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Stock selection based on mutual fund holdings: Evidence from large-cap funds

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Abstract

In this study, we investigate whether individual investors should consider the weightings mutual fund managers place on the stocks held in their funds when making stock selection decisions. Specifically, we compare the performance of the stocks that are most heavily weighted in mutual funds versus the stocks that are most lightly weighted. We find that the heavily weighted stocks in mutual funds perform no better than, and sometimes significantly underperform, the most lightly weighted stocks. These results contradict the idea that individual investors can earn excess returns by following the implicit stock selection picks of mutual fund managers—particularly short-term and momentum investors who trade large-cap stocks. Our findings rather suggest that individual investors should be wary of investing in stocks that are the top holdings in general equity mutual funds.

JEL Classification: G11; G14; G23

Keywords: Portfolio choice; Information and market efficiency; Mutual funds

1. Introduction

In this study, we investigate whether individual investors should consider the weightings mutual fund managers place on the stocks held in their funds when making stock selection decisions. Specifically, we compare the performance of the most heavily weighted stocks in

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a sample of mutual funds versus the most lightly weighted stocks from the same sample of funds. Finding that the heavily weighted stocks outperform the lightly weighted stocks would suggest that mutual fund managers are superior stock-pickers, and that individuals should take these weightings into consideration when selecting stocks for their portfolios. Our findings do not support this idea, however. Using stocks chosen from large-capitalization blended mutual funds sampled during the most recent bull and bear market periods, we find that the stocks mutual fund managers weight most heavily perform no better than, and sometimes significantly underperform, the most lightly weighted stocks in their funds.

Both academics and practitioners are divided on the issue of whether or not the recommendations of security analysts can be used by investors to generate excess returns. As Barber et al. (2001) point out, brokerage houses spend large sums of money on analysis ". . . presumably because these firms and their clients believe its use can generate superior returns." The possibility of using analysts' recommendations for profitable trading is suggested by Stickel (1995) and Womack (1996), who find that announcements of favorable (unfavorable) changes in analysts' recommendations result in immediate positive (negative) stock price changes. Womack (1996) further documents that the direction of these price changes persists for anywhere from one to six months subsequent to the announcement.

The view that security analysis generates profitable recommendations is further supported by the findings of Baumann et al. (1995), who examine analyst recommendations appearing in the "Heard on the Street" column of *The Wall Street Journal*. They find that following the advice of investment analysts leads to superior performance over the ensuing six- and 12-month periods. Rich and Reichenstein (1993) find that individuals investing in large capitalization stocks who use an expected market risk premium based on *Value Line's* price appreciation potential and expected divided yield can successfully time the market. Mann and Solberg (1991) devise a variety of stock screening strategies, also based on a risk premium, that are effective in generating returns that exceed those achieved by professional money managers. Gold and Lebowitz (1999) use stock screening software and various filters to form portfolios that handily beat their comparative benchmarks. Ferreira and Smith (2003) find that the investment recommendations made by panelists on "Wall $treet Week" are profitable. These studies and others suggest that stock selection strategies cannot be dismissed out-of-hand.

Other studies report that attempts to pick stocks based on professional research are apparently profitable, until transactions costs are taken into consideration. Barber et al. (2001) present evidence that the information produced by analysts can be used to generate excess returns. These authors find that purchasing stocks with the most favorable consensus recommendations can yield gross annual excess returns of as much as 4%, but this strategy requires daily portfolio rebalancing. They conclude that the net annual excess returns from pursuing this strategy are not reliably greater than zero once transaction costs are taken into account. Walker and Hatfield (1996) also find that professional stock analysts can identify mispriced securities, but individual investors may not be able to capitalize on these recommendations.

The alternative viewpoint, supported by an ever-growing body of literature, suggests that analysts and active managers underperform their benchmarks, and that this underperformance is no surprise. Ellis (2000) asserts that professional investors should no longer expect

to "beat the market" because this intelligent, well-educated and highly skilled group has become "the market"—over 90% of the trading volume on the NYSE is now generated by professional investors. He presents evidence that 89% of all U.S. mutual funds underperformed the S&P 500 from 1991 to 2000.

