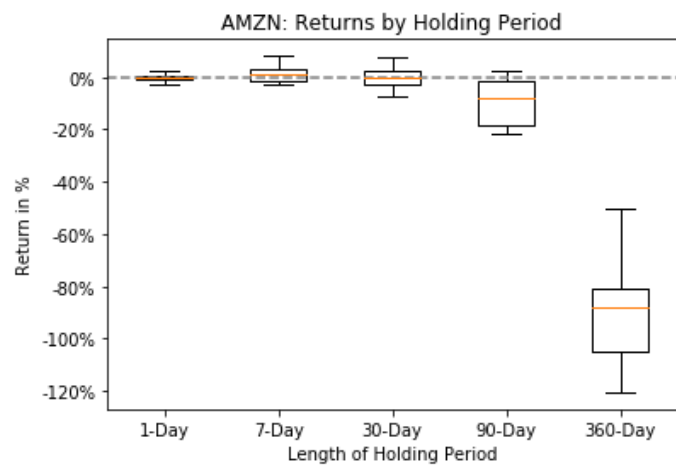


Figure 13: Box Plots of AMZN Returns by Holding Period

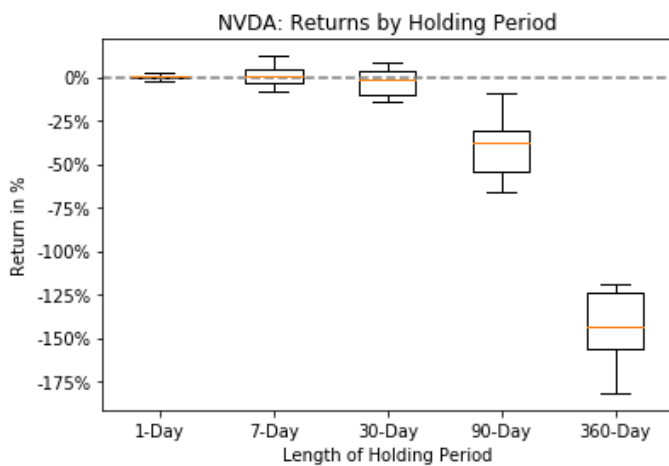


Figure 11: Box Plots of NVDA Returns by Holding Period

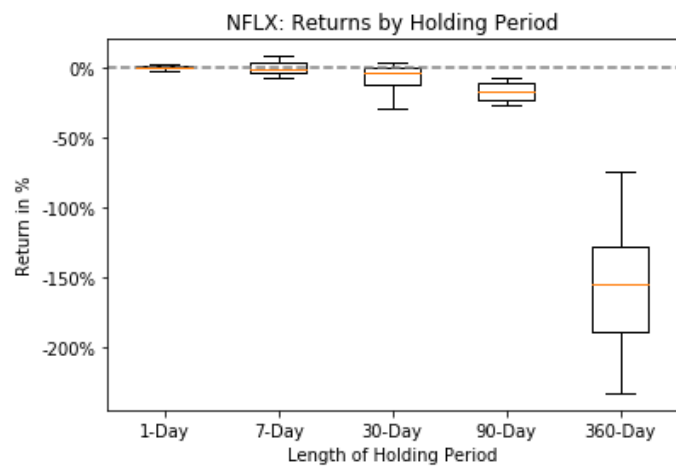


Figure 14: Box Plots of NFLX Returns by Holding Period

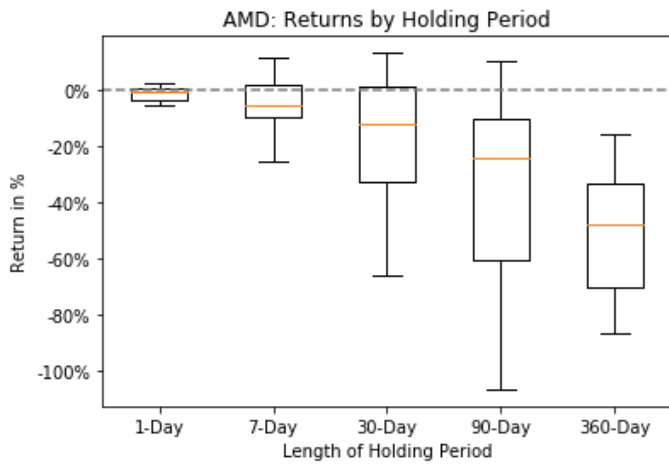


Figure 15: Box Plots of AMD Returns by Holding Period

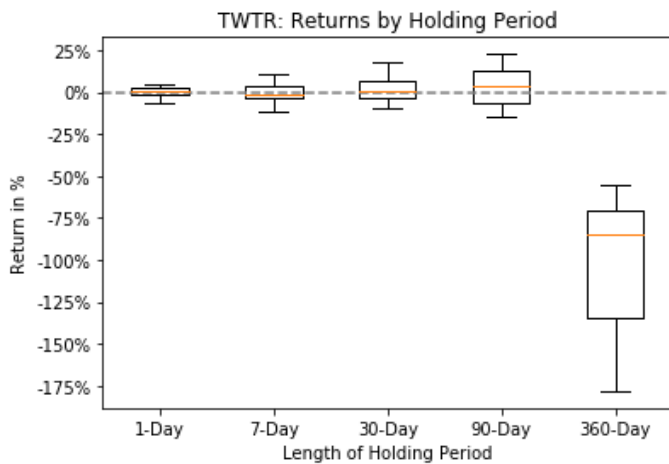


Figure 16: Box Plots of TWTR Returns by Holding Period

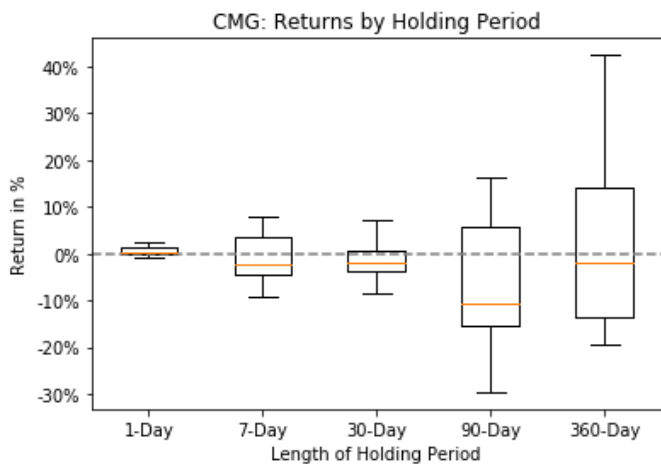


Figure 17: Box Plots of CMG Returns by Holding Period

The above ten box plots help illustrate the ranges of returns of each of the top 10 recommended stocks for the five different holding periods. The median line represented in orange is below zero for all stocks except for DRYS, meaning that most of these short recommendations were not profitable on average. The losses are amplified for the 360-Day holding periods due to the idea that a stock's price can change more during a longer period than a shorter one thus enlarging the difference between the price on the publication date and the price at the end of the year-long holding period. In addition, technology stocks such as NFLX, AAPL, AMZN, and TWTR were popular names to short but increased in price during the period of June 2016 to September 2017, causing a financial loss for short sellers.

We can see that the most recommended stocks do not provide positive returns. Retail investors should avoid the herd mentality and not sell a stock simply because of its apparent popularity among analysts. The number of short sell recommendations of a specific stock has essentially no correlation with that stock's returns. The below scatter plots help illustrate this idea.

