## Market and economic commentary

# Great-West Lifetime Funds

Despite some striking headlines, as well as the resulting market movements toward the end of the quarter, financial markets (at least domestically) were generally positive in the second quarter. Internationally, markets pulled back a bit, but the Brexit panic in the waning hours of June was largely contained in light of positive returns earlier in the quarter.

Although it often hasn't necessarily felt like it, 2016 has been a good year so far for many financial markets, particularly on the fixed-income side.

Economic growth continued to slow during the first quarter, but at a lower rate than originally estimated. Real gross domestic product (GDP) increased at an annual rate of 1.1%, which was revised upward from the earlier estimate of 0.8%. This, however, represents a further decline from the 1.4% annualized growth rate in the fourth quarter of 2015.

However, we're beginning to see some signs of an overall improving economy, highlighted by the striking 287,000 new jobs created in June alone. Whether this number reflects a true improvement in the overall economic outlook or a rebound from the abysmal May jobs report remains to be seen, but it is an encouraging sign nonetheless.

Oil prices have largely been trending upward for the year, providing some degree of stability for the battered energy sector of the economy. After notching a low of less than $34 per barrel in January, oil prices have steadily marched to higher levels of around $50 per barrel. As we've discussed in recent quarters, oil prices can present a bit of a mixed bag for the economy. Although lower oil prices can wreak havoc on energy producers, they can have a positive impact on consumer income statements as consumers ultimately pay less at the pump.

Other commodities have also started to recover in 2016. For example, gold prices started the year below $1,100 per ounce but closed out the second quarter above $1,300, largely riding on the Brexit tide. Gold tends to serve as a store of economic value during uncertain and volatile periods in the financial markets.

Given both the mixed economic data and the overall volatility financial markets have experienced to date in 2016, the U.S. Federal Reserve has maintained its benchmark fed funds rate at 0.25% for the past four meetings. At the time of this writing, the probability of a rate increase before the December 2016 meeting, as implied by futures markets, is only 12%, though the odds increase markedly for the December meeting.

The benchmark 10-year Treasury bond yield has declined significantly in 2016, causing strong returns in bond markets. The 10-year bond yielded around 2.25% to open the year, but it closed the quarter below 1.50%, as Brexit caused a flight to safety in financial markets. In July, the yield dropped further, hitting an all-time low in the mid-130s. On the credit side, credit spreads blew out significantly in 2016, particularly in the high-yield space, before tightening in significantly.

During the first quarter, many market pundits were speaking regularly about the possibility of a recession. However, by Q2, these fears appear to have been overblown, driving the smaller spreads that we've seen in credit markets in 2016.

## What is Brexit? How does it impact my investments?

Brexit, which is an abbreviation for British Exit, refers to the U.K.'s vote to withdraw its membership from the European Union (EU). The referendum to leave the EU was put to a vote of U.K. citizens and was passed June 23, 2016. Market participants had widely expected the referendum to be defeated at the polls. They were ultimately proved wrong.

U.K. Prime Minister David Cameron had promised to hold a referendum on the issue as part of his 2015 re-election. The underlying reason for the referendum relates to perceived increasing bureaucracy on issues such as trade, immigration, financial and labor regulation, and social spending. Some believe that the increasing bureaucracy is an infringement on both British sovereignty and national interests.

The U.K. is one of the wealthiest and most influential EU nations; leaving the EU could have a considerable impact on trade, investment and economic growth throughout the region. Specific details surrounding the impact of a leave vote are currently unknown, leading to increased speculation and media coverage.

As shown in the charts below, the U.K. is a significant part of the global economy, representing 4% of global GDP and some 6% of global stock-market capitalization. The U.K. is the second-largest economy in Europe (behind Germany) and the largest in Europe in terms of market capitalization. With international economies being more interconnected than ever, an economic disruption in a country the size of the U.K. could have major global implications.

