

Underappreciated Benefits of Active Management

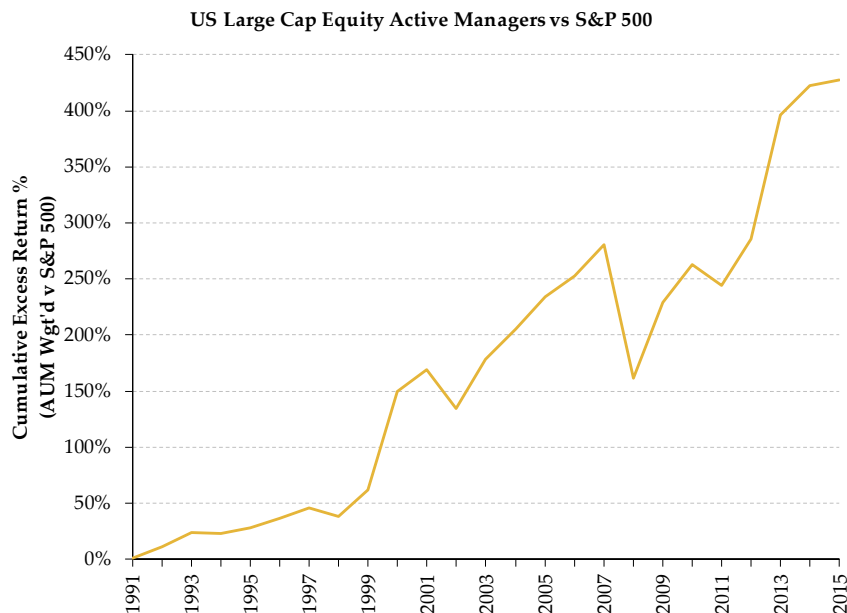
The environment for generating outperformance should improve as cyclical size performance and uncertainty driven risk-aversion headwinds subside.

- Active managers have unique capabilities that enable them to generate long-term outperformance.
- Active management relative performance is cyclical – periods of underperformance are normal.
- Recent active underperformance has been overstated and misunderstood.
- Size performance leadership is the most significant driver of active manager performance.
- Risk aversions impact on active/passive inter-fund flows drives cyclical performance of active positioning.

Active vs Passive

Active management has historically generated long-term market outperformance (Exhibit 1). Active managers have the unique ability to fundamentally, opportunistically and defensively position portfolios. Respectively, this gives the opportunity to generate outperformance from the *Sentiment Gap* between expectations and reality, *Categorical Performance Cyclical*, and *Downside Protection* during market downturns.

Exhibit 1: Active Manager Capabilities Generate Long-Term Alpha



Shows cumulative AUM weighted relative returns of US Large Cap Equity active manager universe vs S&P 500, from 12/31/1990 through 12/31/2015, based in USD. See "Methodology Disclosure" for additional information. Source(s): eVestment Alliance and Fisher Investments Research.

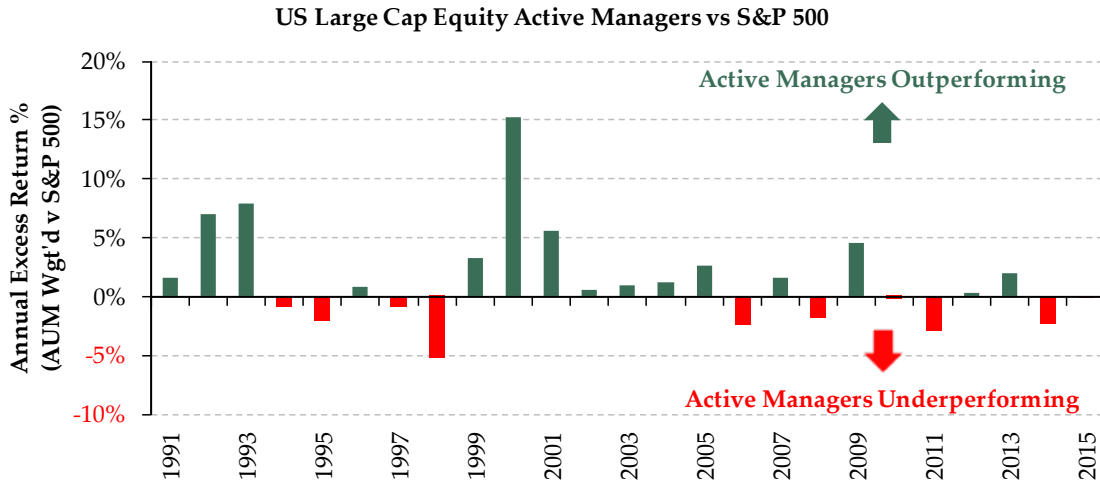
Passive funds are benchmark neutral and cannot utilize the same tools uniquely available to active managers. As a result, passive management guarantees *Long-Term Underperformance* against benchmarks, *Static Allocations* to benchmark subcategories (size/style/sector/etc.) and *Total Downside Exposure* during market downturns.