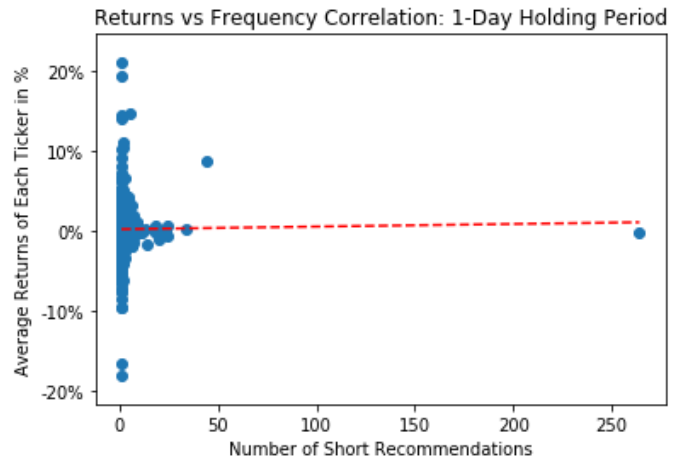


Figure 18: Correlation Between Average Return per Ticker and Number of Recommendations per Ticker (1-Day Holding Period)

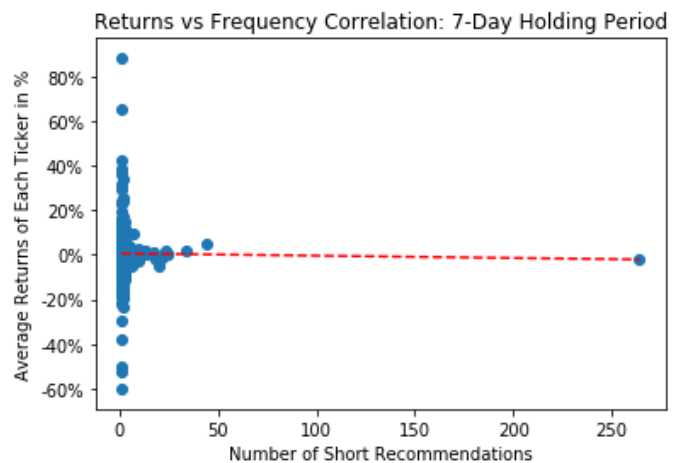


Figure 19: Correlation Between Average Return per Ticker and Number of Recommendations per Ticker (7-Day Holding Period)

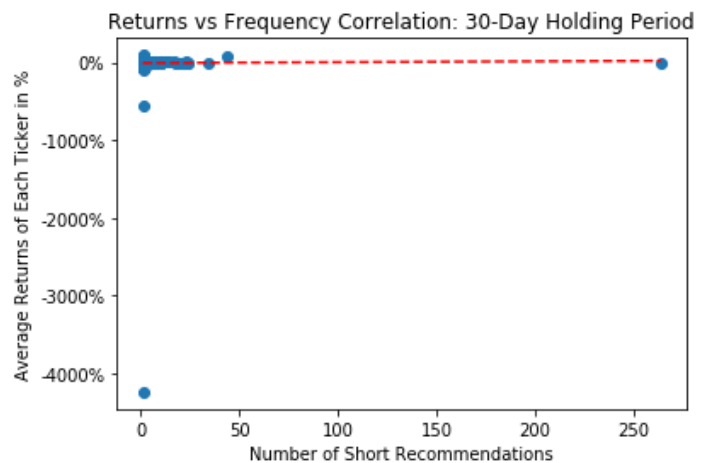


Figure 20: Correlation Between Average Return per Ticker and Number of Recommendations per Ticker (30-Day Holding Period)

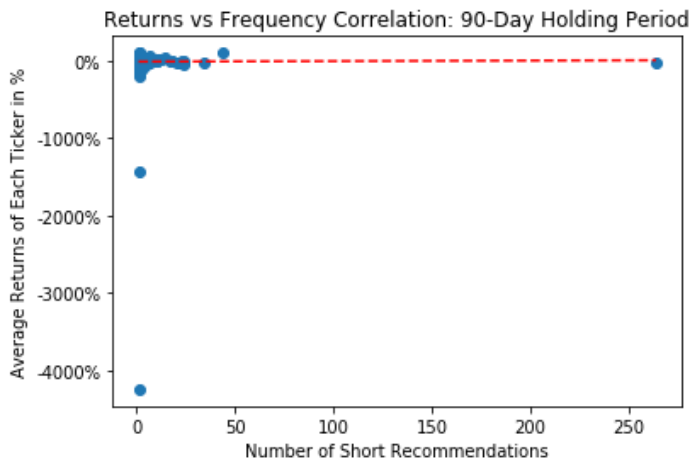


Figure 21: Correlation Between Average Return per Ticker and Number of Recommendations per Ticker (90-Day Holding Period)

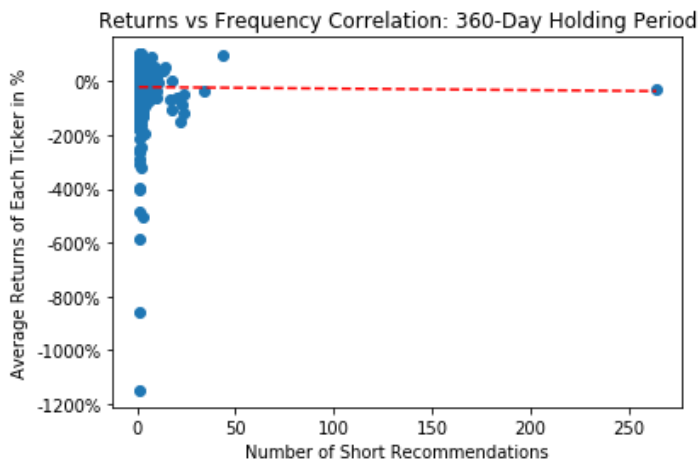


Figure 22: Correlation Between Average Return per Ticker and Number of Recommendations per Ticker (360-Day Holding Period)

The red dotted line represents the line of best fit that was plotted using Python's Matplotlib library. The slope of the line of best fit for each of the five holding periods is equal to zero which signifies essentially no correlation between the x and y-axis.

4.3. Most Prolific Analysts

Another way to illustrate the scraped data is to look at the average returns of each author. However, 56% of the authors only wrote one article with only 8% of all the authors writing more than 7 articles.

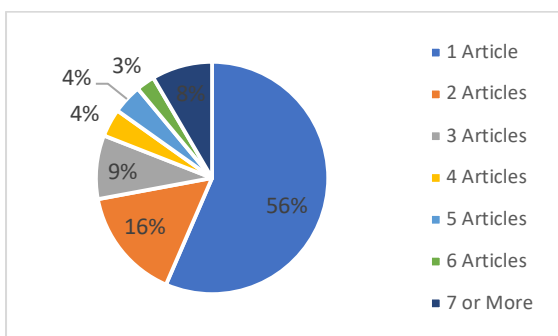


Figure 23: Pie Chart Illustrating the Number of Articles per Analyst

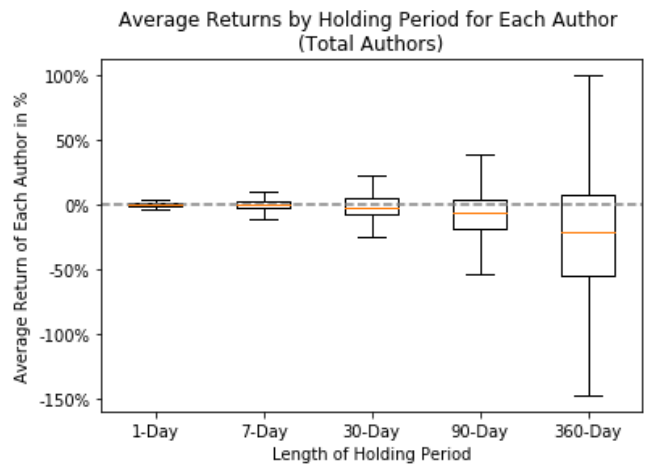


Figure 24: Box Plot of all Seeking Alpha Analysts' Average Returns by Holding Period

To not have skewed results, we have analyzed the average returns of the authors who wrote 10 or more articles, which will allow a more statistically accurate representation of the performance of those analysts' recommendations. From Seeking Alpha's scraped data, a total of 25 authors wrote 10 or more articles.

