

## survivor bias study

*Resource Consulting Group is a founding member of Zero Alpha Group (ZAG). We wanted to share the results of a recent study done by one of the ZAG members. The study has received national attention in numerous publications, including [The Orlando Sentinel](#).*

- ***Hidden Bias in Morningstar Data "Systematically and Significantly" Overstates Managed Mutual Fund Performance***
- ***ZAG Analysis Makes Strongest Case Yet for Low-Cost Passive Indexing***
- ***"Survivor Bias" Distorts Returns in 41 of 42 Morningstar Categories Over 10-Year Period***

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More bad news for actively managed mutual funds: A "survivor bias" in the Morningstar mutual fund data relied upon by most individual investors and financial advisors has the effect of "systematically and significantly" overstating the performance of actively managed mutual funds relative to their related indexes for the 10-year period from 1995-2004, according to a major new study released in March of 2006 by Savant Capital Management Inc. of Rockford, Illinois and the Zero Alpha Group (ZAG).

According to the study, when the little-understood "survivor bias" factor is taken into account, actively managed mutual funds in **all** nine of the Morningstar Principia "style boxes" lagged their related indexes for the 10-year period. In all but one of the 42 narrower Morningstar fund categories, the survivor bias effect worked to inflate fund returns. The Savant Capital/ZAG analysis also shows that the purging of the weakest funds from the Morningstar database boosted apparent returns on average by 1.3 percent per year from 1995-2004.

Report co-author Brent Brodeski, who is the managing director and a financial advisor at Savant Capital Management, Inc. in Rockford, Illinois said: "The mutual fund industry systematically and significantly overstates fund performance in a way that makes actively managed mutual funds look much more competitive with indexes than is actually the case. Very few investors know about survivor bias, but it should be a major concern. What we are really looking at here are 'juiced' mutual fund performance numbers creating a misleading picture that actively managed mutual funds are somewhat competitive with indexing."

As the ZAG report explains, "survivor bias" is a kind of grade inflation for mutual funds that occurs when the funds with the worst performance disappear from the database while strong performers move forward. The result: Skewed performance numbers make the remaining active managers look better since poor performers vanish before they can drag down the overall performance numbers.

For example, the ZAG study shows that the Morningstar "Mid Blend" category returned a whopping cumulative 72 percent **less** than Morningstar data would suggest for the 10-year study period. The Corporate High Quality Fund category demonstrated the least survivor bias with 0.4% cumulative return difference. The largest evidence of survivor bias exists in the Aggressive Growth Fund category at 116 percent. Even when survivor bias is ignored, only the Morningstar Small Growth managers outperformed its index ... and, even then, only for the extraordinary "tech boom" portion (1995-1999) of the study period.

Commenting on the new Savant Capital/ZAG report, Pat Beaird, co-founder and president of BHCO Capital Management, Inc. in Dallas, Texas said: "Though other researchers have shown that survivor bias exists and that indexing is superior to active management, this analysis is the first to strongly suggest that Morningstar data - the main data source relied upon by individual investors and many financial professionals - effectively overstates real historical returns and does so on a significant basis. This information needs to be considered very carefully by every serious-minded investor and financial professional. People who are relying on actively managed mutual funds must now ask this question: Is my investment strategy based on an assumption fueled by biased data?"

Another ZAG member, Glenn G. Kautt, president, chairman and chief investment officer of The Monitor Group, Inc. in McLean, Virginia said: "It is crystal clear from this report survivor bias is pervasive in industry mutual fund data - particularly the performance data for equity funds. Given the extent of survivor bias in commonly published data, investors should be wary of the value of peer group, fund objective and category data. When properly measured, active managers fail in nearly every fund category. The message here is simple: Investors should do the smart thing and pursue low-cost passive investment strategies."

Study co-author Amy Barrett, a portfolio manager at Savant Capital said: "Active managers persist in arguing that they add value, citing various 'anomalies' that supposedly show that certain market segments remain 'inefficient'. This study demonstrates that when properly measured - that is, using proper benchmarks, adjusting for survivor bias, and looking at time periods that span complete market cycles - nearly all the presumed 'anomalies' that supposedly favor active managers disappear. Furthermore, it appears that the few remaining 'anomalies' may simply be unresolved measurement challenges as opposed to manager skill."

For full findings from the Zero Alpha Group study, go to <http://www.zeroalphagroup.com>.

## **METHODOLOGY**

The study period looked at Morningstar Principia Mutual Fund data for the 10-year period from January 1, 1995 to December 31, 2004. This period represents a full market cycle, including boom, bust and recovery periods. The period studied eliminates most common biases often introduced by style, size, geographic, market cycles, currency and sector factors. Researchers compared the data annually, over two five-year periods (1995-1999 and 2000-2004) and for the full 10-year period.

The analysis of 42 of the Morningstar mutual fund categories included U.S. domestic active equity managers and the corresponding indexes for Morningstar's broader "style boxes": Large Growth, Large Blend, Large Value, Mid Growth, Mid Blend, Mid Value, Small Growth, Small Blend and Small Value. Morningstar Principia Mutual Fund data is available in the CD-Rom format dating back to 1992, with 1994 being the first year for which full style box data is available.

## **ABOUT ZERO ALPHA GROUP**

Founded in 1995, ZAG is today an international network of nine independent investment advisory firms that manage over \$6 billion in assets. Members of the group are committed to providing objective, long-term private wealth management solutions to investors, focusing on asset allocation and a structured, quantitative approach to investing. We all share a common philosophy about investing and client service, a commitment to passive, tax-managed investment strategies while providing an independent financial planning solution for investors.