

Objectives-Based Investments: No Easy Answers to Complex Problems

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Objectives-based investing has moved to the asset-management industry's fore in recent years, but the results haven't matched the hype. We reviewed over 1,000 distinct multiasset funds to identify strategies aiming to provide what investors most commonly seek from objectives-based portfolios: income, target returns, volatility protection, and inflation protection. A healthy number of funds accomplish their objective, though comparable blended indexes would do the same, and usually with higher returns and lower volatility. Instead, the markers of worthy objectives-based investments are similar to those of other strong funds, and we indicate them through our Morningstar Analyst Ratings.

Key Takeaways

- ▶ The bar for investment due diligence shouldn't be lower just because a fund is purchased to fulfill a specific objective. Measure objectives-based funds' long-term returns against relevant indexes, as well as their stated objective.
- ▶ Many objectives-based funds meet their objective. However, like most actively managed funds, they struggle to outpace representative indexes.
- ▶ Income-focused funds have clearly provided higher-than-average income. But despite benefiting from a multiyear bull market for income-producing securities, most haven't added discernible value over a comparable blended index, and they've been more volatile, too.
- ▶ Target-return funds, also known as absolute return funds, have largely achieved their objective of delivering positive returns through various market environments, but a blended index has done it with lower volatility and higher returns.
- ▶ Volatility-protection funds are a nebulous group, unified mainly by their explicit focus on downside protection and delivering returns with lower volatility. As a group, the funds protect on the downside (in exchange for upside participation); the blended index has a better record on both the upside and the downside.
- ▶ Most funds with an inflation-fighting mandate have yet to be tested in an extreme inflationary environment, but they generally outpace the past decade's mild inflation. However, a comparable blended index and most inflation-protected bond funds have done so with better returns and markedly lower volatility.
- ▶ Exhibit 1 summarizes the objectives-based funds we recommend, as designated by Morningstar Analyst Ratings of Gold, Silver, or Bronze.

Exhibit 1 Recommended Objectives-Based Funds

Objective/Name	Morningstar Analyst Rating	Morningstar Rating Overall	5 Yr Return Ann	5 Yr Std Dev Ann	Morningstar Category
Income					
Vanguard Wellesley Income Adm	 Gold	★★★★★	7.5	4.7	Alloc--30% to 50% Equity
Berwyn Income	 Silver	★★★★★	5.2	5.0	Alloc--30% to 50% Equity
BlackRock Multi-Asset Income Instl	 Bronze	★★★★★	5.5	5.7	Tactical Allocation
Principal Global Div Inc Instl	 Bronze	★★★★	5.4	6.5	Alloc--30% to 50% Equity
Target Return					
GMO Benchmark-Free Allocation III	 Silver	★★★★	3.3	6.3	World Allocation
JHancock Global Absolute Ret Strats I	 Bronze	★★★★	--	--	Multialternative
Wells Fargo Absolute Return Inst	 Bronze	★★	3.1	6.3	World Allocation
Volatility Protection					
BlackRock Global Allocation Instl	 Gold	★★★★	3.4	8.8	World Allocation
FPA Crescent	 Gold	★★★★★	6.8	8.4	Alloc--50% to 70% Equity
AQR Risk Parity I	 Bronze	★★★	3.2	9.1	Tactical Allocation
Inflation Protection					
PIMCO All Asset Instl	 Gold	★★★	1.9	8.5	Tactical Allocation
PIMCO All Asset All Authority Inst	 Bronze	★★★	0.0	9.4	Tactical Allocation
Principal Diversified Real Asset Instl	 Bronze	★	0.1	9.4	Alloc--30% to 50% Equity

Source: Morningstar, Inc. Data as of 5/31/2016.

Introduction

Objectives-based investing has moved to the fore of the asset-management industry in recent years, with a spate of new strategies and healthy asset flows heralding its arrival. Nevertheless, it's an open question whether objectives-based funds represent a true advance in helping investors to meet their goals when compared with more-traditional funds. This report seeks to address that question.

Defining "Objectives"

In this report, we use the term "objectives-based" to describe funds that seek to address a specific investor preference or problem, which is in contrast to a more traditionally oriented strategy that seeks to provide exposure to a certain asset class. Objectives-based investing is sometimes referred to as "goals-based," "outcomes-based," or "solutions-based" investing and, confusingly, these terms are used interchangeably at times. For simplicity, and to avoid the more promissory connotations of some of these other names, we prefer "objectives-based," and thus use it throughout this report.

The "objectives" pursued by objectives-based funds span a wide range of investor wants and needs. Based on extensive research and numerous conversations with investors, financial advisors, and other industry participants, we have defined four broad types of objectives-based funds—income, target return, volatility protection, and inflation protection. We believe these objectives represent the types of goals that investors are most often seeking to advance.

Once we'd settled on these four types of objectives-based funds, we scoured our data to identify all objectives-based funds and assign them to one of the four types. That entailed combing through the prospectus language of the roughly 1,050 distinct funds included within the allocation or multialternative Morningstar Categories or, when the prospectus was unclear, consulting fund marketing materials and collateral. About one fourth of the funds we examined landed in one of the four objectives-based groups. Exhibit 2 shows some of the key considerations we used in determining which funds belonged within an objectives-based group. (A listing of all funds that we assigned to each objectives-based group can be downloaded [here](#).)

Exhibit 2 Considerations for Including and Excluding Funds From Objectives-Based Groups

Objective	Typical Prospectus and Marketing Language	Notes
Income	<ul style="list-style-type: none"> Clearly stressed current income generation as primary objective. Often included an income/yield target. 	<ul style="list-style-type: none"> Name test—whether or not "income" appears in a fund's name—was not a reliable indicator. Generally excluded target-risk funds that were constructed primarily along an efficient frontier framework and part of a target-risk series.
Target Return	<ul style="list-style-type: none"> Typically stressed "absolute returns" or "positive returns," regardless of market conditions. Sometimes included specific return targets, such as cash plus 5%. 	<ul style="list-style-type: none"> Name test provided some indication of funds' fit in the group, though majority of funds in the group did not have names that suggested inclusion.
Volatility Protection	<ul style="list-style-type: none"> Highlighted downside protection or volatility control as driving components of the investment process Often emphasized equitylike returns with lower-than-equity volatility. 	<ul style="list-style-type: none"> Relied on name test to a large extent given nebulous nature of "volatility."
Inflation Protection	<ul style="list-style-type: none"> Often included terms such as "real return," "inflation-sensitive asset classes," and "preserve purchasing power." 	<ul style="list-style-type: none"> Name test generally reliable. Usually distinguished by a reliance on commodities, inflation-protected bonds, and REITs.

Source: Morningstar, Inc.

Background: Financial-Planning Origins

Before delving more deeply into objectives-based investing, it's handy to understand the movement's antecedent in goals-based financial planning. Whereas the traditional planning process typically begins with investors and their advisors picking a conceptually acceptable level of risk and return, goals-based planning begins with more concrete and measurable goals. Goals might include having enough money to fund college education, retirement, or even material possessions like boats and vacation homes.

In practice, this often results in a portfolio of multiple "buckets" of assets or subportfolios tailored to each goal. The measure of success for these subportfolios isn't necessarily centered on beating a benchmark. Instead, it more holistically takes into account the interactions between savings, spending, time horizons, and expected investment returns to maximize the probability of achieving the goal.

That planning approach has practical and intuitive appeal. After all, it may be hard for investors to spend money fulfilling a goal when their portfolios are delivering negative returns, even if those portfolios are beating an index. Meanwhile, the approach's behavioral-investing rationale says it helps investors to focus on the longer term rather than the market's shorter-term swings, which lessens the chances of the buy-high, sell-low activity that can derail otherwise careful planning.

Asset-management firms have noticed this shift in benchmarking perspective and responded in kind. Some of the newly developed or rejiggered multiasset funds can be easily slotted into one of the

subportfolio roles demanded by a goals-based financial plan. That financial-planning process often takes a goal and backs into the required rate of return needed to achieve it; target-return funds are tailor-made for that approach. Objectives-based funds can also be used to address certain investor preferences rather than a specific spending goal, such as a smoother return stream or protection from inflation. In those cases, the focus changes from what is in the portfolio—for instance, blue-chip stocks or Treasury Inflation-Protected Securities—to why it's in the portfolio.

The funds' multiasset aspect is key: There are already plenty of traditional single-asset-class strategies that can be combined to meet investors' goals. For instance, many of the newer income-focused objectives-based funds essentially conjoin an equity-dividend portfolio with a high-yield-bond-heavy fixed-income fund.

Investing with a specific objective or goal in mind isn't new. One can argue that this motif also extends to target-date retirement funds and the age-based portfolios found in 529 college savings plans. What is newer, though, is the way some objectives-based funds have been positioned to investors—as strategies whose value derives from their ability to satisfy the goal concerned. In effect, it shifts the yardstick from how well the fund performs versus a benchmark index to how well it satisfies the specified objective. This report's Appendix A shows examples of how some industry players have tried to frame that shift.

Overview of Objectives-Based Funds

Not surprisingly, funds with an objectives-based angle generally meet their objectives, partly because those objectives can be so ambiguously defined. However, they're not nearly as successful when measured against a passively managed blended index.

For purposes of this analysis, we measured objectives-based funds in three ways, the results of which are summarized in Exhibit 3. First, we used various combinations of the S&P 500, MSCI ACWI ex USA, and Barclays U.S. Aggregate Bond indexes, weighted according to the objectives-based group's average equity allocation. These simple composite benchmarks combining equities and fixed-income indexes are reasonable starting points, since these mixes could stand in as sound substitute portfolios.

Income-oriented funds generally have little trouble producing above-average income. However, investors in the average income-oriented fund could have achieved similar returns with lower volatility and with more control over the timing of income using a total-return approach that sold fund shares as needed. In fact, that change in view was signaled in the 1990s when many bond funds shifted from a pure yield focus to a total-return approach as championed by PIMCO Total Return. However, the income focus has returned in response to investor demand.

As a group, funds that aim for tempered volatility or target returns accomplish their objectives, though that's largely because the objectives are so generic or nebulous. The average volatility-protection fund has typically cushioned losses in months when the S&P 500 declined but lagged when the benchmark climbed. In a way that's to be expected, since these multiasset funds usually allocate a portion of the portfolio to fixed income. A blended equity and fixed-income index delivers a similar pattern of returns, though with markedly better downside protection, which results in better risk-adjusted results.

Target-return funds, also known as absolute return funds, have objectives that can resemble those of volatility-protection funds—both broadly aim to deliver returns with a smoother ride. But target-return funds invest more heavily in alternative strategies than volatility-protection ones and attempt to produce positive returns regardless of the market's direction while also providing market diversification. Most target-return funds produce positive returns over long-enough measurement periods and also are less volatile than the S&P 500. But so does a simple blended index, which has even better returns and lower volatility than most target-return funds.

Exhibit 3 How Are Objectives-Based Funds Delivering?

Objective	Performance Against Objective	Performance Against Market Indexes ¹
Income	These funds have generally satisfied their objective by delivering higher-than-average yields. Over the past decade through March 2016, they averaged a 12-month yield of 3.5%. Other multiasset funds averaged just 1.9%, and the blended index delivered 2.8%.	Blended Index: 40% Equities, 60% Fixed Income Income-paying securities have been in favor for most of the past decade, which has helped these funds in recent years. There's no statistical evidence showing they're better than the blended index, which has lower volatility and better risk-adjusted returns.
Target Return	These strategies typically aim for positive returns, regardless of market conditions. Over long-enough time frames, such as three-year rolling periods, the vast majority funds accomplish their objective.	Blended Index: 30% Equities, 70% Fixed Income Our holdings data show a 30% average equity stake for these funds, though their use of derivatives could mask this true figure, which could be closer to 50% in equities. Regardless, they've lagged both benchmarks on both an absolute and risk-adjusted basis.
Volatility Protection	These funds, which mainly use traditional equity and fixed-income securities, have succeeded in damping volatility, but at the expense of returns.	Blended Index: 40% Equities, 60% Fixed Income The blended index has similar upside participation as these funds, but its downside protection is markedly better, largely because of a lack of high-yield bonds.
Inflation Protection	The majority of these funds have yet to be tested in any extreme inflationary environment. As a group, they come out ahead of inflation over the last decade's mild inflationary setting,	Blended Index: 40% Equities, 60% Fixed Income Commodities usually make up a substantial portion of these funds, and those plunging assets have taken a toll on results. They've proved to be more volatile and produced lower returns than the comparable index or typical inflation-protected bond fund in recent years.