Active Performance is Cyclical

Similar to how bull/bear markets are normal experiences when investing for long-term growth, cycles of outperformance and underperformance are normal components of generating long-term active outperformance (Exhibit 2).



Exhibit 2: Cycles of Underperformance are Normal

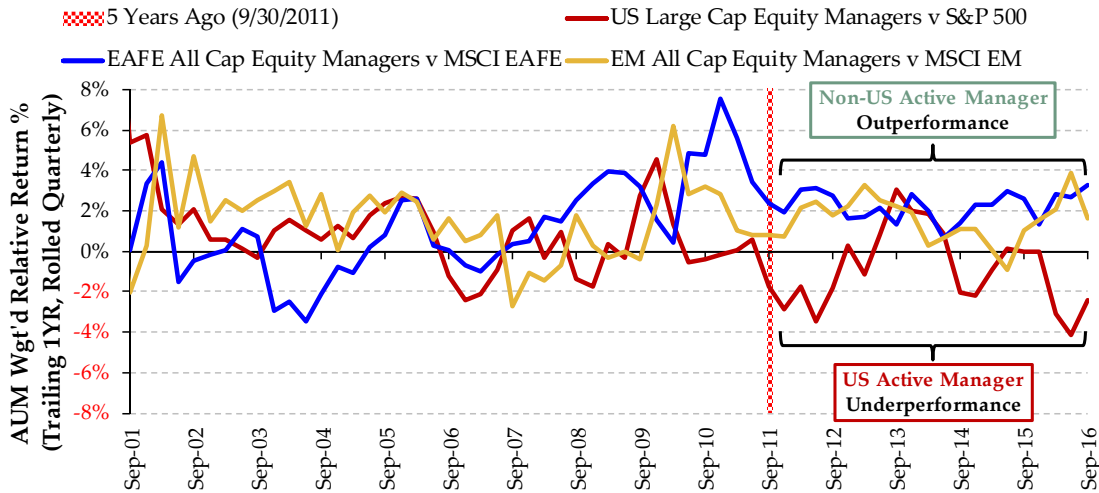


Shows annual AUM weighted relative returns of US Large Cap Equity active manager universe vs S&P 500, from 12/31/1990 through 12/31/2015, based in USD. See "Methodology Disclosure" for additional information. Source(s): eVestment Alliance and Fisher Investments Research.

Recent Active Underperformance Has Been Overstated and Misunderstood

The recent active underperformance cycle within US Large Cap equity funds has been highlighted to evidence various perspectives on active manager underperformance, but this is not reflective of active performance more broadly. While active US equity managers underperformed over the last 5 years, non-US equity active outperformance has strengthened and remains consistent with historical averages (Exhibit 3).

Exhibit 3: AUM Weighted Relative Return – US Large Cap, EAFE All Cap, and EM All Cap Active Managers

