

The Overlooked Persistence of Active Outperformance

By Joseph V. Amato, Peter D’Onofrio, and Alessandra Rago

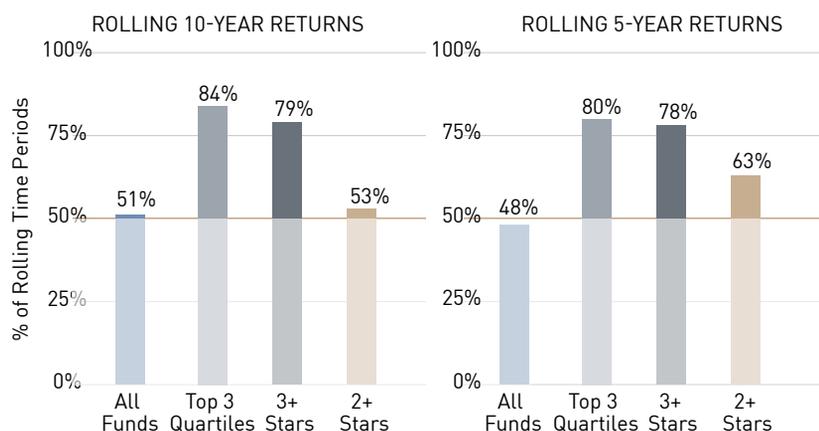
With stock markets fueled by extraordinary central bank intervention in the wake of the Great Recession, passive equity strategies have seen great success in terms of performance, fund flows, and press coverage. Often overlooked in the haste to declare a victor in the active/passive debate, however, is the fact that active outperformance has persisted across a wide swath of managers over various time periods and market regimes (see figure 1). This article discusses the following:

- When performance is examined through a lens that better reflects investor experience, active managers have been much more successful over the past decade than is commonly realized.
- Instead of comparing the performance of an index against an entire universe of active strategies, it’s appropriate to reframe the conversation to include only those managers in the top three quartiles of performance and thus eliminate a small cohort of poorly performing funds unlikely to attract significant investment flows. This comparison finds that more than 50 percent of U.S. equity active managers have beaten the S&P 500 net of fees over the 10-year period ended December 2016.
- Rolling returns—rather than the static measurement periods favored by passive’s supporters—can offer a larger spectrum of performance over time and better reflect investor buying and selling behavior.

Figure 1

ACTIVE OUTPERFORMANCE CAN STILL BE FOUND

PERCENTAGE OF TIME PERIODS IN WHICH U.S. LARGE BLEND ACTIVE FUNDS HAVE BEATEN THE S&P 500 INDEX AFTER FEES, JANUARY 1997 THROUGH DECEMBER 2016



Source: Morningstar. Morningstar category net average annualized return covering 121 (rolling 10-year returns) or 181 (rolling five-year returns) time periods (January 1997 through December 2016). Represents actively managed open-end U.S.-domiciled funds, including funds that have been liquidated. Performance is based on funds’ oldest share class. Quartile rank is based on each 10- or five-year rolling month-end time period. Star rating is based on funds’ “Overall Rating” as of each 10- or five-year rolling month-end time period. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. Past performance is no guarantee of future results.

Fueled by extraordinary global central bank intervention, equity markets have soared since their 2009 trough, leading to conditions unsupportive of traditional capitalism and active management, including high levels of correlation and low levels of dispersion. Stock correlations within the S&P 500, for example, have spiked nearly 20 percent since May 2009, depriving active managers of the opportunity to distinguish winners from losers through fundamental research. Post-crisis market conditions also suggest that the past decade is not an ideal time frame over which to gauge an investment’s potential for long-term success across market cycles. We think central bank

policy normalization could inspire a normalization in market dynamics.

THE PASSIVE ARGUMENT: MISSING PIECES

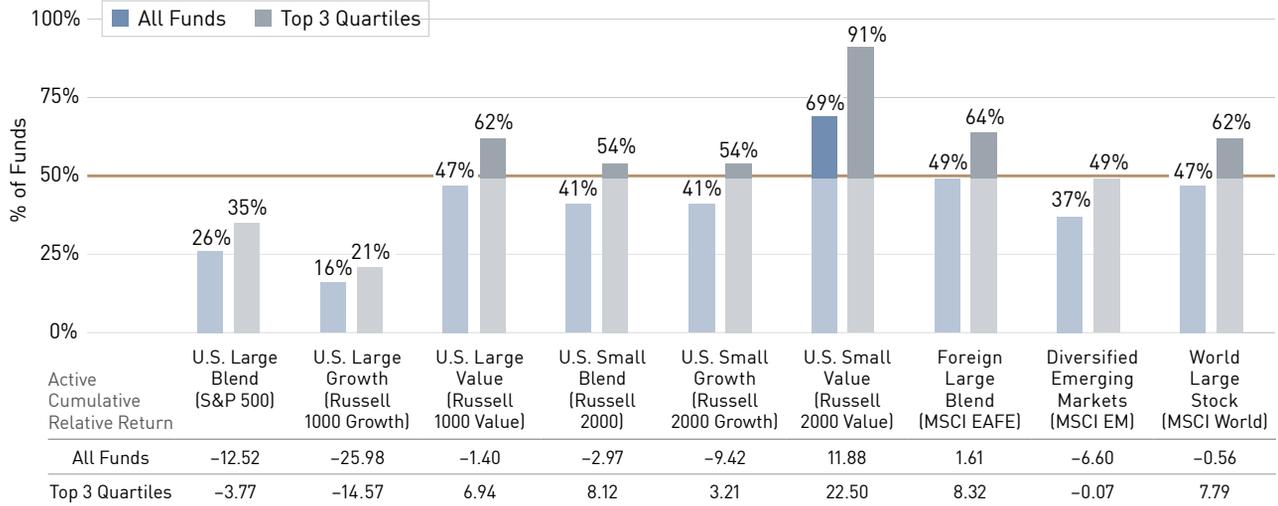
Proponents of passive investing over the past decade have maintained that an active approach does not provide alpha after fees. Often presented alongside this claim is evidence that fewer than 50 percent of active managers outperform their benchmarks after fees over some static period of time.