The rapidly growing field of behavioral finance also offers explanations regarding the underperformance of professional investors. Odean (1999) contends that investors trade too much because of overconfidence, and that professionals probably suffer from greater overconfidence than individuals. Bauman and Miller (1997) assert that experts make habitual cognitive errors, such as focusing on and overusing predictors of limited validity. They present evidence that professional investors tend to herd into stocks with strong recent earnings growth in the mistaken belief that this earnings growth will continue. This behavior is consistent with the "adaptive expectations hypothesis," where decision-makers rely too much on recent trends in forming their expectations about the future.

Doubt remains regarding the ability of professionals to pick individual stocks and outperform the market. Bogle (1998, 2002), founder of the Vanguard Group, compellingly asserts that index funds are the most rational investment choice for both individual and professional investors. Siegel (2002) and Malkiel (1999) also provide data to support indexing as a superior equity investment strategy. Even on the people's medium, the Internet, investment advisors increasingly treat the superiority of index funds as a given. Mary Rowland (2002), writing on the basics of mutual fund investing for MSN Money says, "Most of us know by now that investing in a broad-based market index such as the S&P 500 is a strategy that's tough to beat." At Thestreet.com, the advice from Goodman (2002) is similar: "Because it's nearly impossible to beat the market, the benefits of index funds are obvious." Braham (2003) cites a recent study by Standard & Poor's (2003) which shows that the pros' luck is no better when it comes to picking small-capitalization stocks—only one-third of small-cap fund managers beat the S&P SmallCap 600 Index from 1997 to 2002.

These conclusions are not uncommon, and are supported by a substantial body of academic research. Fama and French (1995), for example, refute the effectiveness of stock selection strategies. Metrick (1999) investigates the stock selection abilities of more than 500 investment newsletters but finds no evidence of superior stock picking skills. Michaud (1998) concludes that single-factor stock selection criteria are often misleading and advocates a multidimensional approach in performance attribution and return forecasting. Chan (1992) reaches a similar conclusion when examining the use of beta as a simple stock selection variable. Chandy, Peavy, and Reichenstein (1993) examine stocks highlighted by *Value Line*. They find a significant three-day abnormal return surrounding the release of this information. The abnormal return is temporary, however, and reverses over the course of the following three weeks.

There is also a growing literature that investigates whether successful investment and stock selection strategies can be inferred from research produced by the mutual fund industry. Carhart (1997) concludes that ". . . the majority [of actively managed mutual funds] underperform by approximately their investment costs." Blake and Morey (2000) report that Morningstar's lowest ratings generally indicate poor future fund performance, but they find no evidence that their highest-rated funds outperform their next-to-highest and median-rated funds. Chen, Jegadeesh, and Wermers (2000) investigate whether the stocks favored by

mutual fund managers are indeed superior stock picks. These authors find no evidence that the stocks most widely held by mutual funds outperform other stocks. Similar results are reported by Loviscek and Jordan (2000). Although these authors find that the five most heavily weighted stocks selected from Morningstar's 10-year, five star equity mutual funds slightly outperform the S&P 500 on a risk-adjusted basis, they conclude that this stock selection strategy is not likely to be profitable for individual investors.

In this paper, we further explore this theme by investigating whether portfolios consisting of the five most heavily weighted stocks from a sample of large-capitalization blended mutual funds outperform portfolios of the five most lightly weighted stocks from the same sample of funds. Following Loviscek and Jordan (2000), we assume that the stocks mutual fund managers choose to invest in most heavily are their top stock selections. By placing the greatest fraction of their funds' assets in these stocks, fund managers are signaling their belief that these stocks are likely to perform better than the other stocks in their portfolios. Additionally, there are a number of funds that sell themselves based on investing in a limited number of good ideas—again implying that a stockpicker's top choices are better than his or her 50th or 100th choice. For example, on the Longleaf Funds' Website, it says: "We hold concentrated portfolios . . . concentration lowers our risk of losing capital because we limit the portfolios to our very best ideas . . ." Furthermore, on the Website for the CGM Focus Fund, manager Ken Heebner writes, "At any given time, there are only so many stocks out there with superior risk-reward profiles. Those are the stocks I want to own and the only ones I want to own." The message is clear. These managers believe they can choose which stocks will be better performers and weight them accordingly.