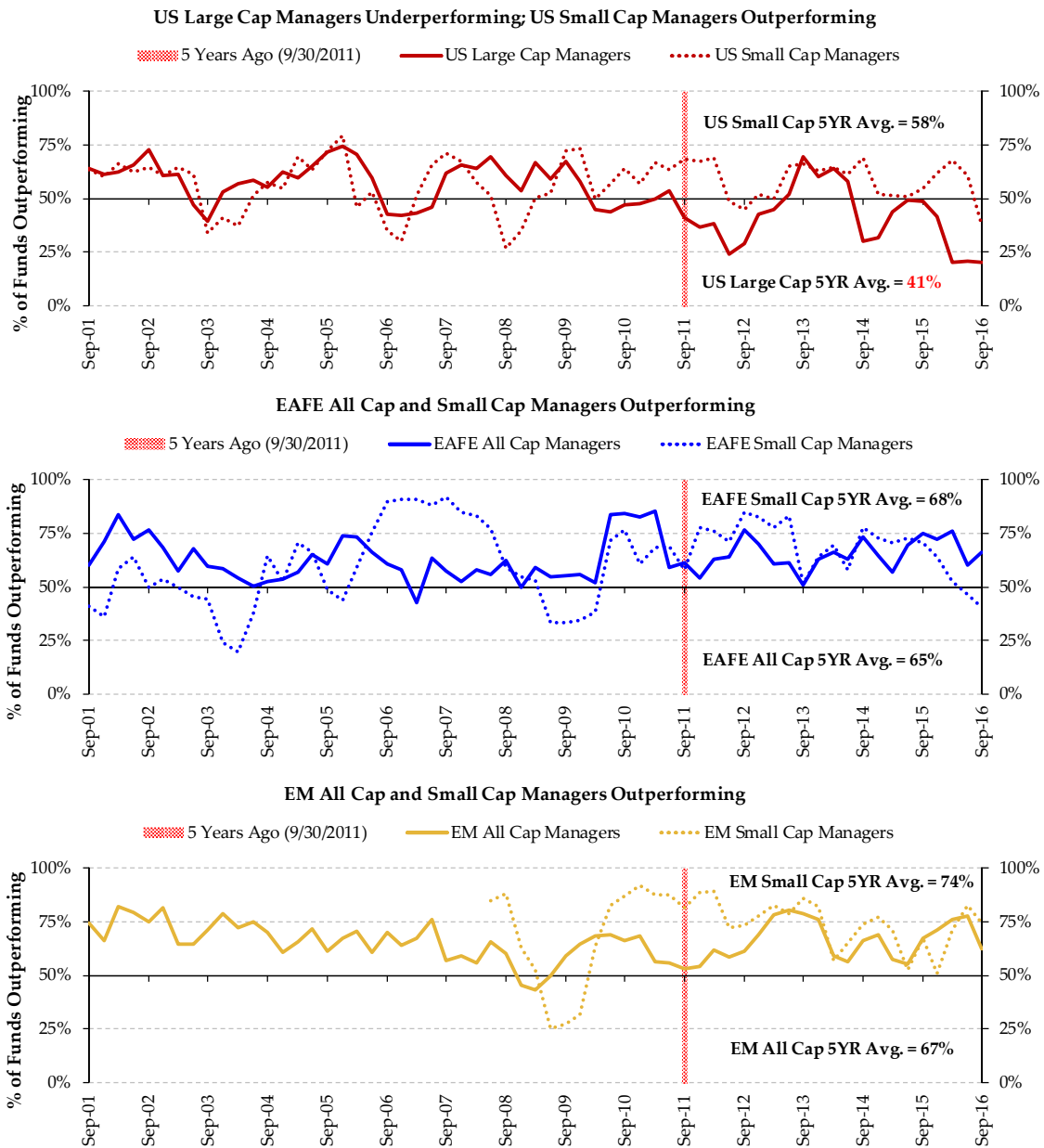


Shows trailing 1YR AUM weighted relative returns of the active equity manager universes vs each universe's respective benchmark indices, as indicated in the graph, from 9/30/2001 through 9/30/2016, rolled quarterly, based in USD. See "Methodology Disclosure" for additional information. Source(s): eVestment Alliance and Fisher Investments Research.

Furthermore, data shows the majority of active managers tend to outperform over time. In the last 5 years, only the US Large Cap active manager universe had a majority of funds underperform. In the same period, a majority of managers within the US Small Cap, EAFE All Cap, EAFE Small Cap, EM All Cap and EM Small Cap universes all outperformed (Exhibit 4).



Exhibit 4: Active Manager Universe Performance – % of Funds Outperforming (Trailing 1YR)



Shows % of active equity managers in each of the fund universes outperforming on a trailing 1YR basis relative to each universes respective benchmark, as indicated in the graphs, rolled quarterly, from 9/30/2001 through 9/30/2016, based in USD. See "Methodology Disclosure" for additional information. Source(s): eVestment Alliance and Fisher Investments Research.

