2015 Target-Date Fund Landscape

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Contents

Executive Summary

Target-date funds continue to cement their place as the preferred investment for American workers' retirement savings. Their ascent has benefited multiple parties. Many asset managers have done well, for instance, and target-date funds have been particularly important to active managers. Investors have also been clear winners; their steady flow of savings into target-date funds have resulted in positive return gaps between their Morningstar Investor Returns and published total returns.

The funds deploy a diverse mix of philosophies, resulting in a wide range of returns in 2014. In an unexpected turn, some series' shorter-dated funds outpaced their longer-dated siblings, reflecting differences in asset allocation and underlying fund composition. Understanding each series' quirks and position in the broader target-date fund landscape can help investors set expectations in a more informed way. That insight should prove especially helpful in ensuring that savers continue to realize the full rewards of investing for the long haul.

Key Takeaways

- Investors have reaped target-date funds' gains. Their asset-weighted average investor returns, which take fund flows into account to estimate a typical investor's experience in a fund, are 1.1 percentage points higher than the funds' average total returns—suggesting that, on average, target-date fund investors are using the funds effectively.

- Growth of target-date mutual funds has continued to slow, but the funds remain key conduits to their fund companies' other funds. On average, target-date funds accounted for more than 30% of the net new inflows to their respective fund firms in 2014. All told, target-date funds made up approximately 8% of these firms' total mutual fund assets as of December 2014.

- Target-date mutual fund assets grew to $706 billion by December 31, 2014. Investors pumped $49 billion in net new monies into the funds last year, representing an 8% organic growth rate.

- Vanguard became the industry's largest target-date mutual fund provider in July 2014, unseating Fidelity from its 16-year reign. Together with T. Rowe Price, the three managers account for 71% of the industry's target-date fund assets.

- Rising markets brought gains to every target-date fund in 2014, though more-diversified series—particularly ones with an international bent—tended to fall behind their peers. Index-based target-date series showed a performance edge over their actively managed peers in 2014 and the past decade, reflecting fee advantages and, in some cases, above-average exposure to U.S. stocks, which outperformed most other asset classes last year.

- The average target-date fund investor paid lower fees for the sixth year in a row. The asset-weighted expense ratio of target-date funds fell to 0.78% in 2014 from 0.84% the year prior.
- The industry average asset-allocation glide path's stake in equities ticked up by as much as 4 percentage points in 2014 compared with the year prior.
- Portfolios generally display a significant home-country bias, though within their international stock stakes they've fully embraced emerging-markets stocks. High-yield and foreign bonds are popular among the "plus" sectors within fixed income, and Morningstar has enumerated each series' relative biases across 10 subasset classes.
- Alternative investments have become increasingly common in target-date funds, with non-traditional-bond and multialternative categories garnering the most attention from managers.
- More than half of the industry's series have no manager investments in the series' target-date mutual fund vehicle. Only three managers devote more than $1 million of their personal assets to the mutual funds of the series they manage.
- Target-date series often hold significant stakes in underlying constituent funds from their own firm. Especially for constituent funds operating within less-liquid areas of the market, the strongest stewards have demonstrated a willingness to proactively close funds and do right by all fund shareholders.

Introduction

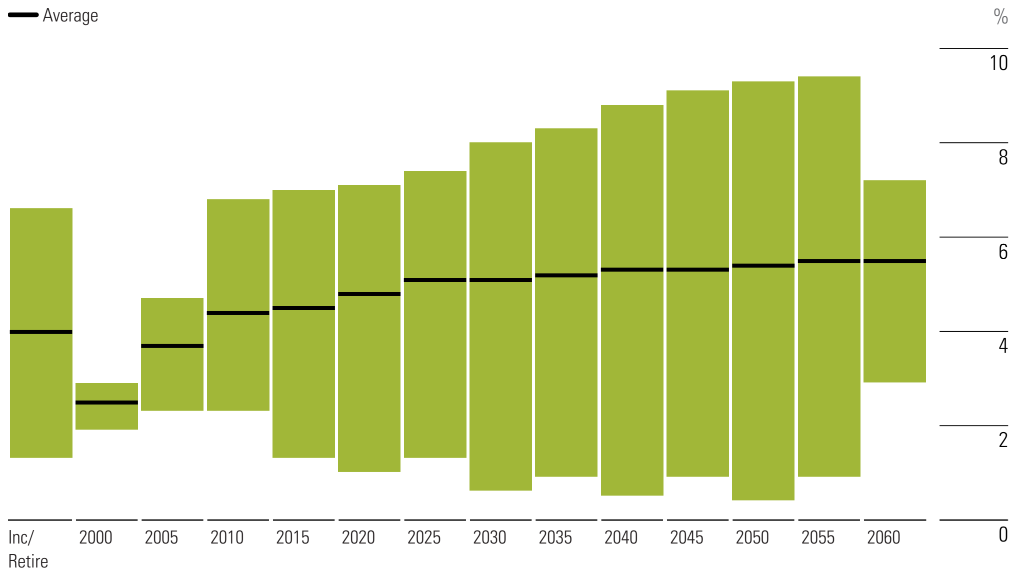
More than 10 target-date series reached a decade or more of Morningstar Investor Returns by the end of 2014, making for an opportune moment to measure how investors have fared with the funds. Investor returns take into account cash flows into and out of funds to measure the actual return experienced by investors. Comparing investor returns with funds' reported returns gives an idea of how well investors have used the funds.

The news is good: The annualized asset-weighted investor return over the last 10 years through December 2014 stood at 6.1%, 1.1 percentage points higher than the typical target-date fund's 5.0% gain. Target-date investors have essentially reaped all of target-date funds' gains, plus more. That's largely due to the discipline inherent in regularly setting aside a portion of each paycheck into retirement savings accounts—the predominant means of investing in these funds. In contrast, most broad investment categories, such as U.S. equity, international equity, and taxable bond funds, have negative investor return gaps.

Asset manager have benefitted from those regular savings flows into target-date fund as well. True, the years of consistent double digit organic growth have passed, but on average, new monies into target-date fund still represent almost a third of their fund companies' net new flows. The steady stream has been especially crucial to active managers, many of which would otherwise be in outflow territory.

Despite those broad-based measures of success, it's still important to recognize that target-date funds aren't homogenous; 2014 offered another reminder of that. To illustrate, Exhibit 1 lays out the average 2014 return of each target-date vintage, as well as the range of returns.

Exhibit 1 Range of Target-Date Funds' 2014 Returns by Vintage Year



Source: Morningstar, Inc. Data as of 12-31-2014.

Not surprisingly, given last year's rally in U.S. stocks and bonds, every target-date vintage notched positive returns, on average. Moreover, given that U.S. stocks beat bonds, it makes sense that more equity-heavy target-date series, such as the longer-dated vintages, would post higher returns than nearer-dated vintages, explaining the upward slope of the average returns shown in Exhibit 1.

What might surprise some investors, however, is that the differences weren't starker. Consider that U.S. stocks, as represented by the S&P 500 Index, rose 13.7% last year, or more than double the Barclays Capital U.S. Aggregate Bond Index's 6.0% return. Yet, the average 2050 target-date fund, which had a roughly 90% equity stake at the end of 2014, delivered only about 1 percentage point over the average 2015 fund, which had close to a 40% stock stake. Even more unusual, a number of series saw their funds with shorter-dated vintages outpace their longer-dated counterparts, a pattern more often associated with periods of market stress, such as 2008 and 2011.

This year's paper, the seventh installment of a series that started in 2009, delves into the factors and nuances behind some of those surprising results. Target-date series' widely varying approaches to international equities and fixed-income sub-asset classes, for instance, drove much of the variation in performance not only last year but also over longer periods.

Knowing each series' quirks, and placing them in the context of the broader target-date fund landscape, can help investors set expectations in a more informed way. As target-date funds cement their place as the retirement vehicle of choice for American workers, that insight should prove especially helpful in ensuring that savers continue to reap the full rewards of investing for the long haul.

Asset Flows and Industry Overview

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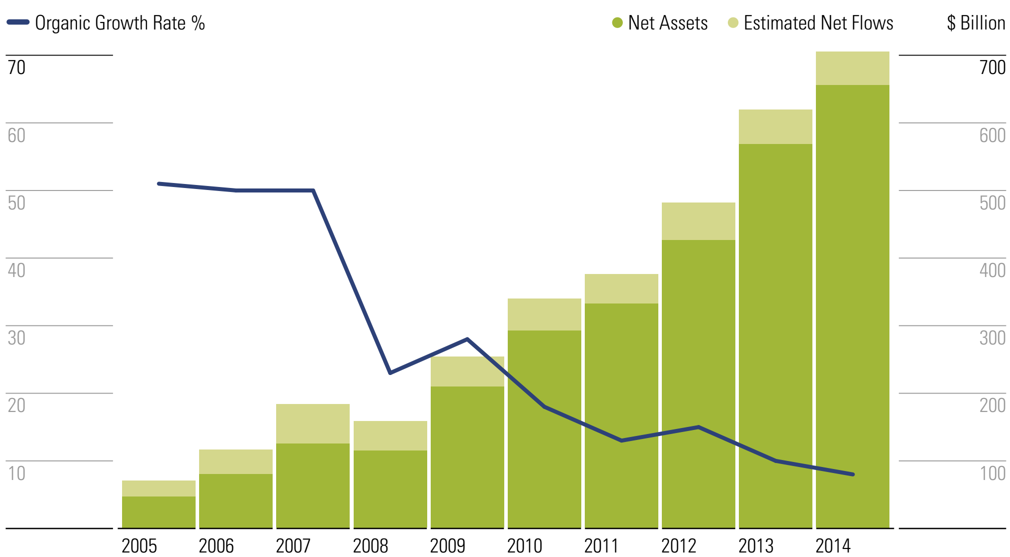
Traipsing a Well-Worn Path

Target-date mutual fund assets grew once again in 2014, but at a decelerating rate. Investors pumped almost $50 billion in net new monies into target-date funds, representing an 8% organic growth rate. However, that growth is a come-down of sorts from recent years, when annual organic growth consistently exceeded 10%. Along with healthy market appreciation, total assets in target-date mutual funds just crossed over the $700 billion threshold. Exhibit 2 displays those annual trends over the past 10 years.

Exhibit 2 Net Assets, Estimated Net Flow, and Organic Growth Rates of U.S. Target-Date Mutual Funds, 2005-14



Source: Morningstar, Inc. Data as of 12-31-2014.

There was plenty of variation in the numbers within specific target-date series. With its 39% net outflows, which translated to roughly $280 million, Russell LifePoints series registered the largest relative decline in net asset flows. The series, which has had a Morningstar Analyst Rating of Negative since 2013, has struggled to keep pace with the competition amid high manager and subadvisor turnover, as well as uninspiring results from underlying investments.

Meanwhile, some midsized target-date providers saw particularly strong growth. Investors added roughly $8 billion per firm to series offered by JPMorgan and American Funds, helping both companies achieve organic target-date growth rates of 40% or more. Morningstar analysts give Silver Analyst Ratings to both JPMorgan Smart Retirement series and American Funds Target Date Retirement series. JPMorgan's portfolio management team, which won

Morningstar's Allocation Fund Manager of the Year award for 2014 (the first target-date manager do to so), has shown itself to be especially adept at the difficult task of making consistently strong tactical allocation calls. Investors in American Funds' series have benefited from consistently peer-beating results, aided by a heavy allocation to equities, as well as some of the industry's most well-regarded equity funds.

Target-date mutual funds' overall movement from a comparatively nascent to a more adolescent development stage predictably results in slower growth, particularly as that advancement comes on top of an increasingly ballooning asset base. Still, asset growth looks impressive in a few lights. It remains well ahead of the world's 3.3% gross domestic product growth in 2014. The United States, for instance, grew by 2.4% that year, while other IMF advanced economies grew in aggregate by just 1.8%. Even emerging-market China's 7.4% GDP growth rate (which has, itself, been rapidly declining in recent years) fell short of target-date funds' 8.0% increase.

Target-date growth also appears enviable compared with most other broad investment categories, as outlined in Exhibit 3. Only sector-specific equity funds (led by offerings in Morningstar's energy limited partnership, health-care, and real estate categories), as well as alternative investments funds, saw greater growth rates.

Exhibit 3 2014 Net Assets, Net Flows, and Organic Growth Rate by Morningstar U.S. Category Group

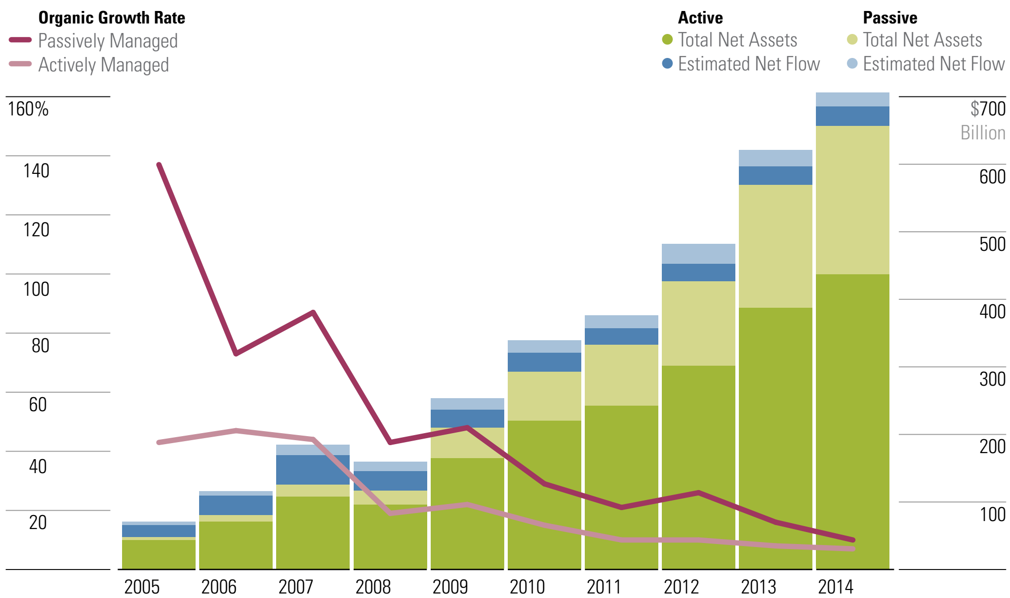
U.S. Category Group	Total Net Assets ($ Billion)	Estimated Net Flow ($ Billion)	Organic Growth Rate %
Target-Date	705.7	49.4	8.0
US Equity	6,025.6	68.3	1.3
Taxable Bond	2,925.6	87.7	3.2
International Equity	2,225.3	144.2	6.7
Allocation, Non-Target-Date	1,223.6	45.1	4.0
Sector Equity	730.5	69.1	11.6
Municipal Bond	581.8	32.0	6.2
Alternative	199.7	20.3	10.9
Commodities	86.1	–3.5	–3.4

Source: Morningstar, Inc. Data as of 12-31-2014.

Target-date funds have played a small role in contributing to the rise of alternative investments. See page 33 of the Portfolio section for a deeper dive into the topic. Generally, though, similar to other investors, target-date fund managers have largely been funneling assets into the multialternative category, a group that comprises a catchall for funds that pursue multiple strategies at once, such as long-short, market-neutral, and currency strategies.

In contrast to the highly active world of alternative investments, index-based target-date funds continue to experience significant asset growth. Exhibit 4 breaks out target-date asset growth over time by active and passive target-date assets.

Exhibit 4 2014 Net Assets, Net Flows, and Organic Growth Rate by Active and Passive Assets



Source: Morningstar, Inc. Data as of 12-31-2014.

Index-based target-date funds organically grew by 9.8% in 2014, compared with 7.0% for actively managed target-date funds.[1] The differential has narrowed over the years, though. In 2009, for instance, passive target-date funds had 47.8% organic growth versus active target-date funds' growth of 22.1%. The growth of index-based target-date funds in 2014 now actually falls below that of the broader index-based market's growth rate of 11.6%, a figure that includes mutual funds and exchange-traded funds.

A Vital Role for Fund Companies

Despite the lower growth rates, target-date funds have quickly become crucial sources of new assets for their firms. Exhibit 8 at the end of this section estimates just how much they contribute to their firms' overall asset bases, as well as the proportion of 2014 net new assets that came from target-date funds. True, overall target-date fund assets make up only about 8% of the typical firm's mutual fund assets. But target-date-originated flows accounted for about one-third of overall flows to the firms concerned in 2014.

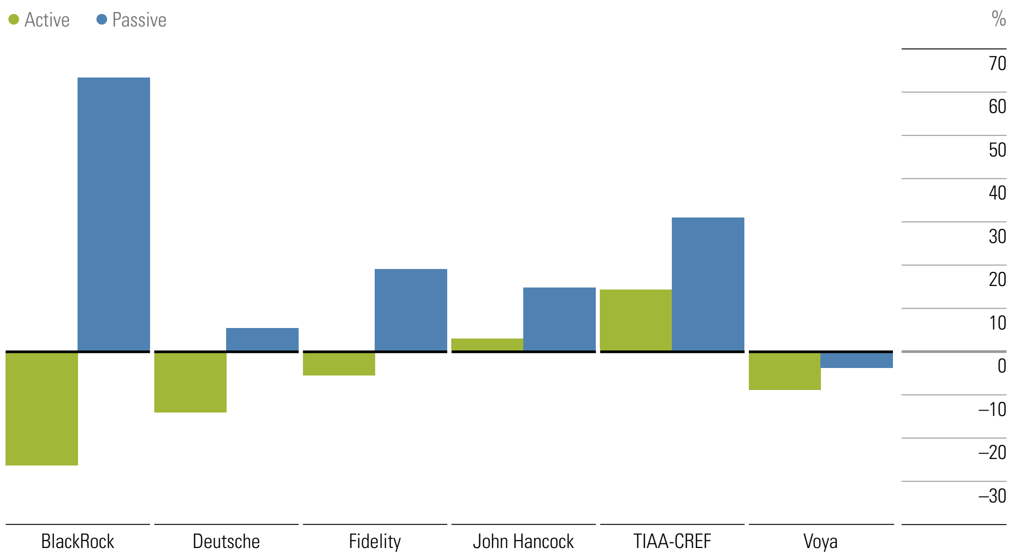
Footnote

1 Of course, even index-based target-date funds make a number of very active decisions, as detailed in this year's Process section, starting on page 15.

They made up an even bigger chunk of flows to active funds. Within the investment industry in general, actively managed mutual funds have experienced modest (and often negative) net new flows for more than a decade. Many firms that that rely primarily on actively managed strategies would have been in net outflows last year absent target-date-originated inflows. Without the more than $7 billion infusion by its target-date offerings, for instance, American Funds would not have been able to break its six continuous years of firm-level outflows (American saw an overall $345 million gain in mutual fund assets in 2014).

A number of managers commonly known for their active management investment lineups have been hedging their bets, taking steps over the years to capitalize on the trend toward index-based investing. Exhibit 5 shows the active versus passive growth rates for the six firms in Morningstar's databases that offer both types of series (Deutsche Asset Management's products come in the form of active mutual funds and passive ETFs).

Exhibit 5 2014 Organic Growth Rate by Fund Companies' Passive and Active Target-Date Funds



Source: Morningstar, Inc. Data as of 12-31-2014.

In all cases, the growth of index-based funds outpaced that of nonindex funds (in Voya's situation, it was less negative). The numbers aren't a completely clear comparison of the fund companies' active and passive offerings, however. That's because Morningstar's methodology looks through to the series' underlying funds to classify passive and active assets, and a number of active target-date funds, such as those from Fidelity Freedom, also contain some passive assets. The caveat also applies to Exhibit 6, which nevertheless gives a directionally indicative picture of how important passive target-date funds have become to these firms.

Exhibit 6 2014 Net Assets, Net Flows, and Organic Growth Rate by Fund Companies' Passive and Active Target-Date Funds

	Net Assets $ Mil		Estimated Net Flow $ Mil		Organic Growth Rate %	
Fund Company	Active	Passive	Active	Passive	Active	Passive
BlackRock	3,063.0	4,077.3	–1,031.0	1,546.7	–26.3	63.4
Deutsche	384.5	115.2	–60.7	5.7	–14.1	5.4
Fidelity	175,190.9	11,956.0	–9,591.8	1,822.7	–5.5	19.1
John Hancock	8,170.8	6,825.1	229.9	840.9	3.0	14.8
TIAA-CREF	18,448.5	3,705.4	2,216.4	832.8	14.3	31.0
Voya	4,247.0	1,664.5	–397.1	–62.9	-8.9	-3.8

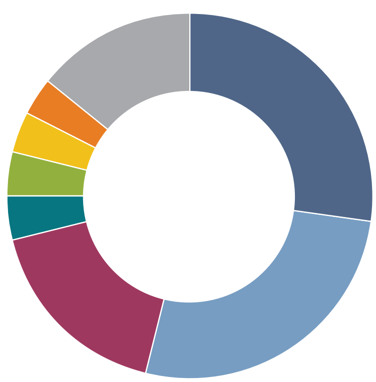
Source: Morningstar, Inc. Data as of 12-31-2014.

A Few Changes in Direction

Though much of the target-date industry's flows and growth patterns have continued in the same direction, one notable change in 2014 came via market-share leadership jostling. After a 16-year reign at the top, Fidelity's leadership gave way to Vanguard's, which now holds 27.3% of the market versus Fidelity's 26.5% stake. Along with T. Rowe Price, the three series still comprise the bulk of the industry's assets, owing largely to their widely used record-keeping businesses. Exhibit 7 demonstrates the dominance enjoyed by the three firms relative to the rest of the industry.

Yet even these three have watched their collective share shrink over the years. Last year, for example, the trio accounted for 73.4% of the market, whereas they now account for 71.2%. Five years prior, in 2009, they made up 77.1% of the market. Fast up-and-comers include JPMorgan and American Funds, though both still have market shares that hover in the low single digits. Exhibit 9, at the end of this section, details each target-date firm's assets under management, market share, and organic growth rates.

Exhibit 7 2014 Firm Market Share of Target-Date Mutual Funds



Fund Family	% of Market
Vanguard	27.3
Fidelity Investments	26.5
T. Rowe Price	17.3
JPMorgan	4.0
American Funds	3.9
Principal Funds	3.6
TIAA-CREF	3.1
Other	14.1

Source: Morningstar, Inc. Data as of 12-31-2014.

Vanguard has come out ahead due to strong inflows, but also because of Fidelity's steady outflows. On an absolute basis, Fidelity lost the most assets by far in 2014. (As one of the biggest players in the industry, the firm also had more than most to lose.) The firm saw about $7.7 billion of target-date assets leave its mutual funds over the year, representing outflows of about 4% of assets. Taken together, that figure would count as the 11th-largest target-date fund company in the industry. Series-specific issues played a role in the losses, as management has continued to tweak the investment process governing most of its offerings amid years of poor results. Certain secular trends exacerbated the firm's asset losses, with retirement plan sponsors becoming less inclined to automatically pick and stay with their retirement plan record-keepers' proprietary offering.

At the same time, that trend hasn't stopped Vanguard and T. Rowe's growth. In 2014, Vanguard gained more than $14 billion in net new assets, representing about 9% organic growth; its target-date mutual funds now holds $193 billion in assets. Investors also added about $14 billion in new money to T. Rowe Price's offerings, although with its smaller asset base ($122 billion at the end of 2014), that amounted to 14% growth.

Missing from these exhibits and numbers are the many target-date funds available via collective investment trusts and assorted private vehicles. Those investments don't face the same regulatory reporting requirements as open-end mutual funds, so their reporting to investment databases tends to be incomplete. For example, BlackRock's $7.1 billion in mutual fund assets only makes up a small slice of its overall target-date business. At the end of 2014, the firm counted $123 billion in assets under management across its collective fund, mutual fund, and customized offerings. The U.S. government and its Thrift Savings Plan also register as a major player in the space. That plan's lifecycle L funds had $70.8 billion at the end of the year. Except for a slice of assets in the G fund managed internally, most of those assets are invested in collective funds managed by BlackRock.

Striking New Frontiers

With target-date funds holding such an important space in U.S. workers' savings plans, it's no wonder interest in these strategies has increased around the world. For instance, target-date funds have been available in the United Kingdom for more than a decade, though with limited traction. That began to change in 2012 when auto-enrollment legislation singled out target-date funds as the default investment for the country's National Employment Saving Trust. More recently, laws allowing investors to skip the annuitization of their pension savings by April 2015 have spurred more product development. In early 2014, U.K.-based investment manager Legal & General completed its purchase of Global Index Advisor, subadvisor to the $16.8 billion Wells Fargo Advantage DJ Target Date series, in a move that bolstered the acquisitor's target-date investment chops.

Asia has seen a recent uptick in interest as well, at least as far as regulators are concerned. In Hong Kong, for instance, residents contribute to their retirement savings via the roughly $70 billion Mandatory Provident Fund system. In mid-2014, the MPF Authority recommended an age-based approach to the scheme's default investments, with a goal to have the new funds in place by 2016. Meanwhile, in late 2014, Singapore's Central Provident Fund began seeking an investment consultant (an assignment ultimately filled by Mercer Investment Consulting) to provide advice on the suitability of target-date solutions for pension members along with advice on portfolio construction.

And even as target-date funds gain a toehold among savers and governments around the world, U.S. regulators continue supplying a steady stream of guidelines that have brought the potential for market innovation. The latest directives came from the Internal Revenue Service in October 2014, when it essentially OK'd the use of deferred income annuities within the funds. So far, investment managers have been slow to offer this new variation. Credit risk stemming from the annuity provider remains an issue, and there are more-immediate logistical challenges as well. Namely, record-keepers have yet to put in the investments necessary to support the new products.

Whether those theoretical products would gain much traction or move the needle on target-date investment growth is a different matter. With workers who currently choose to annuitize their 401(k) savings plans numbering in the low-single-digit percentages, lack of demand may stymie those efforts. Given the increasingly saturated marketplace demonstrated by the industry's slowing growth rates, there's a good chance that any new pickup in DIA target-date funds would come at the expense of existing offerings.