**GDP BY COUNTRY**

| | |
|---|---|
| **U.S.** | 25% |
| **China** | 15% |
| **Japan** | 6% |
| **Germany** | 5% |
| **U.K.** | 4% |
| **France** | 3% |
| **India** | 3% |
| **Italy** | 3% |
| **Brazil** | 2% |
| **Canada** | 2% |
| **Other** | 32% |

**MARKET CAPITALIZATION BY COUNTRY**

| | |
|---|---|
| **U.S.** | 36% |
| **China** | 7% |
| **Japan** | 7% |
| **U.K.** | 6% |
| **Canada** | 4% |
| **France** | 3% |
| **Germany** | 3% |
| **Australia** | 2% |
| **India** | 2% |
| **Brazil** | 2% |
| **Other** | 27% |

Source: World Bank; GWCM analysis; GDP data as of 2015; market cap data as of 2012

## How does Brexit affect U.S. investors?

The uncertainty surrounding a leave vote has made economists and investors a bit nervous — which could lead to increased market and currency exchange rate volatility. Many American companies view the U.K. as a gateway that provides exposure to the broader EU. The leave vote may result in companies reconsidering their operations with British and EU members, potentially disrupting global economic growth. Investors also view Brexit as the potential first falling domino of the EU's future disintegration, which could cause a further slowdown in overall global economic growth.

However, the long-term implications of Brexit, as well as any resulting fallout, are unknown. Events are likely to play out over the next several years. This unprecedented event has created a degree of uncertainty in the financial markets. Financial markets generally do not react well to uncertainty — which could potentially affect portfolios.

## Asset class performance

The second quarter of 2016 was another dynamic environment for financial markets, though the majority of asset classes realized positive returns for the quarter. International equity markets realized some of the greatest fallout from the Brexit vote, with most other asset classes closing the quarter in positive, if lackluster, territory. With the continued uncertainty around the global economy, interest rates pushed lower, creating a relatively strong environment for fixed income.

The S&P 500® Index, a widely followed barometer of U.S. large-cap stock performance, closed the quarter with a gain of 2.5% on a total return basis, bringing the year-to-date return up to 3.8%. Over longer periods, the returns for the index remain stronger. The three-year return for the index for the period ended June 30, 2016, was 11.7% on an annualized basis; the five-year annualized number was 12.1%.

Small-cap stocks, as measured by the S&P SmallCap 600® Index, had a stronger quarter than large-cap stocks, but the longer-term numbers continue to lag the domestic large-cap names on average. For the quarter, the S&P SmallCap 600 posted a return of 3.5%, bringing the year-to-date number for the index up to 6.2%. The one-year number for the period ended June 30, 2016, was flat; longer-term returns were more compelling. The annualized three- and five-year numbers as of June 30, 2016, were 10.2% and 11.2%, respectively.

Outside the U.S., equity markets were much less impressive. The MSCI EAFE® Index, which measures the performance of developed equity markets outside the U.S. and Canada (primarily in Western Europe and developed Asia), realized a total return of -1.5% for the quarter, bringing the year-to-date return down to -4.4%. However, the MSCI Emerging Markets® Index remained in positive territory for the quarter, generating a total return of 0.7%.

Year to date, emerging markets have generally been a bright spot, generating a total return of 6.4% and outperforming developed world equities both in the U.S. and globally. Although we have seen a bit of a decoupling from the performance of emerging markets and commodities in recent years, many emerging market names have remained heavily dependent on the performance of commodities, which have had a very strong year so far despite longer-term returns that remain poor.

For the first time in several years, commodities generated a very strong performance. The Bloomberg Commodity® Index, which tracks a broad-based basket of various commodities, realized a positive return of 12.8% for the first quarter, bringing the year-to-date number up to 13.3%. Despite strong recent returns, however, commodities have performed very poorly over longer-term periods, posting annualized losses of 10.6% and 10.8% over the three- and five-year trailing periods, respectively.

In 2016, value names have outperformed growth names markedly across all cap sizes. The Russell 1000 Growth Index realized a return of only 0.6% for the quarter, compared with 4.6% for the Russell 1000 Value Index. The Russell 2000 Growth Index, which measures the performance of U.S. small-cap growth names, returned 3.2% compared with 4.3% for its value-oriented counterpart (the Russell 2000 Value).

The first quarter was generally a good time for fixed-income investors, who benefited from a continued falling rate environment. The yield on the benchmark 10-year Treasury declined from 2.27% at the end of 2015 to 1.49% at the end of the second quarter (a decline of more than 0.75%) in 2016. This decline has helped drive strong performance in various fixed-income sectors. The Barclays U.S. Aggregate Bond® Index posted a return of 2.2% for the quarter, following a return of 3.0% for the first quarter. The one-year return on the index now stands at 6% because of falling yields in a low-rate environment.

