2014 Target-Date Series Research Paper

Janet Yang, CFA
Strategist
Fund-of-Funds Strategies–North America
+1 312 244-7270
janet.yang@morningstar.com

Laura Pavlenko Lutton
Director of Manager Research
Fund-of-Funds Strategies–North America
+1 312 696-6121
laura.lutton@morningstar.com

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Executive Summary

Target-date funds have rounded out their second decade, having first come to market in 1994. The target-date industry has shown many signs of a maturing, stabilizing market, though there's still plenty of dynamism to be found. Organic growth rates for the target-date industry as a whole, for example, have fallen by multiples during the last five years, but they still often account for meaningful sources of fund firms' growth. That growth has allowed costs to come down for the fifth year in a row since Morningstar began surveying the industry, and 2013 saw another contender take the mantle of lowest-cost provider.

Target-date funds continue to upend expectations in other ways as well. Theoretically, series that access best-of-breed managers regardless of affiliation should have a performance advantage, but open-architecture series continue to show no discernable advantage over closed ones. And contrary to the academic and industry research that suggests it's difficult to consistently execute tactical management well, target-date series with that flexibility have generally outperformed those not making market-timing calls.

Other less-favorable trends also continue. Most notably, the vast majority of target-date series' managers continue to have dismal ownership levels of the funds that they manage. And similar to the investment industry as a whole, Morningstar's attribution analysis shows that series' actively managed underlying strategies generally have failed to outperform their indexes.

Key Takeaways

- Organic growth of 10.5% in 2013 helped target-date mutual fund assets easily cross the $600 billion asset threshold. An additional $18 billion in new assets in the first quarter of 2014, plus market appreciation, brought that figure to more than $650 billion as of March 31, 2014.
- The target-date 2001-2010 category, which comprises the funds aimed at now-retiring baby boomers, has been the only target-date category leaking assets.
- Fidelity, T. Rowe Price, and Vanguard continue their dominant hold over the industry's assets, and their combined market share still represents three fourths of target-date mutual fund assets.
- Whether for large or small series, net new assets flowing into target-date funds often represent a meaningful share of the offering firms' new flows. At the end of 2013, flows into target-date funds amounted to almost a third of those firms' net new assets.
- Open-architecture series should have the ability to draw from the industry's best, but these series have shown no performance advantage over closed-architecture series. Open-architecture series pay systematically higher fees to access nonproprietary managers, and those costs eat into returns.

- Target-date funds that use tactical management have so far defied industry and academic findings that question whether such market-timing moves add to returns in the long run.
- The market turmoil of 2008 rolled off target-date funds' trailing five-year returns by the end of 2013, leading to some significant reversals in series' relative performance records. More equity-heavy series now have a clear lead during the past five years, while the downside protection offered by more equity-light series has increasingly faded into the rearview.
- Similar to the investment industry as a whole, Morningstar's attribution analysis of target-date funds suggests that actively managed underlying strategies have underperformed during the three years through the end of 2013.
- Vanguard has ceded its lowest-cost throne to Fidelity Freedom Index series. At the end of 2013, Vanguard had an asset-weighted fee of 0.17% compared with Fidelity Freedom Index's 0.16%.
- More experienced managers—whether at the target-date series level or within series' underlying funds—have generally produced better results for target-date funds.
- Managers of target-date series still do not demonstrate conviction in their investment process via high ownership of target-date fund shares. Hans Erickson of TIAA-CREF Lifecycle series remains the sole manager with more than $1 million invested in a single fund within the series he skippers.
- Among the firms offering target-date series, those with Parent scores rated Positive by Morningstar have stronger stewardship data and better long-term performance than those rated Neutral or Negative.

Target-Date Asset Flows

A Maturing Industry Still Posting Double-Digit Growth

Target-date funds have experienced explosive growth in the years following the introduction of the Pension Protection Act of 2006, a regulation that allows qualified plan sponsors to direct participants' retirement savings to a target-date fund if they don't choose otherwise. While the pace of growth has leveled off in recent years, assets flowing into target-date funds have still been more than respectable: In 2013, the industry's 10.5% organic growth translated to $50.8 billion in new assets, allowing the industry to easily cross the $600 billion asset threshold. Market appreciation and an additional $18 billion in new assets in the first quarter of 2014 brought the total figure beyond $650 billion at the end of March 2014.

Growth among the big three—Fidelity, Vanguard, and T. Rowe Price—drove most of the target-date industry's rapid rise in its early years. But in 2013, less prominent target-date providers contributed disproportionately. (That said, Vanguard's 14.7% organic growth and $18.3 billion in new assets played an important role.) J.P. Morgan rose impressively, adding $7.4 billion in new assets to its $9.4 billion base in 2012. It added almost 80% in net new assets. Overall, 20 of 36 target-date mutual fund firms had growth rates greater than the overall industry's. Six of those 36 firms saw net outflows in 2013, and two of the series in outflows, AllianceBernstein and Russell, have Morningstar Analyst Ratings of Negative.

Exhibit 1 Net Assets, Estimated Net Flow, and Organic Growth Rates of U.S. Target-Date Mutual Funds, 2005-March 31, 2014

Source: Morningstar, Inc.

Seeing the Leading Edge of the Baby Boomer Drawdown

The oldest members of the baby boomer cohort began turning 65 in 2011. Since then, target-date funds in the 2000-2010 category, which encompasses the 2000, 2005, and 2010 funds, have been leaking assets—the only category to do so in the industry. What started as a 2.7% outflow in 2011, about $900 million in all, has since picked up to 7.6% of assets in 2013, roughly $2.7 billion. Look for these figures, as well as those of other nearer-dated funds, to climb as more baby boomers tap their target-date assets in the coming years.

Meanwhile, the chart's "humped" distribution intuitively matches expectations for investors' savings and contributions over their lifecycles; investors in their early to late middle age—those in the 2020 to 2030 funds—likely have more savings than younger investors in longer-dated funds. The 2021-2025 and 2031-2035 target-date categories dip below their preceding categories because of a structural and historical anomaly of the industry, though. When target-date funds were first launched, many were offered only in 10-year increments (2020, 2030, 2040, for example), and the series later added funds at five-year intervals (2015, 2025, 2035). Currently, seven of the mutual fund industry's 51 series offer funds in only 10-year increments.

Exhibit 2 2013 Net Assets, Net Flows, and Organic Growth Rate by Morningstar Target-Date Category

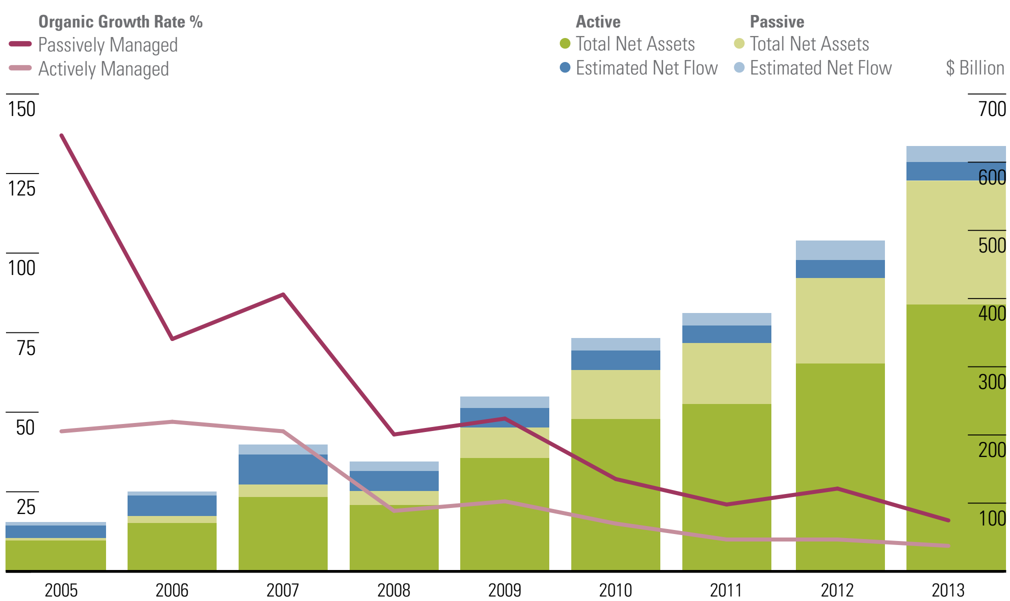
Source: Morningstar, Inc.

Aggressive Growth From Passive Funds

Target-date funds have participated in the industry's overall shift toward passively managed strategies. In 2013, the 16% organic growth rate of assets flowing into target-date funds' passively managed underlying strategies was double that of actively managed strategies. While growth rates into both have slowed considerably, passively managed assets have increasingly closed the gap with those of actively managed strategies. In 2005, actively managed strategies comprised almost 90% of target-date mutual fund assets; they now only hold a 67% share. The shift to passive has been less-pronounced elsewhere. Among all mutual funds and exchange-traded funds, actively managed strategies' market share has dropped to 84% from 89% in 2005.

The vast majority of flows into passively managed target-date strategies came from investors choosing primarily index-based series, such as Vanguard Target Retirement. As the second-largest target-date mutual fund provider, Vanguard's 14.7% organic growth rate translated to about $18 billion in net new assets in 2013, which represents a large portion of the new cash in passively managed funds. Some actively managed competitors have responded by introducing their own indexed series, which often employ the same glide path as the firm's legacy actively managed series. Other primarily index-based options that have received large flows include Fidelity Freedom Index ($2.1 billion in net new assets in 2013), BlackRock LifePath Index ($1.2 billion), and TIAA-CREF Lifecycle Index ($481 million).

Exhibit 3 2013 Net Assets, Net Flows, and Organic Growth Rate by Active and Passive Management



Source: Morningstar, Inc.

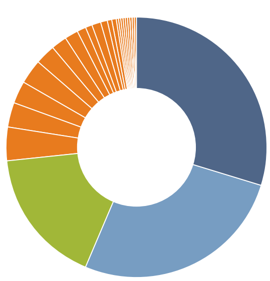
Big Three Maintain Their Hold

While smaller target-date providers have been steadily gaining ground, Fidelity, Vanguard, and T. Rowe Price still dominate the industry; the three firms--also the largest U.S. retirement-plan record-keepers and administrators--collectively account for three fourths of target-date mutual fund assets. Over the years, Fidelity has had to adapt the most to hang on to its top spot. In 2009, for example, the firm launched the Freedom Index series, its low-priced, passively managed answer to Vanguard Target Retirement. The Freedom Index funds received the lion's share of the firm's net new target-date assets in 2013. Even so, Fidelity's market share has dwindled considerably, from more than 40% in 2008 to about 30% at the end of 2013. T. Rowe Price has shown some willingness to change as well, and it launched the less equity-heavy T. Rowe Price Target Retirement funds in mid-2013. In its first calendar year, the series has gained a modest $54 million in net new assets.

For both small and large series alike, target-date flows oftentimes make up significant portions of their parent firms' sources of new assets. Contributions to target-date funds accounted for more than 90% of T. Rowe Price's new flows in 2013 and roughly half of Fidelity's. Meanwhile, J.P. Morgan and American Funds have smaller series—each only makes up about 3% of the target-date industry—but they have also proved to be important sources of new assets for their firms. J.P. Morgan's $7.4 billion in new target-date assets, for instance, represented more than a third of the firm's net new assets in 2013. American Funds' $2.3 billion in net new target-date assets helped soften the impact from the firm's overall $13.0 billion in outflows that year. (Thirteen other firms also saw positive target-date flows but overall negative flows at the firm level.) Overall, the industry's net new flows of target-date assets represented 29% of those firms' new assets.

Target-date funds offered via collective investment trusts or a more customized format have increasingly gained traction in the industry. Tracking such assets is difficult because firms report CIT data to investment databases such as Morningstar's voluntarily. In addition, some private plans are very large and are not forthcoming with their data. For example, the U.S. Government's Thrift Savings Plan, available to Federal government employees, reportedly had $61.6 billion at yearend 2013, which would make it the fourth-largest target-date provider in the mutual fund industry.

Exhibit 4 2013 Market Share of Target-Date Firms



Fund Family	%
Fidelity	29.8
Vanguard	26.7
T. Rowe Price	16.9
Others	26.7

Source: Morningstar, Inc. as of 12/31/2013

Exhibit 5 Net Assets, Organic Growth, and Market Share of Target-Date Firms[1]

	Total Net Assets				
Fund Family	2012	2013	Organic Growth Rate 2013 %	Market Share 2013 %	Firm's Net Flow from Target-Date Funds %[1]
Fidelity Investments	157,189,644,919	185,582,123,989	1.9	29.8	54.8
Vanguard	124,359,813,721	166,148,133,463	14.7	26.7	14.0
T. Rowe Price	80,234,687,672	105,099,029,776	10.1	16.9	95.2
Principal Funds	21,025,958,178	25,331,272,577	4.2	4.1	14.1
JPMorgan	9,372,706,814	18,807,408,724	78.6	3.0	37.3
American Funds	13,268,889,133	18,680,700,212	17.6	3.0	**(G)**
TIAA-CREF Mutual Funds	12,692,934,184	18,203,254,268	21.4	2.9	42.3
Wells Fargo Advantage	13,819,325,436	15,573,428,003	0.1	2.5	**(G)**
John Hancock	9,794,158,343	13,221,369,013	17.1	2.1	16.1
American Century	6,569,258,606	10,191,807,847	37.5	1.6	**(G)**
BlackRock	4,802,718,407	6,365,311,441	19.4	1.0	8.3
Voya	5,562,129,678	6,079,672,659	–6.6	1.0	**(L)**
State Farm	4,483,105,319	5,493,422,471	10.1	0.9	**(G)**
Great-West Funds	3,694,002,620	5,321,959,189	26.8	0.9	125.7
USAA	3,049,771,709	3,719,639,849	7.7	0.6	28.3
Vantagepoint Funds	2,526,624,573	3,380,900,647	12.8	0.5	**(G)**
Schwab Funds	1,825,302,181	2,661,068,654	24.1	0.4	23.6
GuideStone Funds	1,137,905,806	1,589,954,689	23.2	0.3	**(G)**
MFS	830,665,329	1,561,230,658	68.8	0.3	3.2
MassMutual	1,252,596,391	1,494,252,369	0.9	0.2	**(G)**
Nationwide	1,141,465,476	1,481,583,246	11.4	0.2	**(G)**
AllianceBernstein	1,307,476,516	1,259,662,412	–19.9	0.2	**(L)**
Hartford Mutual Funds	697,766,477	755,701,941	-6.1	0.1	**(L)**
Manning & Napier	494,994,385	713,695,925	25.5	0.1	**(G)**
Russell	806,955,252	702,630,667	–24.8	0.1	–37.8
PIMCO	530,065,904	698,443,371	29.1	0.1	**(G)**
MainStay	360,331,663	487,073,370	12.5	0.1	0.3
Invesco	335,042,807	437,819,735	29.1	0.1	9.0
DWS Investments	533,466,413	429,730,061	–31.1	0.1	**(L)**
BMO Funds	n/a	327,219,390	—	0.1	**(G)**
Allianz Funds	167,020,920	300,374,717	72.4	0.0	**(G)**
Putnam	245,610,280	298,977,589	6.9	0.0	0.4
Franklin Templeton	205,574,322	292,184,848	22.2	0.0	0.5
Harbor	127,048,795	141,262,816	–0.5	0.0	0.0
Legg Mason	38,073,000	48,128,002	11.6	0.0	**(G)**
PNC Funds	5,097,986	6,230,955	9.0	0.0	0.6
Total			**10.5**	**100.0**	**29.1**

Source: Morningstar, Inc. as of 12/31/2013

1. Net flow figures exclude firm-level flows to money market funds.
Series marked (G) under "% of Firm's Net Flows from Target-Date Funds" 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 as well as outflows for the overall firm.