Exhibit 8 2014 Target-Date and Firm Assets and Net Flows

	2014 Total Assets ($Million)			**2014 Net Flows** ($Million)		
Fund Company	Target Date	Firm	Firm Assets from TD Assets %	Target Date	Firm	Firm Flows from TD Flows %
Vanguard	192,727.6	2,674,452.7	7.2	14,715.9	219,018.8	6.7
Fidelity Investments	187,318.1	1,248,998.1	15.0	–7,709.0	–3,468.2	222.3
T. Rowe Price	122,287.1	457,862.4	26.7	14,444.3	11,166.1	129.4
JPMorgan	28,509.8	263,862.4	10.8	8,023.2	27,970.0	28.7
American Funds	27,536.9	1,167,187.5	2.4	7,564.4	345.2	2191.0
Principal Funds	25,736.3	110,981.2	23.2	–354.1	4,284.5	(L)
TIAA-CREF Mutual Funds	22,153.9	81,568.9	27.2	3,049.2	7,388.9	41.3
Wells Fargo Advantage	16,763.9	114,773.5	14.6	479.2	2,462.6	19.5
John Hancock	14,995.8	119,596.3	12.5	1,070.7	10,039.3	10.7
American Century Investments	12,604.1	100,825.2	12.5	1,660.0	–3,968.9	(G)
BlackRock	7,140.2	215,716.3	3.3	515.7	18,340.1	2.8
State Farm	6,228.3	17,096.0	36.4	446.6	427.0	104.6
Great-West Funds	6,132.2	14,660.0	41.8	477.7	247.1	193.3
Voya	5,911.5	91,066.0	6.5	–460.0	–6,981.1	6.6
KP Funds	4,091.4	4,096.1	99.9	4,101.3	4,089.0	100.3

Exhibit 8 2014 Target-Date and Firm Assets and Net Flows (Continued)

	2014 Total Assets ($Million)			**2014 Net Flows** ($Million)		
Fund Company	Target Date	Firm	Firm Assets from TD Assets %	Target Date	Firm	Firm Flows from TD Flows %
Vantagepoint Funds	4,046.6	17,005.6	23.8	502.9	35.8	1404.3
USAA	3,960.3	55,891.7	7.1	119.5	2,152.8	5.6
Schwab Funds	3,150.8	56,071.6	5.6	324.9	3,648.2	8.9
MassMutual	1,980.4	22,435.1	8.8	439.4	–476.3	(G)
MFS	1,880.5	172,137.2	1.1	266.0	12,079.4	2.2
GuideStone Funds	1,870.8	9,614.3	19.5	229.3	184.4	124.3
Nationwide	1,586.9	15,916.2	10.0	42.4	311.2	13.6
AllianceBernstein	1,070.8	60,089.4	1.8	–228.8	4,472.2	(L)
PIMCO	851.2	390,103.9	0.2	160.0	–150,276.1	(G)
Manning & Napier	803.2	19,300.2	4.2	66.3	–766.8	(G)
MainStay	724.3	74,906.2	1.0	204.0	–6,570.4	(G)
Russell	445.3	40,914.3	1.1	–279.9	–241.8	115.7
BMO Funds	441.8	7,399.6	6.0	111.1	1,016.0	10.9
Invesco	441.2	148,970.4	0.3	–18.6	–1,329.7	1.4
Franklin Templeton Investments	411.5	444,536.2	0.1	107.3	587.5	18.3
Allianz Funds	406.4	35,285.7	1.2	108.8	–4,083.8	(G)
Putnam	395.5	76,385.3	0.5	77.5	5,933.8	1.3
Deutsche Asset & Wealth Mngt	384.5	49,347.8	0.8	–60.7	–926.7	6.5
Madison Funds	225.4	1,688.2	13.4	0.6	–300.0	(G)
Harbor	145.9	81,170.2	0.2	1.8	–2,038.2	(G)
Deutsche Bank	115.2	4,611.0	2.5	5.7	3,263.7	0.2
Lincoln Financial Group	62.1	62.1	100.0	0.8	0.8	100.0
State St Global Advisors (Chi)	34.2	3,822.5	0.9	19.0	–24.8	(G)
PNC Funds	11.3	3,588.8	0.3	4.5	16.9	26.4
Citi	10.7	10.7	100.0	10.5	10.5	100.0
	705,594.2	**8,474,006.6**	**8.3**	**50,239.4**	**158,039.1**	**31.8**

Source: Morningstar, Inc. Data as of 12-31-2014.
Morningstar flows data strips out firms' funds-of-funds assets in order to avoid double counting. This also results in firm total asset levels and net flow figures that omit assets invested in nonproprietary funds. Exhibit 8 adds back the estimated effect from those nonproprietary funds to firms' total assets and total new flows in order to show a more complete and intuitive picture. Otherwise, KP Funds, for example, which only offers target-date mutual funds and also has significant investments in nonproprietary funds, would show that its target-date assets make up more than 100% of the firm's total assets under management. Assets include mutual fund and exchange traded fund assets, where applicable. Net flow figures exclude firm-level flows to money market funds. Series marked (G) under "Firm Flows from TD Flows" saw positive growth in flows on top of negative overall firm-level flows—the sign change makes percentage representations less meaningful. Series marked (L) had target-date outflows on top of inflows for the overall firm.

Exhibit 9 2014 Target Date Net Assets, Market Share, and Organic Growth, by Firm

	Total Net Assets ($Million)		**Market Share %**		**Organic Growth Rate %**	
Fund Family	2014	2013	2014	2013	2014	2013
Vanguard	192,727.6	166,148.1	27.3	26.8	8.9	14.7
Fidelity Investments	187,318.1	185,582.1	26.5	29.9	–4.2	1.9
T. Rowe Price	122,287.1	101,713.6	17.3	16.4	14.2	10.2
JPMorgan	28,509.8	18,807.4	4.0	3.0	42.7	78.4
American Funds	27,536.9	18,680.7	3.9	3.0	40.5	17.6

Exhibit 9 2014 Target Date Net Assets, Market Share, and Organic Growth, by Firm (Continued)

	Total Net Assets ($Million)		**Market Share %**		**Organic Growth Rate %**	
Fund Family	2014	2013	2014	2013	2014	2013
Principal Funds	25,736.3	25,331.3	3.6	4.1	–1.4	4.2
TIAA-CREF Mutual Funds	22,153.9	18,203.3	3.1	2.9	16.8	21.4
Wells Fargo Advantage	16,763.9	15,573.4	2.4	2.5	3.1	0.1
John Hancock	14,995.8	13,221.4	2.1	2.1	8.1	17.1
American Century Investments	12,604.1	10,191.8	1.8	1.6	16.3	37.5
BlackRock	7,140.2	6,365.3	1.0	1.0	8.1	19.4
State Farm	6,228.3	5,493.4	0.9	0.9	8.1	10.1
Great-West Funds	6,132.2	5,322.0	0.9	0.9	9.0	26.8
Voya	5,911.5	6,079.7	0.8	1.0	–7.6	–6.6
KP Funds	4,091.4	n/a	0.6	n/a	n/a	n/a
Vantagepoint Funds	4,046.6	3,380.9	0.6	0.5	14.9	12.8
USAA	3,960.3	3,719.6	0.6	0.6	3.2	7.7
Schwab Funds	3,150.8	2,661.1	0.4	0.4	12.2	24.1
MassMutual	1,980.4	1,494.3	0.3	0.2	29.4	0.9
MFS	1,880.5	1,561.2	0.3	0.3	17.0	68.8
GuideStone Funds	1,870.8	1,590.0	0.3	0.3	14.4	23.2
Nationwide	1,586.9	1,481.6	0.2	0.2	2.9	11.4
AllianceBernstein	1,070.8	1,259.7	0.2	0.2	–18.2	–19.9
PIMCO	851.2	698.4	0.1	0.1	22.9	29.1
Manning & Napier	803.2	713.7	0.1	0.1	9.3	25.5
MainStay	724.3	487.1	0.1	0.1	41.9	12.5
Russell	445.3	702.6	0.1	0.1	–39.8	–24.8
BMO Funds	441.8	327.2	0.1	0.1	34.0	n/a
Invesco	441.2	437.8	0.1	0.1	–4.2	29.1
Franklin Templeton Investments	411.5	292.2	0.1	0.0	36.7	22.2
Allianz Funds	406.4	300.4	0.1	0.0	36.2	72.4
Putnam	395.5	299.0	0.1	0.0	25.9	6.9
Deutsche Asset & Wealth Mngt	384.5	429.7	0.1	0.1	–14.1	–31.1
Madison Funds	225.4	n/a	0.0	n/a	n/a	n/a
Harbor	145.9	141.3	0.0	0.0	1.3	–0.5
Deutsche Bank	115.2	104.6	0.0	0.0	5.4	–10.5
Lincoln Financial Group	62.1	60.6	0.0	0.0	1.3	55.9
State Street Global Advisors	34.2	n/a	0.0	n/a	n/a	n/a
PNC Funds	11.3	6.2	0.0	0.0	71.5	9.0
Citi	10.7	n/a	0.0	n/a	n/a	n/a
Hartford Mutual Funds	n/a	755.7	n/a	0.1	–103.4	–6.1
iShares	n/a	239.7	n/a	0.0	15.3	58.1
Legg Mason	n/a	48.1	n/a	0.0	–92.4	11.6
Total	**705,602.5**	**619,906.2**	**100**	**100**	**8.0**	**10.5**

Source: Morningstar, Inc. Data as of 12-31-2014.

Process

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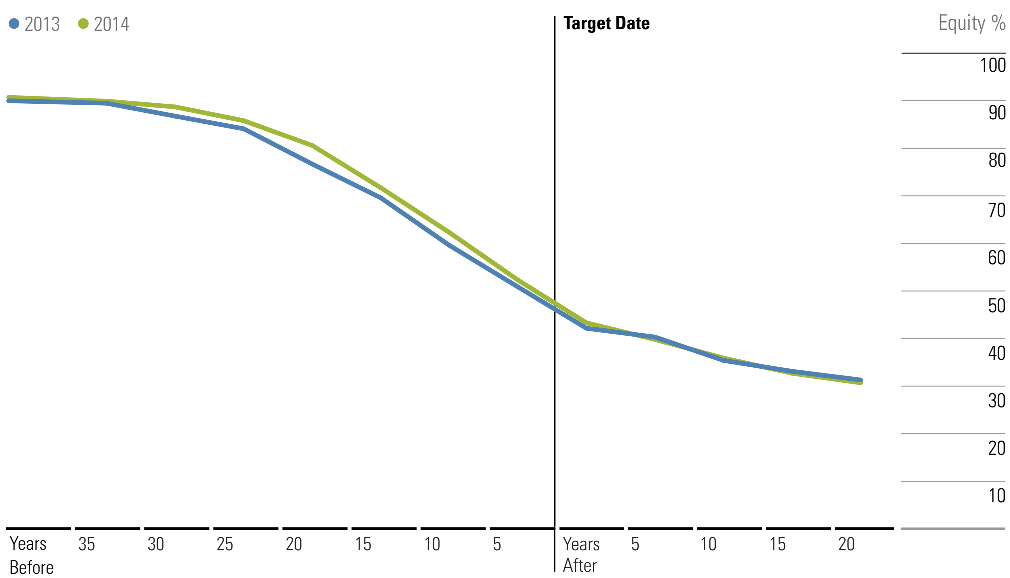
The Average Equity Glide Path Inched Higher in 2014

Target-date glide paths lay out the predetermined asset-allocation course that investment managers plan to take along investors' working years and beyond. Though the movement from more-volatile asset classes, such as equities, into steadier ones, like bonds, can stretch on for 40 years or more, target-date managers regularly revisit and modify their strategic glide paths. They frequently cite updated capital market assumptions, new research, shift in market demand, fee pressure, or the availability of additional investments as reasons for change.

In 2014, those and other factors only led to a marginal change in the industry average equity glide path, which increased slightly compared with 2013. Exhibit 10 represents an industry average of target-date series' strategic equity exposure as detailed in their prospectuses (it doesn't show series' actual equity exposure, which may differ because of rebalancing timing or tactical asset-allocation decisions, among other reasons). The largest uptick—nearly 4 percentage points—occurred 20 years before the target retirement date. Not all portions of the glide path saw a change, though. The equity exposure of funds more than 30 years before the target date and those past the target date remained relatively unchanged.

Exhibit 10 Industry Average Strategic Equity Glide Path: 2014 Versus 2013



Source: Morningstar, Inc. Data as of 12-31-2014.

The general increase in the equity glide path matches Morningstar analysts' observations in monitoring target-date series. Fidelity announced plans to revamp its glide path in late 2013, which included a significant increase to its equity exposure. The change gradually rippled through its four target-date offerings (Advisor Freedom, Freedom, Freedom Index, and Freedom K), spilling into early 2014. At the beginning of 2014, PIMCO also upped the equity exposure of the RealPath series (formerly known as RealRetirement) as part of its annual glide-path revisit. PIMCO made the move after finding that markets were not as volatile as they had forecast. Although not reflected in Exhibit 10, PIMCO increased its equity exposure again at the beginning of 2015 after tailoring its fixed-income exposure to better match investor liabilities. Later in 2014, BlackRock substantially raised the equity allocation of its target-date offerings (LifePath, LifePath Active, and LifePath Index), increasing the exposure by as much as 16 percentage points in some vintages. BlackRock cited research on investor preferences and behavior, as well as a review of its long-term capital assumptions, as reasons for the shift.

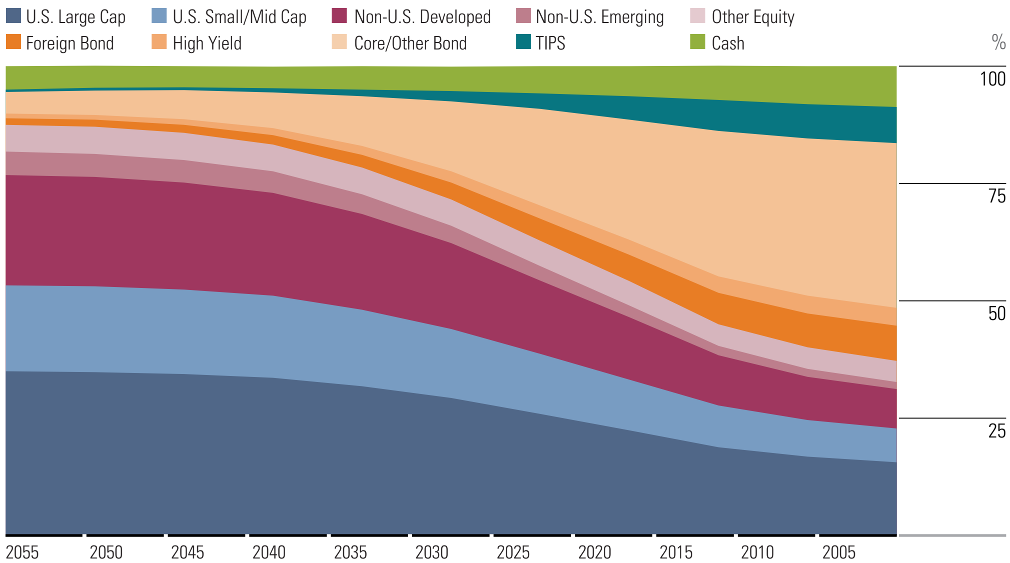
Not all target-date series that changed in 2014 ramped up equity exposure, though. For instance, Vantagepoint shaved some of the equity exposure off its Milestone series by adding to its multistrategy sleeve. That sleeve aims for volatility and return levels between those of stocks and bonds.

Looking at the Sub-Asset-Class Glide Path: Peeling Back Another Layer

A series' overall equity exposure tends to be the primary driver of its results, particularly in times of severe market stress, but comparing series' equity glide paths only scratches the surface in identifying the differences in target-date managers' approaches. In addition to the overall equity exposure, target-date managers also make decisions—some of which appear to be more deliberate than others—for multiple subasset classes.

Exhibit 11 shows the industry average subasset glide path based on actual holdings as of Dec. 31, 2014 (not based on the series' strategic exposure, as used in Exhibit 10). Morningstar collects security-level holdings data for target-date series that are offered via open-end mutual funds and classifies each security into one of 10 distinct subasset classes.

Exhibit 11 Industry Average Sub-Asset-Class Glide Path



Source: Morningstar, Inc. Data as of 12-31-2014.

This glide path was constructed using the observations of 48 target-date series. Four series that tend to make heavy use of derivatives—and thus have sub-asset-class exposures that are more complicated to accurately classify—were excluded from the calculation. Five other series were also omitted because of a lack of holdings data. (Exhibit 22 in the back of this section shows the target-date series that were included and excluded from the industry average sub-asset-class glide path.)

The glide path incorporates 11 observations for each series, ranging from the 2055 to the 2005 vintages. If series did not offer a 2055 vintage, the 2050 positioning extended to the 2055 vintage. If a series reached its static landing point at the target date and did not have a 2010 or 2005 fund, the series' income fund stretched to those vintages. For series that only offer vintages in 10-year increments, midpoints between the existing funds were used as extrapolated observations. The result is a collection of more than 5,000 data points to calculate the average sub-asset-class glide path.

An examination of the sub-asset-class glide path reveals three general take-aways on target-date series' equity exposure when compared with widely recognized asset-weighted benchmarks. (Exhibit 21 in the back of this section shows the various equity splits of the 48 target-date series.)

1. **Home Country.** On average, target-date series allocate approximately two thirds of their equity allocations to U.S. stocks and one third to non-U.S. stocks. (These figures exclude from the calculation "other equity," which includes REITs, commodities, precious metals, property, preferred stocks, and convertibles.) The MSCI All Country World Index had approximately half of its assets—51% as of Dec. 31, 2014—in U.S. equities, thus target-date managers generally display a significant home-country bias, albeit to varying degrees.

2. **Market Cap.** The average mix between large and small/mid-cap stocks within the U.S. equity allocation was approximately two thirds to one third, respectively. The Russell 3000 Index, which serves as a proxy for the broad U.S. equity market, had 72% of its exposure in large-cap stocks as of Dec. 31, 2014, showing target-date managers' general inclination to venture down the market-capitalization spectrum.

3. **Emerging Markets.** Emerging-markets equity exposure accounted for roughly 15% of target-date series' total non-U.S. equity exposure on average. This falls in line with the 14% allocation to that asset class in the MSCI ACWI ex USA Index at the end of 2014.

The industry average sub-asset-class glide path also sheds insight into three aspects of target-date series' fixed-income exposure.

1. **Plus Sectors.** High yield and foreign bonds—the latter includes both developed- and emerging-markets debt—are often considered "plus" sectors as they are not included the Barclays U.S. Aggregate Bond Index. The sub-asset-class glide path showed meaningful exposure to both, reaching nearly 4% and 8% of the 2005 vintage's allocation, respectively.

2. **TIPS in Retirement.** The glide path shows that Treasury Inflation-Protected Securities become an increasing part of target-date series' allocations as the target date approaches. This is consistent with target-date managers' attention to the potential of inflation eroding investors' purchasing power.

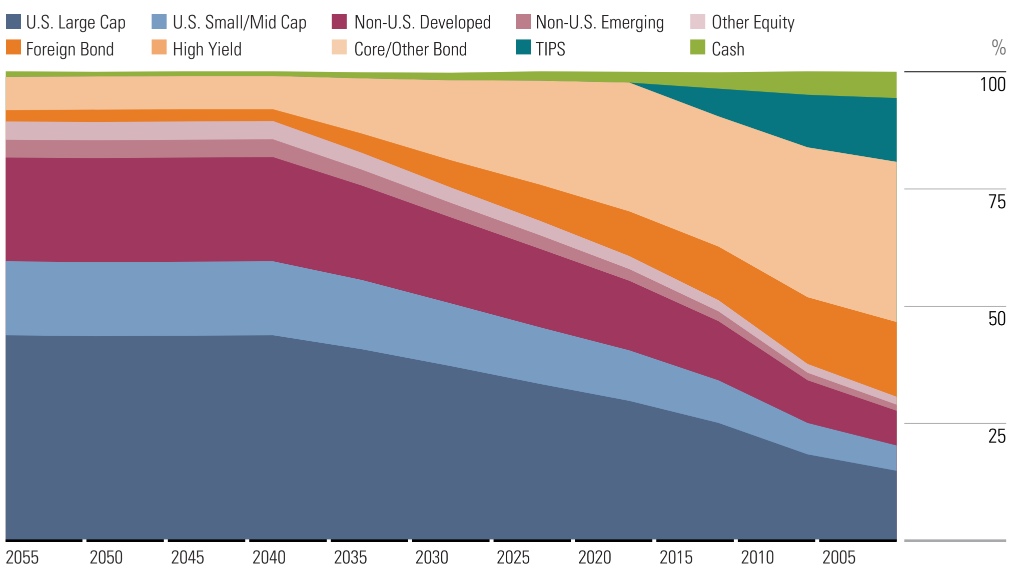
3. **Cash Drag.** Target-date managers appear to allocate to cash somewhat consistently across the glide path. Some series carve out a dedicated allocation to the asset class as a source of capital preservation, particularly in the retirement phase, whereas some series may have less deliberately planned allocations to cash that stem from the underlying active strategies.

Identifying Differentiators: An Example

While the industry average sub-asset-class glide path provides broad insight into the target-date industry, it also provides a baseline for investors to measure how specific target-date series glide paths compare. A closer look at the Vanguard Target Retirement series exemplifies that point. Vanguard's series invests exclusively in passively managed funds—seven in total—and thus is commonly classified as having a "passive" approach. However, Vanguard, like every target-date manager, makes an active decision in determining the sub-asset-class mix across the glide path.

Exhibit 12 shows the Vanguard Target Retirement's sub-asset-class glide path based on security-level holdings as of Dec. 31, 2014.[2] This glide path captures Vanguard's decision to inject TIPS into the series approximately five years before a fund reaches its target date and to ramp up the allocation during an investor's retirement years. Exhibit 12 also indicates that Vanguard includes meaningful exposure to foreign bonds but omits high-yield bonds altogether. An investor would not spot these nuances looking solely at Vanguard's strategic equity glide path.

Exhibit 12 Vanguard Target Retirement Sub-Asset-Class Glide Path



Source: Morningstar, Inc. Data as of 12-31-2014.

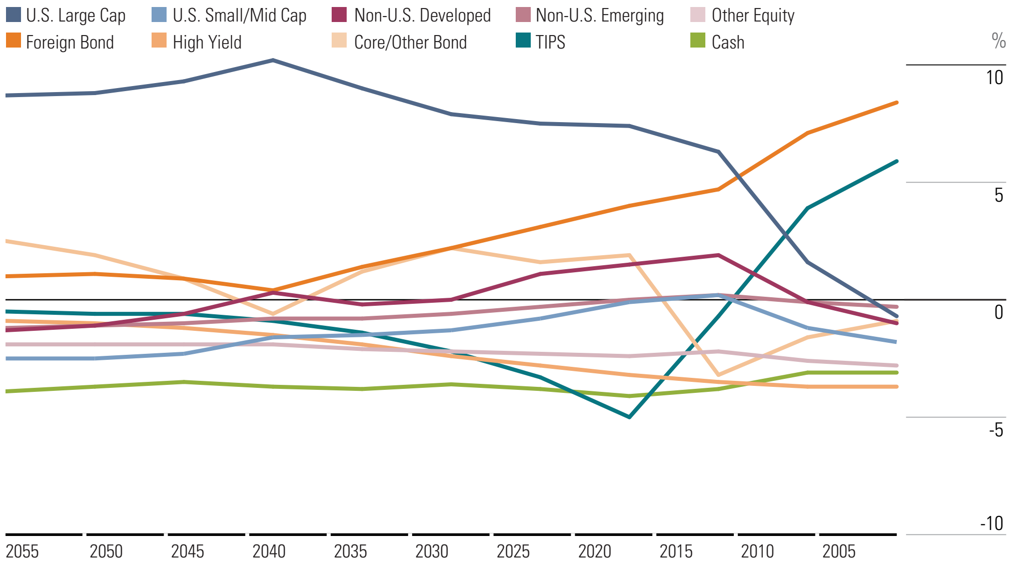
A shortcoming of Exhibit 12 is its inability to quickly identify when and how far a target-date series deviates from the industry's average. Exhibit 13 addresses this by plotting a line for each subasset class across the glide path. The y-axis indicates whether a series has a higher or lower stake in a given subasset class relative to the average allocation. Observations above

Footnote

2 Vanguard subsequently announced strategic changes to its approach in February 2015, which will increase the series' international exposure in both its equity and fixed-income portfolios.

zero represent a relative overweight positon, while observations below zero reveal an underweight position.

Exhibit 13 Sub-Asset-Class Glide Path Comparison: Vanguard Target Retirement vs. Industry Average



Source: Morningstar, Inc. Data as of 12-31-2014.

In the case of the Vanguard Target Retirement series, Exhibit 13 uncovers that the series has a relatively heavy stake in U.S. large-cap stocks—the 2040 fund's exposure tops the average by roughly 10 percentage points—leading up to the target date. That's a common bias among index-based strategies, as actively managed equity funds tend to give an underweighting to the market's largest-cap stocks.

It also shows that the series' foreign-bond exposure is higher than most, and that disparity increases for investors in their retirement years, topping out at approximately 8 percentage points above the average for the 2005 vintage. The series' TIPS exposure quickly moves from a narrow underweighting prior to the target date to an above-average stake in an investor's retirement years.

Identifying Differentiators: A Look Across All Target-Date Series

Morningstar calculated the degree to which 11 vintages for each of the 48 series deviated from the average across the 10 subasset classes as of Dec. 31, 2014. To facilitate the comparison, the target-date "Subasset Class +/− Average"—a new data point from Morningstar—averages the deviation for the 11 vintages to arrive at a single equal-weighted figure for each series for each subasset class. This single figure does not capture instances when a series may deviate significantly at a certain point along the glide path, but it does provide a general view of series' relative biases.

Exhibit 14 shows the average relative position for each of the 48 series (ordered alphabetically) across the 10 subasset classes. Positive figures indicate an above-average position and negative figures reflect a below-average position. The above-average positions are displayed in varying shades of green and the below-average positions are shown in red (darker shades reflect a greater deviation from the average). For example, the AllianceBernstein Retirement series has a dark green value of 8 within non-U.S. developed, reflecting that the series, on average, has an approximately 8% higher stake in that subasset class than the typical peer.

Exhibit 14 Target-Date Series' Average Position Versus Industry Average Sub-Asset-Class Glide Path ("Subasset Class Percentage Points +/– Average") ≥6 5 to 3 2 to –2 –3 to –5 ≤–6

	Equity					Fixed Income				
Target-Date Series	U.S. Large Cap	U.S. Sm-/ Mid-Cap	Non-U.S. Dev	Non-U.S. Emerg	Other	Foreign Bond	High Yield	Core/ Other	TIPS	Cash
AllianceBernstein Retirement	–2	1	8	2	–3	2	–2	–9	3	1
Allianz Retirement	–11	–6	–4	0	7	0	7	–6	17	–5
American Century One Choice	5	2	–8	–1	–2	1	1	–2	2	2
American Funds Target Date Retire	13	–7	0	–1	2	–2	–1	–4	–2	2
BlackRock LifePath	–2	–5	3	–1	–1	–2	–1	12	2	–4
BlackRock LifePath Active	–9	–6	2	0	0	1	–2	3	2	9
BlackRock LifePath Index	0	–4	3	–1	1	–2	–2	10	1	–6
BMO Target Retirement	0	3	–1	2	0	–1	–1	1	–1	–2
Deutsche LifeCompass	1	–1	–4	0	3	4	–1	–6	2	2
Fidelity Advisor Freedom	9	–1	1	1	–2	–2	0	–4	–3	1
Fidelity Freedom	8	–1	2	1	–2	–2	0	–4	–3	0
Fidelity Freedom Index	7	–1	0	0	–3	–3	–2	–1	–2	4
Fidelity Freedom K	8	–1	2	1	–2	–2	0	–3	–2	0
Franklin LifeSmart	3	–1	0	0	1	5	0	–9	–3	4
Great-West Lifetime I	–11	1	–4	0	4	2	3	2	3	0
Great-West Lifetime II	–7	4	–1	0	4	0	1	–3	1	–1
Great-West Lifetime III	–4	6	1	1	5	–1	0	–7	0	–1
Great-West SecureFoundation	–4	8	2	0	–1	–2	–2	5	–3	–2
GuideStone MyDestination	–2	–3	4	1	–1	0	0	–1	2	0
Harbor Target Retirement	–14	1	3	–2	0	0	8	2	4	–2
JHancock Retirement Choices	0	–5	–7	0	–1	2	1	16	–3	–2
JHancock Retirement Living through	4	1	0	1	0	1	1	–7	–3	2
JHancock Retirement Living through II	10	–1	–4	1	0	–1	2	–4	–3	0
JPMorgan SmartRetirement	–3	–1	–1	1	2	0	1	1	–2	2
JPMorgan SmartRetirement Blend	4	–3	–2	1	2	0	0	1	–2	0
KP Retirement Path	–3	–1	3	1	–1	0	–2	3	4	–2
Manning & Napier Target	–2	9	–3	–1	–1	0	0	2	–3	0
MassMutualRetireSMART	–3	3	2	0	2	0	0	–5	3	–2
MFS Lifetime	–4	2	2	–2	–2	3	–1	0	2	0
Nationwide Destination	–7	8	4	–3	–1	–2	–2	–6	1	9

Exhibit 14 Target-Date Series' Average Position Versus Industry Average Sub-Asset-Class Glide Path ("Subasset Class Percentage Points +/– Average") (Continued) ≥6 5 to 3 ☐ 2 to –2 –3 to –5 ≤–6

Target-Date Series	Equity U.S. Large Cap	Equity U.S. Sm-/ Mid-Cap	Equity Non-U.S. Dev	Equity Non-U.S. Emerg	Equity Other	Fixed Income Foreign Bond	Fixed Income High Yield	Fixed Income Core/ Other	Fixed Income TIPS	Fixed Income Cash
PNC Target	–2	2	–4	0	2	–2	–2	3	0	4
Presidential Managed Risk	0	–3	6	–1	–3	1	–2	–1	1	1
Principal LifeTime	3	0	2	0	0	–1	–1	6	0	–7
Putnam RetirementReady	–1	–2	–7	–2	2	0	3	1	–3	10
Russell LifePoints	–5	–2	3	0	0	–1	0	3	–3	6
Schwab Target	5	1	–1	–1	0	–1	–2	4	0	–4
State Farm LifePath	0	–5	2	–1	–1	–2	0	5	1	1
Strategic Advisers Multi–Manager	7	1	0	1	–3	–2	1	–3	–2	1
T. Rowe Price Retirement	5	–1	2	1	–2	1	–1	–5	1	–2
T. Rowe Price Target Retirement	1	–3	–1	1	–2	3	0	–2	5	–1
TIAA-CREF Lifecycle	4	0	1	1	–2	0	1	–1	–1	–3
TIAA-CREF Lifecycle Index	7	–1	0	0	–2	–2	–2	6	–1	–5
USAA Target Retirement	–6	–1	6	2	0	0	3	–1	–2	0
Vanguard Target Retirement	7	–1	0	–1	–2	3	–2	1	0	–4
Vantagepoint Milestone	–4	5	–2	0	1	0	–2	4	–1	–1
Voya Index Solution	6	1	–1	–1	–2	–2	2	2	–3	–3
Voya Solution	5	1	–2	0	0	0	2	–3	0	–2
Wells Fargo Adv DJ Target	–14	7	–4	0	5	3	–2	8	–3	–1
Largest Overweighting	13	9	8	2	7	5	8	16	17	10
Largest Underweighting	–14	–7	–8	–3	–3	–3	–2	–9	–3	–7
Dispersion	27	16	16	6	10	8	11	25	21	17

Source: Morningstar, Inc. Data as of 12-31-2014.

