Semi-Strong Form Market Hypothesis: Evidence from CNBC's Jim Cramer's Mad Money Stock Recommendations

Elizabeth Dodson
University of Arkansas, Fayetteville

Follow this and additional works at: http://scholarworks.uark.edu/inquiry
Part of the Corporate Finance Commons, Finance Commons, and the Finance and Financial Management Commons

Recommended Citation

This Article is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Inquiry: The University of Arkansas Undergraduate Research Journal by an authorized editor of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, ccmiddle@uark.edu.
SEMISTRONG FORM MARKET HYPOTHESIS: EVIDENCE FROM CNBC’S JIM CRAMER’S MAD MONEY STOCK RECOMMENDATIONS

By Elizabeth Dodson
Department of Finance
Faculty Mentor: Dr. Craig Rennie
Department of Finance

Abstract:

Mad Money has become one of the most popular shows on CNBC. The host, Jim Cramer, has an outlandish style and personality that viewers find intoxicating. Cramer’s goal for the show is to make people money. Does he succeed? This paper finds that investors can expect to gain above-average, risk-adjusted returns by following Cramer’s stock recommendations and trading accordingly. These findings challenge the semi-strong form market hypothesis. According to this hypothesis, investors should not recognize gains trading on public information since it states that the market has already adjusted prices for that information. It also contributes to current literature by providing analysis on the different segments of the Mad Money program and serving as a jumping-off point for future research on a possible Jim-Cramer-Mad-Money hedge fund strategy.

Introduction:

CNBC hit a homerun with its decision to put Jim Cramer on the air in all of his glory—hurling chairs across the floor, screaming at the camera, and ripping the heads off of bull-shaped stress balls, and that is in the first 5 minutes. A typical Mad Money show consists of Cramer starting off a pick of the day or week or describing recent market news and its possible impacts. Later in the show, Cramer opens the lines up for callers to run their stock picks by Cramer. During this “lightning round”, the pace is feverishly fast and “Booyah’s” (Cramer’s coined phrase for excitement and also a term of greeting) fill the air. Since its debut on March 14, 2005, Cramer’s Mad Money has become one of the top ranked shows on CNBC. The timeslot of 6 PM EST had previously been the lowest-rated slot until Cramer showed up with a vision. His vision was for a show with one simple goal, make people money. According to Derek Hoggett, editor and publisher of InvestmentWizard.com, “James Cramer is emerging as the most influential stock market guru since Dan Dorfman and Joe Granville.” Can Cramer really provide above-average, risk-adjusted returns for his viewers or is he dangerous to investors’ financial health?

This paper attempts to answer the question of whether Jim Cramer, utilizing his television venue, provides investors with a way to gain above-average, risk-adjusted returns. If Cramer is successful, then these results would challenge semi-strong form market efficiency theory. Semi-strong form market efficiency states that at any time stock market prices fully reflect all public information. Following this, investors should not be able to make better returns than the market trading on information that is already publicly available. Cramer does not provide investors with proprietary information. The support he gives for his choice of stocks comes from a variety of sources such as press releases, company websites, market news, and SEC filings. He is a major proponent of his viewers researching the companies he recommends before deciding to follow his advice. This paper contends, however, that regardless of following Cramer’s do-your-homework advice, investors can expect to see above-average returns simply by buying when and what he says to buy and selling when and what he says to sell.

This paper makes two contributions to current literature. First, it documents holding period returns that would have been achieved by following Jim Cramer’s investment strategy. Second, this study has implications for future hedge fund strategies. Perhaps a hedge fund could repeatedly beat its competition in the growing market for hedge funds by following Cramer’s investment advice and trading accordingly. This paper provides a jumping off point for other academics to continue the research and development of the probability and possible effects of a Jim-Cramer-Mad-Money trading strategy. As will be discussed in Section 2.2 of the Literature Review, one other paper has attempted to document the results of Cramer’s investment recommendations. This paper, however, takes a different slant than that of the Northwestern paper by investigating the different portions of the program (lightning round vs. non-lightning round) and hypothesizing that the two time periods are statistically significant from each other.