Source: Morningstar, Inc.

Inflation-fighting funds have come out ahead of inflation, as measured by the Consumer Price Index for All Urban Consumers, during the past decade's mild inflationary environment. Their reliance on commodities and REITs has produced notably volatile results, especially compared with a blended index or the inflation-protected bond category average—the latter two have also produced better gains during that time. Meanwhile, the vast majority of these funds have yet to be tested over a period of more extreme inflation.

In sum, while income-oriented funds have shown some positive results—owing largely to a recent multi-year bull market in income-producing securities—there's little evidence that any of the four types of objectives-based funds consistently beat their blended indexes.

¹ Blended indexes reflect each group's average equity allocation, with non-U.S. equities representing 30% of the composite's total equity sleeve. We used the S&P 500 to represent U.S. equities, the MSCI ACWI ex USA Index for non-U.S. equities, and the Barclays U.S. Aggregate Bond Index for fixed income.

Digging Deeper

To account for the more flexible allocations and wider range of asset classes often employed in objectives-based funds, we also used returns-based style analysis (RBSA). This measured each fund against the particular mix of indexes that would have most closely mimicked the fund's performance over rolling three-year periods in the 10 years between the beginning of April 2006 and the end of March 2016. (See Exhibit 4 for a listing of the indexes used to conduct the analysis.)

Similar to results comparing income, target-return, volatility protection, and inflation-protection funds to their respective blended indexes, the four types of objectives-based funds do not generally outpace their custom RBSA benchmarks.

Exhibit 4 Returns-Based Style Analysis Asset Classes and Indexes

U.S. Equities	Fixed Income
Morningstar US Large Value	Barclays US Aggregate Bond
Morningstar US Large Growth	BofAML US HY Master II Constrained
Morningstar US Small Value	Barclays Global Aggregate Ex USD
Morningstar US Small Growth	Inflation Hedges
Non-U.S. Equities	S&P GS Commodities Index
MSCI ACWI Ex USA	FTSE NAREIT All Equity REITs
Cash	Barclays US Treasury US TIPS
USTREAS T-Bill Auction Ave 3 Mon	LBMA Gold Price AM USD

Source: Morningstar, Inc.

We also used RBSA analysis to perform a simplified attribution analysis of these funds, breaking out funds' top-down allocation effects from their individual security-selection decisions. The allocation effect essentially measures managers' tactical decisions. Objectives-based funds' flexible allocations are often used as a main selling point. Though similar to stock-picking, it's notoriously difficult to make consistently additive tactical moves. Our results show that objectives-based funds do not prove to be the exception to the rule, at either the tactical asset-allocation level or the individual security-selection level.

Due-Diligence Takeaways

While combining asset classes has its benefits — convenience for one — it has notable drawbacks, too. For instance, the combination of asset classes, coupled with the occasional use of complex strategies like tactical allocation, can reduce transparency and make these funds harder to use. It can also complicate performance benchmarking, perhaps explaining why some portfolio managers have emphasized the importance of achieving the objective and downplayed beating an index.

A healthy number of objectives-based funds seem to accomplish their goals, but it appears the same objectives could have been met far more simply, and at a sharply reduced cost, by utilizing index-based balanced portfolios. Indeed, though the managers of these funds employed specialized asset classes, sophisticated tools, and techniques like tactical asset allocation to meet their objectives, they were still bound by the reality that applies to any type of active strategy — it's hard to beat passive indexes after accounting for fees.

To be sure, that doesn't mean objective-based funds completely lack merit. In fact, we recommend a number of objectives-based funds, which we reference in this report. But we don't believe that investors should apply a different set of criteria when evaluating the merits of an objectives-based strategy. Rather, we believe the markers of worthy objectives-based investments are similar to those of other strong funds: They're run by a talented, committed management team ("People"); they leverage a prudent, repeatable process ("Process"); they're backed by a parent firm that puts shareholders first ("Parent"); and they're reasonably priced ("Price") while boasting attractive past performance ("Performance").

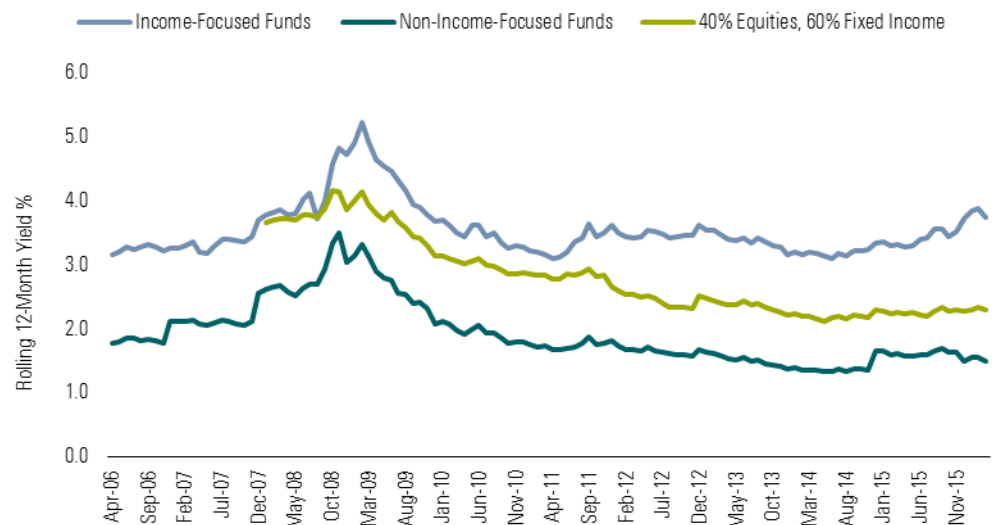
We rate and recommend funds based on the People, Process, Performance, Parent, and Price Pillars that underlie the Morningstar Analyst Rating. For investors looking for funds that address income, target-return, volatility-protection, or inflation-protection objectives, we've listed the funds that we recommend, as designated by an Analyst Rating of Gold, Silver, or Bronze. A Morningstar Medalist rating indicates our conviction in a fund's ability to outpace its index and peer group over a full market cycle. We've also included our assessment on the likelihood of those funds achieving their intended objective.

Objective: Income

Investors' desire for higher income is nothing new, but the last seven years' low-yield environment has made the task more difficult. In that sense, income-focused funds have offered some relief: Our review of multiasset income funds shows that they roundly deliver higher yields than the typical allocation fund as well as a simple blended index.

Exhibit 5 presents rolling 12-month yields for income-focused funds, compared with non-income-focused multiasset funds as well as a 40% equities, 60% fixed-income blended index.²

Exhibit 5 Income-Focused Funds Deliver Income
Rolling 12-month yield, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

Income-focused funds consistently have higher yields, which makes sense, since we placed funds into the income group based primarily on prospectus language that stressed current income as a primary

² While the rest of this paper uses indexes, for Exhibit 5, we used the ETFs of the indexes in order to calculate a weighted average yield for the blended index. The composite consists of 28% SPDR S&P 500, 12% SPDR MSCI ACWI ex-US, and 60% iShares Core U.S. Aggregate Bond. The composite begins at the inception of SPDR MSCI ACWI ex-US on Jan. 10, 2007.

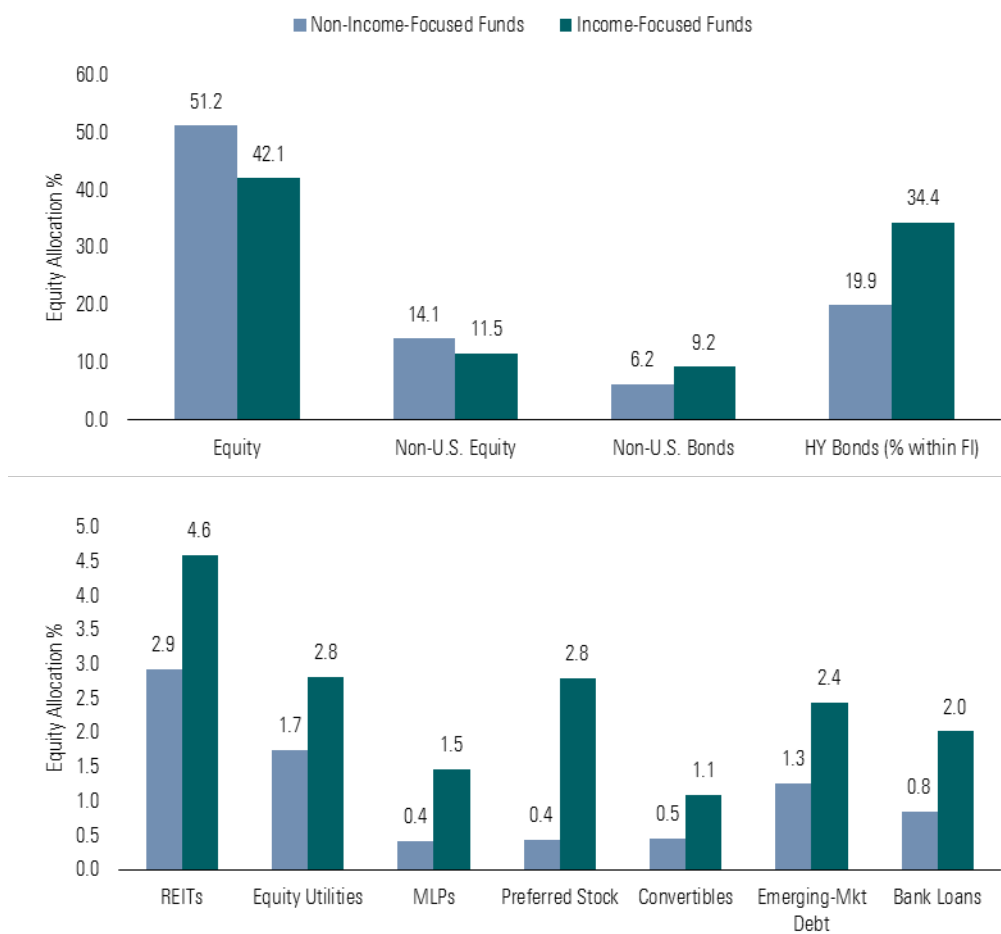
objective. This eliminated a number of funds that may have had "income" in their names, but also had lower yields because their prospectuses also emphasized growth and appreciation objectives.

More Income, More Volatility

But the question is how these income-focused funds achieve those yields, and the opportunity cost of doing so. Despite a multiyear bull market for income-producing securities, during the past decade through March 2016, the typical income-focused fund lagged a simple blended index after fees. What's more, it was more volatile, a salient detail given that volatility can exacerbate the sequence-of-return risk that investors court when drawing investment income (that is, those investors gradually sell their investments and, in so doing, potentially lock in market losses).

Generating a higher yield has meant venturing into more-specialized and volatile areas of the market, such as high-yield bonds, foreign bonds, REITs, and even utilities stocks, as shown by Exhibit 6 (we divided the asset classes into two separate charts to preserve the scaling details for asset classes with smaller allocations).