The data points in Exhibit 14 lead to three general conclusions concerning how target-date managers approach their series' construction.

1. **Contrasting Views on Equity Exposure.** U.S. large cap's 27-percentage-point dispersion is the widest among the subasset classes. American Century One Choice series displays above-average positions in both U.S. large cap and U.S. small/mid-cap, but its non-U.S. developed exposure falls 8 percentage points below the norm, on average.[3] Conversely, the AllianceBernstein Retirement series holds the highest average stake in the non-U.S. developed subasset class, but it remains near the norm in U.S. equity. This reflects that series' pronounced bias toward non-U.S. stocks within the overall equity allocation when compared with peers. (See Exhibit 21 in the back of this section for a summary of series'

Footnote

3 American Century has announced plans to add its non-U.S. developed exposure in early 2015, which may somewhat mitigate the series' home-country bias.

splits within equity.) Notably, the target-date industry's three largest series in terms of assets—Fidelity Freedom, T. Rowe Price Retirement, and Vanguard Target Retirement—hold relatively heavy stakes in the U.S. large-cap subasset class. (Vanguard's series can be expected to fall closer to the norm following its strategic changes in 2015.)

2. **Using Their Strengths.** Multiple target-date series gravitate toward areas of strength within their respective firms. Franklin LifeSmart series, for example, stands out with the highest average stake in the foreign-bond subasset class. That series has a sizable position in Templeton Global Total Return, which receives a Morningstar Analyst Rating of Silver and has established a successful track record under manager Michael Hasenstab. Similarly, AllianzGI Retirement series has a relatively large stake in TIPS, and part of that exposure comes through Silver-rated PIMCO Real Return (PIMCO is a subsidiary of Allianz) managed by Mihir Worah. (PIMCO RealPath series, though not shown here, also has sizable positions in TIPS via the same strategy.) American Funds Target Date Retirement series has the largest average stake in the U.S. large-cap subasset class, but it is generally light in the fixed-income subasset classes and U.S. mid- and small-cap stocks. Capital Group, parent of American Funds, is widely recognized for its strong equity capabilities, and the majority of those strategies tend to focus on large-cap stocks.

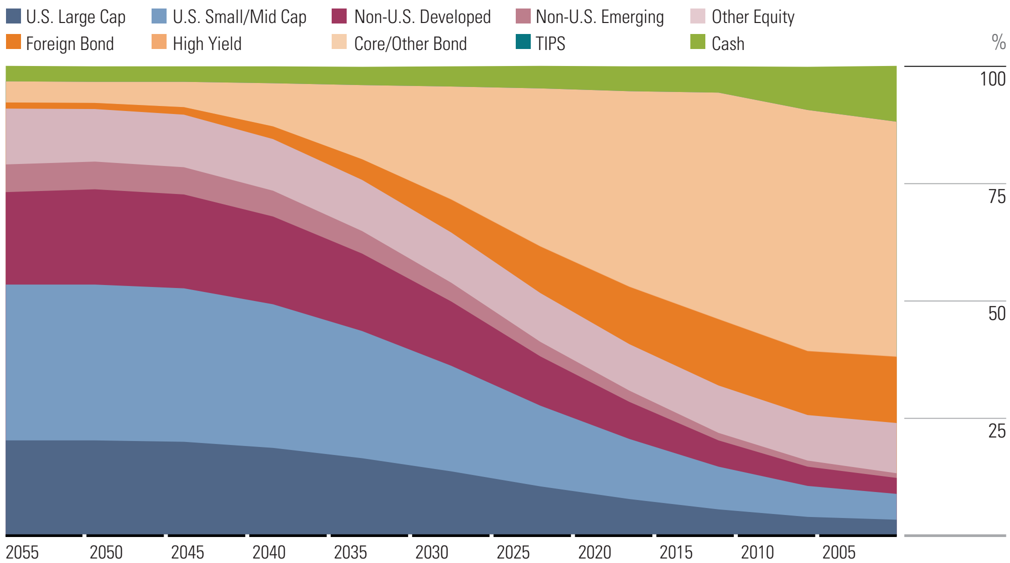
3. **Making Active Decisions.** Even index-based target-date series can differ widely among one another. For instance, Vanguard Target Retirement and Wells Fargo Advantage Dow Jones Target series both have heavy stakes in the foreign-bond subasset class—Vanguard's bias can be expected to be even more pronounced following the implementation of its strategic changes announced in February 2015—whereas BlackRock LifePath Index, Fidelity Freedom Index, TIAA-CREF Lifecycle Index, and Voya Index Solution series do not even venture into that subasset class. Furthermore, Voya Index Solution is the only index-based series that has an above-average stake in the high-yield subasset class.

Insight Into a Target-Date Manager's Philosophy

Identifying the key differences in sub-asset-class glide paths proves worthwhile for two primary reasons: First, it provides investors with further insight into the investment philosophy that underpins a target-date series' construction. Second, it helps investors understand the primary drivers of a target-date series' past and future performance.

Example 1: An Asset-Class Perspective. Some target-date managers approach glide-path design by setting distinct allocations to narrowly defined asset classes. This is the case with Wells Fargo Advantage Dow Jones Target series, which has been subadvised by Global Index Advisors since 2006. GIA's approach gains passive exposure to multiple asset classes by equally weighting the allocation to each asset class within the series' broader equity and fixed-income exposure. For example, a fund in the series has an equal weight in index-based strategies that track U.S. small-cap value stocks and U.S. large-cap growth stocks within the equity allocation throughout the glide path. The series' overall equity allocation declines over time, though. Exhibit 15 shows the resulting sub-asset-class glide path for Wells Fargo's series.

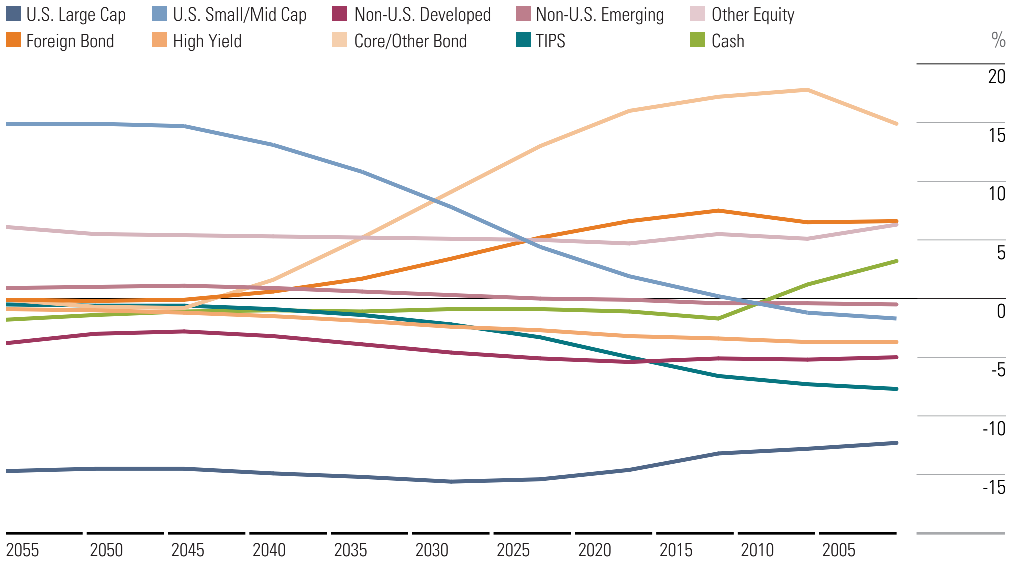
Exhibit 15 Wells Fargo Advantage Dow Jones Target Sub-Asset-Class Glide Path



Source: Morningstar, Inc. Data as of 12-31-2014.

The series' combined exposure to the U.S. small/mid-cap subasset class exceeds the exposure to the U.S. large-cap subasset class across the entire glide path. This counters the general tendency for target-date series to have larger absolute and relative allocations in U.S. large-cap stocks. On the fixed-income side, Exhibit 15 captures GIA's decision to exclude the TIPS and high-yield subasset classes altogether. Again, this highlights how the manager of a "passive" target-date series makes multiple active decisions and may stand out apart from peers. Exhibit 16 shows how Wells Fargo's equal-weighted approach stands out from its typical peer across the glide path. It captures the magnitude of the series' underweighting in U.S. large-cap stocks—between 12 and 16 percentage points—for each vintage. The series' REITs exposure contributes to its relatively high stake in other equity (the series does not carve out exposure to commodities).

Exhibit 16 Sub-Asset-Class Glide Path Comparison: Wells Fargo Adv DJ Target vs. Industry Average



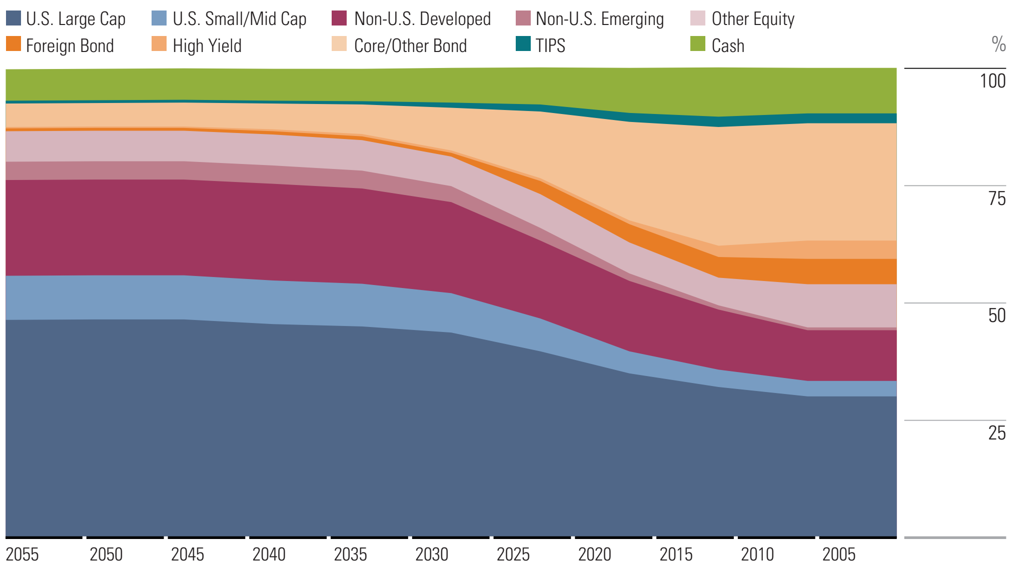
Source: Morningstar, Inc. Data as of 12-31-2014.

Example 2: An Objective-Based Perspective. Not every target-date manager views glide-path design through the lens of the 10 subasset classes (or any of the usual groupings of subasset classes, for that matter) outlined in this section. Though that tends to be the predominant method for some series, the sub-asset-class glide path may essentially be result of decisions made from less mainstream strategic perspectives.

For example, Capital Group launched American Funds Target Date Retirement series in 2007 with a glide path based on four objectives, such as "growth and income," in lieu of more discrete asset classes. Each of the series' 20-plus underlying funds fits within an objective, but they can span multiple subasset classes. For instance, American Funds Investment Company of America is one of the series' largest underlying holdings. That fund lands in the large-blend Morningstar Category, but it held nearly 11% of its assets in non-U.S. equity and nearly 6% in cash as of Dec. 31, 2014. The series' managers also recently added American Funds Global Balanced to the series, which invests in stocks and bonds around the globe.

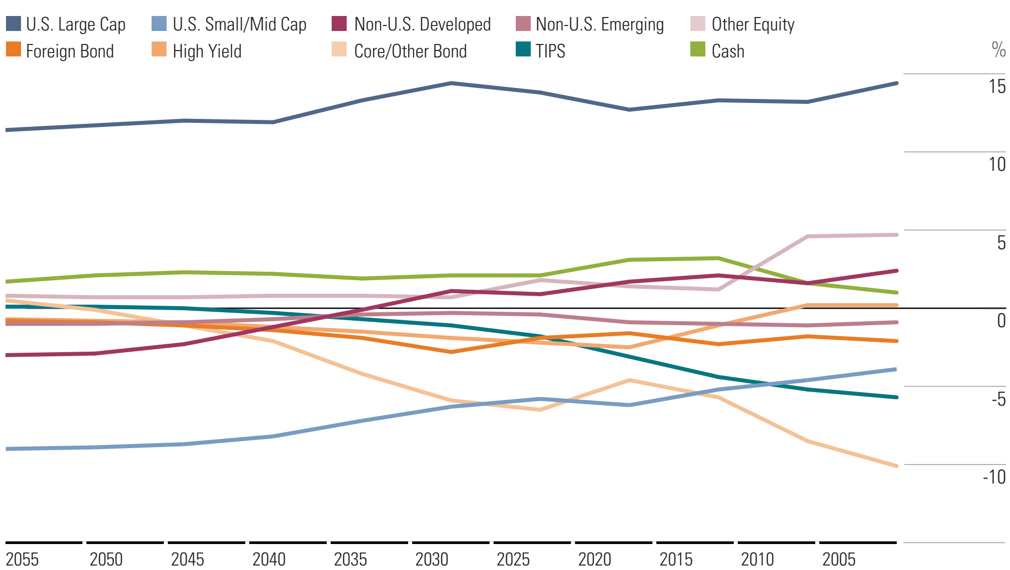
Exhibit 17 shows the series' sub-asset-class glide path as of Dec. 31, 2014. The U.S. large-cap subasset class represents the lion's share of the series' U.S. equity exposure, and the non-U.S. emerging subasset class accounts for a rather small portion of its non-U.S. equity exposure. Exhibit 18 shows that the series' U.S. large-cap stake tops the norm by 10 to 15 percentage points across the glide path, while the small/mid-cap position is as much as 9 percentage points below its typical peer. These relative positions do not necessarily reflect the target-date managers' stance on the subasset classes. Instead, they primarily stem from the investment decisions of the underlying fund managers. This helps explain the series' sizable cash stake throughout the glide path, even though the series does not include a money market or cash fund in the mix; many of American Funds' equity-oriented offerings tend to hold consequential cash positions.

Exhibit 17 American Funds Target Date Retirement Sub-Asset-Class Glide Path



Source: Morningstar, Inc. Data as of 12-31-2014.

Exhibit 18 Sub-Asset-Class Glide Path Comparison: American Funds Target Date Retirement vs. Industry Average



Source: Morningstar, Inc. Data as of 12-31-2014.

Balancing Act

Most target-date managers need to balance their series' desired asset-class exposure with the exposure gained via underlying strategies. Intuitively, managers that apply a passive approach within the glide path, as shown in the examples of Vanguard and Wells Fargo, can generally home in on asset-class exposure with more precision. Conversely, target-date series that use underlying active strategies—like the American Funds series—will likely see more variation in asset-class exposure, as underlying active managers may be afforded a wider range of flexibility.

Putting Performance in Context

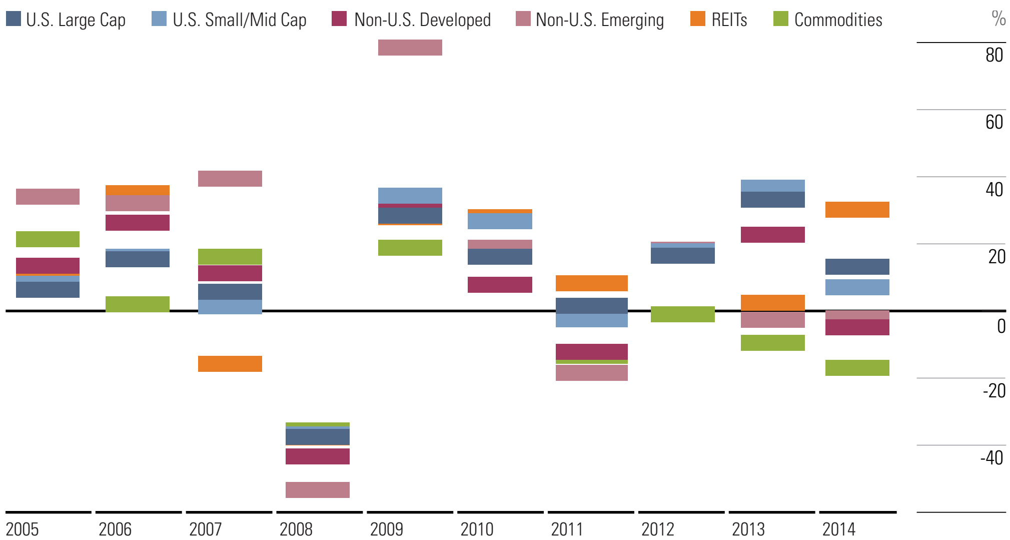
Beyond providing insight into the investment process underpinning target-date series, reviewing a series' sub-asset-class glide paths also gives a framework to understand past and future performance within the context of the market environment. One of the primary attractions of target-date funds (and other multi-asset-class portfolios generally) is their attempt to balance returns and volatility over time by blending multiple asset classes. These asset classes must diverge from one another to produce the desired diversification benefits, thus amplifying the need to tie a target-date series' sub-asset-class glide path to its performance.

Not All Equity Is the Same

The 10 subasset classes presented in this section have generally behaved very differently over time. Exhibit 19 shows the index returns for six equity subasset classes ("other equity" includes REITs and commodities, and those subasset classes have been carved out separately) during the past 10 calendar years. The average annual difference in return between the top- and bottom-performing indexes during that span was approximately 35 percentage points, and the median difference was not far behind, at 30 percentage points. Removing REITs and commodities from the calculation, those same figures were 25 and 19 percentage points, respectively.

While these equity subasset classes generally do not move in lock step, 2012 appears to be an exception. That year, the commodities subasset class was the only one that veered significantly from the pack. Importantly, Exhibit 19 also shows that equity subasset classes rotate leadership. For instance, while non-U.S. emerging held the top spot in 2007, it fell further than the others amid the 2008 economic crisis, and it subsequently rebounded higher than the rest in 2009. Even in the past couple of years, the U.S. large cap and small/mid-cap subasset classes have traded leadership spots.

Exhibit 19 Equity Sub-Asset-Class Calendar-Year Returns

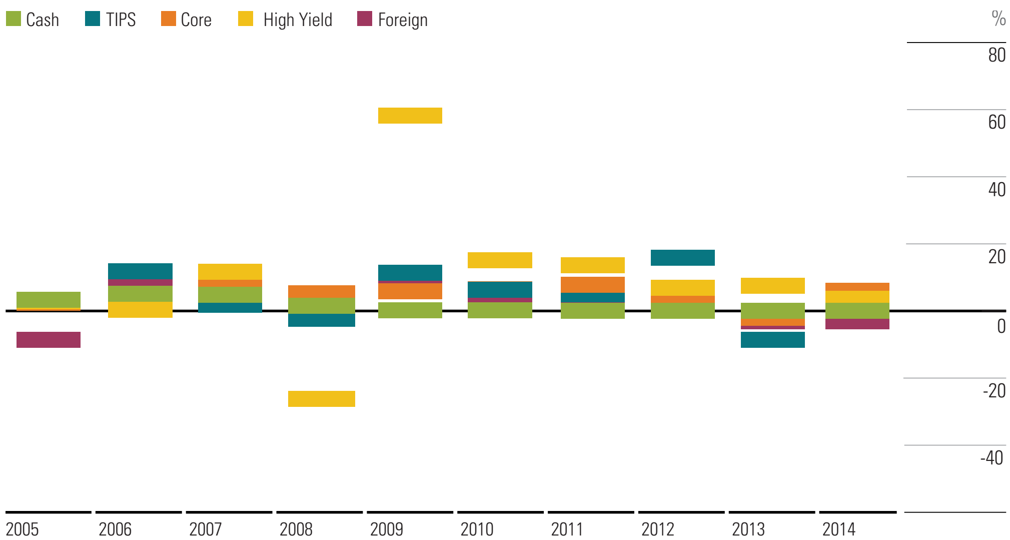


Source: Morningstar, Inc. Data as of 12-31-2014.
The following indexes represent the above respective asset classes: U.S. large cap/ Russell 1000; U.S. small/mid-cap/Russell 2500; non-U.S. developed/MSCI EAFE; non-U.S. emerging/MSCI Emerging Markets; REITs/FTSE NAREIT Equity REITs; and Commodities/Bloomberg Commodity.

Bond Sectors Diverge, Too

Although the level of dispersion is not as great within bonds as with equities, Exhibit 20 shows that bond sectors have also strayed from one another during the past 10 calendar years. The average dispersion between the top- and bottom-performing sectors was approximately 19 percentage points, and the median was 14 percentage points. Even taking out the extreme returns of high-yield bonds, those figures each remain near 8 to 9 percentage points. Aside from cash, each bond sector presented Exhibit 20 posted a negative absolute return in at least one calendar year during the past decade.

Exhibit 20 Fixed-Income Sub-Asset-Class Calendar-Year Returns



Source: Morningstar, Inc. Data as of 12-31-2014.
The following indexes represent the above respective asset classes: Cash: 91-Day U.S. Treasury Bills; TIPS: Barclays U.S. TIPS; Core: Barclays U.S. Aggregate Bond; High Yield: Barclays U.S. Corporate High Yield; and Foreign: Barclays Global Aggregate ex USD.

Connecting the Sub-Asset-Class Glide Path With Expectation

Knowing the nuances of a target-date series' relative sub-asset-class positioning should help investors better understand past and future performance drivers. For example, the American Funds Target Date Retirement series displays the largest average relative exposure to the U.S. large-cap subasset class. The series' returns ranked in the top quintile across the board in 2014, a year when U.S. large-cap stocks outpaced other traditional equities. Conversely, in 2014, AllianceBernstein Retirement ranked in the bottom quartile, on average (78th percentile). That series holds the largest average relative exposure to the non-U.S. developed subasset class, which was the worst-performing traditional equity subasset class that year. Target-date series have various tilts, and investors need to understand them to put performance in the proper context.

This perspective also helps set expectations for future performance. For instance, investors shouldn't expect a series with a relatively light stake in U.S. equities, no matter the strength of the underlying strategies, to lead the pack should U.S. equities continue to deliver market-leading results.

Selecting the Best

Because no single glide path is inherently superior to all others, it's important to understand the driving forces behind target-date managers' glide-path decisions. Investors and their fiduciaries should know and agree with the approach that serves as a foundation for their target-date funds, and evaluating all levels of series' asset-class exposures can help in that assessment. Knowing those distinctions helps investors make better decisions, allowing them to see target-date series' longer-term potential among the shorter-term noise.

Exhibit 21 Target-Date Series' Equity Splits (Color-coded relative to series' % point difference from industry avg)
≥6 5 to 3 2 to –2 –3 to –5 ≤–6

Target-Date Series	U.S. Equity/ Total Equity	U.S. Large Cap/ Total U.S. Equity	Emerging Markets/ Total Non-U.S. Equity
AllianceBernstein Retirement	56	64	19
Allianz Retirement	60	68	21
American Century One Choice	82	68	21
American Funds Target Date Retire	71	86	12
BlackRock LifePath	61	73	11
BlackRock LifePath Active	54	67	17
BlackRock LifePath Index	63	73	12
BMO Target Retirement	68	62	25
Deutsche LifeCompass	72	68	19
Fidelity Advisor Freedom	69	74	20
Fidelity Freedom	67	73	19
Fidelity Freedom Index	69	73	15
Fidelity Freedom K	67	73	19
Franklin LifeSmart	68	70	16
Great-West Lifetime I	67	54	18
Great-West Lifetime II	67	54	18
Great-West Lifetime III	60	71	16
Great-West SecureFoundation	68	52	13
GuideStone MyDestination	68	70	16
Harbor Target Retirement	57	47	7
JHancock Retirement Choices	75	77	25
JHancock Retirement Living through	68	69	20
JHancock Retirement Living through II	75	74	26
JPMorgan SmartRetirement	65	66	23
JPMorgan SmartRetirement Blend	69	75	22
KP Retirement Path	62	66	17
Manning & Napier Target	75	54	14
MassMutualRetireSMART	64	59	17
MFS Lifetime	67	60	8

Exhibit 21 Target-Date Series' Total Equity Splits (Continued)

Target-Date Series	U.S. Equity/ Total Equity	U.S. Large Cap/ Total U.S. Equity	Emerging Markets/ Total Non-U.S. Equity
Nationwide Destination	65	49	0
PNC Target	72	62	23
Presidential Managed Risk	60	72	9
Principal LifeTime	67	68	15
Putnam RetirementReady	79	69	7
Russell LifePoints	59	67	15
Schwab Target	72	70	13
State Farm LifePath	63	75	11
Strategic Advisers Multi-Manager	70	70	21
T. Rowe Price Retirement	66	72	20
T. Rowe Price Target Retirement	66	72	20
TIAA-CREF Lifecycle	67	69	18
TIAA-CREF Lifecycle Index	70	73	16
USAA Target Retirement	54	64	19
Vanguard Target Retirement	70	73	15
Vantagepoint Milestone	70	54	20
Voya Index Solution	73	69	13
Voya Solution	73	69	14
Wells Fargo Adv DJ Target	67	38	23
Highest %	82	86	26
Lowest %	54	38	0
Average %	67	67	17

Source: Morningstar, Inc. Data as of 12-31-2014.

