

The Performance of Popular Investment Magazine Stock Analysts

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Abstract

This study examines the stock price performance for a sample of 239 firms that were recommended by analysts in popular investment magazines (214 buy and 25 sell recommendations). The study was motivated by the magazines' claims that abnormal profits can be earned by following the investment advice published in their respective magazines. The empirical results are not consistent with this claim. For our sample and during the time period investigated, investing in the buy recommendations and selling short the sell recommendations would not earn returns in excess of the market average.

Introduction

"I agree with John Kenneth Galbraith, who said, 'We have two classes of forecasters: Those who don't know--and those who don't know they don't know.' If it were easy to predict the future, it would be easier to attain excellent investment results--then maybe everyone could have above-average investment performance. Let's face it: Most of us have roughly the same ability to predict the future." (Marks 1993)

The above quote was made by the Executive Vice President and Group Managing Director of a large investment company. Although this position may be held by other investment professionals, it is not one that is often heard by the general public. After all, these individuals depend, in a large part, on the public's belief that the information provided to them will help them select investments that will generate positive returns. However, the idea that investment analysts/forecasters may not be able to outperform the market is not new.

In 1933, Alfred Cowles analyzed the forecasting ability of the leading financial information services agencies. He reached two major conclusions from his research: (1) on average, security transactions based on forecaster judgment produce returns that are worse than those generated by a passive market index, and (2) forecasters that outperform the market are as likely to have been lucky as skillful (Cowles 1933). Although this study was conducted over sixty years ago, investors' desires have not changed: they want to make money by investing in stocks that will appreciate in value.

The public's desire to earn positive returns on their investments has created an entire market for investment-

related publications. Many sources of information exist that attempt to provide the investor with advice on how to invest their money in the stock market. These sources range from the more complicated (e.g., Wall Street Transcript) that appeal to a more sophisticated audience to the simplistic (e.g., *Money* magazine) that appeal to the less sophisticated or "average" investor.

This paper focuses on the small, unprofessional investor. Since many individuals continue to enter the stock market, it would appear to be worthwhile to evaluate some of the information sources upon which they rely. Although many alternatives are available, a large number of individuals base their decisions on the advice provided in popular investment magazines, such as *Money* and *Changing Times*. These magazines provide financial analysts' buy and/or sell recommendations for various stocks. These analysts' recommendations are typically advertised as one of the appealing features of subscribing to the magazines. This study evaluates the performance of an investment strategy that is based on analysts' recommendations published in *Money* and *Changing Times*. The performance indicator is a market-adjusted average return for an investment portfolio consisting of stocks that were recommended by the analysts.

There are additional motivations for this study. First, is the voluminous body of academic literature accumulated in finance and accounting that provides evidence consistent with the "efficient market hypothesis" (EMH)--i.e., stock prices reflect all publicly available information. An implication of this hypothesis is that investors cannot earn excess returns by trading on information that is publicly available, for example, a published analyst company

report. In addition to the academic literature, the inability of most analysts to outperform the S&P 500 index is anecdotal evidence consistent with the EMH. *The Wall Street Journal* has recently compared analysts' performance with a portfolio of stocks selected by throwing darts at a board. At last count, the analysts have outperformed the dart throwing strategy 29 times to 19; however, when compared to the industrial average, the analysts have outperformed the market only 25 times out of 48 tries (WSJ, 1994).

In spite of all the evidence consistent with the EMH in academia, the practice community has tended never to embrace this view. There are several reasons to believe that the analysts' recommendations published in investment magazines may be beneficial to investors. Given the very competitive environment within financial markets, the mere fact that numerous financial newsletters are still in existence and that the financial analyst profession has not vanished would be consistent with the notion that they are providing some benefit to somebody. In addition, a growing number of anomalies to the EMH have appeared in the academic literature. Over the past couple of decades, investors that have relied on a stock rating system published in *Value Line Investment Survey* have earned returns significantly greater than the market average [Copeland and Mayers (1982); Hall and Tsay (1988); Pawlukiewicz and Preece (1991)]. This exception to the EMH is commonly referred to as the "Value Line Enigma".

Another motivating factor is that there is evidence that professional forecasts can outperform naive predictions. Baghestani and Nelson (1994) examined the American Statistical Association and the National Bureau of Economic Research survey annual forecasts on seven major macroeconomic indicators. They found that although no single forecaster was consistently accurate, the average forecast error was reasonably low, and more importantly, that the consensus of the forecasts was superior to a naive forecast. These results indicate that there is some basis to believe that the advice provided by professional forecasters is reliable and that investors should take advantage of the available information.

Finally, to our knowledge, this study is the first to directly assess the performance of analysts' recommendations that are published in popular investment magazines. The results of this study should be of interest to the investment community.

