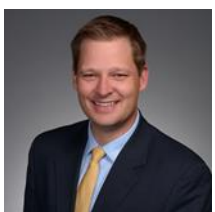


Morningstar Investment Management LLC

Target-Date Report 2Q 2016



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The second quarter of 2016 was far less exciting than the first quarter until the very end, when the United Kingdom voted to leave the European Union. The ensuing sell-off was short-lived in the United States, as the S&P 500 gained 2.5% for the quarter following a full recovery from “Brexit”. European markets did not fully recover before June’s end, and the MSCI EAFE Index finished at -1.19% for the quarter. While the initial reaction in Europe and the U.K. was largely negative following the referendum vote, it would appear that there are many ways in which things could turn out just fine in the long run.

Central bank actions and regulatory policies in Europe and Japan, in conjunction with investors’ flight to safety driven by global macroeconomic concerns, have pushed global interest rates to unprecedented new lows. The yield on U.S. fixed income securities remains attractive to global investors, with over \$11 trillion of sovereign debt trading at a negative yield. Fixed income asset classes posted positive returns in the quarter with Barclays U.S. Aggregate Bond Index return of 2.2% almost matching the return of the S&P 500.

As target-date funds contain a mix of both stocks and bonds, performance of target-date funds was affected by the returns of both asset classes. Highlights from this quarter’s report, with data coming from Morningstar DirectSM, include:

- All variations of the Morningstar[®] Lifetime IndexSM family posted positive returns in the second quarter of 2016.
- Target-date funds managed to gain 1.9% on average by the end of the quarter.
- The target-date industry experienced \$17.7 billion in asset inflows in the second quarter of 2016, with total assets under management reaching \$823 billion. From an asset growth perspective, the retail target-date industry grew at 2.3% this quarter.

In the Spotlight section we discuss the changes implemented during our annual rebalance of the Morningstar Lifetime Allocation Indexes. In June, we have updated the allocations of the indexes to reflect our latest capital markets research.

Target-Date Performance Summary

During the second quarter of 2016, the average target-date fund gained 1.9%, underperforming the S&P 500 Index and Barclays U.S. Aggregate Bond Index, which returned 2.5% and 2.2%, respectively. In the last 12 months, target-date funds returned -0.8%, which trails the S&P 500 Index’s 12-month return of 4.0%.

Table 1: Target-Date Performance Summary

	Q2 Return	12-Month Return
Average Target-Date Fund*	1.9%	-0.8%
Morningstar [®] Lifetime Moderate Index ^{SM**}	2.7%	0.7%
S&P 500 Index	2.5%	4.0%
Barclays U.S. Aggregate Bond Index	2.2%	6.0%

Source: Morningstar Investment Management LLC and Morningstar DirectSM (see end for important disclosure)

*Average of all open-end target-date funds that are tracked by Morningstar, Inc.

**Average of Morningstar[®] Lifetime Moderate IndexSM series

Indexes shown are not available for direct investment. Past Performance is not a guarantee of future performance.

Asset Class Performance

Quarterly performance for some of the most common asset classes that comprise target-date funds are displayed in Table 2. This data allows us to determine which asset classes were the primary drivers and detractors from performance during the second quarter of 2016.

Table 2: Asset Class Performance – Q2 2016

Asset Class	Q2 2016 Return	12-Month Standard Deviation
U.S. Large Growth Equity	0.61%	15.17%
U.S. Large Value Equity	4.58%	14.45%
U.S. Small Growth Equity	3.24%	19.35%
U.S. Small Value Equity	4.31%	15.94%
Non-U.S. Developed Equity	-1.19%	16.91%
Emerging Market Equity	0.80%	22.11%
Real Estate	7.41%	16.08%
Commodities (Futures)	12.78%	17.59%
High-Yield Bonds	5.52%	8.61%
U.S. Aggregate Bonds	2.21%	2.31%
U.S. Short-Term Bonds	0.67%	0.90%
TIPS	1.71%	3.58%
Cash	0.07%	0.06%

Source: Morningstar Investment Management LLC and Morningstar DirectSM

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Stocks largely shook off a short but sharp selloff triggered by the United Kingdom's June 23 referendum to leave the European Union. The vote for "Brexit"—to leave the union—came as a surprise to financial markets, where the consensus seemed to be that U.K. voters wouldn't risk potential economic damage by separating from its largest trading partner. The immediate market response was a downdraft not only in the U.K. and Europe, but in global equity markets generally. The British pound also declined sharply due to expectations that heightened uncertainty would dent investment spending, trigger a recession, and leave the U.K. without easy access to its European customers. European stocks dropped 13% in the two days following the vote on concerns that Britain's departure may mark a new period of instability in the eurozone. U.S. stocks fell 5.3% as measured by the S&P 500 Index. Meanwhile a rise in the yen pushed down stock prices for Japan's exporters.

But after falling hard for two days, global stocks bounced right back, the prevailing view being that the damage would be mostly limited to the U.K. and that any lasting impact wouldn't be known for at least a couple of years. Thus, for the second quarter as a whole, the MSCI EAFE Index of foreign developed-market stocks recorded only a modest 1.19% loss. Emerging-markets stocks ended up 0.8% on continued gains in Brazil and Russia.

The S&P 500 Index rebounded quickly as well, posting a 2.5% gain for the quarter. Strengthening consumer spending in the U.S. pointed to a pickup in GDP following a sluggish start to the year. Energy stocks led the rally as oil prices increased by more than \$10 per barrel to finish the quarter just short of the \$50 mark. Utilities and real estate rose with the help of falling interest rates, while technology and financial-services stocks lagged.

Weak U.S. job growth in May and the scheduled Brexit vote kept the Federal Reserve from raising interest rates at its June meeting, with many now expecting the next rate hike to be delayed until 2017.

Uncertain global growth helped push long-term bond prices up as yields fell toward record lows. Ten-year Treasury yields dropped to 1.49% from 1.79% during the quarter. The rally in bonds was widespread as high-yield bonds and emerging-markets debt also posted strong gains.

Similar to Table 2, asset class returns and standard deviations for the past 12 months are displayed in Table 3.