The following section discusses the data and the methodology employed in the paper. Section 3 presents the empirical results, and conclusions are contained in Section 4.

2. Data and methodology

Using Morningstar Principia, we screen for large-capitalization blended mutual funds using two disks, one dated July 1999 and the other dated July 2000. From these disks we select all funds from the blended category with portfolio reporting dates of March 31, 1999 and March 31, 2000, respectively. We choose large-cap funds for two reasons. First, in preliminary work using small-cap growth funds there were too many stocks for which returns data were unavailable. Using large-cap funds mitigated this problem. Second, because the focus of our paper is assessing the usefulness of fund managers' stock picks to individual investors, we reasoned that individual investors may be more likely to follow the pros' picks from the more widely followed and well-known large-capitalization sector.

We focus on the portfolio dates above for two reasons. First, this allows us to conduct our experiment in both a rising market (on the tail end of the bull market) and a falling market, after the 1990s bubble burst. Second, these portfolio dates result in the largest possible samples from the Morningstar database.

After eliminating multiple classes of funds, index funds, and funds of funds, we are left with 121 funds from the July 1999 disk and 138 funds from the July 2000 disk. With this number of funds, selecting the five most heavily and lightly weighted stocks from each fund

could result in a maximum of 1380 (138 times 10) stocks in the sample in 2000. Similarly, with 121 funds, the potential number of stocks in the sample in 1999 is 1210 (121 times 10). As expected, these numbers are reduced because of missing data on CRSP.[1]

The number of separate individual stocks in each portfolio will also be less than these upper bounds because mutual fund managers often select the same stocks as other fund managers. This is more likely to occur in the heavily weighted portfolios if mutual fund managers' favorite stocks are selected from the same universe of popular or "glamour" stocks. Not surprisingly, we find some evidence of concentration in exactly this type of "brand-name" stock. For example, Cisco Systems was a stock choice selected by 102 of the 138 fund managers in 2000. In each of these cases Cisco Systems was among the five most heavily weighted stocks. In the same year, Sun Microsystems appeared in the portfolios of 29 different fund managers. Twenty-five of these managers bought enough of this stock to merit inclusion in the heavily weighted portfolio. Only four fund managers bought such small amounts of Sun that it qualified for the lightly weighted portfolio.

Thus, the total number of *individual* stocks analyzed in this study is considerably lower than the upper bounds discussed above, given the replication of stock selections by fund managers. After the reduction because of replication, there are 214 separate stocks in the heavily weighted portfolio and 589 stocks in the lightly weighted portfolio in event year 2000. In 1999, there are 224 individual stocks in the heavily weighted portfolio and 659 stocks in the lightly weighted portfolio.

A further issue concerns the weight to place on each stock in the heavily and lightly weighted portfolios. One way to approach this issue would be to count the excess returns of each stock only once when forming the comparison portfolios. This would mean that the heavily weighted portfolio in 2000 would consist of 214 excess returns over the event period and that each stock return would receive equal weight in the portfolio. This approach would ignore the implied heavier weight given to an individual stock when multiple fund managers select it, however.

An alternative method, and the one used in this study, is to give more weight to stocks that are selected more often by fund managers and to give less weight to the stocks selected less often. This method will produce results that are more closely related to the relative changes in the total wealth that fund managers have invested in their top and bottom stock selections. Therefore, we include the excess return of a stock once for each time it is selected as either a high- or low-weight pick by a fund manager. For example, using this approach, the excess returns of Cisco Systems are included (and weighted) in the heavily weighted portfolio 102 times in 2000. Similarly, the excess returns for Sun Microsystems are included 25 times in the heavily weighted portfolio and 4 times in the lightly weighted portfolio in 2000. This method results in 1184 and 1167 firm returns (heavily and lightly weighted stocks, respectively) in 1999, and 1347 and 1291 firm returns in 2000.