Empirical Results

The 1990 editions of *Money Magazine* and *Changing Times* were searched for buy/sell recommendations by

analysts. Price data were then collected to track the performance of the company subsequent to the recommendation. If an analyst provided a buy (sell) recommendation, we hypothesized the subsequent performance of the stock would be better (worse) than the market as a whole. In cases where a company was recommended more than once by separate analysts, the date of the first recommendation was employed as the starting point in time when the company's performance was measured. Subsequent recommendations were excluded since the company's performance was already being included in the sample. This procedure prevents any one company from having an undue influence on the overall results.

The sample comprises 239 companies that had a buy or sell recommendation by an analyst and the requisite price data. Most of these observations (214 out of the 239) were buy recommendations, which is consistent with the popular opinion that analysts are reluctant to give sell recommendations because they feel pressure from managers of companies they follow (Schipper 1991). The distribution of observations was fairly balanced between the two magazines--130 from *Money* and 109 from *Changing Times*.

Stock performance was measured for each company by calculating an abnormal return subsequent to the recommendation using the following set of equations:

$$AbRet_{it} = \frac{(Price_{it} + D_{it}) - Price_{it-1}}{Price_{it-1}} - MarRet_t \quad (1)$$

and

$$CAR_i = \sum_{t=1}^{12} AbRet_{it} \quad (2)$$

where

- AbRet_{it} = abnormal return for company i in month t;
- Price_{it} = ending market price of common stock for firm i in month t;
- D_{it} = dividends paid per share by firm i in month t;
- MktRet_t = an equally weighted market portfolio return in month t; and
- CAR_i = cumulative abnormal return for firm i.

A value for CAR greater (less) than 0 would indicate the company has performed better (worse) than the market portfolio during the specified period.

Table 1 presents the mean and median stock performance for months 1 through 12 subsequent to the analyst's recommendation appearing in the magazines. Panels A and B of Table 1 contain results from the sell and buy

Table 1
Stock Price Performance Subsequent to Analyst's
Recommendations Appearing in
***Money Magazine* or *Changing Times*¹**

Panel A: Sell Portfolio Sample Size = 25					
Month	Mean AbRet	Mean CAR	p-value	CAR	Median p-value
1	.0119	.0119	.0043	.0051	.0012
2	.0202	.0321	.0049	.0198	.0015
3	.0035	.0356	.0156	.0172	.0250
4	.0182	.0538	.0486	.0251	.1538
5	-.0054	.0484	.1324	-.0065	.4706
6	.0201	.0685	.1393	.0268	.3499
7	.0860	.1545	.0364	.0821	.0639
8	.0924	.2469	.0277	.1475	.0271
9	-.0471	.1998	.1004	.0010	.3362
10	.0636	.2634	.0826	.0228	.3229
11	.0886	.3520	.0806	-.0387	.3362
12	.1107	.4627	.0459	.0138	.2387

Panel B: Buy Portfolio Sample Size = 214					
Month	Mean AbRet	Mean CAR	p-value	CAR	Median p-value
1	.0000	.0000	.9271	-.0004	.7305
2	.0020	.0020	.1757	.0006	.3203
3	.0016	.0036	.2608	.0017	.5628
4	.0050	.0086	.0949	.0047	.1723
5	-.0042	.0044	.5279	-.0052	.7579
6	-.0053	-.0009	.9273	-.0102	.2361
7	-.0066	-.0075	.5827	-.0388	.0094
8	-.0121	-.0196	.2446	-.0607	.0037
9	.0073	-.0123	.5769	-.0661	.0026
10	-.0006	-.0129	.6481	-.0924	.0019
11	-.0089	-.0218	.5500	-.0968	.0008
12	-.0294	-.0512	.2331	-.1153	.0001

¹Twelve monthly equally weighted market adjusted returns were calculated for each company subsequent to an analyst recommending the purchase and/or the sell of the company's common stock. The cumulative abnormal return (CAR) is the sum of the monthly abnormal returns. T-statistics and Wilcoxon Signed Rank statistics were calculated to determine if the cumulative abnormal returns were statistically different from zero. Corresponding p-values are derived using a two-tailed test.

portfolios, respectively. In Panel A, the mean abnormal returns are mostly positive for the sell portfolio. The cumulative abnormal returns are all positive and in most cases significantly different from zero at an alpha level of .10. These significantly positive results are contrary to what would be expected given that the analyst has recommended these stocks be sold. Further examination of the individual observations reveals that the mean results are heavily influenced by an outlier. Goodyear Tire experienced an increase in stock price of over 100% during the twelve month period. Evaluation of median values controls for outlying observations. The median results are not as positive as the mean values and generally indicate that the abnormal returns for the portfolio are not significantly different from zero. Nevertheless, significantly positive abnormal returns are documented for months 1-3 and 7-8.