Table 3: Asset Class Performance – 6/30/2016 Trailing 12 Months

Asset Class	12-Month Return	12-Month Standard Deviation
U.S. Large Growth Equity	3.0%	15.2%
U.S. Large Value Equity	2.9%	14.5%
U.S. Small Growth Equity	-10.8%	19.4%
U.S. Small Value Equity	-2.6%	15.9%
Non-U.S. Developed Equity	-9.7%	16.9%
Emerging Market Equity	-11.7%	22.1%
Real Estate	23.6%	16.1%
Commodities (Futures)	-13.3%	17.6%
High-Yield Bonds	1.6%	8.6%
U.S. Aggregate Bonds	6.0%	2.3%
U.S. Short-Term Bonds	1.6%	0.9%
TIPS	4.4%	3.6%
Cash	0.2%	0.1%

Source: Morningstar Investment Management LLC and Morningstar DirectSM

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Over the past 12 months, equity market returns have largely been negative. Large-cap growth stocks posted a positive return of 3.0%, while large-cap value stocks returned 2.9%. Small-cap stocks performed even worse overall. On a relative basis, small-cap value stocks were a better place to be as they returned -2.6% compared to -10.8% for small-cap growth stocks. International equities fared no better: developed markets posted a return of -9.7% and emerging markets returned -11.7%. Real Estate continued to be the best performing asset class with a return of 23.6%. Commodities continued to be the worst performing asset class on a trailing 12-month basis with a return of -13.3%.

Diversification largely hurt returns in the fixed income portion of portfolios for the trailing 12 months. The Barclays U.S. Aggregate Bond Index led all fixed income asset classes with a return of 6.0% for the last 12 months. Portfolios that took on credit risk or protected against inflation performed worse than more “vanilla” portfolios as high-yield bonds and TIPS performed relatively worse, with returns of 4.4% and 1.6%, respectively. The continued low interest rate environment provided a headwind for lower-duration asset classes, as short-term bonds returned 1.6% and cash returned 0.2%.

Morningstar[®] Lifetime Allocation IndexesSM

Table 4 presents the performance figures for the complete Morningstar[®] Lifetime Allocation IndexSM family, which is based on the lifetime asset allocation methodology created by Ibbotson Associates, Inc. (Ibbotson Associates was merged into Morningstar Investment Management LLC on December 31, 2015.) This methodology estimates the median amount of human capital and financial capital for U.S. investors and couples these estimates with the target market portfolio to construct the standard (moderate) glide path for a typical U.S. investor. The Index family offers an aggressive variation for investors with high risk capacity (based on larger and safer human capital) as well as high risk preference. The Index family also offers a conservative variation for investors with low risk capacity and low risk preference. The differences between the aggressive, moderate, and conservative glide paths manifest most visibly in the equity and fixed-income breakdowns by vintage; these exposures can vary by nearly 40% for some vintages between the aggressive and conservative glide paths. The Morningstar Lifetime Allocation Indexes are composed of a broad array of underlying Morningstar[®] Indexes and provide exposure to many sub-asset classes. The indexes provide exposure not only to global equities but also to global fixed-income and inflation-fighting assets, most notably TIPS and commodities.

All variations of the Morningstar Index family posted positive returns in the first quarter of 2016. Despite a volatile quarter, income and closer-to-retirement vintages performed similarly to longer-dated vintages, and within each vintage, the conservative variation of the indexes outperformed slightly the moderate and aggressive variations. These trends resulted from steady gains across both fixed income asset classes and equity asset classes. Along with positive second quarter results, the trailing three- and five-year returns data illustrate that these indexes have fared well over longer periods of time.

Table 4: Morningstar Lifetime Allocation Indexes

<i>(As of 6/30/2016; multiyear periods annualized)</i>											
	1 Month	3 Month	1 Year	3 Year	5 Year		1 Month	3 Month	1 Year	3 Year	5 Year
Income						2030					
Conservative Income	1.4%	2.3%	3.2%	3.4%	3.6%	Conservative 2030	1.4%	3.1%	3.1%	6.1%	6.2%
Moderate Income	1.2%	2.4%	2.5%	4.3%	4.5%	Moderate 2030	0.7%	2.9%	0.7%	6.8%	6.9%
Aggressive Income	0.9%	2.4%	1.9%	5.1%	5.3%	Aggressive 2030	0.3%	2.7%	-0.9%	7.2%	7.2%
2000						2035					
Conservative 2000	1.4%	2.3%	3.2%	3.5%	3.7%	Conservative 2035	1.1%	3.1%	2.1%	6.5%	6.5%
Moderate 2000	1.2%	2.4%	2.5%	4.4%	4.6%	Moderate 2035	0.5%	2.8%	-0.3%	6.9%	7.0%
Aggressive 2000	0.9%	2.4%	1.9%	5.1%	5.4%	Aggressive 2035	0.1%	2.6%	-1.6%	7.1%	7.1%
2005						2040					
Conservative 2005	1.5%	2.5%	3.6%	3.9%	4.1%	Conservative 2040	0.9%	3.0%	0.9%	6.7%	6.7%
Moderate 2005	1.2%	2.5%	2.8%	4.7%	5.0%	Moderate 2040	0.3%	2.7%	-1.1%	6.9%	6.9%
Aggressive 2005	1.0%	2.6%	2.0%	5.5%	5.7%	Aggressive 2040	0.1%	2.5%	-1.9%	6.9%	6.9%
2010						2045					
Conservative 2010	1.6%	2.7%	3.9%	4.3%	4.5%	Conservative 2045	0.7%	2.9%	0.0%	6.6%	6.7%
Moderate 2010	1.3%	2.7%	2.9%	5.1%	5.4%	Moderate 2045	0.3%	2.6%	-1.5%	6.7%	6.7%
Aggressive 2010	0.9%	2.7%	1.9%	5.9%	6.1%	Aggressive 2045	0.1%	2.5%	-2.1%	6.8%	6.8%
2015						2050					
Conservative 2015	1.6%	2.9%	4.1%	4.8%	5.0%	Conservative 2050	0.6%	2.8%	-0.5%	6.5%	6.5%
Moderate 2015	1.3%	2.8%	2.8%	5.6%	5.8%	Moderate 2050	0.3%	2.6%	-1.7%	6.6%	6.6%
Aggressive 2015	0.9%	2.8%	1.6%	6.4%	6.5%	Aggressive 2050	0.1%	2.5%	-2.3%	6.6%	6.6%
2020						2055					
Conservative 2020	1.6%	3.0%	4.0%	5.2%	5.4%	Conservative 2055	0.6%	2.8%	-0.7%	6.3%	6.4%
Moderate 2020	1.2%	2.9%	2.5%	6.0%	6.2%	Moderate 2055	0.3%	2.6%	-1.9%	6.4%	6.4%
Aggressive 2020	0.7%	2.8%	0.9%	6.8%	6.8%	Aggressive 2055	0.1%	2.5%	-2.4%	6.4%	6.4%
2025						2060					
Conservative 2025	1.6%	3.1%	3.8%	5.7%	5.8%	Conservative 2060	0.6%	2.8%	-0.9%	6.2%	6.2%
Moderate 2025	1.0%	2.9%	1.8%	6.5%	6.6%	Moderate 2060	0.3%	2.6%	-2.0%	6.3%	6.3%
Aggressive 2025	0.5%	2.7%	0.0%	7.1%	7.1%	Aggressive 2060	0.2%	2.5%	-2.6%	6.3%	6.3%