Exhibit 22 Industry Average Subasset Glide Path: Constituents and Exclusions

Constituents

- AllianceBernstein Retirement
- Allianz Retirement
- American Century One Choice
- American Funds Target Date Retirement
- BlackRock LifePath
- BlackRock LifePath Active
- BlackRock LifePath Index
- BMO Target Retirement
- Deutsche LifeCompass
- Fidelity Advisor Freedom
- Fidelity Freedom
- Fidelity Freedom Index
- Fidelity Freedom K
- Franklin LifeSmart
- Great-West Lifetime I
- Great-West Lifetime II
- Great-West Lifetime III
- Great-West SecureFoundation
- GuideStone MyDestination
- Harbor Target Retirement
- JHancock Retirement Choices
- JHancock Retirement Living through
- JHancock Retirement Living through II
- JPMorgan SmartRetirement
- JPMorgan SmartRetirement Blend
- KP Retirement Path
- Manning & Napier Target
- MassMutualRetireSMART
- MFS Lifetime
- Nationwide Destination
- PNC Target
- Presidential Managed Risk
- Principal LifeTime
- Putnam RetirementReady
- Russell LifePoints
- Schwab Target
- State Farm LifePath
- Strategic Advisers Multi-Manager
- T. Rowe Price Retirement
- T. Rowe Price Target Retirement
- TIAA-CREF Lifecycle
- TIAA-CREF Lifecycle Index
- USAA Target Retirement
- Vanguard Target Retirement
- Vantagepoint Milestone
- Voya Index Solution
- Voya Solution
- Wells Fargo Adv DJ Target

Exclusions

- AB Multi-Manager Select
- Invesco Balanced-Risk Retirement
- Madison Target Retirement
- MainStay Retirement
- PIMCO RealPath
- PIMCO RealPath Blend
- Principal LifeTime Hybrid
- State Street Target Retirement
- Voya Retirement Solutions

Source: Morningstar, Inc. Data as of 12-31-2014.

Portfolio

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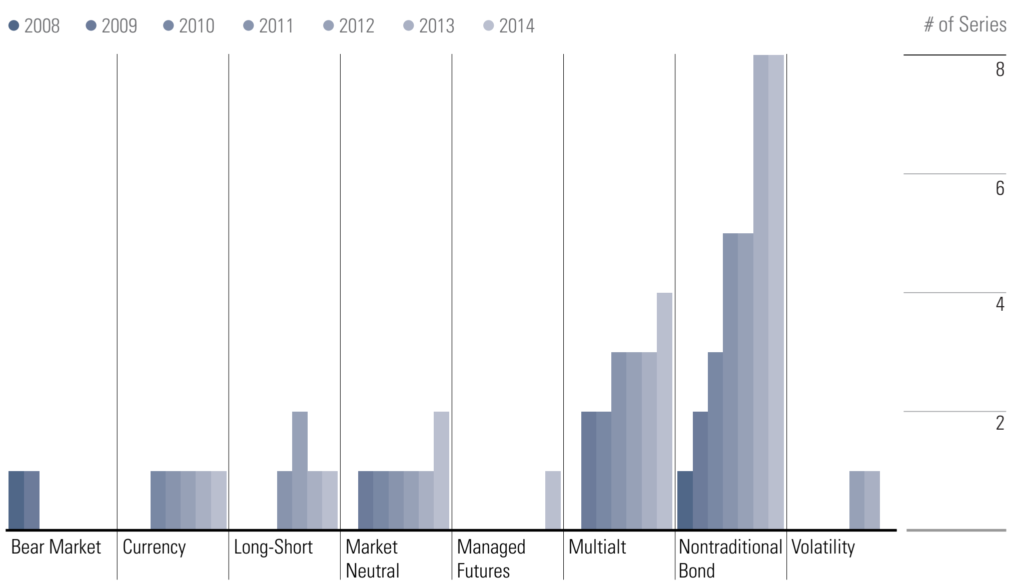
Whereas this year's Process section takes a look at how series' asset-allocation decisions compare with one another, the Portfolio piece mainly offers a view on how the various components have changed over time. For a product that's designed to predictably take care of investors' investment needs over roughly the 45 years from ages 20 to 65—and maybe even 20 years or more thereafter—there have often been some big fluctuations along the way. Those variations stem from numerous sources, including changes in investors' tastes, certain corners of the market becoming more readily accessible, and updates to managers' future capital market expectations.

Alternative Investments in Target-Date Funds

The rise of alternative investments in target-date funds generally results from all three factors. Exhibit 23 shows the number of target-date series that over the years have invested in some of the main Morningstar Categories housed under the alternative investments group. These strategies have become increasingly accessible to target-date funds via the alternative investments managers who continue to take their strategies from the exclusive world of hedge funds to the more democratic mutual fund vehicle; as Exhibit 3 in the Flows section suggests, investors have deluged the funds with new assets, and many target-date managers have joined the stream.

Exhibit 23 Number of Series Using Alternative Investments Mutual Funds, 2008-14



Source: Morningstar, Inc. Data as of 12-31-2014.

Target-date funds' use of alternative investments notably rose post-2008's financial crisis, at least in a partial attempt to prevent the funds from suffering as badly in future market corrections as many did during 2008's rocky period. The multialternatives category, which serves as a catchall for funds simultaneously pursuing a variety of alternative investment strategies (such as going long and short in stocks and bonds and using merger arbitrage), has become more popular of late. The category's heterogeneous mix of funds makes comparisons among them challenging, though investors tend to favor them for their ability to provide a diversified mix of alternative strategies in a single package. In 2009, MFS Lifetime and Putnam RetirementReady series were among the first to use funds in that category, via MFS Diversified Target Return and Putnam's various Absolute Return funds, respectively. John Hancock Retirement Living Through series also began using the firm's multialternatives category Global Absolute Return Strategies in 2011, one of the first target-date series to use a true global macro strategy.

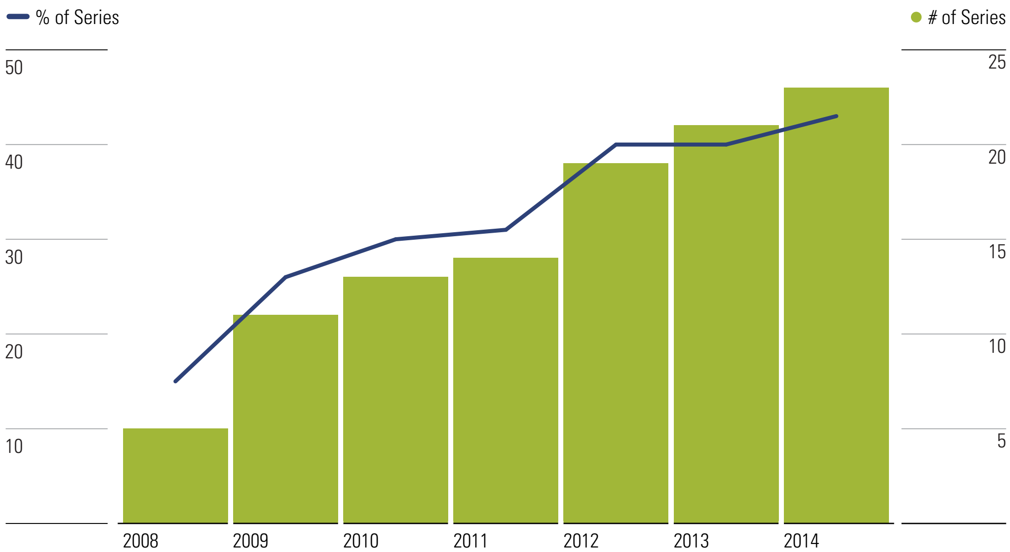
Target-date managers have also been adding stakes in nontraditional bond funds—those that often run unconstrained sector or duration strategies. These funds can also pursue an absolute return mandate, where the goal is to generate positive returns, regardless of market movements. Such strategies should help compensate for low yields and guard against future rising interest rates. For these funds, Putnam was also on the industry's leading edge. Morningstar first launched the non-traditional-bond fund category in 2011, and the series has used Putnam Diversified Income, now part of the nontraditional bond fund group, since 2007.

Target-date series registered their first use of managed-futures strategies in 2014. PIMCO RealPath series added PIMCO TRENDS Managed Futures Strategy earlier in the year. Manning & Napier also carved out an allocation to managed futures from its bond portfolio, citing concerns of higher-quality bonds' anemic yields. (The strategy doesn't register on Exhibit 23, though, because it's implemented within the target-date series' underlying Pro-Blend funds rather than as a stand-alone fund.)

Commodities: Old News?

Exhibit 24 looks at the prevalence of commodities in target-date funds. In some respects, the increasingly common use of commodities has put them into the mainstream, and Morningstar does not explicitly include commodity-related categories within its alternatives umbrella. Still, it wasn't too long ago that they were considered a more fringe offering, with only five series using a commodities-focused strategy in 2008. While they maintain characteristics that investors often look for in alternative investments—such as lower correlation to stocks and bonds—they're typically used as an inflation hedge by many target-date managers. Morningstar first registered a series' use of a broad-basket commodities fund in Deutsche LifeCompass series in 2005 via Scudder Commodity Securities. The numbers have steadily risen since then, with almost half of target-date mutual fund series now investing in a commodities category fund.

Exhibit 24 Number of Series Using Commodities Mutual Funds, 2008-14

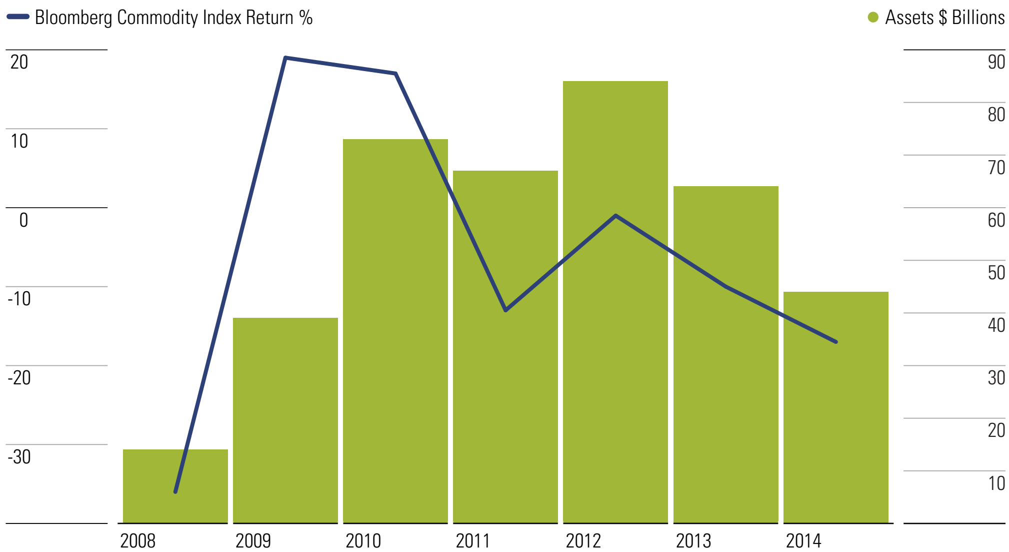


Source: Morningstar, Inc. Data as of 12-31-2014.

Gaining exposure in the space can take various forms, including investing in the physical products (most commonly via metals investments), using commodities derivatives, and buying equities of companies that produce or depend on commodities. The last type serves as a reminder that likely all series have exposure to commodities, whether or not it's via a dedicated allocation or fund.

Exhibit 24's numbers don't tell the whole story of commodity funds' history in target-date series, though. For while the chart shows a steady upward trend, assets devoted to those investments have been coming down over time, as shown in Exhibit 25. (That pattern is all the more striking considering how much overall target-date assets have been rising.) Target-date managers' pulling assets from their commodities investments coincides with a multiyear period of the assets class delivering negative returns, as depicted by the Bloomberg Commodity Index's annual results.

Exhibit 25 Target-Date Assets in Commodities Mutual Funds and Index Return, 2008-14



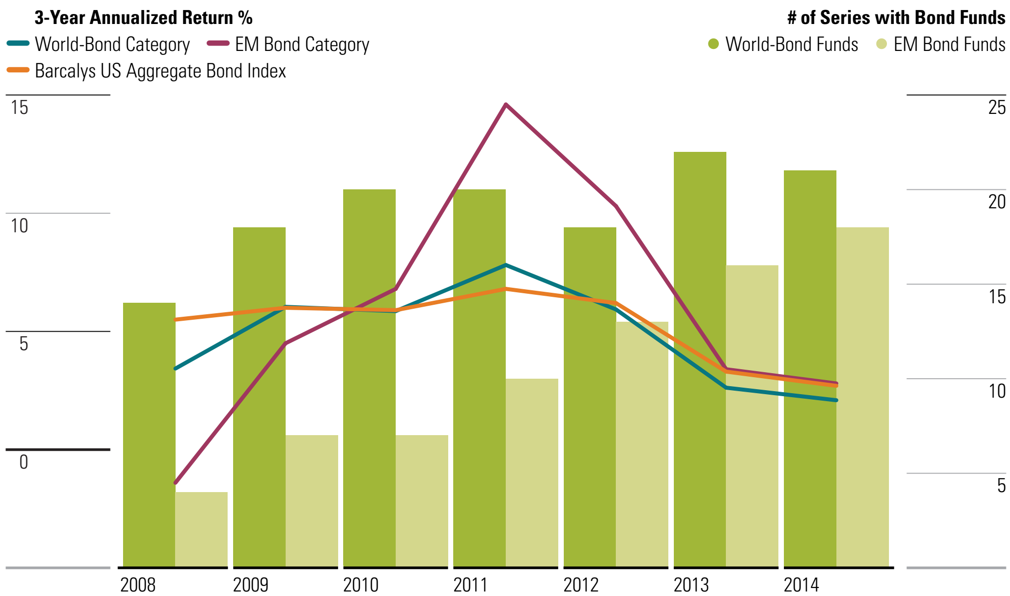
Source: Morningstar, Inc. Data as of 12-31-2014.

The decrease in target-date funds' commodities assets has come from the category's negative returns as well as managers pulling money from those strategies. With its large market share and as previously one of the category's more ardent believers, Fidelity has accounted for much of the latter. The firm initially showed its enthusiasm for the assets class in 2010. That year, for instance, Fidelity Freedom 2050's stake in Fidelity Series Commodity Strategy grew from 1.8% to 8.9% by the end of the year. While that allocation stayed relatively constant for a few years, by the end of 2013, it dropped to 2.4%, and it stood at 0.8% of the portfolio at the end of 2014. The team cites changing capital market assumptions—in particular, waning demand from emerging markets—as a main cause for the retraction. That line of reasoning hasn't been uncommon among investors, yet it also suggests that target-date funds aren't immune from the performance-chasing patterns that they're theoretically set up to avoid.

Venturing Away From Home

Much of the attention previously enjoyed by commodities funds has been redirected to international-bond strategies, in particular, emerging-markets bond funds, as Exhibit 26 demonstrates. With 21 series that now include an allocation to at least one world-bond fund and 18 with an emerging-markets bond fund investment, the numbers still don't approach the prevalence enjoyed by commodities funds.

Exhibit 26 Number of Series With World-Bond or Emerging-Markets Bond Funds and Annualized Three-Year Category and Index Returns, 2008-14



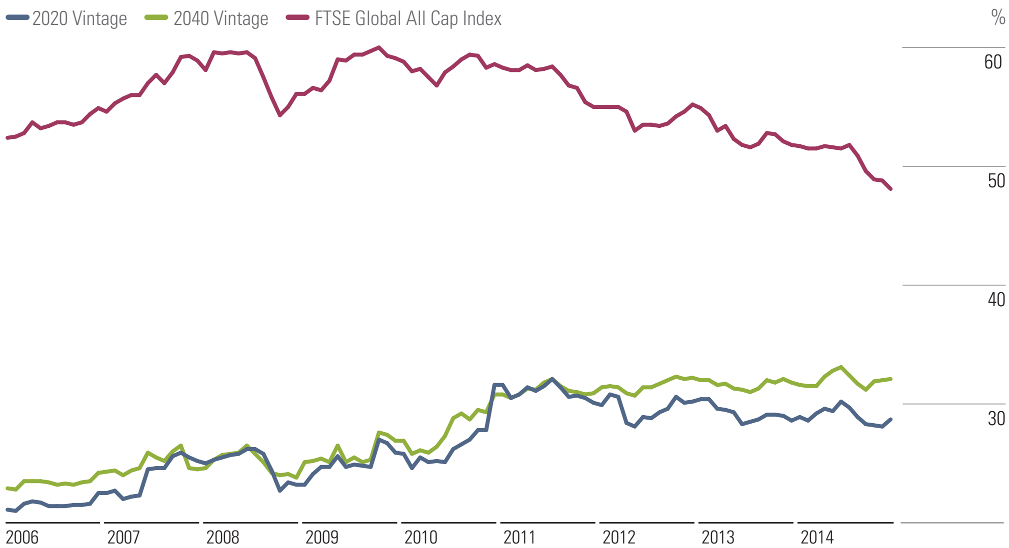
Source: Morningstar, Inc. Data as of 12-31-2014.

Vanguard Target Retirement series' adding of Vanguard Total International Bond Index to its portfolio in 2013, though (and its February 2015 announcement that the stake will rise to 30% from 20% of the series' fixed-income allocation), means that the vast majority of target-date investors now have at least some strategic allocation to international fixed income; the industry's three largest target-date providers—Vanguard, Fidelity, and T. Rowe Price, which account for more than two thirds of the space—all have slots dedicated to non-U.S. bonds.

With low domestic-bond yields and worries of rising interest rates, managers' attraction to international fixed income is largely similar to the factors pushing them to embrace alternative investments. That more-intrepid areas of the bond market have also tended to deliver better (if not also bumpier) returns has likely also helped the case. This has particularly been the case for emerging-markets bonds. Exhibit 26 gives an indication of how the adoption of international funds has coincided with the three-year annualized returns of the typical world and emerging-markets bond funds compared with the Barclays U.S. Aggregate Bond Index.

Meanwhile, U.S. target-date investors have also become worldlier in their equity allocations. Anecdotally, Morningstar analysts' conversations with managers suggest that evolutions in investors' tastes have played as much of a role in the change as other, more purely investment-based reasons (such as a change in managers' capital market expectations). Exhibit 27 demonstrates how investors in the typical 2040 and 2020 vintage target-date funds have seen their proportion of assets invested in international equities rise within their funds' overall stock portfolio. At the beginning of 2006, non-U.S. equities accounted for 21.1% of the typical 2020 vintage fund and 22.9% of the 2040 vintage fund. At the end of 2014, those figures were 28.7% and 32.1%, respectively.

Exhibit 27 Percentage of Equity Portfolio Invested in Non-U.S. Companies, 2006-14



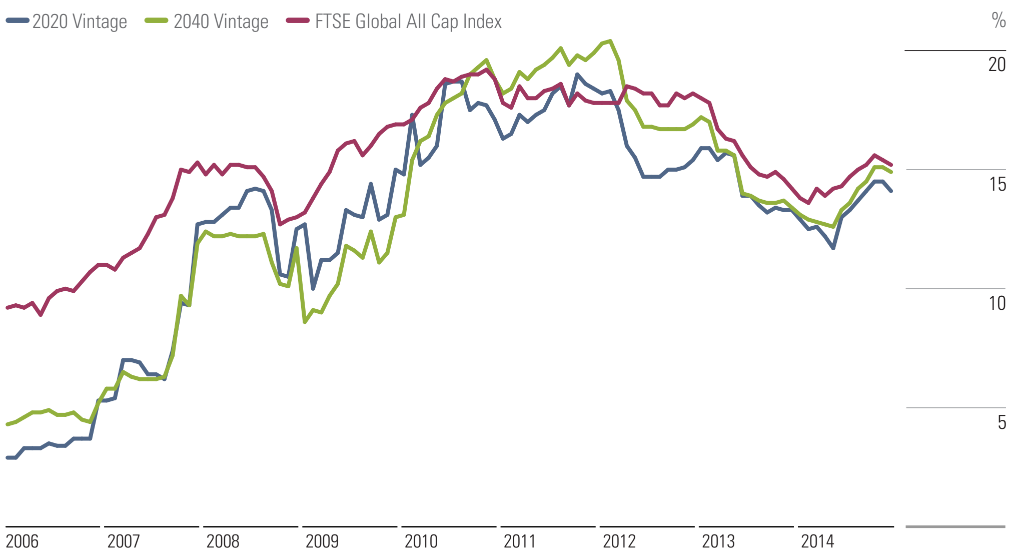
Source: Morningstar, Inc. Data as of 12-31-2014.

However, home-country bias still generally holds tight. The FTSE Global All Cap Index, a proxy for investors who believe in efficient markets and want their equity holdings to be an unbiased reflection of the world's offerings, is about equally divided between U.S. and non-U.S. exposure. A few target-date managers operate within that realm, and they include series from AllianceBernstein, AllianzGI, Harbor, PIMCO, and USAA.

The beginning of 2015 has also brought announcements of series becoming more international. That includes American Century One Choice, a series that was particularly U.S.-bound, with an average 20% allocation to U.S. equities within its stock sleeve across its funds. The firm planned to increase the allocation by as much as 7.1 percentage points by mid-March 2015. Vanguard has also taken a meaningful step out on a limb with its 2015 announcement that it will increase Target Retirement series' international weighting to 40% from 30% of its equity portfolio.

Though target-date funds may still be working their way toward a more geographically neutral portfolio, within their international stakes, they've essentially fully embraced emerging-markets stocks, as shown by Exhibit 28. Within its international-equity sleeve, the FTSE Global All Cap Index currently has about a 15% emerging-markets stake, comparable with the average allocations within 2020 and 2040 vintage year funds. The convergence has been in place since about late 2009, a period after which the industry saw nearly half of its current constituents enter the market. The addition of many of those series caused the overall industry's emerging-markets equity stake to increase, and that pattern continued along when longer-established players such as Fidelity and T. Rowe Price followed the trend.

Exhibit 28 Percentage of International-Equity Portfolio Invested in Emerging-Markets Companies, 2006-14



Source: Morningstar, Inc. Data as of 12-31-2014.

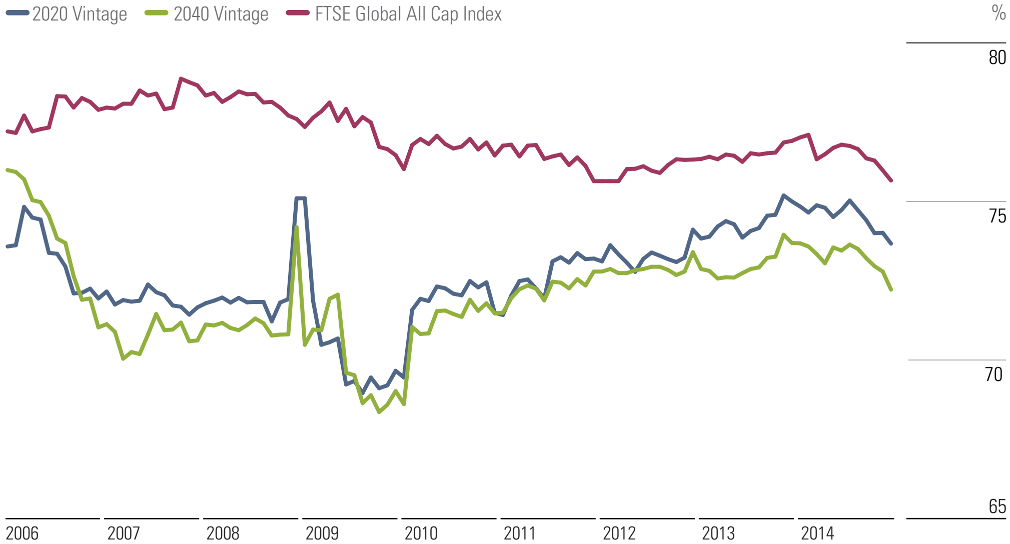
Nominal Moves in Large- and Small-Cap Stocks

Compared with changes to series' international allocations, target-date funds have seen relatively smaller tweaks to their equity market-cap exposures. Exhibit 29 presents the changes to the large-cap allocations of 2020 and 2040 vintage year portfolios compared with the FTSE Global All Cap Index, and Exhibit 30 does the same with their small-cap weightings.[4]

Footnote

4 This paper's Process section examines target-date series' market-cap weightings within their U.S. equity holdings, while this Portfolio section looks at market cap via a fund's entire equity allocation—U.S. and non-U.S. combined—because of the more complete dataset available.

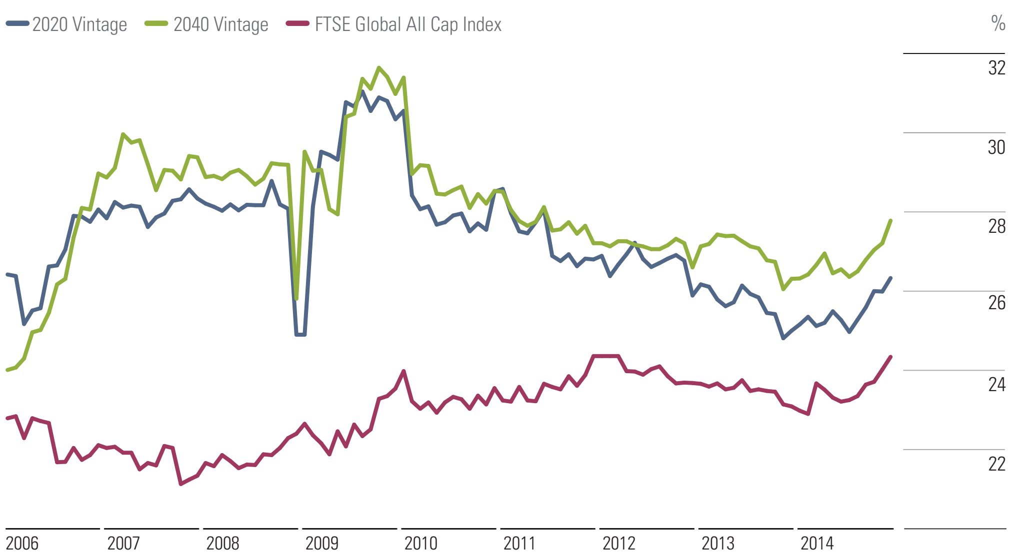
Exhibit 29 Percentage of Equity Portfolio Invested in Large-Cap Companies, 2006-14



Source: Morningstar, Inc. Data as of 12-31-2014.

Series' consistent underweighting of large-cap stocks matches the general investment industry's, where actively managed funds tend to systematically eschew the market's mega-cap names. The deviation has narrowed over the past few years as fund companies have launched a number of index-based series or added more passive underlying investments to their existing actively managed funds. Series' heavy positions in small-cap companies have commensurately come down over the same period of time.

Exhibit 30 Percentage of Equity Portfolio Invested in Small-Cap Companies, 2006-14



Source: Morningstar, Inc. Data as of 12-31-2014.

One pattern has remained fairly consistent: Target-date funds aimed at older investors (as represented by the 2020 vintage year) generally have heavier stakes in large-cap stocks and correspondingly lighter weightings in small-cap ones compared with funds meant for younger investors (those in 2040 vintage funds). For series managers who subdivide their asset-allocation decisions into separate larger- and-smaller-cap buckets, the pattern makes sense in light of their typical goal to temper portfolio volatility over an investor's lifetime. For American Funds Target Date Retirement series, it also stems from a move toward dividend-payers as investors approach and enter retirement. BlackRock LifePath takes a contrary approach, adding to small-cap stocks as it brings down investments in large-cap equities over time. The firm says that given U.S. small-cap stocks' low correlation to fixed income, its portfolio optimization process increases the series' allocation to those stocks as its glide path moves into more fixed-income-heavy portfolios. Other managers, such as the team from Vanguard, don't determine their series' asset allocations using separate market-cap buckets, so their large-, mid-, and small-cap weightings within their stock sleeves tend to remain constant throughout the glide path.

A Different Measure of Change: Glide Path Stability Score

Since 2011, Morningstar subsidiary Ibbotson Associates has also examined the subject of changing glide paths and target-date equity allocations via their proprietary glide path stability score. Exhibit 31 shows the 2014 results for some of the industry's largest target-date players.