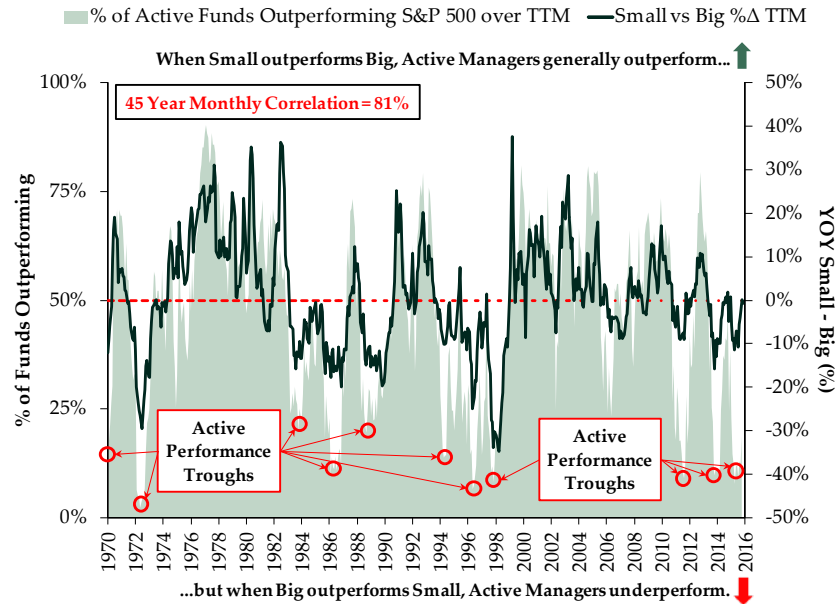
Size Performance Cyclicity

Size performance leadership is the most significant driver of active manager performance throughout market cycles. Many active managers fail to truly distinguish between large and mega cap stocks when purchasing big companies and also tend to keep selective exposure to smaller cap off-benchmark positions.

As most active managers are rarely positioned "big enough" when large/mega cap outperforms, it is not surprising to see that troughs of active manager outperformance (when less than 20% are outperforming) almost always correspond with periods of large/mega cap outperformance (Exhibit 5).



Exhibit 5: Active Management Performance and Size Cycles



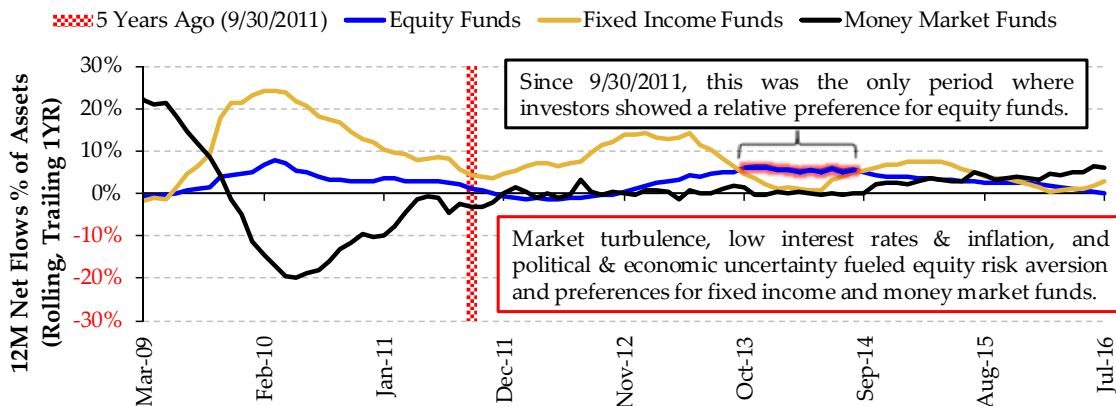
Shows % of active US funds outperforming v S&P 500 and relative returns of Russell 2000 v S&P 500 (Small vs Big), on a trailing 12 month basis, monthly, from 12/31/1970 through 10/31/2016, based in USD. See "Methodology Disclosure" for additional information. Source(s): Morningstar Direct, FactSet, Fama French and Fisher Investments Research.

Risk-Aversion Impacts Inter-Fund Flows and Active Performance

Asset flows drive asset class performance. Similar to equity markets, where cyclical inflows and outflows respectively drive bull and bear cycles, Active/Passive Inter-Fund Flows cyclically drive the performance of active positions. Specifically, "Net Passive Inter-Fund Flows" – when outflows from active funds correspond with inflows into passive funds – negatively impact the performance of active positioning.

Throughout this bull market, investors have been persistently risk-averse towards equities, reflected by their relative preference for other lower risk asset classes – i.e. Fixed Income and Money Markets (Exhibit 6).