The remainder of this paper is organized as follows. Section II discusses current relevant literature and the development of
the hypotheses for the study. Section III describes the sample selection and the design for this study. Section IV lays out the results of the study. Section V provides the results of the sensitivity analysis. Section VI concludes.

Literature Review and Hypothesis Description:

1. Efficient Market Theory

Semi-strong form market efficiency states that at any time stock market prices fully reflect all public information. If this is true, investors should not be able to obtain above-average returns trading on information after it is made public. "This hypothesis implies that investors who base their decisions on any important new information "after it is public should not derive above-average risk-adjusted profits from their transactions" (Reilly & Brown, 2003). There is much disparity in the academic world as to whether the market truly is efficient at any level (strong, semi-strong, or weak) and is still up for debate. If Fama is correct and stock prices fully reflect publicly available information, then there is no opportunity for individual investors to try to find gains in trading securities. Regardless of the academic support for EMH, the actions of many investors reveal that they believe market inefficiencies do exist and that there are opportunities for abnormal gains. While many believe that investors are naïve to think they can actually beat the market because of its efficiency (Tam, 2002), individuals continue to tune in daily to Cramer’s Mad Money looking for an advantage to do just that—beat the market.

The efficient market hypothesis was first developed by Eugene Fama in 1965. He states that "in an efficient market, competition among the many intelligent participants leads to a situation where... actual prices of individual securities already reflect the effects of information based... on events that have already occurred" (1970). Fama’s theory launched a new way of thinking about economic markets and led to much controversy. Perhaps the one puzzle in the discovery of whether the efficient market theory holds is whether investors really are intelligent as Fama surmises.

In his paper, Daniel (1999) asserts that “self-confident individuals will appear to be more competent than individuals who are insecure about their own abilities.” Jim Cramer presents himself as a self-confident individual. It is no wonder that investors catch on to this intoxicating energy and trust in his interpretations of market information. Could Cramer be too confident? Daniel supports his argument saying that overconfidence can have both a direct and indirect impact on how individuals process information. If investors adopt his overconfident attitude, they could overweight his suggestions and neglect to search their own base of knowledge to make the most intelligent investment decision. However, if they jump on the bandwagon too quickly they are not accurately following Cramer’s advice. Cramer advises his viewership to “do their homework” and research a company before making the decision to buy the stock. This paper contends that regardless of following his do-your-homework advice, investors can gain positive returns by following his I-want-you-to-buy-this-stock advice—perhaps investors are more intelligent than originally surmised if they are already trading with Cramer’s stock recommendations.

2. Results of Other Event Studies

Event studies are used to examine abnormal returns surrounding a particular economic event and provide a test for the EMH. Popular event study topics for testing semi-strong market efficiency theory include stock splits, initial public offerings (IPOs), exchange listings, unexpected world events and economic news, announcements of accounting changes, and corporate events. According to Reilly and Brown (2003) the evidence from tests of the semi-strong EMH draws mixed conclusions. Numerous event studies on a range of topics like stock splits, exchange listings, and initial public offerings provide support while numerous studies on predicting the expected return over time or for a cross section of stocks actually provide evidence count to semi-strong efficiency.

However, there are multiple event studies that offer evidence to counter semi-strong market efficiency. One such study is that of Engelberg, Sasseville, and Williams (2006). They find that Cramer's recommendations do have an effect on stock prices in the short run concluding that Cramer's show caused mispricing in the market. Their findings document the existence of inefficiencies in the market—negating the semi-strong form market efficiency hypothesis. However, this study's findings differ from those of Engelberg, et al. because this study differentiates between the different portions of the television programs. This study also uses TheStreet.com as the primary data source, but Engelberg et al. used a different second-hand source other than the Personal Finance Blog discussed later in the paper.