Returns are adjusted for risk by calculating market model alphas and betas for each stock, using the CRSP value-weighted NYSE/AMEX/NASDAQ index as our market proxy. We use a 60-month estimation period that begins at month −72 relative to the event date and ends at month −13 relative to the event date. These market model estimates are used to calculate monthly abnormal returns for 6- and 12-month pre-event periods spanning months −12 to −1 and −6 to −1 relative to the portfolio formation month (March 1999 and March

Table 1
Descriptive Statistics

	1999		2000	
	Lightly weighted stocks	Heavily weighted stocks	Lightly weighted stocks	Heavily weighted stocks
Mean portfolio weight of stocks	0.44% (0.56)	2.84% (1.33)	0.53% (0.65)	3.14% (1.36)
Alpha	0.004 (0.014)	0.010 (0.032)	0.006 (0.020)	0.015 (0.014)
Beta	0.96 (0.557)	1.07 (0.383)	1.04 (0.542)	1.21 (0.416)

This table shows the mean alpha, beta, and stock investment weights for the heavily and lightly weighted stock portfolios during the 12-month period preceding the March 1999 and March 2000 portfolio formation dates (standard deviations in parentheses).

2000, respectively). The same estimates are used to calculate abnormal returns in the 6- and 12-month post-period, months +1 to +6 and +1 to +12 relative to the portfolio formation month.

Cumulative abnormal returns are calculated over the pre- and post-periods using these monthly abnormal returns. Market-adjusted returns are also reported. Calculation of the cumulative returns is shown below:

$$r_i = [(1 + R_{i,1})(1 + R_{i,2})\cdots(1 + R_{i,n})] - 1 \quad (1)$$

where

$R_{i,t}$ = abnormal return (market or market-model adjusted) in month (t) for firm i;
r_i = cumulative return for firm i over either the 6- or 12-month pre- and post-period.

The 6- and 12-month abnormal returns of each stock are then averaged to obtain the mean abnormal performance of both the heavily and lightly weighted portfolios. We report t-statistics and Wilcoxon tests to determine whether there is any difference between the mean cumulative abnormal returns of the heavily and lightly weighted stock portfolios.

3. Empirical results

Descriptive statistics are reported in Table 1. For the 12 months preceding the March portfolio dates, there is a substantial difference in the average weight placed on the top five versus the bottom five stocks in the sample of mutual funds. Mutual fund managers placed an average of 0.44% of the total wealth of their funds in the more lightly weighted stocks in 1999 and 0.53% in 2000. Fund managers invested an average of 2.84% of their fund's wealth in their most heavily weighted stocks in 1999 and 3.14% in 2000. Mutual fund managers from the funds in our sample invest, on average, six times more in their favorite stocks compared with the stocks they deem less desirable.

Average stock alphas and betas for the heavily and lightly weighted portfolios are also

provided in the table. We find that mutual fund managers' most heavily weighted stock selections have higher alphas and betas than the stocks they weight most lightly. A difference-between-the-means t-statistic reveals that in 1999 the mean beta of the heavily weighted portfolio (1.07) is significantly greater than the mean beta of the lightly weighted portfolio (0.96, $t = 5.39$). Similarly, in 2000 the mean beta of the heavily weighted portfolio (1.21) is also significantly greater than the mean beta of the lightly weighted portfolio (1.04, $t = 8.53$).