The passive argument ignores a number of important investor-specific considerations:

Figure 2

A TYPICAL PASSIVE ARGUMENT, RECONSIDERED—10 YEARS

PERCENTAGE OF ACTIVE FUNDS THAT HAVE OUTPERFORMED THE INDEX AFTER FEES, JANUARY 2007 THROUGH DECEMBER 2016

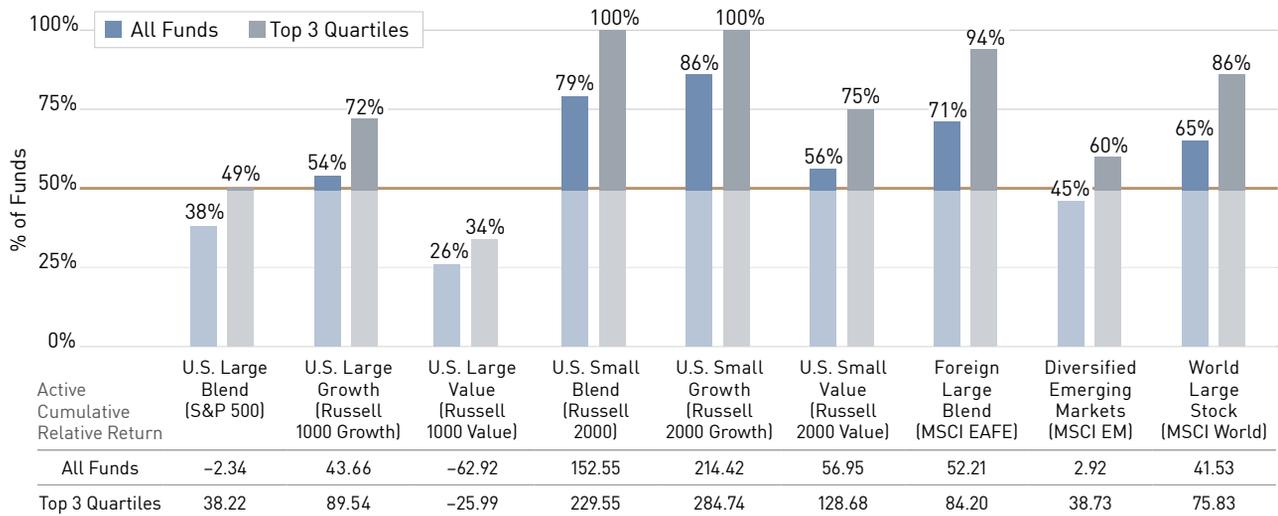


Source: Morningstar. Represents actively managed open-end U.S. domiciled funds. Performance is based on funds' oldest share class. Quartile rank is based on the annualized 10-year return. "Active Cumulative Relative Return" is based on the Morningstar category averages. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. Past performance is no guarantee of future results.

Figure 3

A TYPICAL PASSIVE ARGUMENT, RECONSIDERED—20 YEARS

PERCENTAGE OF ACTIVE FUNDS THAT HAVE OUTPERFORMED THE INDEX AFTER FEES, JANUARY 1997 THROUGH DECEMBER 2016



Source: Morningstar. Represents actively managed open-end U.S. domiciled funds. Performance is based on funds' oldest share class. Quartile rank is based on the annualized 20-year return. "Active Cumulative Relative Return" is based on the Morningstar category averages. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. Past performance is no guarantee of future results.

● The bull market that began in 2009 has been significant in both gain and duration. A view across market regimes—not just raging bulls—can show more clearly how different investment approaches may perform in less-frothy environments. Meanwhile, the extraordinary circumstances fueling this market—and their

impact on correlation and dispersion—are unlikely to persist indefinitely.

● Static time periods reflect only a snapshot of an investment's performance. Rolling measurement periods, in contrast, consider a greater volume of performance data and may better depict an investor's experience over

time. Think still photography versus video.

Figures 2 and 3 depict a typical argument for passive investing—as well as what happens once we remove the poorest performers within each equity category from the comparison. We would argue that a static time period,

particularly one that fails to capture a full market cycle, isn't ideal in evaluating an investment, but it is telling how the relative performance of active and passive shifts with the focus to only funds with a realistic hope of attracting assets.

Active managers sometimes also can provide staggering benefits to long-term investors. The 10-year chart (figure 2) highlights active management's difficulties in the present market environment, but the 20-year chart (figure 3) suggests that active has performed quite well over periods that encompass multiple market cycles. Eliminating the bottom quartile of performers provides an even starker contrast between active and passive strategies' historical returns.