Two additional studies that tested the value of investment advice looked at the recommendations made through the Heard on the Streets (HOTS) column in the Wall Street Journal. The first study was conducted by Davies and Canes (1978). They study the recommendations presented in the HOTS articles and found that the dissemination of information from a primary source (the analysts) to a public format can significantly affect stock prices. As a follow up to this study, Liu, Smith, and Syed (1990) extend the study using a more recent sample. They also find that investment advice has economic value due to the observed abnormal returns for both buy and sell recommendations on the day of articles publication.

3. Cramer's Reviews

After Cramer graduated from Harvard in 1977, he began work as a journalist at the Los Angeles Herald Examiner. He returned to Harvard, received his Juris Doctor degree, and took a position with Goldman Sachs’ Sales and Trading department.
He began his own hedge fund company (Cramer Berkowitz) with his partner Jeff Berkowitz in 1987. Though his hedge fund was hugely successful, Cramer left in 2000 citing anger-management and stress issues as the dominant factor to his decision. Shortly after leaving Cramer Berkowitz, he began appearing as a host on ‘America Now’ and Kudlow & Cramer. After Kudlow & Cramer, Cramer began his own show which mixed his reputation for an anger-management problem and his stellar stock-picking record into a dynamite television program that has soared to the top of the charts.

Cramer’s Mad Money came under scrutiny on June 19, 2005, when the New York Post printed an article by Richard Wilner entitled “Smart ‘Money’? Cramer’s Bark Worse Than Bite.” The article explained that while Cramer’s show is entertaining, it is not the best investment advice. Cramer responded to this article by offering his own, “Cramer’s Mad Money Record Speaks for Itself.” In his article, Cramer provides the first week’s worth of his recommendations and their results. He wraps up the article by saying “I thought you would enjoy the actuals, though, and you might conclude that my bite and my bark are both pretty effective.” The first week’s worth of recommendations did look impressive, but that was not enough to keep those who doubt Cramer’s success at bay.

On February 27, 2006 TheStreet.com revealed that it and Cramer had received a subpoena from the SEC in response to stock manipulation allocations made by Overstock.com’s CEO Peter Byrnes (Byrnes denied he was behind the SEC probe). The accusation is that a group of hedge fund managers and journalists conspired to drive down the stock price in order to gain from the stock’s fall in price. Cramer responded by saying he was the target of the investigation because “I said the stock was going lower. I didn’t get the subpoena because I’m corrupt. I got it because I tried to get people out of a stock that we said was going lower, and went lower.” He subsequently wrote bull on the stock and dropped it on the floor.

Hypotheses Development

Based on the analysis of current literature and other relevant event studies, two hypotheses for this test were developed. The first hypothesis is as follows.

H_1: investors can gain above-average, risk-adjusted returns for the 5 and 26 day trading windows by following the recommendations made by Jim Cramer during his CNBC show Mad Money

The second hypothesis was made by further dividing the data and distinguishing between when the recommendation was made during the program—either lightning round or non-lightning round. The hypothesis for this division was developed as follows.

H_2: regardless of when the recommendation was made during the program, investors cannot expect to gain above-average, risk-adjusted returns for the 5 and 26 day trading windows

H_3: the two different segments of the program can gain the investor differing levels of above-average, risk-adjusted returns for the 5 and 26 day trading windows when one considers whether the recommendation was a buy or sell

Sample selection and study design:

The data for this test was collected from two internet data sources. The first and most reliable is TheStreet.com, a website co-founded by Jim Cramer. This website provides recaps of the daily shows from the most recent date back to June 28, 2005. For data earlier than June 28, I relied on the Personal Finance Blog (PFBlog.com) where a faithful viewer reviews in detail Cramer’s daily recommendations. The variables I considered were the date of each show, company name, Cramer’s position on the stock, and whether he was recommending the stock during the normal show time or the adrenaline-pumped lightning round. The data collection required some subjective decision making. In instances when it was difficult to distinguish, I relied on my ability to read his comments and decide whether he was bullish or bearish on the stock. The rule of thumb used was if he spoke about the stock in a positive light, it received a “buy” recommendation—alternatively, negative spins on a stock received a “sell” recommendation.

