

# Why blending active and passive strategies is right for investors



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*The debate over whether one should choose an active or passive approach is ultimately misguided, because investors can benefit greatly by combining both approaches in the same portfolio.*

## Key takeaways

- Index investing has produced numerous benefits for investors—and for the asset management industry at large.
- Many of the shortcomings in capitalization-weighted index strategies can be addressed with newer, strategic beta approaches.
- Research suggests that many high active share strategies have outperformed over time, even after fees are taken into account.
- Given investor needs and market complexity, the role of active strategies extends beyond beta to include objectives such as portfolio stability, deeper diversification, and niche alpha.
- Blending active and passive strategies can help investors outperform and pursue other important objectives while still being mindful of cost and tax efficiency.

## Executive summary

The debate over whether investors should use active or passive strategies in their portfolios has traditionally been viewed through the lens of outperforming a narrow set of benchmarks. While performance is important, we believe this approach is ultimately not in the best interests of investors. At John Hancock Investments, we employ both active and passive approaches in our asset allocation portfolios because we believe each provides significant value to our shareholders. In this paper, we explore the advantages and drawbacks of each, and seek to provide guidance on how investors can be well served by blending the two in a portfolio.

# Index investing has produced multiple benefits for investors

The growth of index-tracking funds and exchange-traded funds (ETFs) has forever altered the investment landscape for millions of Americans. From a mere 80 funds with a combined \$66 billion in assets in 2000, ETFs have grown to represent nearly \$2 trillion in assets invested across more than 1,400 funds on behalf of 5.2 million U.S. households. At the same time, the share of equity mutual fund assets represented by index funds has more than doubled, to nearly 20%, according to the Investment Company Institute.<sup>1</sup>

The use of these passive strategies has been most pronounced in market segments such as large-capitalization U.S. stocks, where market efficiency and the abundance of information about those stocks make outperforming a given benchmark more challenging. This makes perfect sense, and investors have voted with their dollars—so much so that funds tracking the large-cap S&P 500 Index represented a third of all index fund assets at the end of 2014.<sup>2</sup> However, the index investing revolution has done more for investors than merely provide inexpensive market exposure, or beta, to U.S. large-cap stocks.

## Lowered fund expenses for all funds

One of the unexpected benefits of index investing is the effect it has had on expenses across all funds. As index funds and ETFs have attracted a growing share of investor dollars since 2000, expenses paid by investors in all equity mutual funds have dropped by nearly 30%. This is due in part to investors flocking

to lower-cost options; however, competition from passive strategies has also pressured providers to lower costs of actively managed funds, which fell by 19% on average across bond and stock funds over the past 15 years.<sup>2</sup>

## Raised the performance bar for active managers

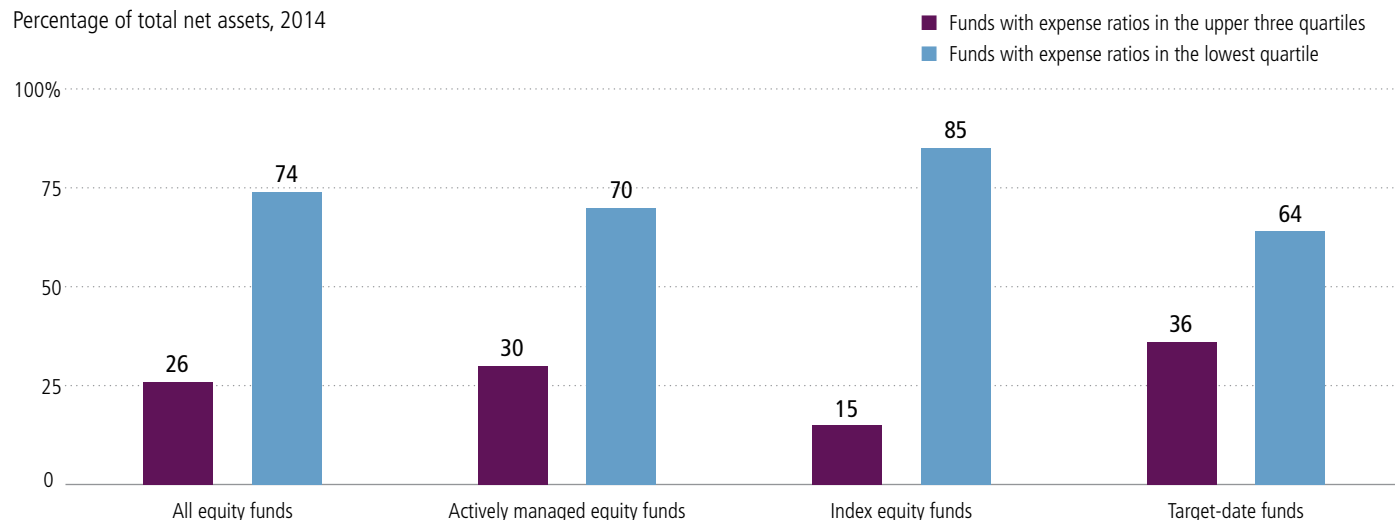
The rising popularity of passive strategies, along with the steady drumbeat of financial news coverage on the percentage of U.S. large-cap funds that underperform their benchmarks, has sent a clear message to active managers: Earn your fees, or else. As with the beneficial effect of fee competition, the focus on performance relative to passive strategies can only be good for investors, ensuring they get the value they expect for the fees they pay.