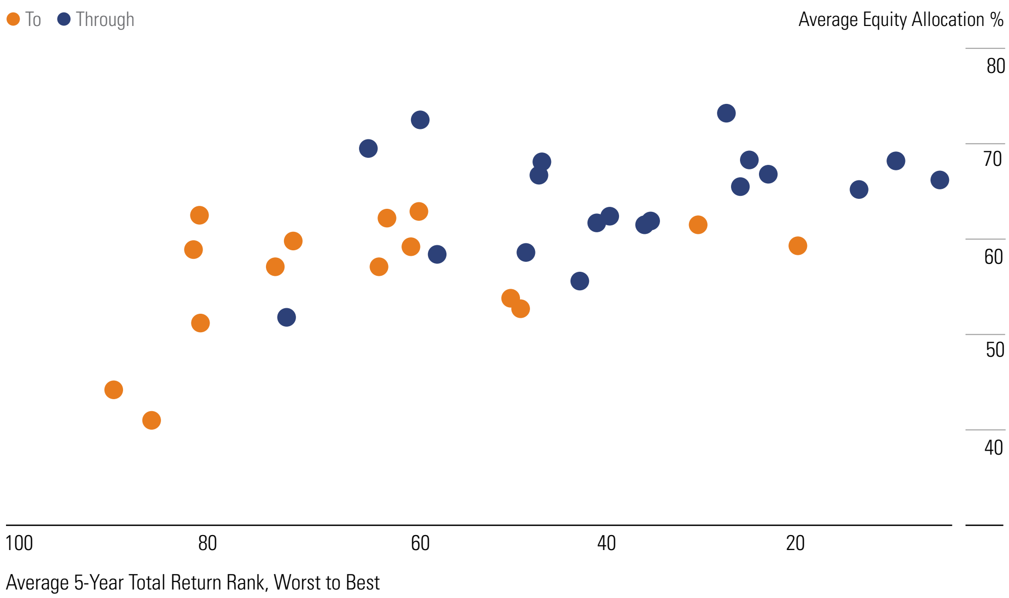
Process

"Through" Glide Paths Benefiting From a Five-Year Equity Tailwind

Target-date series have several ways to differentiate themselves from one another, and one of the main ones is through glide-path design. Some use an equity-allocation glide path that shifts to the retirement year (known as a "to" glide path), while others continue to lower the equity allocation through at least a portion of the retirement years (known as a "through" glide path). While it's not necessarily the case that "to" glide paths should have lower overall equity allocations than "through" glide paths, in practice, that's generally been the case. Looking at a 60-year glide path that would hypothetically take investors from a 40-year saving-and-working phase into a 20-year retirement, "to" glide paths average a 57% exposure to equities (with a mimum of 41% and a maximum of 70%). "Through" glide paths, in contrast, have a 63% average (49% minimum, 73% maximum). Fidelity, Vanguard, and T. Rowe Price all use "through" glide paths, thus putting the vast majority of the target-date industry's assets into that class of glide path. The scales are somewhat more balanced across all series, with 21 choosing "to" glide paths and 30 using "through" ones.

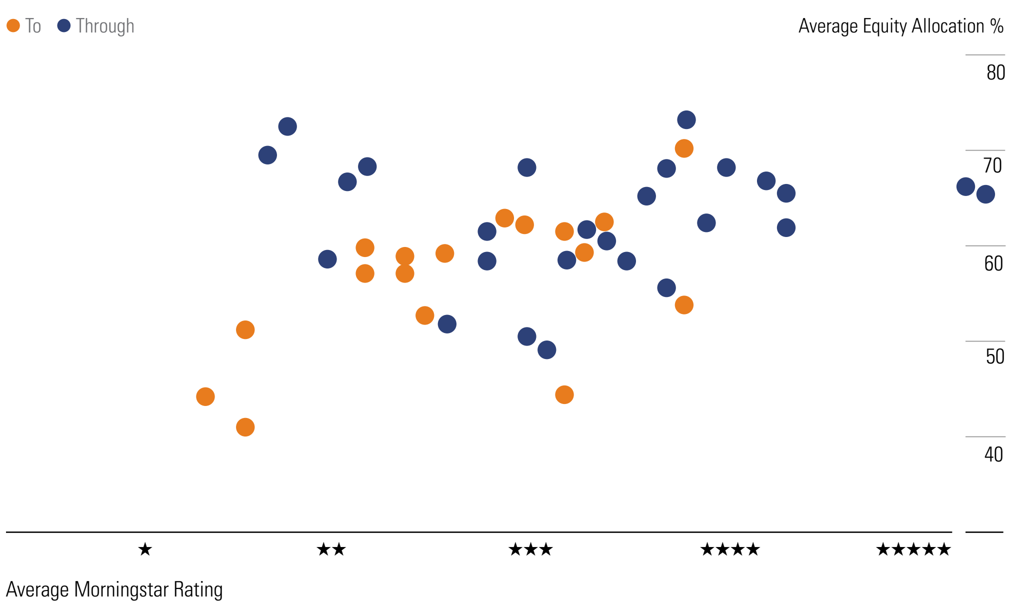
Given the equity market's overall rise in recent years, returns of "to" glide paths have tended to fall behind those of their "through" counterparts. Exhibit 6 plots the average return rank of each series' target-date funds versus the series' average 60-year equity allocation, and during the last five years through 2013, there's a clear and positive relationship between series having higher allocations to stocks and also achieving better overall performance rankings. That relationship still holds when considering series' average Overall Morningstar Rating for funds, which adjusts for risk and accounts for series' various track-record lengths. (The Overall Morningstar Rating uses a combination of three-, five-, and 10-year records as funds reach those milestones, so the overall star ratings for two series may incorporate different time periods, depending on their ages.) As shown by Exhibit 7, the difference in performance is a little less stark on a risk-adjusted basis, with "to" series clustered more tightly with "through" series.

Exhibit 6 Series' Average Target-Date Fund 5-Year Return Rank, by "To" and "Through" Series



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 7 Series' Average Target-Date Fund Overall Morningstar Rating, by "To" and "Through" Series



Source: Morningstar, Inc. as of 12/31/2013

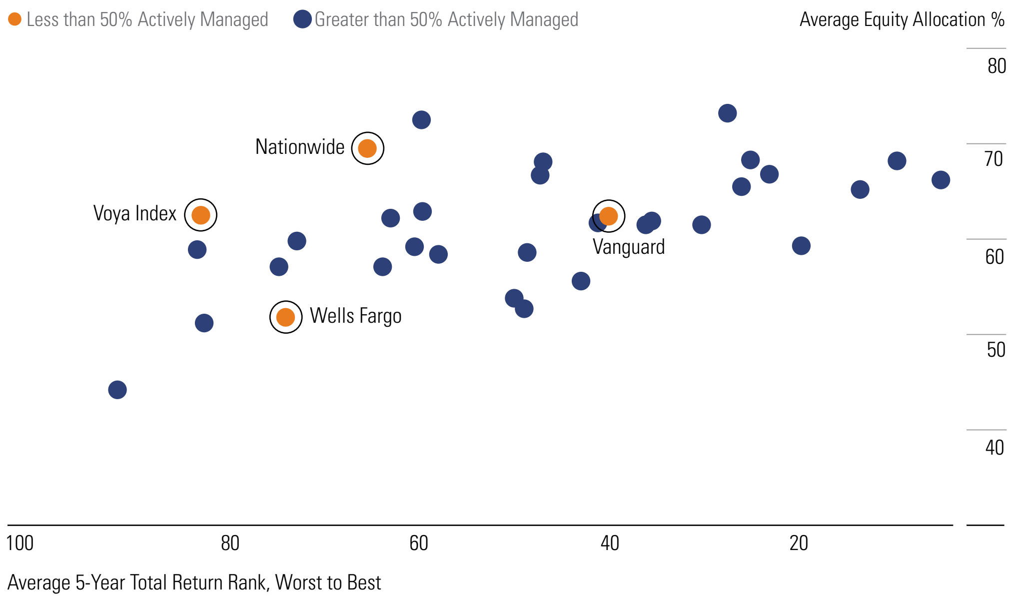
When Index Management Doesn't Work

The majority of the target-date industry's assets are invested in actively managed underlying strategies, but target-date portfolio managers often work passively managed funds into the portfolio for a number of reasons. Roughly three fourths of target-date series have at least some exposure to an index-based underlying fund. For one, it often gives those funds a cost advantage compared with peers, and Exhibit 30 on page 38 in the Price section demonstrates that series relying more heavily on passively managed underlying strategies generally have lower fees.

For many of those series, though, their costs haven't been low enough to translate into an actual performance advantage. Take the Nationwide Destination series: Its asset-weighted average expense ratio in 2013 of 0.89% may put it in the cheaper half of the target-date universe, but it's still fairly pricey for a primarily index-based approach. Not even the series' relatively high equity allocation has been able to compensate, as the fund's average 64th percentile five-year rank and average Morningstar Rating of 1.3 stars can attest. The Voya Index Solution and Wells Fargo Advantage Dow Jones Target Date series fall into a similar camp, with fees that may be lower than the industry's average but are high compared with other primarily passively managed alternatives (the latter's returns have also been held back by having one of the indsutry's least equity-heavy glide paths).

Vanguard's series remains one of the strongest examples of how a low-cost model—its weighted average fees are the second-lowest in the industry—translates to better results in the long run. The TIAA-CREF Lifecycle Index series, with the third-lowest asset-weighted fees, also has more than held its own during the relatively short four-plus years since it launched. Despite having the lowest fees in the industry, Fidelity Freedom Index series has failed to distinguish itself since its late-2009 launch; its lower overall equity allocation played a role, and so did a hefty allocation to a largely falling commodities market. In late 2013, Fidelity upped the equity allocation for its various suites of target-date funds while also scaling back its allocations to commodities.

Exhibit 8 Series' Average 5-Year Return Rank, by Actively and Passively Managed Series



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 9 Series' Average Overall Morningstar Rating, by Actively and Passively Managed Series

Source: Morningstar, Inc. as of 12/31/2013

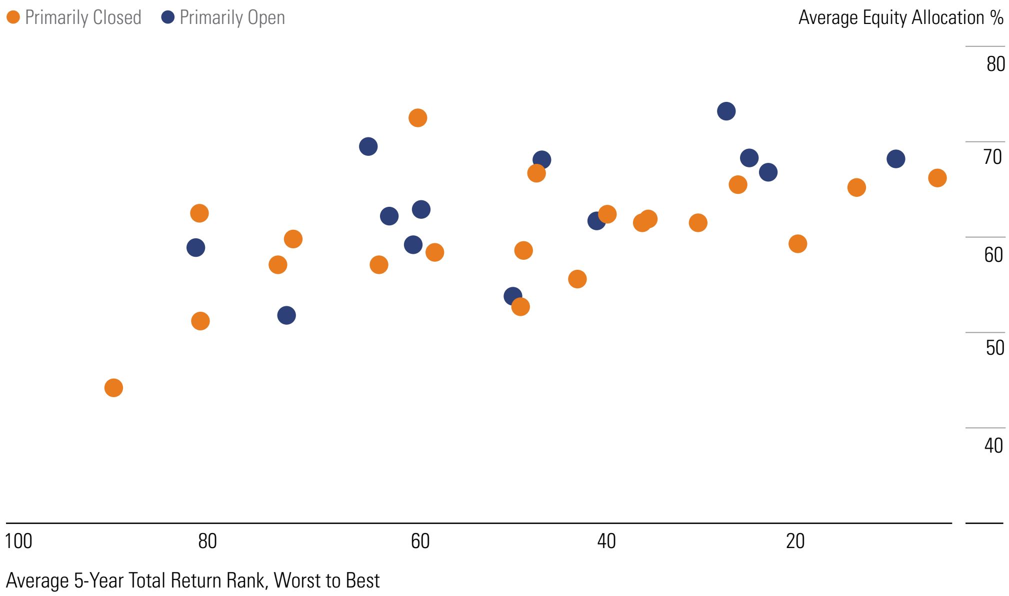
Open Architecture: No Clear Advantage

Open-architecture target-date series that aren't beholden to a single fund family's investment lineup should have an edge over their closed-architecture brethren. After all, even the strongest investment firms may not be industry-leading in every asset class used by a target-date series; it's unlikely that all of their offerings will be posting relatively strong results at all times. Alternatively, custom target-date funds, composed of a retirement plan's existing and vetted investments, can use best-in-class managers, no matter their fund-family affiliation.

So far, though, open-architecture series have failed to live up to their promise. Along various performance measures, series with half their assets or more invested in nonpropietary investments haven't distinguished themselves from those that keep more than half their assets in their firm's proprietary funds. In Exhibits 10 and 11, the relatively uniform scattering of "Primarily Open" and "Primarily Closed" series visually show this. The typical open-architecture series has an average five-year total return rank in the 48th percentile, which is basically in line with its closed-architecture counterpart's 49th percentile showing. Both types of series have average Moringstar Ratings of 2.7 stars across their vintages.

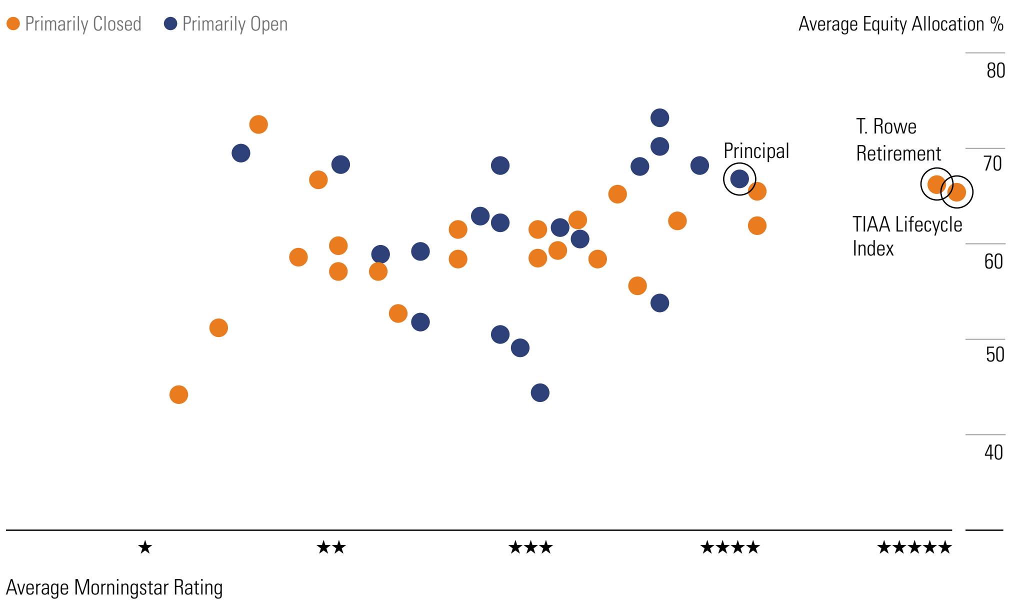
Higher costs from open-architecture funds play some role in this undistinguished showing. Those series have average asset-weighted costs of 0.92%, more than 10 basis points greater than closed-architecture series' average 0.81% expense ratio. Altogether, those figures hint that open-architecture series may hold more successful underlying funds, but that benefit is negated by their higher costs.

Exhibit 10 Series' Average Target-Date Fund 5-Year Return Rank, by Open and Closed Series



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 11 Series' Average Target-Date Fund Morningstar Rating, by Open and Closed Series



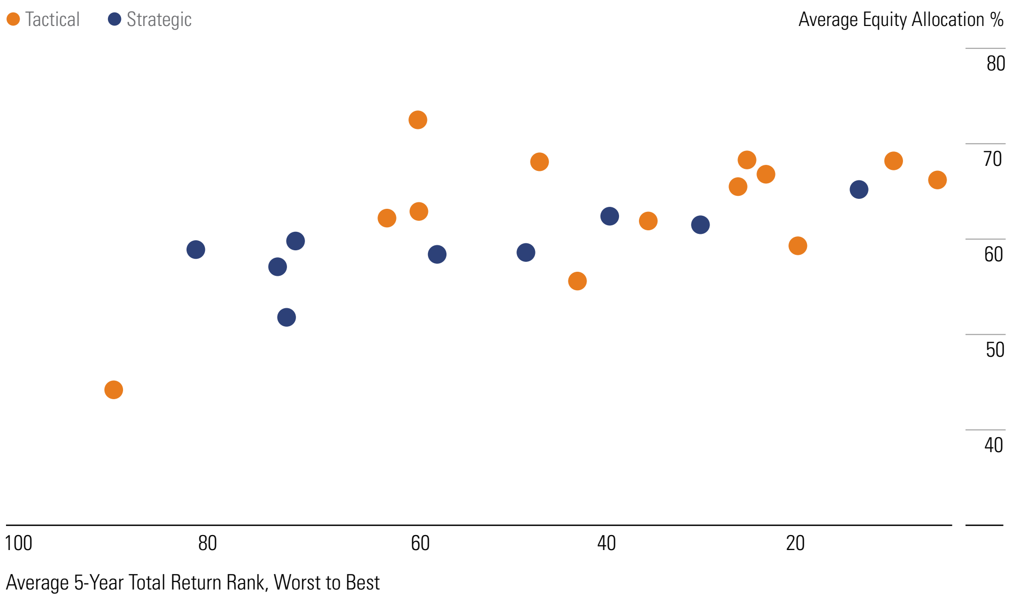
Source: Morningstar, Inc. as of 12/31/2013

Tactically Managed Target-Date Series Show an Edge

Some target-date managers have the flexibility to tactically deviate from the strategic, long-term allocations set forth by their asset-allocation glide paths. It's a tool that has intuitive appeal since it may allow managers to avoid frothy areas of the market or jump into asset classes that appear poised for a turnaround. There's much research to show that such market-timing moves are difficult to consistently execute well, but so far, many target-date managers with tactical leeway have generally delivered relatively strong results.