The next step was to define the window of time. Since the show has only been on the air for a little over a year, the analysis would have to be short-term. This being the case, the decision was made to focus the analysis on 26-day trading window (five days prior to the event and twenty days after). Since Mad Money is a daily show, Cramer will often times repeat his recommendation for a stock within the created constraint of 25 days. Therefore, the process then became to remove “doubled-up” recommendations that could skew the results. Repeated recommendations were deleted unless Cramer changed his views on the stock, up to 25 days after the initial recommendation. After the 26-day window, the same recommendation on a stock was considered a unique event and included in the analysis. After controlling for repetition, there were 3,550 observations. The time period extended from April 19 to November 30, 2005. The data could not be extended beyond its end date since 20 days after the trade recommendation were required for the analysis. Also, data on stock prices and indices were only available through 2005.
After the time period of the study was established, the second set of data needed to be collected. This portion of the study included finding the stock returns for each company in Cramer’s basket of recommendations as well as the returns for the value-weighted index, the proxy for the market’s return. Through the University of Arkansas’s subscription to Wharton Research Data Services (WRDS) the returns were accessed for the value-weighted index using datasets from the Center for Research in Security Prices (CRSP). The value-weighted daily returns include all distributions, on a value-weighted market portfolio (excluding American Depository Receipts (ADR)). All returns were found for the 26-day trading window.

Since the alternative hypotheses of this paper are that investors can expect to earn above-average risk-adjusted returns, the daily returns of each stock had to be adjusted for the returns an investor could expect to make from investing in a portfolio of the market during the same time period. The cumulative abnormal returns were calculated for each of the 26 days surrounding the event as:

\[
\text{Cumulative Abnormal Return} = \text{Portfolio Return} - \text{Return on Value-Weighted Index} \text{ (where } t=0 \text{ is the recommendation event)}
\]

The data underwent two tests of significance for the two time periods evaluated for the existence of short-term abnormal gains one could make from watching Mad Money.

The first test looked at the entire 26-day trading window (5 days before the event, the day of, and 20 days after). The second time period was for the five days surrounding the recommendation event (two days before, the day of, and two days after). Tables 1 and 2 summarize the observations for the two time periods and the two tests for each hypothesis (buy and sell only and lightning round vs. non-lightning round). From the study, one can conclude that Jim Cramer’s stock recommendations made during his television program, Mad Money, can gain investors cumulative abnormal returns.

Results:

The conclusion that investors can gain above-average, risk-adjusted returns is statistically significant at a 95% level of confidence. The variables were tested twice for the given hypotheses. The variables for the first test were all buy and sell recommendations. These variables were significantly different from each other with a p-value of less than 0.0001 for both time periods. The second set of tests determined the significant difference of lightning round buy and sell recommendations and non-lightning round buy and sell recommendations. For the 5-day period variables were found to be significantly different from each other with p-values less than 0.0001 for all variables. The 26-day time period found statistically significant differences for all variables with the following p-values: 0.0042 for lightning round buy vs. lightning round sell and 0.0002 for non-lightning round buy vs. non-lightning round sell. The final test compared lightning round and non-lightning round recommendations. These tests were significantly different at a 95% level of confidence only for the 5-day time period with p-values of less than 0.0001 for buys and 0.0059 for sells. Table 3 summarizes the significant difference for the variables in each time period test.

Investors can earn abnormal returns from following Cramer’s trading advice. They can expect to gain the highest returns by following his recommendations for a position on a stock during the non-lightning round portion of his show. For the 26-window trading period, this class of recommendations averaged a 2.4% cumulative abnormal return as opposed to 1.4% for non-lightning round recommendations. Sell recommendations made during the regular part of the show averaged -1.2%—for non-lightning round sell recommendations, the CAR was just over 0.25%. The largest CAR (3.6%) occurred two days after the recommendation event for buys on stocks recommended during the non-lightning round portion. The second largest was the day before, or one day after the announcement. Following the second day, returns slowly begin to decrease dropping by a total of 1% by the twenty-fifth trading day in the study for non-lightning round buy recommendations. Figure 1 illustrates the variables and cumulative abnormal returns.