## Refocused attention on investor outcomes

Apart from helping to lower fees and raise the bar on fund performance, competition that active strategies face from index funds and ETFs has refocused attention on investor outcomes, such as tax efficiency. Consider portfolio turnover, which creates higher expenses through trading costs. The asset-weighted average turnover rate among mutual funds has dropped to 43% from as high as 80% in the 1980s as more and more investors choose lower-turnover funds that generate fewer taxable distributions.<sup>1</sup>

## Even among active managers, assets are concentrated in the lowest-cost options

Percentage of total net assets, 2014



Source: ICI, Lipper, 2015. Target-date funds data includes the full universe of such funds, which primarily invest in other underlying mutual funds. All other data excludes mutual funds of funds and variable annuities.

## Not all index-based approaches are the same

All passive strategies involve some active decision in their initial construction. While passive approaches have clearly benefited investors through lower costs and improved tax efficiency, it is important to recognize some of the more common shortcomings of indexes and ETFs.

### Most passive approaches are capitalization weighted

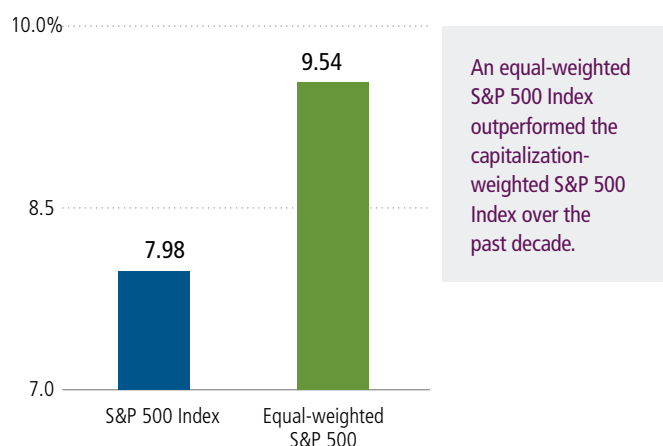
Whether the proxy is the S&P 500 Index, the Russell 3000 Index, or the Wilshire 5000 Index, the composition of most indexes is proportional to the capitalization size of their component companies, so bigger companies get a proportionately bigger weighting in the index. One flaw in this approach is that, by definition, the largest-capitalization stocks have already experienced the greatest amount of price appreciation. The proportionate weighting of these stocks in most indexes is the equivalent of thinking that past performance will predict future results. For example, Apple is the largest holding in all three of the indexes mentioned. Investors in these strategies who believe Apple's best days are behind it have no choice but to own it as their largest holding. Conversely, capitalization-weighted indexes relegate the smallest—often younger, faster-growing—companies to proportionately smaller weightings.

### Membership rotation and index distortion create unintended consequences

The composition of an index changes frequently, based on the index's guidelines and the changing dynamics of the markets.

### Strategic beta approaches seek a better mix

Average annual return (2004–2014)



Source: Bloomberg, 2015. Past performance does not guarantee future results.