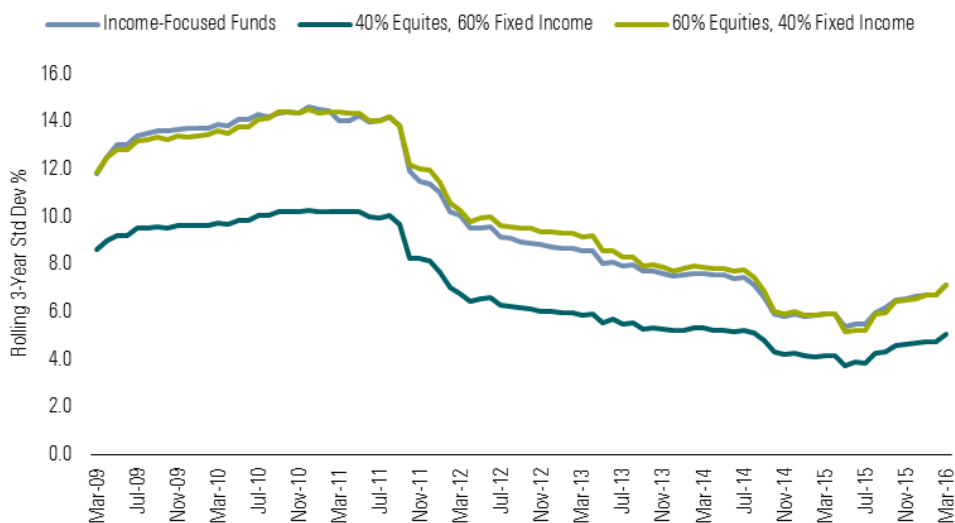
Exhibit 6 An Intrepid Search for Yield by Income-Focused Funds
Rolling 12-month yield, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

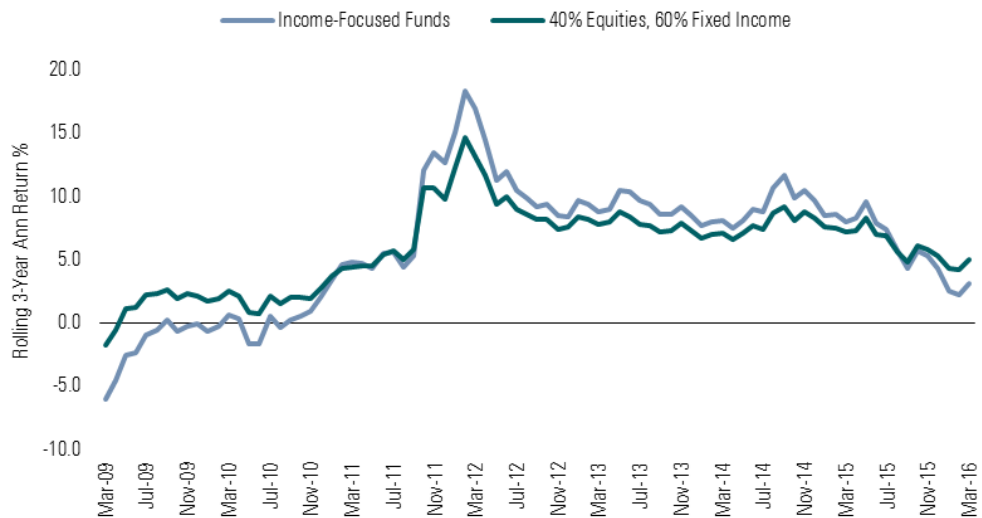
Relying on racier areas of the bond market—such as lower-rated credits, emerging-markets debt, and bank loans—subjects the funds to more equitylike risk, which has manifested in higher standard deviations. Income-focused funds only have, on average, a 40% equity stake, but as the rolling three-year standard deviations shown in Exhibit 7 demonstrate, their volatilities have been similar to that of a 60% equities, 40% fixed-income portfolio during the past 10 years through March 2016. Volatility for a 40% equities, 60% fixed-income portfolio has been consistently lower than both.

Exhibit 7 Income-Focused Funds Have Standard Deviations Similar to a 60% Equities, 40% Fixed-Income Index
Rolling three-year annualized standard deviation, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

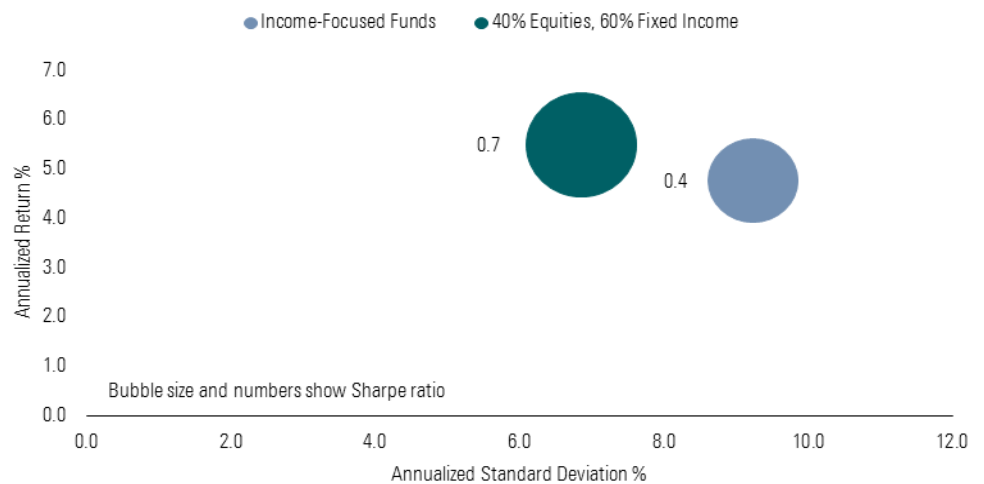
Exhibit 8 Income-Focused Funds Have About the Same Returns as a 40% Equities, 60% Fixed-Income Index
Rolling three-year annualized returns, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

Exhibit 8 illustrates how income-focused funds have followed a more jagged returns trajectory than a 40% equity, 60% fixed-income blended index, producing results that somewhat lag the index. As shown in Exhibit 9, during the past 10 years through March 2016, the typical income-focused fund gained an annualized 4.8% with a 9.2% standard deviation, while the 40% equities, 60% fixed-income composite index increased 5.5% with a 6.9% standard deviation; income funds' lower returns and higher volatility result in worse risk-adjusted results, as measured by Sharpe ratios. The average income-focused fund costs 1.20% per year (based on oldest share classes), which implies that managers of income-focused funds have successfully juiced returns before fees, but not after.

Exhibit 9 Income-Focused Funds Have Higher Standard Deviation, Lower Return Than Blended Index
10-year annualized returns, standard deviations, and Sharpe ratios, April 1, 2006 to March 31, 2016



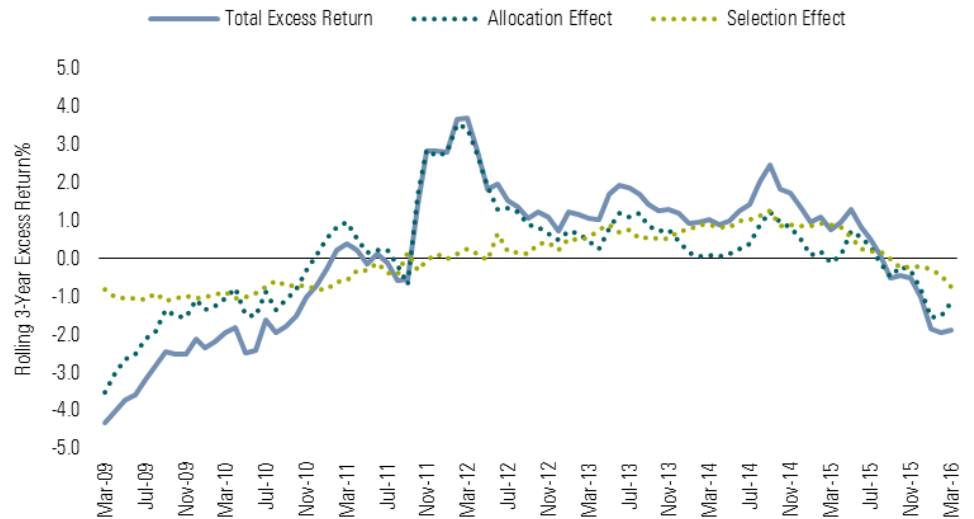
Source: Morningstar, Inc.

Income Comes Into and Out of Favor

Attribution analysis in Exhibit 10 may suggest that much of the value comes from asset-allocation decisions, but it's not necessarily due to allocation skill, per se.³ Instead, at least some of the positive allocation effects come from income-focused funds being systematically invested in a segment of securities (income-producing ones) that have been in favor for much of the past five years. Similarly, the allocation effect's negative turn in late 2015 more reflects a tough market for value stocks and high-yield bonds rather than a badly timed allocation decision. If investment styles and asset classes come into and out of favor over time, we would expect the positive and negative allocation effects from income-focused funds' systematic allocation biases to essentially cancel each other out. Exhibit 10's selection effect similarly suggests that the typical income-focused portfolio manager's stock and bond picks also don't materially add to results, on average.

³ For attribution analysis in Exhibit 10 and throughout the rest of this report, we calculated the allocation effect by subtracting the returns of the simple blended index (in this case, composed of 40% equities and 60% fixed income) from those of the average objective-based fund's RBSA blended index. We calculated the security-selection effect by subtracting funds' total returns from their custom RBSA index.

Exhibit 10 Income-Focused Funds Have Been in the Right Asset Classes; Security Selection Is More Mixed
Rolling three-year attribution versus 40% equity, 60% fixed-income composite index, April 1, 2006 to March 31, 2016







Source: Morningstar, Inc.

Medalist Income-Focused Funds With Lower Volatility

When we rate and evaluate investment strategies, we're basically indifferent to whether returns come from income or capital appreciation. As a result, our recommended income-focused multiasset funds stand on the usual pillars of the Morningstar Analyst Rating—such as having experienced teams and sound investing processes—rather than how much yield they produce; we expect these funds' total returns to hold up well compared with their blended indexes and allocation peers over a full market cycle.

Yet investors looking to draw income from their investments should focus on volatility and credit quality as well as total return, because they also face sequence-of-return risk that doesn't affect investors who just buy and hold their investments. Over a given time period, if most of an investment's worst returns come at the beginning of the period, income-drawing investors will have lower account balances than if the worst returns come at end; this is because the income taken out doesn't have the chance to grow and compound from the higher returns experienced later on. Investments with lower volatility and lower downside capture can help guard against this risk, so Exhibit 11 shows the funds that we believe will ably serve investors that intend to draw regular income from these investments; these multiasset income-focused funds have Morningstar Analyst Ratings of Gold, Silver, or Bronze and also tend to have lower volatility and lower downside capture compared with peers.

Exhibit 11 Recommended Income-Focused Funds Are Medalists With Lower Volatility and Lower Downside Risk

Name	Morningstar Analyst Rating	5 Yr Downside Capture Ratio*	5 Yr Std Dev Ann	12 Mo Yield	5 Yr Return Ann	Morningstar Rating Overall	Morningstar Category
Vanguard Wellesley Income Adm	 Gold	35.2	4.7	2.9	7.5	★★★★★	Allocation--30% to 50% Equity
Berwyn Income	 Silver	47.3	5.0	2.2	5.2	★★★★★	Allocation--30% to 50% Equity
BlackRock Multi-Asset Income Instl	 Bronze	65.0	5.7	5.0	5.5	★★★★★	Tactical Allocation
Principal Global Div Inc Instl	 Bronze	70.1	6.5	5.4	5.4	★★★★	Allocation--30% to 50% Equity

Source: Morningstar, Inc. Data as of 5/31/2016.

*Downside Capture Ratio calculated versus Morningstar Moderate Target Risk Index.

► **Vanguard Wellesley Income**

Fixed-income portfolio manager John Keogh and equity manager Michael Reckmeyer manage their 65% and 35% sleeves of the fund, respectively, using a balanced approach to providing income, capital appreciation, and downside protection. The fund has lately derived its top-quintile, 2.9% trailing 12-month yield from a bond portfolio with no high-yield bonds and stocks that, on average, have less debt and higher returns on assets than its typical peer's holdings. The fund's rock-bottom fees make it one of the cheapest actively managed allocation funds around and give investors a discernable performance head start. —Alec Lucas

► **Berwyn Income**

The team here takes a contrarian approach, preferring to avoid hot parts of the market and buying what is out of favor. The fund can invest as much as 30% of its assets in dividend-paying common stocks. Beyond a dividend, management looks for companies of all sizes with improving balance sheets and good cash flow prospects that trade relatively cheaply—often because of short-term issues. The rest of the portfolio is split among corporate bonds, preferred stocks, and convertible securities. Within corporates, the team has focused on BBB rated debt and high-yield securities, although it usually avoids the lowest-rated debt. —Kevin McDevitt

► **BlackRock Multi-Asset Income**

Lead manager Michael Fredericks can shift his portfolio across myriad income-generating asset classes with few constraints, typically holding 20% to 40% of assets in equity-income securities, 40% to 60% in fixed income, and 20% to 40% in alternative income securities, such as master limited partnerships, REITs, preferred stock, bank loans, and emerging-markets debt. He can also use futures, options, and shorting to hedge various risks, including equity, interest-rate, yield-curve, and currency risks. While the fund may move in and out of asset classes with ever-changing risk profiles, Fredericks aims to keep the fund's average 30-day volatility below that of the 50% MSCI World/50% Barclays U.S. Aggregate Bond Index blended benchmark, and it has generally stayed well below that threshold. —Jeff Holt

► **Principal Global Diversified Income**

This multimanager fund invests in over a dozen distinct strategies across nine asset classes, and this diversification has smoothed returns as the strategies have taken turns shouldering performance. Management emphasizes the risk-adjusted yields of each underlying asset class to construct the overall portfolio, and it sets constraints to prevent any asset class from overwhelming the fund as part of the

effort to balance the portfolio's overall yield and risk. The fund uses both Principal-affiliated and external managers to gain access to U.S. high-yield bonds (which had a 33% target allocation as of March 2016), emerging-markets debt (21%), commercial mortgage-backed securities (17%), global infrastructure (8%), global value equities (6%), preferred securities (6%), global REITs (4%), master limited partnerships (3%), and non-U.S. developed high-yield bonds (2%). —Jeff Holt

Objective: Target Return

Target-return funds, also known as "absolute return" strategies, can vary quite widely in terms of the investment strategies they pursue and securities they buy. But, by and large, these different approaches coalesce around a single overarching goal: earn positive returns regardless of market environment.