Another phenomenon witnessed within theses tests was that the CAR for the recommendations increases initially before the day of recommendation. There are many possible reasons why this is the case. One is that Cramer bases his recommendations of the market news—information that is publicly available—and the market is adjusting for this public information. Another possibility is that there is a leak in information. This conclusion concerns the idea that Cramer’s recommendations actually affect the stock price which is a consideration that should be looked into in the future. The leak, therefore, means that investors trade with the expectation of being able to ride the change in stock price due to Cramer’s recommendation. Regardless of the reason, investors are still able to gain returns thanks to Cramer’s recommendations.

Sensitivity Analysis/Robustness Check:

For robustness, equally-weighted daily returns, including all distributions on an equally-weighted market portfolio (including ADRs), were also collected from CRSP. The cumulative abnormal returns were calculated for each of the 26 days surrounding the event as:

\[
\text{Cumulative Abnormal Return} = \text{Portfolio Return} - \text{Return on Equally-Weighted Index} \text{ (where } t=0 \text{ is the recommendation event)}
\]

Conclusions drawn from new tests using this index instead of the Value-weighted index were similar to those based on the value-weighted index.
Conclusion:

The energy of Cramer’s show is invigorating. While his enthusiasm has developed many strong supporters and believers, he has also managed to draw plenty of criticism for his personal style and investment advice. He maintains, though, that the objective of the show is to make people money. As long as he remains loyal to the show’s original purpose, he is doing his job to the best of his ability. The results of this study support just that. There are some shortcomings of this study, though that could potentially diminish the returns an investor can expect to make. These factors include considerations like transaction costs and time concerns. Taking these factors into consideration could absolve any abnormal returns observed in the study.

Even with the above considerations, the findings that investors can expect to gain above-average, risk-adjusted returns by following Cramer’s recommendations on Mad Money make a contribution to the research on the semi-strong form market efficiency hypothesis. If this hypothesis holds firm, investors can not expect to gain cumulative abnormal returns trading on information after it is made public—the information is already priced into the stock. However, this paper contends that not only can investors find gains in an inefficient market but they can gain these returns by following the recommendations made by Jim Cramer during his show Mad Money. Other studies, such as that conducted by a group of academics at Northwestern, also find that Cramer is able to provide investors with gains over those of the market. The findings of this paper, coupled with that of Northwestern, provide additional support that the market is not operating at a semi-strong form of market efficiency. These findings make contributions to the current literature by providing information about the returns gained from the different portions of the show. There are also implications for future research into the development of a hedge fund strategy based off of this assessment.

Author’s note:

I wish to thank the following people for their dedication and support throughout this long and sometimes stressful process. Thanks for making my last semester a memorable and worthwhile experience: Dr. Craig Rennie, John Norwood, Jeff Jones, Candice Norton, Rivka Berman, Gary Schubert, Leslie Lemiso, and Susannah Rodgers.

References:


Table 1: Description of Data for 5-day and 26-day Trading Window Buy and Sell Recommendations Only Value-Weighted Index:

This table provides the descriptive statistics for the entire data set. The two variables considered in this test were the cumulative abnormal returns for all buy and sell recommendations made by Cramer during Mad Money television broadcasts from April 19, 2005 to November 30, 2005. Stock recommendations that were repeated within the 25-day limit are not included in the sample. The two time periods tested—the 5-day and 26-day trading windows—are represented in the following table.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Std Dev</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sell</td>
<td>CAR for 5 days</td>
<td>1661</td>
<td>-0.0029</td>
<td>-0.0023</td>
<td>0.0663</td>
<td>-0.5864</td>
<td>0.5713</td>
</tr>
<tr>
<td></td>
<td>CAR for 26 days</td>
<td></td>
<td>0.0045</td>
<td>0.0043</td>
<td>0.1381</td>
<td>-0.8182</td>
<td>1.0170</td>
</tr>
<tr>
<td>Buy</td>
<td>CAR for 5 days</td>
<td>1889</td>
<td>0.0155</td>
<td>0.0073</td>
<td>0.0625</td>
<td>-0.1945</td>
<td>0.8581</td>
</tr>
<tr>
<td></td>
<td>CAR for 26 days</td>
<td></td>
<td>0.0214</td>
<td>0.0152</td>
<td>0.1092</td>
<td>-0.5453</td>
<td>0.8487</td>
</tr>
</tbody>
</table>
Table 2: Description of Data for 5-day and 26-day Trading Window Buy/Sell Recommendations and Lightning Round vs. Non-Lightning Round Value-Weighted Index

