



FROM BETA TO ALPHA

WHY IT WILL PAY TO BE THE LAST ACTIVE INVESTOR STANDING

Passive equity strategies have seen massive inflows over the last decade, in part use because of active management's struggles. But the pendulum seems to be swinging back toward active today—and leaving active out of the equation could be leaving money on the table.

Of all the debates in capital markets today, there probably isn't one that's more heated than the roles of active and passive management in the years ahead. At a high level, we believe both approaches play an important role. But there's a story within the story—and it has to be understood for portfolio decisions to be fully informed.

THE BACKSTORY: HOW WE GOT HERE

First, let's look at the sweeping forces that brought us to where we are today. In the early 1980s, baby boomers began to enter their peak earning years. And they were fortunate to step into an environment that would unleash the biggest wind-aided equity bull market in history.

From 1981 through 1999, this massive equity run featured over 17% annualized returns from the S&P 500 (*Display 1, page 2*). It combined with growing wealth among baby boomers to produce a winning formula for investors. But as the oldest boomers began to approach their retirement years, they were hit with two major market crises—the bursting of the tech bubble and the global financial crisis.

This challenging period from 2000 through 2008—almost a lost decade—left investors reeling. Their wealth was eroding just as they saw retirement approaching. The shock from this reversal of fortune caused many baby boomers to reexamine the way they thought about investing.

One of the prevailing thoughts? "Active management didn't help me defend in the downturns."

This line of thinking sparked a broader assessment of active management's struggles. With that in mind, investors sent a wave of money into passive strategies after the global financial crisis. It was a sea change in investing preference: From 1988 through 2006, roughly \$1 trillion flowed into active equity strategies. Since 2007, about the same amount has flowed out of active and into passive—aided by a changing regulatory environment.



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WHY ACTIVE MANAGEMENT FAILED...AND DIDN'T

It's true that active managers—as a group—underperformed over time; there's really no debate on that point. But it's also true that the success of active managers varies a lot based on important factors such as the specific time period, the equity category, and how active a manager really is.

We see two structural themes behind active's slump.

First, both actively managed assets and asset managers' staff saw explosive growth in the 1990s (*Display 2, page 3, left*). That growing number of alpha seekers made it harder to add value by being active. Second, many active managers that had raised large amounts of assets became less active (*Display 2, page 3, right*), managing closer to the benchmark—perhaps to avoid underperforming and losing client assets in a strong beta market.