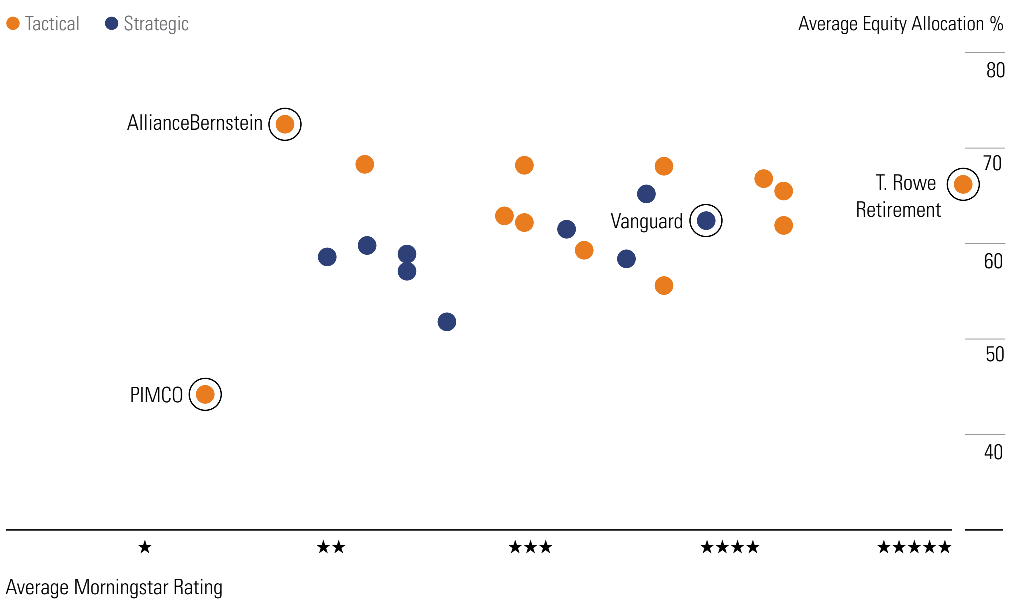
Because a series' use of tactical management is often ill-disclosed in its filings and other publicly available materials, Morningstar only tracks the use of tactical or strategic management for the 22 series under its analysts' coverage. Of that group, nine stick closely to their long-term glide paths, while 13 have varying levels of lattitude to opportunistically change their series' shorter-term asset allocations. On average, the target-date funds for series that use strategic management have an average five-year total return rank in the 54th percentile, while those that use tactical management have a 39th percentile average rank. As Exhibits 12 and 13 show, as a group, tactical series' glide paths also tend to have more equities than those without tactical budgets; the former averages a 63% equity allocation over 60 years versus the latter's 59%, so the difference is relatively minor. The patterns carry through to the series' risk-adjusted results, as measured by their funds' Morningstar Ratings. The typical tactically managed series averages 2.9 stars, while the strategically managed counterpart averages 2.5 stars.

Exhibit 12 Series' Average Target-Date Fund 5-Year Return Rank, by Strategic and Tactical Series



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 13 Series' Average Target-Date Fund Morningstar Rating, by Strategic and Tactical Series



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 14 Target-Date Series Investment Process Details, Average Five-Year Return Ranks and Average Morningstar Ratings[2]

Target Date Series	Glide Path Type	Actively Managed %	Open Architecture %	Tactical or Strategic Mgmt[2]	Average 60-year Glide Path Equity Allocation %	Average 5-Year Total Return Percentile Rank	Average of Morningstar Rating ★'s
"Through" Glide Paths'							
AllianceBernstein Retirement Strategies	Through	100.0	2.6	Tactical	72.5	58.8	1.4
American Funds Trgt Date Retirement	Through	100.0	0.0	Strategic	65.2	14.7	3.2
BMO Target Date Retirement	Through	83.0	78.7		63.0	n/a	n/a
Fidelity Advisor Freedom	Through	96.7	0.0	Strategic	58.6	48.1	1.6
Fidelity Freedom Index	Through	8.1	0.0		58.4	n/a	2.4
Fidelity Freedom K	Through	97.3	0.0		58.5	n/a	2.8
Fidelity Freedom	Through	97.2	0.0	Strategic	58.4	57.0	3.1
Great-West Lifetime I	Through	62.4	78.7		50.5	n/a	2.6
Great-West Lifetime II	Through	60.3	83.6		60.5	n/a	3.0
Great-West Lifetime III	Through	57.7	88.6		68.2	n/a	3.6
Guidestone Funds MyDestination	Through	100.0	100.0		73.2	28.0	3.4
Harbor Target Retirement	Through	100.0	100.0		49.1	n/a	2.7
Hartford Target Retirement	Through	100.0	87.2		61.7	41.0	2.9
JHancock Retiremnt Living through	Through	100.0	56.8	Tactical	68.2	11.0	2.6
John Hancock Retirement Living II	Through	n/a	n/a		68.0	n/a	n/a
Legg Mason Target Retirement	Through	68.4	31.6		66.7	46.8	1.7
MainStay Retirement	Through	77.0	11.4		61.5	36.2	2.4
Manning & Napier Target	Through	100.0	0.0	Tactical	55.6	42.7	3.3
MassMutual RetireSMART	Through	88.0	52.1	Tactical	68.3	25.7	1.8
Nationwide Target Destination	Through	18.9	97.8		69.5	63.9	1.3
Principal LifeTime	Through	87.9	54.6	Tactical	66.8	23.8	3.8
Schwab Target	Through	78.3	48.1	Tactical	61.9	35.6	3.9
Strategic Adviser Multi-Manager	Through	99.0	89.7		63.8	n/a	n/a
T. Rowe Price Retirement	Through	86.3	0.0	Tactical	66.2	6.6	4.8
T. Rowe Price Target Retire	Through	86.5	0.0		58.2	n/a	n/a
TIAA-CREF Lifecycle Index	Through	1.6	0.0		65.4	n/a	4.9
TIAA-CREF Lifecycle	Through	100.0	0.0	Tactical	65.5	26.6	3.9
Vanguard Target Retirement	Through	0.0	0.0	Strategic	62.4	39.7	3.5
Vantagepoint Milestone	Through	79.7	100.0	Tactical	68.1	46.5	3.3
Wells Fargo Advantage DJ Target	Through	4.0	96.0	Strategic	51.8	72.1	2.2
"Through" Glide Paths' Average		**73.7**	**43.4**		**62.9**	**38.1**	**2.9**
"To" Glide Paths'							
AllianzGI Retirement	To	88.9	9.2		51.2	80.5	1.2
American Century One Choice	To	100.0	0.0	Strategic	59.8	71.2	1.8
BlackRock LifePath Index	To	0.2	0.0		57.1	n/a	n/a
BlackRock LifePath	To	73.4	0.0	Strategic	57.1	73.0	2.0
BlackRock LifePath® Active	To	81.5	0.0		57.1	62.6	1.8
DWS LifeCompass	To	57.8	51.0		59.2	59.4	2.2
Great-West SecureFoundation® Lifetime	To	0.0	69.1		70.2	n/a	3.4
Invesco Balanced-Risk Retirement	To	n/a	n/a		41.0	85.4	1.2
John Hancock Retirement Choices	To	49.3	51.5		44.4	n/a	2.8
JPMorgan SmartRetirement Blend	To	27.2	74.2		59.3	n/a	n/a

Exhibit 14 Target-Date Series Investment Process Details, Average Five-Year Return Ranks and Average Morningstar Ratings[2] (Continued)

Target Date Series	Glide Path Type	Actively Managed %	Open Architecture %	Tactical or Strategic Mgmt[2]	Average 60-year Glide Path Equity Allocation %	Average 5-Year Total Return Percentile Rank	Average of Morningstar Rating ★'s
JPMorgan SmartRetirement	To	99.8	0.0	Tactical	59.3	20.6	2.9
MFS Lifetime	To	100.0	0.0	Strategic	61.5	30.6	2.8
PIMCO RealRetirement	To	91.8	8.0	Tactical	44.2	89.2	1.0
PNC Target	To	80.0	29.0		53.1	n/a	n/a
Putnam RetirementReady	To	100.0	0.0		52.7	48.4	2.1
Russell LifePoints Target Date	To	100.0	100.0	Tactical	62.2	61.8	2.6
State Farm Lifepath	To	74.7	100.0	Strategic	58.9	81.2	2.0
USAA Target Retirement	To	94.5	65.1		53.8	49.4	3.4
Voya Index Solution	To	0.0	12.1		62.5	80.6	3.0
Voya Retirement Solution	To	82.8	33.0		62.5	n/a	n/a
Voya Solution	To	80.9	49.7	Tactical	62.9	58.6	2.5
"To" Glide Paths' Average		**69.1**	**32.6**		**56.6**	**63.5**	**2.3**

Source: Morningstar, Inc. as of 12/31/2013

2. Morningstar only provides "Tactical" and "Strategic" glide-path management designations for the 22 target-date series currently under Morningstar analyst coverage.

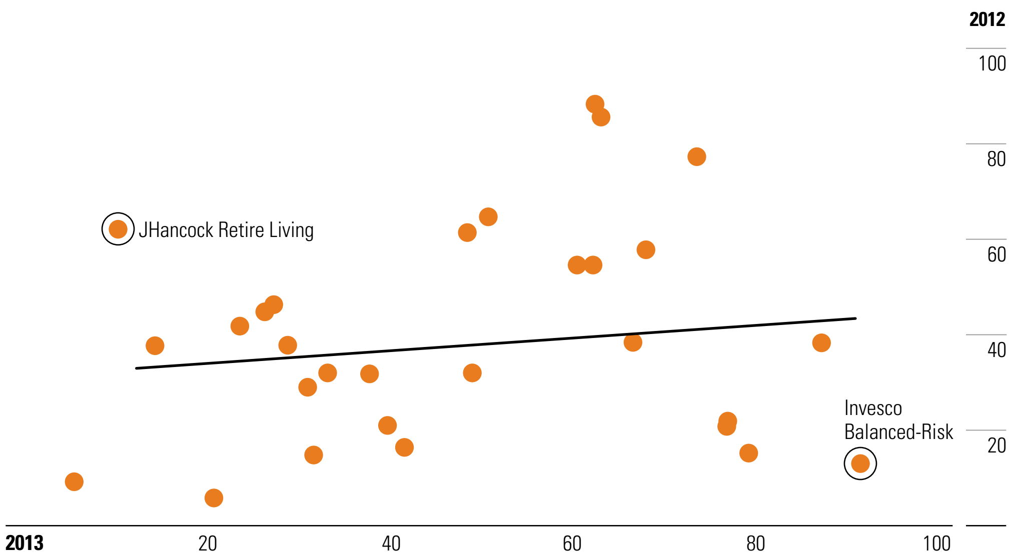
Performance

What a Difference a Year Makes

To the chagrin of some and the relief of others, target-date series saw their 2008 returns roll off of their five-year performance numbers in 2013. For many series, losing the record connected to that year's market turmoil resulted in dramatic changes in their relative results. Exhibit 15 averages the return ranks for each target-date series' vintage years for the five years as of year-end 2013 and compares them with the five years ended 2012 (which includes 2008 results). On average, series saw more than a 20-point differnce in their average ranks. In contrast, the change from 2011 to 2012, shown in Exhibit 16, produced an average difference of just 10 points. The difference in slope between the two charts' trend lines—Exhibit 15's flatter line versus Exhibit 16's almost 45-degree angle—illustrate the difference as well, with a flatter line indicating the weaker relationship between the results through 2012 and 2013.

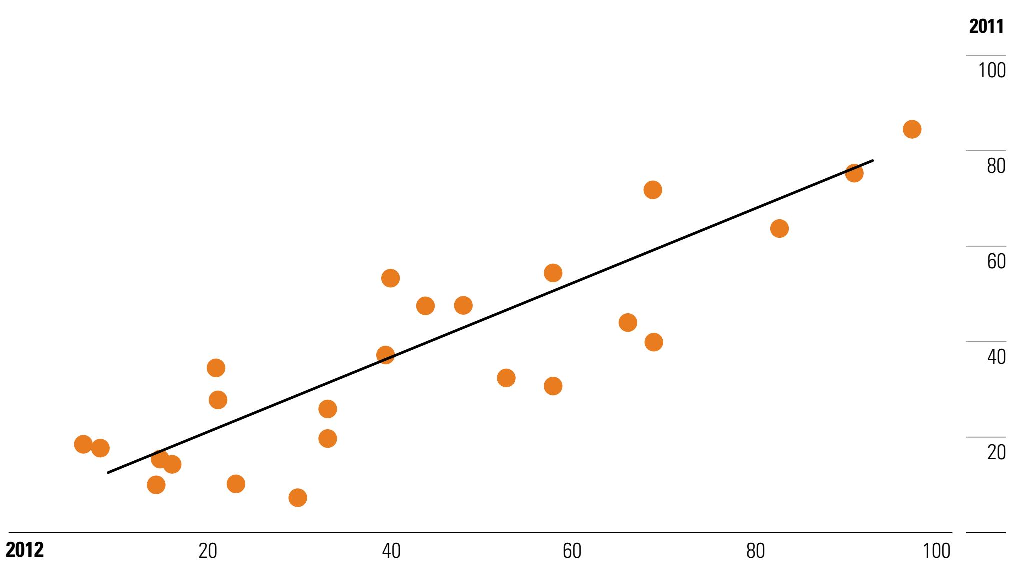
The Invesco Balanced-Risk Retirement series saw the most dramatic change: For the five years through year-end 2013, funds in the series ranked, on average, in the 85th percentile; it previously averaged in the 13th percentile over the five years through 2012. Invesco has one of the more unusual asset-allocation glide paths in the industry, with a large emphasis on commodities. Its change in standing is an extreme example of how a series that had strong trailing returns in 2012 saw the tide turn in 2013. More equity-heavy series saw the opposite phenomenon, with the John Hancock Retirement Living series seeing the largest improvement. Its average rank improved from the 62nd percentile in 2012 to the 11th percentile in 2013.

Exhibit 15 Series' Average 5-Year Return Percentile Rank through 2013 and 2012



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 16 Series' Average 5-Year Return Percentile Rank through 2012 and 2011



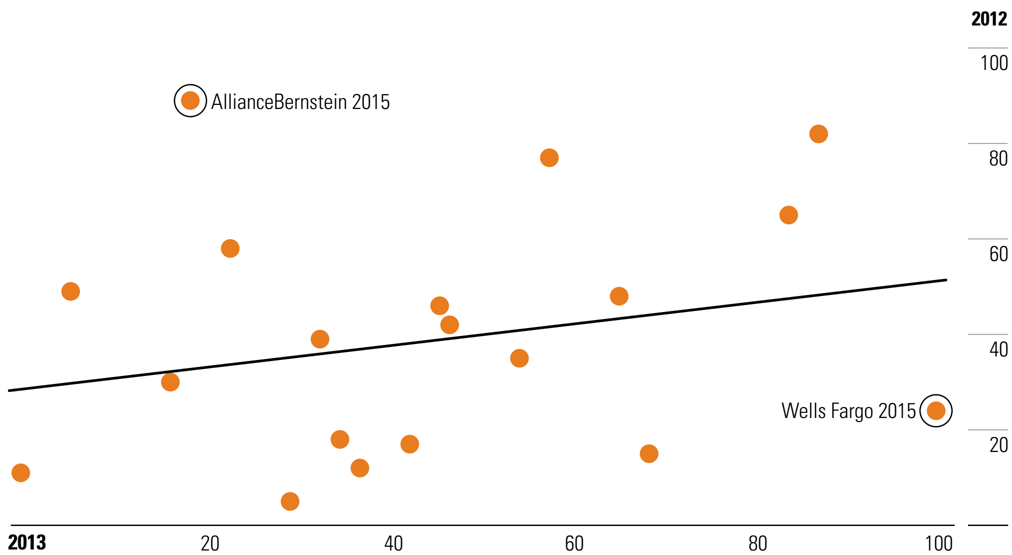
Source: Morningstar, Inc. as of 12/31/2013

Asset Mix Varies More for Those Closest to Retirement Than Those Just Starting Their Careers

Losing 2008's results from five-year trailing returns had big effects on many target-date series' records, but the consequences on specific target-date vintages were more nuanced. The industry's shorter-dated target-date funds have more variation in their equity allocations than longer-dated ones. Funds aimed at those planning to retire in 2015, for instance, have glide-path equity allocations that vary from between 25% to 78%, while the equity allocations for 2045 funds are more tightly clustered, ranging from 80% to 100%.