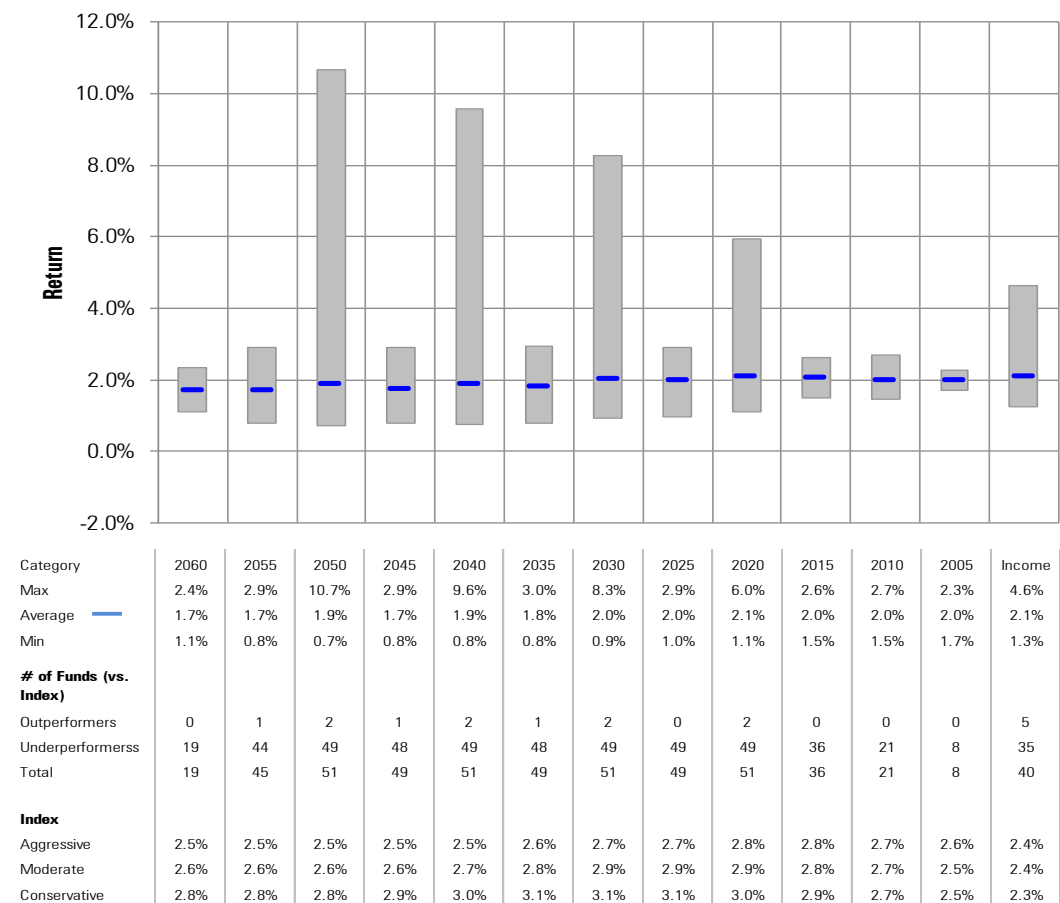
Source: Morningstar Investment Management and Morningstar DirectSM

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Target-Date Fund Performance

Figure 1 shows the range of second-quarter performance for target-date funds within their respective target-date vintage and in relation to the Morningstar® Lifetime Moderate IndexSM. The floating gray bars within the chart show the range of quarterly returns for the 13 target-date vintages included in our analysis. The blue line within each bar identifies the average performance for each vintage. For most of the vintages, there are small differences between the best-performing funds ("Max" row within the table below) and the worst-performing funds ("Min" row within the table below). The range of returns within each vintage and across vintages was primarily due to differences in equity and fixed income asset classes. The Invesco target-date series, which has vintages in the 2050, 2040, 2030, 2020 and Income categories, benefited from high allocations to Commodities. Commodities was one of the best performing asset class in the second quarter with a return of 12.8%, compared with 2.5% for S&P 500 index. After a positive first quarter, target-date funds continued to post positive gains on average in the second quarter of 2016. However, these gains came with much volatility within the quarter as most equity asset classes tanked late in the quarter due to Brexit and then rebounded in the last days of the quarter. Compared to previous quarters, the performance of target-date funds was much tighter across the vintages with income funds outpacing 2060 funds by approximately 0.4% on average. This trend was also reflected in the much narrower spread of 0.2% between the performance of the Barclays U.S. Aggregate Bond Index and the S&P 500 Index. In previous quarters, the spread between these two indexes was over 7.0%. The majority of target-date funds underperformed their respective Morningstar Lifetime Moderate Index.