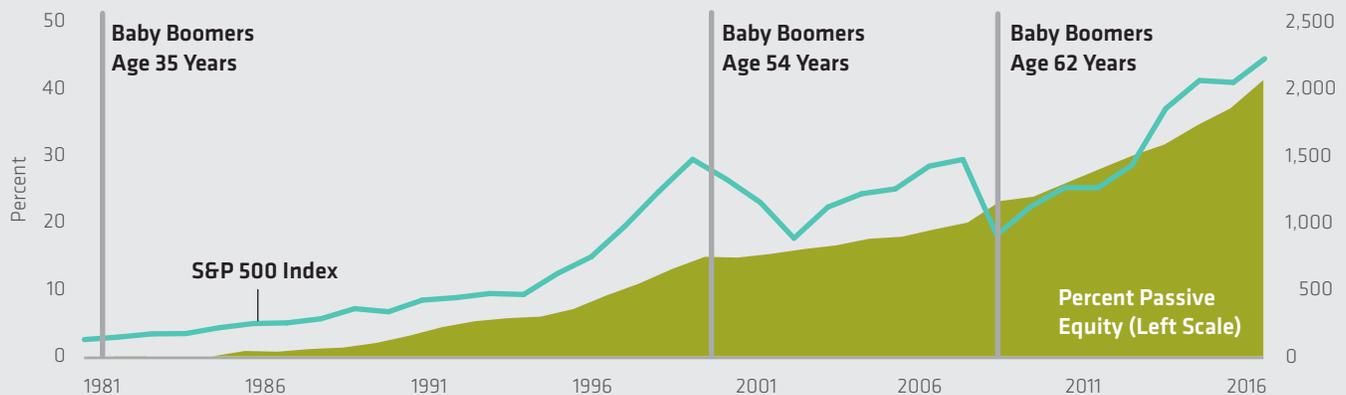
DISPLAY 1: THE BABY BOOMERS: A TALE OF TWO INVESTMENT EXPERIENCES

1981–1999: Massive Market Rally Boosts Savings

	Returns (%)	Volatility (%)
US Stocks	17.2	14.8
US Bonds	10.4	5.8
Global Stocks	14.5	14.3
60/40*	14.8	10.2

2000–2008: Twin Crises Deliver a Major Jolt

	Returns (%)	Volatility (%)
US Stocks	-3.6	15.2
US Bonds	6.4	3.9
Global Stocks	-3.1	15.5
60/40*	0.6	9.1



From January 1, 1981 through December 31, 2016

Historical analysis does not guarantee future results. An investor cannot invest in an index.

* 60% S&P 500 Index/40% Bloomberg Barclays US Aggregate Bond Index

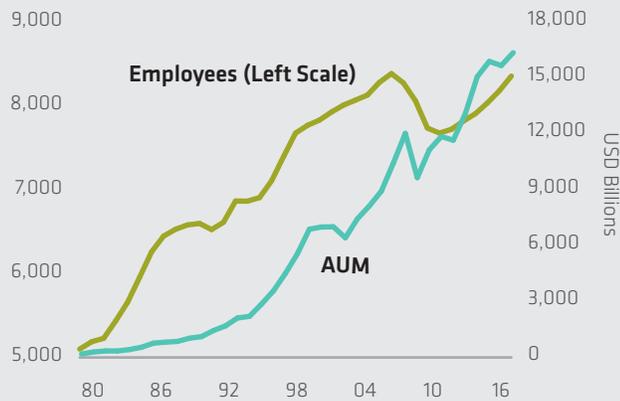
Data excludes sector and allocation funds; S&P price level at year-end

Source: Bloomberg, Barclays, Investment Company Institute and Strategic Insight

DISPLAY 2: STRUCTURE IN A NUTSHELL: LESS ALPHA TO GO AROUND AND FEWER SEEKING IT

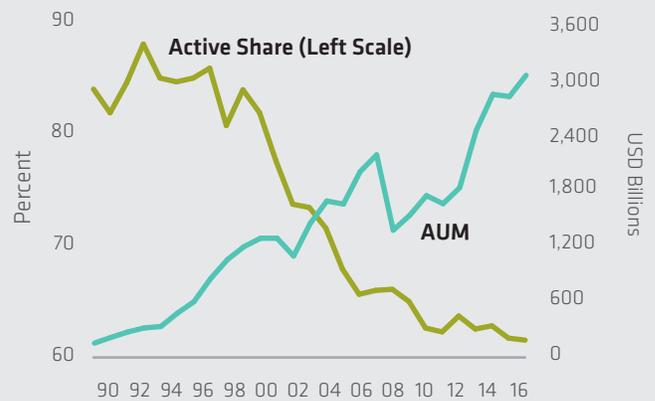
Growing Fund Space Makes Alpha Harder to Find

Financial Employees (1,000) and Fund AUM



“Don’t Blow Me Up”: Declining Active Share

Active Share and AUM of Top 10 Large Blend Funds



Historical analysis does not guarantee future results.

Left display from December 31, 1980 through December 31, 2016; right display from December 31, 1990 through December 31, 2016

Active mutual funds only

Active share is calculated relative to S&P 500

Source: Investment Company Institute, Morningstar Direct and US Bureau of Labor Statistics

A well-known academic study of a 20-year period from 1990 through 2009¹ compared the degree of active management with performance versus benchmarks. Active managers, as a group, underperformed their respective benchmarks after fees by about 40 basis points per year.