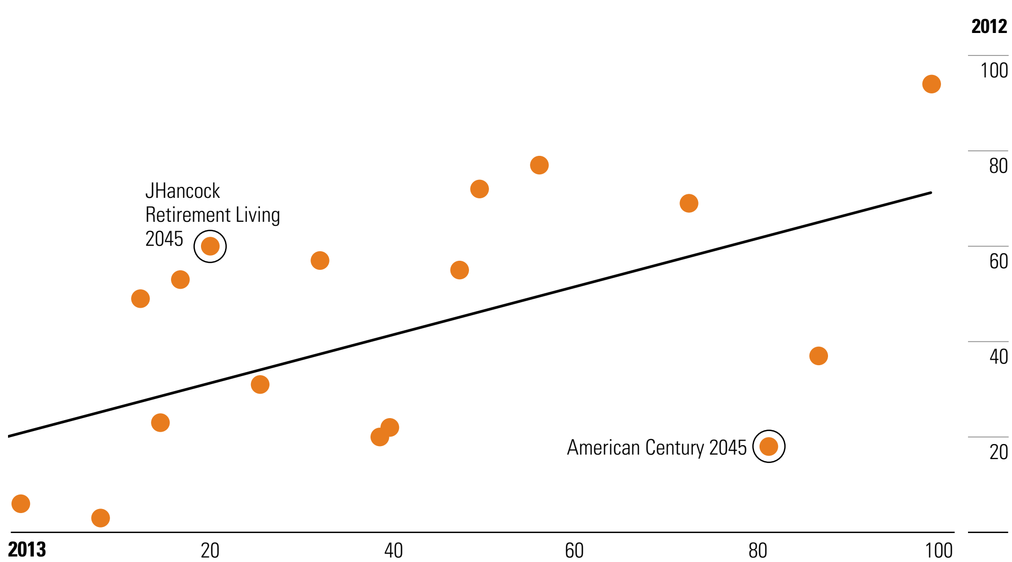
As the flatter trend line in Exhibit 17 shows, the shorter-dated 2015 funds saw a bigger change in their trailing five-year relative rankings between 2012 and 2013 compared with longer-dated 2045 funds. On average, 2015 funds saw a 24-percentile-point change, with Wells Fargo Advantage Dow Jones Target 2015 seeing the most deterioration and AllianceBernstein 2015 Retirement Strategy seeing the most improvement. The 2045 funds averaged a 21-point change between 2012 and 2013, and American Century One Choice 2045 fell furthest while John Hancock Retirement Living through 2045 had the greatest rise. Similar to target-date series' overall results, for the individual funds, those with greater equity allocations tended to see the greatest improvements in their standings, while more fixed-income-heavy funds generally saw their five-year rankings fall the most.

Exhibit 17 Target-Date 2015 Funds' 5-Year Return Percentile Ranks through 2013 and 2012



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 18 Target-Date 2045 Funds' 5-Year Return Ranks through 2013 and 2012



Source: Morningstar, Inc. as of 12/31/2013

Higher-Quality Bonds and International Equities Damping Results

Balanced funds are a straightforward alternative to target-date funds, so it's reasonable to compare the funds' performances. The well-known 60% equities/ 40% fixed-income balanced funds fall in the Morningstar Category of moderate allocation. That group had an average 59% allocation to equities at the end of 2013, comparable with the 2021-2025 category's 61% equity allocation. That higher equity stake should have been a tailwind for the target-date funds, but the typical moderate-allocation fund gained 16.5% in 2013, outpacing the 2021–2025 category by almost 120 basis points. The target-date funds' more international flavor held them back in a market where U.S. stocks soundly outpaced their non-U.S. counterparts. Target-date funds' bond portfolios generally have a higher-quality profile versus the typical moderate-allocation fund, and that also acted as an anchor in 2013 when less creditworthy fare tended to dominate results.

In common market environments, where equities outperform fixed income, returns from target-date funds should steadily rise as allocations to equities increase from the shortest- to the longest-dated funds. That pattern mostly held in 2013, though returns for the 2036-2040 and 2046-2050 categories broke from norms; it was a minuscule difference for the former, but the 2046-2050 category average lagged the typical 2041–2045 by almost 1 percentage point. The differences are largely due to an industry quirk where some series offer funds only in 10-year increments. All told, the seven target-date series with decade-spaced funds, including PNC Target, State Farm LifePath, and USAA Target Retirement, also happen to have lower overall equity allocations.

Exhibit 19 2013, 3-Year, and 5-Year Returns for Morningstar Target-Date Categories and Selected Benchmarks

Total Return (Annualized)

Category	2013 Return	3-Year	5-Year
Retirement Income	7.36	5.94	8.92
2000-2010	8.30	6.20	10.17
2011-2015	9.65	6.56	10.76
2016-2020	11.57	7.53	11.64
2021-2025	15.30	8.48	13.16
2026-2030	16.65	9.00	13.62
2031-2035	20.00	9.90	14.56
2036-2040	19.97	9.90	14.72
2041-2045	22.00	10.50	15.14
2046-2050	21.02	10.23	15.16
2051+	23.14	10.90	15.59
Moderate Allocation	16.48	9.13	12.53
Benchmark			
S&P 500 TR USD	32.39	16.18	17.94
MSCI EAFE NR USD	22.80	9.73	14.92
MSCI EM NR USD	–2.60	–2.06	14.79
Barclays US Agg Bond	–2.02	3.26	4.44

Source: Morningstar, Inc. as of 12/31/2013

Scuffing Some of the Shine From Returns

Morningstar Risk Adjusted Return is a measure that takes into account several factors, including loads, the risk-free rate, and research into investing behavior and utility theory, which show that a given unit of loss tends to produce more "hurt" than the "pleasure" gained from an equivalent unit of gain. It also considers that investors prefer a guaranteed return over an uncertain one. A fund's MRAR is equal to the guaranteed return that would provide an investor the same level of utility (or "pleasure") as that provided by the fund's specific pattern of returns, after accounting for sales loads and the risk free alternatives. Because investors prefer certainty over uncertainty, MRAR is always lower than total return.

The gap between total return and MRAR has varied considerably, depending on the series. Exhibit 20 sorts series by their five-year total returns, from best to worst, and also compares them with their MRAR. The color gradients in all three columns—with green shades being the best, white in the middle, and red shades the worst—give an indication of how the series fare based on the two measures, as well as the difference between the two. The list uses each series' oldest share class--a common method for screening funds, though it also mixes load and no-load funds in the measurements. For series such as John Hancock Retirement Living and American Funds Target Date Retirement series, those funds' loads have notably contributed to the difference between total return and risk-adjust return. For no-load series, the difference between the two figures primarily reflects the psychic discount incurred from the funds' volatility, particularly on the downside. That discount matters because it helps to determine whether or not an investor is willing to stick with investments through the bad times in order to gain from the good ones.

Exhibit 20 Target-Date Series' Average 5-Year Total Return and Morningstar Risk-Adjusted Return
Quintile: Top 20-40% Middle 60%-80% Bottom

Target-Date Series	5-Year Average Total Return	Risk-Adj Return	Difference
T. Rowe Price Retirement	15.8	13.5	–2.3
BMO Target Date Retirement	15.0	12.7	–2.3
JHancock Retirement Living Through	15.0	11.3	–3.7
American Funds Target Date Retirement	14.8	11.5	–3.3
Franklin LifeSmart	14.3	11.1	–3.2
JPMorgan SmartRetirement	14.2	11.1	–3.2
Principal LifeTime	14.2	12.0	–2.2
TIAA-CREF Lifecycle	13.9	11.8	–2.1
MainStay Retirement	13.9	10.6	–3.3
Hartford Target Retirement	13.9	11.2	–2.6
GuideStone Funds MyDestination	13.8	11.5	–2.3
MassMutual RetireSMART	13.7	10.2	–3.5
Legg Mason Target Retirement	13.6	9.8	–3.8
BlackRock LifePath® Active	13.6	10.3	–3.3
Schwab Target	13.5	11.8	–1.7
Vanguard Target Retirement	13.4	11.5	–1.9
Putnam RetirementReady	13.3	10.2	–3.1
USAA Target Retirement	13.3	11.5	–1.7
MFS Lifetime	13.2	10.4	–2.8
Russell LifePoints Target Date	13.0	10.9	–2.1
Fidelity Advisor Freedom	12.9	9.6	–3.2
Manning & Napier Target	12.8	11.0	–1.9
AllianceBernstein Retirement Strategies	12.8	9.3	–3.5
American Century One Choice	12.7	9.8	–2.9
Vantagepoint Milestone	12.6	10.9	–1.6
ING Solution	12.5	10.5	–2.1
Fidelity Freedom	12.3	10.6	–1.7
Nationwide Target Destination	12.1	8.8	–3.3
BlackRock LifePath	12.1	9.8	–2.3
DWS LifeCompass	12.0	9.5	–2.4
State Farm Lifepath	11.7	8.9	–2.8
ING Index Solution	11.7	9.8	–1.8
Wells Fargo Advantage DJ Target Date	11.4	9.1	–2.3
AllianzGI Retirement	11.3	8.7	–2.6
Invesco Balanced-Risk Retirement	11.1	8.6	–2.6
PIMCO RealRetirement	10.7	8.4	–2.3

Source: Morningstar, Inc. as of 12/31/2013

Active Managers Struggle to Add Value for Target-Date Funds

Morningstar breaks down target-date series' returns into three parts, measuring the outperformance that comes from costs, glide-path decisions, and security selection. The portions attributable to costs and glide-path allocations are both measured against industry averages, and as a result, about half of target-date series will show positive contributions from those two areas, while the other half will show negative contributions. As the uniformly negative numbers of Exhibit 21's last column shows, though, that balance doesn't extend to attribution results from security selection. Morningstar's target-date attribution results show that no series has produced security selection that's been additive to the series' three-year return, on average. The benchmarks used in the attribution analysis may have an advantage. They are streamlined relative to target-date series' more diversified approach, and diversification hasn't paid off during the past three years. The latter employs the Morningstar US Market Index, MSCI EAFE Index, Barclays U.S. Aggregate Bond Index, Dow Jones U.S. Select REIT Index, and U.S. Treasury T-bills to represent its five asset classes; additional asset classes used within the industry include international and high-yield fixed income, as well as commodities and emerging-markets equities.

The target-date industry's preference for actively managed strategies also contributed to the shortfall. Like passive investments in general, index-based series such as TIAA-CREF Lifecycle Index and Vanguard Target Retirement have stronger overall attribution results for the period. The Fidelity Freedom Index series and Wells Fargo Advantage Dow Jones Target Date series are notable exceptions. A hefty allocation to commodities particularly hurt all of Fidelity's target-date offerings, while Wells Fargo employs a highly unusual method of equal-weighting many of the indexes underlying its funds.

Exhibit 21 Three-Year Performance Attribution, 1/1/2011 to 12/31/2013

Target-Date Series	Total Attribution	Cost	Strategic Allocation	Security Selection
TIAA-CREF Lifecycle Index	0.4	0.7	0.6	-0.9
TIAA-CREF Lifecycle	–0.1	0.3	0.5	–0.9
American Funds Target Date Retirement	–0.1	–0.1	0.5	–0.5
T. Rowe Price Retirement	–0.1	0.1	0.5	–0.7
Vanguard Target Retirement	–0.2	0.7	0.4	–1.3
Schwab Target	–0.3	0.1	0.2	–0.6
Vantagepoint Milestone	–0.6	0.2	0.9	–1.7
BMO Target Date Retirement	–0.6	0.0	0.5	–1.2
MainStay Retirement	–0.9	–0.1	0.4	–1.1
Principal LifeTime	–1.0	0.0	0.5	–1.5
Voya Index Solution	–1.4	0.0	0.4	–1.7
MFS Lifetime	–1.4	–0.1	0.3	–1.5
JPMorgan SmartRetirement	–1.4	0.1	–0.1	–1.4
MassMutual RetireSMART	–1.4	–0.1	1.0	–2.2
American Century One Choice	–1.5	–0.1	–0.4	–1.1
Great-West Lifetime III	–1.5	–0.1	0.5	–1.9
JHancock Retiremnt Living through	–1.8	0.0	1.0	–2.7
Guidestone Funds MyDestination	–2.0	–0.3	1.3	–2.9
DWS LifeCompass	–2.0	–0.1	0.1	–1.9
Fidelity Freedom K	–2.1	0.3	–0.5	–1.9
Nationwide Target Destination	–2.1	0.0	0.2	–2.3
Great-West Lifetime II	–2.2	–0.1	–0.2	–1.8
Harbor Target Retirement	–2.2	0.2	–1.2	–1.2
Voya Solution	–2.2	–0.3	0.4	–2.4
Fidelity Freedom Index	–2.3	0.7	–0.5	–2.5
Fidelity Freedom	–2.3	0.1	–0.5	–2.0
BlackRock LifePath® Active	–2.4	–0.2	–0.3	–1.9
Putnam RetirementReady	–2.4	–0.2	–0.5	–1.8
Manning & Napier Target	–2.5	–0.2	–0.4	–1.9
Legg Mason Target Retirement	–2.5	–0.5	0.7	–2.6
John Hancock Retirement Choices	–2.6	0.2	–1.2	–1.6
Hartford Target Retirement	–2.6	–0.3	0.3	–2.7
USAA Target Retirement	–2.7	0.1	–0.8	–2.0
Fidelity Advisor Freedom	–2.7	–0.1	–0.2	–2.4
Franklin Templeton Retirement	–2.9	–0.2	–0.3	–2.4
Great-West Lifetime I	–3.0	–0.1	–1.2	–1.7
Russell LifePoints Target Date	–3.0	–0.1	0.3	–3.3
Wells Fargo Advantage DJ Target	–3.0	0.4	–0.9	–2.5
AllianceBernstein Retirement Strategires	–3.1	–0.1	1.2	–4.1
BlackRock LifePath	–3.1	–0.1	–0.3	–2.7
State Farm Lifepath	–3.4	–0.3	–0.1	–3.1
Invesco Balanced-Risk Retirement	–4.2	–0.2	–3.1	–0.9
AllianzGI Retirement	–4.4	0.0	–2.1	–2.3
PIMCO RealRetirement	–5.3	0.0	–1.3	–4.0

Source: Morningstar, Inc. as of 12/31/2013

Exhibit 22 Target-Date Series' Average Return Rankings and Morningstar Ratings

	Average Percentile Rank			
Target-Date Series	2013	3-Years	5-Years	Average Morningstar Rating ★'s
American Funds Target Date Retirement	3.0	3.0	14.7	3.2
MainStay Retirement	7.2	13.0	36.2	2.4
TIAA-CREF Lifecycle	10.2	7.6	26.6	3.9
T. Rowe Price Retirement	10.9	8.6	6.6	4.8
Vantagepoint Milestone	11.2	21.1	46.5	3.3
Schwab Target	18.4	11.3	35.6	3.9
TIAA-CREF Lifecycle Index	19.3	9.3	n/a	4.9
Manning & Napier Target	23.9	35.7	42.7	3.3
JHancock Retiremnt Living Through	24.7	40.1	11.0	2.6
MassMutual RetireSMART	25.2	30.6	25.7	1.8
Vanguard Target Retirement	29.7	16.7	39.7	3.5
AllianceBernstein Retirement Strategies	30.3	73.5	58.8	1.4
Franklin LifeSmart	31.8	67.3	30.0	2.0
Great-West Lifetime III	32.6	27.0	n/a	3.6
DWS LifeCompass	33.4	48.2	59.4	2.2
Voya Index Solution	33.9	29.5	80.6	3.0
Great-West SecureFoundation® Lifetime	34.4	35.8	n/a	3.4
Nationwide Target Destination	35.8	49.9	63.9	1.3
Principal LifeTime	36.5	20.3	23.8	3.8
Voya Retirement Solution	40.4	n/a	n/a	n/a
Putnam RetirementReady	40.5	50.3	48.4	2.1
MFS Lifetime	40.6	33.0	30.6	2.8
Voya Solution	42.4	52.7	58.6	2.5
JPMorgan SmartRetirement	48.4	32.7	20.6	2.9
Fidelity Freedom K	52.9	59.6	n/a	2.8
Guidestone Funds MyDestination	54.5	32.4	28.0	3.4
Fidelity Freedom	54.9	62.5	57.0	3.1
Legg Mason Target Retirement	55.8	46.1	46.8	1.7
BlackRock LifePath® Active	56.5	49.8	62.6	1.8
Fidelity Advisor Freedom	59.1	66.8	48.1	1.6
Strategic Adviser Multi-Manager	59.2	n/a	n/a	n/a
JPMorgan SmartRetirement Blend	60.8	n/a	n/a	n/a
American Century One Choice	63.5	36.9	71.2	1.8
Great-West Lifetime II	63.6	42.4	n/a	3.0
PNC Target	64.6	n/a	n/a	n/a
BlackRock LifePath Index	68.8	n/a	n/a	n/a
Hartford Target Retirement	70.6	55.0	41.0	2.9
Russell LifePoints Target Date	71.5	76.9	61.8	2.6
Harbor Target Retirement	71.9	62.5	n/a	2.7
Fidelity Freedom Index	73.9	75.1	n/a	2.4
State Farm Lifepath	74.4	69.2	81.2	2.0
USAA Target Retirement	74.8	71.6	49.4	3.4
Wells Fargo Advantage DJ Target	76.5	82.1	72.1	2.2
Presidential® Managed Risk	76.6	n/a	n/a	n/a
BlackRock LifePath	78.9	69.0	73.0	2.0
John Hancock Retirement Choices	82.8	64.5	n/a	2.8
Great-West Lifetime I	85.6	73.4	n/a	2.6
AllianzGI Retirement	90.7	87.7	80.5	1.2
Invesco Balanced-Risk Retirement	93.8	78.8	85.4	1.2
PIMCO RealRetirement	95.4	93.6	89.2	1.0