This table provides the descriptive statistics for the entire data set. The four variables considered in this test were the cumulative abnormal returns for buy and sell recommendations made during lightning round and non-lightning segments for *Mad Money* broadcasts from April 19, 2005 to November 30, 2005. Stock recommendations that were repeated within the 25-day limit are not included in the sample. The two time periods tested—the 5-day and 26-day trading windows—are represented in the following table.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Std Dev</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sell/Non-lightning Round</td>
<td>CAR for 5 days</td>
<td>143</td>
<td>-0.0170</td>
<td>-0.0041</td>
<td>0.1034</td>
<td>-0.5864</td>
<td>0.4065</td>
</tr>
<tr>
<td></td>
<td>CAR for 26 days</td>
<td>143</td>
<td>-0.0174</td>
<td>-0.0093</td>
<td>0.1670</td>
<td>-0.8062</td>
<td>0.5735</td>
</tr>
<tr>
<td>Sell/Lightning Round</td>
<td>CAR for 5 days</td>
<td>1518</td>
<td>-0.0016</td>
<td>-0.0021</td>
<td>0.0616</td>
<td>-0.3081</td>
<td>0.5713</td>
</tr>
<tr>
<td></td>
<td>CAR for 26 days</td>
<td>1518</td>
<td>0.0065</td>
<td>0.0050</td>
<td>0.1350</td>
<td>-0.818</td>
<td>1.0170</td>
</tr>
<tr>
<td>Buy/Non-lightning Round</td>
<td>CAR for 5 days</td>
<td>473</td>
<td>0.0335</td>
<td>0.0168</td>
<td>0.0830</td>
<td>-0.1945</td>
<td>0.8581</td>
</tr>
<tr>
<td></td>
<td>CAR for 26 days</td>
<td>473</td>
<td>0.0268</td>
<td>0.0206</td>
<td>0.1201</td>
<td>-0.5453</td>
<td>0.7738</td>
</tr>
<tr>
<td>Buy/Lightning Round</td>
<td>CAR for 5 days</td>
<td>1416</td>
<td>0.0094</td>
<td>0.0040</td>
<td>0.0526</td>
<td>-0.1860</td>
<td>0.6370</td>
</tr>
<tr>
<td></td>
<td>CAR for 26 days</td>
<td>1416</td>
<td>0.0196</td>
<td>0.0127</td>
<td>0.1052</td>
<td>-0.4348</td>
<td>0.8467</td>
</tr>
</tbody>
</table>

Table 3: Test of Significant Difference for Cumulative Abnormal Returns Value-Weighted Index

This table provides a summary of the test of significance for the variables under the two tests of the hypotheses. Panel A refers to the test for the first hypothesis (whether investors can gain cumulative abnormal returns by following the recommendations made by Jim Cramer during *Mad Money*). The remaining panels offer evidence for the second hypothesis (the returns investors can expect to gain are dependent upon during which segment of *Mad Money* the recommendation is made). The two time periods tested—the 5-day and 26-day trading windows—are represented in the following table.