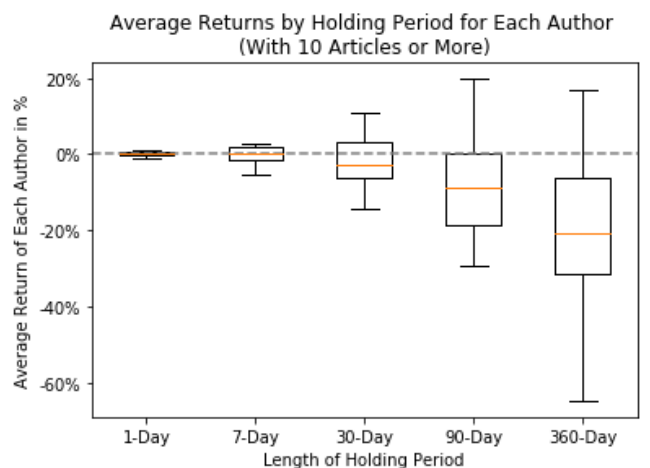


Figure 25: Box Plot of the Seeking Alpha Most Prolific Analysts' Average Return (10 articles or more)

We can observe that the 25 authors had better average returns across all holding periods than all the 462 authors combined. The difference is especially highlighted in the 360-Day holding period, with the lower quartile being twice as large for all authors (Fig. 23) than for the selected 25 (Fig. 24).

The top 3 authors with the highest profits for each holding period are plotted in the below boxplots. The authors are in descending order of average total returns, which is illustrated by the green triangles.

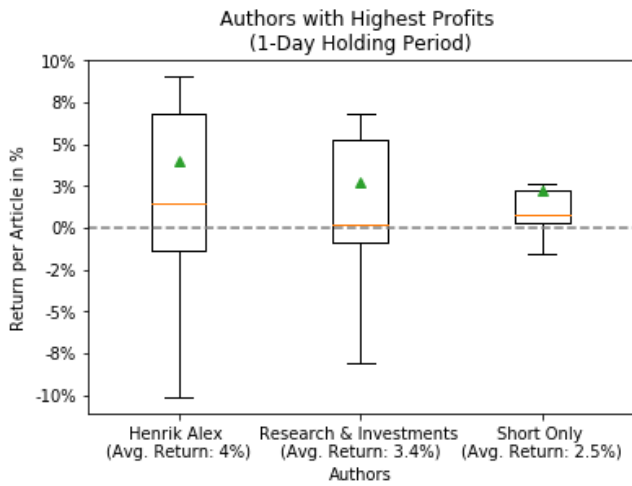


Figure 26: Box Plot of Top 3 Authors with Highest Profits (1-Day Holding Period)

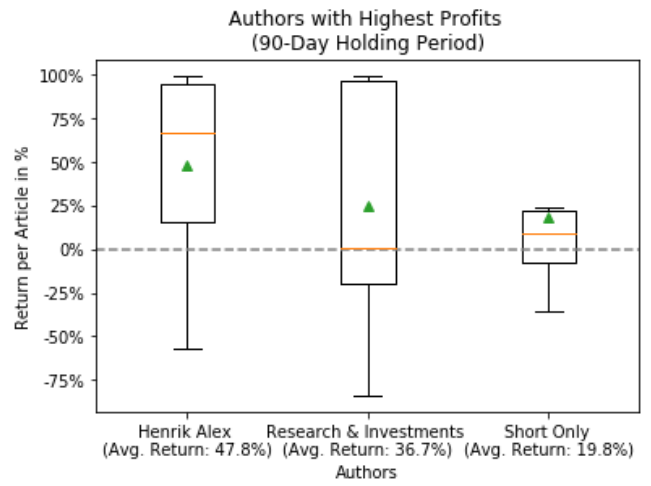


Figure 29: Box Plot of Top 3 Authors with Highest Profits (90-Day Holding Period)

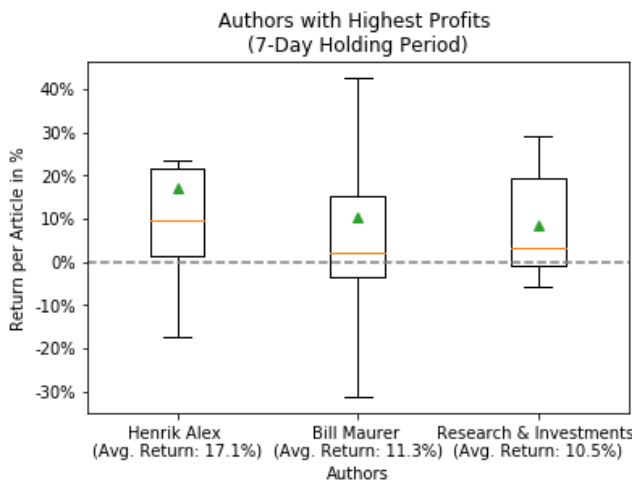


Figure 27: Box Plot of Top 3 Authors with Highest Profits (7-Day Holding Period)

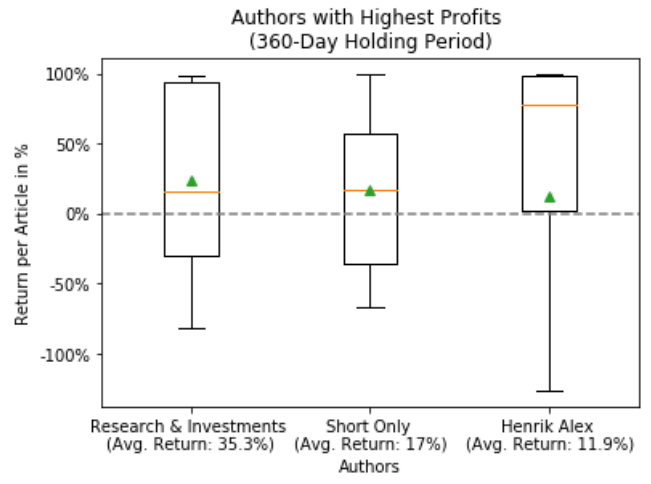


Figure 30: Box Plot of Top 3 Authors with Highest Profits (360-Day Holding Period)

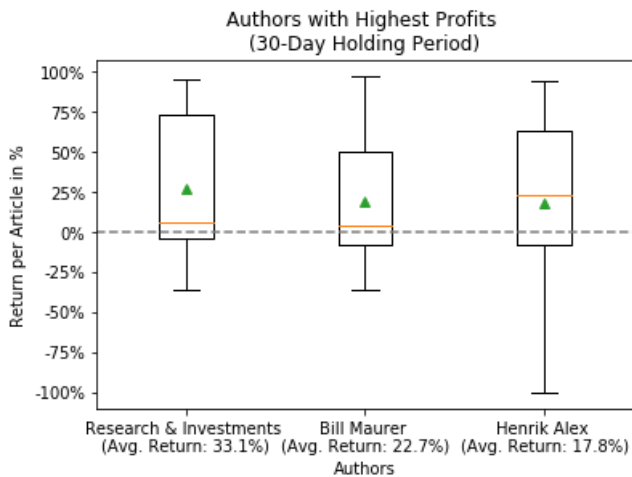


Figure 28: Box Plot of Top 3 Authors with Highest Profits (30-Day Holding Period)

The analysts with the highest average returns are the following: Henrik Alex, Research & Investments, Bill Maurer and Short Only.