The performance measures in Panel B suggest that the buy portfolio of stocks generally perform worse than the market. The mean returns are insignificant for all twelve months subsequent to the analyst recommendation. However, the median CARs are close to zero until month 7 when they become significantly negative and remain negative throughout month 12.

To evaluate whether analysts' recommendations published in *Money Magazine* have a comparative advantage in assessing stock performance over those published in *Changing Times* and vice-versa, the same analysis was performed after partitioning the sample by magazine. The results are presented in Table 2. The results from the sell portfolios for each magazine are not reported since the resulting sample sizes were too small to derive conclusions with sufficient validity.

Panels A and B of Table 2 present the results for the buy portfolios from *Money Magazine* and *Changing Times*, respectively. The subsequent performance for *Money Magazine* recommendations is similar to the market performance until about month 6 when the median cumulative abnormal returns become significantly negative. The *Changing Times* portfolio does demonstrate a positive abnormal performance in months 2 and 4; however, by month twelve the performance on these stocks have reversed and most of the companies are actually performing worse than the market.

Table 2
Stock Price Performance For Buy Portfolios By Magazine¹

Panel A: <i>Money Magazine</i> Sample Size = 112					
Month	Mean AbRet	Mean CAR	p-value	CAR	Median p-value
1	-.0004	-.0004	.6277	-.0004	.4866
2	.0011	.0007	.7476	.0004	.9609
3	.0030	.0037	.3885	.0001	.7642
4	-.0012	.0025	.7093	-.0001	.8355
5	-.0068	-.0043	.6378	-.0083	.1726
6	-.0170	-.0213	.0871	-.0405	.0051
7	.0074	-.0139	.4591	-.0528	.0142
8	-.0149	-.0288	.1963	-.0623	.0081
9	-.0133	-.0421	.1762	-.0857	.0008
10	-.0058	-.0479	.1950	-.1018	.0010
11	-.0199	-.0678	.1768	-.1110	.0006
12	-.0190	-.0868	.1236	-.1302	.0001

Panel B: <i>Changing Times</i> Sample Size = 102					
Month	Mean AbRet	Mean CAR	p-value	CAR	Median p-value
1	.0005	.0005	.4681	-.0004	.8307
2	.0029	.0034	.0846	.0022	.1395
3	.0000	.0034	.4699	.0026	.5992
4	.0120	.0154	.0567	.0171	.0313
5	-.0014	.0140	.1981	.0064	.3448
6	.0075	.0215	.1632	.0162	.3214
7	-.0221	-.0006	.9771	-.0314	.2549
8	-.0089	-.0095	.7109	-.0508	.1423
9	.0298	.0203	.5185	-.0335	.4038
10	.0073	.0276	.5068	-.0689	.2884
11	.0010	.0286	.5923	-.0633	.2242
12	-.0407	-.0121	.8540	-.0985	.0193


¹Twelve monthly equally weighted market adjusted returns were calculated for each company subsequent to an analyst recommending the purchase and/or the sell of the company's common stock. The cumulative abnormal return (CAR) is the sum of the monthly abnormal returns. T-statistics and Wilcoxon Signed Rank statistics were calculated to determine if the cumulative abnormal returns were statistically different from zero. Corresponding p-values are derived using a two-tailed test.

Conclusions

This study examined the effectiveness of an investment strategy that is based on analysts' recommendations published in popular investment magazines. The empirical tests documented that the median cumulative annual return of a stock portfolio containing 214 "buy" recommendations from analysts published in *Money* and *Changing Times* was significantly worse than the market's average return. The mean return from this same portfolio was not significantly different than the market return. The annual median market-adjusted return for the stock portfolio containing 25 "sell" recommendations was not significantly different from zero. The mean market-adjusted return for this same portfolio was significantly positive; however, this result was driven by one outlying observation. A closer examination of analysts performance by magazine, however, does provide some evidence that following recommendations published in *Changing Times* can earn abnormal profits but only in the very short-term.

This evidence suggests that the recommendations provided by analysts in popular magazines are not reliable sources for predicting the future performance of company's stock price. This result is consistent with the large body of academic research documenting that capital markets are efficient in that all publicly available information is quickly impounded in the market. Therefore, investors should be skeptical about the claim that abnormal profits can be earned by trading on information that is disclosed in these magazines.

Suggestions For Future Research

There are significant limitations to this study when making interpretations. First, the sample came from only two magazines--*Money* and *Changing Times*--therefore, the results cannot be generalized to other magazines. In addition, only the recommendations that were published in the 1990 editions of the magazines were analyzed. Just as the dart board strategy of choosing stocks may occasionally outperform analysts' recommendations, it is possible that the time period analyzed was an exception to the more general rule that following the recommendations published in these magazines will result in excess profits. Future research can extend this study by employing a more comprehensive sample of firms that are obtained from more magazines and by tracking these firms' performance over a longer time period. 

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