Finally, the domestic real estate market, as measured by the performance of the FTSE NAREIT All Equity REITs® Index, also experienced another strong quarter. The index posted a return of 7.4%, bringing the year-to-date number up to 13.7% (one of the strongest performers across the asset class spectrum). Allocations to real estate securities have been a strong contributor for portfolios allocating to the space this year.

## Performance of the Great-West Lifetime Funds[1]

Both the Great-West Lifetime Funds and the Great-West Lifetime Conservative Funds closed out the quarter with positive returns ranging from 1.9 to 2.4%. The funds benefited during the quarter from the positive returns generated by most asset classes. However, certain asset classes in which the funds invest, particularly non-U.S. equities, proved to be a detractor from overall fund performance.

The funds, by design, are broadly diversified across global equity and fixed-income asset classes. In general, the performance of each of the funds is influenced by the performance of the various equity and fixed-income asset classes in which each one invests.

The funds' results continue to match our expectations for performance. Over longer periods, the performance variations among asset classes become far more pronounced. As expected during a relatively strong period for equity markets, the Lifetime Conservative Funds have underperformed the Lifetime Funds. The Lifetime Funds, which have significantly greater exposure to equity securities, target — and in this quarter obtained — more upside market capture. The Lifetime Conservative Funds, which tend to have less equity exposure, place greater emphasis on downside protection relative to their peers. They have generally performed in line with their Morningstar categories despite a broad underweight to equity securities in a period in which equities have generally outperformed fixed income.

One positive driver of relative performance for the quarter was the inclusion in each of the funds of the Great-West Goldman Sachs Mid Cap Value Fund.[2] This fund attempts to leverage Goldman's capabilities in big data to deliver value for fund shareholders. The strategy deploys advanced quantitative methods and analytics to identify mid-cap equity securities that the team expects to outperform over the long run.

The fund's 4.03% return in the second quarter ranked in the top quartile of all funds in the Morningstar mid-value category. Longer-term results are compelling as well. The fund returned 11.6% and 11.4% on an annualized basis over the three- and five-year periods, respectively — both of which rank within the top 10% of all funds in the Morningstar category.[3,4]

Another positive driver of fund performance for the quarter was the Great-West Putnam High Yield Bond Fund.[5] This strategy continues to leverage Putnam's capabilities in high-yield fixed income to identify names in the space that Putnam expects to outperform. The fund has had an impressive run over the past several years, despite a more conservative tilt versus many other funds in the high-yield space. Year to date, the fund has posted a return of 8.7%, which ranks among the top 10% of all funds in the Morningstar high-yield bond category. In the three- and five-year periods, the fund has returned an annualized 3.9% and 5.2%, respectively.[6,7]

During the quarter, the Great-West Lifetime Series II Funds merged into the Lifetime Series III Funds. Additionally, the names of the funds were changed to better reflect the new structure. The Great-West Lifetime Series I Funds were renamed the Great-West Lifetime Conservative Funds, and the Great-West Lifetime Series III Funds were renamed the Great-West Lifetime Funds. Finally, additional funds were launched for each of the two series to expand the number of funds in each series from five to nine. The 2020, 2030, 2040 and 2050 funds were launched for each of the two series.

We believe that these changes will benefit clients in providing more differentiation across the various fund suites and will better align the two surviving series to individual investor needs. There were no changes to any of the underlying funds during the quarter.