Source: Morningstar, Inc. as of 12/31/2013

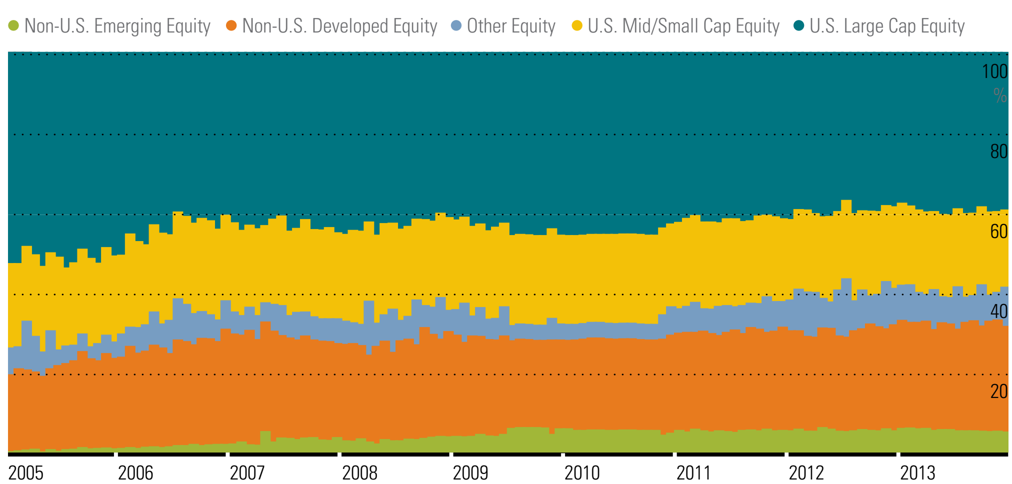
Portfolio

Target-Date Funds Stick Close to Home

A target-date series' investment process and its portfolio are intimately connected. Analyzing the former generally involves more macro-level considerations, such as whether the series uses active versus passive management or open versus closed architecture. The latter often takes a more detailed bent. Among those details, there's been noticeable change in the split between domestic and international exposure. Take the industry's 2040 funds: At the beginning of 2005, the average 2040 fund's allocation to international stocks stood at roughly 20% of its overall equity allocation. That figure has climbed over the years; by the end of 2013, non-U.S. stocks accounted for about a third of those funds' stock holdings. That allocation still represents a home country bias. The equity markets are split fairly evenly between U.S. and non-U.S. publicly traded companies.

Series that tend to have lighter allocations to non-U.S. firms include American Century One Choice. The series' management team takes a decidedly cautious approach as investors near retirement, so the series gradually decreases its already-light exposure to non-U.S. stocks as investors age. On an asset-weighted basis, the series keeps about 20% of its equity holdings in international companies. Hartford Target Retirement 2040 has the worldliest allocation, with an essentially even split between U.S. and non-U.S. stocks.

Exhibit 23 Average U.S. and Non-U.S. Equity Exposure Within Total Equity Allocation of Target-Date 2040 Funds, 2005-2013



Source: Morningstar, Inc. as of 12/31/2013

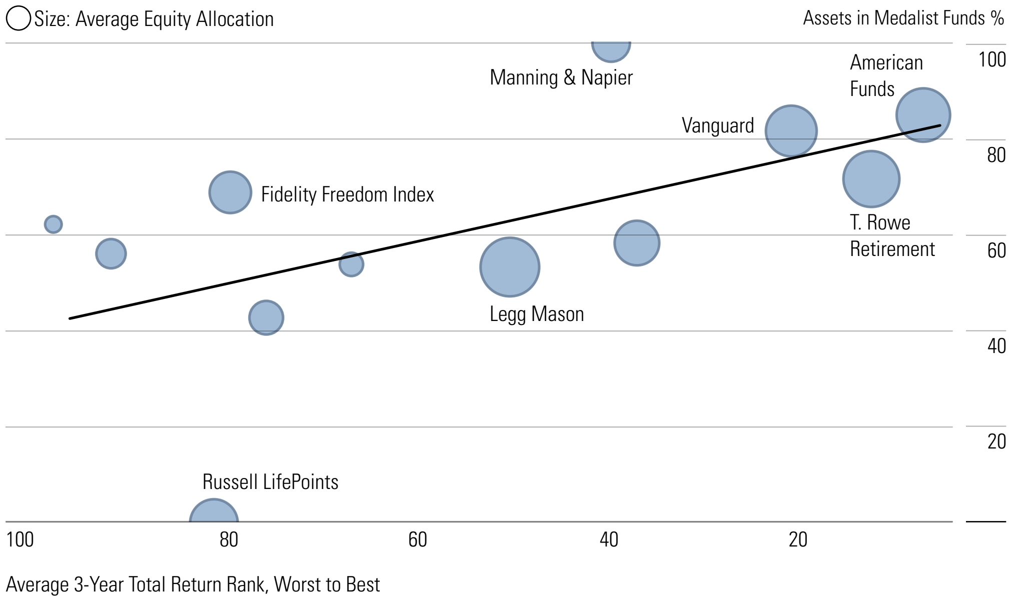
Pay Attention to What's Under the Hood

In addition to asset-allocation decisions, series' underlying strategies play important roles in target-date funds' results. Those strategies should be able to stand up to due-diligence scrutiny on their own merits, and the Morningstar Analyst Rating, launched in November 2011, gives one indication of their potential to do so. For the most part, target-date managers appear to be picking decent—and often strong—candidates that earn Analyst Ratings of Gold, Silver, or Bronze. Series generally don't use underlying funds that have Negative ratings; the Negative-rated AllianceBernstein Retirement Strategy series is somewhat of an exception, though not technically so. Rather than investing in funds, the series invests directly in a pool of securities that is run by the same teams managing funds that are rated by Morningstar. Two of the strategies used by the series are similar to AllianceBernstein International Growth AWPAX and AllianceBernstein International Value ABIAX, which both receive Analyst Ratings of Negative.

Assets in Neutral-rated funds also tend to be in the minority. The Russell LifePoints Target Date and Invesco Balanced-Risk Retirement series are notable exceptions: Of those series' underlying funds that are rated by Morningstar analysts (rated funds in those series amount to 78% and 67% of assets, respectively), all have Analyst Ratings of Neutral.

For series with at least 50% of assets in underlying funds rated by Morningstar analysts, performance has followed an encouraging pattern: As the upward-sloping line in Exhibit 24 suggests, series with a greater percentage of their assets in Morningstar Medalist funds tend to have stronger overall three-year returns. The relative sizes of the circles show that the highest ranking series in the group—those from American Funds, T. Rowe Price Retirement, and Vanguard—have also benefited from their heftier equity allocations. However, greater stock weightings haven't guaranteed success, as Legg Mason's middling showing and Russell LifePoints' near-bottom quintile average three-year return ranks demonstrate.

Exhibit 24 Average 3-Year Return Ranks for Target-Date Series With Greater Than 50% of Assets with Morningstar Analyst Rating Coverage



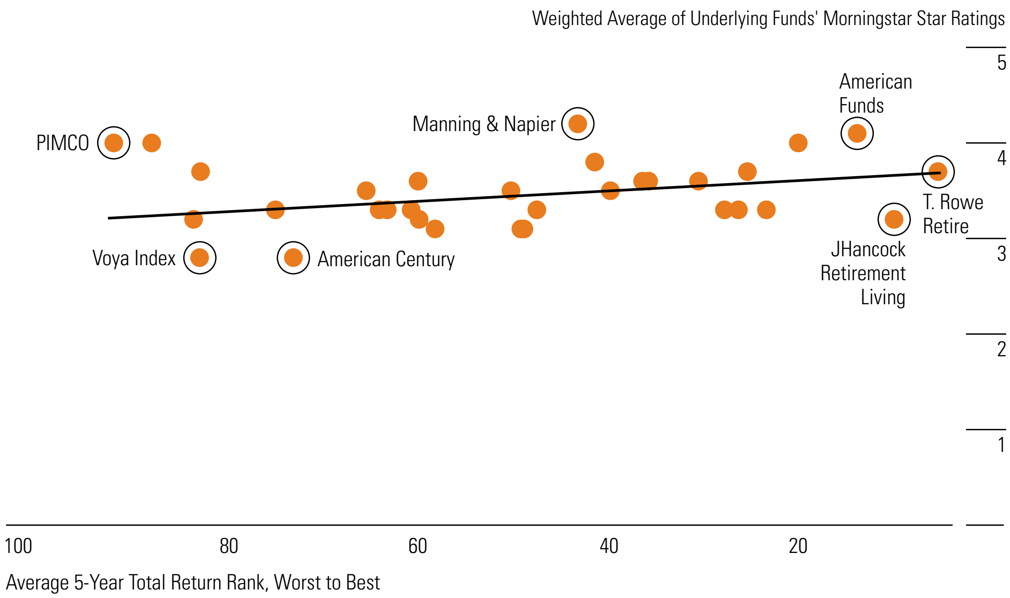
Source: Morningstar, Inc. as of 12/31/2013

Past Performance May Not Even Be a Good Indicator of the Past

Target-date series that use underlying funds with higher Morningstar Ratings (known as star ratings) often have stronger overall performance, though as the relatively flat trend line indicates, the relationship appears weaker than the one between target-date series performance and underlying funds that come recommended by Morningstar's forward-looking Analyst Ratings. The relatively weak relationship holds even when considering target-date funds' risk-adjusted results. There's no obvious systematic reason why series with underlying funds that fare better under a forward-looking rating system should show stronger results than those that have stronger star ratings. True, the latter is a backward-looking metric, but so is the measurement of target-date series' past performance. One possibility is that target-date managers tend to replace their underperforming underlying funds with those that have better records. Thus, a current target-date series' portfolio could include a set of winners even if those winners have not been employed long enough to help boost the series' record.

The Manning & Napier Target Date series boasts the highest proportion of assets in underlying Medalist funds (100%) as well as the highest asset-weighted star ratings of its underlying funds (4.2 stars). The target-date funds have an average 43rd percentile average standing, which may appear wanting, though the series also tends to hold a lighter equity stake than most of its target-date competitors. PIMCO's RealRetirement series falls under a more extreme form of that scenario: Its underlying funds on their own have posted strong past risk-adjusted results and have earned an average of 4.0 stars, but its emphasis on fixed income and commodities has held back the target-date funds, leading them to an average five-year return rank in the 89th percentile. On the other end of the spectrum, the John Hancock Retirement Living series' relatively higher allocation to equities seems to have made up for poorer outcomes from underlying holdings.

Exhibit 25 Target-Date Series' Average Five-Year Return Ranks and Underlying Funds' Average Morningstar Ratings



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 26 Morningstar Analyst Ratings of Target-Date Series' Underlying Funds

Target Date Series	Total Assets in Medalists %	Coverage%	Medalist %	Neutral %	Negative %
Series with Coverage Greater than 50% of Assets					
Manning & Napier Target	100	100	100	0	0
American Funds Target Date Retirement	84.8	88.9	95.3	4.7	0
Vanguard Target Retirement	81.8	81.8	100	0	0
T. Rowe Price Retirement	71.8	92.3	77.8	20.4	0
Fidelity Freedom Index	68.9	68.9	100	0	0
BMO Target Date Retirement	62.5	67.1	93.2	6.8	0
PIMCO RealRetirement	62.0	81.8	75.8	24.2	0
MFS Lifetime	58.0	61.3	94.7	5.3	0
AllianzGI Retirement	55.7	59.4	93.8	6.2	0
Harbor Target Retirement	53.6	53.6	100	0	0
Legg Mason Target Retirement	53.2	53.2	100	0	0
USAA Target Retirement	42.8	56.7	75.5	24.5	0
Russell LifePoints Target Date	—	78.0	0	100	0
Invesco Balanced-Risk Retirement	—	66.7	0	100	0
Series with Coverage less than 50% of Assets					
JPMorgan SmartRetirement	45.3	46.8	96.8	3.2	0
Franklin LifeSmart	42.8	44.4	96.5	3.5	0
MainStay Retirement	40.0	40.0	100	0.0	0
Schwab Target	39.8	49.2	80.9	19.1	0
Hartford Target Retirement	33.5	38.3	87.4	12.6	0
John Hancock Retirement Choices	33.1	33.1	100	0.0	0
Great-West Lifetime I	24.3	27.6	88.0	12.0	0
Great-West Lifetime II	23.2	26.0	89.1	10.9	0
Great-West Lifetime III	20.9	23.3	89.5	10.5	0
Voya Solution	8.5	8.7	97.0	3.0	0
JHancock Retiremnt Living Through	7.6	10.7	71.6	28.4	0
BlackRock LifePath® Active	7.5	36.4	20.5	79.5	0
American Century One Choice	6.1	6.1	100.0	0.0	0
MassMutual RetireSMART	4.9	8.6	56.8	43.2	0
Vantagepoint Milestone	3.6	16.9	21.4	78.6	0
Fidelity Freedom	2.3	2.3	100	0.0	0
Fidelity Freedom K	1.8	1.8	100	0.0	0
AllianceBernstein Retirement Strategies	1.4	1.4	100	0.0	0
Principal LifeTime	1.0	8.2	11.6	88.4	0
Voya Index Solution	0.8	0.8	100	0.0	0
TIAA-CREF Lifecycle	—	40.3	0	100	0
Fidelity Advisor Freedom	—	13.1	0	100	0
Guidestone Funds MyDestination	—	2.7	0	100	0
DWS LifeCompass	—	1.5	0	100	0

Source: Morningstar, Inc. as of 12/31/2013

Exhibit 27 Weighted Average Morningstar Rating of Target-Date Series' Underlying Funds

Target-Date Series	Weighted Average Morningstar Rating ★'s 2013	2012	Ratings Change from 2012 to 2013	2013 Coverage %
Manning & Napier Target	4.2	3.3	0.8	100.0
American Funds Target Date Retirement	4.1	4.0	0.1	100.0
PIMCO RealRetirement	4.0	4.2	–0.2	89.9
Franklin LifeSmart	4.0	n/a	n/a	94.2
BMO Target Date Retirement	4.0	n/a	n/a	31.6
Invesco Balanced-Risk Retirement	4.0	5.0	–1.0	66.7
JPMorgan SmartRetirement	4.0	3.7	0.3	92.1
Hartford Target Retirement	3.8	3.5	0.3	74.7
AllianzGI Retirement	3.7	3.9	–0.2	82.4
MassMutual RetireSMART	3.7	3.6	0.1	85.1
T. Rowe Price Retirement	3.7	3.5	0.2	95.3
MFS Lifetime	3.6	3.5	0.1	97.3
Schwab Target	3.6	3.4	0.3	97.2
AllianceBernstein Retirement Strategies	3.6	3.5	0.0	1.3
MainStay Retirement	3.6	3.5	0.0	95.5
Vanguard Target Retirement	3.5	3.7	–0.2	91.4
TIAA-CREF Lifecycle Index	3.5	3.6	–0.1	99.7
USAA Target Retirement	3.5	3.6	–0.1	92.4
Great-West Lifetime III	3.5	n/a	n/a	69.7
Nationwide Target Destination	3.5	3.1	0.3	75.5
Great-West Lifetime II	3.4	n/a	n/a	73.0
Harbor Target Retirement	3.4	3.5	–0.1	94.5
Guidestone Funds MyDestination	3.3	3.2	0.2	80.8
Great-West Lifetime I	3.3	n/a	n/a	76.6
BlackRock LifePath® Active	3.3	3.5	–0.2	42.6
TIAA-CREF Lifecycle	3.3	3.5	–0.2	93.0
DWS LifeCompass	3.3	2.7	0.5	97.6
Russell LifePoints Target Date	3.3	3.3	0.0	100.0
Fidelity Freedom K	3.3	3.0	0.3	50.9
Legg Mason Target Retirement	3.3	3.7	–0.4	99.5
BlackRock LifePath	3.3	3.3	0.0	19.1
Principal LifeTime	3.3	3.3	0.0	92.8
State Farm Lifepath	3.2	3.2	0.0	22.2
JHancock Retiremnt Living Through	3.2	3.7	–0.5	50.6
Fidelity Freedom Index	3.2	3.8	–0.6	96.0
Voya Solution	3.2	3.8	–0.6	73.8
Putnam RetirementReady	3.1	2.7	0.4	87.0
Fidelity Advisor Freedom	3.1	2.8	0.3	56.4
Fidelity Freedom	3.1	2.9	0.2	51.7
John Hancock Retirement Choices	2.9	n/a	n/a	49.9
American Century One Choice	2.8	3.3	–0.5	91.7
Voya Index Solution	2.8	2.8	0.0	96.4