Exhibit 6: Investor Preferences for Fixed Income and Money Market Funds



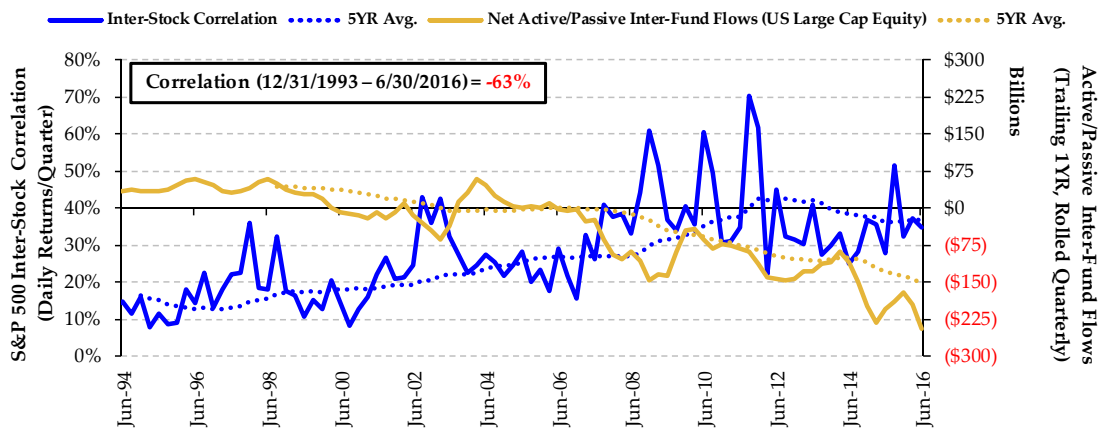
Shows trailing 12 month net fund flows % of assets, across funds within each investment category, monthly, from 3/31/2009 through 7/31/2016, based in USD. "Red" highlighted segments highlight instances where investors relatively preferred those asset classes to equities. See "Methodology Disclosure" for additional information. Source(s): Morningstar Direct and Fisher Investments Research.



In addition to investors' broader risk-aversion to equities, ongoing uncertainty also drove investor risk-aversion within the asset class itself – a lack of confidence in the financial industry along with uncertainty regarding the economic outlook resulted in an acute aversion to active-risk that drove relative preferences for passive risk amongst equity investors.

This created a significant cycle of *Net Passive Inter-Fund Flows*, where investors reduced active risk by shifting assets to passive managers, causing stock correlations to rise as assets are linearly reinvested in index constituents with benchmark neutral allocations (Exhibit 7).

Exhibit 7: Net Shift to Passive Funds Causes Higher Inter-Stock Correlations



Shows quarterly trailing inter-correlation of S&P 500 constituents' daily returns and active minus passive trailing 12 month net fund flows within the US Large Cap Equity universe, quarterly, from 6/30/1994 through 6/30/2016, based in USD. See "Methodology Disclosure" for additional information. Source(s): FactSet, Morningstar Direct and Fisher Investments Research.

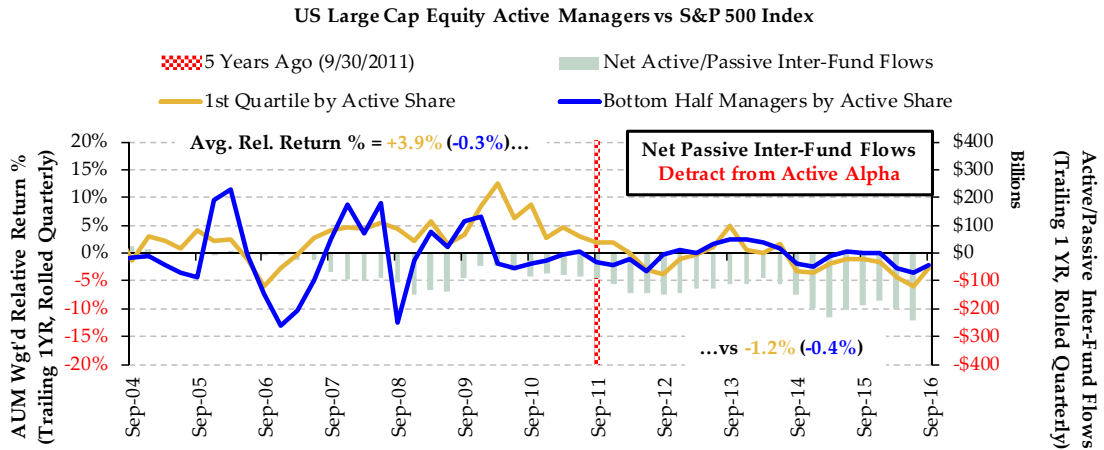
The concurrence of active outflows and passive inflows acutely detracts from active manager relative performance by negatively impacting the performance of active positioning in two ways:

- Outflows from active funds constitute a broad selling of active positioning (overweights and off-benchmark holdings), negatively impacting the performance of those positions and the active managers holding them.
- Subsequent inflows into passive funds constitute a broad purchasing of non-active positioning (index constituents and neutral allocations), benefitting the performance of non-active positioning and detracting from active manager alpha derived from active underweights.