Henrik Alex, who wrote a total of 18 short recommendation articles during the scraped period had the highest profits for the short holding periods: 1-Day, 7-Day and 30-Days. Research & Investments, who wrote 12 articles, had the highest profits for the long holding periods of 90-Day and 360-Days. Bill Maurer, the most prolific out of all the 462 authors scraped with 74 published short recommendations came in second for the 7 and 30-day holding periods, with 16 articles, Short Only placed in the top 3 for the 7-day, 90-day and 360-day holding periods.

The idea that the most prolific writer (Bill Maurer) also yielded one of the highest average returns lead us to study the correlation between the number of articles published by one analyst and the average returns of their recommendations.

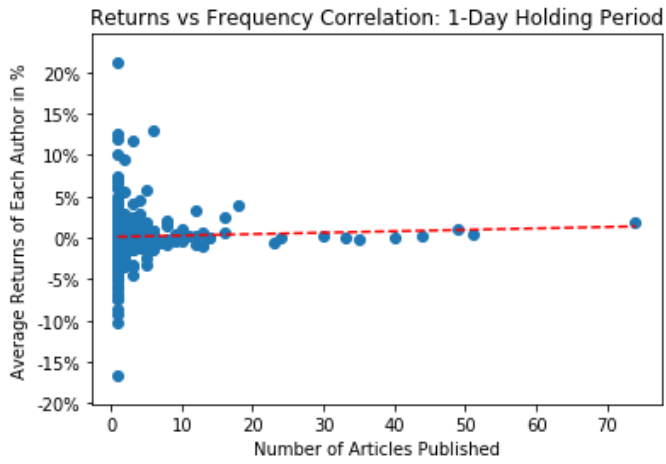


Figure 31: Correlation Between Average Return per Analyst and Number of Articles Published (1-Day Holding Period)

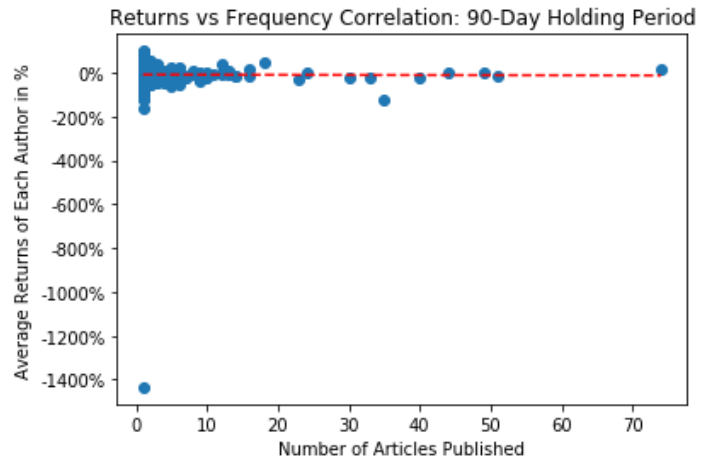


Figure 34: Correlation Between Average Return per Analyst and Number of Articles Published (90-Day Holding Period)

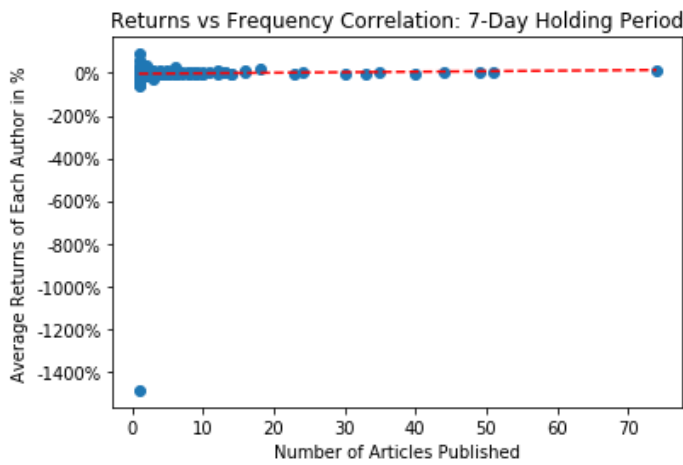


Figure 32: Correlation Between Average Return per Analyst and Number of Articles Published (7-Day Holding Period)

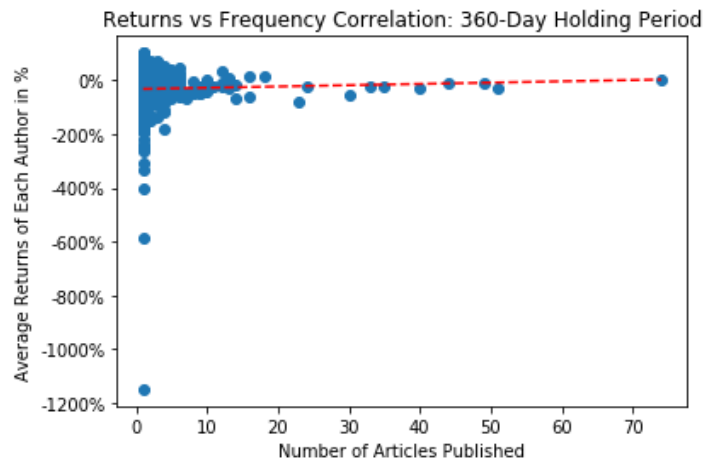


Figure 35: Correlation Between Average Return per Analyst and Number of Articles Published (360-Day Holding Period)

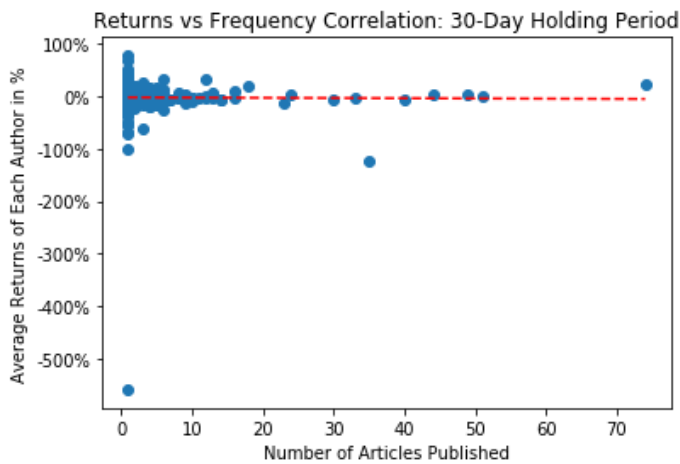


Figure 33: Correlation Between Average Return per Analyst and Number of Articles Published (30-Day Holding Period)

Once again, the red dotted line represents the line of best fit that was plotted using Python's Matplotlib library. The slope of the line of best fit for each of the five holding periods is zero. We can conclude that there is essentially no correlation between the number of articles published by an author and their average return.

After additional research, it is important to note that the above 'number of articles published per author' does not represent the full picture. In fact, most authors (with the exception of 'Short Only') publish long recommendations with their short recommendations representing only a fraction of their total number of articles.