Source: Morningstar, Inc. as of 12/31/2013

Price

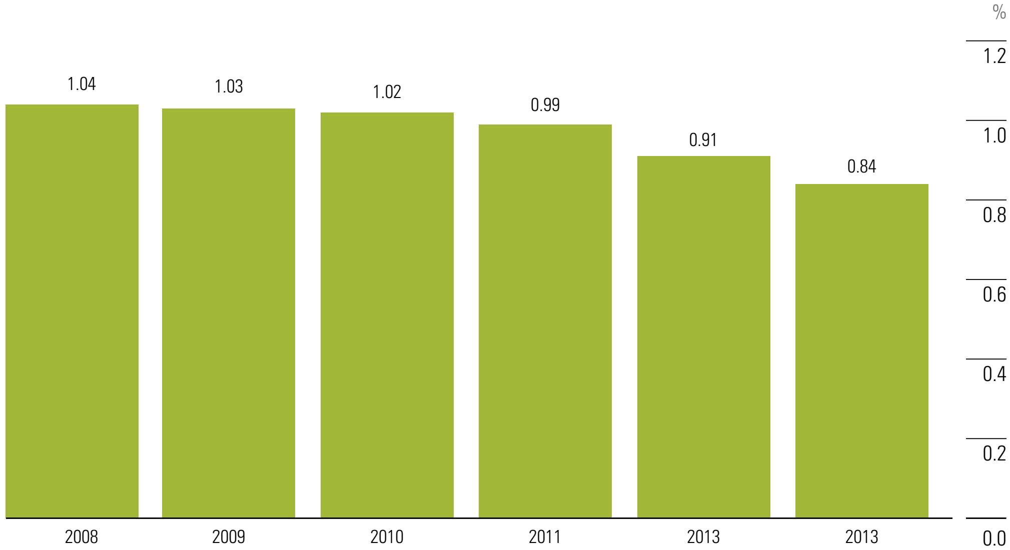
Fidelity Tips Vanguard Off the Low-Cost Throne

Target-date fund expenses have fallen for the fifth year in a row since Morningstar has been tracking the data in its annual industry surveys. The latest decrease matches the direction of the overall industry: From 2012 to 2013, Morningstar research shows that the typical open-end mutual fund investor paid 0.71% annually, down from 0.72%; three years earlier, that figure stood at 0.78%. A rising market triggered breakpoints in management fees and also spread funds' fixed costs over a larger pool of assets. The mutual fund industry in general has benefited from strong market performance and net new inflows, but target-date funds in particular have implemented even greater price decreases. From 2012 to 2013, target-date funds' average asset-weighted expense dropped 7 basis points, to 0.84% from 0.91%. At the end of 2010, the average was 1.02%.

In 2013, Fidelity Freedom Index took the mantle as the industry's lowest-cost series, unseating Vanguard. The Fidelity Freedom Index series' scale increased, lowering its weighted average cost to 0.16% in 2013 from 0.19% in 2012. Meanwhile, the Vanguard Target Retirement series added an international-bond fund to its lineup, which contributed to a 2-basis-point increase in its weighted average expense ratio. Its 2013 asset-weighted total was 0.17%.

Elsewhere, the Vantagepoint Milestone series' fees declined the most in absolute terms: In March 2013, the series cut its fees by 0.25% annually, lowering this historically pricey offering's fees below the industry's 0.84% average. The Vantagepoint series was especially expensive considering its meaningful use of passively managed underlying strategies. The Hartford Target Retirement series was one of only nine in the industry that saw a price increase; the series increased its weighted average fee by 13 basis points to 1.17%.

Exhibit 28 Average of Industry's Asset-Weighted Expense Ratio, 2008-2013



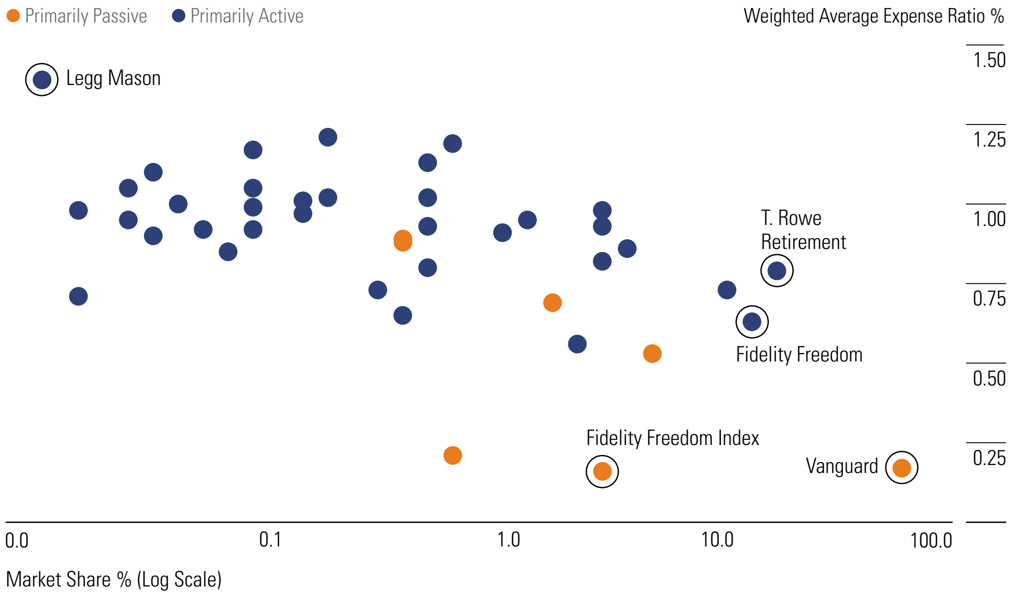
Source: Morningstar, Inc. as of 12/31/2013

Investors Sometimes Getting Less Than They Paid For

Target-date funds' expense ratios are largely driven by their asset size and the degree to which they use active management. It's good to see, then, that series with the largest market shares have generally passed on at least some of the savings from their larger scales. Of course, expensive funds sometimes blame lack of scale, but that's a poor excuse if the firm otherwise is large. For example, Legg Mason's asset base was the smallest in the industry at year-end 2013, while its asset-weighted fees were the highest. Indeed, Legg Mason announced in June 2014 that it was shuttering its target-date funds. Given the plethora of options available, there's no need for investors to subsidize fund companies' target-date funds as they attempt to gain market share. Like Legg Mason, other firms, including Goldman Sachs and Oppenheimer, determined that it's better to exit the target-date industry than maintain a series that isn't competitive.

Index-based series should have a cost advantage, but that isn't always the case. Voya Index Solution's weighted average fee of 0.88% is among the highest in the group of target-date series that have more than 50% of their assets invested in index-based strategies. As suggested by Exhibit 8's performance rankings on page 11, relatively high fees plus passive management have made for a losing combination. In contrast, TIAA-CREF Lifecycle series' 0.56% weighted fee is especially commendable, as it undercuts most series that are actively managed, as well as a few primarily index-based series. (The series benefits from the use of a few enhanced-index strategies, which count toward its percentage of actively managed assets.)

Exhibit 29 Target-Date Series' Market Share and Average Expense Ratio



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 30 Percentage of Target-Date Series Actively Managed and Average Expense Ratio

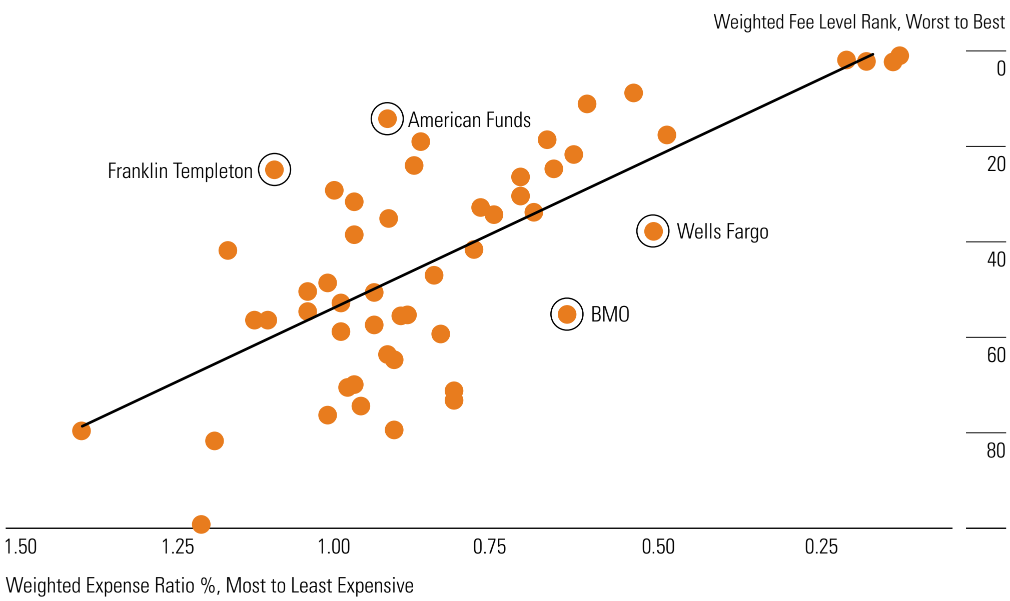
Source: Morningstar, Inc. as of 12/31/2013

Hidden Bargains

Morningstar uses funds' asset-weighted Morningstar Fee Level—Distribution to evaluate target-date expenses instead of just a weighted expense ratio, as the former takes into account how each series' share classes compare with other funds intended for similar distribution channels. The methodology lessens the penalty for funds with higher 12b-1 distribution fees, which inflate the funds' overall expense ratios; those fees, though, are often legitimately used to pay for retirement-plan record-keeping and other administrative services.

For the most part, series with higher asset-weighted expense ratios also have higher average Morningstar Fee Levels, though there are a few notable exceptions: The Wells Fargo Advantage Dow Jones Target Date and BMO Target Date Retirement series have some of the lower asset-weighted fees in the industry (0.53% and 0.66%, respectively), but their average Fee Level ranks are less impressive (38th percentile and 55th percentile). Meanwhile, American Funds' 0.93% weighted expense ratio falls in the industry's more expensive half, but most of the series' assets are invested in its A shares, which are very well priced compared with other advisor-sold funds. Franklin Templeton Retirement series looks better after taking into account sales channels—its 1.10% weighted expense ratio is among the most expensive in the industry, but its weighted Fee Level puts it in the industry's least expensive quartile. Most of its assets are also in its front-load A share class, and similar to American Funds, its A shares compare favorably with other front-load offerings.

Exhibit 31 2013 Fee Level and Weighted Average Expense Ratio



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 32 Series' Expenses, Market Share, and Actively Managed Assets

Target-Date Series	2013 Wt Avg Expense Ratio %	2012 Wt Avg Expense Ratio %	2013 to 2012 Change	2013 Market Share %	Actively Managed %	Fee Level Percentile Rank
Fidelity Freedom Index	0.16	0.19	–0.03	1.5	8.1	1.0
Vanguard Target Retirement	0.17	0.15	0.02	26.7	0.0	2.3
TIAA-CREF Lifecycle Index	0.21	0.23	–0.02	0.4	1.6	2.2
Wells Fargo Advantage DJ Target	0.53	0.63	–0.11	2.5	4.0	37.8
TIAA-CREF Lifecycle	0.56	0.60	–0.04	2.5	100	8.8
Fidelity Freedom K	0.63	0.57	0.06	14.1	97.3	11.1
Vantagepoint Milestone	0.65	0.88	–0.24	0.5	79.7	21.7
John Hancock Retirement Choices	0.69	—	—	0.9	49.3	18.6
Harbor Target Retirement	0.71	0.70	0.01	0.0	100	33.8
Fidelity Freedom	0.73	0.67	0.06	11.2	97.2	30.4
Schwab Target	0.73	0.76	–0.03	0.4	78.3	26.4
T. Rowe Price Retirement	0.79	0.79	0.00	17.0	86.3	32.8
USAA Target Retirement	0.80	0.74	0.06	0.6	94.5	41.6
JPMorgan SmartRetirement	0.82	0.87	–0.04	3.0	99.8	35.1
PIMCO RealRetirement	0.85	1.00	–0.16	0.1	91.8	59.3
Principal LifeTime	0.86	0.87	–0.01	4.1	87.9	47.0
Voya Index Solution	0.88	0.90	–0.01	0.3	0.0	19.0
Nationwide Target Destination	0.89	0.93	–0.04	0.2	18.9	24.0
AllianzGI Retirement	0.90	0.86	0.04	0.0	88.9	55.3
JHancock Retiremnt Living	0.91	0.92	–0.01	1.2	100	55.5
MainStay Retirement	0.92	1.14	–0.23	0.1	77.0	79.4
Russell LifePoints Target Date	0.92	0.93	0.00	0.1	100	64.7
American Funds Target Date Retirement	0.93	0.96	–0.03	3.0	100	14.2
BlackRock LifePath	0.93	0.94	0.00	0.6	73.4	63.6
American Century One Choice	0.95	0.96	–0.01	1.7	100	50.6
Great-West Lifetime III	0.95	—	—	0.0	57.7	57.4
MassMutual RetireSMART	0.97	1.04	–0.06	0.2	88.0	74.4
BlackRock LifePath® Active	0.98	1.16	–0.18	0.0	81.5	38.5
Fidelity Advisor Freedom	0.98	0.95	0.03	3.3	96.7	31.6
Great-West Lifetime I	0.99	—	—	0.1	62.4	70.5
DWS LifeCompass	1.00	1.02	–0.03	0.1	57.8	52.8
AllianceBernstein Retirement Strategies	1.01	1.02	–0.01	0.2	100	29.2
Great-West Lifetime II	1.02	—	—	0.7	60.3	76.3
MFS Lifetime	1.02	1.15	–0.13	0.3	100	48.6
Putnam RetirementReady	1.05	1.10	–0.05	0.0	100	54.6
Manning & Napier Target	1.05	1.11	–0.06	0.1	100	50.4
Franklin LifeSmart	1.10	—	—	0.0	95.4	24.9
Invesco Balanced-Risk Retirement	1.11	1.19	–0.09	0.1	N/A	56.4
Voya Solution	1.13	1.18	–0.05	0.7	80.9	56.4
Hartford Target Retirement	1.17	1.04	0.13	0.1	100	41.8
State Farm Lifepath	1.19	1.27	–0.09	0.9	74.7	81.7
Guidestone Funds MyDestination	1.21	1.14	0.07	0.3	100	99.2
Legg Mason Target Retirement	1.39	1.47	–0.08	0.0	68.4	79.6

Source: Morningstar, Inc. as of 12/31/2013

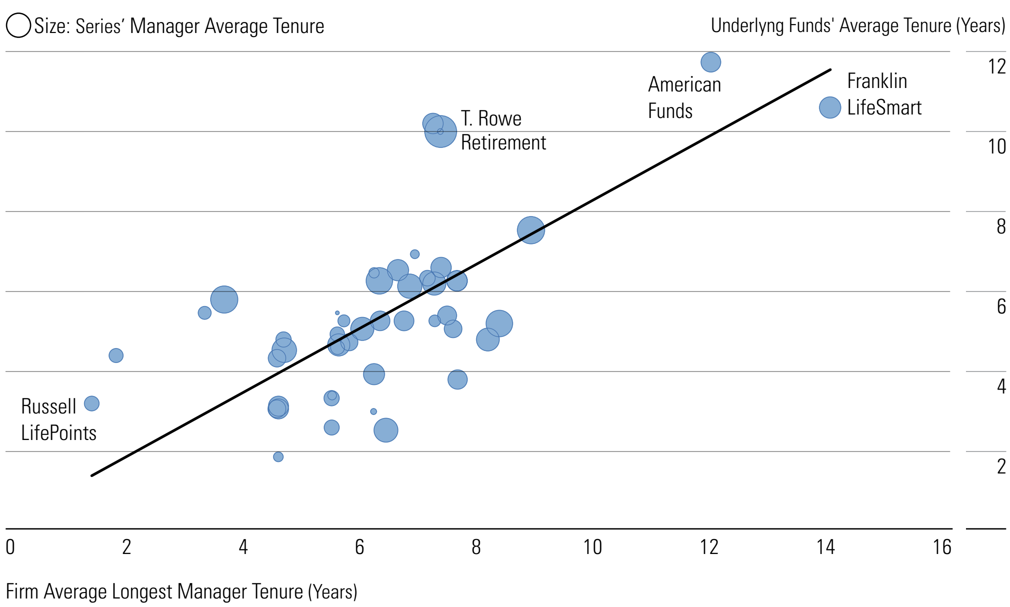
People

Target-Date Series Generally Use the Best of What They Have

If tenure is an indication of quality, then Exhibit 33's upward-sloping trend line suggests that target-date series' portfolio managers are generally choosing their firms' stronger managers for the series' underlying funds. American Funds, for example, generally boasts some of the industry's longest-tenured managers, and since the firm's target-date series uses almost all of American's lineup of funds (exceptions are mainly its municipal-bond funds and static funds of funds), it makes sense that the average tenure of the series' underlying managers is about equal to the firm's overall average manager tenure of 12 years. T. Rowe Price stands out for using the most experienced managers within its stable; the firm has an average overall tenure of almost eight years, and its target-date funds' underlying strategies have average manager tenures of 10 years. As the series' larger circle also indicates, the T. Rowe Price Retirement series—one of the industry's original offerings—also boasts the longest-tenured target-date portfolio manager via Jerome Clark, who has managed the series since its 2002 launch.