REFRAMING THE DEBATE

We think it's important to frame the active/passive comparison to reflect the nuances of an average investor's experience over time. Here are a few critical elements to any real-life comparison of active and passive performance:

The analysis should emphasize the funds that investors tend to favor.

Fund flows going back to 2007, depicted in figure 4, show that investors overwhelmingly have directed their investment flows to top-rated funds

(i.e., those rated four or five stars by Morningstar) and that this trend has intensified since the Great Recession.

Performance should be evaluated over multiple market cycles. A measurement period beginning in January 1997, for example, captures both bull and bear market periods, including the technology and financial bubbles.

The more data the better. Performance should be considered over many time periods instead of only one that may differ dramatically from the norm. For example, rolling five-year and 10-year periods beginning in January 1997 capture 181 and 121 unique time periods, respectively, providing a more comprehensive view of an investment's performance over the past 20 years.

Considering the historical fund flows depicted in figure 4, we sought to narrow the fund universe to better represent the product set investors have targeted. Most of the past decade has been challenging for active managers in aggregate, but as shown in figure 1, removing only a small subset of the poorest-performing funds results in a universe whose average return beat the index after fees more often than not.

Eliminating that small group is only one way to reframe the active/passive

argument. Figures 5 and 6 also incorporate the impact of rolling returns on relative performance over a 20-year period that captures up, down, and sideways markets, and any distortions that have emerged over time.

Figure 5 considers active managers' relative performance versus their benchmarks based on 10-year rolling returns since 1997, capturing 121 unique measurement periods, revealing the following:

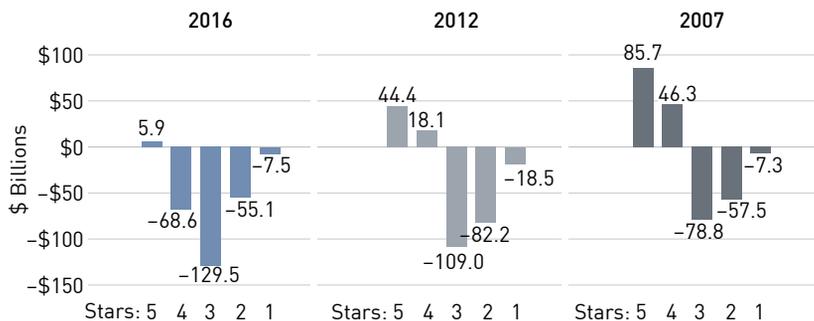
- Even when every fund within each category was included in the comparison, active managers beat their respective indexes after fees more often than not in all but two categories.
- Removing the bottom quartile in each category improved active's success rates significantly. Active managers outperformed their respective indexes after fees more than half the time in all nine categories, with managers in eight categories beating the index in at least 75 percent of the 121 measurement periods.

As shown in figure 6, five-year rolling returns, capturing 181 unique measurement periods since December 2016, tell a similar story:

- Even though the universe as a whole didn't do as well over the shorter evaluation periods, the top 75 percent of active managers outperformed their respective indexes after fees more often than not in all nine categories.
- Even more compelling, focusing on the top 75 percent of managers in each category shows that active managers outperformed their respective indexes after fees at least 80 percent of the 181 time periods in this scenario in six of the nine categories.

In short, when performance is considered across rolling time periods, actively managed funds have provided strong returns versus their respective indexes over multiple market cycles.

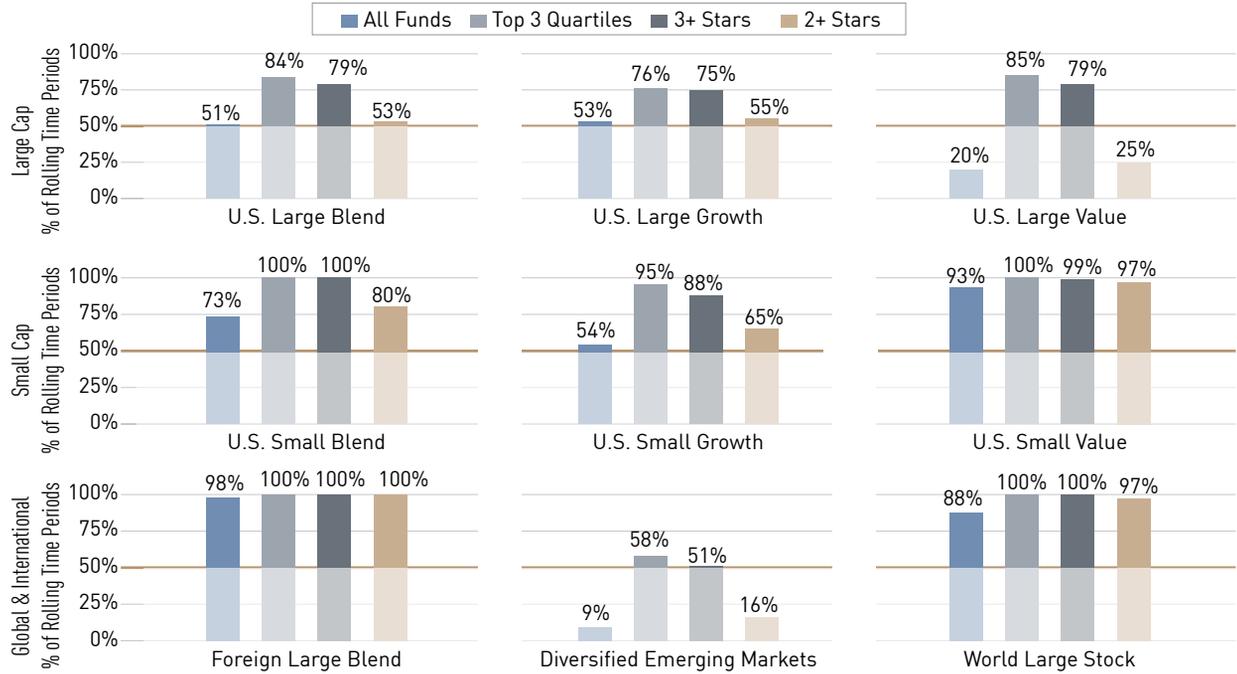
Figure 4 INVESTORS HAVE FAVORED HIGHLY RATED FUNDS
ACTIVE FUND FLOWS BY MORNINGSTAR RATING™



