

Market Analysis / Third Quarter 2019



INDEPENDENT WEALTH MANAGEMENT

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Trade Uncertainty Clouded the Tepid Global Landscape

During Q2, U.S.–China trade tension escalated, providing an additional source of concern about the global growth slowdown. The world’s major central banks, including the Federal Reserve, shifted their tone more clearly toward an easing bias. These factors stoked volatility in global equity markets, while government bond yields dropped further. The mature global business cycle continues to warrant smaller cyclical allocation tilts.

MACRO

Q2 2019

- Signs of lackluster global growth and escalating U.S.-China trade tensions spurred a further dovish shift in monetary policy expectations.

OUTLOOK

- The U.S. is firmly in the late-cycle phase, though near-term recession risk remains low.
- Policy easing has stabilized China’s economy, but a material reacceleration is unlikely.
- The Fed’s more dovish tone provides near-term relief, but the global monetary backdrop is still tighter than two years ago.
- Trade-policy uncertainty is an ongoing drag on corporate confidence.

ASSET MARKETS

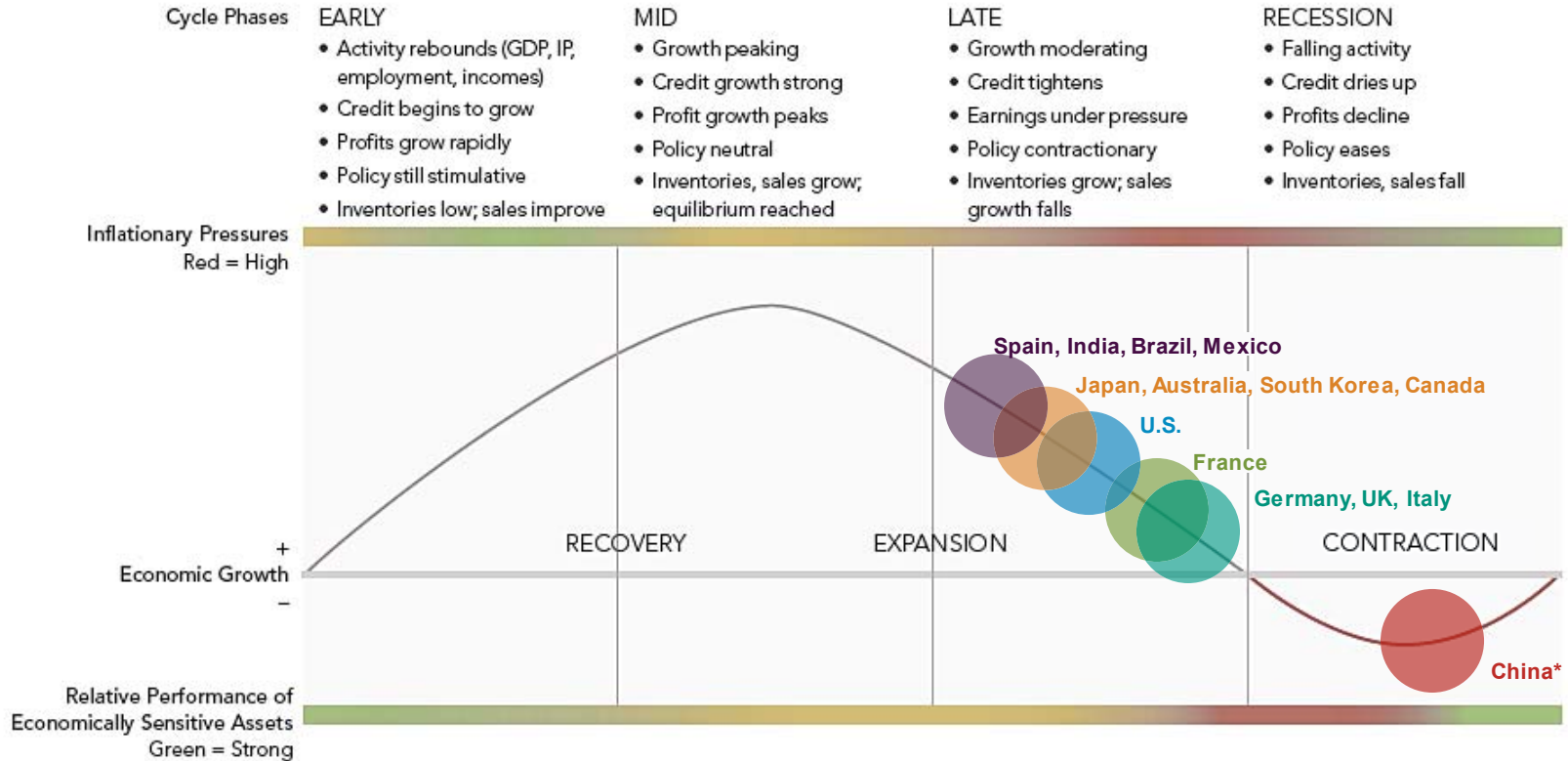
- Global government bond yields continued to drop, while global equities posted gains.