5. Muddy Waters' U.S. Stocks: Data Analysis

Similarly to Seeking Alpha, the data for the short recommendations was scrapped from Muddy Waters' website; the data included the recommended ticker and date of publication. As mentioned above, in order to allow a more direct comparison between Seeking Alpha and Muddy Waters, we only analyzed Muddy Waters' US Tickers. This meant a total of 16 tickers were scrapped (see appendix).

5.1 Overview of Muddy Waters' U.S. Stock Recommendations

As we can observe from the table below, Muddy Waters' U.S. short sell recommendations did not return a profit on average. In fact, all the median lines (represented by the orange lines) and all averages (represented by the green triangles) are below 0 for each of the five holding periods.

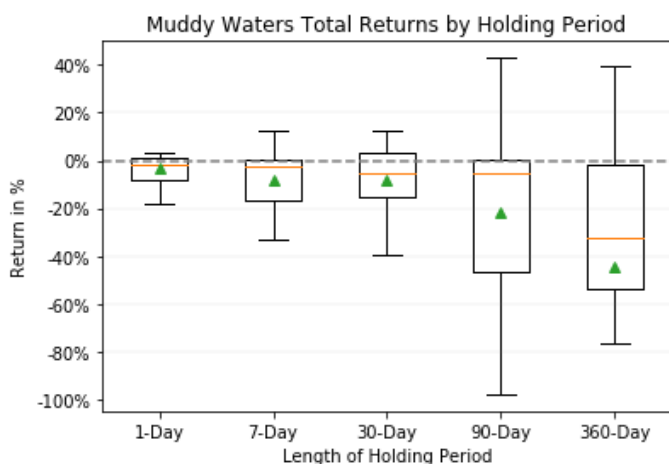


Figure 36: Box Plot of Muddy Waters' Returns by Holding Period

5.2. Highest Performing Short Sell Recommendations

The number of Muddy Waters' profitable U.S. market short sell recommendations were limited.

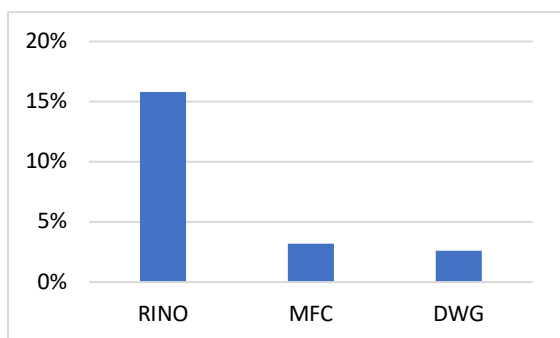


Figure 37: Top 3 Highest Returns for 1-Day Holding Period

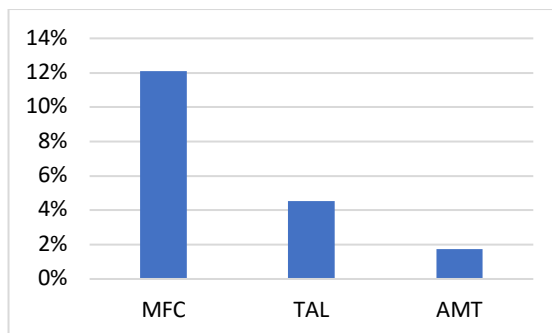


Figure 38: Top 3 Highest Returns for 7-Day Holding Period

For the 1-Day and 7-Day holding period there were only three recommendations that yielded positive returns. Similarly, for the other holding periods (30, 90 and 360 days), there was a maximum of 4 recommendations that yielded positive returns, for the 360-Day holding period only two stocks yielded positive returns.

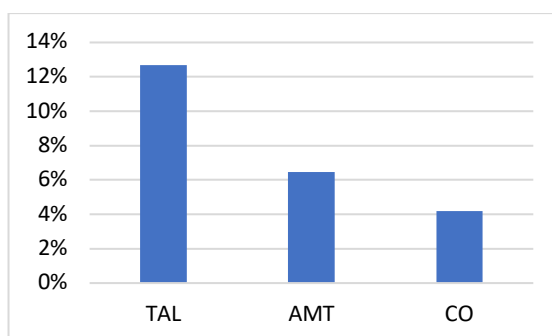


Figure 39: Top 3 Highest Returns for 30-Day Holding Period

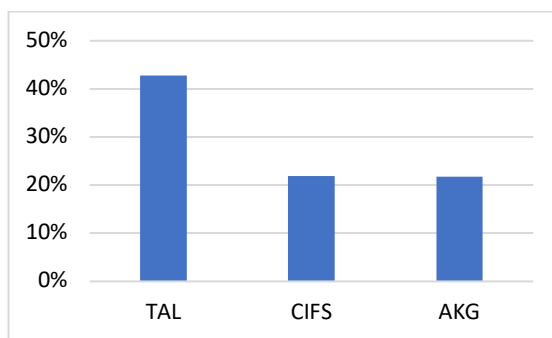


Figure 40: Top 3 Highest Returns for 90-Day Holding Period

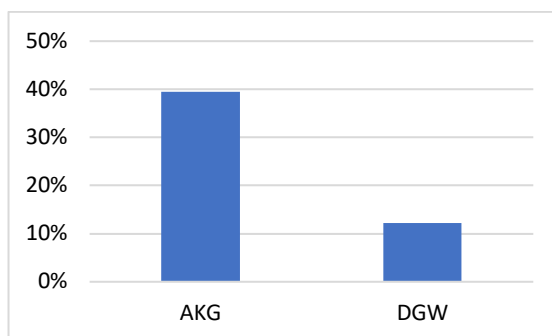


Figure 41: Top 2 Highest Returns for 360-Day Holding Period

5.3. Issues with Muddy Waters' Scraped Data

The lack of profitable recommended stocks can be due to the removal of Muddy Waters' non-U.S. stocks, leaving us with a portfolio of 60% of their total recommendations (28 in total). Moreover, half of the scraped data is missing the '360 trading days later' price due to one of the following two reasons:

Firstly, most of Muddy Waters' U.S. short recommendations have been within the past year, and therefore the publication date falls within 360 trading days. Secondly, three other companies have stopped trading shortly after the Muddy Waters article was published. This lack of data for the longest holding period would contribute to the absence of profit for Muddy Waters' recommendations.

It is also important to note that given the data goes back 8 years, some of the U.S. stocks scraped from the website have changed tickers or have been acquired by another company.

For example:

- ONP is now ORIENTPPR
- NG is now LKM
- STK was acquired by ABT in 2016

This causes an issue with price extraction as Yahoo Finance API does not recognize old tickers or acquired stocks. Due to these data inconsistencies, the analysis of Muddy Waters' recommendation's returns can be skewed and biased.

6. U.S. Market Behavior

6.1. Benchmark Index: S&P 500

The Standard & Poor's 500 Index is the most commonly used benchmark for determining the state of the overall U.S. economy, with many investors using it as a benchmark for their own portfolio. From the date of Muddy Waters' first report (1st November 2010) to 27th November 2018, the S&P 500 increased by 126.46% (going from 1,184.38 to 2,682.17).



Figure 42: Price of the S&P500 during Muddy Water's Scraped Period [4]

Similarly, during the Seeking Alpha scraping period (1st September 2016 to 21st June 2017), the S&P500 went from 2,170.86 to 2,435.61 representing an increase of 12%. The index also experienced an increase of 28.6% from 1st September 2016 to 27th of November 2018.