Figure 1: Target-Date Vintage Performance Q2 2016



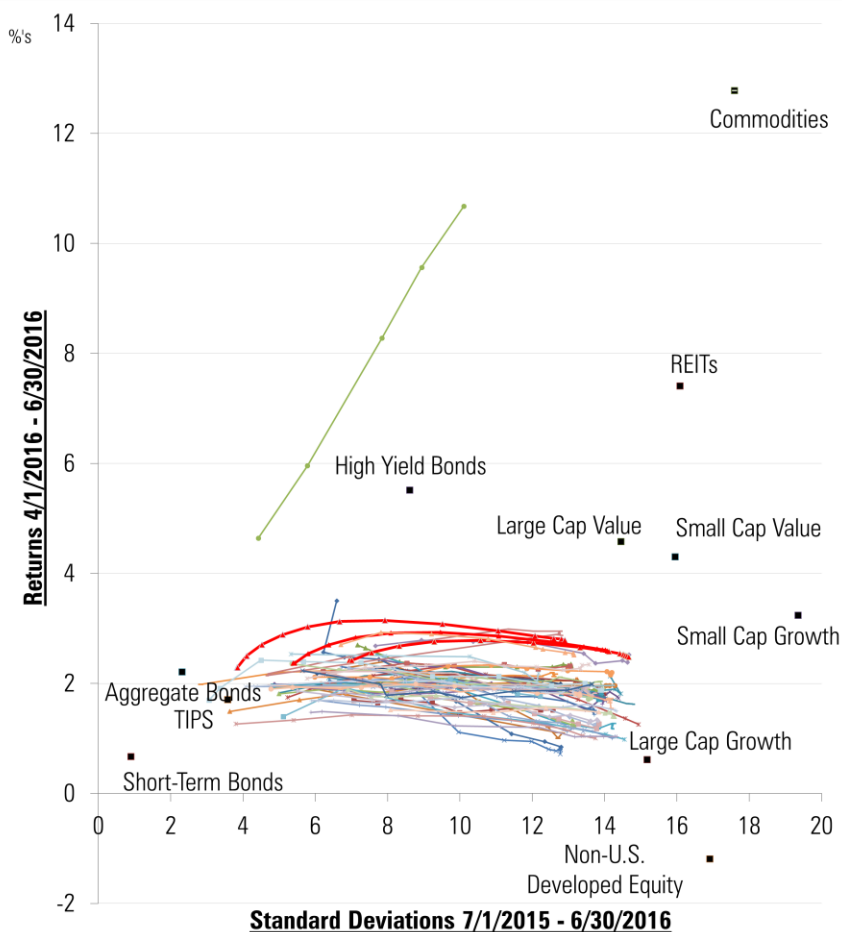
Source: Morningstar Investment Management LLC and Morningstar, Inc. (See end for important disclosures.)

Fund Family Performance

The performance of target-date fund families during the second quarter is summarized in Figure 2. We are now tracking 520 unique target-date funds with at least a one-year track record representing 56 target-date series. Last quarter we tracked 527 unique funds. This quarter saw the merger of 2 Great-West Lifetime series and the some of the 2010 and 2015 vintages have been merged into Income funds. The lines in the graph connect funds from the same target-date series. Second quarter net returns are plotted on the vertical axis, and 12-month standard deviations are plotted along the horizontal axis. Overall the performance of fixed income was similar to the performance of equities as illustrated by the flat lines. Marking a break from recent quarters, commodities no longer served as a major detractor from overall performance. The green line that stands out connects the target-date funds from Invesco, which, as mentioned above, benefited from their concentrated allocation to Commodities which returned 12.8% for the quarter, as measured by Bloomberg Commodity Index. Moreover, diversifying into REITs provided a nice tailwind as the asset class gained 7.4%, as measured by the FTSE NAREIT All Equity REITs Index. Within fixed income, diversifying into high-yield bonds boosted target-date family performance.

The three Morningstar® Lifetime Allocation IndexesSM, representing conservative, moderate, and aggressive glide paths, are displayed along the bolded red lines which are near the top of the graph. For the quarter, a majority of the retail target-date funds underperformed their respective Morningstar Lifetime Moderate Index counterpart across all Morningstar Categories.

Figure 2: Fund Family Performance –Q2 Return and One-Year Risk Ending Q2 2016

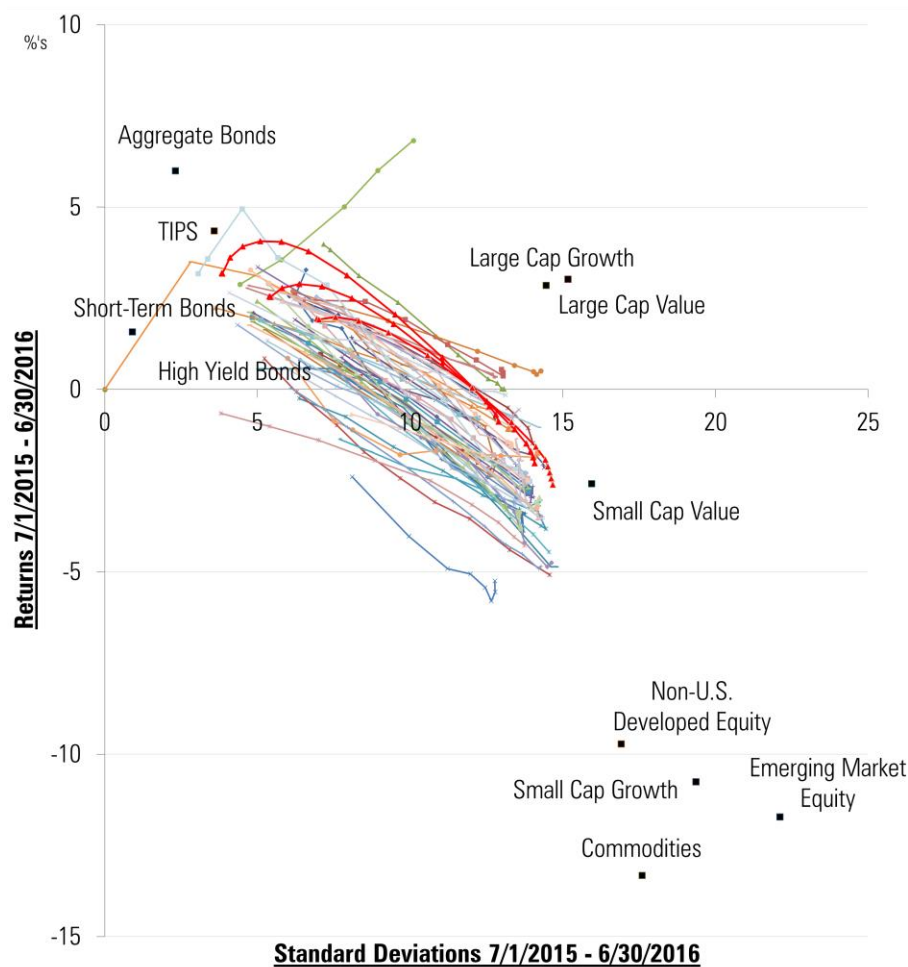


Source: Morningstar Investment Management LLC and Morningstar DirectSM (see end for important disclosures)

The same risk/return information for the year ending June 30th, 2016 is displayed in Figure 3. In this figure, we still see a downward-sloping trend. At a high level, the Barclays U.S. Aggregate Bond Index's return of 6.0% over the trailing year outperformed the S&P 500 Index's return of 4.0% by a small margin, suggesting that the lines in the graph should be much flatter. However, many target-date providers diversify their equity exposure into small-cap, international-developed and emerging-market stocks. Compared to large-cap domestic stocks, these equity asset classes posted large losses over the trailing year. The main bright spot over the last year was REITs, which gained 23.6%. Within fixed income, target-date series that remained closest to the Barclays U.S. Aggregate Bond Index avoided losses compared to other series. TIPS gained 4.4% over the year but failed to outperform aggregate bonds. Moving down the credit spectrum hurt target-date series as high-yield bonds gained 1.6% for the last year.