- Late-cycle phases typically exhibit higher volatility, a more asymmetric risk-return profile.
- Wide dispersion of outcomes warrants smaller allocation tilts than earlier in the cycle.
- Prioritize diversification amid significant uncertainty.

Mature U.S. and Global Business Cycles

Global growth momentum continued to slow, and most major economies have progressed toward more advanced stages of the business cycle. The U.S. is firmly in the late-cycle phase but with low near-term risk of recession. Policy stimulus in China has stabilized that country's growth trajectory, but most economic indicators in Europe continue to point to lackluster activity.






Business Cycle Framework



Note: The diagram above is a hypothetical illustration of the business cycle. There is not always a chronological, linear progression among the phases of the business cycle, and there have been cycles when the economy has skipped a phase or retraced an earlier one. * A growth recession is a significant decline in activity relative to a country's long-term economic potential. We use the "growth cycle" definition for most developing economies, such as China, because they tend to exhibit strong trend performance driven by rapid factor accumulation and increases in productivity, and the deviation from the trend tends to matter most for asset returns. We use the classic definition of recession, involving an outright contraction in economic activity, for developed economies. Source: Fidelity Investments (AART), as of 6/30/19.

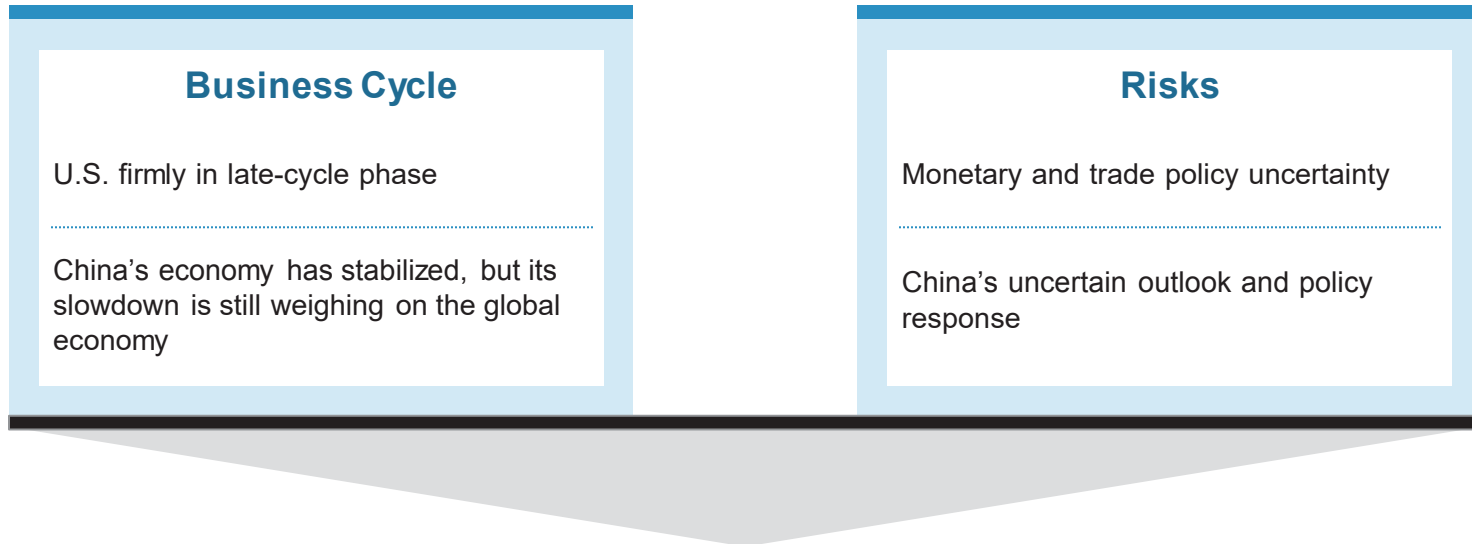
U.S. Exhibiting a Slow-Moving Late Cycle

Late cycle often is characterized as the phase when capacity becomes constrained and economic activity peaks. Inflation rates are not always high, but tight labor markets tend to lead to higher wage growth and more restrictive monetary policy. Currently, late-cycle trends are well entrenched with peaking profit margins and an inverted yield curve, although some trends are progressing slowly and credit conditions remain easy.