*Please consider the investment objectives, risks, fees and expenses carefully before investing. For this and other important information, you may obtain mutual fund prospectuses from your registered representative or by visiting* ***greatwestfunds.com.*** *Read them carefully before investing.*

*The date in a target date fund's name represents an approximate date when an investor is expected to retire (which is assumed to be at age 65). The principal value of the funds is not guaranteed at any time, including the target date. For more information, please refer to the fund prospectus.*

*Current performance may be lower or higher than performance data shown. Performance data quoted represents past performance and is not a guarantee or prediction of future results. For performance data current to the most recent month-end, please visit* ***greatwestfunds.com.*** *The investment return and principal value of an investment will fluctuate so that, when redeemed, shares/units may be worth more or less than their original cost.*

## Fund performance and Morningstar ratings as of June 30, 2016

| | | | | MORNINGSTAR RATING/ TOTAL # OF FUNDS | | | TOTAL RET. RANK CATEGORY*/ # OF FUNDS | | |
|---|---|---|---|---|---|---|---|---|---|
| FUND NAME | TICKER | INCEPTION DATE | CATEGORY | OVERALL | 3-YEAR | 5-YEAR | 1-YEAR | 3-YEAR | 5-YEAR |
| **Great-West Lifetime 2015 Instl** | MXNYX | 5/1/2015 | Target Date 2015 | ★★★★/114 | ★★★★/114 | ★★★★/85 | 45/155 | N/A | N/A |
| **Great-West Lifetime 2020 Instl** | MXAKX | 4/29/2016 | Target Date 2020 | N/A | N/A | N/A | N/A | N/A | N/A |
| **Great-West Lifetime 2025 Instl** | MXQBX | 5/1/2015 | Target Date 2025 | ★★★★/160 | ★★★★/160 | ★★★★/123 | 57/207 | N/A | N/A |
| **Great-West Lifetime 2030 Instl** | MXAYX | 4/29/2016 | Target Date 2030 | N/A | N/A | N/A | N/A | N/A | N/A |
| **Great-West Lifetime 2035 Instl** | MXTBX | 5/1/2015 | Target Date 2035 | ★★★★/160 | ★★★★/160 | ★★★★/123 | 43/207 | N/A | N/A |
| **Great-West Lifetime 2040 Instl** | MXBGX | 4/29/2016 | Target Date 2040 | N/A | N/A | N/A | N/A | N/A | N/A |
| **Great-West Lifetime 2045 Instl** | MXWEX | 5/1/2015 | Target Date 2045 | ★★★★/160 | ★★★★/160 | ★★★/116 | 41/207 | N/A | N/A |
| **Great-West Lifetime 2050 Instl** | MXBSX | 4/29/2016 | Target Date 2050 | N/A | N/A | N/A | N/A | N/A | N/A |
| **Great-West Lifetime 2055 Instl** | MXZHX | 5/1/2015 | Target Date 2055 | ★★★/122 | ★★★/122 | ★★★/80 | 51/202 | N/A | N/A |
| **Great-West Lifetime Conservative 2015 Instl** | MXMAX | 5/1/2015 | Target Date 2015 | ★★★/114 | ★★★/114 | ★★★/85 | 31/155 | N/A | N/A |
| **Great-West Lifetime Conservative 2020 Instl** | MXAFX | 4/29/2016 | Target Date 2020 | N/A | N/A | N/A | N/A | N/A | N/A |
| **Great-West Lifetime Conservative 2025 Instl** | MXOZX | 5/1/2015 | Target Date 2025 | ★★★/160 | ★★★/160 | ★★★/123 | 9/207 | N/A | N/A |
| **Great-West Lifetime Conservative 2030 Instl** | MXARX | 4/29/2016 | Target Date 2030 | N/A | N/A | N/A | N/A | N/A | N/A |
| **Great-West Lifetime Conservative 2035 Instl** | MXRCX | 5/1/2015 | Target Date 2035 | ★★★/160 | ★★★★/160 | ★★★/123 | 1/207 | N/A | N/A |
| **Great-West Lifetime Conservative 2040 Instl** | MXBCX | 4/29/2016 | Target Date 2040 | N/A | N/A | N/A | N/A | N/A | N/A |
| **Great-West Lifetime Conservative 2045 Instl** | MXUCX | 5/1/2015 | Target Date 2045 | ★★★/160 | ★★★★/160 | ★★★/116 | 16/207 | N/A | N/A |
| **Great-West Lifetime Conservative 2050 Instl** | MXBNX | 4/29/2016 | Target Date 2050 | N/A | N/A | N/A | N/A | N/A | N/A |
| **Great-West Lifetime Conservative 2055 Instl** | MXXFX | 5/1/2015 | Target Date 2055 | ★★★/122 | ★★★/122 | ★★★/80 | 28/202 | N/A | N/A |

* A lower percentile ranking is more favorable (higher relative returns).