These negative active performance impacts indicate a significant period of Net Passive Inter-Fund Flows can cause active underperformance and most detrimentally impact the most-active (highest active share) managers – those most exposed to net passive inter-fund flow active performance risks (Exhibit 8).



Exhibit 8: Net Passive Inter-Fund Flows Negatively Impact Active Performance

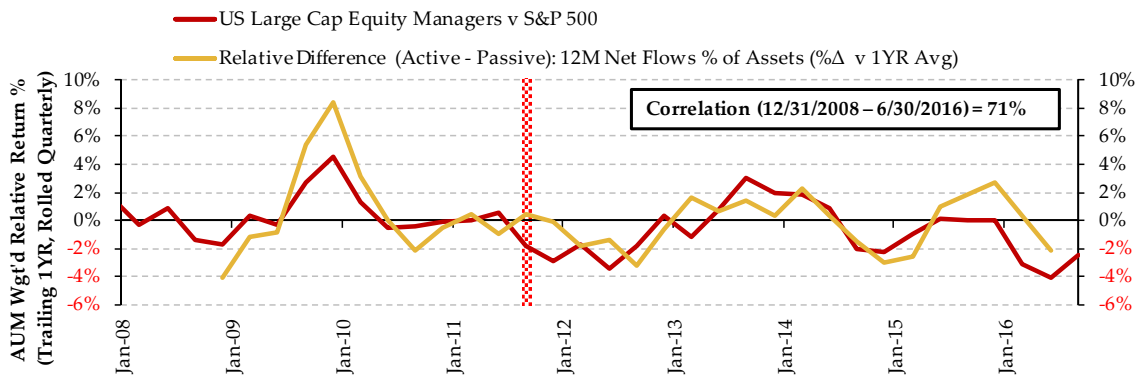


Shows trailing 1YR AUM weighted relative returns of the top quartile and bottom half managers by active share within the eVestment US Large Cap Equity universe versus the S&P 500; shows active minus passive trailing 12 month net fund flows within the Morningstar US Large Cap Equity universe. Data provided from 9/30/2004 through 9/30/2016, based in USD. See “Methodology Disclosure” for additional information. Source(s): eVestment Alliance, Morningstar Direct and Fisher Investments Research.

Furthermore, when active net fund flows as a percentage of assets rise relative to passive funds, active manager relative performance tends to improve. This occurs because the proportion of assets being invested in active positions is higher and rising versus the proportion invested in passive/benchmark neutral positions.

Relative to the total market value of active and passive fund holdings, a rising proportion of asset flows into active versus passive funds results in an increasing proportion of assets being invested in active positioning – benefitting the performance of those positions and thus contributing to active alpha. Additionally, the recent shift from active to passive is not a secular, but rather a cyclical trend – even over the past 5 years (Exhibit 9).

Exhibit 9: Active Outperformance Strongly Correlated w/ Difference in Active-Passive Relative Flows



Shows trailing 1YR AUM weighted relative returns of the eVestment US Large Cap Equity manager universe vs the S&P 500; shows active minus passive relative net flows (% change vs trailing 12 month average) within the Morningstar US Large Cap Equity universe. Data provided quarterly, from 12/31/2008 through 9/30/2016, based in USD. See “Methodology Disclosure” for additional information. Source(s): eVestment Alliance, Morningstar Direct and Fisher Investments Research.

As uncertainty subsides and markets move beyond skepticism in the latter part of the bull, investors will become more optimistic and more willing to take active risk, ending the cyclical trend into passive funds. This will benefit the relative performance of active positioning and active managers, as rising preferences for active risk result in higher relative net flows into active funds.



Summary

Active management remains the best option for generating superior growth and long-term outperformance.

Active managers have unique capabilities, unavailable to passive management, which enable them to generate superior growth and outperformance over the long-term. Passive managers are unable to use these and guarantee underperformance against the market in the long-term.

In generating long-term active outperformance, it is normal for active management to experience periods of underperformance as active performance is cyclical – despite periods of underperformance, active management generates alpha in the long-term.