The three Morningstar® Lifetime Allocation IndexesSM are displayed along the bolded red lines and are clustered toward the top of the graph, reflecting the diversified nature of the indexes. Reversing the trend from previous quarters, fund families with heavier real assets exposure, such as commodities and REITs had an easier time outperforming the Morningstar® Indexes as the underlying commodity index used in the Morningstar Lifetime Allocation Indexes tends to be more aggressive than other commodity benchmarks.

Figure 3: Fund Family Performance – One-Year Return and One-Year Risk Ending Q2 2016



Source: Morningstar Investment Management LLC and Morningstar DirectSM (see end for important disclosures)

Fund Flows

The target-date industry experienced \$17.7 billion in asset inflows in the second quarter of 2016. The second quarter net asset flows were slightly below the flows from first quarter (\$18.2 billion) but they well surpassed the three-year quarterly average net flow of \$14.3 billion. First quarter inflows have historically trended towards the largest inflows in a given year, as retirement plans often implement changes at the beginning of the year, which could include selecting a target-date series as the default investment. From an asset growth perspective, the retail target-date industry grew at 2.3% this quarter, which matched the growth rate from the previous two quarters. However, this growth rate falls short of the growth rate of 2.9% for the second quarter of 2015. Overall, quarterly growth rates have been declining in recent years as most retirement plans have adopted the use of target-date funds, and an increasing number of plans have been moving assets out of retail target-date funds and into collective trusts or custom target-date strategies.

The largest beneficiaries of asset inflows this past quarter were Vanguard, American Funds, TIAA-CREF Asset Management and BlackRock. With \$3.4 billion in new assets Vanguard continued its five-quarter run of bringing in over half of the new assets for the entire target-date industry. American Funds brought \$0.9 billion of new assets while TIAA-CREF experienced \$0.5 billion in net flows. Overall, the second quarter saw \$1.3 billion in outflows across 15 fund families. For a second quarter in a row, Fidelity experienced the largest outflows at \$753 million, followed by T. Rowe Price and Principal Funds losing \$206 and \$112 million, respectively.

Retail target-date funds had total assets under management of \$823 billion, up \$33 billion from last quarter. The majority of this increase came from true inflows while a smaller part came from market appreciation, as the average target-date fund gained 1.9% in the quarter. Vanguard remains the largest retail target-date fund provider with \$251 billion in assets, followed by Fidelity with \$184 billion and T. Rowe Price with \$139 billion.

Table 5: Target-Date Fund Flows Q2 2016

Target Date	Asset Under Management (\$Mil)		Estimated Net Flow (\$Mil)	
	End Q1 2016	End Q2 2016	Q1 2016	Q2 2016
Income	26,925	27,530	(221)	96
2000-2010	30,155	30,462	(529)	(313)
2011-2015	58,322	59,936	(824)	(834)
2016-2020	132,196	136,319	1,012	1,458
2021-2025	118,861	126,006	3,061	3,081
2026-2030	128,418	133,894	3,152	3,108
2031-2035	90,286	96,221	3,022	2,861
2036-2040	91,376	95,434	2,886	2,517
2041-2045	54,775	58,819	2,674	2,356
2046-2050	41,260	44,057	2,506	2,096
2051 +	12,122	13,846	1,443	1,301
Total	784,697	822,525	18,183	17,726

Source: Morningstar DirectSM. Universe includes funds with a less than one-year track record. Please refer to [Morningstar® Cash Flow Methodology](#) report for important methodology notes. (See end for important disclosures)

Figure 4: Quarterly Estimated Net Flows by Morningstar Category as of 6/30/2016

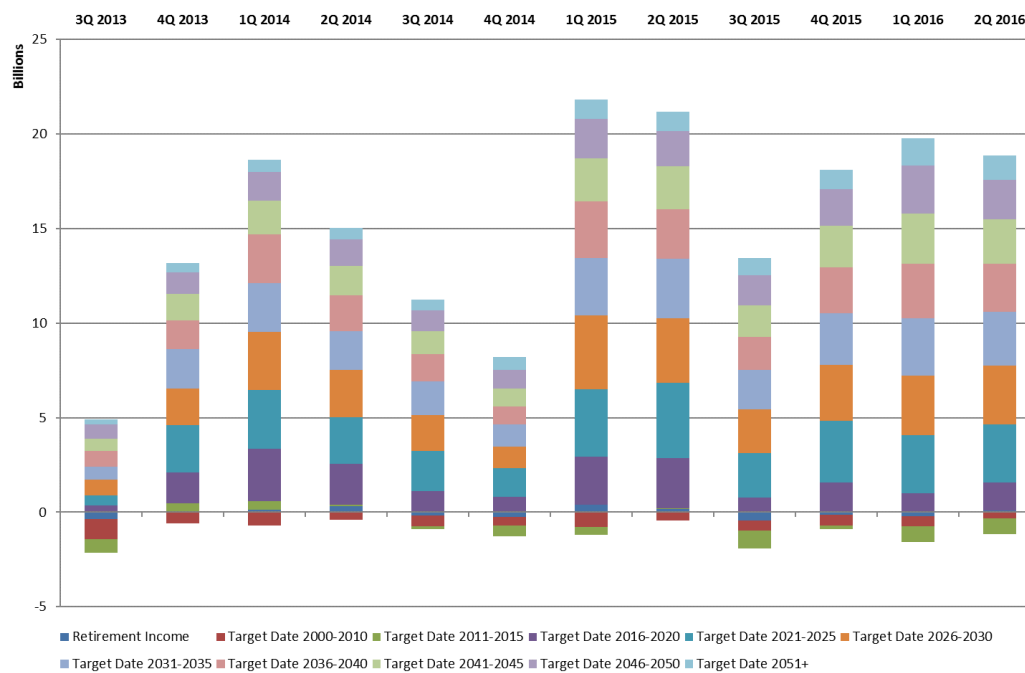
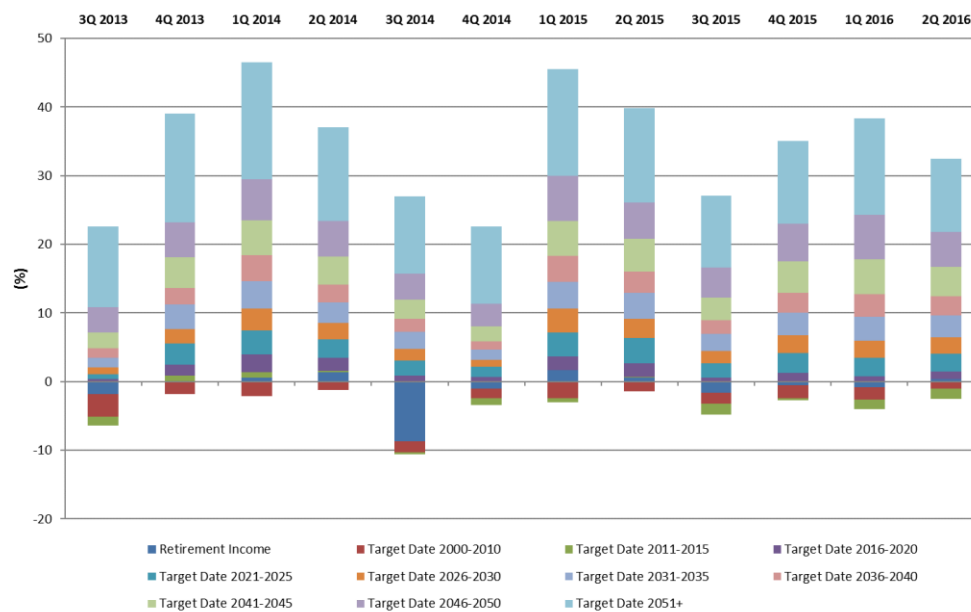