INDICATOR	CURRENT TREND	LATEST READINGS
 Employment/Wages	Labor markets tighter, wages higher than 2–3 years ago	Pace of improvement has stalled
 Monetary Policy	Fed policy tighter than one year ago	Fed leaning toward easing
 Yield Curve	Flattening	Inverted
 Credit	Some tightening of lending standards	Credit accessible, spreads tight
 Corporate Profits	Margins lower than 3 years ago	Mid-single-digit earnings growth expectations

Outlook: Market Assessment

Fidelity's Business Cycle Board, composed of portfolio managers responsible for a variety of global asset allocation strategies, believes global economic momentum has peaked and trade policy friction is negatively influencing capital expenditures. However, the change in tone from monetary policymakers globally offers a possibility that a more accommodative posture may help to lengthen the duration of the business cycle.



Asset allocation implications

Current environment warrants smaller asset allocation tilts and a diversified strategy

Policymakers' shift to more accommodative stance may support global asset markets

Inflation-linked asset valuations appear attractive relative to other asset classes

Performance Rotations Underscore Need for Diversification

The performance of different assets has fluctuated widely from year to year, and the magnitude of returns can vary significantly among asset classes in any given year—even among asset classes that are moving in the same direction. A portfolio allocation with a variety of global assets illustrates the potential benefits of diversification.

Periodic Table of Returns

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	YTD	Legend
66%	32%	14%	26%	56%	32%	35%	35%	40%	5%	79%	28%	8%	20%	39%	28%	5%	21%	38%	0%	21%	Growth Stocks
34%	26%	8%	10%	47%	26%	21%	33%	16%	-20%	58%	27%	8%	19%	34%	14%	3%	18%	30%	-2%	19%	Large Cap Stocks
27%	12%	5%	4%	39%	21%	14%	27%	12%	-26%	37%	19%	4%	18%	33%	13%	1%	18%	26%	-2%	18%	REITs
24%	8%	2%	-2%	37%	18%	12%	22%	11%	-34%	32%	18%	4%	18%	32%	12%	1%	12%	22%	-3%	17%	Small Cap Stocks
21%	-1%	-2%	-6%	31%	17%	7%	18%	7%	-36%	28%	17%	2%	16%	23%	11%	1%	12%	15%	-4%	16%	Value Stocks
21%	-3%	-4%	-9%	31%	11%	5%	16%	6%	-36%	27%	16%	2%	16%	19%	6%	0%	11%	15%	-4%	14%	Foreign-Developed Country Stocks
12%	-5%	-4%	-15%	29%	11%	5%	12%	5%	-37%	26%	15%	0%	16%	7%	5%	-4%	9%	13%	-9%	14%	60% Large Cap 40% IG Bonds
7%	-9%	-12%	-16%	28%	9%	5%	11%	2%	-38%	20%	15%	-4%	15%	3%	3%	-4%	8%	9%	-11%	11%	Emerging-Market Stocks
3%	-14%	-20%	-20%	24%	8%	4%	9%	-1%	-38%	19%	12%	-12%	11%	-2%	-2%	-5%	7%	8%	-11%	10%	High-Yield Bonds
-1%	-22%	-20%	-22%	19%	7%	3%	4%	-2%	-43%	18%	8%	-13%	4%	-2%	-4%	-15%	3%	4%	-11%	6%	Investment-Grade Bonds
-5%	-31%	-21%	-28%	4%	4%	2%	2%	-16%	-53%	6%	7%	-18%	-1%	-10%	-17%	-25%	2%	1%	-14%	5%	Commodities

Past performance is no guarantee of future results. Diversification/asset allocation does not ensure a profit or guarantee against loss. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Asset classes represented by: Commodities—Bloomberg Commodity Index; Emerging-Market Stocks—MSCI Emerging Markets Index; Non-U.S. Developed-Country Stocks—MSCI EAFE Index; Growth Stocks—Russell 3000 Growth Index; High-Yield Bonds—ICE BofAML U.S. High Yield Index; Investment-Grade Bonds—Bloomberg Barclays U.S. Aggregate Bond Index; Large Cap Stocks—S&P 500 Index; Real Estate/REITs—FTSE NAREIT All Equity Total Return Index; Small Cap Stocks—Russell 2000 Index; Value Stocks—Russell 3000 Value Index. Source: Morningstar, Standard & Poor's, Haver Analytics, Fidelity Investments (AART), as of 6/30/19.

U.S. Assets Led Widespread Rally

In Q2, U.S. markets—led by financial-sector stocks and long-term bonds—spearheaded a broad-based appreciation in equity and fixed income assets around the world. Performance differentials among U.S. assets were unusually narrow, with most categories of both riskier and less risky assets posting modest to mid-single-digit gains. More-globally linked assets such as commodities and emerging-market equities lagged.