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1 The Great-West Lifetime Funds may invest in other funds advised by GWCM, funds that are subadvised by affiliated and unaffiliated subadvisers retained by GWCM, funds that are advised by affiliated and unaffiliated investment advisers of GWCM, and in a fixed-interest contract issued and guaranteed by Great-West Life & Annuity Insurance Company (GWL&A). All comments reflect the Institutional Share Class of each fund. Asset allocation funds are subject to the risks of the underlying funds, which can be a mix of equity funds and fixed-income funds. For more information, see the prospectus.

2 Equity securities of small and mid-sized companies may be more volatile than securities of larger, more established companies.

3 Great-West Goldman Sachs Mid Cap Value Fund Institutional Class performance as of June 30, 2016, performance for the one-, three-, five- and 10-year and since inception periods was 2.4%, 11.6%, 11.4%, N/A and 8.0%, respectively. The date of inception for the fund was May 1, 2015. The gross expense ratio as of June 30, 2016 is 0.90%. Performance for Institutional Class shares before their inception is derived from the historical performance of Initial Class shares, which has not been adjusted for the lower expenses; had it, returns would have been higher.

4 The Great-West Goldman Sachs Mid Cap Value Fund Institutional Class was ranked 87 out of 484 funds in the Morningstar Mid Cap Value Category for the second quarter of 2016. The fund ranked 25 out of 408 funds in the Morningstar Mid Cap Value Category for the three years ended June 30, 2016, and was ranked 26 out of 348 for the five years ended June 30, 2016. Morningstar rankings do not reflect the deduction of sales charges, which, if reflected, would reduce returns. *Past performance is no guarantee of future results.*

5 A bond fund's yield, share price and total return change daily and are based on changes in interest rates, market conditions, economic and political news, and the quality and maturity of its investments. In general, bond prices fall when interest rates rise and vice versa. Compared with higher-rated securities, high-yield bond investment options are subject to greater risk, including the risk of default.

6 Great-West Putnam High Yield Fund Institutional Class performance as of June 30, 2016, performance for the one-, three-, five- and 10-year and since inception periods was 0.8%, 3.9%, 5.2%, 5.4% and 5.9%, respectively. The date of inception for the fund was May 1, 2015. The gross expense ratio as of June 30, 2016, is 0.75%. Performance for Institutional Class shares before their inception is derived from the historical performance of Initial Class shares, which has not been adjusted for the lower expenses; had it, returns would have been higher.

7 The Great-West Putnam High Yield Bond Fund, Institutional Class was ranked 58 out of 815 funds in the Morningstar High Yield Bond Category for the first six months (YTD) 2016. The fund ranked 180 out of 653 funds in the category for three years and 161 out of 529 funds for the five years ended June 30, 2016. Morningstar rankings do not reflect the deduction of sales charges, which, if reflected, would reduce returns. *Past performance is no guarantee of future results.*

The S&P 500® Index is an unmanaged index considered indicative of the domestic large-cap equity market. The MSCI EAFE® Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity performance of developed markets, excluding the U.S. and Canada. As of December 31, 2014, the MSCI EAFE® Index consisted of 22 developed market country indices. The Barclays U.S. Aggregate Bond Index covers the U.S. investment-grade bond market. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The FTSE NAREIT U.S. Real Estate Index Series is to present investors with a comprehensive U.S. REIT performance index. The FTSE EPRA/NAREIT Developed ex-U.S. Index is a subset of the FTSE EPRA/NAREIT Developed Index and is designed to track the performance of listed real estate companies and REITs outside the U.S. The Russell 2000® Index measures the performance of the small-cap segment of the U.S. equity universe. The Barclays U.S. Corporate High Yield Index is designed to measure the performance of the noninvestment-grade (i.e., high yield) segment the U.S. corporate fixed-income market. The Barclays U.S. Government/Credit Long Duration is designed to measure the performance of long duration government and corporate and other credit bonds. S&P 500® Index is a registered trademark of Standard & Poor's Financial Services, LLC. Russell 2000® Index is a registered trademark of Russell Investments. MSCI EAFE® is a registered trademark of MSCI Inc.

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