Exhibit 31 2014 Glide Path Stability Scores for Selected Target-Date Series
Stability: ■ <1.5: High □ 1.5 to 3: Average ■ > 3.0: Low

		Avgerage Standard Deviation		GPSS Avg (Absolute) Chg Per Year	
Series	Start Year of Data	3-Year	Inception	3-Year	Inception
T. Rowe Price Retirement	2002	0.55	0.91	0.77	0.90
Great-West Lifetime III	2009	1.15	1.45	0.76	1.08
Great-West Lifetime II	2009	1.16	1.48	0.81	1.10
Great-West Lifetime I	2009	2.26	2.98	1.11	1.27
MFS Lifetime	2005	1.45	3.65	1.29	1.68
John Hancock Retirement Living Through	2006	1.19	2.39	1.57	1.89
Vanguard Target Retirement	2003	0.39	7.74	0.49	1.94
Vantagepoint Milestone	2005	1.30	2.93	1.86	2.02
MassMutual RetireSMART	2004	0.57	5.94	0.79	2.06
TIAA-CREF Lifecycle	2004	1.27	5.37	1.47	2.11
American Funds Trgt Date Rtrmt	2007	1.55	2.95	1.29	2.19
American Century One Choice	2005	2.89	2.12	2.86	2.20
Schwab Target	2005	1.06	4.63	0.75	2.21
BlackRock LifePath	2004	0.79	3.16	2.50	2.31
JPMorgan SmartRetirement	2006	1.08	3.19	1.36	2.61
Principal LifeTime	2001	1.90	7.19	2.05	3.39
AllianceBernstein Retirement	2006	5.27	6.19	5.57	3.74
Putnam RetirementReady	2004	3.08	11.10	3.61	3.75
Wells Fargo Advantage DJ Target	1994	1.54	6.61	1.43	3.99
DWS LifeCompass	1997	2.90	7.46	5.41	4.78

Exhibit 31 2014 Glide Path Stability Scores for Selected Target-Date Series
Stability: <1.5: High 1.5 to 3: Average > 3.0: Low Stability (Continued)

		Avgerage Standard Deviation		GPSS Avg (Absolute) Chg Per Year	
Series	Start Year of Data	3-Year	Inception	3-Year	Inception
Fidelity Freedom	1996	6.95	6.39	8.51	4.81
Invesco Balanced-Risk Retirement	2005	4.05	6.84	3.84	4.87
Fidelity Advisor Freedom	2004	8.55	6.52	9.99	5.18

Source: Morningstar, Inc. Data as of 12-31-2014.
Inception in this case refers to first year with reported holdings data.

The table shows the average absolute annual change in equity allocation that investors along each series' glide path have experienced over the past three years and since inception, with a lower GPSS indicating a more stable glide path. Since 2002, for instance, investors of the same age in T. Rowe Price Retirement series have seen their equity allocation vary by less than 1 percentage point each year. Those in Fidelity Advisor Freedom (which is similar to,though not an exact replica of, the firm's mainline Fidelity Freedom series) have seen a more than 5 percentage point average annual change since 2004.

Stability isn't a virtue in its own right. Some series, for instance, tactically manage their funds' allocations using shorter-term time horizons. Because GPSS is based on actual equity allocations rather than the longer-term strategic weightings prospectively shown by a series' prospectus and asset-allocation glide path, series that use tactical allocation tend to have higher GPSS, such as JPMorgan's. Of course, T. Rowe Price Retirement series also uses tactical asset allocation, though with its now more than decade-long decision to give an overweighting to equities, its tactical moves haven't affected its GPSS much.

Underlying Investments Matter, Too

Asset allocation tends to dominate the discussion when weighing the merits of different target-date series, but as the Department of Labor emphasized in its 2013 Target Date Retirement Funds - Tips for ERISA Plan Fiduciaries, it's important for investors to have confidence in series' underlying investments as well. There are a few ways to approach the task. A fund's Morningstar Analyst Rating, for instance, gives analysts' qualitative, forward-looking assessment of the fund's future prospects of beating its index and peer group over a full market cycle. Its scale starts with the three recommended ratings levels of Gold, Silver, and Bronze, and it also includes Neutral and Negative ratings.

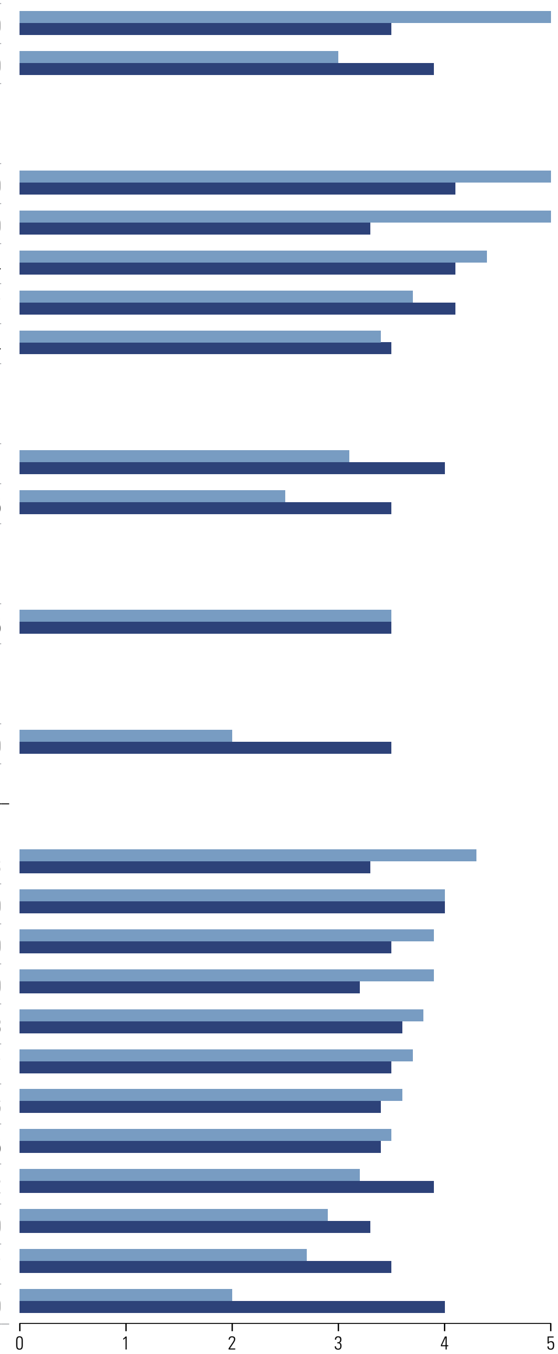
In contrast, the Morningstar Rating (commonly known as the star rating), quantitatively indicates funds' historical performance rankings compared with peers' on a risk-adjusted basis. Exhibit 32 depicts how target-date series' underlying holdings fare using these two metrics, as arranged by how analysts rate the series themselves. The graphic shows only target-date series that have at least half of their underlying assets invested in funds rated by Morningstar analysts.

Exhibit 32 Series' Underlying Funds' Morningstar Analyst Rating and Morningstar Rating, Arranged by Series' Morningstar Analyst Rating

Weighted Ratings

■ ★ ■ Analyst: Negative = 1, Neutral = 2, Bronze = 3, Silver = 4, Gold = 5

	★	Analyst
Gold		
Vanguard Target Retirement	3.5	5.0
T. Rowe Price Retirement	3.9	3.0
Silver		
Manning & Napier Target	4.1	5.0
Fidelity Freedom Index	3.3	5.0
American Funds Trgt Date Rtrmt	4.1	4.4
JPMorgan SmartRetirement	4.1	3.7
MFS Lifetime Series	3.5	3.4
Bronze		
PIMCO RealRetirement	4.0	3.1
TIAA-CREF Lifecycle	3.5	2.5
Neutral		
Schwab Target	3.5	3.5
Negative		
Russell LifePoints Target Date	3.5	2.0
Not Rated		
Presidential® Managed Risk	3.3	4.3
BMO Target Date Rtrmt Funds	4.0	4.0
Harbor Target Retirement	3.5	3.9
John Hancock Rtrmt Choices	3.2	3.9
AllianzGI Retirement	3.6	3.8
Great-West Lifetime III	3.5	3.7
Great-West Lifetime II	3.4	3.6
Great-West Lifetime I	3.4	3.5
Franklin LifeSmart	3.9	3.2
BlackRock LifePath® Active	3.3	2.9
MainStay Retirement	3.5	2.7
Invesco Balanced-Risk Rtrmt	4.0	2.0



Source: Morningstar, Inc. Data as of 12-31-2014.

A few series stand out: The Gold-rated T. Rowe Price Retirement series' weighted Analyst Rating has come down over the past two years as various manager changes within its underlying funds have caused analysts to downgrade some funds. The series still benefits from some of the most experienced target-date managers in the industry. And a number of the index-based funds used by Silver-rated Fidelity Freedom Index series receive high marks from Morningstar analysts thanks to their low costs and efficient tracking. However, unlike a trend seen within U.S. equity markets, international index-based funds haven't as readily trounced their actively managed peers, and the generally more intrepid bond portfolios used by active managers within the intermediate-term bond group have largely outpaced passive investments. As a result, the series has strong weighted Analyst Ratings but weaker weighted Morningstar Ratings.

For a look at other components that measure the quality of series' underlying funds, turn to the People section, which scrutinizes issues such as how manager tenure on underlying funds relates to performance, as well as how closely those managers align themselves with shareholders' interests by investing in their own funds.

People

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A Snapshot of Tenure in the Target-Date Industry

Portfolio manager tenure often serves as an indicator of manager quality and experience; indeed, Morningstar's research has shown a link between longer-tenured managers and better investment results[5] Most target-date funds use fund-of-fund structures, so investors have two layers of tenure to consider: the tenure of the target-date series' management team and the tenure of the series' underlying managers. Exhibit 33 graphs both sets of tenure for the 51 series in Morningstar's mutual fund database with available tenure data.

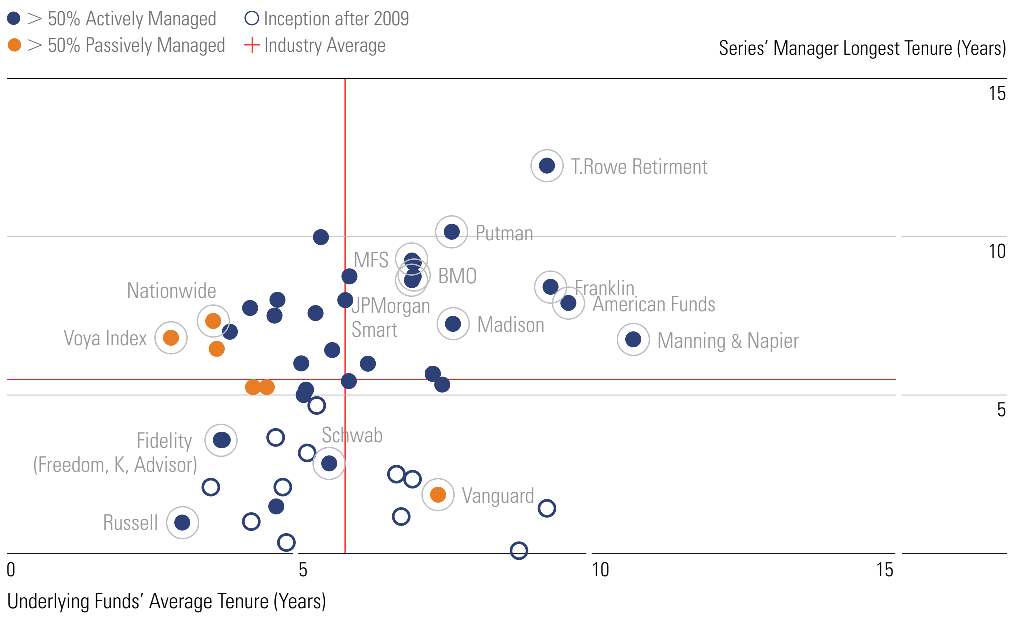
While the importance of manager tenure for a bond or equity fund may be intuitive to many, that's not always the case with target-date managers. However, target-date series' management teams can make a number of decisions that materially impact performance, including setting the asset allocation glide path, making tactical allocation decisions, and selecting underlying managers. For instance, 13 of the 24 target-date series covered by Morningstar analysts can make tactical shifts away from their series' long-term strategic asset allocation glide paths; many can deviate by more than 10 percentage points. Meanwhile, turnover on the target-date team often leads to various changes, as was the case after Jeff Tyler (formerly a manager for American Century's target-date funds) joined Principal to lead its LifeTime series. Tyler decreased the series' exposure to preferred securities and high yield bonds while increasing its exposure to income-oriented equities for investors approaching their target retirement date.

Morningstar's data suggests that target-date series managed by veteran teams have generally delivered above-average returns, though a variety of factors, including series' relative stock and bond mixes, play big roles in performance as well. Exhibit 33 graphs manager tenure for target-date series and their underlying funds.

Footnote

5 For more details of the research, see 2014 Morningstar U.S. Mutual Fund Industry Stewardship Survey.

Exhibit 33 Manager Tenures for Underlying Funds and Series



Source: Morningstar, Inc. Data as of 12-31-2014.

Series that land in Exhibit 33's upper-right quadrant benefit from long-tenured management on both fronts. Jerome Clark, lead manager of T. Rowe Price Retirement series since its 2002 inception, remains the longest-tenured target-date portfolio manager in the industry. Veteran skippers also underpin that series, with its underlying fund lineup boasting an average tenure of more than nine years. Manning & Napier[6] and American Funds use underlying offerings run by managers who, on average, have been in place for more than 10 and 9 years, respectively. All three of those series receive medals from Morningstar analysts, thanks in part to notable management stability.

Other series stand out for uninspiring reasons. Russell LifePoints Target-Date series, which plots in the lower-left quadrant of Exhibit 33, received a new lead skipper in early 2014, and the three-year average tenure of its underlying managers ranks among the industry's lowest. Russell managers often rotate through various roles at the firm, and such frequent change can prove disruptive. Morningstar assigns an Analyst Rating of Negative to the series, in part because of personnel turnover. Fidelity's Freedom, Freedom K, and Advisor Freedom series also chart in that same quadrant, though the tenure numbers for these series can be somewhat misleading. True, comanager Andrew Dierdorf has only been on those series' rosters since 2011, and nearly all of its underlying funds have limited records. However, in

Footnote

6 In March 2015, Manning & Napier announced changes to and departures from its management team, which will likely result in decreases to both of the series' tenure figures.

many instances, veteran investors with strong performance histories, including Will Danoff and Joel Tillinghast, lead the underlying strategies.

Bill Gross' abrupt departure from PIMCO in September 2014 affected a number of target-date strategies, including PIMCO's RealPath funds. While Gross did not directly manage that series, he skippered multiple underlying holdings, and his exit dragged the series' average underlying tenure down to 3.6 years (it stood at 5.8 years as of August 2014). Nonetheless, PIMCO thoughtfully tapped into its depth of talented managers to forge ahead, and the series retained its Bronze rating.

Manager Departures Deserve Careful Consideration

Looking at series' manager tenures provides one view of stability, but it's also helpful to review series' departures. In fact, focusing exclusively on the tenure of a team's current members can be misleading. For instance, while Chris Nikolich has acted as AB Retirement Strategies' day-to-day skipper since its 2005 inception, the series has suffered eight manager departures since then, as shown in Exhibit 34. Most recently, Dan Loewy and Vadim Zlotnikov replaced former lead skippers Seth Masters and Dokyoung Lee. The series' manager churn has contributed to its Analyst Rating of Negative. Schwab's target-date group has also experienced significant turnover, with four different teams taking the reins since its 2005 launch. However, with Zifan Tang at the helm since early 2012, that team has recently demonstrated stability; Morningstar increased the series' People score to Neutral from Negative in December 2014.

Exhibit 34 Target-Date Series' Manager Departures and Manager Longest Tenures

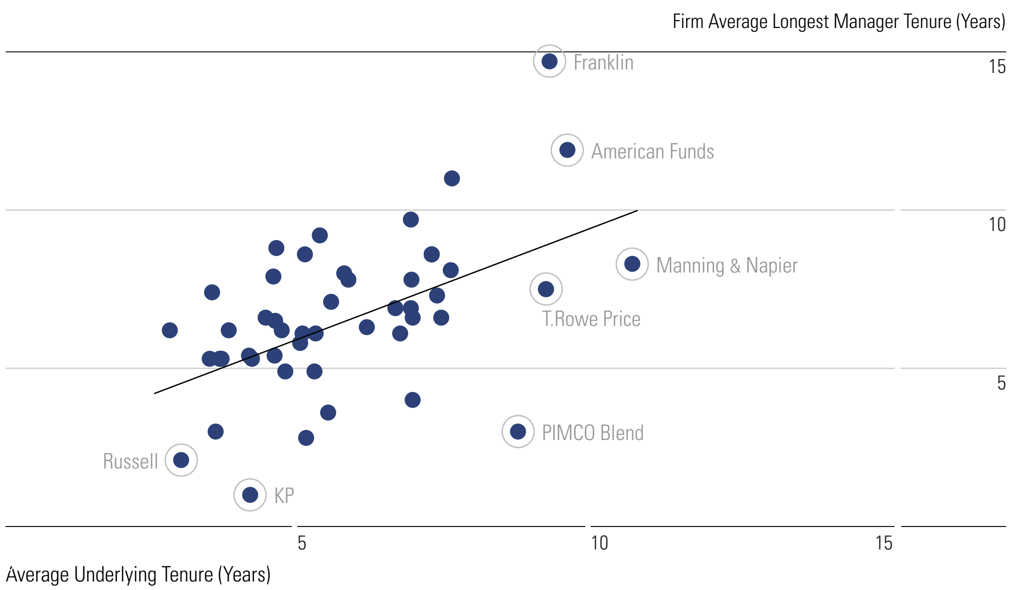
Source: Morningstar, Inc. Data as of 12-31-2014.

Meanwhile, other series have successfully retained talent. Joe Flaherty has acted as the sole manager on the MFS Lifetime funds since their 2005 inception, and 11 other series with track records of more than five years have similarly had no departures.

Target-Date Series Generally Pick Their Firm's Most Veteran Managers

When selecting underlying strategies, target-date teams have generally shown a preference toward their firm's more experienced managers, as shown by Exhibit 35. Manning & Napier stands out; its series boasts an average underlying manager tenure of more than 10 years, the longest in the industry. The firm's 14-member senior research group skippers most of its strategies, including the target-date funds, and no one from the group has left the firm in more than a decade.[7] American Funds has a reputation for having some of the investment industry's most-tenured managers, and its target-date series includes nearly all of the firm's funds. It makes sense that the average tenure of its underlying managers ranks among the target-date industry's highest at more than nine years.

Exhibit 35 Manager Tenures for Target-Date Series' Underlying Funds and Firm



Source: Morningstar, Inc. Data as of 12-31-2014.

Other series are notable for less desirable reasons. Russell's average firm tenure of 2.1 years falls well below the investment industry norm. As a result, it has few tenured managers to pick from in filling out its target-date portfolios, with the average tenure of its series' underlying strategies standing at about three years.

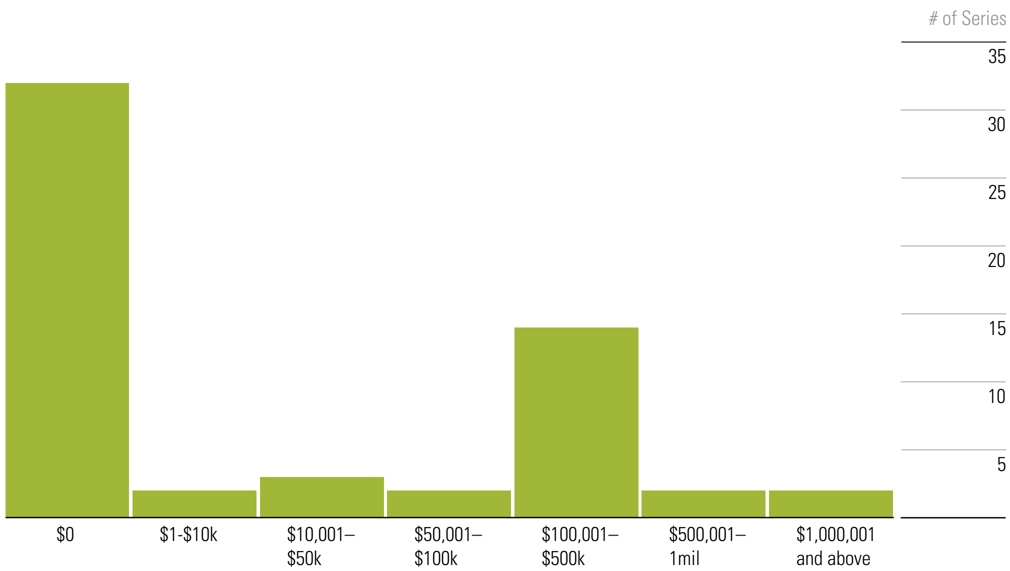
Footnote

7 In March 2015, Manning & Napier announced changes to and departures from its management team.

Target-Date Fund Manager Ownership

Portfolio managers can demonstrate conviction in their approach by making meaningful personal investments in the funds they manage. Target-date managers have consistently fallen short on this measure. Of the 57 series included in Exhibit 36, 32 have no manager investment in the series' mutual fund vehicle.

Exhibit 36 Manager Ownership of Target-Date Funds, Series' Highest Reported Ownership Level



Source: Morningstar, Inc. Data as of 12-31-2014.

Several teams manage multiple target-date strategies, however, and it's reasonable to see that those members wouldn't necessarily invest in each series under management. Looking at the 37 unique target-date series investment teams represented in Exhibit 37, 16 have no investment in any target-date mutual fund that they manage. Hans Erickson and John Cunniff of TIAA-CREF, as well as Bradley Vogt of American Funds, count as the only managers who have devoted more than $1 million to the series they manage.

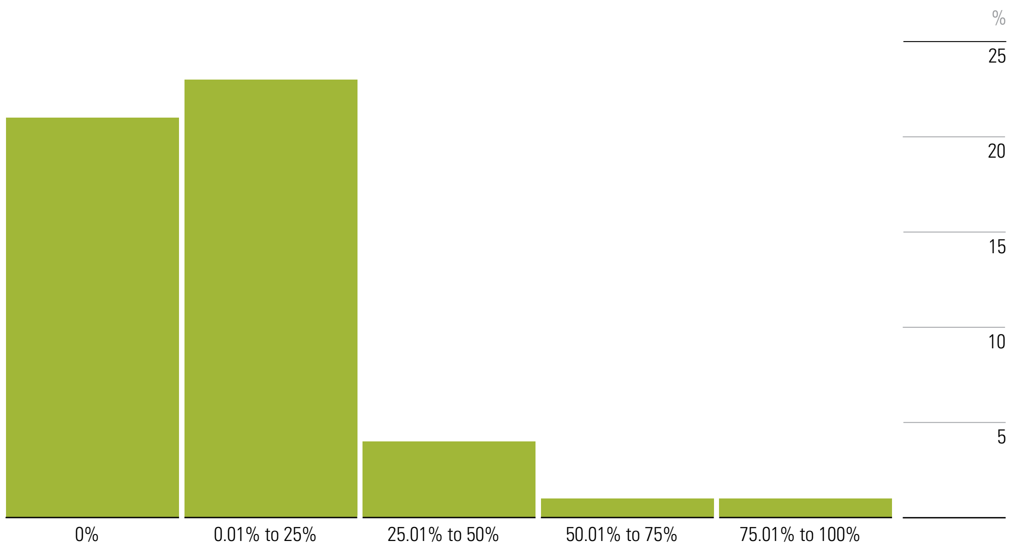
Some that lack meaningful investment have significant ownership in other strategies they run; the John Hancock Retirement team fits into this category, which invests considerably in the target-risk strategies it manages. And a few managers, including Jerome Clark of T. Rowe Price and the BlackRock LifePath team, invest in the collective investment trust versions of their target-date strategies. Those caveats offer some consolation, but the industry as a whole still falls short in terms of manager ownership.

Underlying Managers' Fund Ownership Has Room for Improvement

Exhibit 37 shows that out of the 50 target-date series with available underlying manager ownership data, 21 don't own a single fund where manager investment exceeds $1 million. That's disappointing, as managers who devote a significant amount of personal assets to the funds they oversee align their financial interests with fund shareholders'.

That said, it's encouraging to see that a few series have chosen underlying offerings with high manager ownership. American Funds' target date series stands out; the series stashes roughly 94% of its assets in funds that have at least one manager with over $1 million invested. That firm benefits from a structural advantage, as it names multiple portfolio managers—sometimes more than 10—on all of its funds. Notably, Invesco's Balanced-Risk Retirement series allocates more than 60% of its assets to a risk-parity fund that boasts high manager investment.

Exhibit 37 Percentage of Series' Assets in Underlying Funds With High Manager Ownership



Source: Morningstar, Inc. Data as of 12-31-2014.

Exhibit 38 Average Manager Tenure of Target-Date Series and Underlying Funds, and Series Manager Departures

Target-Date Series	Underlying Funds' Average Tenure (Yrs)	Series' Manager Longest Tenure (Yrs)	Number of Departures (according to prospectus)	Inception Date
AB Multi-Manager Select Series	N/A	0.0	0	12/15/14
AB Retirement Strategies	N/A	9.3	9	9/1/05
AllianzGI Retirement Series	5.0	6.0	0	12/29/08
American Century One Choice Series	5.7	8.0	4	8/31/04
American Funds Trgt Date Rtrmt Series	9.5	7.9	2	2/1/07
BlackRock LifePath Index Series	4.5	3.7	1	5/31/11
BlackRock LifePath® Active Series	4.1	7.8	1	4/20/07
BlackRock LifePath Series	N/A	5.3	8	3/1/94
BMO Target Date Retirement Funds	6.9	9.2	0	12/2/05
DWS LifeCompass Series	4.6	1.5	12	11/15/96
Fidelity Advisor Freedom Series	3.7	3.6	3	7/24/03
Fidelity Freedom Index Series	4.2	5.2	2	10/2/09
Fidelity Freedom K Series	3.6	3.6	2	7/2/09
Fidelity Freedom Series	3.6	3.6	4	10/17/96
Franklin LifeSmart Series	9.2	8.4	0	8/1/06
Great-West Lifetime I Series	7.2	5.7	0	5/1/09
Great-West Lifetime II Series	7.2	5.7	0	5/1/09
Great-West Lifetime III Series	7.2	5.7	0	5/1/09
Great-West SecureFoundation® Lifetime Se	5.1	5.2	0	11/13/09
Guidestone Funds MyDestination Series	4.6	8.0	0	12/29/06
Harbor Target Retirement Series	6.1	6.0	1	1/2/09
Invesco Balanced-Risk Retirement Series	7.3	5.3	1	1/31/07
John Hancock Retirement Choices Series	5.2	4.7	4	4/29/10
John Hancock Retirement Living II	6.6	1.2	0	11/7/13
John Hancock Retirement Living Through S	5.0	5.0	8	10/30/06
JPMorgan SmartRetirement Blend Series	6.6	2.5	0	7/2/12
JPMorgan SmartRetirement Series	6.8	8.6	1	5/15/06
KP Retirement Path Series	4.1	1.0	1	1/10/14
Madison Target Retirement	7.5	7.3	0	10/1/07
MainStay Retirement Series	4.5	7.5	2	6/29/07
Manning & Napier Target Series[8]	10.6	6.8	0	3/28/08
MassMutual RetireSMART Series	5.8	8.8	4	12/31/03
MFS Lifetime Series	6.8	9.3	0	9/29/05
Nationwide Target Destination Series	3.5	7.3	0	8/29/07
PIMCO RealPath Blend	8.6	0.1	0	12/31/14
PIMCO RealPathTM Series	3.6	6.5	1	3/31/08
PNC Target Series	6.8	2.3	1	9/28/12
Presidential® Managed Risk Series	5.1	3.2	0	11/1/11
Principal Lifetime Hybrid Series	4.7	0.3	0	9/30/14
Principal LifeTime Series	5.2	7.6	6	3/1/01
Putnam RetirementReady Series	7.5	10.2	2	11/1/04
Russell LifePoints Target Date Series	3.0	1.0	3	12/31/04
Schwab Target Series	5.4	2.8	7	7/1/05
State Farm Lifepath Series	N/A	5.3	7	5/9/03
State Street Target Retirement	N/A	0.3	0	9/30/14

Footnote

8 In March 2015, Manning & Napier announced changes to and departures from its management team, which will likely result in decreases to both of the series' tenure figures.