Mean cumulative abnormal returns for the pre- and post-periods for 1999 are shown in Table 2. Panels A and B present the market-adjusted returns for all funds and for the four- and five-star funds, respectively. Panels C and D show the market model-adjusted returns for all funds and for the four- and five-star funds, respectively. The stocks that fund managers weight most heavily beginning in March 1999 outperform the lightly weighted stocks over the prior 6- and 12-month periods. These stocks outperform by a large magnitude, and their superior performance is statistically significant in all cases. For example, the market model-adjusted returns of the heavily weighted stocks in the four- and five-star fund subsample are 29% greater than the lightly weighted stocks for the 12 months preceding March 1999.

The portfolio results for the six-month period following March 1999 are sensitive to the adjustment for risk. For example, for the six months following March 1999 there is no difference in the market-adjusted returns of the heavily and lightly weighted stocks (Panels A and B). After adjusting for risk, however (Panels C and D), the lightly weighted stocks outperform the heavily weighted stocks by a small but statistically significant margin.

The results for the 12 month period following March 1999 also depend upon whether or not the returns are adjusted for risk. For example, the market-adjusted returns of the heavily weighted stocks of all funds and the four- and five-star fund subsample are greater than those of the lightly weighted stocks by approximately 11%. After these returns are adjusted for risk, however, the performance of both groups of stocks is significantly negative, and indistinguishable from each other. One finding of particular interest is that the S&P 500 Index rose 16.5% over this period, while both the lightly and heavily weighted holdings of fund managers exhibited risk-adjusted performances between −8 and −11%.

Mean cumulative abnormal returns for the pre- and post-periods for 2000 are shown in Table 3. Panels A and B present the market-adjusted returns for all funds and for the four- and five-star funds, respectively, and Panels C and D show the market model-adjusted returns. Examining the market-adjusted returns of all funds in the sample shows that the heavily weighted stocks outperform the lightly weighted stocks in both the prior 6- and 12-month periods. For the four- and five-star fund subsamples, however, the lightly weighted stocks outperform before March 2000. For the market model-adjusted returns of all funds, the heavily weighted stocks underperform for the entire 12-month pre-period, but outperform for the six-month pre-period. For the four- and five-star funds, the heavily weighted stocks underperform for the 12-month pre-period and post a performance equal to those of the lightly weighted stocks in the six-month pre-period. Comparing these results to the S&P 500 shows that in both the lightly and heavily weighted categories, fund managers are focusing on stocks that have been outperforming the S&P 500.

Regardless of how returns are measured following March 2000, the results are unequivocally poor for mutual fund managers' heavily weighted stock picks. The market-adjusted

Table 2
Performance of heavily versus lightly weighted stocks: 1999

Window	Panel A: Market-adjusted returns, all funds			
	−12 to −1	−6 to −1	+1 to +6	+1 to +12
S&P 500 Index	26.3%	29.4%	−0.3%	16.5%
Heavily weighted stocks	30.0%	13.5%	0.8%	5.0%
Lightly weighted stocks	−6.3%	−2.2%	1.9%	−6.5%
(Ret_{Heavy}-Ret_{Light})	36.3%	15.7%	−1.1%	11.5%
t-statistic	14.10**	9.13**	−0.94	3.15**
Wilcoxon statistic	19.44**	13.05**	−0.56	6.96**
Window	Panel B: Market-adjusted returns, four and five Star funds			
	−12 to −1	−6 to −1	+1 to +6	+1 to +12
S&P 500 Index	26.3%	29.4%	−0.3%	16.5%
Heavily weighted stocks	27.0%	13.5%	0.2%	6.4%
Lightly weighted stocks	−9.4%	−2.6%	2.7%	−5.2%
(Ret_{Heavy}-Ret_{Light})	36.4%	16.1%	−2.5%	11.6%
t-statistic	14.00**	6.94**	−1.42	1.93
Wilcoxon statistic	14.65**	9.61**	−0.62	3.87**
Window	Panel C: Market-model adjusted returns, all funds			
	−12 to −1	−6 to −1	+1 to +6	+1 to +12
S&P 500 Index	26.3%	29.4%	−0.3%	16.5%
Heavily weighted stocks	12.7%	6.5%	−5.5%	−10.5%
Lightly weighted stocks	−13.7%	−7.8%	−0.4%	−10.7%
(Ret_{Heavy}-Ret_{Light})	26.4%	14.3%	−5.1%	0.2%
t-statistic	14.25**	11.60**	−3.80**	0.05
Wilcoxon statistic	19.52**	15.03**	−2.60**	1.55
Window	Panel D: Market-model adjusted returns, four and five star funds			
	−12 to −1	−6 to −1	+1 to +6	+1 to +12
S&P 500 Index	26.3%	29.4%	−0.3%	16.5%
Heavily weighted stocks	13.4%	6.9%	−6.0%	−9.8%
Lightly weighted stocks	−15.4%	−8.1%	0.7%	−8.4%
(Ret_{Heavy}-Ret_{Light})	28.8%	15.0%	−6.7%	−1.4%
t-statistic	12.79**	8.77**	−3.47**	−0.30
Wilcoxon statistic	14.91**	11.50**	−2.99**	−0.16