The acute cycle of active US Large Cap equity manager underperformance over the last 5 years has been unduly extrapolated, and does not represent the aggregate performance of active managers globally. Overall, non-US active manager outperformance remains consistent with and better than historical norms and a majority of active managers outside the US Large Cap equity universe have continued to outperform over that time.

Large/mega cap outperformance and uncertainty have been active performance headwinds in recent years, as the smaller-cap characteristics of active managers are detrimental within a cycle of large cap leadership, and as broader risk aversion drove a cyclical shift to passive funds detrimental to the performance of active positioning. However, these are temporary headwinds as size performance is cyclical, while rising investor appetite for active risk should drive a shift into active funds as optimism grows and uncertainty subsides in the latter half of the bull.

This update constitutes the general views of Fisher Investments and should not be regarded as personalized investment advice. No assurances are made we will continue to hold these views, which may change at any time based on new information, analysis or reconsideration. In addition, no assurances are made regarding the accuracy of any forecast made herein. Past performance is no guarantee of future results. A risk of loss is involved with investments in stock markets. As of 12/15/2016.



Methodology Disclosures

Original analysis compiled 12/15/2016. The following disclosures provide additional information on methodology used throughout. Further clarifications are available on request.

- **Exhibit 1:** “Cumulative Excess Return %” shows cumulative AUM weighted relative returns of the eVestment US Large Cap Equity active manager universe versus the S&P 500, calculated from 12/31/1990 through 12/31/2015 using annual AUM weighted returns of the universe. AUM weighted relative return provides the equivalent of cap weighted relative performance of actively managed assets within a particular universe. All data provided rolled annually, from 12/31/1990 through 12/31/2015, based in USD; Source(s): eVestment Alliance and Fisher Investments Research.
- **Exhibit 2:** “Annual Excess Return %” shows annual AUM weighted relative returns of the eVestment US Large Cap Equity active manager universe versus the S&P 500. AUM weighted relative return provides the equivalent of cap weighted relative performance of actively managed assets within a particular universe. All data provided rolled annually, as of the dates indicated, from 12/31/1990 through 12/31/2015, based in USD; Source(s): eVestment Alliance and Fisher Investments Research.
- **Exhibit 3:** Data in the above chart shows trailing 1YR AUM weighted relative returns of active equity managers comprising the eVestment manager universes indicated relative to each universe’s respective benchmark index. AUM weighted relative return provides the equivalent of cap weighted relative performance of all actively managed assets within a particular universe of managers relative to the benchmark respective to that universe – i.e. = weighted average excess return of the universe versus the benchmark. “US Large Cap Equity”, “EAFE All Cap Equity” and “EM All Cap Equity” eVestment universes include all currently and formerly available actively managed funds in order to account for and minimize survivorship bias. Data is provided from 9/30/2001 through 9/30/2016, rolled quarterly, based in USD. Source(s): eVestment Alliance and Fisher Investments Research.
- **Exhibit 4:** Shows % of active equity managers from each of the eVestment manager universes indicated in the graphs, that are outperforming against each universes respective benchmark, on a trailing 1YR basis, rolled quarterly, from 9/30/2001 through 9/30/2016. Total # of Actively Managed Products in each universe: US Large Cap = 2356; US Small Cap = 1189; EAFE All Cap = 220; EAFE Small Cap = 110; EM All Cap = 320; EM Small Cap = 67. Note, the # of managers fluctuates over time as all historical products are included (including closed funds) to prevent survivorship bias; furthermore, managers that drop-out (cease reporting performance in a given period) are counted as underperforming when calculating the % of managers outperforming in each period. In determining manager outperformance, US Large Cap universe benchmarked against S&P 500; US Small Cap against Russell 2000; EAFE All Cap against MSCI EAFE; EAFE Small Cap against MSCI EAFE Small Cap; EM All Cap against MSCI EM; EM Small Cap against MSCI EM Small Cap. Data as of 9/30/2016, based in USD. Source(s): eVestment Alliance and Fisher Investments Research.
- **Exhibit 5:** “% of Active Funds Outperforming S&P 500 over TTM” shows the % of actively managed US domiciled open-end funds outperforming the S&P 500 index on a monthly rolling trailing 12 month basis, calculated from the set of funds categorized within the “US Equity Large Cap Blend”, “US Equity Large Cap Growth”, “US Equity Large Cap Value”, “US Equity Mid Cap”, “US Equity Mid/Small Cap” and “US Equity Small Cap” active equity fund universes, using “Global Category” universe definitions, from Morningstar Direct. “Small vs Big Δ TTM” shows trailing 12 month relative return of the Russell 2000 index versus the S&P 500. “Russell 2000” index uses Fama French total return data pre-1979 and Russell total return data post-1979; Fama French deciles are market cap weighted with small cap bucket equal weighting deciles 3-6. “45 Year Monthly Correlation” calculated from 1/31/1971 through 9/30/2016. Unless otherwise noted, data is provided from 12/31/1970 through 10/31/2016, calculated on a monthly rolling basis, and based in USD. Source(s): Morningstar Direct, FactSet, Fama French and Fisher Investments Research.
- **Exhibit 6:** “12M Net Flows % of Assets” shows trailing 12 month net fund flows into as a percentage of 12 month trailing assets, across all active and passive funds within each respective “Global Broad Category Group” as indicated in the chart. “Global Broad Category Group” shows values derived from Worldwide Open-Ended and Money Market funds and ETFs (excluding Funds of Funds and Feeder Funds), as defined and provided by Morningstar Direct. “Red” highlighted segments on Fixed Income and Money Market funds lines denote instances where those categories 12M Net Flows % of Assets exceeded those of Equity Funds – indicating investor preferences for those asset classes relative to equities. “5 Years Ago (9/30/2011)” shows the date 9/30/2011, and identifies the date 5 years prior to 9/30/2016, consistent with other charts with available data through 9/30/2016. Data provided monthly, from 3/31/2009 through 7/31/2016, based in USD. Source(s): Morningstar Direct and Fisher Investments Research.
- **Exhibit 7:** “Inter-Stock Correlation” shows quarterly trailing inter-correlation of S&P 500 constituents daily returns, calculated from daily prices. “Net Active/Passive Inter-Fund Flows (US Large Cap Equity)” shows the spread (difference) of trailing 12 month net fund flows between active and passive equity funds categorized within the “Large Blend”, “Large Growth” and “Large Value” Morningstar Category groups. “Morningstar Category” groups show values derived from Worldwide Open-Ended and Money Market funds and ETFs (excluding Funds of Funds and Feeder Funds), as defined and provided by Morningstar Direct. Data provided quarterly, from 6/30/1994 through 6/30/2016, based in USD. Source(s): FactSet, Morningstar Direct and Fisher Investments Research.