Source: Morningstar. Represents actively managed open-end U.S.-domiciled funds including funds that have been liquidated. Includes the following Morningstar Categories: U.S. Fund Large Blend, U.S. Fund Large Growth, U.S. Fund Large Value, U.S. Fund Small Blend, U.S. Fund Small Growth, U.S. Fund Small Value, U.S. Fund Diversified Emerging Markets, U.S. Fund World Large Stock, and U.S. Fund Foreign Large Blend.

Figure 5

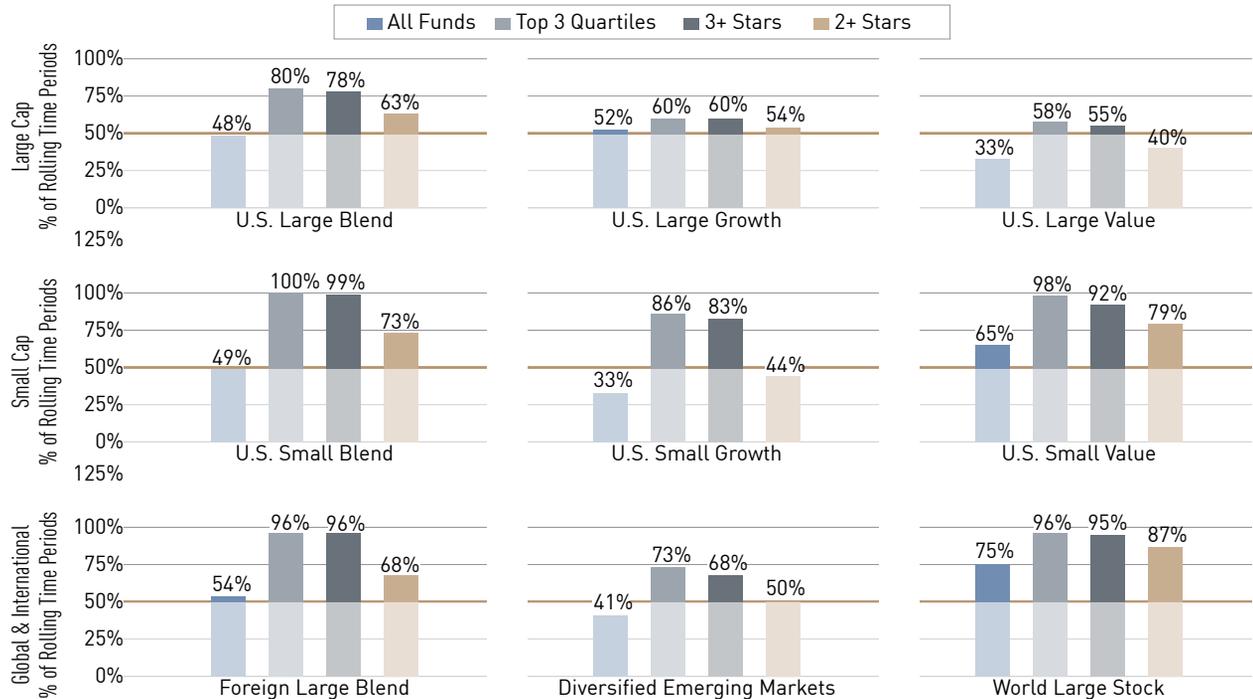
AN ADJUSTED OPPORTUNITY SET TELLS A DIFFERENT STORY OVER ROLLING 10-YEAR PERIODS ...
 PERCENTAGE OF TIME PERIODS AVERAGE MORNINGSTAR CATEGORY OF ACTIVE FUNDS OUTPERFORMED ITS INDEX AFTER FEES BASED ON ROLLING 10-YEAR MONTHLY RETURNS, JANUARY 1997 THROUGH DECEMBER 2016 (121 TIME PERIODS)



Source: Morningstar. Morningstar category net average annualized return covering 121 time periods (January 1997 through December 2016). Represents actively managed open-end U.S. domiciled funds, including funds that have been liquidated. Performance is based on funds' oldest share class. Quartile rank is based on each 10-year rolling month-end time period. Star rating is based on funds' "Overall Rating" as of each 10-year rolling month-end time period. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. Past performance is no guarantee of future results.