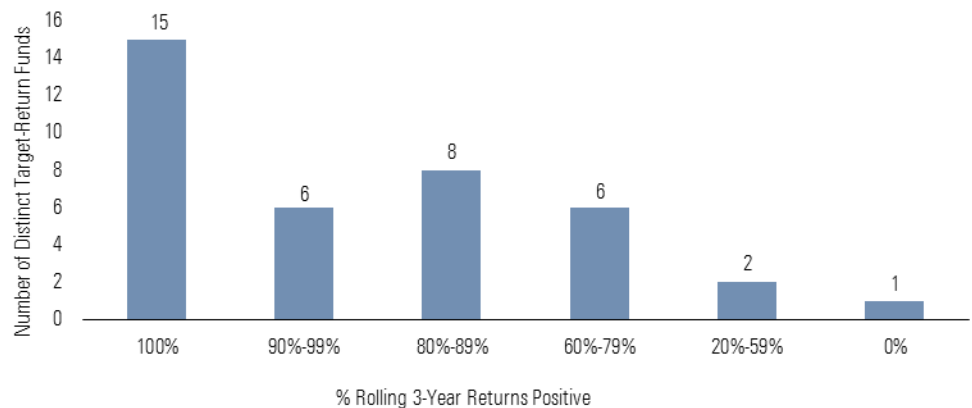
The pursuit of positive returns intuitively resonates on a few levels. From a behavioral finance perspective, it addresses investors' strong preference to avoid losses. From an objectives-based framework, it can be attractive to investors looking to hit a certain return level; a number of target-return funds, for instance, come with specific return objectives, such as cash plus 4% or Consumer Price Index plus 5%.

Target-Return Funds Deliver Positive Returns, and so Does the Index

Target-return funds don't produce positive returns month after month, in unerring fashion. This is no indictment, as it's probably not reasonable to expect that of virtually any strategy. Instead, we evaluated the performance of target-return funds over rolling three-year periods. By that measure, they fare pretty well: Of the 38 distinct target-return funds with at least three years of returns, 15 delivered positive returns in all rolling three-year periods since inception. As shown by Exhibit 12, a good majority produced positive returns in more than 80% of rolling three-year periods.

Exhibit 12 Most Target-Return Funds Have Delivered Long-Term Positive Returns

Number of funds that have positive three-year rolling returns, April 1, 2006 to March 31, 2016



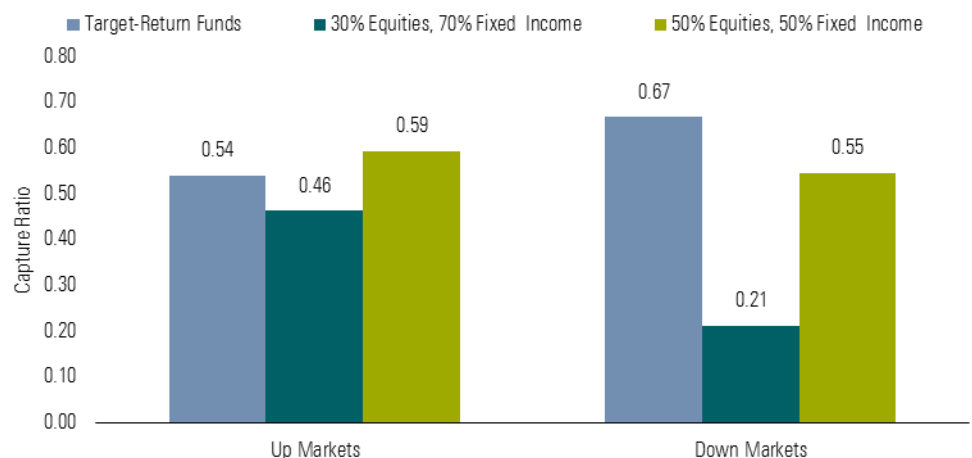
Source: Morningstar, Inc.

However, there's a catch: Comparable 30/70 and 50/50 blended indexes also had positive returns in every rolling three-year period in the last decade through March 31, 2016. We mainly compare target-return funds to a 30% equities, 70% fixed-income blended index because our holdings data show that they have an average net equity allocation of about 30%. However, as a number of the funds reside in the multialternative category, they often use derivatives, which may result in a different true equity exposure. Over the last three years, target-returns funds' average monthly returns had a 0.91 correlation with a 30/70 index. Their correlations were highest—at 0.95—with a 50% equities, 50% fixed-income index, so throughout this section we also compare the funds with a 50/50 index.

A few caveats apply to this comparison. First, while target-return funds' average performance may resemble these simply constructed index composites, they're very different approaches. Indeed, the target-return funds within the multialternative category employ alternative investment strategies, which are a far cry from the traditional stocks and bonds of the 30/70 or 50/50 composites. In addition, U.S. stocks have been very difficult to beat over the past decade, arguably making upside capture more important than downside avoidance. Yet, as shown in Exhibit 13, target-return funds appear to excel primarily at avoiding losses, and thus, one could argue, this has placed them at a stylistic disadvantage in recent years.

Nevertheless, even after accounting for these factors, target-return funds have turned in rather disappointing results. For one, the two blended indexes capture less of the S&P 500's dips than the typical target-return fund; each index lacks exposure to high-yield bond funds, which has helped. For another, in exchange for the downside protection they've afforded, target-return funds have sacrificed much of the upside.

Exhibit 13 Target-Return Funds Protect on Downside, and so Does the Blended Index
Average monthly up- and downmarket capture ratios versus the S&P 500, April 1, 2006 to March 31, 2016

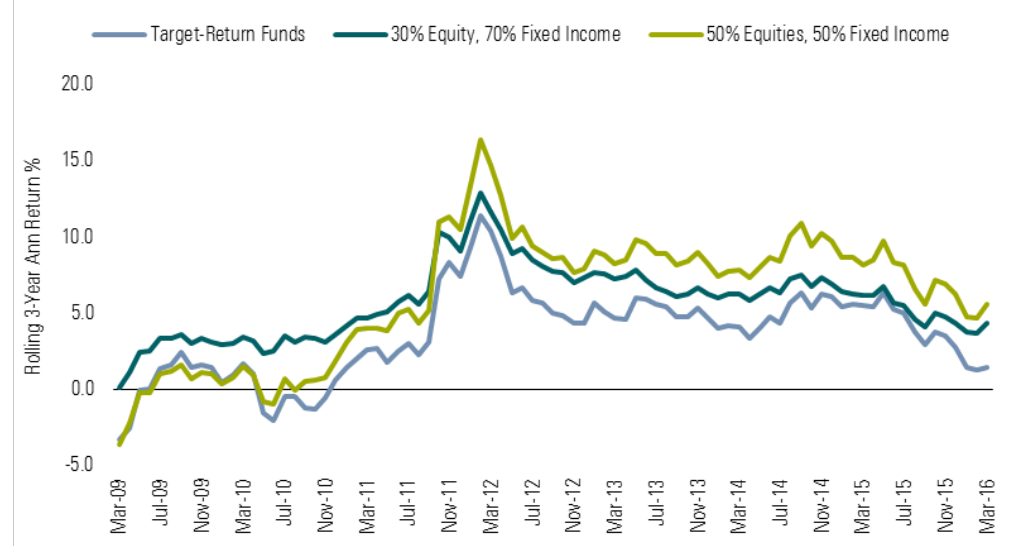


Source: Morningstar, Inc.

Those up- and downmarket capture patterns translate to the rolling three-year returns seen in Exhibit 14, where the typical target-return fund consistently lags both benchmarks. But as Exhibit 15 shows, it has done so with rolling three-year volatility, as measured by standard deviation, that looks more similar to a 50% equities, 50% fixed-income index.

Exhibit 14 Target-Return Funds Consistently Lag Their Blended Indexes

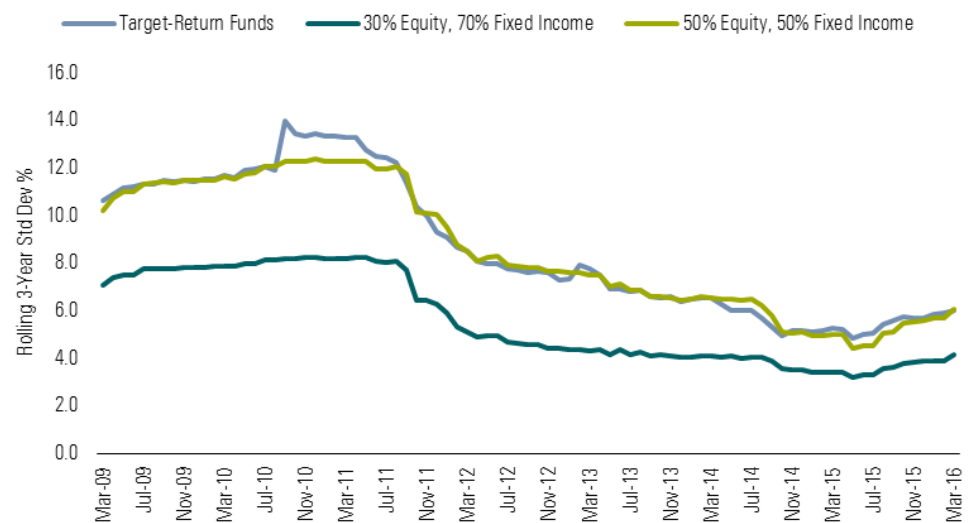
Rolling three-year annualized returns, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

Exhibit 15 Target-Return Funds Have Standard Deviations Similar to a 50% Equities, 50% Fixed-Income Index

Rolling three-year annualized standard deviation, April 1, 2006 to March 31, 2016

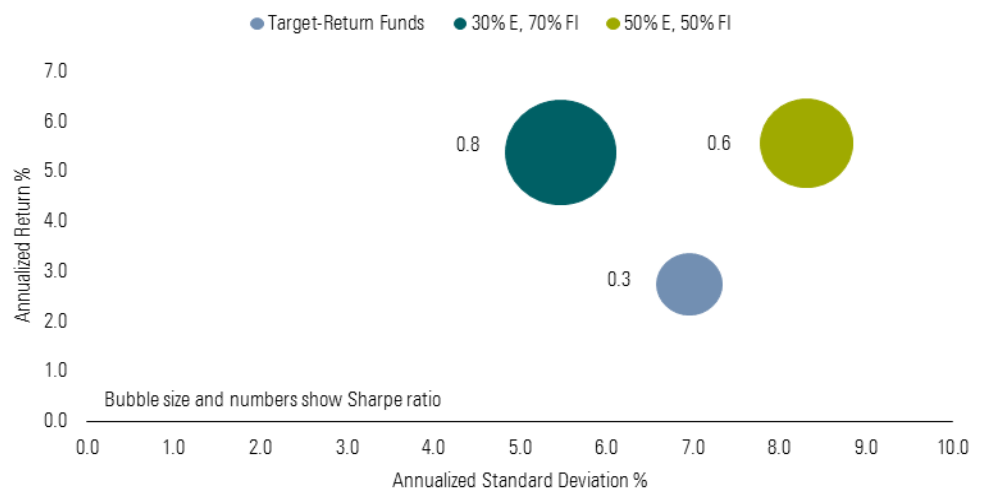


Source: Morningstar, Inc.

Exhibit 16 charts target-return funds overall risk and return statistics over the past 10 years from April 1, 2006, to March 31, 2016. During that time, the typical target-return fund had an annualized gain of 2.7%, while the 30/70 index returned 5.4% and the 50/50 index grew 5.6%. That 2.7-percentage-point return differential between the average target-return fund and the 30/70 index is still greater than the 1.77% average prospectus net expense ratio of each target-return fund's oldest share class.

Target-return funds' higher fees explain much of the performance shortfall but not the difference in volatility. In the past decade, target-return funds have an average annualized standard deviation of 7.0% compared with the 30/70 index's standard deviation of 5.5%. The funds were less volatile than the 50/50 index's 8.3% standard deviation, but that wasn't enough to make the funds come out ahead on a risk-adjusted basis, as measured by Sharpe ratios.