But when the researchers looked closer, they found that truly active managers actually fared quite well. Using tracking error and active share as gauges, they grouped managers based on how actively they managed. The most active 20% of managers, who the study called “diversified stock pickers,” outperformed their benchmarks by 126 basis points per year. The takeaway: being more active led to more outperformance.

MARKET ENVIRONMENT MAKES A BIG DIFFERENCE

Structural factors aren’t the only factors that influenced active management’s underperformance: the market environment also had a big impact on relative returns.

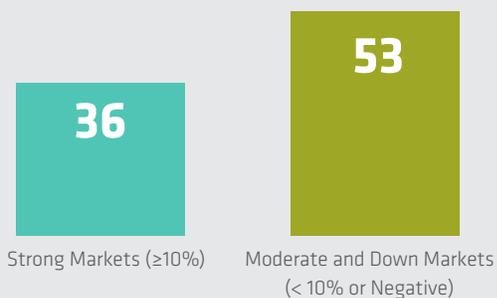
To put it simply, in the great rising tide of a strong beta-driven market, the individual boats of active management don’t really matter. In periods when equity-market returns were 10% or higher, only one-third or so of active managers outperformed their benchmarks (*Display 3, page 4*). But when market returns were under 10%, over half of active managers outperformed.

In other words, when the tide wasn’t rising as high or was receding, the skill of the individual boats mattered more. If we drill further into the market environment, we find that the most difficult times for

¹ Active Share and Fund Performance, Antti Petajisto, 2013

DISPLAY 3: ACTIVE TENDS TO FLOURISH IN TOUGH MARKETS

Percent of Managers Beating Benchmark



Historical analysis does not guarantee future results.

As of December 31, 2016
 Measured by the average annual outperformance of active managers in the Large Blend Morningstar category vs. each fund's primary prospectus benchmark over the past 20 years
 Source: Morningstar and AB

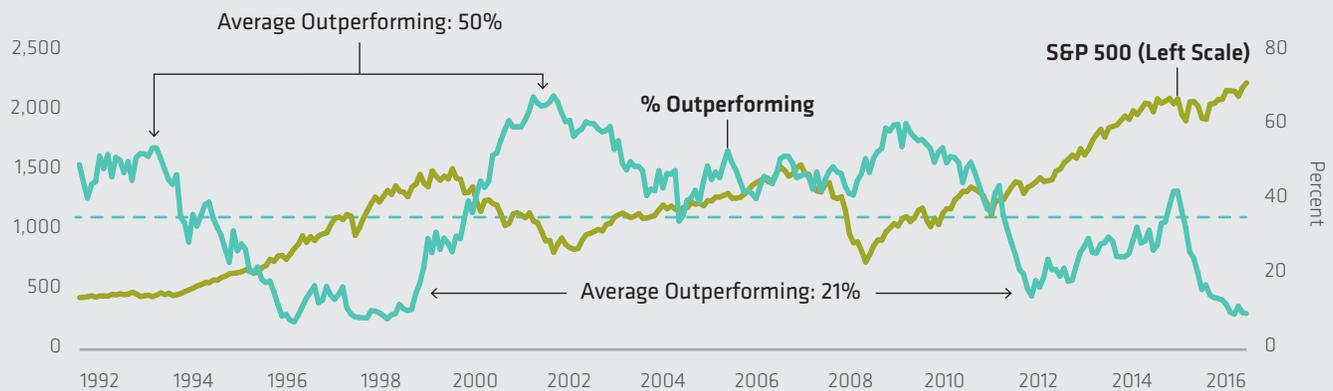
active managers are when the market is rising and when valuations—as measured by price/earnings ratios—are expanding.

When we use that lens to look at the market's patterns over the last 20 years or so (*Display 4*), the storyline makes sense. Based on rolling three-year periods, it's clear that the buildup to the tech bubble in the late 1990s and the easy-money-driven period after the global financial crisis were the toughest for active managers in terms of relative performance. But in all other time periods, they fared significantly better.