Figure 6

... AND ROLLING FIVE-YEAR PERIODS
 PERCENTAGE OF TIME PERIODS AVERAGE MORNINGSTAR CATEGORY OUTPERFORMED ITS INDEX AFTER FEES BASED ON ROLLING 5-YEAR MONTHLY RETURNS, JANUARY 1997 THROUGH DECEMBER 2016 (181 TIME PERIODS)



Source: Morningstar. Morningstar category net average annualized return covering 181 time periods (January 1997 through December 2016). Represents actively managed open-end U.S. domiciled funds, including funds that have been liquidated. Performance is based on funds' oldest share class. Quartile rank is based on each five-year rolling month-end time period. Star rating is based on funds' "Overall Rating" as of each five-year rolling month-end time period. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. Past performance is no guarantee of future results.

THE IMPACT OF MASSIVE CENTRAL BANK STIMULUS— AND ITS UNWIND

Highly stimulative monetary policy in response to the financial crisis has been fueling a rise in equity markets while also suppressing the dynamics

that provide opportunities for active outperformance.

With the global economy and financial markets on the verge of collapse in 2007, governments worldwide introduced massive stimulus to fend off disaster. The

Fed slashed its overnight rate from 5.25 percent in September 2007 to near zero by the end of 2008. It also initiated three rounds of quantitative easing from March 2009 to October 2014, during which it purchased more than \$2.5 trillion of U.S. Treasuries, agency debt, and mortgage-backed securities, expanding its balance sheet to nearly \$4.5 trillion.

A NOTE ON MORNINGSTAR RATINGS™

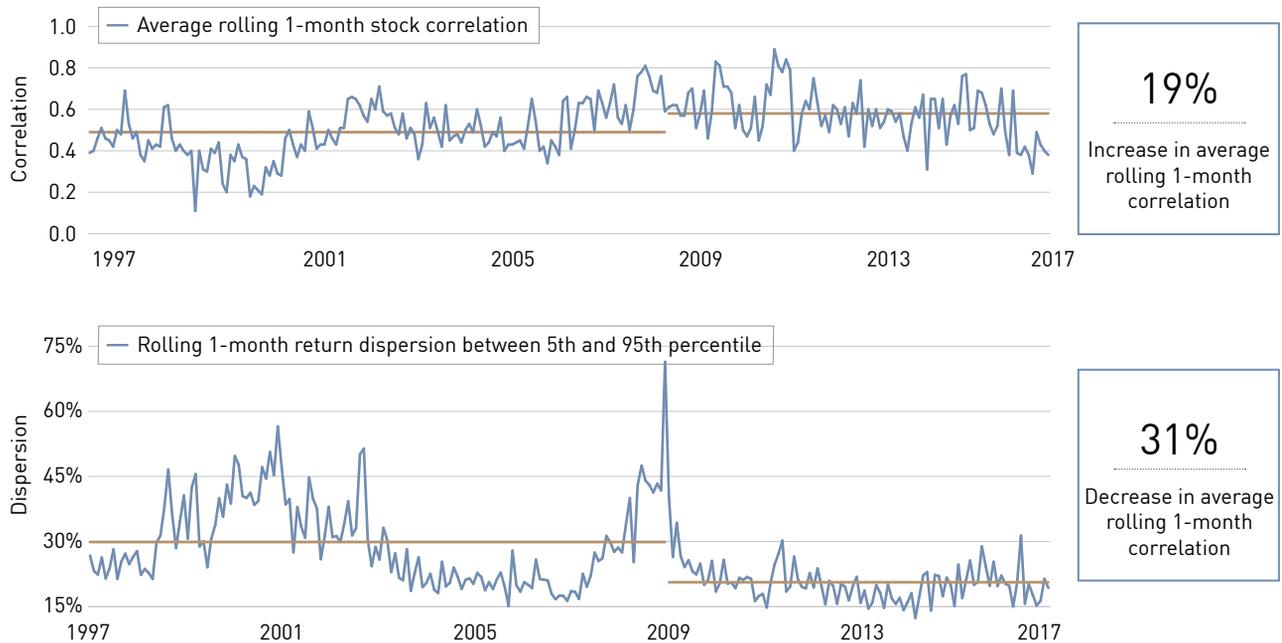
Morningstar launched its star rating system in 1985. In assessing the star rating system's usefulness as a starting point for research, Morningstar research found that, notwithstanding inherent limitations due to an emphasis on past performance, its rating system can be a useful starting point because it apparently "points investors toward cheaper funds that are easier to own and likelier to outperform in the future, qualities that correspond with investor success."^{*} Although Morningstar Ratings™ are not predictive of future performance, its research suggested that "higher-rated funds tend to suffer less downside volatility while living longer than lower-rated funds" and that "in general high-rated funds generated higher average excess returns (versus their category average peer) than lower-rated funds" in subsequent 30- and 60-month rolling periods.^{*}

* Jeffrey Ptak, CFA®, "The Morningstar Rating for Funds: A Good Starting Point for Investors?" Morningstar.com, September 5, 2017. Among other things, the Morningstar research sought to evaluate the success of its rating system based on how funds performed subsequent to receiving a star rating, with an interest in knowing the extent to which rated funds' returns surpassed (or lagged) the average for the category over a subsequent event horizon. The research included all classes of U.S. open-ended funds, including dead funds. The level of risk taken in generating excess returns was not considered.