Figure 5: Quarterly Organic Growth Rate by Morningstar Category as of 6/30/2016



Spotlight: Morningstar[®] Lifetime Allocation IndexesSM Reallocation

Executive Summary

Individual investors are driving strong demand for retirement investment products largely due to increases in longevity, increases in post-retirement expenses like healthcare, and shrinking income streams from corporate pensions and government entitlements. The financial services industry recognizes this demand and offers a growing line of investment options that incorporate professional asset allocation advice designed to help investors meet their goals. Target-date funds continue to play an increasingly crucial role in this area.

In 2009, Morningstar, Inc. launched the Morningstar[®] Lifetime Allocation IndexesSM to help investors evaluate the many competing target-date funds available. The glide paths for these Indexes reflect Morningstar's latest insights on how investors should save for retirement, while also considering the range of target-date glide paths in the market. These Indexes can provide a strong foundation for target-date strategies and are a valuable benchmarking tool for investors. The Indexes' glide paths are based on the asset allocation methodologies of Morningstar Investment Management LLC, a registered investment adviser and subsidiary of Morningstar, Inc.

Morningstar recently updated the Morningstar Lifetime Allocation Indexes to reflect our latest capital markets research and fundamental analysis of each asset class and the target-date industry. The Morningstar Asset Allocation Indexes are reconstituted—i.e., the index membership is reset—once annually. Each year, adjustments are performed after the close of business on the third Friday of June and are effective on the following Monday.

The glide path construction methodology and the assumptions behind our total wealth approach have remained the same this year as in 2015. Our updated capital market research has led to some adjustments to the asset allocation of the Morningstar Lifetime Allocation Indexes. In keeping with our methodology, Morningstar will make small changes to the Indexes over time as a reflection of changes in the global market and our focus on helping investors achieve their retirement goals.

Below we discuss the changes implemented during our annual rebalance of the Indexes.

Glide Path Update

Our method for creating glide paths builds on the asset-allocation experience in Morningstar's Investment Management group and applies a total wealth approach. When determining the optimal portfolio for investors, we take a holistic view of a person's total wealth so we can construct the most appropriate glide path based on the total value and risk attributes of the different assets owned by that investor.

Our total wealth approach considers assets that are often overlooked, like human capital and pension wealth. Human capital can be thought of as the mortality-weighted net present value of an individual's future wage income, where pension wealth represents assets like Social Security retirement benefits and defined-benefit pensions. The dynamics between human capital and financial capital, two of the largest assets on investors balance sheet, and the risk capacity and risk preference of investors determine the shape of the glide path for our three risk tracks: Conservative, Moderate and Aggressive.

The implied glide path is one of the main criteria investors and plan sponsors use to evaluate and select a target date offering. Investors should select a glide path based on his or her risk preference and risk capacity. At Morningstar Investment Management, we strive to maintain a stable glide path through time and, therefore, changes to the glide path are minor from year to year. Over time we have made small adjustments to the glide path that typically resulted in changes of approximately 0% to 2%. Besides aging the portfolios and decreasing the equity allocation of the portfolios as they approach the retirement year, other factors that result in changes to the glide path are investor demographics, estimates of the asset allocation of the reference portfolio, and the risk profiles of the human capital. We have not made any changes to these factors in 2016.

Asset Allocation Update

Using our total wealth approach, we first create the stock/bond allocation for an investor and then determine the asset-class targets for the portfolio. We use some of the most advanced asset-allocation techniques available to us to determine these weights. Three examples include: our proprietary approach to formulating capital market assumptions; how we incorporate non-normal returns and downside risk in the portfolio optimization routine; and how we build portfolios based on the specific objectives of the investor.

Morningstar's goal is to help investors reach their financial goals. Recent improvements to our approach for formulating expected returns include introducing a supply-side model so we can more accurately incorporate valuations into our forecasts. We invest for the long term and have a fundamental, valuation-oriented view that helps investors ride out the market's ups and downs and take advantage of opportunities when they arise. We believe this enhancement to our investment process will improve the effectiveness of our decision-making and help to serve investors for years to come.