Index providers typically announce changes to composition in advance of implementation—for example, announcing on the fifteenth of the month additions and deletions that will go into effect on the first of the following month. Index funds cannot make any changes to their portfolios until the index is officially changed, but other investors often buy the new additions and sell the deletions right away to take advantage of the anticipated change in price. This front running creates an unavoidable performance drag for passive strategies as additions are bid up prior to inclusion and deletions begin to sell off before formally exiting the index.<sup>3</sup>

Index distortion can take place when external forces have an outsized effect on a group of securities. The Barclays U.S. Aggregate Bond Index is a good example. To be eligible for inclusion in the index, a bond must meet certain credit quality, maturity, and size requirements; issues that clear these hurdles are automatically included in the index. Before the credit crisis began in 2007, less than 40% of the index was made up of U.S. Treasuries and government-backed securities. Today, mortgage giants Fannie Mae and Freddie Mac remain in the conservatorship of the federal government. While this is relatively new territory and it remains to be seen what would happen in the event of a default, we believe the two government-sponsored enterprises are likely supported by the full faith and credit of the U.S. government. That would mean that more than 75% of the Agg is supported by the federal government.<sup>4</sup> Passive strategies designed to track this widely used and supposedly diversified benchmark are far less diversified as a result.

### Strategic beta strategies seek to address some of these issues

Strategic beta, or smart beta, strategies seek to combine the low-cost appeal of index investing with a selection, weighting, and rebalancing strategy that differs from traditional capitalization-weighted indexes. One common example is equal weighting the S&P 500 Index to give more weight to the smaller, undervalued names at the expense of the larger names that have already experienced significant appreciation. In doing so, the equal-weighted version seeks to eliminate the past performance bias inherent in capitalization-weighted indexes. While the variety and popularity of strategic beta funds have grown in recent years, all are defined by transparent methodologies that eliminate the need for ongoing research and portfolio management.

## Many active managers outperform, even in efficient markets

The traditional argument against active management has been made using U.S. large-cap equity funds with the assertion that, on average, these managers fail to beat their benchmark indexes in any given year. While this is often true, it is a mistake to conclude that *all* active managers underperform. A growing body of research has begun to segment the universe of U.S. large-cap funds in order to demonstrate that, in fact, many active managers outperform their benchmarks over long periods of time, even in a market as efficient as that of U.S. equities, where companies are widely researched and information is readily available. One recurring measure that stands out as a characteristic of successful managers is high active share.

### Active share as an indicator of performance potential

Active share measures how different a fund is from the benchmark it is measured against. It is calculated by adding the absolute value of a portfolio's overweights and underweights relative to its benchmark and then dividing by 2. Assume a benchmark owns only one stock. If a manager invests 50% of a portfolio in that stock and 50% in another stock, the fund's active share is 50%.

	Stock A	Stock B
Index weighting	100%	0%
Fund weighting	50%	50%
Active share	$(50\% + 50\%) / 2 = 50\%$	

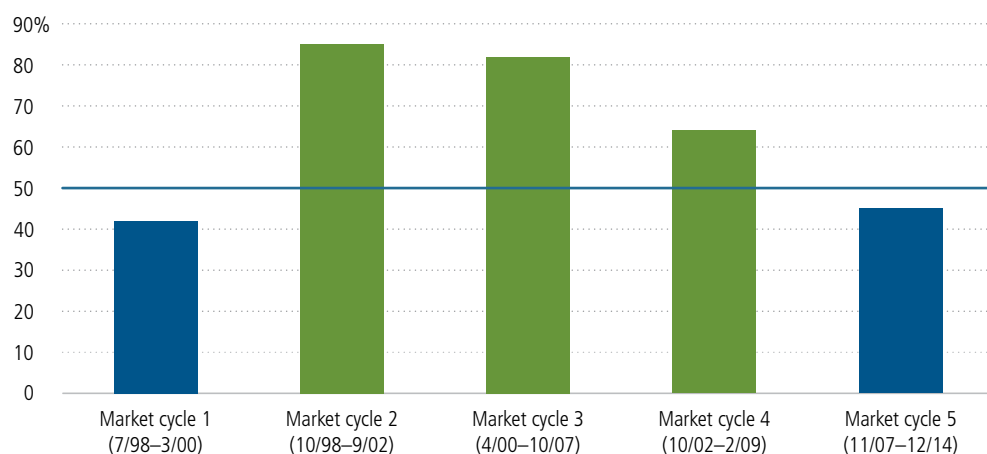
Active share ranges from 0%, in the case of an index, to 100%, where a fund has no holdings in common with its benchmark, with 60% a commonly cited dividing line between highly active and less active funds. A recent study by Invesco examined the performance of roughly 3,000 equity mutual funds over five market cycles that took place during the past 20 years and found that high active share funds (>60%) outperformed their benchmarks after fees, on average, in three of the five market cycles.<sup>5</sup> Active share is only one indicator of performance potential, and it is not without its critics; however, it is clear that a fund must be different from its benchmark in order to outperform it.