U.S. Equity Styles Total Return

	Q2	YTD
Growth	4.5%	21.4%
Large Caps	4.3%	18.5%
Mid Caps	4.1%	21.3%
Value	3.7%	16.0%
Small Caps	2.1%	17.0%

U.S. Equity Sectors Total Return

	Q2	YTD
Financials	8.0%	17.2%
Materials	6.3%	17.3%
Info Tech	6.1%	27.1%
Consumer Discretionary	5.3%	21.8%
Communication Services	4.5%	19.1%
Consumer Staples	3.7%	16.2%
Industrials	3.6%	21.4%
Utilities	3.5%	14.7%
Real Estate	2.5%	20.4%
Health Care	1.4%	8.1%
Energy	-2.8%	13.1%

International Equities and Global Assets Total Return

	Q2	YTD
ACWI ex-USA	3.0%	13.6%
Canada	4.9%	21.0%
Europe	4.5%	15.8%
EAFE	3.7%	14.0%
EAFE Small Cap	1.7%	12.5%
Japan	1.0%	7.7%
EMEA	7.2%	13.1%
Latin America	4.4%	12.6%
Emerging Markets	0.6%	10.6%
EM Asia	-1.2%	9.7%
Gold	9.1%	9.9%
Commodities	-1.2%	5.1%

U.S. Equity Factors Total Return

	Q2	YTD
Momentum	6.2%	19.9%
Min Volatility	5.6%	19.1%
Quality	4.0%	21.4%
Size	4.0%	19.0%
Value	2.4%	13.7%
Yield	1.7%	12.5%

Fixed Income Total Return

	Q2	YTD
Long Govt & Credit	6.6%	13.5%
Credit	4.3%	9.4%
EM Debt	3.8%	10.6%
CMBS	3.3%	6.6%
Aggregate	3.1%	6.1%
Treasuries	3.0%	5.2%
TIPS	2.9%	6.2%
High Yield	2.5%	10.1%
Agency	2.3%	4.2%
Municipal	2.1%	5.1%
MBS	2.0%	4.2%
Leveraged Loan	1.7%	5.7%
ABS	1.7%	3.2%

EM: Emerging Markets. EMEA: Europe, the Middle East and Africa. For indexes and other important information used to represent above asset categories, see Appendix. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. Sector returns represented by S&P 500 sectors. Sector investing involves risk. Because of its narrow focus, sector investing may be more volatile than investing in more diversified baskets of securities. Source: Bloomberg, Fidelity Investments (AART), as of 6/30/19.

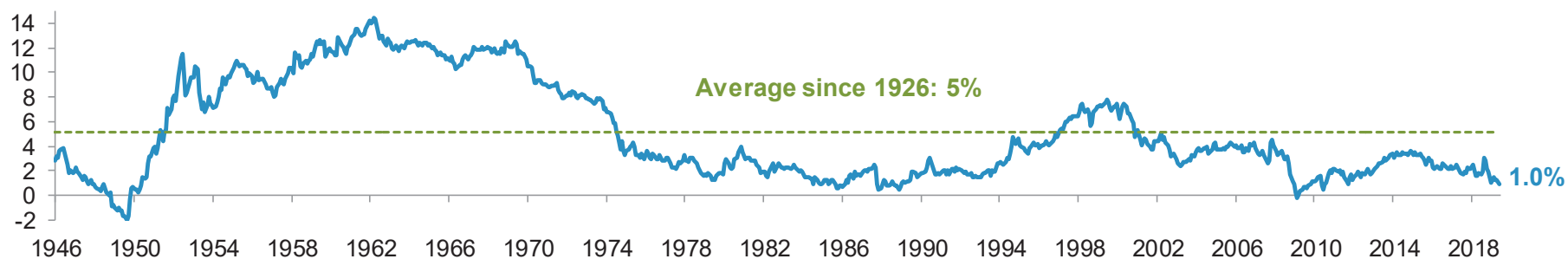
Broad-Based Gains across Safer and Riskier Assets

Safe-haven assets such as government bonds and gold registered solid returns during Q2, while equities and riskier bond categories extended their year-to-date gains. Markets benefited from a dovish shift in tone from global monetary policymakers that many investors hoped would lead to lower policy interest rates and greater liquidity growth. Commodities and emerging-market equities lagged as global growth indicators stayed soft.