By reducing the cost of capital to near zero, Fed stimulus made risk assets more attractive on a relative basis and distorted equity market dynamics—including correlation and dispersion—that allow managers to distinguish among stocks through fundamental research (see figure 7). Correlation measures the degree to which stocks move in relation to one another, and dispersion tracks the magnitude of relative performance. Low correlation (an abundance of stocks whose movements are not closely aligned) and high dispersion (wide differences between the best and worst performing stocks within an index) afford greater opportunity for fundamental active management to identify

Figure 7

CORRELATION AND DISPERSION TRENDS POST-CRISIS HAVE SUPPORTED PASSIVE JANUARY 1997 THROUGH JUNE 2017



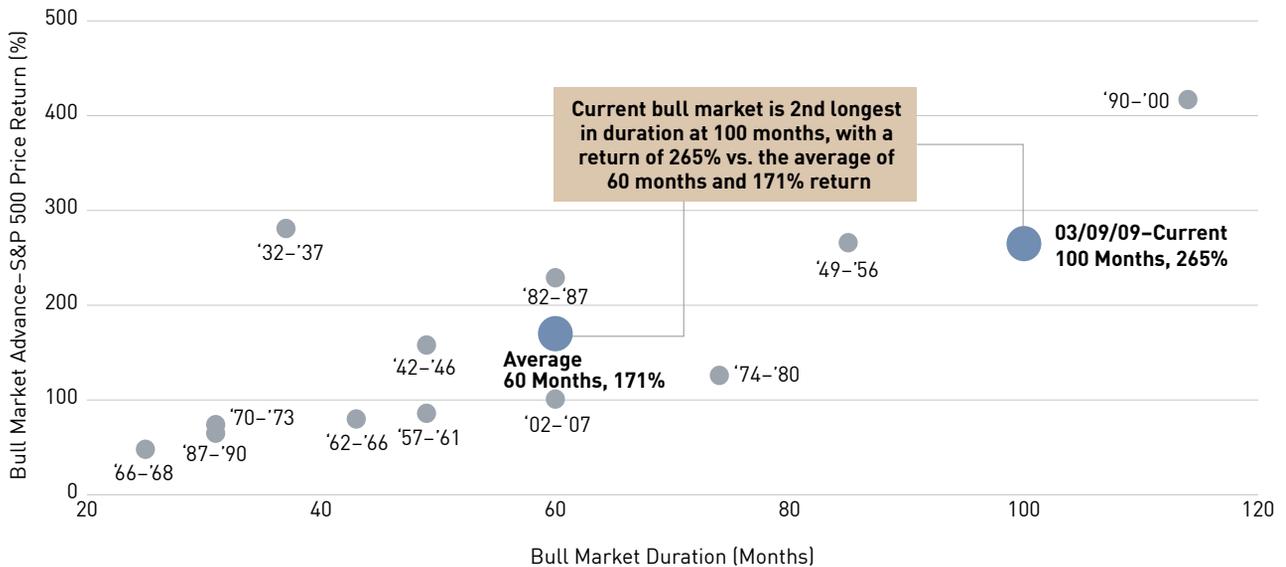
Source: FactSet.

Note: Correlation is represented by average one-month rolling stock correlation among securities in the S&P 500 Index. Dispersion is represented by one-month rolling stock return dispersion between the 5th percentile and 95th percentile securities in the S&P 500 Index.

Figure 8

THE MARKET'S LONG RECOVERY

COMPARISON OF S&P 500 BULL MARKETS JANUARY 1932 THROUGH JULY 2017

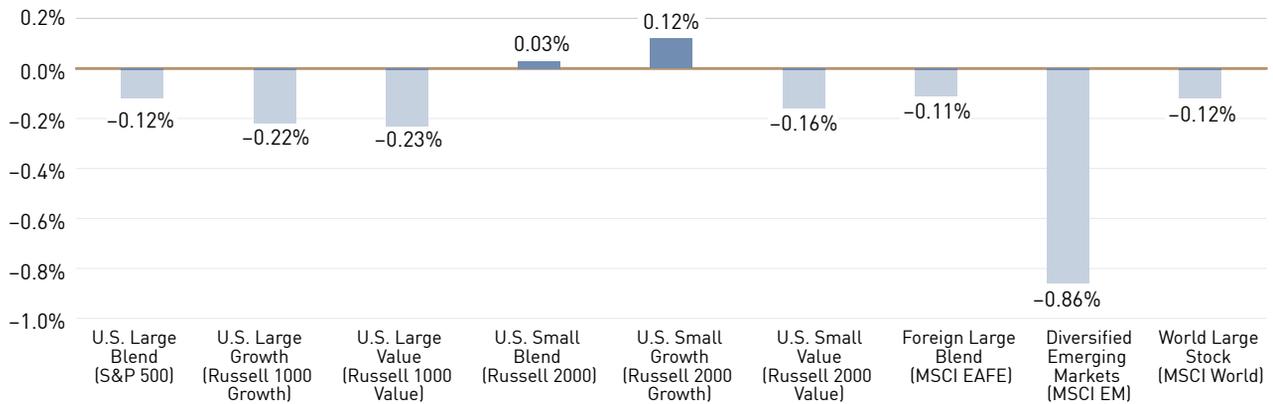


Source: Strategies Research Partners. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. Past performance is no guarantee of future results.