Exhibit 38 Average Manager Tenure of Target-Date Series and Underlying Funds, and Series Manager Departures
(Continued)

Target-Date Series	Underlying Funds' Average Tenure (Yrs)	Series' Manager Longest Tenure (Yrs)	Number of Departures (according to prospectus)	Inception Date
Strategic Adviser Multi-Manager Series	3.4	2.1	1	12/20/12
T. Rowe Price Retirement Series	9.1	12.3	1	9/30/02
T. Rowe Price Target Retire Series	9.1	1.4	0	8/20/13
TIAA-CREF Lifecycle Index Series	4.4	5.3	1	9/30/09
TIAA-CREF Lifecycle Series	6.9	8.8	3	10/15/04
USAA Target Retirement Funds Series	5.5	6.4	1	7/31/08
Vanguard Target Retirement Series	7.3	1.9	1	10/27/03
Vantagepoint Milestone Series	5.3	10.0	3	1/3/05
Voya Index Solution Series	2.8	6.8	3	3/10/08
Voya Retirement Solution Series	4.7	2.1	1	12/19/12
Voya Solution Series	3.8	7.0	8	4/29/05
Wells Fargo Advantage DJ Target Series	N/A	8.6	1	3/1/94
Average	**5.8**	**5.4**	**2.1**	

Source: Morningstar, Inc. as of 12-31-2014

Exhibit 39 Target-Date Series Managers' Ownership of Series' Fund Shares
(Numbers indicate number of target-date funds in which manager has the given level of investment.)

Target-Date Series / Manager(s)	>$1M	$500K–1M	$100–500K	$50–100K	$10–50K	$1–10K	None
AB Multi-Manager Select							
Nikolich, Christopher							
Huckstep, Brian							
Zlotnikov, Vadim							
Stempien, Jeremy							
Loewy, Daniel							
AB Retirement Strategies							
Nikolich, Christopher							
Rudden, Patrick							
Zlotnikov, Vadim							
Loewy, Daniel							
AllianzGI Retirement							
Pietranico, Paul			2				
Macey, James			1		1		
Malhotra, Rahul							
Marsala, Claudio							
American Century One Choice							
Wilson, Scott			1	1	1		
Wittman, Scott			1				
Weiss, Richard			2				
Gabudean, Radu						1	
MacEwen, G.							
American Funds Target Date Retirement							
Lovelace, James			1				
Smet, John			1				
Berro, Alan		1					
Suzman, Andrew			1				
Phoa, Wesley			1				
Vogt, Bradley	1						
Jonsson, Joanna			1				

Exhibit 39 Target-Date Series Managers' Ownership of Series' Fund Shares (Continued)
(Numbers indicate number of target-date funds in which manager has the given level of investment.)

Target-Date Series / Manager(s)	>$1M	$500K–1M	$100–500K	$50–100K	$10–50K	$1–10K	None
BlackRock LifePath Index							
Mason, Alan							
Whitelaw, Amy							
BlackRock LifePath							
Mason, Alan							
Jonsson, Joanna							
BlackRock LifePath® Active							
Green, Philip							
BMO Target Date Retirement Funds							
Boritzke,John							
Lincoln,Sandy							
Schwartz,Alan							
Yura,Lowell							
DWS LifeCompass							
Kung,Darwei						1	
Bhatnagar,Pankaj							
Fidelity Advisor Freedom							
Dierdorf,Andrew							
Sumsion,Brett							
Fidelity Freedom Index							
Dierdorf, Andrew						1	
Sumsion, Brett							
Fidelity Freedom K							
Dierdorf, Andrew		1					
Sumsion, Brett			1				
Fidelity Freedom							
Dierdorf, Andrew			2				
Sumsion, Brett							
Franklin LifeSmart							
Coffey, T.							
Nelson, Thomas							
Great-West Lifetime I							
Corbett, S.							
Tocher, Catherine							
Gdovin, Thone							
McLeod, David							
Kreider, Jonathan							
Corwin, Andrew							
Great-West Lifetime II							
Corbett, S.							
Tocher, Catherine							
Gdovin, Thone							
McLeod, David							
Kreider, Jonathan							
Corwin, Andrew							

Exhibit 39 Target-Date Series Managers' Ownership of Series' Fund Shares (Continued)
(Numbers indicate number of target-date funds in which manager has the given level of investment.)

Target-Date Series / Manager(s)	>$1M	$500K–1M	$100–500K	$50–100K	$10–50K	$1–10K	None
Great-West Lifetime III							
Corbett, S.							
Tocher, Catherine							
Gdovin, Thone							
McLeod, David							
Kreider, Jonathan							
Corwin, Andrew							
Great-West Secure Foundation							
Corbett, S.							
Tocher, Catherine							
Gdovin, Thone							
McLeod, David							
Kreider, Jonathan							
Corwin, Andrew							
Guidestone Funds MyDestination							
Cummins, Rodric							
Peden, Matt							
Dugan, Ronald							
Bray, Tim							
Harbor Target Retirement							
Molenda, Linda			1		2		
Herbert, Paul			1				
Collins, Brian				1			
Van Hooser, David							
Invesco Balanced-Risk Retirement							
Ahnrud, Mark							
Hixon, Scott							
Wolle, Scott							
Devine, Chris							
Ulrich, Christian							
John Hancock Retirement Choices							
Boyda, Robert"Bob"							
Medina, Steve							
Daher, Marcelle							
Thooft, Nathan							
JHancock Retiremnt Living Through S							
Boyda, Robert"Bob"				1			
Thooft, Nathan				1			
Medina, Steve							
Daher, Marcelle				1			
JHancock Retire Living thru							
Boyda, Robert"Bob"							
Thooft, Nathan							
Medina, Steve							
Daher, Marcelle							

Exhibit 39 Target-Date Series Managers' Ownership of Series' Fund Shares (Continued)
(Numbers indicate number of target-date funds in which manager has the given level of investment.)

Target-Date Series / Manager(s)	>$1M	$500K–1M	$100–500K	$50–100K	$10–50K	$1–10K	None
JPMorgan SmartRetirement® Blend							
Schoenhaut, Michael							
Lester, Anne							
Geller, Jeffrey							
Oldroyd, Daniel					1		
Bernbaum, Eric							
JPMorgan SmartRetirement							
Schoenhaut, Michael					2		
Lester, Anne			1				
Geller, Jeffrey					1		
Oldroyd, Daniel			1				
Bernbaum, Eric							
KP Retirement Path							
Allen, Gregory							
Cliff, Ivan							
Madison Target Retirement							
Ryan, Patrick							
Hottmann, David							
MainStay Retirement							
Swaney, Jonathan		1					
Yoon, Jae					5		
Kristensen, Poul							
Manning & Napier Target							
Andreach, Christian							
Donlon, Jeffrey							
Gambill, Brian							
Herrmann, Jeffrey							
Magiera, Michael							
Tommasi, Marc							
Bauer, Jack							
Coons, Jeffrey							
Lester, Brian							
Trotter, III, Virge							
Busheri, Ebrahim							
Petrosino, Christopher							
Pickels, Robert							
Feuerstein, Jay							
Chen, Paul							
MassMutual RetireSMART							
Picard Jr., Bruce							
Schulitz, Frederick							
Eldredge, Michael							
MFS Lifetime							
Joseph Flaherty, Jr.			2				
Nationwide Target Destination							
Hickey, Jr., Thomas			1				
Richer, Benjamin							
PIMCO RealPath Blend							
Bhansali, Vineer							

Exhibit 39 Target-Date Series Managers' Ownership of Series' Fund Shares (Continued)
(Numbers indicate number of target-date funds in which manager has the given level of investment.)

Target-Date Series / Manager(s)	>$1M	$500K–1M	$100–500K	$50–100K	$10–50K	$1–10K	None
PIMCO RealRetirement							
Bhansali, Vineer			4		1		
PNC Target							
McGlone, Mark							
Schulz, Martin							
Mineman, James							
Compan, Timothy							
Roman, Douglas							
Rhoderick, Sean							
Weigel, Keith			1				
Hohman, Donald							
Deshpande, Aneet							
Moloznik, Jake					1		
Presidential® Managed Risk							
Weiss, David					1		
Adamson, Kevin							
Principal LifeTime Hybrid							
Welch,Randy							
Fennessey,James							
Tyler,Jeffrey							
Principal LifeTime							
Welch, Randy			1				
Fennessey, James							
Tyler, Jeffrey				1			
Annenberg, Matthew							
Putnam RetirementReady							
Kea, Robert							
Schoen, Robert							
Kutin, Joshua							
Vaillancourt, Jason							
Fetch, James							
Russell LifePoints Target Date							
Greves, John							
Meath, Brian							
Schwab Target							
Tang, Zifan					1		
State Farm Lifepath							
Mason, Alan							
Whitelaw, Amy							
State Street Target Retirement							
McGinn, Charles							
Khatri, Lisa							
Strategic Advisers® Multi-Manager							
Dierdorf, Andrew					1		
Sumsion, Brett							
T. Rowe Price Retirement							
Clark, Jerome							
T. Rowe Price Target Retire							
Clark,Jerome							
Lee, Wyatt							

Exhibit 39 Target-Date Series Managers' Ownership of Series' Fund Shares (Continued)
(Numbers indicate number of target-date funds in which manager has the given level of investment.)

Target-Date Series / Manager(s)	>$1M	$500K–1M	$100–500K	$50–100K	$10–50K	$1–10K	None
TIAA-CREF Lifecycle Index							
Erickson, Hans							
Cunniff, John							
TIAA-CREF Lifecycle							
Erickson, Hans	1						
Cunniff, John	1						
USAA Target Retirement							
Latif, Wasif							
Toohey, John			1		1		
Vanguard Target Retirement Funds							
Coleman, William				1			
Buek, Michael							
Nejman, Walter							
Vantagepoint Milestone							
Wicker, Wayne			1				
Trenum, Lee			1				
Braverman, David			1				
Voya Index Solution							
Zemsky, Paul							
Kvaale, Halvard							
van Etten, Frank							
Voya Retirement Solution							
Zemsky, Paul							
Kvaale, Halvard							
van Etten, Frank							
Voya Solution							
Zemsky, Paul							
Kvaale, Halvard							
van Etten, Frank							
Wells Fargo Advantage DJ Target							
Rodney Alldredge			1				
James Lauder			1				
Paul Torregrosa			1				

Source: Morningstar, Inc. as of 12-31-2014

Performance

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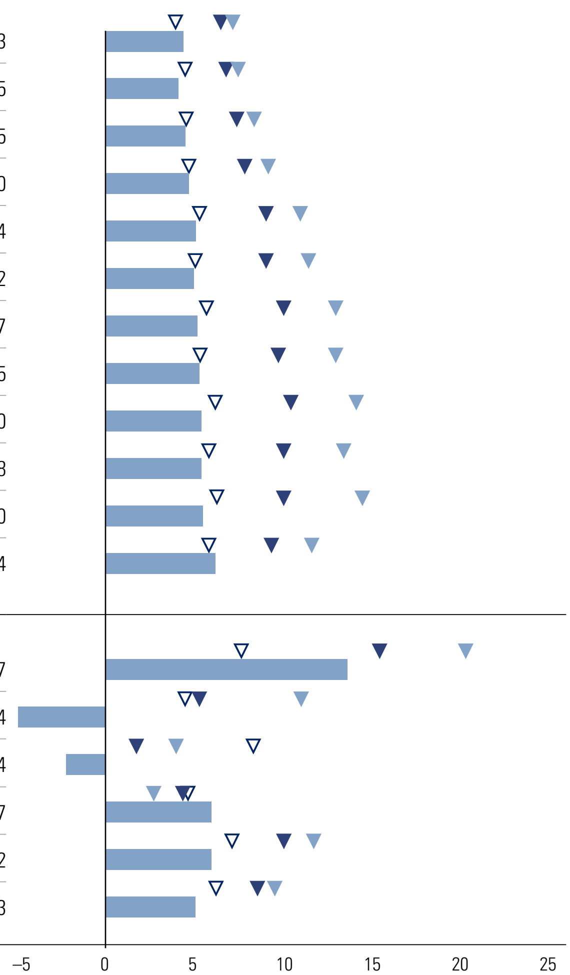
Target-Date Series Deliver Positive, Narrow Gains

Last year's rising market, which saw the S&P 500 and Barclays U.S. Aggregate Bond indexes climb about 14% and 6%, respectively, brought gains to every target-date fund. Still, international stock markets were down for the year, which weighed on returns of longer-dated target funds, where foreign stocks tend to loom larger as a percentage of overall stock exposure. Thus, while longer-dated funds beat shorter-dated funds, on average, the gap was fairly narrow. For example, the average 2036-2040 fund gained 5.3% while the average 2016-2020 fund rose 4.7%.

Exhibit 40 2014, 3-Year, 5-Year, and 10-Year Returns for Morningstar Target-Date Categories and Selected Benchmarks

Total Return % (Annualized)

Category	2014	3-Yr	5-Yr	10-Yr
Retirement Income	4.4	6.8	6.1	4.3
2000-2010	4.1	7.3	6.6	4.5
2011-2015	4.5	8.3	7.2	4.5
2016-2020	4.7	9.2	7.9	5.0
2021-2025	5.1	11.1	8.8	5.4
2026-2030	5.0	11.6	9.0	5.2
2031-2035	5.2	13.1	9.9	5.7
2036-2040	5.3	13.0	9.8	5.5
2041-2045	5.4	14.1	10.3	6.0
2046-2050	5.4	13.5	10.0	5.8
2051+	5.5	14.5	10.5	6.0
Moderate Allocation	6.2	11.2	8.9	5.4
Benchmark				
S&P 500 TR USD	13.7	20.4	15.5	7.7
MSCI EAFE NR USD	–4.9	11.1	5.3	4.4
MSCI EM NR USD	–2.2	4.0	1.8	8.4
Barclays US Agg Bond	6.0	2.7	4.4	4.7
Lifetime Mod 2025	6.0	11.9	10.1	7.2
DJ (Global) Tgt 2025	5.1	9.6	8.6	6.3



Source: Morningstar, Inc. Data as of 12-31-2014.

The differential increases over longer time periods, however. For instance, the past three years saw larger gains from U.S. and foreign stocks alike, boosting the results of longer-dated funds versus shorter-dated funds with less equity exposure.

Are Investors Reaping the Gains?

As target-date funds prosper and grow in assets, it's important to examine whether investors are using these vehicles well and actually participating in the funds' gains. Investor returns, which take into account monthly fund flows and monthly returns to estimate a typical investor's experience in a fund, shed some light from this perspective. The data looks good. On average during the past 10 years, target-date fund's asset-weighted investor returns are 1.1 percentage points greater than their total returns. The positive gap indicates investors are capturing all of the funds' total return, plus more. Their roles as default investments for many retirement plans, which brought with it steady steams of inflows throughout recent years' strong markets, made for additive timing effects as well.

Compared with other categories, target-date investors are doing markedly better than the norm, likely a result of the structural differences in how investors typically access the latter (mostly through retirement plans). Exhibit 41 shows the typical gap for select categories, and investors in non-target-date funds tend to experience a significant, detrimental gap in returns. Morningstar's research on this behavioral effect shows an even starker contrast for most standalone asset class categories.

Exhibit 41 Total Return and Investor Return for Select Category Averages

Category	Average 10-Year Total Return (%)	Asset-Weighted 10-Year Investor Return (%)	Returns Gap (%)
Target-Date	5.03	6.13	1.10
Allocation (non-target-date)	5.55	5.19	–0.36
Intl Equity	5.74	4.55	–1.19
Municipal Bond	3.66	2.36	–1.30
Sector Equity	7.16	7.18	0.02
Taxable Bond	4.44	3.75	–0.69
US Equity	7.47	6.49	–0.98
All Funds	**5.75**	**5.21**	**–0.54**

Source: Morningstar, Inc. Data as of 12-31-2014.

Not all target-date series show the same outcome, however, as shown by Exhibit 42. For example, the 1.1 percentage point average shortfall between Fidelity Freedom series' investor and total returns shows that investors have been moving in and out of the series at inopportune times. Of course, part of that pattern may also reflect retirement plan sponsors pulling the series from its plans at untimely moments. In contrast, series such as American Century One Choice and TIAA-CREF Lifecycle have investor returns that wellsurpass their total returns. These two series in particular have received much in new assets in recent years, just in time for investors to take advantage of their gains.

Exhibit 42 Total Return and Investor Return by Series

Series Name	Average 10-Year Total Return (%)	Asset-Weighted 10-Year Investor Return (%)	Returns Gap %
American Century One Choice Series	6.20	8.36	2.16
TIAA-CREF Lifecycle Series	5.50	7.45	1.95
Vanguard Target Retirement Series	6.37	7.60	1.23
Wells Fargo Advantage DJ Target Series	4.52	5.74	1.22
Fidelity Advisor Freedom Series	4.63	5.62	0.99
T. Rowe Price Retirement Series	6.51	7.49	0.98
Principal LifeTime Series	5.03	5.49	0.46
BlackRock LifePath Series	5.03	5.04	0.01
State Farm Lifepath Series	4.68	4.20	–0.48
DWS LifeCompass Series	3.76	3.17	–0.59
MassMutual RetireSMART Series	4.74	4.10	–0.64
Fidelity Freedom Series	5.44	4.34	–1.10
Target-Date Average	**5.03**	**6.13**	**1.10**

Source: Morningstar, Inc. Data as of 12-31-2014.

Changing Tides, Changing Ranks

Given the largely rising markets of the past six years, the year-over-year rankings of each series were largely unchanged recently. However, the five-year period ending December 2011 and December 2014 offered much more varied market conditions; the former had a severe crisis and sharp recovery and the latter had a generally rising market. As such, series with generally lower equity exposure, such as Wells Fargo Advantage DJ Target and Franklin LifeSmart, tended to mitigate losses better than most during the credit crisis and had stronger five-year rankings as of 2011. Those series then trailed behind as markets continued to rally, posting relatively worse five-year rankings as of 2014. Principal LifeTime and DWS LifeCompass offered the opposite trend, posting relatively weak results as of 2011 but jumping more than 20 percentile points as of 2014. The Principal series received a new manager in 2011, and the addition of some unique subasset class exposures, such as floating-rate debt and timber, has been a boon to recent results. Exhibit 43 presents each series' five year results as of 2011 and 2014, as well as the degree of change between the two periods.

Exhibit 43 Series' Average 5-Year Return Percentile Rank Through 2011 and 2014

Series Name	5-Year % Rank 2011	5-Year % Rank 2014	Change in % Ranking
Principal LifeTime Series	48	16	31
DWS LifeCompass Series	75	54	21
Putnam RetirementReady Series	64	44	20
Schwab Target Series	28	14	14
T. Rowe Price Retirement Series	15	4	11
Voya Solution Series	54	43	11
John Hancock Retirement Living Through S	33	24	9
AllianceBernstein Retirement Strategies	78	70	8
JPMorgan SmartRetirement Series	11	9	2
Vanguard Target Retirement Series	14	14	1
MassMutual RetireSMART Series	32	33	–1
Guidestone Funds MyDestination Series	37	46	–8
American Century One Choice Series	6	16	–11
Vantagepoint Milestone Series	26	38	–12
MFS Lifetime Series	9	23	–15
Russell LifePoints Target Date Series	46	66	–20
Fidelity Advisor Freedom Series	31	53	–22
Fidelity Freedom Series	32	57	–25
State Farm Lifepath Series	40	66	–25
Franklin LifeSmart Series	4	54	–50
Wells Fargo Advantage DJ Target Series	5	63	–59

Source: Morningstar, Inc. Data as of 12-31-2014.

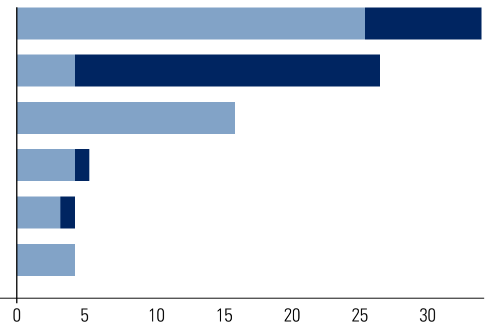
Measuring Relative Performance

Comparing short- and long-term results with the industry average can provide context when evaluating a single target-date series' results. A more difficult task is comparing a target-date fund with an appropriate benchmark. Static balanced funds make for reasonable comparisons, as they serve as straightforward alternatives to target-date funds. The typical moderate-allocation fund, for example, has a 59% stock/41% bond allocation, similar to the target-date 2021-2025 category norm. During 2014, the average moderate-allocation fund returned 6.2%, surpassing the 5.1% of the typical target-date 2021-2025 offering; the greater focus on U.S. stocks and bonds in the moderate-allocation category helped that category come out ahead.

Picking an index as a benchmark for a target-date offering is less straightforward. As shown in Exhibit 44, 32 target-date providers use broad indexes (such as the S&P 500 or Barclays Aggregate Bond Index) as the primary or secondary benchmarks in their prospectuses. Twenty-five series use custom-blended benchmarks based on their strategic asset allocations, which can help investors measure management's skill in selecting underlying assets to fill the portfolio or its tactical prowess, but it does not provide a means to evaluate the effectiveness of target-date series' strategic asset allocation.

Exhibit 44 Count of Target-Date Series' Benchmarks

	Primary	Secondary
Single Asset Class	24	8
Custom Index	4	21
S&P Target-Date	15	—
Morningstar Lifetime	4	1
Dow Jones Global Target or Real Return	3	1
Lipper (Index or Average)	4	—



Source: Morningstar, Inc. Data as of 12-31-2014.

Several index providers have launched target-date benchmarks that follow a predetermined glide path. For example, the target-date 2021-2025 category can be compared with the Morningstar Lifetime Moderate 2025 Index and Dow Jones Global Target 2025 Index. The Morningstar index has a 60% equity allocation and in 2014 it posted a 6.0% gain, boosted by its lower international-equity stake, including a smaller exposure to emerging markets, than the 2021-2025 category norm. In contrast, the Dow Jones index is more equity-light, holding roughly 47% in stocks. Despite its more conservative stance, the index returned 5.1% during 2014, a gain on par with the more equity-heavy 2021-2025 category average.

Other Important Inputs for Performance

Attribution analysis can be a helpful tool to dig deeper into the drivers of results across series. According to Morningstar's attribution data, summarized in Exhibit 45, a series' strategic allocation, or stock and bond split relative to its typical peer, was a prominent factor driving results at the top-performing series during the trailing three-year period ended December 2014. American Funds Target Date Retirement and T. Rowe Price Retirement both ranked highly overall, boosted by the above-average equity stakes along their glide paths. The lowest-ranking series during this period, Invesco Balanced-Risk Retirement, suffered from the opposite effect. The series keeps a much lighter stake in stocks than the norm, and a hefty stake in the commodities sector further dragged on results in recent years.

Costs are also an important factor in performance, and low-cost options such as TIAA-CREF Lifecycle Index and Vanguard Target Retirement ranked in the top of their groups, boosted by their inexpensive price tag. Those series also have a relatively high stake in U.S. stocks (Vanguard announced it will be allocating more to international stocks in 2015), which also boosted results. Fidelity Freedom Index, which was the industry leader in low costs as of the end of 2014, ranked closer to the middle of the pack. That series had a lower equity stake and hefty allocation to commodities prior to a strategic shift in late-2013, so its three-year results have trailed behind its peers.

The security selection effect includes all other factors in a series' performance, including subasset class exposure and underlying fund exposure. Unsurprisingly, given the strong rise in domestic stock and bond markets, diversification beyond U.S. stocks and bonds detracted from results and each series posts a negative security selection effect. However, the degree varies. Several series, such as J.P. Morgan SmartRetirement and American Funds Target Retirement, had relatively small negative effects; while they have diverse subasset class exposure, strong performance from their underlying funds boosted the series' results.

Exhibit 45 Three-Year Attribution Results, 1/1/2012 to 12/31/2014
Quintile: Top 20-40% Middle 60%-80% Bottom

Name	Strategic Allocation %	Cost %	Security Selection %	Total Attribution %
American Funds Trgt Date Rtrmt Series	0.7	0.0	-0.4	0.3
T. Rowe Price Retirement Series	0.8	0.1	–0.5	0.3
TIAA-CREF Lifecycle Index Series	0.7	0.6	–1.0	0.3
Vanguard Target Retirement Series	0.6	0.7	–1.2	0.1
TIAA-CREF Lifecycle Series	0.7	0.3	–0.9	0.1
BMO Target Date Retirement Funds	0.7	0.1	–0.7	0.0
JPMorgan SmartRetirement Series	0.0	0.1	–0.2	–0.1
Schwab Target Series	0.3	0.1	–0.7	–0.3
MainStay Retirement Series	0.3	0.0	–0.7	–0.4
Principal LifeTime Series	0.6	0.0	–1.1	–0.6
Vantagepoint Milestone Series	1.3	0.2	–2.2	–0.7
John Hancock Retirement Living Through S	1.4	0.1	–2.2	–0.8
Great-West Lifetime III Series	1.1	–0.2	–1.6	–0.8
Voya Index Solution Series	0.6	0.0	–1.5	–0.9
Manning & Napier Target Series	–0.5	–0.2	–0.2	–1.0
BlackRock LifePath Index Series	0.0	0.6	–1.7	–1.2
Voya Solution Series	0.7	–0.3	–1.6	–1.2
Putnam RetirementReady Series	–0.5	–0.2	–0.4	–1.2
Fidelity Freedom K Series	–0.2	0.2	–1.3	–1.4
MFS Lifetime Series	0.8	–0.1	–2.1	–1.4
MassMutual RetireSMART Series	1.2	–0.2	–2.5	–1.5
American Century One Choice Series	–0.6	–0.1	–0.9	–1.5
Fidelity Freedom Series	–0.3	0.1	–1.4	–1.6
Great-West Lifetime II Series	0.1	–0.2	–1.5	–1.7
Nationwide Target Destination Series	0.7	0.0	–2.4	–1.7
DWS LifeCompass Series	0.3	–0.3	–1.8	–1.8

Exhibit 45 Three-Year Attribution Results, 1/1/2012 to 12/31/2014 (Continued)
Quintile: Top 20-40% Middle 60%-80% Bottom

Name	Strategic Allocation %	Cost %	Security Selection %	Total Attribution %
Fidelity Freedom Index Series	–0.3	0.7	–2.4	–1.9
Fidelity Advisor Freedom Series	–0.2	–0.1	–1.9	–2.3
AllianceBernstein Retirement Strategies	0.9	–0.2	–3.0	–2.3
BlackRock LifePath® Active Series	–0.2	–0.2	–2.2	–2.5
Harbor Target Retirement Series	–1.4	0.1	–1.3	–2.6
Franklin LifeSmart Series	0.1	–0.2	–2.6	–2.7
Great-West Lifetime I Series	–1.3	–0.2	–1.4	–2.9
Russell LifePoints Target Date Series	0.3	0.0	–3.2	–2.9
BlackRock LifePath Series	0.0	–0.1	–2.8	–2.9
USAA Target Retirement Funds Series	–0.9	0.0	–2.2	–3.1
State Farm Lifepath Series	0.2	–0.3	–3.1	–3.2
Wells Fargo Advantage DJ Target Series	–1.1	0.3	–2.5	–3.3
John Hancock Retirement Choices Series	–1.5	0.1	–2.1	–3.4
Guidestone Funds MyDestination Series	1.9	–0.4	–5.2	–3.8
Presidential® Managed Risk Series	0.6	–0.2	–5.5	–5.2
AllianzGI Retirement Series	–3.4	0.0	–2.8	–6.2
PIMCO RealRetirement Series	–2.2	0.0	–4.3	–6.5
Invesco Balanced-Risk Retirement Series	–3.9	–0.3	–2.6	–6.6

Source: Morningstar, Inc. Data as of 12-31-2014.

Despite popular headlines arguing for or against the superiority of active or passive management, both remain prevalent in the target-date industry. Exhibit 46 shows that results across these groups are mixed. Series utilizing passive investments did well in 2014 and the trailing three-year period, as actively managed funds have generally struggled to surpass their benchmarks. Over the five-year period, the reverse is true, with actively managed series gaining the upper hand and blended series performing best of all. Passive options again take the lead over the 10-year mark. Still, the gap is relatively narrow, and several index-based series, such as those mentioned above, benefited from above-average exposure to well-performing asset classes including U.S. stocks.