Based on this history, the current environment suggests that the landscape ahead will be more favorable for active managers. Equity valuations are higher than normal today, and the great beta trade is over—market returns are likely to be lower ahead, tax cuts and repatriation notwithstanding. And with returns likely to be lower and volatility higher ahead, dispersion among individual stock returns seems likely to rise (*Display 5, page 5*): when stocks travel increasingly different paths, there are more opportunities for active managers to stand out.

DISPLAY 4: HOW DO ACTIVE MANAGERS FARE IN BETA TRADES...AND OUTSIDE THEM?

% of Large-Cap Blend Managers Beating S&P 500, Rolling Three Years

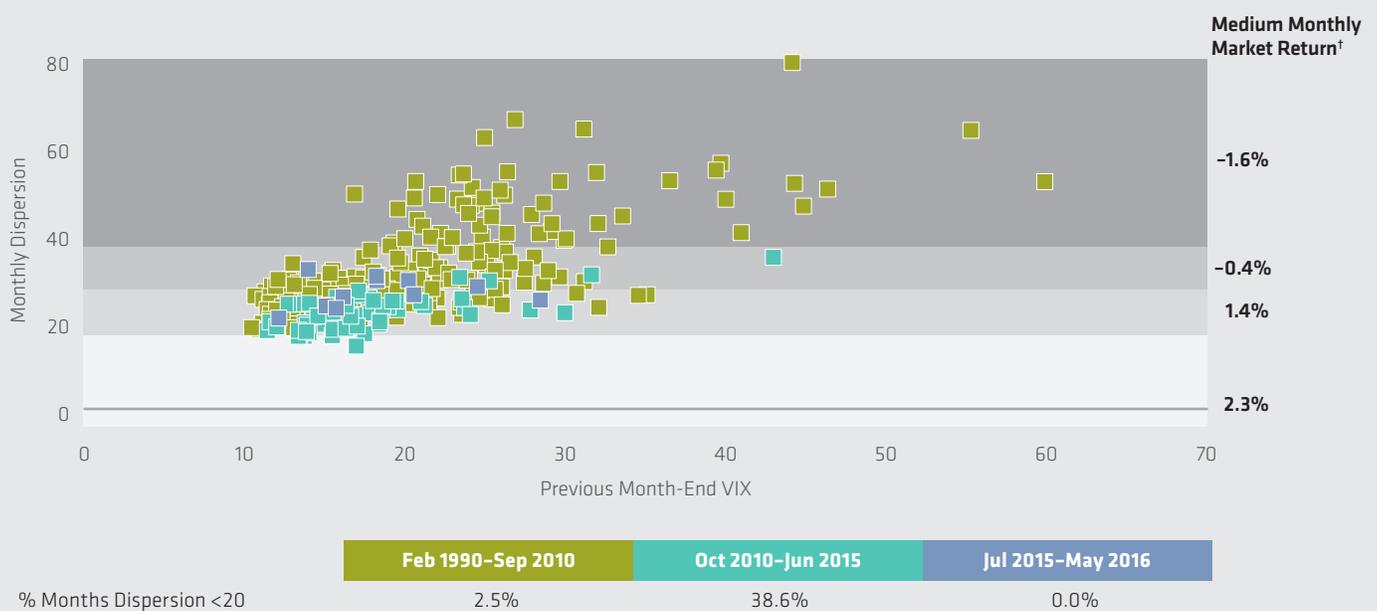


Historical analysis does not guarantee future results. An investor cannot invest in an index.

From December 31, 1992 through December 31, 2016
 Represents the percent of mutual funds in the US Large Blend Morningstar category outperforming the S&P 500 on a rolling three year basis with a monthly step. The data include active mutual funds only.
 Source: Bloomberg and Morningstar Direct

DISPLAY 5: HIGHER VOLATILITY INCREASES SECURITY DISPERSION

Monthly Stock Dispersion* vs. Level of VIX (Percent)



Historical analysis does not guarantee future results. An investor cannot invest in an index.

As of May 31, 2016

* Dispersion is cross-sectional standard deviation of monthly returns.