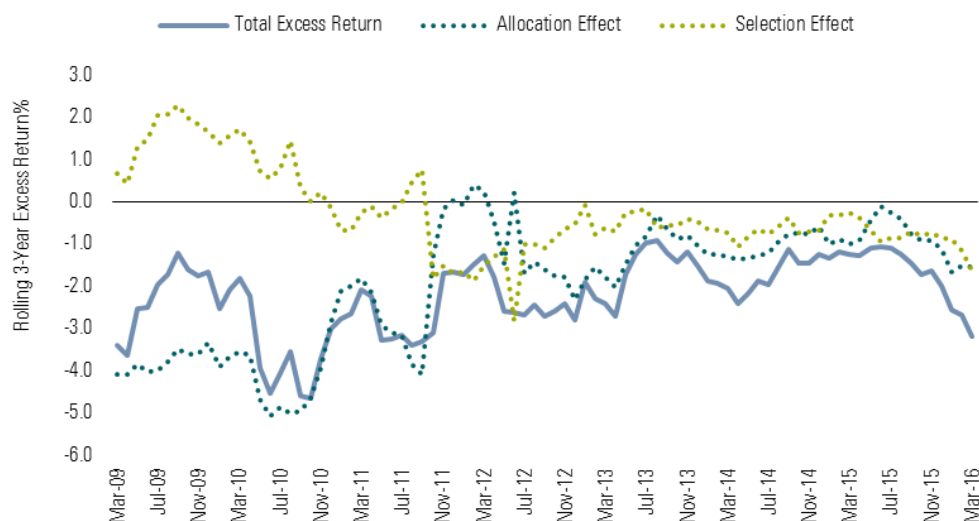
Exhibit 16 Target-Return Funds Have Higher Standard Deviations, Lower Returns Than Blended Index
10-year annualized returns, standard deviations, and Sharpe ratios, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

Attribution analysis of the rolling three-year periods over the past decade through March 2016 reveals that a combination of poor asset allocation and security selection explains the shortfall to the 30/70 index. Though target-return funds routinely allocate assets among a bevy of different asset classes and strategies, those moves have not bolstered returns, as evidenced by the consistently negative allocation effect shown in Exhibit 17. Security selection appears to have aided performance for a time but has tailed off in recent years.

Exhibit 17 Target-Return Funds Rarely Add Value Via Allocation Decisions, Sometimes Through Security Selection
Rolling three-year attribution versus 30% equity, 70% fixed-income composite index, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

Recommended Target-Return Funds

Though target-return funds haven't delivered as a group, some funds have merit. Those funds are run by experienced teams with proven long-term and consistent records of beating their peers and indexes. To wit, the three funds listed in Exhibit 18 have earned medals under our Morningstar Analyst Rating, meaning we believe they are well poised to deliver strong risk-adjusted results compared with their peer groups and relevant indexes over a full market cycle.

Exhibit 18 Recommended Funds for Target-Return Objective

Name	Morningstar Analyst Rating	Morningstar Rating Overall	5 Yr Return Ann	5 Yr Std Dev Ann	Morningstar Category
GMO Benchmark-Free Allocation III	Silver	★★★★	3.3	6.3	World Allocation
JHancock Global Absolute Ret Strats I	Bronze	★★★★	--	--	Multialternative
Wells Fargo Absolute Return Inst	Bronze	★★	3.1	6.3	World Allocation

Source: Morningstar, Inc. Data as of 5/31/2016.

► GMO Benchmark-Free Allocation

This is one of about a dozen funds not within the multialternative category that falls within the target-return group. It qualifies for the group because it has an inflation plus 5% annual return target, with a 5% to 10% annualized standard deviation goal. Since its July 2003 inception through March 2016, its annualized 8.6% gain has readily met the return goal—CPI All Urban increased 2.1% during that period. It's done so with a standard deviation of 7.3%.

Lead managers Ben Inker and Sam Wilderman maneuver GMO Benchmark-Free Allocation across almost two dozen asset classes, changing allocations based on an overarching firmwide view that valuations and profit margins eventually revert to their long-run averages. Over the past decade, the team has allocated roughly half the fund's assets to equities, with half of that portion invested in non-U.S. stocks. The fund compares well with a 50% MSCI ACWI/50% Barclays U.S. Aggregate Bond composite index, which gained an annualized 6.2% with an 8.2% standard deviation from the fund's July 2003 inception to March 2016. —Leo Acheson⁴

► John Hancock Global Absolute Return Strategies

Bronze-rated John Hancock Global Absolute Return Strategies targets a return of cash plus 5%. Since its December 2011 inception through March 2016, the fund has an annualized return of 3.5% and standard deviation of 3.9%. Adding back its prospectus net expense ratio of 1.33% gets the fund to within 20 basis points of meeting its return target (most objectives are typically on a gross-of-fees basis). It's had a globally diversified, average net equity exposure of about 20% since inception. A 20% MSCI ACWI/80% composite index gained 4.3% during the same time period, with a standard deviation of 3.3%. The fund was on a stronger trajectory prior to 2015's low-return environment. There's reason to believe that this global macro strategy's well-developed and risk-aware process can get it back on a stronger performance track in the future. Lead portfolio manager Guy Stern tactically invests in global stock, bond, and currency markets and draws from the best ideas of a more than 50-person global absolute return analyst team. —Jason Kephart

► Well Fargo Absolute Return

With a minimum investment as low as \$1,000, Wells Fargo Absolute Return is the more accessible clone of GMO Benchmark-Free Allocation, which has a minimum initial purchase of \$10 million. It's also more expensive, at 1.51% for the A shares, versus 0.90% for the class III GMO share class. Wells Fargo Absolute Return's higher price tag keeps its Morningstar Analyst Rating at Bronze. The Wells Fargo fund hasn't met its return goal since its March 2012 inception, but GMO Benchmark-Free Allocation's longer track record instills more confidence that it can do so over longer time horizons. —Leo Acheson

⁴ On June 6, 2016, we put the Analyst Ratings for GMO Benchmark-Free Allocation and its more expensive clone, Wells Fargo Absolute Return, under review because of personnel changes. Comanager Sam Wilderman, a 20-year veteran of GMO, will leave the firm at the end of 2016, and GMO also laid off roughly 10% of its 650-person staff in the past few weeks. While longtime lead manager Ben Inker's continued presence at the helm and GMO's deep asset-allocation resources provide a solid foundation for the fund, the team changes are substantial, and we are currently assessing their impact on the fund's prospects.

Objective: Volatility Protection

The 2007-08 financial crisis left many investors feeling understandably unmoored and searching for investments that could temper future bouts of such stomach-churning market volatility. Funds seeking to provide protection from similar downturns have multiplied since then; of the 60 distinct strategies that we identified as volatility-protection funds, 47 were launched since 2009.

The rather nebulous notion of "volatility" resulted in a motley group of funds compared with other objectives-based groups, and it could have been even more disparate. It's not uncommon, for instance, to see multiasset funds tout themselves based on their goal of providing lower volatility compared with equities. But by that yardstick, essentially any fund within the allocation categories should be expected to have lower volatility than equities, because by our category definitions, they must also hold fixed income.

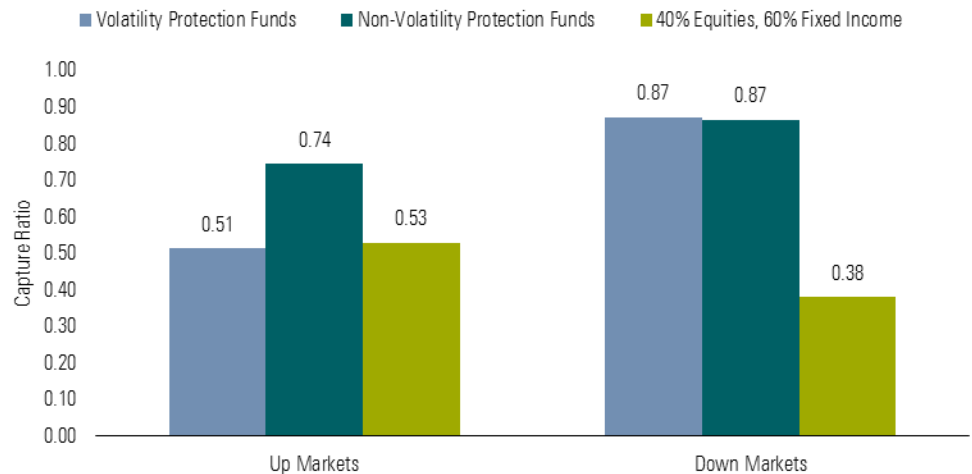
To narrow the field, we concentrated on identifying funds in which volatility or downside protection appeared to be a driving component of their investment process. This still resulted in a rather inclusive group. They include relatively newer and more-esoteric investments, such as risk-parity funds, which aim to balance sources of risk and then leverage up the resulting fixed-income-driven returns. More-traditional valuation-driven strategies, which can move assets in and out of cash depending on market opportunities, also fall into this group.

Not News: Multiasset Strategies Have Lower Downside Risk and Standard Deviation Than Equities

As a group, volatility-protection funds do generally offer refuge when equity markets turn negative. Exhibit 19 shows that in months when the S&P 500 lost money, the typical volatility-protection fund captured only 87% of the loss. That figure is similar to the downside capture ratio of all other non-volatility-protection multiasset funds. A comparable blended index of 40% equities and 60% fixed income handily beat both, capturing only 38% of the S&P 500's losses in down months. Volatility-protection funds have, on average, 20% of their bond sleeves invested in high-yield bonds, which would go a long way toward explaining the difference in downside capture between those funds and the blended index, which does not include high-yield fixed income.

Protecting on the downside generally entails giving up some participation in up markets. On that measure, volatility-protection funds and the blended index perform similarly, with both capturing about half of the S&P 500's gains. Nonvolatility multiasset funds, which have an average equity allocation almost 10 percentage points greater, predictably offer more upside participation.

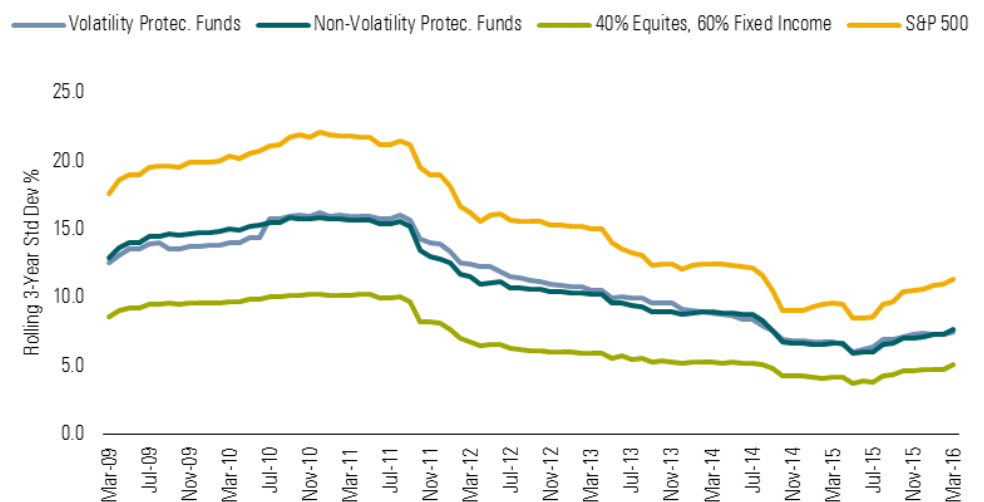
Exhibit 19 Volatility-Protection Funds Protect on the Downside, and so Does the Blended Index
Average monthly up- and downmarket capture ratios versus S&P 500, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

It's almost a tautology to assert that volatility-protection funds—or any multiasset fund—have lower standard deviations than the S&P 500. Exhibit 20 shows how that relationship has played out over rolling three-year periods throughout the past decade. Perhaps unsurprisingly given the downside behavior and lack of high-yield bonds, the standard deviation of the blended index is consistently lower than both groups of multiasset funds.