While valuation is a component of our capital markets research, Morningstar Investment Management believes that the asset allocation policy is the most important determinant of a portfolio's risk and return characteristics over time. When constructing an asset allocation portfolio, it is critical to take advantage of diversification benefits over the long run. We believe that a diversified selection of asset classes offers investors the greatest opportunity to maximize their retirement savings with the appropriate amount of risk. As such, the Morningstar Lifetime Allocation Indexes offer exposure to a variety of asset classes, including non-U.S. developed equity, emerging-markets equity, commodities, non-U.S. bonds, and TIPS. On an annual basis, we re-evaluate our expected returns for each asset class represented in the portfolio and analyze additional asset classes for inclusion in the indexes. We aim to keep individual asset allocations consistent over time with the typical adjustment ranging from 0% to 2% year to year. In 2016, driven by our long-term expectations we made the following changes to the asset allocation of the Morningstar Lifetime Allocation Indexes:

- ▶ Decreased Large U.S. Equities relative to Mid-Small U.S. Equities
- ▶ Increased Value relative to Growth across the capitalization spectrum
- ▶ Decreased U.S. Equities relative to non-U.S. Equities
- ▶ Increased allocation to Emerging Markets
- ▶ Introduced REITs
- ▶ Decreased Commodities
- ▶ Decreased Global ex-U.S. Government Bonds

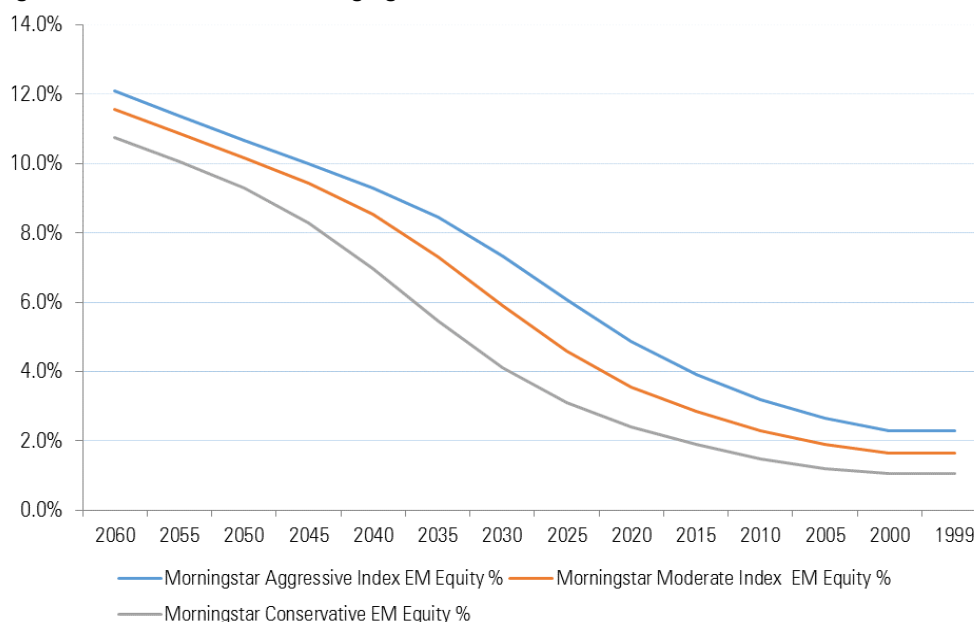
Morningstar made a few changes to the U.S. equity portion of the Indexes in 2016. We slightly reduced the allocation to large-cap equities relative to small- and mid-cap stocks, as our long-term expectations for large-cap stocks decreased relative to smaller domestic equities. We also increased the Indexes' allocation to U.S. value stocks relative to growth stocks. The Indexes have always held a modest bias to value stocks, as Morningstar believes value stocks will generate greater returns than growth stocks over

time. Our recent capital market expectations suggest the difference in long-term returns is more prominent, which resulted in the slight adjustment this year.

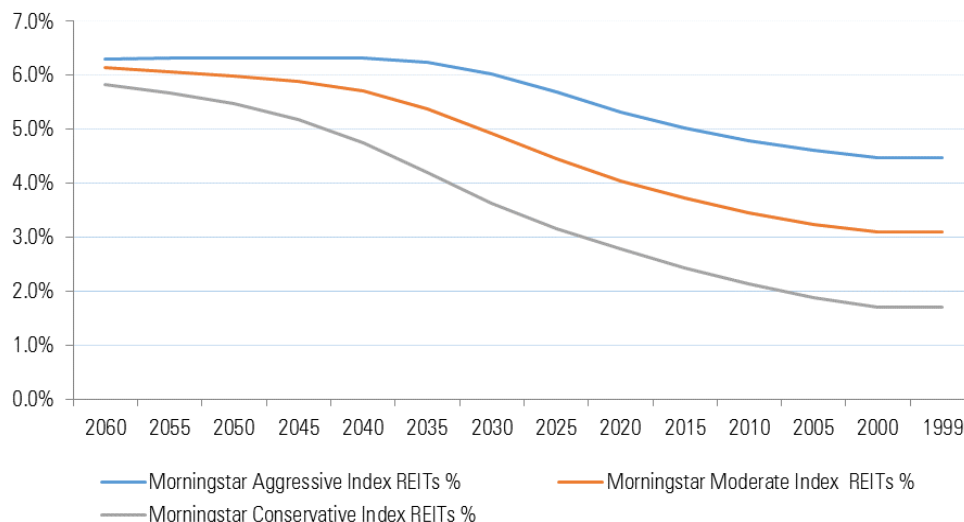
We also made changes to the allocations across global equities. The Indexes favor U.S. equities relative to foreign stocks, though the allocation to foreign stocks has increased over time. In 2016, we continued to lower the U.S. equity allocation relative to non-U.S. stocks, as our long-term expectations suggest greater returns overseas. In addition to improving returns, foreign stocks provide a valuable diversification benefit to a multi-asset portfolio that can help long-term investors better weather fluctuations in the global equity markets. Given current corporate margins, we believe valuations appear to be stretched the U.S. and returns are likely to be challenged in an environment of slow and gradual interest rate increases.

Our recent capital market expectations also show high long-term returns for emerging-market equities. Within a globally diversified portfolio, emerging market equities have the potential to help improve returns without adding substantial volatility. We slightly increased the emerging market equity allocation in response to our improved long-term expectations for the asset class. Figure 1 below illustrates the allocations to the Emerging Markets across the three glide paths. While the performance of the emerging markets equities is tied to the outlook for commodities, conservative assumptions for earnings growth and fair margins in our valuation implied returns point to relatively higher returns for emerging markets than in other equity asset classes.