	Q2 2019 (%)	YTD (%)		Q2 2019 (%)	YTD (%)
Gold	9.1	9.9	Investment-Grade Bonds	3.1	6.1
Long Government & Credit Bonds	6.6	13.5	High Yield Bonds	2.5	10.1
U.S. Large Cap Stocks	4.3	18.5	U.S. Small Cap Stocks	2.1	17.0
U.S. Corporate Bonds	4.3	9.4	Non-U.S. Small Cap Stocks	1.7	12.5
U.S. Mid Cap Stocks	4.1	21.3	Real Estate Stocks	1.2	17.8
Emerging-Market Bonds	3.8	10.6	Emerging-Market Stocks	0.6	10.6
Non-U.S. Developed-Country Stocks	3.7	14.0	Commodities	-1.2	5.1

20-Year U.S. Stock Returns Minus IG Bond Returns since 1926

Annualized Return Difference (%)

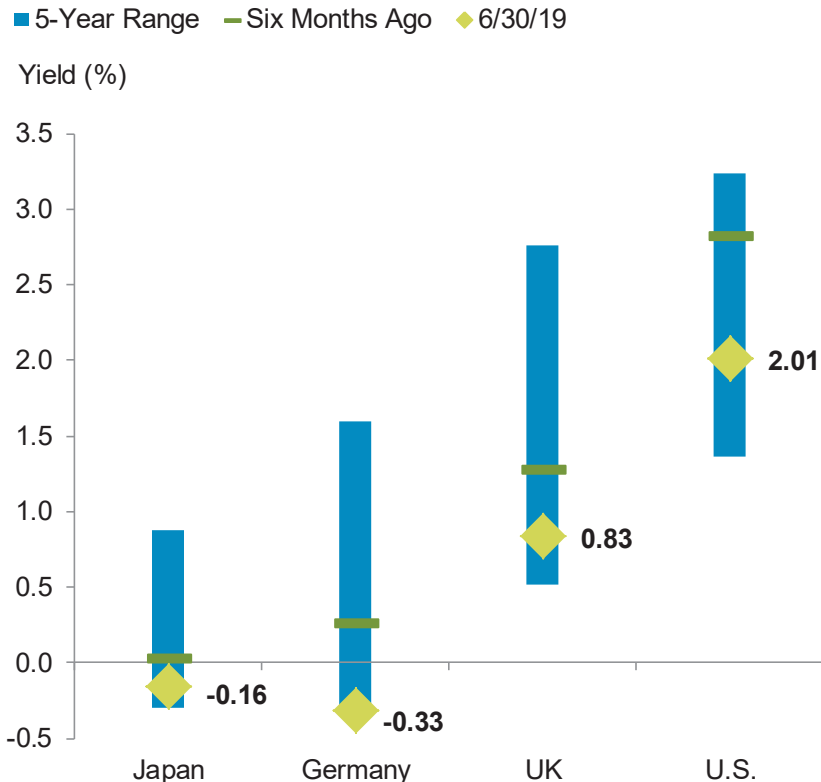


Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Assets represented by: Commodities—Bloomberg Commodity Index; Emerging-Market Bonds—JP Morgan EMBI Global Index; Emerging-Market Stocks—MSCI EM Index; Gold—Gold Bullion, LBMA PM Fix; High-Yield Bonds—ICE BofAML High Yield Bond Index; Investment-Grade Bonds—Bloomberg Barclays U.S. Aggregate Bond Index; Non-U.S. Developed-Country Stocks—MSCI EAFE Index; Non-U.S. Small Cap Stocks—MSCI EAFE Small Cap Index; Real Estate Stocks—FTSE NAREIT Equity Index; U.S. Corporate Bonds—Bloomberg Barclays U.S. Credit Index; U.S. Large Cap Stocks—S&P 500® Index; U.S. Mid Cap Stocks—Russell Midcap Index; U.S. Small Cap Stocks—Russell 2000 Index; U.S. Treasury Bonds—Bloomberg Barclays U.S. Treasury Index. Source: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments (AART), as of 6/30/19.

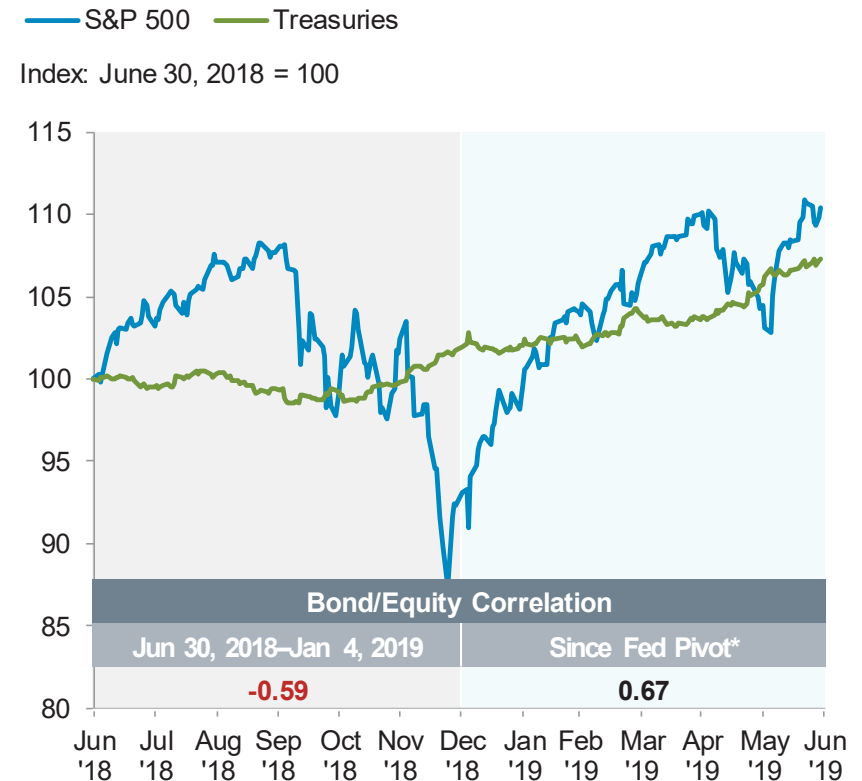
Mixed Signals from Plunging Bond Yields, Soaring Stocks