Exhibit 46 Trailing Returns by Investment Type and Series Architecture

		Total Return (% Annualized)		
Investment Type	2014	3-Year	5-Year	10-Year
Active	5.2	11.6	9.1	5.6
Blend	5.8	11.6	9.3	5.2
Passive	5.8	11.7	9.1	5.7
Series Architecture				
Closed	5.9	12.1	9.4	5.6
Open	5.1	11.3	8.9	5.4

Source: Morningstar, Inc. Data as of 12-31-2014.

In addition to deciding upon investment types, such as active or passive, firms must also choose whether to offer series strictly with their in-house funds or to branch out and offer investments from multiple firms, also known as open-architecture. The latter has intuitive appeal, as it would be difficult to expect most firms to be able to offer best-in-class investments across all asset classes. Still, paying up for top-tier investments can increase costs, which will be a natural drag on performance. Twenty-three series have more than half of their assets from unaffiliated managers. Twenty-one use closed architecture for their design, choosing to keep the majority, if not all, of assets in the firm's own funds. Exhibit 46 shows that overall, closed plans have outperformed, both in 2014 and longer trailing time periods. American Century One Choice and J.P. Morgan SmartRetirement have been among the top-performing series, boosted by strong performance of the firm's underlying funds. In contrast, Russell LifePoints has posted poor results, dragged down by relatively expensive underlying funds with middling results. The series' above-average stake in international stocks and lagging sectors like commodities has also pushed down results.

Exhibit 47 Series' Trailing Results (% Annualized) and % Open Architecture, by Investment Type

		Total Return (% Annualized)				
Investment Type	Series Name	2014	3-Year	5-Year	10-Year	% Open Architecture
Active	AllianceBernstein Retirement Strategies	3.8	11.2	8.0	—	1.9
	AllianzGI Retirement Series	1.9	7.6	6.7	—	7.0
	American Century One Choice Series	7.7	12.6	10.2	6.6	0.0
	American Funds Trgt Date Rtrmt Series	6.9	14.7	10.9	—	0.0
	BlackRock LifePath Series	5.7	11.5	8.8	5.4	0.0
	BlackRock LifePath® Active Series	4.3	12.0	9.5	—	0.0
	BMO Target Date Retirement Funds	6.7	13.5	10.5	—	57.0
	Fidelity Advisor Freedom Series	5.1	10.9	8.6	5.2	4.9
	Fidelity Freedom K Series	5.4	11.2	8.5	—	3.9
	Fidelity Freedom Series	5.3	11.1	8.4	5.3	3.8
	Franklin LifeSmart Series	4.6	11.4	9.2	—	14.0
	Guidestone Funds MyDestination Series	2.9	10.9	8.9	—	100.0
	Harbor Target Retirement Series	2.8	10.4	8.2	—	100.0
	Invesco Balanced-Risk Retirement Series	6.3	6.1	8.0	—	0.0
	John Hancock Retirement Living Through S	5.3	13.1	9.8	—	56.1
	JPMorgan SmartRetirement Series	7.2	13.6	10.4	—	0.2
	Manning & Napier Target Series	4.9	11.6	8.8	—	0.0
	MassMutual RetireSMART Series	3.7	12.0	9.1	5.1	51.0
	MFS Lifetime Series	4.0	11.9	9.4	—	0.0
	PIMCO RealPathTM Series	4.6	6.8	6.6	—	12.4
	Principal LifeTime Series	5.7	12.7	10.1	5.5	49.3
	Putnam RetirementReady Series	7.6	12.9	9.1	4.9	0.0
	Russell LifePoints Target Date Series	4.0	10.8	8.5	5.1	100.0
	Strategic Adviser Multi-Manager Series	5.2	—	—		92.3
	T. Rowe Price Retirement Series	5.8	13.9	10.7	6.7	0.0
	T. Rowe Price Target Retire Series	5.3	—	—	—	0.0
	TIAA-CREF Lifecycle Series	4.7	13.3	10.2	5.7	0.0
	USAA TARGET RETIREMENT FUNDS Series	3.3	9.5	8.2	—	66.7
	Voya Retirement Solution Series	6.0	—	—	—	34.9
	Voya Solution Series	6.4	12.7	8.9	—	48.7

Exhibit 47 Series' Trailing Results (% Annualized) and % Open Architecture, by Investment Type (Continued)

Investment Type	Series Name	Total Return (% Annualized) 2014	3-Year	5-Year	10-Year	% Open Architecture
Blend	DWS LifeCompass Series	4.4	10.6	8.1	4.4	4.6
	Great-West Lifetime I Series	5.7	11.4	9.0	—	86.1
	Great-West Lifetime II Series	5.9	12.8	9.8	—	90.0
	Great-West Lifetime III Series	6.1	13.8	10.3	—	94.0
	John Hancock Retirement Choices Series	5.3	9.7	—	—	98.8
	John Hancock Retirement Living II	6.5	—	—	—	42.8
	JPMorgan SmartRetirement Blend Series	6.5	—	—	—	71.9
	MainStay Retirement Series	6.1	13.4	10.2	—	19.5
	PNC Target Series	6.5	—	—	—	33.2
	Schwab Target Series	6.0	12.5	10.0	—	43.2
	State Farm Lifepath Series	5.1	10.2	8.2	5.0	100.0
	Vantagepoint Milestone Series	4.7	11.7	9.1	5.7	100.0
Passive	BlackRock LifePath Index Series	6.7	12.3	—	—	0.0
	Fidelity Freedom Index Series	5.9	10.1	8.1	—	74.7
	Great-West SecureFoundation® Lifetime Se	5.2	12.9	9.2	—	70.3
	Madison Target Retirement Series	8.0	12.1	8.9	—	n/a
	Nationwide Target Destination Series	4.6	11.9	9.0	—	97.9
	Presidential® Managed Risk Series	2.9	8.1	—	—	100.0
	TIAA-CREF Lifecycle Index Series	6.6	13.0	10.1	—	0.0
	Vanguard Target Retirement Series	6.9	12.8	10.0	6.2	0.0
	Voya Index Solution Series	6.1	12.8	9.0	—	9.3
	Wells Fargo Advantage DJ Target Series	4.9	10.0	8.2	5.2	0.0

Source: Morningstar, Inc. Data as of 12-31-2014.

Exhibit 48 Details of Series' Benchmarks

Benchmark: Primary Secondary

Series Name	Single Asset Class	Custom Index	S&P Target-Date	Morningstar Lifetime	Dow Jones xGlobal Target or Real Return	Lipper (Index or Average)	Not Disclosed
AllianceBernstein Multi-Manager Select S							Primary
AllianceBernstein Retirement Strategies	Primary	Secondary					
AllianzGI Retirement Series				Secondary	Primary		
American Century One Choice Series	Secondary		Primary				
American Funds Trgt Date Rtrmt Series	Secondary		Primary				
BlackRock LifePath Index Series	Secondary	Primary					
BlackRock LifePath Series	Secondary	Primary					
BlackRock LifePath® Active Series	Primary	Secondary					
BMO Target Date Retirement Funds			Primary			Secondary	
DWS LifeCompass Series			Primary				
Fidelity Advisor Freedom Series	Primary	Secondary					
Fidelity Freedom Index Series	Primary	Secondary					
Fidelity Freedom K Series	Primary	Secondary					
Fidelity Freedom Series	Primary	Secondary					
Franklin LifeSmart	Primary						

Exhibit 48 Details of Series' Benchmarks (Continued)

Benchmark: Primary Secondary

Series Name	Single Asset Class	Custom Index	S&P Target-Date	Morningstar Lifetime	Dow Jones xGlobal Target or Real Return	Lipper (Index or Average)	Not Disclosed
Great-West Lifetime I				Primary			
Great-West Lifetime II				Primary			
Great-West Lifetime III				Primary			
Great-West SecureFoundation® Lifetime	Primary	Secondary					
Guidestone Funds MyDestination	Secondary	Primary					
Harbor Target Retirement	Primary						
Invesco Balanced-Risk Retirement	Primary	Secondary					
John Hancock Retirement Choices	Primary	Secondary					
John Hancock Retirement Living II							Primary
John Hancock Retirement Living Through	Primary	Secondary					
JPMorgan SmartRetirement Blend			Primary			Secondary	
JPMorgan SmartRetirement			Primary			Secondary	
KP Retirement Path Series							Primary
Madison Target Retirement			Primary		Secondary		
MainStay Retirement	Primary	Secondary					
Manning & Napier Target		Secondary	Primary				
MassMutual RetireSMART	Secondary		Primary				
MFS Lifetime	Primary	Secondary					
Nationwide Target Destination				Primary			
PIMCO RealPath Blend							Primary
PIMCO RealPathTM					Primary	Secondary	
PNC Target			Primary				
Presidential® Managed Risk	Primary	Secondary					
Principal Lifetime Hybrid							Primary
Principal LifeTime			Primary				
Putnam RetirementReady	Primary						
Russell LifePoints Target Date	Primary						
Schwab Target	Primary	Secondary					
State Farm Lifepath	Secondary	Primary					
State Street Target Retirement							Primary
Strategic Adviser Multi-Manager	Primary	Secondary					
T. Rowe Price Retirement		Secondary	Primary				
T. Rowe Price Target Retire							Primary
TIAA-CREF Lifecycle Index	Primary	Secondary					
TIAA-CREF Lifecycle	Primary	Secondary					
USAA TARGET RETIREMENT FUNDS	Primary						
Vanguard Target Retirement	Primary	Secondary					
Vantagepoint Milestone	Primary	Secondary					
Voya Index Solution			Primary				
Voya Retirement Solution			Primary				
Voya Solution			Primary				
Wells Fargo Advantage DJ Target	Primary				Primary		
Count	**32**	**25**	**15**	**5**	**4**	4	7

Source: Morningstar, Inc. Data as of 12-31-2014.

MORNINGSTAR®

Price

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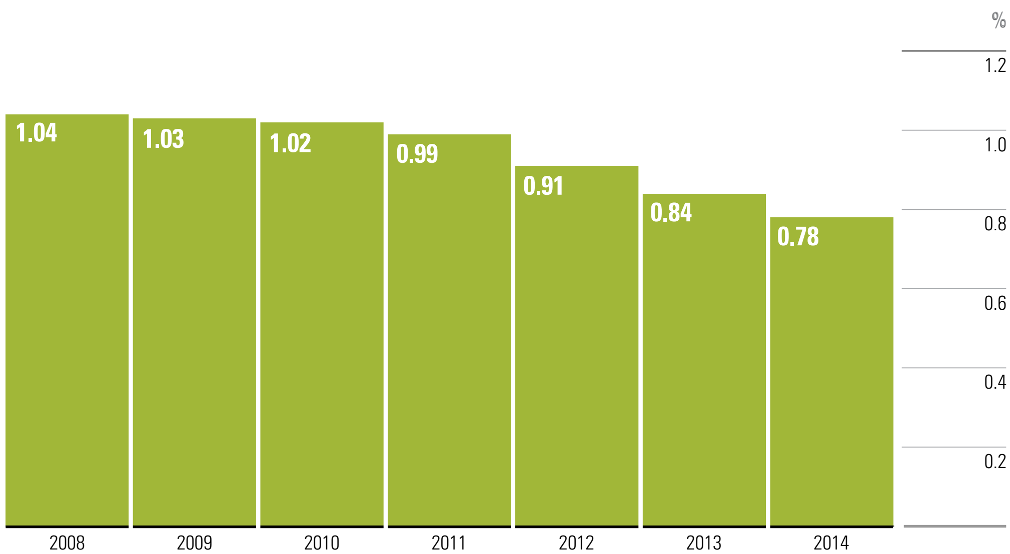
For the sixth year in a row since Morningstar has been tracking the data in its annual industry survey, investors paid less for target-date funds. From 2013 to 2014, the straight average of target-date funds' asset-weighted expense ratios fell to 0.78% from 0.84%, as seen in Exhibit 49. The asset-weighted expense ratios of 27 of the 57 series included in Morningstar's database decreased from 2013 to 2014, reflecting both investors' preference for the lowest-cost target-date series, as well as small reductions in fees across share classes; 15 fund families reduced fees across some or all of their target-date share classes.

Exhibit 49 Average of Industry's Asset-Weighted Expense Ratio, 2008-2014



Source: Morningstar, Inc. Data as of 12-31-2014.

Several new, lower-priced offerings, including State Street Target Retire Series (with a weighted average fee of 0.27%) and PIMCO RealPath Blend Series (0.29%) further reduced the industry average. Though these young funds don't have much assets, their asset-weighted expense ratio across share classes holds the same weight as the largest series when calculating the industry average.

That said, fees for 15 target-date date series also came down. Some of the decreases came from increasing asset bases, which caused series' underlying fund fees to hit lower management fee tiers. Others came from outright fee waivers at the target-date series level. For example, John Hancock Retirement Living Through took the deepest cut, instituting fee waivers ranging from 20 to 26 basis points, which reduced the series' 2014 weighted average expense ratio by 19 basis points versus 2013. Other firms, like American Funds, offered newer share classes at both upper and lower expense ratio levels. Investors moving their assets to series' lower-priced share classes also lowered asset-weighted average expenses.

Meanwhile, a couple of the pricier series included in the 2013 industry data exited the mutual fund target-date business in 2014. Although these series failed to garner many assets, their absence from the data set reduced the straight average calculation across the industry. Legg Mason and Hartford, which were among the most expensive series in previous years, liquidated their target-date offerings in 2014.

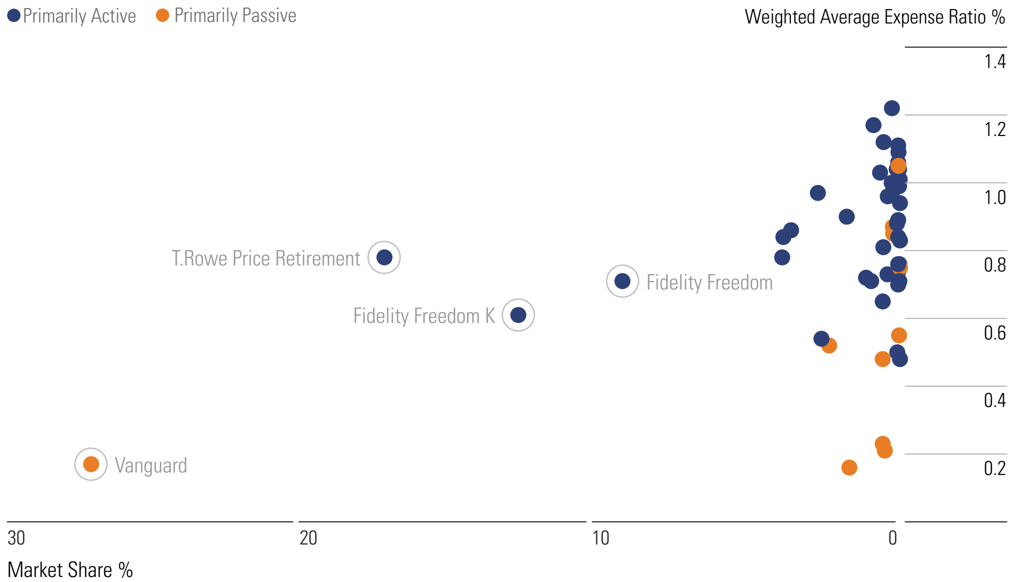
Bucking the declining fee trend, DWS LifeCompass series' weighted average fee increased to 1.09% from 1.00%, and Great-West Lifetime III series' fees also went up in 2014, to 1.04% from 0.95% a year earlier. Both series saw their net assets decline in 2014.

The market-share-weighted average of series' asset-weighted expense ratios was 0.58% in 2014, a figure that's lower than the straight average because less-expensive series claim a disproportionate share of industry assets. The market-share-weighted fee fell from its 2013 figure of 0.60% primarily because the lowest-cost operators, including Vanguard, took market-share from higher-cost rivals. And it is somewhat of a foregone conclusion that this figure should decrease if assets continue to flow at a higher clip to target-date series (mainly of the index-based variety) with lower fees.

Market Share and Use of Passive Investments Contribute to Lower Fees

Not surprising, series with greater market share tend to also have lower fees, as shown by Exhibit 50. Asset flows to lower-priced, passive funds contributed to an increase in market share for some firms like Vanguard, while lower-priced, mostly actively managed funds such as TIAA-CREF Lifecycle and T. Rowe Price Retirement series increased their market share as well. Other firms' lowered fees may have been an attempt to grab market share rather than a reflection of asset growth. During 2014, Russell lowered fees for its LifePoints strategy, resulting in the series' weighted average fee decreasing to 0.84% from 0.92%, even as its net asset base also declined.

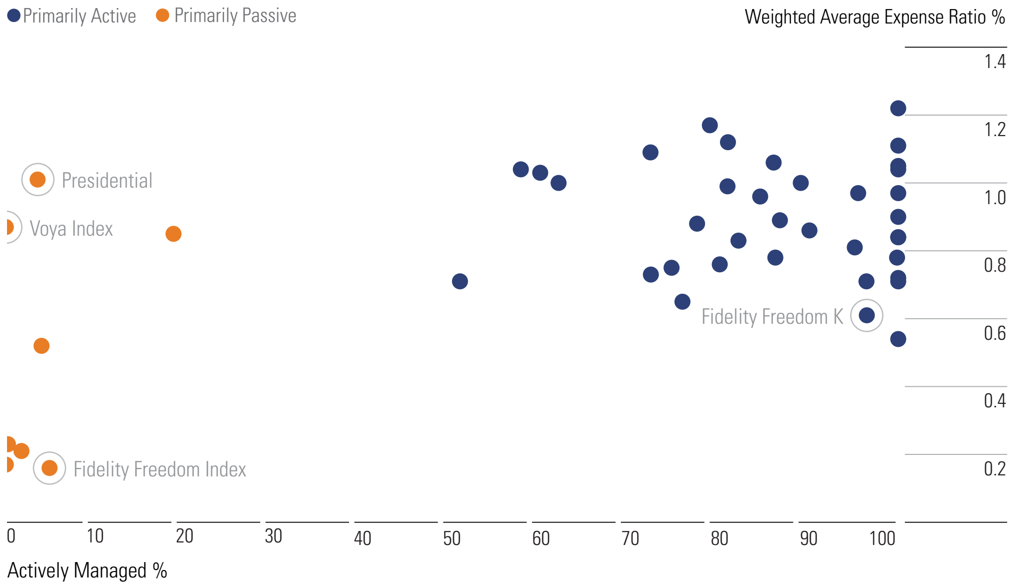
Exhibit 50 Target-Date Series' Market Share and Average Expense Ratio



Source: Morningstar, Inc. Data as of 12-31-2014.

As expected, index-based target-date series are the industry's low-cost leaders, as shown in Exhibit 51. For example, the weighted-average expense ratio of passively managed series is 0.45%, well below the 0.78% asset-weighted industry norm. But investors should not assume that index-based management automatically equates with a bargain. Voya Index Solution, Nationwide Target Destination and Presidential Managed Risk series all carry asset-weighted average fees above industry average norms despite their predominant use of passive management.

Exhibit 51 Percentage of Target-Date Series Actively Managed and Average Expense Ratio



Source: Morningstar, Inc. Data as of 12-31-2014.

Vanguard's early lead in providing low fees for its index-based target-date funds has contributed to accelerated flows to the series. Five years ago, the series was roughly 80 basis points cheaper than the norm, and its market share has continued to grow as fees have continued to fall. Rivals have countered by launching their own passively managed series or increasing the use of passive funds in their existing offerings.

Layers of Fees

Most target-date funds segregate the costs of the underlying investments as the "acquired fund expense." But those acquired fund fees don't always represent the entirety of what target-date fund investors pay. Indeed, about 70% of target-date funds charge additional fees for items such as oversight of the target-date series' portfolio, rebalancing of assets (strategically or tactically), or various administrative costs. Exhibit 52 tallies-up these "Additional Fees" for each series' least expensive share class.

Exhibit 52 Target-Date Series Additional Fees

Series Name	Additional Fee %	Asset-Weighted Average Expense %
John Hancock Retirement Living Through S	–0.11	0.72
BMO Target Date Retirement Funds	–0.05	0.76
AllianzGI Retirement Series	–0.04	0.89
American Century One Choice Series	0.00	0.90
BlackRock LifePath® Active Series	0.00	0.99
Fidelity Advisor Freedom Series	0.00	0.97
Fidelity Freedom Series	0.00	0.71
Franklin LifeSmart Series	0.00	1.06
Harbor Target Retirement Series	0.00	0.71
Invesco Balanced-Risk Retirement Series	0.00	1.11
JPMorgan SmartRetirement Series	0.00	0.78
MFS Lifetime Series	0.00	0.97
Putnam RetirementReady Series	0.00	1.05
Russell LifePoints Target Date Series	0.00	0.84
Schwab Target Series	0.00	0.73
T. Rowe Price Retirement Series	0.00	0.78
T. Rowe Price Target Retire Series	0.00	0.70
TIAA-CREF Lifecycle Series	0.00	0.54
Vanguard Target Retirement Series	0.00	0.17
American Funds Trgt Date Rtrmt Series	0.03	0.84
MassMutual RetireSMART Series	0.04	1.00
USAA Target Retirement Funds Series	0.04	0.81
PIMCO RealPath Blend Series	0.04	0.29
Principal LifeTime Series	0.05	0.86
Manning & Napier Target Series	0.05	1.04
BlackRock LifePath Index Series	0.05	0.23
Fidelity Freedom K Series	0.05	0.61
Fidelity Freedom Index Series	0.06	0.16
Principal Lifetime Hybrid Series	0.06	0.48
TIAA-CREF Lifecycle Index Series	0.07	0.21
KP RETIREMENT PATH Series	0.09	0.48
State Street Target Retirement Series	0.09	0.27
Strategic Adviser Multi-Manager Series	0.09	0.94
PIMCO RealPathTM Series	0.10	0.85
PNC Target Series	0.11	0.75
Great-West SecureFoundation® Lifetime Se	0.12	0.74
Voya Index Solution Series	0.12	0.87
Great-West Lifetime I Series	0.12	1.00
Great-West Lifetime II Series	0.12	1.03
Great-West Lifetime III Series	0.12	1.04
MainStay Retirement Series	0.12	0.88
Nationwide Target Destination Series	0.13	0.85
JPMorgan SmartRetirement Blend Series	0.13	0.50
Voya Retirement Solution Series	0.14	0.83
Voya Solution Series	0.14	1.12
Vantagepoint Milestone Series	0.16	0.65
Wells Fargo Advantage DJ Target Series	0.16	0.52
Guidestone Funds MyDestination Series	0.18	1.22
BlackRock LifePath Series	0.20	0.96
AllianceBernstein Multi-Manager Select S	0.22	0.84

Exhibit 52 Target-Date Series Additional Fees (Continued)

Series Name	Additional Fee %	Asset-Weighted Average Expense %
DWS LifeCompass Series	0.29	1.09
Madison Target Retirement Series	0.30	0.55
John Hancock Retirement Living II	0.31	0.76
John Hancock Retirement Choices Series	0.36	0.71
Presidential® Managed Risk Series	0.65	1.01
AllianceBernstein Retirement Strategies	n/a	1.03
State Farm Lifepath Series	n/a	1.17

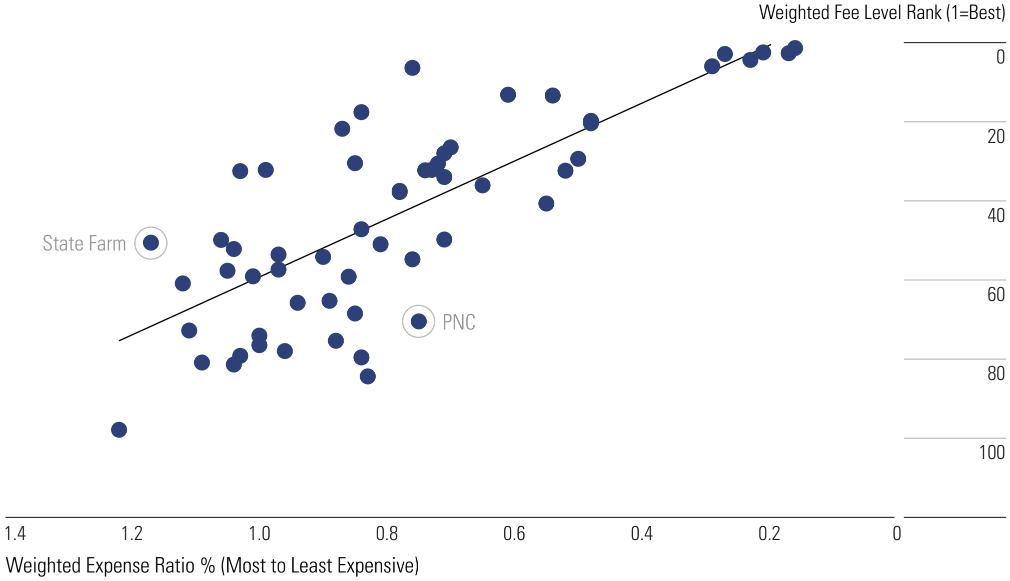
Source: Morningstar, Inc. Data as of 12-31-2014.

Fee Levels Within Distribution Channels

In 2013, Morningstar first introduced the Fee Level–Distribution data point in its annual target-date industry study. The statistic compares series' individual share classes with other funds in the same distribution channel. The series are then ranked via an asset-weighted average of their share class' fee level ranks. This methodology lessens the penalty for funds with higher 12 b-1 distribution fees, which inflate the funds' overall expense ratios; those fees, however, are often legitimately used to pay for retirement plan recordkeeping and other administrative services.

Most often, funds with lower asset-weighted expense ratios also end up ranking lower (better) overall within the fee level-distribution rank, though as Exhibit 53 shows, there are exceptions. State Farm's Lifepath series' asset-weighted average expense ratio of 1.17% lands well above the category average of 0.78%, but the majority of assets are held in the A share class, which is priced below or near the average across similar share classes in the category.

Exhibit 53 2014 Asset-Weighted Fee Level and Expense Ratio



Source: Morningstar, Inc. Data as of 12-31-2014.