This table shows the mean cumulative abnormal returns for the portfolios of the most heavily and lightly weighted stocks owned by mutual funds for 6- and 12-month windows preceding and following the March 1999 portfolio formation date. The *t*-statistics and Wilcoxon statistics test whether the returns of the heavily and lightly weighted stocks are significantly different. Unadjusted returns to the S&P 500 index are shown for comparison.

*, ** Significant at the 0.05 and 0.01 levels, respectively.

and market model-adjusted returns of the heavily weighted stock picks in all funds and the four- and five-star funds underperform managers' most lightly weighted stock picks. It is interesting to note that on both a market-adjusted and market-model adjusted basis, the lightly weighted picks significantly outperform the S&P 500, which declines 22% in the 12 months following March 2000. Mutual fund managers obviously researched these lightly weighted stocks, as they appear in their fund portfolios, but could not correctly identify them

Table 3
Performance of heavily versus Lightly weighted stocks: 2000

Window	Panel A: Market-adjusted returns, all funds			
	−12 to −1	−6 to −1	+1 to +6	+1 to +12
S&P 500 Index	10.3%	3.5%	−4.1%	−22.6%
Heavily weighted stocks	46.0%	21.4%	−2.5%	−8.3%
Lightly weighted stocks	36.1%	8.1%	7.6%	27.3%
(Ret_{Heavy}-Ret_{Light})	9.9%	13.3%	−10.1%	−35.3%
t-statistic	1.37	3.11**	−7.31**	−16.91**
Wilcoxon statistic	5.78**	15.31**	−6.86**	−16.25**
Window	Panel B: Market-adjusted returns, four and five star funds			
	−12 to −1	−6 to −1	+1 to +6	+1 to +12
S&P 500 Index	10.3%	3.5%	−4.1%	−22.6%
Heavily weighted stocks	57.9%	28.4%	−3.42%	−13.6%
Lightly weighted stocks	71.7%	29.0%	7.1%	24.4%
(Ret_{Heavy}-Ret_{Light})	−13.8%	−0.6%	−10.5%	−38.0%
t-statistic	−0.71	−0.40	−3.68**	−9.67**
Wilcoxon statistic	−8.41**	−8.09**	−3.18**	−8.96**
Window	Panel C: Market-model adjusted returns, all funds			
	−12 to −1	−6 to −1	+1 to +6	+1 to +12
S&P 500 Index	10.3%	3.5%	−4.1%	−22.6%
Heavily weighted stocks	21.1%	12.1%	−9.82%	−17.9%
Lightly weighted stocks	22.9%	0.7%	5.5%	29.5%
(Ret_{Heavy}-Ret_{Light})	−1.8%	11.4%	−15.3%	−47.4%
t-statistic	−0.25	2.88**	−10.60**	−18.13**
Wilcoxon statistic	−10.64**	12.68**	−10.15**	−15.78**
Window	Panel D: Market-model adjusted returns, four and five star funds			
	−12 to −1	−6 to −1	+1 to +6	+1 to +12
S&P 500 Index	10.3%	3.5%	−4.1%	−22.6%
Heavily weighted stocks	30.4%	17.8%	−10.9%	−23.1%
Lightly weighted stocks	49.1%	17.6%	5.1%	31.3%
(Ret_{Heavy}-Ret_{Light})	−18.7%	0.2%	−16.0%	−54.4%
t-statistic	−0.91	0.02	−5.29**	−9.80**
Wilcoxon statistic	−5.93**	0.44	−4.85**	−10.58**