Figure 1. Asset Allocation Emerging Markets %



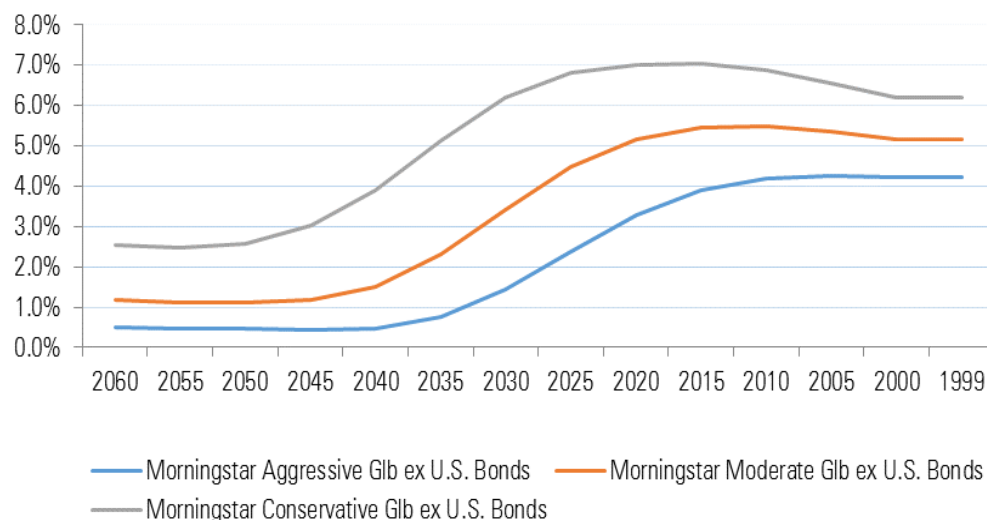
In 2016, Morningstar decided to add REITs as a separate asset class to the Morningstar Lifetime Allocation Indexes. The Indexes previously had some exposure to REITs as a small component of the U.S. equity indexes, but we have long believed a targeted allocation to the asset class can improve the risk and return profile of a portfolio. REITs generally have predictable cash flows and inflation-hedging characteristics that behave differently from typical equities, which can be particularly beneficial when investing for retirement. We therefore believe target-date investors should have a greater allocation to REITs than is available in a market-cap weighted index and Morningstar has therefore included it as a separate asset class in the Lifetime Allocation Indexes. Figure 2 below plots the overall allocation to REITs.

Figure 2. Asset Allocation REITs %

As part of making room for the REITs asset class, Morningstar slightly reduced the allocation to commodities. Our long-term expected returns for the asset class have fallen slightly and the volatility of the asset class remains high, further justifying the decision to reduce its exposure in the Indexes. Considering the potential inflation-hedging benefits of REITs, we believe commodities, which also have the ability to provide a hedge against inflation, can have a smaller role in the target-date portfolio. In addition, low valuation implied returns, higher expected volatility and negative roll yields in the futures market frame our low conviction in the asset class.

Within the fixed-income portion of the Indexes, Morningstar slightly reduced the allocation to global ex-U.S. bonds relative to U.S. bonds, as seen in Figure 3. Our long-term expected returns for foreign bonds was reduced in 2016 relative to U.S. bonds. A substantial portion of the global ex-U.S. bond market has negative rates and overall global bonds carry interest rate risk with very low, and at times negative, payout. We continue to see value to the portfolios in having foreign fixed-income exposure, and the Indexes still maintain exposure to non-U.S. bonds mainly as a currency diversification exposure.

The remaining fixed-income allocations did not change from the previous year.

Figure 3. Asset Allocation Global ex U.S. Bonds %

About Morningstar Investment Management LLC

Morningstar Investment Management LLC, in part through the rich heritage of Ibbotson Associates, Inc., is a leading independent provider of asset allocation, manager selection, and portfolio construction services. Ibbotson Associates, Inc. was merged into Morningstar Investment Management LLC on 12/31/2015. The company leverages its innovative and ground-breaking academic research to create customized investment advisory solutions that help investors meet their financial goals. Morningstar Investment Management LLC is a registered investment adviser and a subsidiary of Morningstar, Inc.

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Diversification is an investment method used to help manage risk. It does not ensure a profit or protect against a loss.

Appendix: Index Definition

Morningstar[®] Lifetime Allocation IndexesSM are a family of multi-asset class target maturity indexes available in three risk tracks: Aggressive, Moderate, and Conservative. Each risk track consists of 13 indexes ranging from a 2055 index to an income index. The glide paths and strategic asset allocations of the indexes is based on Ibbotson's Lifetime Asset Allocation methodology. Security selection for each sub-asset class in the index family is provided by a matching Morningstar market index.

Standard & Poor's 500 Index: Market-capitalization-weighted index of 500 widely held stocks. Member companies are chosen based on market size, liquidity, and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies.

Barclays Capital U.S. Aggregate Bond Index – Broad-based benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS.

BofA Merrill Lynch US 3-Month Treasury Bill - Comprised of a single issue purchased at the beginning of the month and held for a full month. At the end of the month that issue is sold and rolled into a newly selected issue. The issue selected at each month-end rebalancing is the outstanding Treasury Bill that matures closest to, but not beyond, three months from the rebalancing date. To qualify for selection, an issue must have settled on or before the month-end rebalancing date. While the index will often hold the Treasury Bill issued at the most recent 3-month auction, it is also possible for a seasoned 6-month Bill to be selected.

Barclays Capital Global Inflation Linked U.S. TIPS Index – Includes securities which offer the potential for protection against inflation as their cash flows are linked to an underlying inflation index. The index represents a standalone multi-currency index exposed to the real yield curve for each relevant currency.

Barclays Capital U.S. 1-3 Year Government/Credit Bond Index – An unmanaged market value weighted performance benchmark for government and corporate fixed-rate debt issues with maturities between one and three years.

Barclays Capital U.S. Corporate High Yield Index – Covers the USD-denominated, non-investment grade, fixed-rate, taxable corporate bond market. Securities are classified as high-yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below.

DJ-UBS Commodity Index – A broadly diversified index composed of futures contracts on physical commodities traded on U.S. exchanges, with the exception of aluminum, nickel and zinc, which trade on the London Metal Exchange (LME).

FTSE NAREIT Equity REITs Index – Spans the commercial real estate space across the US economy. The index series provides investors with exposure to all investment and property sectors.

MSCI EAFE Index – Measures international performance and comprises 21 MSCI country indexes, representing the developed markets outside of North America: Europe, Australia and the Far East.

MSCI Emerging Markets Index – A market capitalization weighted index composed of companies representative of the market structure of 26 emerging market countries in Europe, Latin America, and the Pacific Basin.

Russell 1000 Growth Index – Measures the performance of the 1,000 largest companies in the Russell 3000 Index, with higher price-to-book ratios and higher forecasted growth values.

Russell 1000 Value Index – Measures the performance of the 1,000 largest companies in the Russell 3000 Index with lower price-to-book ratios and lower forecasted growth values.

Russell 2000 Growth Index – Measures the performance of the 2,000 smallest companies in the Russell 3000 Index with higher price-to-book ratios and higher forecasted growth values.

Russell 2000 Value Index – Measures the performance of the 2,000 smallest companies in the Russell 3000 Index with lower price-to-book ratios and lower forecasted growth values.