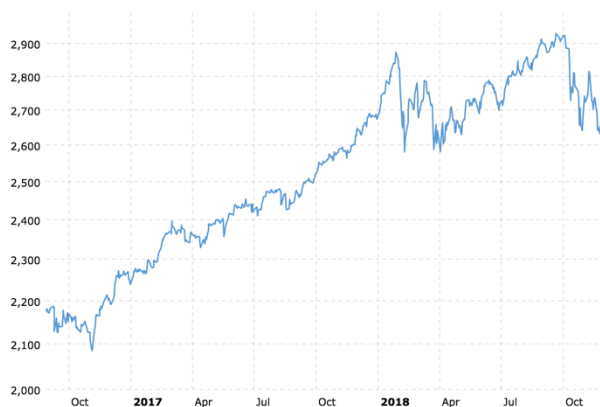


Figure 43: Price of S&P500 During Seeking Alpha Scraped Period [5]

It is important to note that these index increases represent the general performance of the S&P500 for the long holding periods indicated by the above graphs. The increases, therefore, cannot be directly compared to the returns of the above short sell recommendations, which used shorter holding periods. However, Figures 42 and 43, help illustrate the overall trend of the U.S. Market which has increased over the last 9 years, suggesting that purchasing an index fund that tracks the S&P500 over the longer periods would yield better returns than shorting individual stocks.

6. Conclusion and Final Observations

To conclude, we have observed that on average analyst short sell stock recommendations do not perform as well as anticipated, with the majority not outperforming the U.S. market. Investors should continue to be wary when reading and following analyst's recommendations and should balance out the risk in their portfolios with a variety of stocks.

For Seeking Alpha, although the shorter holding periods yield positive returns, they remain insignificant. Retail investors should instead focus on individual analysts such as Henrik Alex and Research & Investments, who have created a positive track record of recommending higher performing short sell ideas.

Muddy Waters' U.S. recommendations underperformed with the majority of the recommendations yielding negative returns. However, as previously mentioned, we only analyzed Muddy Waters' U.S. stocks, which accounted for 60% of their total recommendations. In addition, most of the U.S. names were published within 360 trading days of our analysis and we were unable to represent the 360-days later holding period return accurately.

Finally, despite the amount of data scraped from both Muddy Waters and Seeking Alpha, the sample size remains relatively small. This small sample size prevented us from estimating and modelling the accuracy of the analysts' recommendations properly, making it difficult to reach a conclusion that had a strong statistical power. In order to avoid this in the future, we should aim to scrape the entire history of recommendations from Seeking Alpha's website to include all the short sell recommendations of the authors as well as analyze both Muddy Waters' non-U.S. and U.S. traded stocks.

⁴ <https://www.macrotrends.net/2488/sp500-10-year-daily-chart>

⁵ <https://www.macrotrends.net/2488/sp500-10-year-daily-chart>

Appendix

U.S. Stock Data Extracted from Muddy Waters

The below table contains the returns for each holding period if an investor were to sell the stock on the date of publication and buy it back x days later (with x representing the number of days in the holding period). N/A indicates that the price was unable to be extracted from the Yahoo Finance for the specific date.

U.S. Ticker & Date	1-Day Return	7-Day Return	30-Day Return	90-Day Return	360-Day Return
RINO 10/11/2010	15.78%	N/A	N/A	N/A	N/A
DGW 4/4/2011	2.59%	-0.16%	1.78%	-0.16%	12.16%
SPRD 28/6/2011	-10.17%	-33.23%	-15.45%	-124.50%	-46.20%
FMCN 21/11/2011	-14.71%	-27.74%	-27.67%	-64.23%	-76.47%
FSIN 10/4/2012	-1.97%	-13.44%	-12.30%	-46.23%	N/A
EDU 18/7/2012	-17.89%	-25.79%	-39.79%	-97.68%	-215.37%
AMT 17/7/2013	-0.77%	1.75%	6.47%	-5.04%	-33.45%
NOBL 8/4/2015	-0.30%	0.71%	-1.09%	-0.44%	-6.22%
CO 17/12/2015	-3.86%	0.16%	4.19%	0.16%	-31.56%
SAX 21/4/2016	-3.72%	-0.56%	-3.95%	N/A	N/A
AKG 31/5/2017	-16.28%	-20.16%	-22.48%	21.71%	39.53%
PRTA 29/6/2017	0.61%	-9.29%	-4.98%	-13.74%	N/A
OSIS 6/12/2017	-7.75%	-10.50%	-15.74%	-15.64%	N/A
CIFS 20/12/2017	-1.50%	-2.32%	-11.30%	21.85%	N/A
TAL 13/6/2018	1.53%	4.55%	12.70%	42.84%	N/A
MFC 4/10/2018	3.21%	12.10%	4.13%	N/A	N/A
Total Average	-3.45%	-8.26%	-8.37%	-21.62%	-44.70%

1-Day Returns of Top 50 Analysts (in descending order)

#	Seeking Alpha Analyst	Average 1-Day Profit	Number of Articles
1	Sean Kellmurray	21.21%	1
2	Fuzzy Panda Shorts	12.89%	6
3	Le Penseur	12.50%	1
4	Keubiko	11.88%	1
5	Sicilian Research	11.85%	3
6	Robert Dutch	10.17%	1
7	Brandon Carnovale	9.55%	2
8	Steven Nickolas	7.42%	1
9	Vladimir Zernov	6.97%	1
10	Long-Short Value	6.89%	1
11	Macro Ops	6.26%	1
12	Trending Value	5.97%	1
13	Looking For Diogenes	5.86%	5
14	Patrick McGowen	5.53%	2
15	Adem Tumerkan	4.96%	1
16	Robert Riesen	4.64%	1
17	J Mintzmyer	4.54%	4
18	Ruerd Heeg	4.38%	1
19	Permabear	4.18%	3
20	Henrik Alex	3.99%	18
21	Fun Trading	3.97%	1
22	Silky Oak Capital	3.85%	1
23	Guy Kosov	3.60%	1
24	The Capitolist	3.56%	1
25	Investonomics	3.54%	1
26	Mike Gorlon	3.43%	1
27	Elephant Analytics	3.40%	1
28	Research & Investment	3.40%	12
29	Fundamentals First	3.36%	1
30	Mark Hake	3.01%	1
31	The Boy Plunger	2.98%	1
32	Ariana Research	2.98%	1
33	Jonathan Selsick	2.97%	4
34	D.M. Martins Research	2.91%	1
35	MTS Insights	2.88%	2
36	Dividend Income	2.75%	2
37	Vincent Ventures	2.74%	1
38	Investor of All	2.68%	1
39	Safety In Value	2.63%	1
40	Ivory Wolf	2.52%	1
41	Healthcare Explorer	2.49%	2
42	Michael A. Ball	2.49%	1
43	Short Only	2.48%	16

44	Edward Vranic CFA	2.41%	3
45	Sean Dunion	2.38%	1
46	TechnicallyAnalyzed	2.33%	1
47	Jack Hampson	2.22%	1
48	Air Seller	2.21%	1
49	Tim Maturo	2.19%	1
50	Ian Bezek	2.16%	2

7-Day Returns of Top 50 Analysts (in descending order)