This table shows the mean cumulative abnormal returns for the portfolios of the most heavily- and lightly-weighted stocks owned by mutual funds for 6- and 12-month windows preceding and following the March 2000 portfolio formation date. The *t*-statistics and Wilcoxon statistics test whether the returns of the heavily- and lightly-weighted stocks are significantly different. Unadjusted returns to the S&P 500 index are shown for comparison.

*, ** Significant at the 0.05 and 0.01 levels, respectively.

as the stocks most likely to continue performing well during the early stages of the bear market.

A distinct pattern emerges from the evidence presented in Tables 2 and 3. The results indicate that mutual fund managers place the greatest fraction of their funds' wealth in stocks that have done particularly well over the prior 12-month period, and place the lightest weight

on stocks that have not performed as well over the same time frame. In both 1999 and 2000, however, we find that this effect reverses during the 12 months following the portfolio formation dates, and the stocks mutual fund managers weight most heavily do no better than, and sometimes significantly underperform, the stocks they choose to weight most lightly.

These findings contradict the idea that mutual fund managers are superior stock pickers, and that individual investors stand to gain by following the implicit recommendations of this group of professional investors. The results rather suggest that fund managers suffer from adaptive expectations as described in Bauman and Miller (1997), placing too much emphasis on the recent past when forming their expectations regarding the future. If our experiment provides any investment advice for the individual investor, the message would be to avoid picking stocks by mimicking the most heavily weighted holdings of mutual fund managers. Our results indicate that these stocks perform no better than, and can significantly underperform, the most lightly weighted stocks held in large-capitalization equity mutual funds.

4. Conclusions

This paper investigates whether individual investors should consider the weightings mutual fund managers place on the stocks held in their funds when making stock selection decisions. Specifically, we investigate the relative performance of the most heavily weighted stocks in a sample of mutual funds versus the most lightly weighted stocks from the same sample of funds. If mutual fund managers are superior stock pickers, individual investors might be able to earn excess returns by following the implicit stock selections of these professional investors.

Our findings do not support this idea, however. We find that the stocks mutual fund managers weight most heavily perform generally better than the most lightly weighted stocks in their funds over the 6- and 12-month periods before their weighting decisions are implemented. This effect exhibits a distinct reversal once the weighting decisions of fund managers are in place, however. In 1999 the risk-adjusted performance of fund managers' most heavily weighted stocks is no better than their most lightly weighted holdings, and in 2000 their heavily weighted picks significantly underperform their most lightly weighted stocks. Individual investors should be wary of picking stocks by mimicking the implicit stock selections of mutual fund managers.

This paper contributes to the literature on the acumen of professional investors in several ways. Our findings lend support to the view that the stock selection ability of professional managers is no better than that of individual investors. We also find support for the growing field of behavioral finance as a valid framework for explaining behaviors in financial markets. Our results are consistent with the adaptive expectations hypothesis, which postulates that decision-makers place too much weight on the recent past when forming their expectations regarding the future. We find that mutual fund managers heavily weight a group of stocks with superior recent performance and lightly weight a group of stocks with poor recent performance. Individual investors would do well to learn from this apparently common error in decision making and avoid committing similar mistakes when selecting stocks.

Notes

1. Twenty-three firms (9 in the heavily weighted portfolio and 14 in the lightly weighted portfolio) are eliminated because they lack sufficient returns data in either the estimation period, event period or both in 2000. Thirty-nine firms (20 in the heavily weighted portfolio and 19 in the lightly weighted portfolio) are eliminated for lack of sufficient returns data in 1999.

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