### Outperformance over time does not require outperformance every year

The Invesco study and others suggest that active management may thrive in certain market conditions—those that include higher volatility, for example. As a result, the yearly reporting cycle of relative performance can fail to capture the value of active strategies designed to deliver performance over a full market cycle. For example, some managers employ disciplined strategies that involve seeking to protect assets in declining markets while keeping pace in rising markets. The full benefit of such an approach cannot be appreciated by looking only at periods when markets are strongly positive; rather, it becomes more apparent when viewing a combination of weak and strong markets.

### High active share funds outperformed in three of the past five market cycles

Percentage of high active share funds (weighted by assets) that outperformed their benchmarks (12/31/94–12/31/14)



In a study of 3,000 funds over the past 20 years, Invesco found that the average equity fund with an active share above 60 outperformed in all but the strongest bull markets.

## Many markets provide opportunities for active managers to add value

The benchmark against which active managers are often measured—the S&P 500 Index—is an anomaly when viewed on the global stage: It includes a relatively small number of large, highly liquid companies about which information is readily available. In contrast, most areas of the global investment universe are considerably more complex, include illiquid securities, and are not widely covered by Wall Street analysts. As a result, most markets are less efficient than large U.S. stocks, have a wider dispersion of returns, and represent areas where research and active management can provide alpha.

### Down markets

Large-cap U.S. stocks have experienced losses in 22 of the past 90 years; intrayear market pullbacks are even more common.<sup>6</sup> Market corrections are often characterized by emotional selling in which correlations increase and prices of high-quality stocks decline alongside those of low-quality stocks. Active managers have the ability to raise cash levels during these periods and sidestep some of the declining stocks. In fact, over the past 35 years, the percentage of active managers who historically outperform their benchmarks has spiked during market declines.<sup>7</sup>

### Small-capitalization stocks

More than 15,000 small- and micro-cap stocks trade in the United States alone on various exchanges and in the over-the-counter market. Yet the entire capitalization of the Russell 2000

Index of small company stocks represents just 8% of the U.S. equity market's total capitalization. This compares with the S&P 500 Index, which represents 78% of U.S. equity market capitalization.<sup>8</sup> Given the sheer scope of the universe and the small size of its many constituents, the majority of small companies are not widely covered by Wall Street research, and the dispersion of returns is significantly wider than that of the S&P 500 Index, providing opportunity for active managers.

### International equities

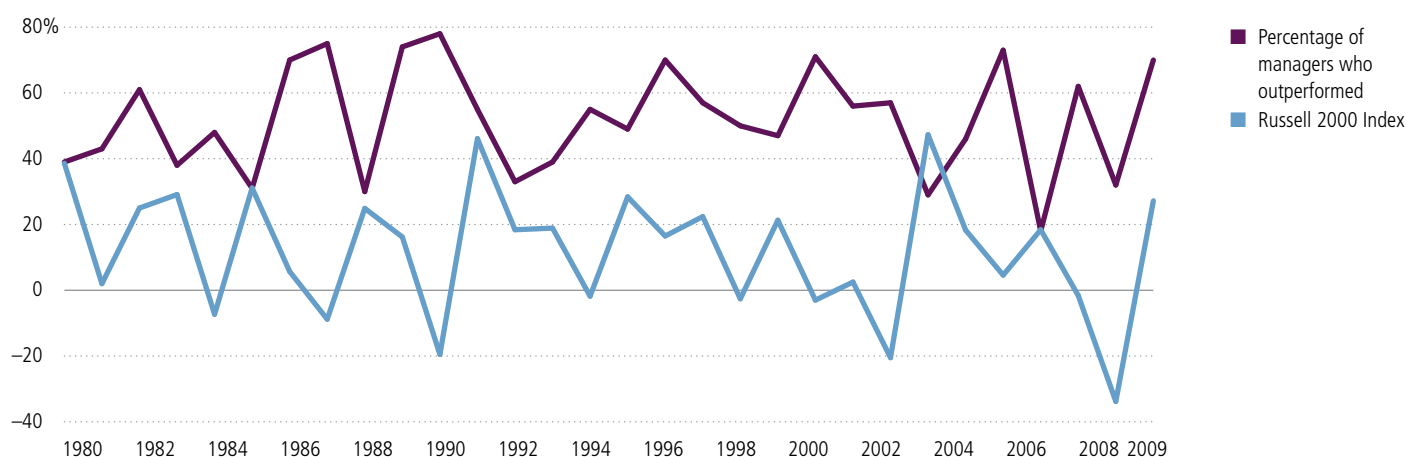
The breadth of opportunities and the dispersion of returns are even greater outside of the United States. In fact, researchers at the Rotterdam School of Management, working with Robeco Investment Management, found that performance persistence among active managers is strongly correlated with market breadth, and that global equities and emerging-market equities in particular possessed the greatest degree of market breadth.<sup>9</sup>