Exhibit 54 Series' Expenses, Market Share, and Actively Managed Assets

Target-Date Series	2014 Wt Avg Expense Ratio %	2013 Wt Avg Expense Ratio %	2014 to 2013 Change	2014 Market Share %	Actively Managed %	Fee Level Percentile Rank
Fidelity Freedom Index Series	0.16	0.16	0.00	1.70	4.90	1.0
TIAA-CREF Lifecycle Index Series	0.21	0.21	0.00	0.51	1.75	2.1
Vanguard Target Retirement Series	0.17	0.17	0.00	27.19	0.00	2.3
State Street Target Retirement Series	0.27	N/A	—	0.00	N/A	2.5
BlackRock LifePath Index Series	0.23	0.24	–0.01	0.58	0.24	4.0
PIMCO RealPath Blend Series	0.29	N/A	—	0.00	N/A	5.6
John Hancock Retirement Living II	0.76	0.87	–0.11	0.02	57.19	6.0
Fidelity Freedom K Series	0.61	0.63	–0.02	12.83	96.48	12.8
TIAA-CREF Lifecycle Series	0.54	0.56	–0.02	2.64	100.00	13.0
American Funds Trgt Date Rtrmt Series	0.84	0.93	–0.09	3.92	100.00	17.2
KP Retirement Path Series	0.48	N/A	—	0.58	92.89	19.4
Principal Lifetime Hybrid Series	0.48	N/A	—	0.00	35.45	20.0
Voya Index Solution Series	0.87	0.88	–0.01	0.24	0.00	21.4
T. Rowe Price Target Retire Series	0.70	0.68	0.02	0.06	87.87	26.1
John Hancock Retirement Choices Series	0.71	0.69	0.02	0.97	50.89	27.6
JPMorgan SmartRetirement Blend Series	0.50	0.51	–0.01	0.09	28.11	29.0
Nationwide Target Destination Series	0.85	0.89	–0.04	0.23	18.79	30.1
John Hancock Retirement Living through	0.72	0.91	–0.19	1.14	100.00	30.2
BlackRock LifePath® Active Series	0.99	0.98	0.01	0.03	80.87	31.8
Schwab Target Series	0.73	0.73	0.00	0.42	72.28	31.8

Exhibit 54 Series' Expenses, Market Share, and Actively Managed Assets (Continued)

Target-Date Series	2014 Wt Avg Expense Ratio %	2013 Wt Avg Expense Ratio %	2014 to 2013 Change	2014 Market Share %	Actively Managed %	Fee Level Percentile Rank
Great-West SecureFoundation® Lifetime	0.74	0.77	–0.03	0.05	0.00	31.9
Wells Fargo Advantage DJ Target Series	0.52	0.53	–0.01	2.38	4.00	32.0
AB Retirement Strategies	1.03	1.01	0.02	0.15	N/A	32.1
Fidelity Freedom Series	0.71	0.73	–0.02	9.33	96.44	33.6
Vantagepoint Milestone Series	0.65	0.65	0.00	0.58	75.82	35.7
T. Rowe Price Retirement Series	0.78	0.79	–0.01	17.33	86.23	37.1
JPMorgan SmartRetirement Series	0.78	0.82	–0.04	3.96	99.87	37.4
Madison Target Retirement Series	0.55	0.60	–0.05	0.03	100.00	40.3
Russell LifePoints Target Date Series	0.84	0.92	–0.08	0.06	100.00	46.8
Harbor Target Retirement Series	0.71	0.71	0.00	0.02	100.00	49.4
Franklin LifeSmart Series	1.06	1.10	–0.04	0.06	86.04	49.5
State Farm Lifepath Series	1.17	1.19	–0.02	0.89	78.89	50.2
USAA Target Retirement Funds Series	0.81	0.80	0.01	0.56	95.13	50.6
Manning & Napier Target Series	1.04	1.05	–0.01	0.11	100.00	51.8
Fidelity Advisor Freedom Series	0.97	0.98	–0.01	2.76	95.51	53.2
American Century One Choice Series	0.90	0.95	–0.05	1.79	100.00	53.8
BMO Target Date Retirement Funds	0.76	0.83	–0.07	0.06	81.15	54.4
MFS Lifetime Series	0.97	1.02	–0.05	0.27	100.00	57.0
Putnam RetirementReady Series	1.05	1.05	0.00	0.05	100.00	57.3
Presidential® Managed Risk Series	1.01	1.00	0.01	0.01	3.56	58.7
Principal LifeTime Series	0.86	0.86	0.00	3.66	90.05	58.8
Voya Solution Series	1.12	1.13	–0.01	0.55	80.92	60.5
AllianzGI Retirement Series	0.89	0.90	–0.01	0.06	86.74	64.9
Strategic Adviser Multi-Manager Series	0.94	0.98	–0.04	0.00	99.15	65.4
PIMCO RealPathTM Series	0.85	0.85	0.00	0.11	N/A	68.1
PNC Target Series	0.75	0.83	–0.08	0.00	74.60	70.1
Invesco Balanced-Risk Retirement Series	1.11	1.11	0.00	0.06	100.00	72.4
MassMutual RetireSMART Series	1.00	0.97	0.03	0.28	89.08	73.7
MainStay Retirement Series	0.88	0.92	–0.04	0.10	77.46	75.0
Great-West Lifetime I Series	1.00	0.99	0.01	0.12	61.94	76.1
BlackRock LifePath Series	0.96	0.93	0.03	0.41	84.53	77.6
Great-West Lifetime II Series	1.03	1.02	0.01	0.67	59.88	78.8
AB Multi-Manager Select S	0.84	N/A	—	0.00	N/A	79.2
DWS LifeCompass Series	1.09	1.00	0.09	0.05	72.24	80.5
Great-West Lifetime III Series	1.04	0.95	0.09	0.03	57.71	81.0
Voya Retirement Solution Series	0.83	0.83	0.00	0.00	82.10	84.0
Guidestone Funds MyDestination Series	1.22	1.21	0.01	0.27	100.00	97.5

Source: Morningstar, Inc. Data as of 12-31-2014.

Parent

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Good Stewards Set the Stage for Target-Date Fund Success

Fund company stewardship practices play a particularly important role in target-date funds' future prospects. On one level, with their long-term, multidecade design, it's logical that investors would want to partner with companies that have demonstrated that they put the interests of fund shareholders before their own financial interests. And because many target-date series invest heavily in their firms' own funds, Parent ratings also give investors insight into the overall quality of a firm's funds, investment teams, and resources. Strong stewards of capital have a well-supported investment culture, responsible sales practices, and stable investment management teams that invest in the funds they run. Such firms also exhibit effective fund-board governance, reasonable fees, and clean records with industry regulators.

Exhibit 55 outlines some of the more quantitatively oriented factors that go into Parent ratings. Analysts look for signs that companies nurture a constructive environment where good investors choose to stay for the long term, so it's no wonder that target-date firms with better Parent ratings generally boast higher manager-retention rates and longer average manager tenures.

Exhibit 55 Morningstar Firm-Level Data for Target-Date Firms ⊕ Positive ⊙ Neutral ⊖ Negative

Firm Name	Morningstar Parent Rating	Firm Average Longest Mgr Tenure, Years: Equal-Weighted	Firm Average Longest Mgr Tenure, Years: Asset-Weighted	Morningstar Five-Year Manager-Retention Rate %	Firm Fund Assets with High Manager Ownership of Fund Shares %	Average Morningstar Fee Level Distribution Percentile Rank
Positive Parents						
American Funds	⊕	12.3	20.9	95.5	97.2	19.0
Fidelity Investments	⊕	5.3	8.9	92.1	56.5	35.0
Franklin Templeton Investments	⊕	14.7	15.4	95.8	60.9	35.0
Harbor	⊕	6.3	11.6	91.2	88.2	60.0
JPMorgan	⊕	7.0	10.8	95.1	54.4	34.0
Manning & Napier	⊕	8.2	15.5	94.5	9.2	55.0
MFS	⊕	9.6	11.2	94.4	44.5	47.0
T. Rowe Price	⊕	7.6	11.2	94.6	30.1	38.0
Vanguard	⊕	7.6	11.9	92.8	13.9	4.0
Vantagepoint Funds	⊕	9.1	10.0	86.8	0.0	29.0
Average		**8.8**	**12.7**	**93.3**	**45.5**	**35.6**

Exhibit 55 Morningstar Firm-Level Data for Target-Date Firms (Continued) ⊕ Positive ⊙ Neutral ⊖ Negative

Firm Name	Morningstar Parent Rating	Firm Average Longest Mgr Tenure, Years: Equal-Weighted	Firm Average Longest Mgr Tenure, Years: Asset-Weighted	Morningstar Five-Year Manager-Retention Rate %	Firm Fund Assets with High Manager Ownership of Fund Shares %	Average Morningstar Fee Level Distribution Percentile Rank
Neutral Parents						
Allianz Funds	⊙	6.0	13.7	90.3	89.9	53.0
American Century Investments	⊙	7.9	11.2	92.7	5.4	53.0
BlackRock	⊙	5.3	11.7	88.1	65.4	46.0
Invesco	⊙	6.5	11.0	84.2	64.3	49.0
John Hancock	⊙	6.0	7.5	90.6	18.6	51.0
MainStay	⊙	7.8	8.9	95.1	52.3	65.0
MassMutual	⊙	7.7	9.7	89.8	4.5	44.0
PIMCO	⊙	2.9	3.9	90.1	50.2	48.0
Principal Funds	⊙	4.9	7.2	80.5	0.0	52.0
Putnam	⊙	8.0	8.1	91.3	24.9	47.0
Russell	⊙	2.1	2.7	84.6	0.0	56.0
Schwab Funds	⊙	3.5	3.1	86.8	0.0	22.0
State Farm	⊙	10.3	13.0	87.8	0.0	38.0
TIAA-CREF Mutual Funds	⊙	6.6	8.7	93.6	29.2	18.0
USAA	⊙	7.1	8.5	89.5	0.0	56.0
Voya	⊙	6.2	8.1	87.7	0.0	33.0
Wells Fargo Advantage	⊙	8.7	9.9	92.7	20.3	49.0
Average		**6.3**	**8.6**	**89.1**	**25.0**	**45.9**
Negative Parents						
AllianceBernstein[9]	⊖	9.9	12.2	88.5	25.1	45.0
Deutsche Asset & Wealth Mngt	⊖	6.5	10.0	83.3	3.2	52.0
Average		**8.2**	**11.1**	**85.9**	**14.1**	**48.5**
Unrated Parents						
BMO Funds	Unrated	4.0	7.8	91.1	0.0	40.0
Citi	Unrated	0.8	0.8	n/a	n/a	n/a
Great-West Funds	Unrated	8.5	8.9	89.0	0.0	57.0
GuideStone Funds	Unrated	8.7	10.6	86.5	0.0	57.0
KP Funds	Unrated	0.9	0.9	n/a	n/a	24.0
Lincoln Financial Group	NA	2.8	3.0	n/a	0.0	46.0
Madison Funds	NA	10.9	10.4	92.6	10.6	52.0
Nationwide	NA	7.3	7.1	87.5	0.2	32.0
PNC Funds	NA	7.7	12.0	88.9	16.5	39.0
State Street Global Advisors	NA	2.4	7.2	87.6	0.0	13.0
Average		**5.4**	**6.9**	**89.0**	**3.4**	**40.0**

Source: Morningstar, Inc. Data as of 12-31-2014.

Footnote

9 AllianceBernstein's Parent Rating was raised to Neutral in March 2015.

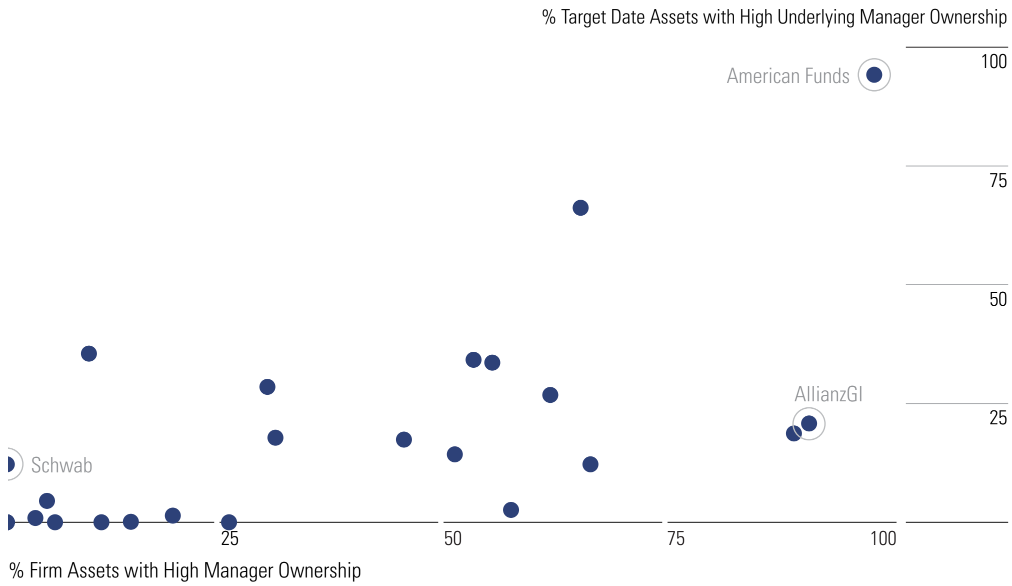
A fund company's overall fees and manager-incentive structure also figure into stewardship assessments. With respect to the former, the Morningstar Fee-Level-Distribution percentile rank considers how a firm's fees stack-up versus similar funds aimed at comparable sales channels. The latter considers managers' personal investments in the funds that they manage. On this front, Morningstar sets a relatively high bar by only counting the percentage of assets in funds that at least one manager has at least a $1 million investment.

Though Exhibit 63 shows that highly regarded firms (i.e., those garnering "positive" Morningstar Parent ratings) tend to have managers with higher personal fund investments, managers of target-date series themselves don't eat much of their own cooking. Only three managers (representing two series) invest more than $1 million in the target-date mutual funds that they manage. A few more get there via the collective investment trust versions of their target-date strategies (see Page 52 of the People section for more details on target-date managers' ownership levels of their funds).

Exhibit 56 examines target-date series' underlying holdings and measures skin in the game for those funds' managers. The data indicate that manager investment in the underlying funds sometimes falls short of the $1 million personal investment threshold observed elsewhere at the firms. For instance, 90% of Allianz's mutual fund assets reside with funds that have manager ownership of $1 million or more, but AllianzGI Retirement series invests only about 20% of its assets in underlying funds with similarly high manager ownership levels. The firm has a relatively limited number of larger funds that have high manager investments, which drives the overall firm's high asset-weighted ownership figures. However, those funds aren't featured as prominently in its target-date series.

Schwab represents a different anomaly. The overall firm has no proprietary funds where manager ownership exceeds $1 million. However, it invests 12% of its target-date assets in third-party funds, such as Dodge & Cox Stock, with manager ownership of more than $1 million.

Exhibit 56 Target-Date Series' Versus Firm's Funds With High Manager Ownership



Source: Morningstar, Inc. Data as of 12-31-2014.

American Funds, in contrast, shines consistently. The firm's funds have some of the highest manager ownership levels in the industry. Because the American Funds Target Date Retirement series uses virtually all of the firm's funds in its lineup (the primary exceptions are its nontaxable municipal-bond funds and static funds of funds), the series' underlying holdings have impressive manager-ownership metrics.

An Important Client

Target-date funds from parent firms with strong stewardship practices stand to benefit, but the advantages don't just flow in one direction. As discussed on page 8 of the Flows section and covered in Exhibit 8, the funds have become crucial sources of new assets for their firms, making up an average of 32% of firms' overall flows in 2014.

Exhibit 57 examines the importance of target-date assets to the underlying funds in the series. In many cases, the underlying funds derive a large portion of inflows from the target-date series that hold them, and target-date funds can thus become a significant shareholder in any constituent fund. More than 45% of the assets in the funds that comprise the T. Rowe Price Retirement Series are owned by the target-date series, for example. JPMorgan SmartRetirement Series and Principal LifeTime Series each own more than a third of the assets of their underlying funds. Even at 11% of underlying fund assets on average, target-date series are important clients to individual funds.

To the extent that such underlying funds have ample capacity, the popularity of a firm's target-date series may not present a problem to the constituent funds. In fact, most portfolio managers appreciate the kind of steady inflows that target-date series can provide, as stable inflows can be easier to manage than more-erratic or excessive flows in or out of a mutual fund.

Further, some fund families have pre-emptively taken steps to preserve a fund's capacity. For example, T. Rowe Price has closed several of its constituent funds, such as T. Rowe Price Small-Cap Stock, to new investors to leave some runway for the fund as the target-date series continues to funnel money to those closed funds. In this regard, the closed-architecture series has the advantage over open-architecture counterparts, as it has more control over which funds are open or closed.

Exhibit 57 Target-Date Series' Average Representation in Underlying Funds

	Average %		
Target-Date Series	Open	Closed	All Funds
JPMorgan SmartRetirement Series	39.4	18.8	37.1
T. Rowe Price Retirement Series	56.0	18.3	45.5
Schwab Target Series	17.3	16.7	17.2
Principal LifeTime Series	40.0	2.4	38.6
Great-West Lifetime II Series	19.8	1.0	17.8
AllianzGI Retirement Series	8.1	0.9	7.6
Franklin LifeSmart Series	2.7	0.9	2.4
Harbor Target Retirement Series	3.8	0.7	3.6
BMO Target Date Retirement Funds	6.8	0.6	6.2
Great-West Lifetime I Series	3.8	0.1	3.4
MassMutual RetireSMART Series	16.2	0.1	15.8
T. Rowe Price Target Retire Series	0.2	0.1	0.2
Great-West Lifetime III Series	0.8	0.0	0.7
AllianceBernstein Retirement Strategies	0.1	—	0.1
American Funds Trgt Date Rtrmt Series	6.6	—	6.6
BlackRock LifePath Index Series	20.7	—	20.7
BlackRock LifePath Series	8.5	—	8.5
BlackRock LifePath® Active Series	0.4	—	0.4
DWS LifeCompass Series	4.3	—	4.3
Great-West SecureFoundation® Lifetime Se	5.8	—	5.8
Guidestone Funds MyDestination Series	18.5	—	18.5
Invesco Balanced-Risk Retirement Series	0.9	—	0.9
John Hancock Retirement Choices Series	5.9	—	5.9
John Hancock Retirement Living II	0.1	—	0.1
John Hancock Retirement Living Through S	10.9	—	10.9
JPMorgan SmartRetirement Blend Series	0.5	—	0.5
KP RETIREMENT PATH Series	34.1	—	34.1
MainStay Retirement Series	4.8	—	4.8
Manning & Napier Target Series	13.3	—	13.3
MFS Lifetime Series	4.9	—	4.9

Exhibit 57 Target-Date Series' Average Representation in Underlying Funds (Continued)

	Average %		
Target-Date Series	Open	Closed	All Funds
Nationwide Target Destination Series	10.8	—	10.8
PIMCO RealRetirement Series	3.0	—	3.0
PNC Target Series	0.3	—	0.3
Presidential® Managed Risk Series	0.1	—	0.1
Principal Lifetime Hybrid Series	0.0	—	0.0
Putnam RetirementReady Series	4.0	—	4.0
Russell LifePoints Target Date Series	7.0	—	7.0
State Farm Lifepath Series	8.6	—	8.6
Strategic Adviser Multi-Manager Series	2.9	—	2.9
TIAA-CREF Lifecycle Index Series	13.6	—	13.6
TIAA-CREF Lifecycle Series	50.0	—	50.0
USAA Target Retirement Funds Series	19.5	—	19.5
Vanguard Target Retirement Series	25.9	—	25.9
Vantagepoint Milestone Series	22.7	—	22.7
Voya Index Solution Series	7.3	—	7.3
Voya Retirement Solution Series	0.0	—	0.0
Voya Solution Series	20.1	—	20.1
Average	**11.7**	**4.7**	**11.3**

Source: Morningstar, Inc. Data as of 12-31-2014.

Appendix

Appendix 1 2014 Morningstar Analyst Ratings for Target-Date Fund Series

Pillars: ⊕ Positive ⊙ Neutral ⊖ Negative

Target Date Series	Morningstar Analyst Rating	Process	People	Performance	Parent	Price
AB Retirement Strategies	Negative	Negative	Negative	Negative	Negative	Positive
American Century One Choice	Bronze	Positive	Neutral	Positive	Neutral	Neutral
American Funds Target Date Retirement	Silver	Positive	Positive	Positive	Positive	Positive
BlackRock LifePath	Neutral	Negative	Neutral	Neutral	Neutral	Negative
BlackRock LifePath Index	Silver	Positive	Positive	Positive	Neutral	Positive
Fidelity Advisor Freedom	Neutral	Neutral	Positive	Neutral	Positive	Neutral
Fidelity Freedom®	Neutral	Neutral	Positive	Neutral	Positive	Positive
Fidelity Freedom® Index	Silver	Positive	Positive	Negative	Positive	Positive
JHancock Retire Living through	Bronze	Positive	Positive	Positive	Neutral	Positive
JPMorgan SmartRetirement®	Silver	Positive	Positive	Positive	Positive	Positive
Manning & Napier Target	Silver	Positive	Positive	Neutral	Positive	Neutral
MassMutual RetireSMART	Neutral	Positive	Positive	Positive	Neutral	Negative
MFS® Lifetime®	Silver	Positive	Positive	Positive	Positive	Neutral
PIMCO RealPath™	Bronze	Positive	Positive	Negative	Neutral	Negative
Principal LifeTime	Bronze	Positive	Positive	Positive	Neutral	Negative
Russell LifePoints Target Date	Negative	Neutral	Neutral	Negative	Neutral	Neutral
Schwab Target	Neutral	Neutral	Neutral	Positive	Neutral	Positive
State Farm LifePath	Negative	Neutral	Neutral	Negative	Neutral	Neutral
T. Rowe Price Retirement	Gold	Positive	Positive	Positive	Positive	Positive
TIAA-CREF Lifecycle	Bronze	Neutral	Positive	Positive	Neutral	Positive
Vanguard Target Retirement	Gold	Positive	Positive	Positive	Positive	Positive
Vantagepoint Milestone	Bronze	Neutral	Positive	Neutral	Positive	Positive
Voya Solution	Neutral	Neutral	Positive	Positive	Neutral	Negative
Wells Fargo Advantage DJ Target	Neutral	Negative	Neutral	Negative	Neutral	Positive

Source: Morningstar, Inc. Data as of 12-31-2014.

Appendix 2 Complete Glide-Path Equity Allocations by Target-Date Series %

Figures represent the equity allocations depicted in each series' investment prospectus.

Years to Target	50	45	40	35	30	25	20	15	10	5	0	–5	–10	–15	–20	–25	–30
Year	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	2000	1995	1990	1985
Through Glide Paths																	
AllianceBernstein Retirement Strategies	—	90	90	90	85	80	71	60	49	42	35	27	21	16	16	—	—
AllianceBernstein Multi-Manager Select	—	—	84	84	84	83	76	67	58	49	42	36	30	25	—	—	—
American Funds Trgt Date Rtrmt	—	—	84	84	84	83	82	78	66	56	48	47	41	40	36	31	30
BMO Target Date Retirement Funds	—	—	90	90	90	90	83	77	70	60	50	36	30	30	30	30	30
db-X Target Date	—	—	—	96	94	91	81	71	57	44	10	32	32	32	32	—	—
Fidelity Advisor Freedom	—	—	90	90	90	90	90	80	65	59	52	43	34	24	24	24	—
Fidelity Freedom K	—	—	90	90	90	90	90	80	65	59	52	43	34	24	24	24	—
Fidelity Freedom	—	—	90	90	90	90	90	80	65	59	52	43	34	24	24	24	—
Fidelity Freedom Index	—	—	90	90	90	90	90	80	65	58	52	43	33	24	24	24	—
Great-West Lifetime I	—	80	80	78	75	68	58	45	36	29	24	22	17	17	17	17	—
Great-West Lifetime II	—	85	85	85	84	81	72	60	49	40	34	28	25	22	22	22	—
Great-West Lifetime III	—	90	90	90	89	88	83	75	62	51	42	37	32	29	27	27	—
Guidestone Funds MyDestination	—	—	—	—	84	—	75	—	62	—	48	41	30	25	—	—	—
Harbor Target Retirement	93	93	93	93	84	74	65	55	48	40	32	20	20	20	20	20	—
John Hancock Retirement Living Through	—	—	95	95	93	93	90	83	72	62	52	45	36	28	25	25	25
John Hancock Retirement Living II	—	—	95	95	95	95	92	84	73	63	54	45	37	31	25	25	25
KP RETIREMENT PATH	—	88	88	88	88	88	82	76	66	51	38	21	21	—	—	—	—
MainStay Retirement	—	95	91	89	87	85	79	73	65	55	50	35	30	30	—	—	—
Manning & Napier Target	—	82	82	82	82	76	70	60	50	45	40	30	30	—	—	—	—
MassMutual RetireSMART	—	90	90	90	87	84	83	80	72	60	48	43	37	32	32	32	32
Nationwide Target Destination	—	—	89	89	89	86	80	75	67	58	50	42	—	—	27	—	—
Presidential® Managed Risk	—	—	99	92	85	78	73	67	63	61	55	47	39	31	25	25	—
Principal LifeTime	87	87	87	85	82	77	71	66	60	51	44	33	25	20	20	—	—
Principal Lifetime Hybrid	87	87	87	85	82	78	72	67	61	53	44	34	28	20	20	—	—
Schwab Target	—	95	95	93	90	86	80	74	65	54	40	38	35	30	25	25	—
State Street Target Retirement	—	90	90	90	90	88	82	77	69	56	41	30	30	—	—	—	—
Strategic Adviser Multi-Manager	—	—	90	90	90	90	90	80	65	58	52	43	33	24	24	24	—
T. Rowe Price Retirement	—	—	90	90	90	90	85	78	71	64	54	45	40	35	31	27	20
T. Rowe Price Target Retire	—	—	90	87	83	77	72	65	58	51	44	37	36	34	31	27	21
TIAA-CREF Lifecycle	—	90	90	90	90	90	82	74	66	58	49	43	40	40	40	40	40
TIAA-CREF Lifecycle Index	—	90	90	90	90	90	81	73	65	57	50	44	40	40	40	40	40
Vanguard Target Retirement	90	90	90	90	90	90	81	75	67	59	50	30	30	30	30	30	—
Vantagepoint Milestone	—	—	84	84	84	80	75	65	55	45	40	35	30	30	30	30	30
Wells Fargo Advantage DJ Target	—	—	90	90	87	82	72	61	48	37	28	22	20	—	—	—	—
To Glide Paths																	
AllianzGI Retirement	90	90	90	85	83	80	70	60	48	35	25	—	—	—	—	—	—
American Century One Choice	—	85	85	82	80	73	67	61	55	50	45	45	45	45	45	45	45
BlackRock LifePath	—	—	82	82	81	78	72	64	56	47	36	—	—	—	—	—	—
BlackRock LifePath® Active	—	—	82	82	81	78	72	64	56	47	36	—	—	—	—	—	—
BlackRock LifePath Index	—	—	85	85	84	82	75	67	59	50	39	—	—	—	—	—	—
DWS LifeCompass	—	—	—	—	85	—	75	—	60	48	40	—	—	—	—	—	—
Franklin LifeSmart	—	—	83	83	82	81	79	74	68	55	32	32	32	—	—	—	—
Great-West SecureFoundation® Lifetime	—	91	91	90	89	87	78	68	58	58	58	58	58	58	58	58	—
Invesco Balanced-Risk Retirement	—	—	28	—	28	—	28	—	28	24	19	—	—	—	—	—	—
John Hancock Retirement Choices	—	—	82	82	82	80	74	64	47	27	8	—	—	—	—	—	—

Appendix 2 Complete Glide-Path Equity Allocations by Target-Date Series % (Continued)
Figures represent the equity allocations depicted in each series' investment prospectus.

Years to Target	50	45	40	35	30	25	20	15	10	5	0	–5	–10	–15	–20	–25	–30
Year	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	2000	1995	1990	1985
JPMorgan SmartRetirement	—	—	80	80	80	80	73	67	58	48	32	32	32	—	—	—	—
JPMorgan SmartRetirement Blend	—	—	86	86	86	86	79	72	62	52	36	36	36	—	—	—	—
MFS Lifetime	85	85	85	85	85	85	80	74	54	35	25	25	25	—	—	—	—
PIMCO RealPath Blend	—	—	72	72	70	65	59	50	42	36	27	—	—	—	—	—	—
PIMCO RealPath	—	—	73	—	70	—	60	—	43	—	28	—	—	—	—	—	—
PNC Target	—	—	80	78	75	70	65	55	45	38	30	30	30	—	—	—	—
Putnam RetirementReady	—	95	93	89	84	77	68	57	45	32	25	—	—	—	—	—	—
Russell LifePoints Target Date	—	82	82	82	82	77	62	49	39	29	27	27	—	—	—	—	—
State Farm Lifepath	—	—	—	90	—	80	—	67	—	51	38	—	—	—	—	—	—
USAA Target Retirement Funds	—	95	90	85	80	75	70	60	50	40	30	—	—	—	—	—	—
Voya Index Solution	—	95	95	95	95	88	80	72	62	50	35	35	35	35	—	—	—
Voya Retirement Solution	—	95	95	95	95	88	80	72	62	50	35	35	35	35	—	—	—
Voya Solution	—	95	95	95	95	88	80	72	63	50	35	35	35	35	—	—	—

Source: Morningstar, Inc. Data as of 12-31-2014.