Exhibit 20 Volatility-Protection Funds Have Lower Standard Deviation Than Equities; Blended Index's Is Even Lower
Rolling three-year annualized standard deviation, April 1, 2006 to March 31, 2016

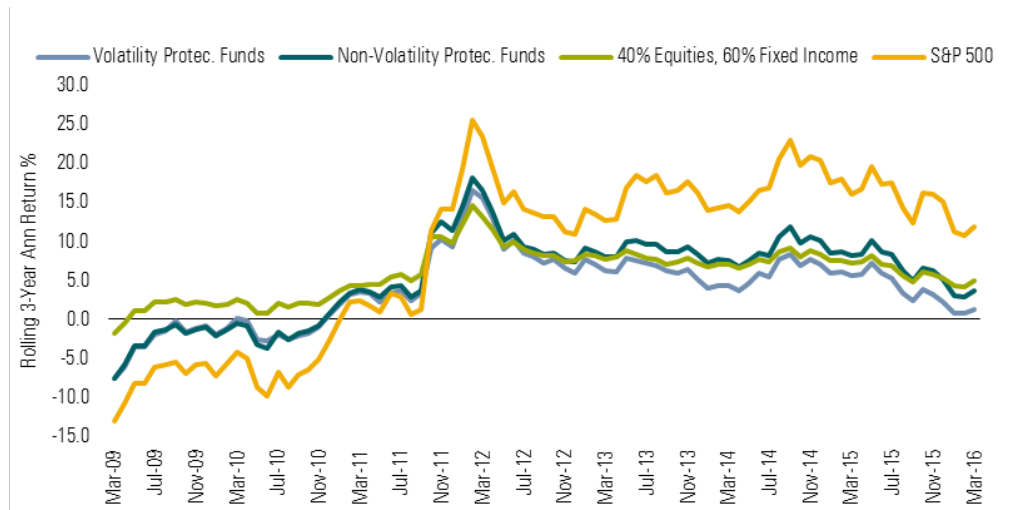


Source: Morningstar, Inc.

Index's Better Downside Protection Leads to Better Total and Risk-Adjusted Returns

The blended index's overall better record of downside protection results in consistently more attractive total returns. Exhibit 21 shows how the index has fared against volatility-protection funds and other multiasset strategies using rolling three-year periods over the past 10 years.

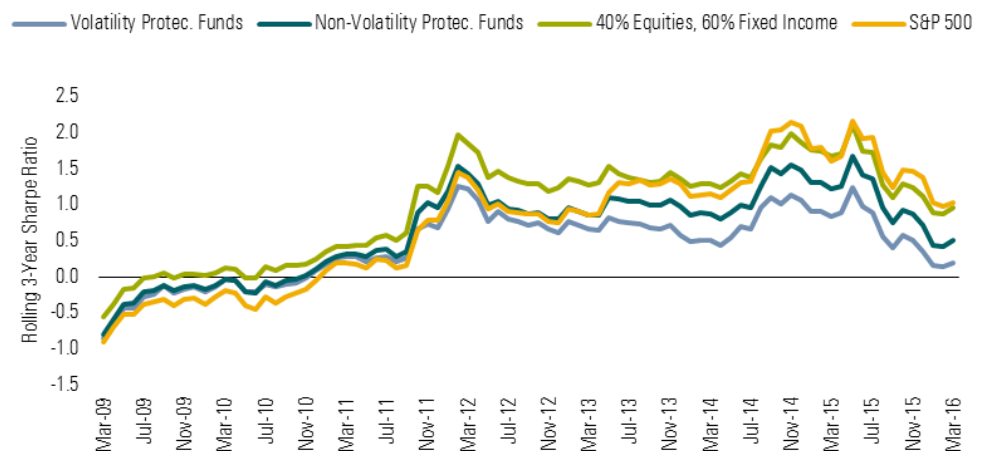
Exhibit 21 Volatility-Protection Funds' Total Returns Consistently Lag Blended Index's
Rolling three-year annualized returns, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

Suffice it to say, when considering risk-adjusted results, as measured through Sharpe ratios, the blended index looks even better. Exhibit 22 shows that the blended index's lower standard deviation also keeps its Sharpe ratio ahead of the S&P 500's for much of the last decade. That's largely due to its Barclays U.S. Aggregate Bond Index stake, where a low-rate environment has helped produce some of the market's best Sharpe ratios during that time.

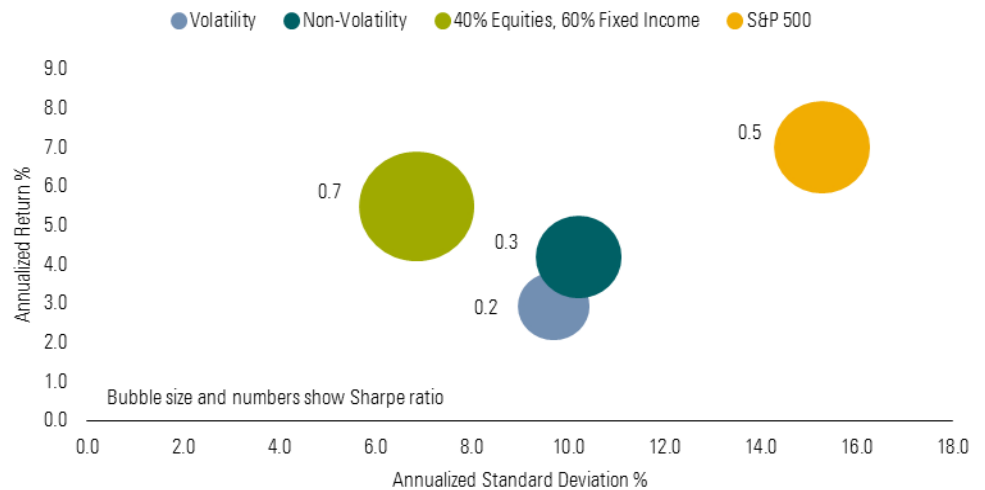
Exhibit 22 Volatility-Protection Funds' Sharpe Ratios Consistently Lag Those of Blended Index and S&P 500
Rolling three-year annualized Sharpe ratio, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

Exhibit 23 translates those rolling risk and return results to 10-year figures: From April 2006 to March 2016, volatility-protection funds may have delivered lower volatility compared with the S&P 500, but a blended index had less volatility with better returns.

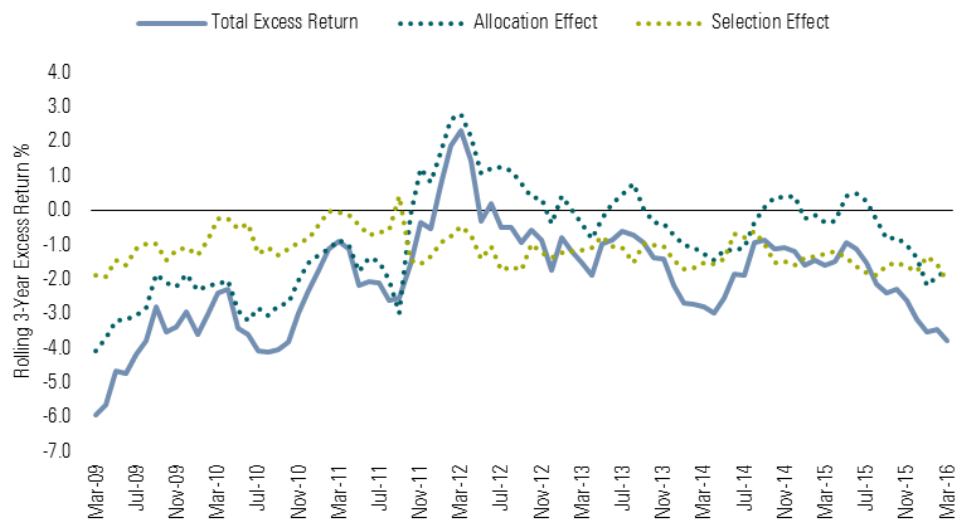
Exhibit 23 Volatility-Protection Funds Have Higher Standard Deviation, Lower Returns Than Blended Index
10-year annualized returns, standard deviations, and Sharpe ratios, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

Volatility-protection funds often rely on tactical asset-allocation decisions to provide smoother returns. As the allocation effect in Exhibit 24 shows, over the past 10 years at least, those decisions have generally not proved better than a static blended index. Security selection for these funds is similarly poor.

Exhibit 24 Volatility-Protection Funds Rarely Add Value Via Allocation Decisions, Sometimes Through Security
Rolling three-year attribution versus 30% equity, 70% fixed-income composite index, April 1, 2006 to March 31, 2016






Source: Morningstar, Inc.

The almost uniformly negative excess returns and performance attribution results don't necessarily indicate a complete lack of manager skill—expenses play a role in the outcomes well. Volatility-protection funds tend to have higher fees than other multiasset funds; their average oldest share class prospectus net expense ratio is 1.53% versus 1.33% for all multiasset funds (only the alternatives-heavy target-return funds have higher average expenses, at 1.77%, among objectives-based groups).

Recommended Volatility-Protection Funds

The volatility-protection funds in which we have the most confidence are summed up in Exhibit 25. Crucially, they rise above any vague notions of "volatility" to define the concept more concretely. For the teams at BlackRock Global Allocation and FPA Crescent, that means delivering equitylike returns with lower-than-equity risk, feats that both funds have accomplished over their more-than-two-decade histories. Both funds predate the idea of objectives-based investing. Like most funds that pursue a risk-parity strategy, AQR Risk Parity has a considerably shorter track record (the fund only launched in 2010). For investors who believe in its approach to allocating assets based on risk rather than capital, the fund provides a measured and well-researched approach to doing so.

Exhibit 25 Recommended Funds for Volatility-Protection Objective

Name	Morningstar Analyst Rating	5 Yr Downside Capture*	5 Yr Standard Deviation	5 Yr Return Annualized	Morningstar Rating Overall	Morningstar Category
BlackRock Global Allocation Instl	 Gold	0.9	8.8	3.4	★★★★	World Allocation
FPA Crescent	 Gold	1.0	8.4	6.8	★★★★★	Allocation--50% to 70% Equity
AQR Risk Parity I	 Bronze	0.8	9.1	3.2	★★★	Tactical Allocation

Source: Morningstar, Inc. Data as of 5/31/2016.

*Downside Capture Ratio calculated versus Morningstar Moderate Target Risk Index.

► BlackRock Global Allocation

This fund aims to be a portfolio anchor and attempts to deliver equity-market-like returns with less risk. The fund's blended benchmark is a 60%/40% stock/bond split, including 36% S&P 500, 24% FTSE All-World ex US Index, 24% Bank of America/Merrill Lynch 5-Year U.S. Treasury Bond Index, and 16% Citigroup Non-U.S. Dollar World Government Bond Index.

Management's aversion to permanent capital loss and investments that it believes don't compensate for their risks has driven the fund's success. Its nearly 10% annualized gain from its 1989 inception through Dec. 31, 2015, beats the 7.3% annualized gain of the typical world-allocation fund. A \$10,000 investment made in 1989 was worth more than \$132,000 at the end of 2015, while the same deposit in its custom global stock, bond, and cash benchmark was \$69,000. The fund has captured more than 100% of that category's upside and 85% of its downside. — Dan Culloton

► FPA Crescent

This fund's stated mission is to deliver equitylike returns with less risk than the stock market, a hurdle that lead manager Steve Romick has far exceeded since the fund's inception. Indeed, its 10.9% annualized gain from its June 1993 launch through April 30, 2015, beats the S&P 500 by 1.5 percentage

points per year, while its standard deviation, a measure of volatility, was 31% lower than the index's. FPA Crescent has won by not losing. With an oft-heavy cash stake, it will lag in some rallies. From its 1993 inception through the end of April 2015, it captured about 70% of the S&P 500's gains in upturns. However, it was able to preserve those gains in rough environments, suffering just 45% of the index's losses in downturns.

The fund ranges across asset classes, market caps, sectors, geographies, and public and private markets. Romick and team, who can also short securities, are absolute value investors who view risk as the possibility of suffering permanent loss, not of underperforming a benchmark or peer group. They seek securities trading at substantial discounts to their estimated worth and stockpile cash when they can't find them. — Dan Culloton

► **AQR Risk Parity**

Management allocates risk equally across four buckets—global equities, global bonds, inflation-hedged assets (two thirds commodities, one third inflation-linked bonds), and credit/currency—then adjusts those allocations based on its tactical models. One area in which AQR distinguishes its process is its approach to risk. The fund's 10% volatility is achieved, as is the case with other risk-parity strategies, with the aid of leverage. AQR generates forward-looking volatility estimates for each asset class, then keeps unusually close tabs on volatility, monitoring it and rebalancing to target levels on a daily basis. Moreover, management incorporates several constraints to help manage the risk of leverage. Those include exposure limits at the asset-class and sub-asset-class levels (generated through stress-testing), gross exposure caps, and a systematic drawdown process run through a separate companywide risk-management function.