### Fixed income

Outside of government sectors, fixed-income markets possess a number of characteristics that make them unsuitable for indexing, including illiquidity and a lack of reasonable bid/ask spreads. Varying market liquidity and a diversity of market participants driven by non-total-return motive (e.g., liability hedging, capital requirements, tax status, etc.) give an astute active manager an opportunity to add value over passive indexes.

### The majority of actively managed small-cap funds outperformed, particularly in down markets

Russell 2000 Index calendar year returns versus percentage of U.S. small-cap active managers that outperformed (1980–2009)



# Blending active and passive approaches offers the best of both worlds

The debate over whether one should choose an active or passive approach is ultimately misguided because investors can benefit greatly by combining both approaches in the same portfolio. For more than 25 years, our experience constructing and overseeing multi-asset portfolios has provided us with ample evidence of how complementary these two approaches can be. Passive strategies can achieve market exposure cheaply and efficiently in certain markets. Active strategies can extend the reach of that portfolio and add risk mitigation or performance alpha, depending on the investor's goals. While high active share strategies have demonstrated their ability to outperform over time, beating a benchmark is too narrow a lens through which to view a well-rounded portfolio.

## Potential applications for active and passive strategies

Active	Passive
Core, flexible holding	Low-cost beta in efficient markets
Noncorrelated sources of return	Precise, tactical exposure to certain asset classes
Risk mitigation and/or performance alpha	Overall portfolio cost reduction

## Institutional and individual investors have sought to reduce risk in the years following the 2008 financial crisis

Survey of plan sponsor goals for 2011



Source: "Towers Watson–Forbes Insights 2010 Pension Risk Survey," Towers Watson, December 2010.

## Passive: gain low-cost exposure to certain markets

For investors looking to accumulate wealth, index-based passive strategies can offer low-cost exposure to markets where active strategies have historically had a more difficult time outperforming. This is particularly true of U.S. large-cap equities. The weighting of index strategies in a portfolio is a necessary function of investor need and suitability, but may be influenced by the degree to which the investor wishes to reduce expenses and increase tax efficiency. Strategic beta approaches may improve this dynamic further by focusing on proven factors that drive stock returns and by reducing the market capitalization bias of traditional indexes.

## Active: pursue objectives beyond pure market beta

### Portfolio stability

One of the outcomes of the 2008 crisis was a desire for portfolio-stabilizing strategies that would provide a buffer against volatility while also earning more than cash. As a result, many investors began incorporating absolute return strategies into their portfolios. Employed for several decades in the hedge fund world, absolute return strategies put aside the traditional benchmark-centric approach and instead seek to deliver positive returns across all market environments with significantly less volatility than equities. Some varieties target specific levels of absolute return, but all employ a wide range of portfolio tools, such as raising cash and short selling, to pursue their objectives.

## Percentage of households willing to take only below-average investment risk or no risk (2008–2014)



Source: 2015 Investment Company Fact Book, ICI, 2015.