Panel A: All Buy and All Sell Recommendations

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Buy</th>
<th>Sell</th>
<th>Difference</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR for 5 days</td>
<td>3550</td>
<td>0.0157</td>
<td>-0.0029</td>
<td>0.0184</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>CAR for 26 days</td>
<td>3550</td>
<td>0.0214</td>
<td>0.0045</td>
<td>0.0169</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

Panel B: Lightning Round Buy and Sell Recommendations

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Buy</th>
<th>Sell</th>
<th>Difference</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR for 5 days</td>
<td>2934</td>
<td>0.0094</td>
<td>-0.0016</td>
<td>0.0110</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>CAR for 26 days</td>
<td>2934</td>
<td>0.0196</td>
<td>0.0065</td>
<td>0.0131</td>
<td>0.0042</td>
</tr>
</tbody>
</table>

Panel C: Non-lightning Round Buy and Sell Recommendations

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Buy</th>
<th>Sell</th>
<th>Difference</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR for 5 days</td>
<td>616</td>
<td>0.0335</td>
<td>-0.0170</td>
<td>0.0504</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>CAR for 26 days</td>
<td>616</td>
<td>0.0268</td>
<td>-0.0174</td>
<td>0.0441</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

Panel D: Lightning Round Buy vs. Non-lightning Round Buy Recommendations

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Lightning Round</th>
<th>Non-lightning Round</th>
<th>Difference</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR for 5 days</td>
<td>1889</td>
<td>0.0094</td>
<td>0.0335</td>
<td>-0.0240</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>CAR for 26 days</td>
<td>1889</td>
<td>0.0196</td>
<td>0.0268</td>
<td>-0.0072</td>
<td>0.2730</td>
</tr>
</tbody>
</table>

Panel E: Lightning Round Sell vs. Non-lightning Round Sell Recommendations

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Lightning Round</th>
<th>Non-lightning Round</th>
<th>Difference</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR for 5 days</td>
<td>1661</td>
<td>-0.0016</td>
<td>-0.0170</td>
<td>0.0154</td>
<td>0.0059</td>
</tr>
<tr>
<td>CAR for 26 days</td>
<td>1661</td>
<td>0.0065</td>
<td>-0.0174</td>
<td>0.0239</td>
<td>0.0271</td>
</tr>
</tbody>
</table>
Figure 1: Cumulative Abnormal Returns for 5-day and 26-day Trading Window Value-Weighted Index

This figure provides a visual interpretation of the data analyzed in the study. The time period analyzed is five days before the recommendation event and twenty days after. The recommendation event day is time 0. The six variables represented in this figure are the two for the first hypothesis (whether investors can gain abnormal returns) which are all buy and sell recommendations made and the four variables for the second hypothesis (the amount of gain investors can expect to gain depends on when the recommendation was given during the show) which are buy and sell recommendations made during lightning round and non-lightning round portions.

Mentor comments:

Dr. Craig Rennie made the following remarks about Ms. Dodson's research:

As Elizabeth Dodson's thesis advisor, I strongly recommend Elizabeth's research on Jim Kramer's Mad Money recommendations for publication in Inquiry. Her paper makes a material contribution to the empirical investments finance literature dealing with efficient markets and asset pricing by investigating the effectiveness of investment recommendations made by the immensely successful CNBC investments commentator of a hit TV show.

Traditionally, there has been debate in the academic investments finance literature about semi-strong form market efficiency. Prior literature generally shows investments recommendations from newsletters and other commentators generate marginally superior returns, but not necessarily after transaction costs are taken into account.

Elizabeth’s research extends this work in a new way by investigating the effectiveness of recommendations made by a widely followed CNBC commentator who is a highly experienced former hedge fund manager. Only one other working paper exists on this topic, but it fails to differentiate between Jim Kramer's own recommendations and his commentary in the "lightning round" where he responds to questions from call-ins. Elizabeth notes that Jim Kramer's recommendations could predict stock price movements, or cause stock price movements. What matters to investors is that his recommendations can be used to achieve abnormal stock returns.

Importantly, Elizabeth’s findings of almost a 3 percent abnormal return over a short term holding period are striking. Her research can be used by investors to realize abnormal stock returns. Her results also cast further doubt on the semi-strong form efficient markets hypothesis.