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[Do Morningstar Ratings predict risk-adjusted equity mutual fund performance?](#)

Category : Mutual Fund Rating Services - Morningstar Star Ratings

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Do Morningstar Ratings predict risk-adjusted equity mutual fund performance?

Summary: Morningstar Ratings have demonstrated some modest predictive information about performance. However, most individual investors will probably be very surprised about what kind of predictive information the stars provide. The stars have been a mild predictor of inferior performance. However, investors act as if the stars predict superior future performance, yet they may contain no such information. Some individual investors seem to use Morningstar Ratings* as a shorthand selector of superior future mutual fund performance.¹ Mutual funds with 4 and 5 star ratings have garnered the vast majority of new fund investment money. (See: [Do mutual fund Morningstar Ratings changes influence individual investors?](#)) Furthermore, mutual fund companies promote higher star rated funds heavily, but not lower star rated funds. In fact, often the only performance information that many mutual funds supply in their advertising are 4 or 5 star Morningstar Ratings. (See: [How Morningstar Ratings for mutual funds are used as a marketing tool](#)) In their study, "Morningstar Ratings and Mutual Fund Performance," Professor Christopher Blake of Fordham University and Professor Matthew Morey of Pace University analyzed the predictive powers of the Morningstar Ratings.² In line with other scientific finance studies of mutual fund performance, Professors Blake and Morey found that mutual funds with low star ratings — particularly 1 star funds — were more likely to continue their below average performance in the future. However, in the mid- and higher-ranges of fund performance, there was little statistical evidence of any real differences in future performance between funds with 5, 4, and 3 star ratings. Funds rated 3, 4, and 5 stars account for 67.5% or about 2/3 of all funds. Differences in future performance between them were trivial. Professors Blake and Morey used Morningstar's data for 1992 to 1997 and focused most of their analysis on "seasoned" domestic equity funds that had at least 10 years of return information for the study period. They also used all star rated funds in 1993 for certain comparisons. Professors Blake and Morey were careful to ensure that they included all mutual funds in their analysis. They tracked down and determined what had happened to any fund that had gone out of business or was merged into another fund, during the study period. By doing this, they ensured that the data did not suffer from "survivorship bias." Survivorship bias can significantly distort the conclusions of investment return studies, if it is not accounted for properly. They also made appropriate load adjustments to returns, since Morningstar makes adjustments that allow it to combine loaded and no-load funds, when it calculates the star ratings. About half of the funds in the 1993 sample had front-end loads. Note that sales loads tend to lead to suboptimal fund performance. (See: [Avoid mutual funds with sales commissions and 12b-1 fees](#)) Professors Blake and Morey compared the predictive abilities of the star ratings with four performance predictors that are commonly used in the scientific investment literature. These alternate predictors were: ->average monthly historical returns, which they termed a "naive predictor"; ->the Sharpe Ratio ->the Jensen single index alpha ->a four-index alpha, which was composed of a) the market, b) a bond index, c) small versus large capitalization, and d) growth versus value. For the 1992 to 1997 "seasoned" domestic equity funds that had at least 10 years of return information for the study period.

domestic equity funds sample, Professors Blake and Morey used several different statistical tests and concluded that the future performance of 3, 4, and 5 star rated funds did not differ significantly. If anything, they found that funds with 5 star ratings might slightly under-perform 3 and 4 star rated funds going forward. Professors Blake and Morey found that there was some evidence that funds with a 1 star rating and perhaps a 2 star rating had a slightly greater tendency to under-perform in the future. When the predictive abilities of the Morningstar star ratings were compared with the alternate predictors using the 1992 to 1997 "seasoned" domestic equity funds sample, in general the stars were similar in predictive ability to all to the other predictors. All predictors – Morningstar star ratings and the alternates – were very weak in predicting future high performing funds, but all predictors had some ability to predict future low performing funds. Professors Blake and Morey said, "all predictors with the notable exception of the Sharpe ratio, have problems in predicting high-performing funds." Professors Blake and Morey concluded that: "First, Morningstar is able to "predict" low-performing funds. Funds with less than three stars generally have much worse future performance than other groups. ... Second, there is only weak statistical evidence that the five star funds outperform the four- and three-star funds. ... Third, the Morningstar ratings, at best, do only slightly better than alternative predictors in foretelling future fund performance."3 Professors Blake and Morey noted further that: "Our first two results are broadly consistent with much of the mutual fund performance persistence literature: while it is relatively easy to predict poor performance, it is much more difficult to predict superior performance. Our results also suggest that investors should be very cautious about associating a highly rated fund with superior future performance. Although previous studies have shown that highly rated funds attract the bulk of investor cash inflows, our results suggest that those cash inflows are not necessarily justified by subsequent performance."4 Finally, you should note that in 2002 Morningstar changed some aspects of how it defined its stars. (See: [How the new Morningstar Ratings for mutual funds have been determined since mid-2002](#)) In particular, it moved from 4 to 48 fund categories. Therefore, the "new" stars are defined across narrower groups of funds. Morningstar also changed its risk adjustment assumptions to be more similar to those used in investment science. In 2004, Morningstar published an article on performance prediction related to the new stars. (See: [Do the "new" Morningstar star Ratings predict superior fund performance?](#)) While the new stars appear to have gained some performance predictability about better performing funds, in its analysis Morningstar did not control of the effects of fund fees and costs. If the new stars simply act as a proxy for fund costs, then investors should instead screen funds directly based on costs and not the stars, which are subject to wide random fluctuations related to lucky securities selection. Also, see these related rating service articles about Morningstar: ->[Investment astrology – should you pick investments according to the Morningstars?](#) ->[Morningstar Ratings should be used with caution](#) ->[The quality of the "old" Morningstar Ratings prior to mid-2002](#) ->[What does Morningstar, Inc. say its mutual fund stars can do?](#) ->[What does Morningstar, Inc. say its mutual fund stars cannot do?](#) ->[Simplifying investment decision making can be taken too far](#) ->[High Morningstar Ratings can lure you into funds with costly sales loads](#) ->[How stable have Morningstar Ratings for mutual funds been over time?](#) ->[What the instability of mutual fund Morningstar Ratings means for long-term investors – Commentary](#) ->[Does it pay to trade when the Morningstar Rating of a mutual fund changes?](#) ->[What might be wrong with buying a mutual fund with a 4 or 5 star Morningstar Rating?](#) * The Morningstar Rating is a trademark of Morningstar, Inc. The Morningstar Rating has also been referred to in the media as the Morningstar stars, the star rating, the star rating system, etc.

1) <http://www.morningstar.com> and <http://datalab.morningstar.com> (Note that morningstar.com is a website for individual investors, and datalab.morningstar.com is a website for institutional and advisor clients.)

2) Christopher R. Blake and Matthew R. Morey. "Morningstar Ratings and Mutual Fund

Performance.” Journal of Financial and Quantitative Analysis, Vol. 35, No. 3, September 2000: 451-483

3) Ibid, page 481

4) Ibid, page 482