#	Seeking Alpha Analyst	Average 7-Day Profit	Number of Articles
1	Bart van Velzen	88.18%	1
2	Daniel Jones	60.64%	1
3	Sean Kellmurray	35.88%	1
4	Spotlight Research	34.29%	2
5	Fuzzy Panda Shorts	25.66%	6
6	ReaDone Research	19.73%	1
7	qia	19.44%	1
8	Robert Riesen	18.34%	1
9	Kasteel Research	18.06%	1
10	Henrik Alex	17.13%	18
11	Patrick McGowen	16.70%	2
12	The Contrarian Investor	14.85%	1
13	Ruerd Heeg	13.75%	1
14	Kerrisdale Capital Management	13.72%	3
15	Cliffside Research	13.67%	5
16	George Rho	12.68%	1
17	Healthcare Explorer	12.05%	2
18	Jay Wei	11.93%	2
19	Fun Trading	11.92%	1
20	Keubiko	11.64%	1
21	K2 & Associates	11.57%	2
22	Bill Maurer	11.34%	74
23	Michael Roat	10.84%	1
24	Brandon Carnovale	10.63%	2
25	Research & Investment	10.53%	12
26	Alpha Exposure	10.49%	2
27	Intelligent Speculator	10.46%	1
28	Disciplined Investing	10.19%	1
29	Robert Dutch	10.17%	1
30	Stock Puzzle	10.15%	2
31	Matthew Michniewicz	9.80%	1
32	Don Steiger	9.76%	1
33	Sriram Gurijala	9.71%	1
34	Alan Brochstein CFA	9.38%	1
35	Lagniappe Investments	9.29%	1
36	Hudson River Capital Research	8.90%	4
37	Short Only	8.81%	16
38	Damitha Pathmalal	8.80%	2
39	Andriy Blokhin	8.79%	1
40	Valueseeker	8.53%	1
41	CVC Research	8.38%	2
42	PDC Investments	8.16%	1
43	Chandler Clinkingbeard	8.12%	1

44	Lean Forward	7.63%	1
45	Jonathan Lim	7.53%	1
46	Steven Nickolas	7.42%	1
47	Parker Logan	7.39%	3
48	Mako Research	7.27%	5
49	Grumpy Bear Research	7.26%	3
50	Gary Bourgeault	6.85%	1

30-Day Returns of Top 50 Analysts (in descending order)

#	Seeking Alpha Analyst	Average 30-Day Profit	Number of Articles
1	Bart van Velzen	78.46%	1
2	Daniel Jones	67.00%	1
3	Sean Kellmurray	52.67%	1
4	Fun Trading	45.03%	1
5	Kasteel Research	39.96%	1
6	The Contrarian Investor	37.62%	1
7	Research & Investment	33.14%	12
8	Fuzzy Panda Shorts	31.23%	6
9	Keubiko	30.92%	1
10	George Rho	29.75%	1
11	Kerrisdale Capital Management	25.78%	3
12	ReaDone Research	24.30%	1
13	Illuminati Investments	24.22%	1
14	Jonathan Lim	23.63%	1
15	Aurelius	22.92%	1
16	Bill Maurer	22.73%	74
17	Sean Dunion	22.22%	1
18	Air Seller	21.74%	1
19	Cannell Capital LLC	21.08%	1
20	Damitha Pathmalal	20.53%	2
21	Alan Brochstein CFA	19.57%	1
22	Christine Richard	19.57%	1
23	Intelligent Speculator	17.96%	1
24	Henrik Alex	17.84%	18
25	Spotlight Research	17.72%	2
26	Lagniappe Investments	17.60%	1
27	Nitin Gulati	17.57%	1
28	Cliffside Research	17.38%	5
29	Manole Capital Management	17.22%	1
30	Itinerant	16.89%	1
31	Andrew Mackler	16.81%	1
32	Brandon Carnovale	16.51%	2
33	Edward Vranic CFA	15.69%	3
34	Bank On Insight	15.48%	1
35	Luis V. Sanchez CFA	15.46%	1
36	Stock Puzzle	15.43%	2
37	Quinn Foley	15.28%	4
38	Guy Kosov	15.11%	1
39	Vincent Ventures	15.07%	1
40	Zegnus Deuce	15.01%	1
41	Ruerd Heeg	15.00%	1
42	K2 & Associates	14.23%	2

43	Kumquat Research	14.13%	1
44	Matt Stewart	13.89%	1
45	Stephen Christoffersen CFA	13.80%	1
46	Long-Short Value	13.60%	1
47	WYCO Researcher	13.19%	2
48	Roger Lipton	13.07%	2
49	Don Steiger	12.89%	1
50	Looking For Diogenes	12.78%	5

90-Day Returns of Top 50 Analysts (in descending order)

#	Seeking Alpha Analyst	Average 90-Day Profit	Number of Articles
1	Daniel Jones	98.14%	1
2	MTF Investing	96.25%	1
3	Bart van Velzen	91.13%	1
4	Greg Blotnick CFA	77.49%	1
5	Fraud Research Institute	57.14%	1
6	Keubiko	55.31%	1
7	Sean Kellmurray	54.30%	1
8	Josh Kolodner	52.29%	2
9	Robert Dutch	51.69%	1
10	Khen Elazar	48.44%	1
11	Henrik Alex	47.83%	18
12	Kasteel Research	46.42%	1
13	Fun Trading	46.36%	1
14	Roger Lipton	44.27%	2
15	K2 & Associates	43.45%	2
16	Austin Lee	42.67%	1
17	Cannell Capital LLC	41.72%	1
18	Air Seller	40.58%	1
19	Brandon Carnovale	39.45%	2
20	Vladimir Zernov	38.34%	1
21	Edwin Kye	37.75%	1
22	ValueSquared	37.71%	2
23	Ivan Grytsenko	37.68%	1
24	Sicilian Research	37.51%	3
25	Alan Brochstein CFA	37.00%	1
26	Research & Investment	36.70%	12
27	Stephen Christoffersen CFA	35.72%	1
28	Kerrisdale Capital Management	34.69%	3
29	ReaDone Research	33.15%	1
30	Ivan K. Wu	32.28%	1
31	Jonathan Lim	31.30%	1
32	Kit Research	30.43%	1
33	Lagniappe Investments	30.40%	1
34	Damitha Pathmalal	30.02%	2
35	Gary Bourgeault	28.07%	1
36	Bank On Insight	28.03%	1
37	Investonomics	27.85%	1
38	Guy Kosov	27.34%	1
39	Viceroy Research	26.00%	1
40	Don Steiger	25.35%	1
41	CVC Research	25.15%	2

42	The Non-Consensus	24.72%	1
43	The Boy Plunger	24.44%	1
44	Jared Orr	24.16%	2
45	Cliffside Research	23.89%	5
46	Anton Tyumin	23.71%	2
47	Stock Puzzle	22.84%	2
48	Richard X Roe	22.65%	1
49	Michael A. Ball	22.61%	1
50	Edward Vranic CFA	21.82%	3

360-Day Returns of Top 50 Analysts (in descending order)

#	Seeking Alpha Analyst	Average 360-Day Profit	Number of Articles
1	Daniel Jones	100.00%	1
2	MTF Investing	99.99%	1
3	Bart van Velzen	99.16%	1
4	ReaDone Research	98.69%	1
5	Fraud Research Institute	95.36%	1
6	Ivan Zaitsev	92.51%	1
7	Greg Blotnick CFA	88.42%	1
8	Don Steiger	86.84%	1
9	Air Seller	81.45%	1
10	Sean Kellmurray	76.12%	1
11	Guy Kosov	73.38%	1
12	K2 & Associates	71.25%	2
13	FourWorld Capital Management	71.19%	3
14	Element Capital Research	70.51%	1
15	Keubiko	67.96%	1
16	The Boy Plunger	66.94%	1
17	Kasteel Research	66.67%	1
18	Ruerd Heeg	65.63%	1
19	Brandon Carnovale	63.73%	2
20	Bank On Insight	62.85%	1
21	Kerrisdale Capital Management	62.76%	3
22	Sean McEniry	51.47%	1
23	J Mintzmyer	50.87%	4
24	BumbleBayGoombeeFluor	50.68%	1
25	Liberty Street Research	49.66%	1
26	Roger Lipton	48.39%	2
27	Biotechnocrat	48.23%	2
28	Damitha Pathmalal	48.00%	2
29	Fuzzy Panda Shorts	47.70%	6
30	George Rho	46.49%	1
31	Edwin Kye	45.12%	1
32	Ivan Grytsenko	44.89%	1
33	Jason Tillberg	44.41%	1
34	Jack Hampson	43.81%	1
35	Alpha Exposure	39.09%	2
36	Austin Lee	39.07%	1
37	Black Mamba	38.90%	2
38	Looking For Diogenes	38.08%	5
39	CVC Research	37.66%	2
40	qia	36.51%	1
41	Fun Trading	35.72%	1