Other series catch the eye for less auspicious reasons. For instance, as a firm, Russell's average firm tenure of 1.7 years is among the lowest for almost 200 North American fund firms rated by Morningstar analysts. At 3.2 years, the average tenure of its LifePoints series' underlying strategies isn't much better. To be sure, the subadvisors that Russell picks for the multimanager funds used by its target-date series likely boast much longer industry tenures. However, there has been manager churn at various levels in the Russell fund lineup, one contributor to the series' Analyst Rating of Negative.

Exhibit 33 Manager Tenures for Underlying Funds, Series, and Firm (Years)



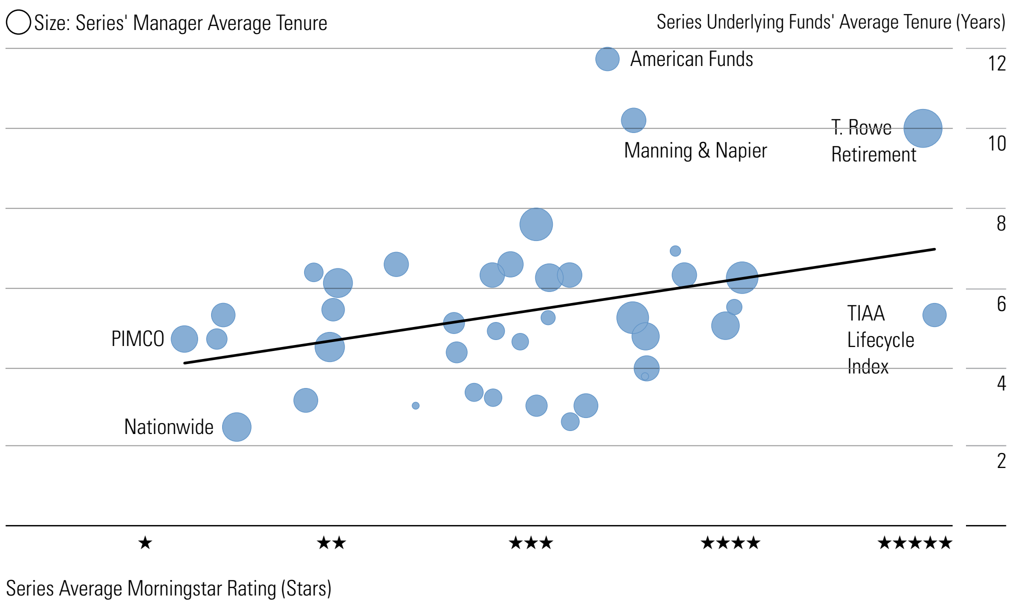
Source: Morningstar, Inc. as of 12/31/2013

Veteran Managers Have Delivered Results

Among target-date series, more-experienced managers have delivered better results. That's reflected in Exhibit 34's upward-sloping graph: Series that use underlying funds with longer average manager tenures (those at the top of the chart) tend to have better Morningstar Ratings (those to the right). Target-date series managers with longer tenures are also associated with better series performance, as demonstrated by the graph's larger circles generally falling to the right side of the exhibit.

That combination has worked especially well for T. Rowe Price Retirement, which enjoys some of the industry's longest-serving managers and also has an average Morningstar Rating of 4.8 stars. That showing is outpaced only by the TIAA-CREFF Lifecycle Index series, which averages 4.9 stars. The managers of TIAA-CREF's underlying funds average just 5.3 years of tenure, but given the straightforward nature of index investing, longer tenures at the underlying funds arguably hold less sway over series' results. Instead, those target-date funds have benefited from a glide path that tends to favor equities relative to the competition.

Exhibit 34 Target-Date Series' Average Morningstar Rating and Average Manager Tenure for Underlying Funds



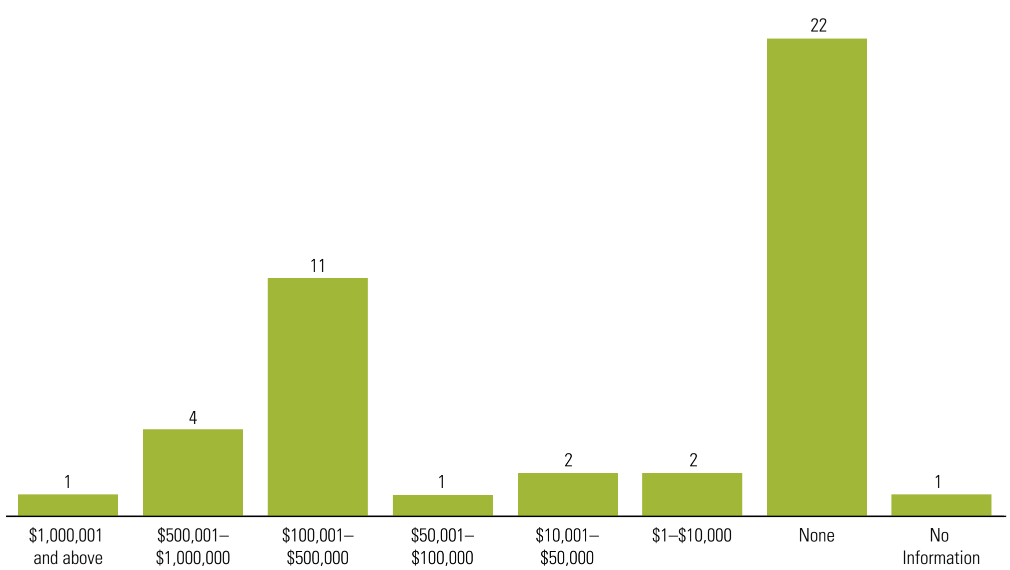
Source: Morningstar, Inc. as of 12/31/2013

Target-Date Managers Fall Woefully Short on Ownership of Their Funds

Portfolio managers who invest meaningfully in the funds that they manage concretely demonstrate conviction in their strategies. For the most part, target-date series managers come up miserably behind on this measure. Exhibit 35 tallies each series' highest reported level of manager ownership according to the SEC's mandated groups. Hans Erickson of TIAA-CREF counts as the only manager who has more than $1 million—the highest reportable level—invested in a single target-date fund. Almost half of the target-date series in the industry—22 in all—have managers with zero investment in the target-date funds that they manage. The figures are even more disconcerting given that target-date funds are intended to be able to stand as an investor's entire portfolio.

Some managers—such as T. Rowe Price's Jerome Clark and the BlackRock LifePath team—say that they have meaningful investments in the non-mutual fund target-date vehicles that they also manage. While that's more encouraging, it's not quite equivalent, as they don't have the same cost experience as mutual fund investors. In a handful of cases, managers may not meet the highest standard of ownership for the target-date funds that they manage, though they do so within the target-date series' underlying funds; the team at American Funds fits into this category. And in a few limited cases, the managers may not be able to buy into their funds. This is the case at the Vantagepoint series, which is available only to municipal employees. Those caveats offer some consolation, but the industry as a whole still falls far from ideal.

Exhibit 35 Manager Ownership of Target-Date Funds, Series' Highest Reported Ownership Level



Source: Morningstar, Inc. as of 12/31/2013

Exhibit 36 Average Manager Tenure of Underlying Funds, Series, and Firm by Target-Date Series and Series Average Morningstar Rating

Target-Date Series	Average Manager Tenure (Years): Underlying Funds'	Series	Firm, Longest Tenured	Series Average Morningstar Rating ★'s
American Funds Target Date Retirement	11.7	4.3	12.0	3.2
Franklin LifeSmart	10.6	5.0	14.0	2.0
Manning & Napier Target	10.2	4.7	7.4	3.3
T. Rowe Price Retirement	10.0	11.3	7.5	4.8
T. Rowe Price Target Retirement	10.0	0.4	7.5	n/a
MFS Lifetime	7.6	8.3	9.0	2.8
Vanguard Target Retirement	6.9	0.9	7.1	3.5
Putnam RetirementReady	6.6	4.6	7.5	2.1
Harbor Target Retirement	6.5	5.0	6.8	2.7
PNC Target	6.5	1.2	6.4	n/a
Legg Mason Target Retirement	6.3	2.7	7.3	1.7
Great-West Lifetime I	6.3	4.7	7.8	2.6
Great-West Lifetime II	6.3	4.7	7.8	3.0
Great-West Lifetime III	6.3	4.7	7.8	3.6
TIAA-CREF Lifecycle	6.2	7.8	6.5	3.9
JPMorgan SmartRetirement	6.2	6.0	7.4	2.9
MassMutual RetireSMART	6.1	6.5	7.0	1.8
BMO Target Date Retirement	5.8	8.2	3.9	n/a
Schwab Target	5.5	1.8	3.6	3.9
John Hancock Retirement Living II	5.5	0.1	5.8	n/a
American Century One Choice	5.4	4.0	7.6	1.8
TIAA-CREF Lifecycle Index	5.3	4.3	6.5	4.9
Invesco Balanced-Risk Retirement	5.3	4.3	6.9	1.2
Hartford Target Retirement	5.3	1.6	5.9	2.9
JPMorgan SmartRetirement Blend	5.2	1.5	7.4	n/a
Vantagepoint Milestone	5.2	7.8	8.5	3.3
MainStay Retirement	5.1	3.4	7.7	2.4
Principal LifeTime	5.1	5.9	6.2	3.8
JHancock Retiremnt Living Through	4.9	2.3	5.8	2.6
BlackRock LifePath Index	4.8	2.6	4.9	n/a
Guidestone Funds MyDestination	4.8	5.8	8.3	3.4
AllianzGI Retirement	4.7	3.3	6.0	1.2
PIMCO RealRetirement	4.7	5.5	5.8	1.0
John Hancock Retirement Choices	4.6	2.2	5.8	2.8
BlackRock LifePath® Active	4.5	6.7	4.9	1.8
Presidential® Managed Risk	4.4	2.2	2.1	n/a
Fidelity Freedom Index	4.4	3.4	4.8	2.4
USAA Target Retirement	4.0	4.9	6.4	3.4
Great-West SecureFoundation® Lifetime	3.8	4.1	7.8	3.4
Voya Retirement Solution	3.4	0.9	5.7	n/a
Voya Solution	3.3	2.6	5.7	2.5
Russell LifePoints Target Date	3.2	2.4	1.7	2.6
Fidelity Advisor Freedom	3.2	4.5	4.8	1.6
Fidelity Freedom	3.1	4.5	4.8	3.1
Fidelity Freedom K	3.1	3.5	4.8	2.8

Exhibit 36 Average Manager Tenure of Underlying Funds, Series, and Firm by Target-Date Series (Years) and Series Average Morningstar Rating (Continued)

Target-Date Series	**Average Manager Tenure** (Years) Underlying Funds'	Series	Firm, Longest Tenured	Series Average Morningstar Rating ★'s
DWS LifeCompass	3.0	0.4	6.4	2.2
Voya Index Solution	2.6	2.5	5.7	3.0
Nationwide Target Destination	2.5	6.3	6.6	1.3
Strategic Adviser Multi-Manager	1.9	1.0	4.8	n/a
Wells Fargo Advantage DJ Target	n/a	6.2	8.2	2.2
BlackRock LifePath	n/a	4.9	4.9	2.0
State Farm Lifepath	n/a	4.9	10.2	2.0
AllianceBernstein Retirement Strategies	n/a	3.5	10.1	1.4

Source: Morningstar, Inc. as of 12/31/2013

Exhibit 37 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)	More than $1M	$500K–1M	$100–500K	$50–100K	$10–50K	$1–10K	None	Info Not Available
AllianceBernstein Retirement Strategies								
Daniel Loewy							•	
Christopher Nikolich							•	
Patrick Rudden							•	
Vadim Zlotnikov							•	
AllianzGI Retirement								
James Macey			1		1			
Rahul Malhotra							•	
Paul Pietranico			2					
Stephen Sexauer		1	1					
American Century One Choice								
Radu Gabudean							•	
G. David MacEwen							•	
Richard Weiss			2					
Scott Wilson			1		2			
Scott Wittman			1					
American Funds Target Date Retirement								
Alan Berro			1					
James Lovelace			1					
Wesley Phoa			1					
John Smet			1					
Andrew Suzman			1					
Bradley Vogt		1						
BlackRock LifePath Series								
Leslie Gambon							•	
Alan Mason							•	
Amy Whitelaw							•	
BlackRock LifePath® Active								
Philip Green							•	
BMO Target Date Retirement								
John Boritzke								•
Sandy Lincoln								•
Alan Schwartz								•
DWS LifeCompass								
Pankaj Bhatnagar							•	
Louis Cucciniello						1		
Darwei Kung						1		
Benjamin Pace							•	
Fidelity Advisor Freedom								
Andrew Dierdorf							•	
Brett Sumsion							•	
Fidelity Freedom Index								
Andrew Dierdorf						1		
Brett Sumsion							•	
Fidelity Freedom K								
Andrew Dierdorf		1						
Brett Sumsion			1					

Exhibit 37 Target-Date Series Managers' Ownership of Series' Fund Shares (Continued)

Target-Date Series / Manager(s)	More than $1M	$500K–1M	$100–500K	$50–100K	$10–50K	$1–10K	None	Info Not Available
Fidelity Freedom								
Andrew Dierdorf							•	
Brett Sumsion							•	
Franklin LifeSmart								
T. Anthony Coffey							•	
Thomas Nelson							•	
Great-West Lifetime I								
S. Mark Corbett							•	
Great-West Lifetime II								
S. Mark Corbett							•	
Great-West Lifetime III								
S. Mark Corbett							•	
Guidestone Funds MyDestination								
Rodric Cummins							•	
Ronald Dugan							•	
Matt Peden							•	
Harbor Target Retirement								
Brian Collins				1				
Paul Herbert			1					
Linda Molenda			1		2			
David Van Hooser							•	
Hartford Target Retirement								
Stephen Gorman							•	
Richard Wurster							•	
Invesco Balanced-Risk Retirement								
Mark Ahnrud							•	
Chris Devine							•	
Scott Hixon							•	
Christian Ulrich							•	
Scott Wolle							•	
JHancock Retiremnt Living Through								
Robert"Bob" Boyda			1					
Marcelle Daher							•	
Steve Medina			1					
Nathan Thooft							•	
John Hancock Retirement Choices								
Robert"Bob" Boyda							•	
Marcelle Daher							•	
Steve Medina							•	
Nathan Thooft							•	
JPMorgan SmartRetirement								
Jeffrey Geller							•	
Anne Lester			1					
Daniel Oldroyd			1					
Michael Schoenhaut							•	
Legg Mason Target Retirement								
Steven Bleiberg			1					
Prashant Chandran							•	

Exhibit 37 Target-Date Series Managers' Ownership of Series' Fund Shares (Continued)

Target-Date Series / Manager(s)	More than $1M	$500K–1M	$100–500K	$50–100K	$10–50K	$1–10K	None	Info Not Available
S. Kenneth Leech								•
Y. Wayne Lin							•	
Patricia Maxwell			1					
MainStay Retirement								
Poul Kristensen							•	
Jonathan Swaney		1						
Jae Yoon					5			
Manning & Napier Target								
Christian Andreach							•	
Jack Bauer							•	
Ebrahim Busheri							•	
Jeffrey Coons							•	
Jeffrey Donlon							•	
Brian Gambill							•	
Jeffrey Herrmann							•	
Brian Lester							•	
Michael Magiera							•	
Christopher Petrosino							•	
Robert Pickels							•	
Marc Tommasi							•	
Virge Trotter, III							•	
MassMutual RetireSMART								
Michael Eldredge							•	
Bruce Picard Jr.							•	
Frederick Schulitz							•	
MFS Lifetime								
Joseph Flaherty, Jr.			2					
Nationwide Target Destination								
Thomas Hicky, Jr.			1					
PIMCO RealRetirement								
Vineer Bhansali			4		1			
Principal LifeTime								
Matthew Annenberg							•	
James Fennessey							•	
Dirk Laschanzky							•	
Jeffrey Tyler				1				
Randy Welch			1					
Putnam RetirementReady								
James Fetch							•	
Robert Kea							•	
Joshua Kutin							•	
Robert Schoen							•	
Jason Vaillancourt							•	
Russell LifePoints Target Date								
John Greves							•	
Brian Meath							•	
Schwab Target								
Zifan Tang					1			

Exhibit 37 Target-Date Series Managers' Ownership of Series' Fund Shares (Continued)

Target-Date Series / Manager(s)	More than $1M	$500K–1M	$100–500K	$50–100K	$10–50K	$1–10K	None	Info Not Available
State Farm Lifepath								
Leslie Gambon							•	
Alan Mason							•	
Amy Whitelaw							•	
T. Rowe Price Retirement								
Jerome Clark							•	
TIAA-CREF Lifecycle Index								
John Cunniff							•	
Hans Erickson							•	
TIAA-CREF Lifecycle								
John Cunniff			1					
Hans Erickson	1							
USAA Target Retirement								
Wasif Latif							•	
John Toohey					2			
Vanguard Target Retirement								
Michael Buek							•	
William Coleman				1				
Walter Nejman							•	
Vantagepoint Milestone								
David Braverman			1					
Lee Trenum			1					
Wayne Wicker			1					
Voya Index Solution								
Halvard Kvaale							•	
Frank Van Etten								•
Paul Zemsky							•	
Voya Solution								
Halvard Kvaale							•	
Frank Van Etten								•
Paul Zemsky							•	
Wells Fargo Advantage DJ Target								
Rodney Alldredge				1				
James Lauder				1				
Paul Torregrosa			1					

Source: Morningstar, Inc. as of 12/31/2013

Parent

Finding Good Stewards Among Target-Date Firms

Morningstar maintains that asset managers' stewardship practices are material to the investor's long-term experience. Particularly in a 30-plus-year investment, such as one in a target-date series, it stands to reason that firms that put their fundholders' interests before their own corporate interests will deliver better results. As such, Morningstar includes a qualitative evaluation of the investment's parent company as part of the forward-looking Morningstar Analyst Rating for target-date series. Some of the key quantitative data that inform the qualitative analysis are featured in exhibit 38. The data show whether the firm's fund managers are experienced, retained over a five-year period, and invest significantly in the funds they run. Morningstar also considers whether the firm typically prices its funds competitively, as indicated by a low firmwide average Morningstar Fee Level—Distribution percentile rank.