Commodities play an intrinsic part of nearly all risk-parity strategies, but they also introduce greater unpredictability to returns, and they have been a significant drag on this fund's returns in recent years. From its October 2010 inception through April 2016, the fund is ahead of the category on a returns and Sharpe ratio basis, but it significantly lags its blended benchmark (4.98 % annualized return for the fund versus 7.08% for the benchmark, and a Sharpe ratio of 0.57 compared with 0.91). —Josh Charlson

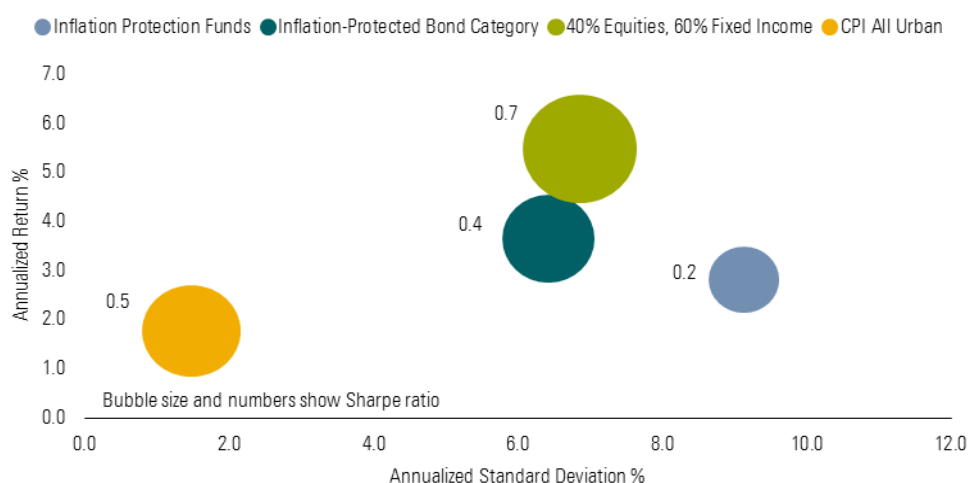
Objective: Inflation Protection

Inflation is often equated to a tax that erodes investors' future purchasing power, and even periods of relatively low and steady inflation can accumulate to become significant drags on real returns over time. The current low-inflation environment has dampened investor interest in inflation-fighting funds in recent years; a marked negative turn in performance, driven by the large commodities stakes commonly used in many of these funds, hasn't helped asset flows, either. But an unprecedentedly accommodative Fed rate policy following the global financial crisis did spark a flood of new products in anticipation of a money-supply-fueled jump in inflation; of the 31 multiasset funds that we classify as having an inflation-protection objective, 25 were launched between 2010 and 2014.

Few Inflation-Protection Bond Funds Have Been Truly Tested

As a result of this timing, the vast majority of funds in the group have never been tested with anything beyond mild inflationary pressure or limited bouts of unexpected inflation. In this sort of steady-state environment, inflation is a relative nonissue for stocks and bonds, as inflation expectations are built into the discount rates used in those pricing models.

Exhibit 26 Inflation-Protection Funds Beat Inflation, Though Volatility Has Been High
10-year annualized returns, standard deviations, and Sharpe ratios, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

The low-inflation environment has produced a mixed record, as suggested by Exhibit 26: Over the past decade through March 2016, multiasset funds with an inflation-protection objective have generally met

their mark and even come out ahead of inflation, as measured by the Consumer Price Index for All Urban Consumers. During that time, inflation grew by an annualized 1.8% per year, while inflation-protection funds gained 2.8%.

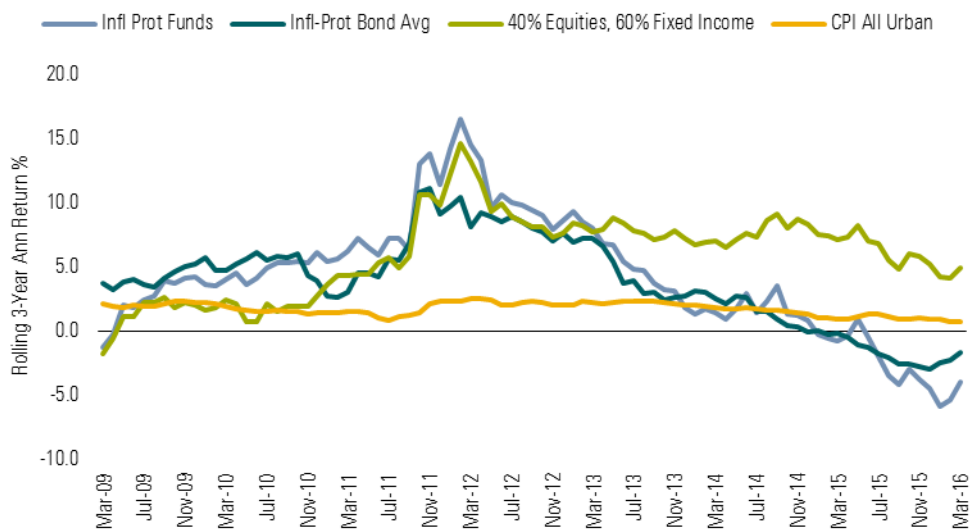
However, a comparable 40% equity, 60% fixed-income blended index, as well as the typical inflation-protected bond fund, each delivered better gains, and they did so with markedly lower volatility. Inflation-protection funds' relatively high volatility comes largely from the exposure to REITs and commodities that typically represent significant portions of these strategies. Those asset classes, along with Treasury Inflation-Protected Securities, make up the primary triumvirate of holdings that distinguishes these funds from most allocation funds and inflation-protected bond funds (other investments often used in multiasset inflation protection funds include gold and currency).

Commodities: Earlier a Blessing, Now a Curse

As Exhibit 27 indicates, inflation-protection funds enjoyed fairly strong returns for the first half of the last decade, with returns that easily outstripped inflation and the blended index. Much of those gains came on the back of a booming commodities market, driven primarily by a Chinese investment-led growth model that vastly outstripped all historical economic precedents. But as China has moved toward a more balanced, consumption-led economy, commodities have suffered. As a result, most inflation-protection funds have delivered negative annual returns since 2013, even as inflation has crept modestly upward.

Exhibit 27 Inflation Has Climbed, but Inflation-Protection Funds Have Declined

Rolling three-year annualized returns, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

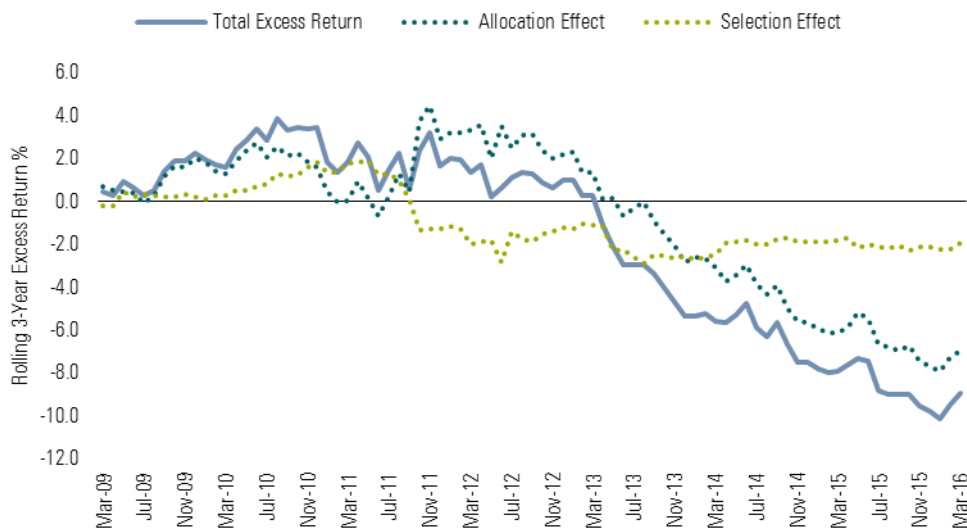
Performance Attribution Reflects Distinct Asset-Class Profile

Exhibit 28 breaks down the attribution results for inflation-protection funds by estimating the portion of excess returns versus a 40% equities, 60% fixed-income blended index that came from allocation versus security-selection decisions. We think it makes sense to compare returns with the blended index because it reflects the funds' average equity allocation. It's also realistic to imagine these inflation-

protection funds being used as a proportional carve-out of a 40/60 portfolio, making the 40/60 index an investor's forgone returns. (Of course, commodity and real estate-related investments court more volatility than the broader equity market, and the leveraged bonds sometimes used by inflation-protection funds can also bring more volatility than a core bond selection. These additional sources of risk imply that inflation-protection funds are best held as a long-term inflation hedge.)

But given the relatively unique set of asset classes typically represented in inflation-protection funds, we would not necessarily interpret Exhibit 28's positive or negative allocation effects as proof of asset-allocation skill, or the lack thereof. Instead, it more reflects inflation-protection funds being systematically overweight certain areas of the market that have gone in and out of favor during the past decade. Over that time, for instance, REITs have largely benefited from a bull market in income-producing securities. Negative returns from TIPS in two of the past three calendar years have contributed to the recent negative allocation effect, though the commodities downturn explains the majority of the pattern.

Exhibit 28 Inflation-Protection Funds Beat Inflation, Though Volatility Has Been High
10-year annualized standard deviations and returns, April 1, 2006 to March 31, 2016



Source: Morningstar, Inc.

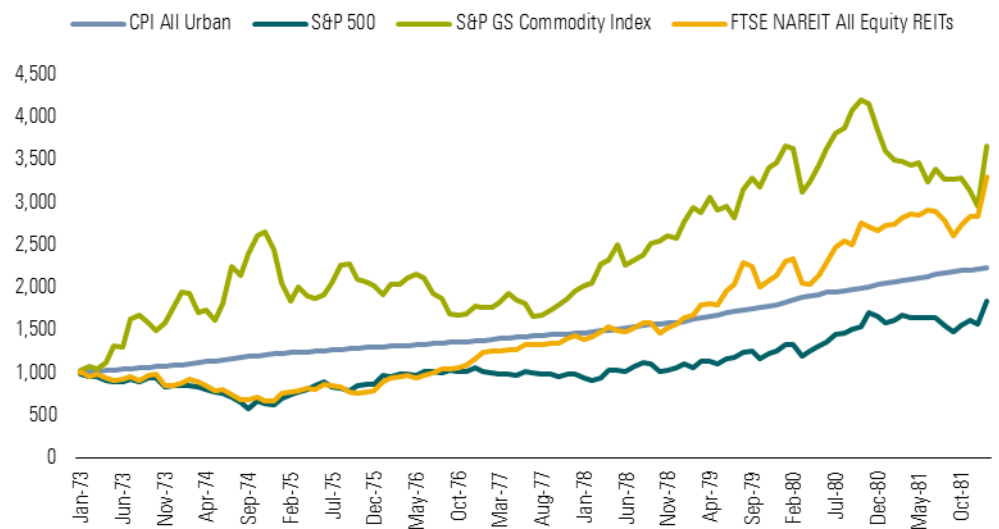
Don't Give Up on Inflation-Protection Funds

Despite those uneven results, there's still some argument to be made for multiasset inflation-protection funds over a portfolio of TIPS. True, TIPS are one of the most direct approaches to protecting against both expected and unexpected inflation because their principal amounts change with the Consumer Price Index, not something theoretically correlated with the CPI. And while their prices can fluctuate because of changes in inflation or real yields, they're an effective hedge when held to maturity.

But TIPS only provide inflation protection for the money invested in them. To protect a larger pool of assets, history suggests that commodities and REITs have effectively combated periods of more extreme unexpected inflation, when more-traditional asset classes have not held up as well. For

instance, between January 1973 and December 1981, inflation climbed 9.2% annually, while the S&P 500 increased only 5.2%, resulting in a real-return loss of 4.0% annually. (We use the S&P 500 instead of the blended index, as neither the Barclays U.S. Aggregate Bond Index nor the MSCI ACWI ex USA have return histories that go back that far.) Exhibit 29 demonstrates that during that time, a broad basket of commodities and REITs proved to be effective hedges against inflation. Of course, there's the question of how well the past will represent the future. Whether or not commodities or REITs will continue to hedge inflation going forward is beyond the scope of this paper, but Appendix 2 offers some broad considerations on the topic.

Exhibit 29 REITs and Commodities Have Been Effective Inflation Hedges in Past High-Inflation Environments
Growth of \$1,000, from Jan. 1, 1973 to Dec. 31, 1981



Source: Morningstar, Inc.