Figure 9

ETFs HAVEN'T ALWAYS KEPT PACE

FIVE-YEAR ANNUALIZED RELATIVE RETURN OF THE LARGEST ETF IN EACH CATEGORY



Source: FactSet. Represents spread versus the index. Largest ETF was based on assets under management in the Morningstar category as of June 30, 2017. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. Past performance is no guarantee of future results.

winners from losers. Trends in these metrics since the financial crisis have favored passive:

- Average rolling one-month correlation of stocks within the S&P 500 Index rose to 0.58 from May 2009 through June 2017 compared to an average of 0.49 from January 1997 through April 2009—a 19-percent increase.
- Average rolling one-month stock return dispersion between the

5th percentile and 95th percentile securities in the S&P 500 Index fell to 20.6 percent from May 2009 through June 2017 compared to an average of 29.9 percent from January 1997 through April 2009—a 31-percent decline.

Post-recession, stocks increasingly moved in lock step directionally and realized less difference in price performance. This meant more winners and

fewer losers—and a much more difficult environment for individual security selection.

These conditions provided the backdrop for the second-longest bull market in history, as seen in figure 8, and the embrace of passive strategies in the process. Slow normalization of central bank policy, already underway, likely will result in an environment more supportive of active investment—one with increased market

volatility along with lower correlations and higher dispersions among stocks and sectors.

HAVE ETFS DELIVERED IN THIS PERFECT PASSIVE ENVIRONMENT?

You'd be hard-pressed to find a situation better suited to passive investing than the prevailing beta-driven market over the past eight-plus years. Despite significant tailwinds, however, achieving market-level returns via exchange-traded fund (ETF) investments has not been guaranteed, as shown in figure 9.

ETFs, like traditional mutual funds, charge management fees that detract from the products' net asset value and, in many instances, prevent an ETF from matching the performance of the index it tracks. They also incur shareholder transaction costs through brokerage commissions and/or bid-ask spreads—costs that take away from an investor's actual return even if not captured in an ETF-reported performance.

ASSET CLASS-SPECIFIC CONSIDERATIONS

LARGE-CAP EQUITIES

The top three quartiles of large-cap equities have performed very well versus the index, with all three styles (blend, growth, and value) beating their

benchmarks more often than not on both rolling five-year and 10-year return bases.

Large-cap equity markets tend to be efficient, but they are still susceptible to bubbles that at times leave passive investment strategies such as ETFs exposed to wildly overvalued sectors. Consider the most recent significant bubbles: technology in the late-90s and financials in the mid- to late-2000s (see figure 10).

EMERGING-MARKETS EQUITIES

With an investment universe covering more than 20 countries and 800-plus companies (as measured by the MSCI Emerging Markets Index), emerging-markets equities make up a diverse asset class. Unlike core U.S. equity products—which are assigned to one of nine Morningstar categories according to size and style—all emerging-market equities funds fall within a single bucket, resulting in a wide dispersion of performance, both relative to the benchmark and one another. As shown in figures 5 and 6, active emerging-market equities have had the most trouble outperforming the index.

Such market diversity also means that replicating an emerging-market equity index is a greater challenge for ETFs;

these products have struggled to keep up with both the index and active counterparts (see figure 11).

SMALL-CAP EQUITIES

Periods of low and/or falling interest rates—such as we've seen for the past 10 years or so—can inspire a spike in initial public offerings, and the vast majority of these untested business models populate the small-cap indexes.

Extremely low interest rates also have driven highly levered stocks to outperform as investor risk preferences shifted toward long-duration cash flow streams and higher-risk balance sheets.

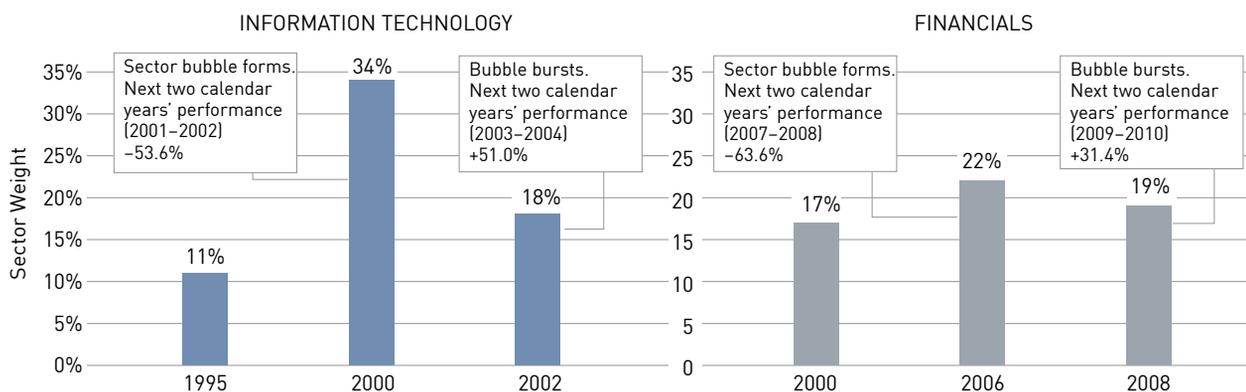
With only 9 percent of Russell 2000 companies carrying investment-grade debt ratings, most small-cap companies employ leveraged loans and high yield bonds for their debt financing. These kinds of debts' maturities are clustered around the five-year mark, leaving many of these companies exposed to rising interest rates as central bank policy normalizes.