Morningstar analysts look to this quantitative stewardship data, as well as a qualitative analysis of five factors, to determine a firm's Parent rating of Positive, Neutral, or Negative. The factors consist of the firm's corporate culture, fund board independence, manager incentives, fees, and regulatory history.

Exhibit 38 lists the Parent ratings for the 37 firms offering mutual fund target-date series. As one might expect, firms rated Positive have stronger stewardship data, specifically managers with longer tenure, higher retention rates, and larger personal investments in fund shares, as well as lower-priced funds, on average. Firms with lower Parent ratings often have less-favorable stewardship data. This trend is true not only for the firms listed below, but also across all fund firms to which Morningstar had assigned a Parent rating as of Dec. 31, 2013. Morningstar considered all the U.S. firms it rates as part of its 2014 Morningstar U.S. Mutual Fund Industry Stewardship Study, published in March 2014. Morningstar found that firms with Parent ratings of Positive had stronger stewardship data, on average, than those rated Neutral or Negative.

Exhibit 38 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	21.6	95.6	97	18
Fidelity Investments	⊕	4.8	8.5	91.1	51	33
Franklin Templeton Investments	⊕	14.3	23.7	95.6	62	33
Harbor	⊕	6.5	11.8	92.7	86	57
Manning & Napier	⊕	7.8	15.3	93.7	0	55
MFS	⊕	8.7	10.9	94.0	41	47
T. Rowe Price	⊕	7.3	11.1	95.0	21	37
Vanguard	⊕	6.8	11.7	91.5	16	4
Vantagepoint Funds	⊕	8.4	9.3	88.8	0	29
PIMCO	⊕[5]	5.5	15.5	91.9	48	48
Average		**8.2**	**13.9**	**93.0**	**42**	**36**
Neutral Parents						
Allianz Funds	⊙	5.7	12.8	90.2	74	53
American Century Investments	⊙	7.3	10.5	92.1	0	53
BlackRock	⊙	4.9	12.3	86.2	65	47
Hartford Mutual Funds	⊙	5.8	9.9	91.3	35	47
Voya Funds	⊙	5.5	12.9	84.2	0	51
John Hancock	⊙	5.7	6.6	90.9	16	55
JPMorgan	⊙	6.9	10.5	93.9	56	34
Legg Mason	⊙	7.7	12.6	94.2	44	50
MainStay	⊙	7.7	12.6	90.0	64	66
MassMutual	⊙	6.7	8.9	88.8	4	45
Principal Funds	⊙	6.8	7.9	88.4	0	52
Putnam	⊙	7.2	7.3	89.4	26	48
Russell	⊙	2.0	1.7	83.9	0	63
Schwab Funds	⊙	3.2	4.5	87.1	0	23
State Farm	⊙	9.8	13.1	89.0	0	44
TIAA-CREF Mutual Funds	⊙	6.1	8.2	92.7	5	16
USAA	⊙	6.2	7.7	87.9	10	56
Wells Fargo Advantage	⊙	7.9	9.3	91.8	20	49
Average		**6.3**	**9.4**	**89.6**	**23**	**47**
Negative Parents						
AllianceBernstein	⊖	9.8	11.1	84.9	12	42
DWS Investments	⊖	6.2	9.0	82.8	3	53
Average		**8.0**	**10.1**	**83.8**	**8**	**48**
Unrated Parents						
BMO Funds	NA	2.5	7.8	91.2	0	54
Great-West Funds	NA	7.5	8.2	84.4	0	53
GuideStone Funds	NA	7.9	10.0	86.5	0	54
Lincoln Financial Group	NA	1.8	2.0	NA	0	43
Nationwide	NA	6.4	6.1	87.1	0	30
PNC Funds	NA	6.1	10.3	83.3	14	58
Average		**5.4**	**7.4**	**86.5**	**2**	**49**

Source: Morningstar, Inc. as of 12/31/2013

5. PIMCO's Parent Rating was lowered to Neutral in March 2014.

Strong Fund Stewards Produce Better Investment Results

Firms earning Positive Parent ratings have stronger manager and fee data, which is not surprising because those data can specifically help inform the Parent rating. The Parent rating, does not, however, specifically incorporate firms' fund performance, but higher-rated Parents have delivered better performance, particularly on a risk-adjusted basis. Morningstar measures fund performance, as well as staying power, across a firm's offerings through its success ratios. Morningstar Success Ratios eliminate survivorship bias as the denominator consists of the number of fund share classes a firm offered at the beginning of the measurement period; the numerator is the sum of share classes that both survived the period and outperformed their typical category peer. Morningstar Risk-Adjusted Success Ratios have the same methodology for the denominator, but the numerator is the sum of the surviving share classes that are in the top half of their category based on their Morningstar Risk-Adjusted Return, the basis for the Morningstar Rating (star rating).

On average, more than half of the funds with Positive Parent ratings both survived and outperformed across the three-, five-, and 10-year periods. The two firms with the best long-term, Risk-Adjusted Success Ratios—Vanguard and T. Rowe Price—offer target-date series earning Gold Morningstar Analyst Ratings. Overall, the Neutral and Negative Parents have been far less successful, particularly over the longer term, though the Negative sample is very small.

There are six target-date firms in Exhibit 39 that do not receive Parent ratings from Morningstar. None of these firms' fund offerings receive Morningstar Analyst Ratings, including the target-date series. In some cases, such as Franklin Templeton, Harbor, and The Hartford, Morningstar does not rate the firm's target-date series, but analysts do assign ratings to other offerings at the firm and thus it receives a Parent rating.

Exhibit 39 Morningstar Success Ratios for Target-Date Parents

⊕Positive ⊙Neutral ⊖Negative

Firm Name	Morningstar Parent Rating	Morningstar Success Ratio 3-Year	5-Year	10-Year	Morningstar Risk Adj Success Ratio 3-Year	5-Year	10-Year
Positive Parents							
American Funds	⊕	62	60	62	62	64	67
Fidelity Investments	⊕	48	57	40	40	49	32
Franklin Templeton Investments	⊕	42	41	45	41	42	44
Harbor	⊕	42	39	48	41	41	45
Manning & Napier	⊕	45	44	77	56	40	77
MFS	⊕	57	60	40	56	58	41
T. Rowe Price	⊕	78	82	82	76	83	82
Vanguard	⊕	75	61	78	79	65	78
Vantagepoint Funds	⊕	68	50	55	71	56	59
PIMCO	⊕[6]	50	60	61	47	60	56
Average		**57**	**55**	**59**	**57**	**56**	**58**

Exhibit 39 Morningstar Success Ratios for Target-Date Parents (Continued) ⊕Positive ⊙Neutral ⊖Negative

Firm Name	Morningstar Parent Rating	Morningstar Success Ratio 3-Year	5-Year	10-Year	Morningstar Risk Adj Success Ratio 3-Year	5-Year	10-Year
Neutral Parents							
Allianz Funds	⊙	26	25	23	24	22	22
American Century Investments	⊙	51	23	31	47	25	31
BlackRock	⊙	38	31	25	30	28	23
Hartford Mutual Funds	⊙	55	51	34	49	47	31
John Hancock	⊙	41	35	20	39	34	16
JPMorgan	⊙	56	46	36	47	44	34
Legg Mason	⊙	53	46	18	48	44	15
MainStay	⊙	57	45	23	44	36	19
MassMutual	⊙	57	45	50	50	40	49
Principal Funds	⊙	53	35	33	54	38	35
Putnam	⊙	52	53	33	37	45	23
Russell	⊙	22	31	14	23	27	11
Schwab Funds	⊙	67	27	40	67	24	35
State Farm	⊙	27	4	17	20	4	17
TIAA-CREF Mutual Funds	⊙	89	65	48	86	63	39
USAA	⊙	66	63	69	67	69	69
Voya Funds	⊙	34	22	13	28	21	12
Wells Fargo Advantage	⊙	48	39	30	41	38	28
Average		**50**	**38**	**31**	**45**	**36**	**28**
Negative Parents							
AllianceBernstein	⊖	29	35	24	29	32	18
DWS Investments	⊖	33	29	17	33	27	16
Average		**31**	**32**	**21**	**31**	**30**	**17**
Unrated Parents							
BMO Funds	n/a	57	38	16	57	40	24
Great-West Funds	n/a	58	47	73	65	50	67
GuideStone Funds	n/a	72	54	42	75	56	42
Lincoln Financial Group	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Nationwide	n/a	38	19	21	33	13	18
PNC Funds	n/a	34	10	8	35	9	7
Average		**52**	**34**	**32**	**53**	**34**	**32**

Source: Morningstar, Inc. as of 12/31/2013

6. PIMCO's Parent Rating was lowered to Neutral in March 2014.

Appendix

Appendix 1 2014 Morningstar Analyst Ratings for Target-Date Funds Series %

Pillars: ⊕Positive ⊙Neutral ⊖Negative

Target Date Series	Morningstar Analyst Rating	Process	People	Performance	Parent	Price
AllianceBernstein Retirement Strategies	Negative	Negative	Negative	Negative	Negative	Positive
American Century One Choice	Bronze	Neutral	Neutral	Neutral	Neutral	Neutral
American Funds Target Date Retirement	Silver	Positive	Positive	Positive	Positive	Positive
BlackRock LifePath	Neutral	Neutral	Neutral	Negative	Neutral	Negative
Fidelity Advisor Freedom	Neutral	Neutral	Positive	Negative	Positive	Positive
Fidelity Freedom	Neutral	Neutral	Positive	Negative	Positive	Positive
JHancock Retiremnt Living Through	Neutral	Positive	Positive	Positive	Neutral	Neutral
JPMorgan SmartRetirement	Silver	Positive	Positive	Positive	Neutral	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 RealRetirement	Bronze	Positive	Positive	Negative	Neutral	Negative
Principal LifeTime	Neutral	Neutral	Neutral	Positive	Neutral	Neutral
Russell LifePoints Target Date	Negative	Neutral	Neutral	Negative	Neutral	Negative
Schwab Target	Neutral	Neutral	Negative	Positive	Neutral	Positive
State Farm Lifepath	Negative	Neutral	Neutral	Negative	Neutral	Negative
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	Negative	Neutral	Neutral
Wells Fargo Advantage DJ Target	Neutral	Negative	Neutral	Negative	Neutral	Positive

Source: Morningstar, Inc. as of 5/31/14

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

Target-Date Series	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005
AllianceBernstein Retirement Strategies	—	95	95	95	95	95	90	86	79	72	65	55
AllianzGI Retirement	—	100	100	100	95	75	60	45	35	30	25	—
American Century One Choice	—	85	85	82	80	73	67	60	55	50	45	45
American Funds Target Date Retirement	—	91	91	91	91	89	87	82	67	57	45	43
BlackRock LifePath Index	—	96	91	86	80	74	68	60	52	41	38	—
BlackRock LifePath	—	96	91	86	80	74	68	60	52	41	38	—
BlackRock LifePath® Active	—	96	91	86	80	74	68	60	52	41	38	—
BMO Target Date Retirement	—	—	90	90	90	90	83	76	69	59	47	35
DWS LifeCompass	—	—	—	—	88	—	76	—	58	48	35	—
Fidelity Advisor Freedom	—	90	90	90	90	90	90	80	65	59	52	43
Fidelity Freedom Index	—	90	90	90	90	90	90	80	65	58	52	43
Fidelity Freedom	—	90	90	90	90	90	90	80	65	59	52	43
Franklin LifeSmart	—	—	84	83	83	81	79	75	68	55	32	32
Great-West Lifetime I	—	85	85	84	80	75	66	53	44	38	32	29
Great-West Lifetime II	—	91	91	91	90	87	80	68	58	48	42	38
Great-West Lifetime III	—	94	94	94	94	93	92	81	70	57	50	46
Great-West SecureFoundation® Lifetime	—	93	92	91	90	86	78	69	58	58	58	58
Guidestone Funds MyDestination	—	95	95	95	94	92	85	78	76	78	70	61
Harbor Target Retirement	93	93	93	93	86	72	53	48	43	38	32	20
Hartford Target Retirement	—	—	87	87	87	87	79	71	63	54	46	41
Invesco Balanced-Risk Retirement	—	—	47	—	47	—	47	—	51	—	32	—
JHancock Retiremnt Living Through	—	—	96	96	96	96	92	85	73	61	51	44
John Hancock Retirement Choices	—	—	82	82	82	79	75	64	46	27	8	—
John Hancock Retirement Living II	—	—	95	95	95	95	92	84	73	63	54	45
JPMorgan SmartRetirement Blend	—	—	85	85	85	85	78	70	60	51	35	35
JPMorgan SmartRetirement	—	85	85	85	85	85	78	70	60	51	35	35
Legg Mason Target Retirement	—	94	94	94	94	87	76	72	66	62	56	50
MainStay Retirement	—	95	91	88	87	85	79	74	65	55	50	36
Manning & Napier Target	—	83	83	83	83	78	71	62	50	45	40	32
MassMutual RetireSMART	—	95	95	95	92	88	87	84	76	64	51	46
MFS Lifetime	95	95	95	95	95	95	88	80	60	41	30	30
Nationwide Target Destination	—	94	94	93	92	89	83	76	65	58	53	53
PIMCO RealRetirement	—	—	80	80	75	70	60	50	35	25	20	—
PNC Target	—	—	85	85	80	80	70	60	45	35	30	30
Presidential® Managed Risk	—	—	99	92	86	78	73	67	63	61	56	47
Principal LifeTime	95	95	95	94	91	87	82	76	71	63	55	47
Putnam RetirementReady	—	95	94	90	85	78	70	60	48	35	25	—
Russell LifePoints Target Date	—	90	90	90	90	90	90	74	58	46	36	36
Schwab Target	—	95	95	93	90	86	80	74	65	54	40	38
State Farm Lifepath	—	—	93	—	82	—	70	—	54	—	39	—
Strategic Adviser Multi-Manager	—	—	90	90	90	90	90	80	65	58	52	43
T. Rowe Price Retirement	—	90	90	90	90	90	85	78	71	63	54	45
T. Rowe Price Target Retire	—	90	90	87	82	77	71	65	57	50	42	37
TIAA-CREF Lifecycle Index	—	90	90	90	90	90	81	73	65	57	50	44
TIAA-CREF Lifecycle	—	90	90	90	90	90	82	74	66	58	49	43
USAA Target Retirement	90	95	90	85	80	75	70	60	50	40	30	—
Vanguard Target Retirement	90	90	90	90	90	90	82	75	65	59	50	30
Vantagepoint Milestone	—	—	95	95	95	92	86	79	71	64	56	49
Voya Index Solution	—	95	95	95	95	88	80	72	62	50	35	35
Voya Retirement Solution	—	95	95	95	95	88	80	72	62	50	35	35
Voya Solution	—	95	95	95	95	88	81	73	63	52	35	35
Wells Fargo Advantage DJ Target	—	90	90	90	87	81	72	60	48	37	28	21

Source: Morningstar, Inc. as of 12/31/2013