Recommended Inflation-Protection Funds




Given their relatively specific objectives and unique portfolios, we pay closer attention to how well funds with an inflation-fighting mandate live up to their objective when rating them (as enumerated in the rest of this report, we don't necessarily do the same for the comparatively more ambiguous objectives seen in income, target-return, or volatility-protection funds). Our recommended inflation-protection funds have generally outpaced inflation over their histories. While they fall short of their more specific "CPI-plus" goals (most of which are relatively ambitious), we believe they're still poised to serve investors well over the long term.

► PIMCO All Asset and PIMCO All Asset All Authority

PIMCO All Asset has a CPI plus 5% goal, while closely related sibling PIMCO All Asset All Authority tries to reach CPI plus 6.5%. Those are lofty goals, and they had us debating whether these funds belonged with inflation-fighting or target-return funds—many of the latter have CPI-plus targets. Both funds' marketing pages are so imbued with inflation-hedging language ("Why Invest in This Fund ... Inflation Protection: The strategy seeks to combat the effects of inflation ..."), and because objectives-based

funds are largely classified based on their marketing message, we ultimately decided to put them in the inflation-protection group.

Exhibit 30 Recommended Funds for Inflation-Protection Objective

Name	Morningstar Analyst Rating	Morningstar Rating Overall	5 Yr Return Ann	5 Yr Std Dev Ann	Morningstar Category
PIMCO All Asset Instl	 Gold	★★★★	1.9	8.5	Tactical Allocation
PIMCO All Asset All Authority Inst	 Bronze	★★★★	0.0	9.4	Tactical Allocation
Principal Diversified Real Asset Instl	 Bronze	★	0.1	9.4	Allocation--30% to 50% Equity

Source: Morningstar, Inc. Data as of 5/31/2016.


Since All Asset's 2002 inception through March 2016, portfolio manager Rob Arnott has fallen just 40 basis points shy of meeting the fund's ambitious target, and its Sharpe ratio of 0.61 tops the S&P 500's 0.54 during that period. Arnott and his Research Affiliates team invest in a mostly solid lineup of PIMCO funds using a models-based approach that looks beyond traditional stocks and bonds in pursuit of high-yielding assets with attractive valuations. For instance, its equity stake has averaged less than 10% of the portfolio since its inception, whereas inflation-oriented strategies—TIPS, commodities, and REITs—have averaged more than 25%.

Arnott manages All Asset All Authority using a similar process, though he also may leverage the portfolio by up to 50% of net assets (it's been about 40% in the past three years). While Arnott has used the leverage responsibly, a rough patch from 2013 through 2015 caused the fund's overall record to fall short of its performance target. From its 2003 inception through March 2016, the fund's 4.9% annualized return lagged the 8.6% mark of CPI plus 6.5%. The fund's 0.42 Sharpe ratio also came in below the S&P 500's 0.51 during that period. Still, we believe that Research Affiliates' disciplined, contrarian approach remains well-poised to reward long-term investors. — Jeff Holt

► Principal Diversified Real Asset

This fund sets itself apart from peers with its double dose of diversification. It invests across a diverse group of inflation-hedging asset classes, which consist of global infrastructure (17% of the portfolio's September 2015 target allocation), floating-rate debt (16%), MLPs (15%), commodities (10%), TIPS (10%), currency (10%), global real estate (7%), global timber (7%), global agriculture (5%), and natural-resources stocks (3%). The fund's managers also seek best-in-class subadvisors to gain access to those areas; with the exception of Principal Real Estate Investors, all of the subadvisors are externally sourced.

The fund aims to generate a 3- to 5-percentage-point premium above inflation over a full market cycle. It appeared on track to meet that objective after a few strong years out of the gate—the fund launched in March 2010—but a recent string of negative quarterly returns has hindered results. While the fund's 3.5% annualized gain since its inception through September 2015 tops the CPI's 1.6% annualized increase, it falls short of the desired premium. Diversification has helped steady the fund's returns at times. For instance, meaningful exposure to REITs and global infrastructure lifted returns above TIPS in

2012. When TIPS and commodities declined in 2013, the fund still posted a modestly positive return as MLPs and global infrastructure generated double-digit returns. —Jeff Holt 

Below are a few examples of some in the investment industry suggesting that investors should look at investments against goals and outcomes rather than conventional market indexes and benchmarks,



IT'S TIME TO BENCH THE BENCHMARKS.

INVESTING ISN'T ABOUT MEETING BENCHMARKS. It's about achieving goals. And simply tracking the averages may not do the trick. That's why Invesco doesn't settle for average. Instead, we believe investors need to look beyond the benchmarks to high-conviction active management and factor-based investing. To see how Invesco can help you bench the benchmarks, visit invesco.com/HighConviction.

High-Conviction Active	Fixed Income	Factor-Based
Equities Invesco Comstock Fund (ACSTX) Invesco Diversified Dividend Fund (LCEAX)	Fixed Income Invesco Core Plus Bond Fund (ACPSX) Invesco Strategic Income Fund (SIZAX)	Smart Beta PowerShares S&P 500 High Quality Portfolio (SPHQ) PowerShares S&P 500 Low Volatility Portfolio (SPLV)



Life After Benchmarks: Retooling Active Asset Management

November 2013

Most current active investment strategies are becoming outmoded. Investors' requirements and frameworks are moving away from rigid benchmark-based allocations towards risk-factor and outcome-based mandates.



UNCONSTRAINED INVESTING

Because Your Goals Are Bigger Than a Benchmark

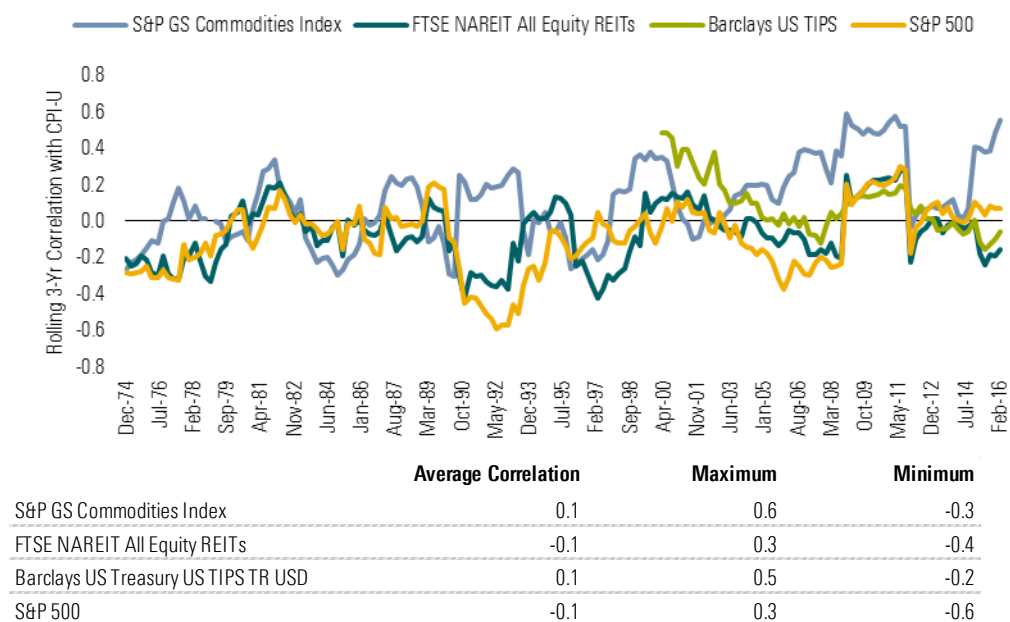
Appendix B: Commodities, REITs, and Inflation

Commodities, REITs, and TIPS make up the backbone of most multiasset inflation-protection funds, and these asset classes have tended to have the highest correlations with inflation, as measured by the Consumer Price Index for All Urban Consumers. Whether or not they will continue to do so is not a given. Here are a few considerations to help think about how well those relationships will continue to hold in the future.

► Correlations Weren't That Strong to Begin With

As shown by Exhibit 31, the correlations of these asset classes with inflation have sometimes been tenuous. Even TIPS may not track inflation as closely as some may assume. While they perfectly track the CPI when held to maturity, in the interim, their prices and returns are subject to the impact of real yield fluctuations, which may cause correlations with inflation to deviate.

Exhibit 31 Main Inflation-Fighting Asset Classes Don't Always Correlate Well With Inflation
Rolling Three-Year Correlation with CPI All Urban, Dec. 1, 1972 to March 31, 2016



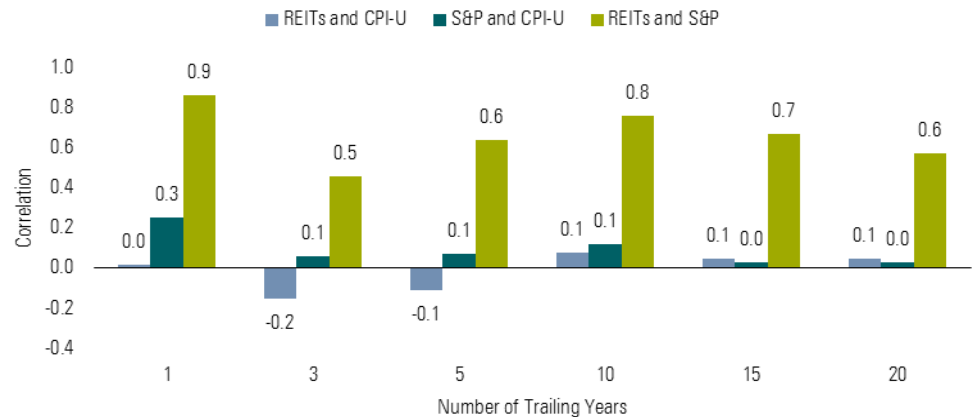
Source: Morningstar, Inc.

► There's an Intuitive Case to Be Made for REITs, Though They Tend to Behave Like Equities

Exhibit 31 suggests that the relationship between REITs and inflation versus equities and inflation hasn't been terribly different. Exhibit 32 gives some indication of why that is: REITs are a subset of equities, so they're usually highly correlated with the general equity markets. Still, the reasoning behind using REITs as an inflation hedge makes sense. For example, REITs' rental incomes are generally linked to inflation, so there's a fundamental argument for why the two should theoretically move together.

Exhibit 32 REITs Have Behaved Like Equities in Their Movement With Inflation

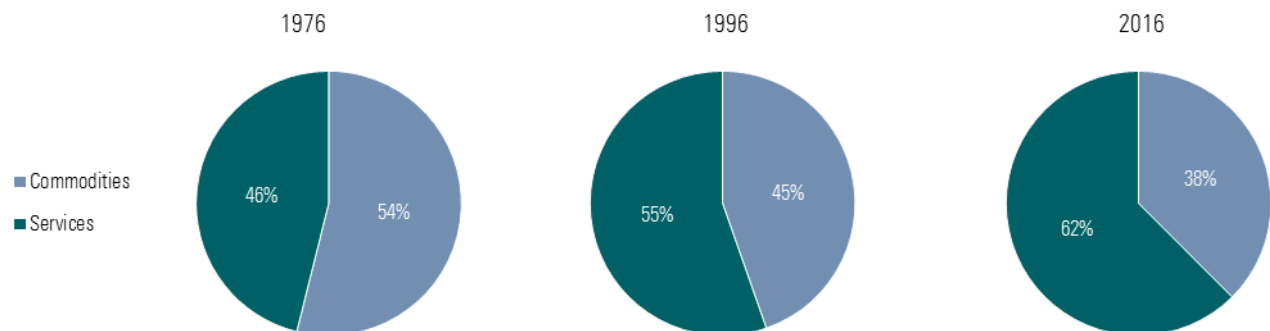
Trailing-period correlations between various index pairs, through March 31, 2016



Source: Morningstar, Inc.

► **Commodities Have Become Less Important to Consumers' Spending Basket**

Commodities provide a hedge against rising commodity prices, which is not necessarily the same as saying that they provide a good hedge against the CPI. In fact, the share of commodities within the CPI-All Urban basket has been steadily decreasing in the past few decades. Exhibit 33 shows the portion of the basket dedicated to commodities versus services over the past 40 years. Even within the CPI's commodities portion, the share of labor used to produce those goods has gone up dramatically compared with actual raw material input costs. To the extent that services or labor drive inflation going forward, commodities may not track changes in consumer price levels as well in the future.

Exhibit 33 Commodities Have Become Less Important Components of Consumer Purchases

Source: Morningstar, Inc. Data as of 4/30/2016.

About Morningstar Manager Research

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