## Deeper diversification

A related outcome of the crisis was the realization that traditional asset classes can become highly correlated in the midst of a severe market event. Alternative strategies have proliferated in the intervening years, providing investors with a wide variety of noncorrelated investment approaches, including currency, market-neutral strategies, real assets, and more. When employed alongside traditional asset classes, alternatives have the potential to deepen the level of portfolio diversification while also pursuing market-like returns.

## Niche alpha

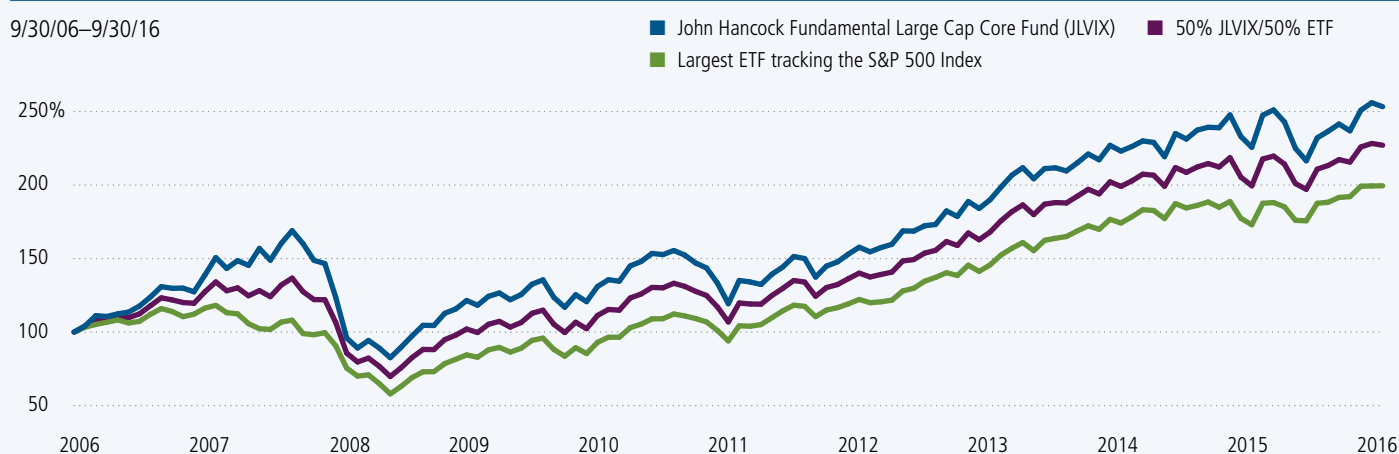
While risk mitigation was the driving force of product innovation after the financial crisis, a number of opportunistic strategies also had their origin in that time period. In fixed income, for example, the dramatic decline in risk-free rates of return spurred the development of strategies that pursued additional drivers of return, including mortgages, emerging-market debt, and high yield.

## Case study

To demonstrate the utility of blending active and passive strategies, we combined the largest ETF that tracks the S&P 500 Index, the SPDR S&P 500 ETF, with an actively managed fund that has the S&P 500 Index as its benchmark. The resulting 50%/50% portfolio outperformed the passive-only strategy over the past 10 years. The combined portfolio also has lower fees, a lower standard deviation, and a lower tracking error than the all-active strategy. The efficiency of returns also improves relative to the ETF, as measured by a higher Sharpe ratio.<sup>10</sup>

## Investment growth

9/30/06–9/30/16



## Performance details

9/30/06–9/30/16

	Average annual total returns (%)				Expense ratios (%)	10-year statistics			Active share
	1 year	3 year	5 year	10 year		Standard deviation	Sharpe ratio	Tracking error	
<b>50% JLVIX/50% ETF</b>	<b>13.78</b>	<b>10.56</b>	<b>16.25</b>	<b>8.55</b>	<b>0.44</b>	<b>16.42</b>	<b>0.53</b>	<b>5.58</b>	—
JLVIX (Class I)	12.24	10.06	16.24	9.74	0.78	18.38	0.56	9.15	72.00
ETF	15.29	11.04	16.23	7.15	0.09	15.22	0.48	2.82	—
TAGRX (Class A)	11.93	9.77	15.91	9.36	1.05				
TAGRX (Class A with 5% maximum sales charge)	6.33	7.90	14.73	8.80	1.05				

Source: John Hancock, Morningstar, 2016. The fund was inception on 10/4/49. Performance prior to 9/30/84 is not available for Class A shares. Prior to 3/1/16, the fund's name was John Hancock Large Cap Equity Fund. The past performance shown here reflects reinvested distributions and the beneficial effect of any expense reductions, and does not guarantee future results. Returns for periods shorter than one year are cumulative, and results for other share classes will vary. Shares will fluctuate in value and, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance cited. For the most recent month-end performance, visit [jhinvestments.com](http://jhinvestments.com). Please see the products' prospectuses for additional information, which is available from your financial professional.