Government bond yields continued to decline amid concerns of global economic weakness, trade friction, and low inflation, with 10-year yields in Germany and Japan dropping further into negative territory. Meanwhile, U.S. stocks posted new all-time highs. Unlike in late 2018—when stocks sold off as bond yields fell—the rise of both equities and Treasury bonds during 2019 may reflect hope for broad-based global monetary easing.

10-Year Government Bond Yields



U.S. Equity and Treasury Bond Returns



* On January 4, 2019, Federal Reserve Chairman Jerome Powell commented at the American Economic Association and Allied Social Science Association Annual Meeting in Atlanta, Georgia. **LEFT:** Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 6/30/19.

RIGHT: Source: Standard & Poor's, Bloomberg Barclays, Bloomberg Finance L.P., Fidelity Investments (AART), as of 6/30/19

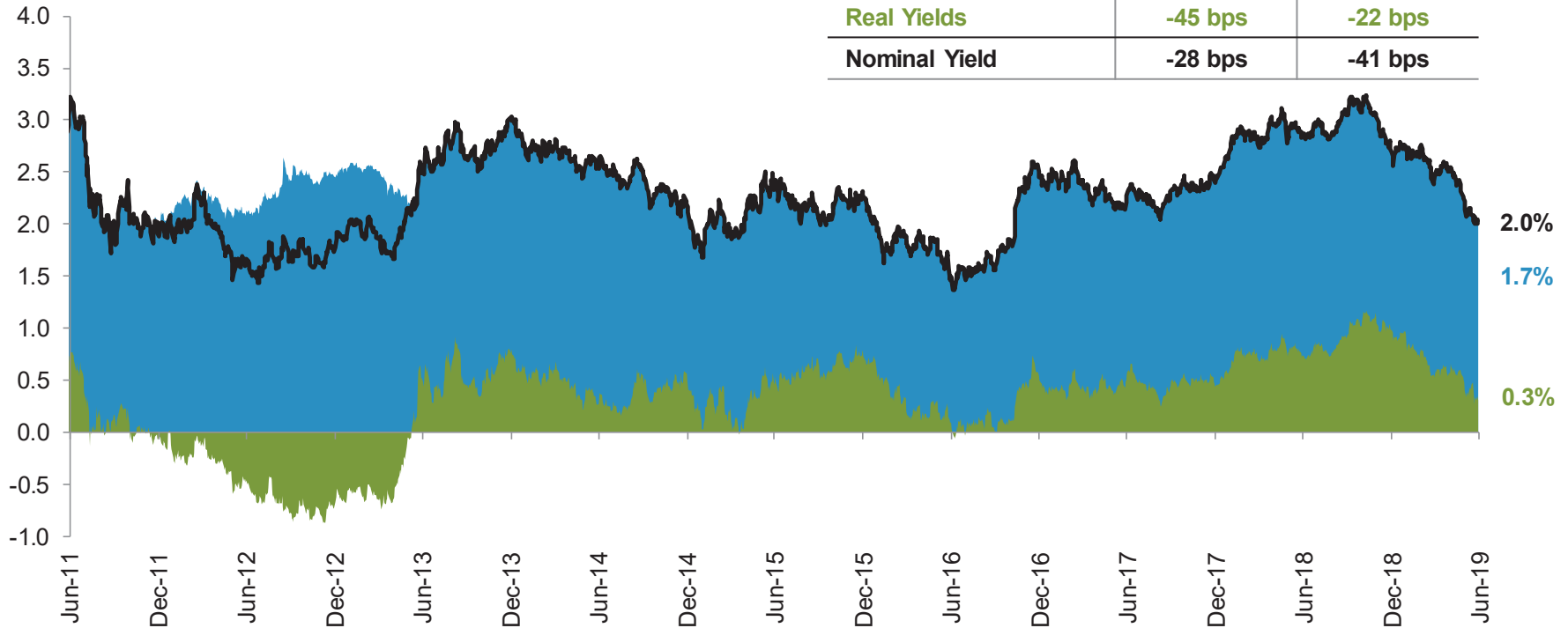
Yields Priced In Lower Expectations for Inflation and Growth

Nominal 10-year Treasury bond yields fell again during Q2, a result of a drop in real yields and inflation expectations. For the first half of 2019, nominal yields dropped nearly 70 basis points, with real yields accounting for almost all of the move. The decline in the real cost of borrowing reflected end-of-Q2 market expectations that the Federal Reserve will cut interest rates at least 50 basis points during 2019.