† Median monthly return of the S&P 500

Source: Bloomberg, Chicago Board Options Exchange, eVestment, MSCI, S&P and AB

PASSIVE INVESTING ISN'T A PANACEA

On the other side of the ledger, we have passive investing. There's a story within a story in that arena, too. There's no doubt that passive investing has brought great benefits to investors, allowing them to access capital markets at a low cost.

However, just as the explosive growth of active investing eventually created structural challenges, so has the surge in passive investing. Today, there are only 768 US stocks with a market capitalization over

\$5 billion, but there are 1,808 exchange-traded funds (ETFs) chasing them—a number that's still growing.² That's a lot of vehicles chasing a few stocks—and it's creating unintentional crowding in specific stocks and market segments.

More and more passive investors are finding themselves in the same market spaces; history shows that the most passively held stocks have been much more volatile—and volatility is likely to go even higher.

² As of June 30, 2017. Source: Morningstar and AB

They've also had higher correlations to one another as part of the crowded universe. In our view, four factors magnify the risks to investors:

- + **Crowding:** the risk to investors who follow the herd, making similar investment decisions based on what others are doing. Crowding itself is magnified by the following three factors
- + **Fragility:** the flight risk of investors in a segment of the market. Because they've aligned their investments with a specific outcome, if that outcome doesn't happen, they're likely to exit rapidly
- + **Liquidity:** if investors do run from a crowded trade, how hard will it be for them to find an exit door if liquidity is drying up—and how much will it cost for them to open that door?
- + **Passive Ownership:** If passive investors own an ETF based on an index that contains a crowded trade, they have to sell the entire index to get out. In essence, they have to sell the baby with the bathwater.

Crowding, fragility, liquidity and passive ownership—the “four horsemen” that can supercharge downturns—create potential traps for investors.

WHEN CROWDED TRADES BREAK

One such trap turned out to be very costly in the February equity market correction.

Market volatility had been so low for so long that taking short positions in the CBOE VIX index—a volatility indicator—became an enormously crowded trade. Essentially, a lot of money was betting that volatility would stay low—but it didn't. When the correction unfolded, the VIX quadrupled in a week, and passive vehicles that shorted volatility were hit very hard.

Crowding isn't limited to exotic trades like the short VIX—think of the broad healthcare equity sell-off in 2015, driven by concerns over drug pricing. And it happens in bond markets, too, as high-yield energy debt taught us in 2016. In that episode, investors looking for yield poured money into high-yield energy bonds, which grew to roughly 17% of the high-yield index. When oil and gas prices

plunged, energy defaults rose, and fragile investors were selling entire bathtubs in an exit that became harder and more costly.

With so many different stripes of passive investing today, the risks of passive have grown. By some accounts, there are as many as one million indices today (*Display 6, page 7*)—the vast majority of them equity. And there's a growing number of passive vehicles looking to buy stocks to replicate those indices.

No one really knows what it means to have so much of the world buying the same stocks based purely on their weightings in an index. And it's hard to dimension the potential hazards and distortions created by all the overlapping exposures of passive ownership. We've never seen a period of meaningful outflows from ETFs (and passive vehicles); it could have a large-scale, spiraling effect on stocks that are widely held by passive vehicles.

Today, there's an avalanche of money in passive investing. There's also a staggering variety of indices (and ETFs) designed to mimic every nook and cranny of the market in almost any combination you can think of. With so much money and so many ETFs chasing so few stocks in so many groupings, there's a big question that needs to be answered: is there even such a thing as passive investing anymore?