More than 30 percent of Russell 2000 companies are losing money, compared to the S&P 500's 10 percent. Unprofitable companies historically have underperformed profitable ones over the long term (see figure 12).

Figure 10

BURSTING BUBBLES CAN PUNISH THE PASSIVE INVESTOR

PEAK SECTOR WEIGHTINGS IN S&P 500 INDEX



Source: FactSet. Based on Global Industry Classification Standards (GICS) sectors and reflects maximum monthly sector weight for respective time period. Performance based on S&P 500 Information Technology Index and S&P 500 Financials Index. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. Past performance is no guarantee of future results.

CONCLUSION

Passive investments have thrived in recent years as extraordinary central bank intervention post-crisis fueled the rise of equity indexes and suppressed market dynamics that, under normal circumstances, can provide active managers with opportunities to distinguish among stocks through fundamental research.

Even so, alpha hasn't been as elusive as conventional wisdom makes it out to be. In fact, reframing the active/passive

comparison to better reflect the average investor's experience—simply by cutting poor performers unlikely to be considered for investment and employing rolling returns data across full market cycles—reveals that despite considerable headwinds, active outperformance has persisted across a wide swath of managers and over a variety of time periods and market regimes. ●

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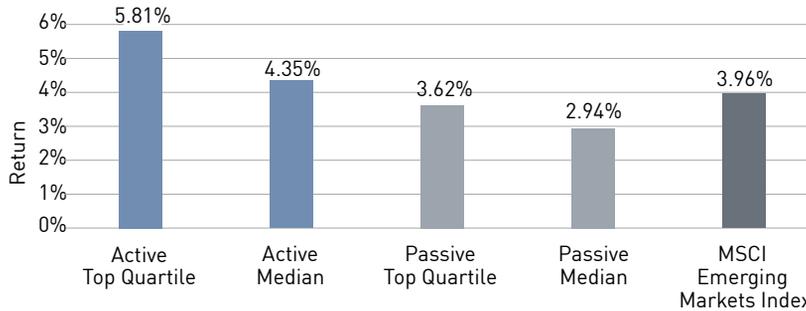
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CONTINUING EDUCATION

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Figure 11

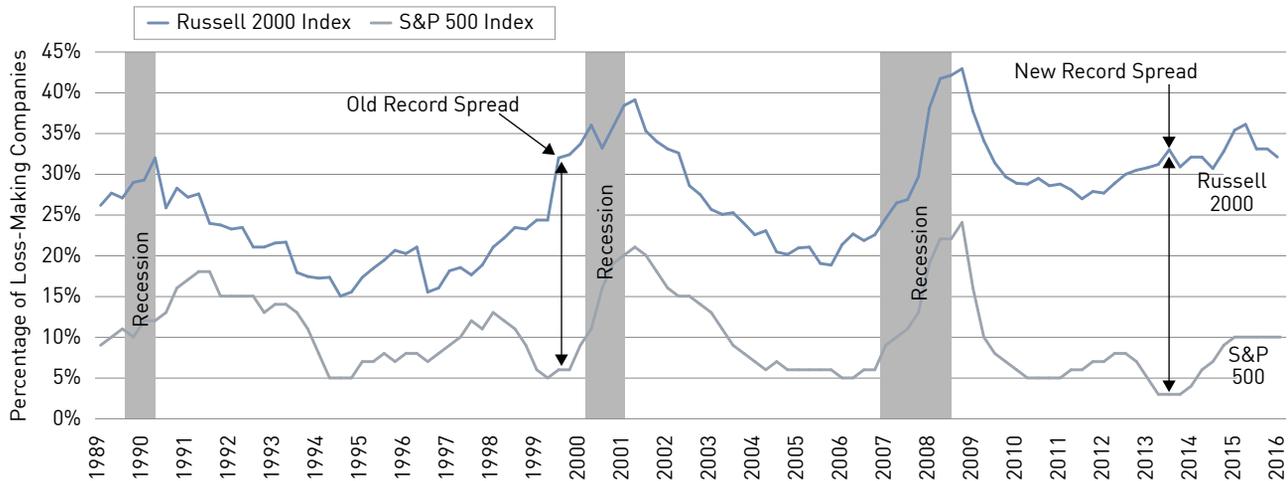
ACTIVELY MANAGED EMERGING MARKETS EQUITY FUNDS HAVE OUTPERFORMED THEIR PASSIVE COUNTERPARTS
FIVE-YEAR ANNUALIZED RETURNS



Source: Morningstar. The universe for the chart is all funds in the Morningstar Diversified Emerging Markets category. Data as of June 30, 2017. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. Past performance is no guarantee of future results.

Figure 12

THE RUSSELL 2000 CONTAINS A SIGNIFICANT AND GROWING NUMBER OF COMPANIES REPORTING LOSSES
PERCENTAGE OF LOSS-MAKING COMPANIES IN INDEX (BASED ON TRAILING GAAP EARNINGS)



Source: Furey Research Partners, FactSet. Data as of December 31, 2016. Note: The % of loss-making companies is calculated by determining the number of benchmark holdings that have negative trailing generally accepted accounting principles (GAAP) earnings and dividing that total by the total number of names in the overall benchmark. This information is calculated for both the Russell 2000 and the S&P 500 on a quarterly basis.