- **Exhibit 8:** Data in the above chart shows trailing 1YR AUM weighted relative returns of the top quartile and bottom half of managers by active share from the eVestment US Large Cap Equity manager universe versus the S&P 500 index. AUM weighted relative return provides the equivalent of cap weighted relative performance of all actively managed assets within a particular universe of managers relative to the benchmark respective to that universe – i.e. = weighted average excess return of the universe versus the benchmark. “Net Active/Passive Inter-Fund Flows (US Large Cap Equity)” shows the spread (difference) of trailing 12 month net fund flows between active and passive equity funds categorized within the “Large Blend”, “Large Growth” and “Large Value” Morningstar Category groups. “Morningstar Category” groups show values derived from Worldwide Open-Ended and Money Market funds and ETFs (excluding Funds of Funds and Feeder Funds), as defined and provided by Morningstar Direct. Data is provided quarterly, from 9/30/2004 through 9/30/2016, based in USD. Source(s): eVestment, Morningstar Direct and Fisher Investments Research.
- **Exhibit 9:** Shows trailing 1YR AUM weighted relative returns of the eVestment US Large Cap Equity active manager universes vs the S&P 500. AUM weighted relative return provides the equivalent of cap weighted relative performance of all actively managed assets within a particular universe of managers relative to the benchmark respective to that universe – i.e. = weighted average excess return of the universe versus the benchmark. “Relative Difference (Active – Passive): 12M Net Flows % of Assets (%Δ v 1YR Avg)” shows the difference between active and passive “Relative Net Flows”, calculated as the % difference between the current 12M trailing net flows % of assets and the trailing 12 month average, categorized within the “Large Blend”, “Large Growth” and “Large Value” Morningstar Category groups. “Morningstar Category” groups show values derived from Worldwide Open-Ended and Money Market funds and ETFs (excluding Funds of Funds and Feeder Funds), as defined and provided by Morningstar Direct. Data provided quarterly, from 12/31/2008 through 9/30/2016, based in USD. Source(s): eVestment Alliance, Morningstar Direct and Fisher Investments Research.