10-Year U.S. Treasury Bond Yields

■ Inflation Expectations ■ Real Yields — Nominal Yield

Yield (%)



Fed: Federal Reserve. Nominal Yield: 10-Year Treasury yield. Source: Federal Reserve, Haver Analytics, Fidelity Investments (AART), as of 6/30/19.

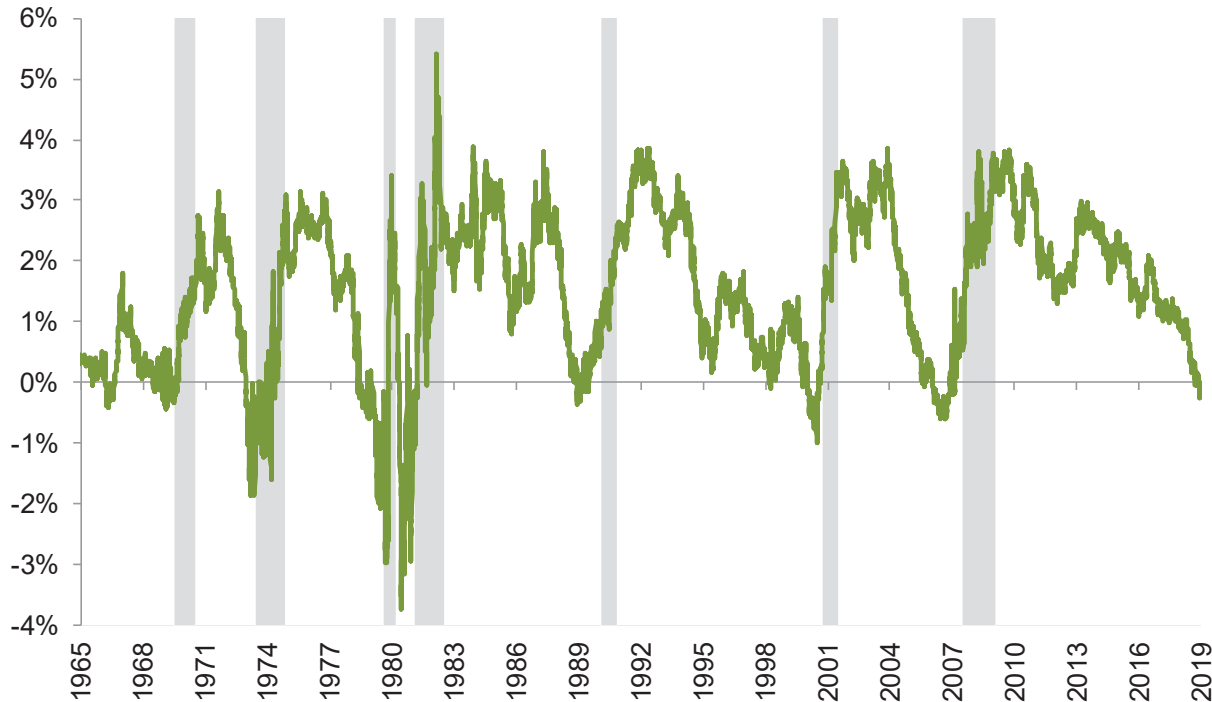
Yield Curve Inversion Typical during Late Cycle

Ten-year Treasury bond yields ended the quarter below 3-month Treasuries, inverting the yield curve. Curve inversions have preceded the past seven recessions and may be interpreted as a market signal of weaker expectations relative to current conditions. However, the time between inversion and recession has varied significantly, and there have been two “head fakes” in which the expansion continued for more than two years.