42	Jonathan Lim	35.34%	1
43	Research & Investment	35.34%	12
44	Ted Barac	34.76%	1
45	Hades Investment Ideas	34.58%	1
46	Josh Kolodner	33.67%	2
47	Daniel R Moore	33.55%	2
48	Adam Alvarez	33.41%	1
49	En Passant	33.06%	1
50	Long Player	32.67%	3

1-Day Returns of All 25 Analysts Who Have Written 10 Articles or More (in descending order)

#	Seeking Alpha Analysts	Average 1-Day Returns	Number of Articles
1	Henrik Alex	3.99%	18
2	Research & Investment	3.40%	12
3	Short Only	2.48%	16
4	Bill Maurer	1.91%	74
5	Orange Peel Investments	1.03%	49
6	The Friendly Bear	0.99%	10
7	Kevin Wenck CFA	0.69%	13
8	George Kesarios	0.59%	16
9	Paulo Santos	0.51%	51
10	Fundamental Investing	0.38%	13
11	Citron Research	0.31%	11
12	EnerTuition	0.30%	30
13	Paul Franke	0.20%	12
14	Josh Arnold	0.16%	44
15	Vince Martin	0.09%	24
16	Anton Wahlman	-0.01%	33
17	Michael Boyd	-0.02%	14
18	Montana Skeptic	-0.05%	40
19	David Trainer	-0.07%	14
20	Shock Exchange	-0.08%	35
21	The First Mover	-0.20%	10
22	Darspal S Mann	-0.38%	10
23	The Structure Of Price	-0.68%	23
24	ChartMasterPro	-0.73%	12
25	Stone Fox Capital	-0.95%	13

7-Day Returns of All 25 Analysts Who Have Written 10 Articles or More (in descending order)

#	Seeking Alpha Analysts	Average 7-Day Returns	Number of Articles
1	Henrik Alex	17.13%	18
2	Bill Maurer	11.34%	74
3	Research & Investment	10.53%	12
4	Short Only	8.81%	16
5	Orange Peel Investments	2.83%	49
6	Citron Research	2.18%	11
7	George Kesarios	2.11%	16
8	The Friendly Bear	1.72%	10
9	Stone Fox Capital	1.49%	13
10	Paulo Santos	1.03%	51
11	Josh Arnold	0.81%	44
12	Vince Martin	0.64%	24
13	Fundamental Investing	0.36%	13
14	Kevin Wenck CFA	0.25%	13
15	Shock Exchange	0.10%	35
16	Paul Franke	0.07%	12
17	David Trainer	-0.98%	14
18	ChartMasterPro	-1.37%	12
19	The First Mover	-1.69%	10
20	Anton Wahlman	-1.98%	33
21	Michael Boyd	-2.08%	14
22	Darspal S Mann	-2.20%	10
23	Montana Skeptic	-2.20%	40
24	EnerTuition	-2.33%	30
25	The Structure Of Price	-5.31%	23

30-Day Returns of All 25 Analysts Who Have Written 10 Articles or More (in descending order)

#	Seeking Alpha Analysts	Average 30-Day Returns	Number of Articles
1	Research & Investment	33.14%	12
2	Bill Maurer	22.73%	74
3	Henrik Alex	17.84%	18
4	Short Only	10.87%	16
5	Stone Fox Capital	4.78%	13
6	Kevin Wenck CFA	3.38%	13
7	Vince Martin	3.11%	24
8	Orange Peel Investments	1.60%	49
9	Josh Arnold	1.59%	44
10	Paul Franke	0.40%	12
11	Paulo Santos	-1.19%	51
12	ChartMasterPro	-2.45%	12
13	Citron Research	-3.00%	11
14	The Friendly Bear	-3.59%	10
15	George Kesarios	-3.65%	16
16	Fundamental Investing	-3.94%	13
17	Anton Wahlman	-4.98%	33
18	Darspal S Mann	-5.18%	10
19	Michael Boyd	-6.14%	14
20	Montana Skeptic	-6.26%	40
21	David Trainer	-6.39%	14
22	EnerTuition	-7.52%	30
23	The First Mover	-11.17%	10
24	The Structure Of Price	-14.17%	23
25	Shock Exchange	-123.18%	35

90-Day Returns of All 25 Analysts Who Have Written 10 Articles or More (in descending order)

#	Seeking Alpha Analysts	Average 90-Day Returns	Number of Articles
1	Henrik Alex	47.83%	18
2	Research & Investment	36.70%	12
3	Short Only	19.77%	16
4	Bill Maurer	16.02%	74
5	Stone Fox Capital	8.64%	13
6	Vince Martin	0.76%	24
7	Josh Arnold	0.40%	44
8	Orange Peel Investments	0.32%	49
9	Paul Franke	-2.57%	12
10	The Friendly Bear	-2.82%	10
11	Citron Research	-5.20%	11
12	Fundamental Investing	-7.62%	13
13	ChartMasterPro	-8.63%	12
14	Kevin Wenck CFA	-10.83%	13
15	Darspal S Mann	-15.01%	10
16	Michael Boyd	-15.28%	14
17	George Kesarios	-15.63%	16
18	Paulo Santos	-18.43%	51
19	David Trainer	-18.68%	14
20	The First Mover	-20.22%	10
21	EnerTuition	-23.43%	30
22	Montana Skeptic	-23.84%	40
23	Anton Wahlman	-25.16%	33
24	The Structure Of Price	-29.18%	23
25	Shock Exchange	-124.69%	35

360-Day Returns of All 25 Analysts Who Have Written 10 Articles or More (in descending order)

#	Seeking Alpha Analysts	Average 360-Day Returns	Number of Articles
1	Research & Investment	35.34%	12
2	Short Only	16.96%	16
3	Henrik Alex	11.91%	18
4	Stone Fox Capital	7.40%	13
5	Bill Maurer	1.97%	74
6	The Friendly Bear	-0.40%	10
7	Fundamental Investing	-6.42%	13
8	Orange Peel Investments	-8.00%	49
9	Paul Franke	-8.30%	12
10	Josh Arnold	-10.19%	44
11	The First Mover	-11.29%	10
12	Michael Boyd	-17.57%	14
13	Shock Exchange	-20.77%	35
14	ChartMasterPro	-22.52%	12
15	Citron Research	-23.62%	11
16	Anton Wahlman	-25.04%	33
17	Vince Martin	-25.21%	24
18	Kevin Wenck CFA	-27.91%	13
19	Montana Skeptic	-31.30%	40
20	Paulo Santos	-32.01%	51
21	Darspal S Mann	-39.60%	10
22	EnerTuition	-56.98%	30
23	George Kesarios	-61.34%	16
24	David Trainer	-64.76%	14
25	The Structure Of Price	-79.90%	23