THE PENDULUM SEEMS TO BE SWINGING TOWARD ACTIVE

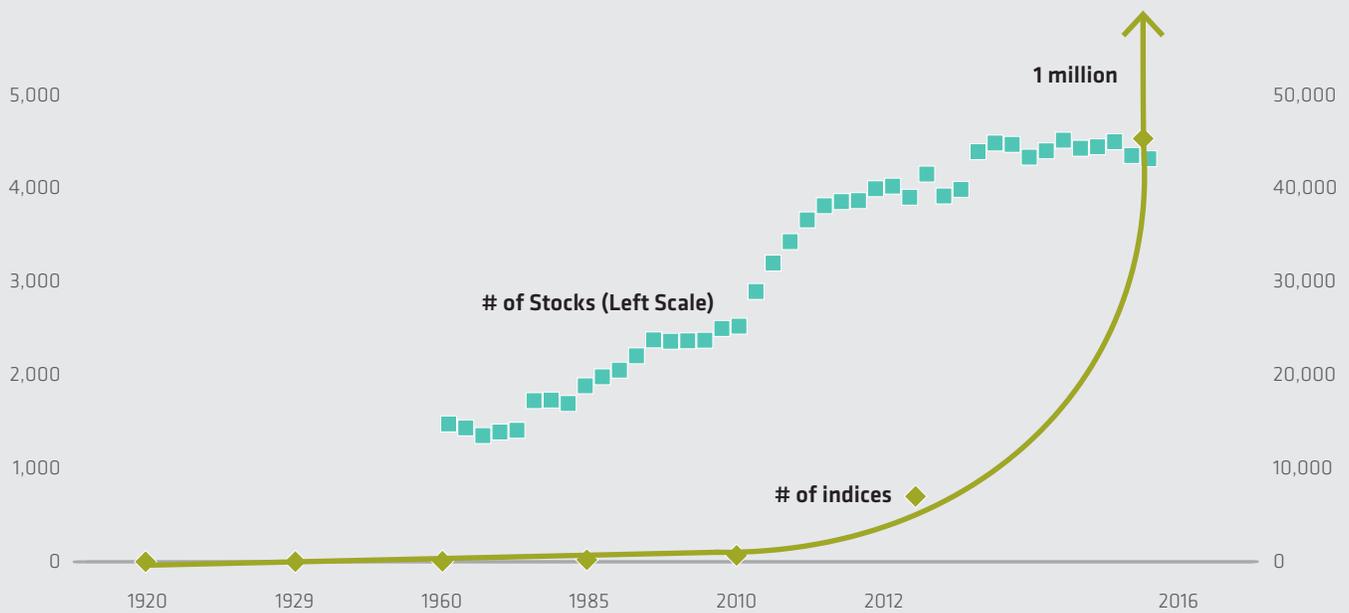
Active and passive investing both have a place in many investors' portfolios, but there's been a lot of money pouring into one or the other over the years. Those cycles create distortions and structural challenges. After a decade of swinging toward passive, today the pendulum looks as though it's swinging toward active.

The growing wave of active management eventually led to a crowded field that likely made it harder for active managers. And if that statement is true, then the reverse should also be true: a thinning roster of active managers and less investment in active research seem to create more opportunity for true active managers. Between 2008 and 2017, global investment banks reduced their research budgets by 59%.³ At the same time, the massive wave of passive investing faces growing risks.

³ Source: Frost Consulting

DISPLAY 6: TOUGHER ROAD AHEAD: FACTOR MANIA AND THE PASSIVE SINGULARITY

There Are Many More Indices than Stocks in the World Today



Historical analysis does not guarantee future results.

As of December 31, 2016

Source: Bernstein

Today, the market environment seems to be moving in active management's favor. Active management has historically been more effective in moderate-to-low-return equity markets—and during market declines. And the high-double-digit equity returns of the last decade, fueled by easy-money policies, are likely a thing of the past.

Volatility, which has been abnormally low for years, is likely to rise—we've seen bouts of volatility already in early 2018. When markets are more volatile, individual stock returns show higher dispersion—to put it another way, they increasingly tend to follow different paths.

That gives active managers the opportunity to deliver alpha by picking winners—and avoiding losers.

The way we see it, the debate really shouldn't be about passive versus active. It's about how and where to deploy each to get the most effective balance of market exposure and potential outperformance from high-conviction active management. Given the structural and environmental factors that seem to be tilting in favor of active, it seems that investors who give up on active management could be leaving money on the table.

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