- 1 2015 Investment Company Fact Book, Investment Company Institute, 2015.
- 2 Investment Company Institute, 2014.
- 3 "The index premium and its hidden cost for index funds," Antti Petajisto, *Journal of Empirical Finance*, October 2010.
- 4 Barclays, 2015.
- 5 *Think Active Can't Outperform, Think Again*, Invesco, 2015.
- 6 *Ibbotson SBBI Classic Yearbook 2014: Market Results for Stocks, Bonds, Bills, and Inflation 1926–2014*, Morningstar, 2015.
- 7 "Active Versus Passive Investment Management: Analysis Update," Arnerich Massena & Associates, Inc., August 2010.
- 8 Russell indexes, as of 5/31/14.
- 9 "Mutual Fund Performance Persistence, Market Efficiency, and Breadth," J. Huij and S.D. Lansdorp, 2012.
- 10 John Hancock Investments, Morningstar, 2016.

The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States. The Russell 3000 Index tracks the performance of 3,000 publicly traded large-, mid-, and small-cap companies in the United States. The Wilshire 5000 Index is a market-capitalization-weighted index of the market value of all stocks actively traded in the United States. The Bloomberg Barclays U.S. Aggregate Bond Index tracks the performance of U.S. investment-grade bonds in government, asset-backed, and corporate debt markets. Prior to 8/24/16, the index was named the Barclays U.S. Aggregate Bond Index. The Russell 2000 Index tracks the performance of 2,000 publicly traded small-cap companies in the United States. The SPDR S&P 500 ETF Trust seeks to provide investment results that, before expenses, correspond generally to the price and yield performance of the S&P 500 Index. It is not possible to invest directly in an index. Past performance does not guarantee future results.

Alpha measures a manager's incremental return that cannot be attributed to market movements. Beta measures the sensitivity of a fund to its benchmark. The beta of the market (as represented by a benchmark) is 1.00. Accordingly, a fund with a 1.10 beta is expected to have 10% more volatility than the market.

Standard deviation measures performance fluctuation, may not be indicative of future risk, and is not a predictor of returns. Information ratio is a measure of portfolio management's performance against risk and return relative to the benchmark. Tracking error is reported as a standard deviation percentage difference—the difference between the return received on an investment and that of the investment's benchmark. Sharpe ratio is a measure of excess return per unit of risk, as defined by standard deviation. A higher Sharpe ratio suggests better risk-adjusted performance.

Diversification does not guarantee a profit or eliminate the risk of a loss.

*Investments involve risks, including the potential loss of principal. The stock prices of midsize and small companies can change more frequently and dramatically than those of large companies. Growth stocks may be more susceptible to earnings disappointments, and value stocks may decline in price. Large company stocks could fall out of favor, and foreign investing, especially in emerging markets, has additional risks, such as currency and market volatility and political and social instability. Absolute return strategies are not designed to outperform stocks and bonds in strong markets, and there is no guarantee of a positive return. Fixed-income investments are subject to interest-rate and credit risk; their value will normally decline as interest rates rise or if a creditor is unable or unwilling to make principal or interest payments. Liquidity—the extent to which a security may be sold or a derivative position closed without negatively affecting its market value, if at all—may be impaired by reduced trading volume, heightened volatility, rising interest rates, and other market conditions. Investments in higher-yielding, lower-rated securities include a higher risk of default. Precious metal and commodity investments can be volatile and are affected by speculation, supply-and-demand dynamics, geopolitical stability, and other factors.*

**A fund's investment objectives, risks, charges, and expenses should be considered carefully before investing. The prospectus contains this and other important information about the fund. To obtain a prospectus, contact your financial professional, call John Hancock Investments at 800-225-5291, or visit our website at [jhinvestments.com](http://jhinvestments.com). Please read the prospectus carefully before investing or sending money.**

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