U.S. Treasury Yield Curve

— 10-Year Minus 3-Month Yield

Yield Spread



Yield Curve Inversions

- Occurred before the last 7 recessions
- Occurred twice without a recession (1966, 1998)
- Recessions started 4 to 21 months after inversion
- Un-inversions often occurred prior to recession

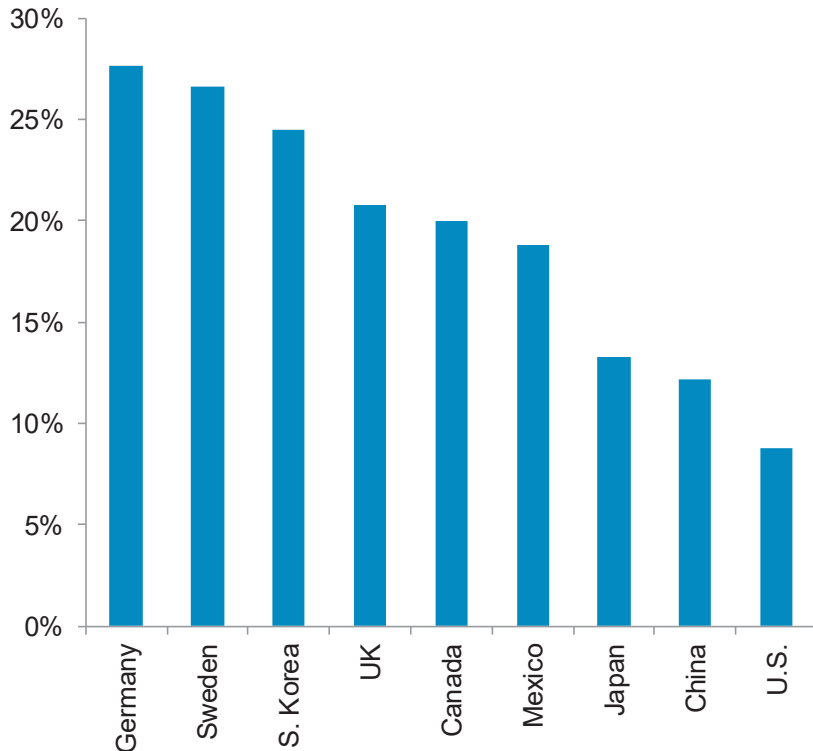
Shading represents U.S. economic recession as defined by the National Bureau of Economic Research (NBER). Source: Bloomberg Financial L.P., NBER, Fidelity Investments (AART), as of 6/30/19.

Evidence of a Trade Slowdown Starting to Mount

Weaker industrial activity—in conjunction with rising trade barriers and uncertainty—has begun to reverberate throughout the highly interconnected global economy. Inventories, particularly of manufactured goods, have risen in several regions. Smaller and more open economies are most susceptible to global trade risk, but employment in many large economies, including Germany, is significantly influenced by trade.

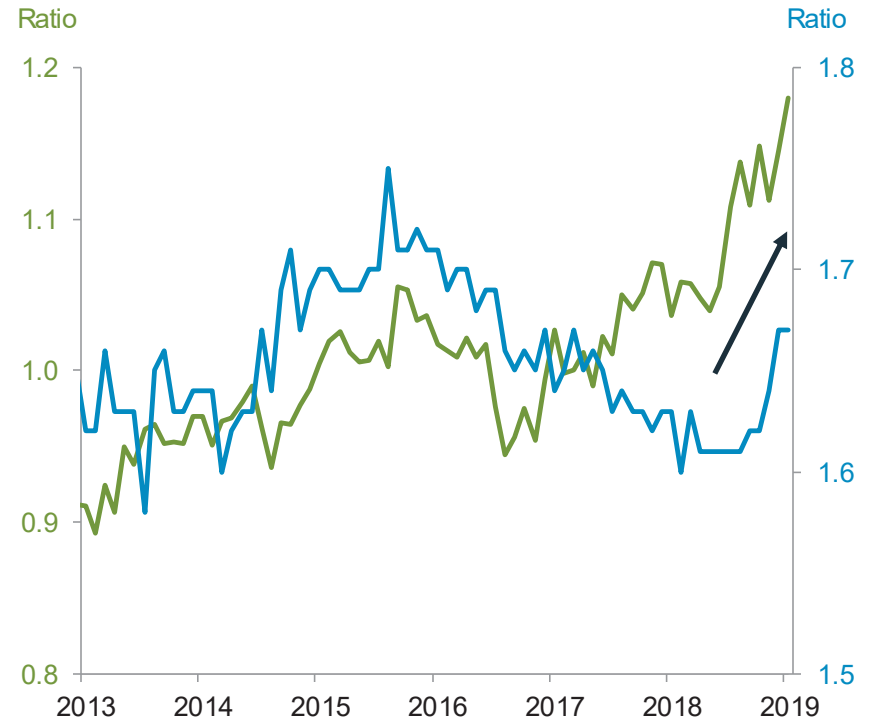
Employment Reliance on Foreign Trade

Share of Employment from Exports



Inventory to Shipments

— South Korea (All Industries) — U.S. Durable Goods



LEFT: Share of domestic business sector employment sustained by exporting activities. Source: OECD, Fidelity Investments (AART), as of 6/30/19.

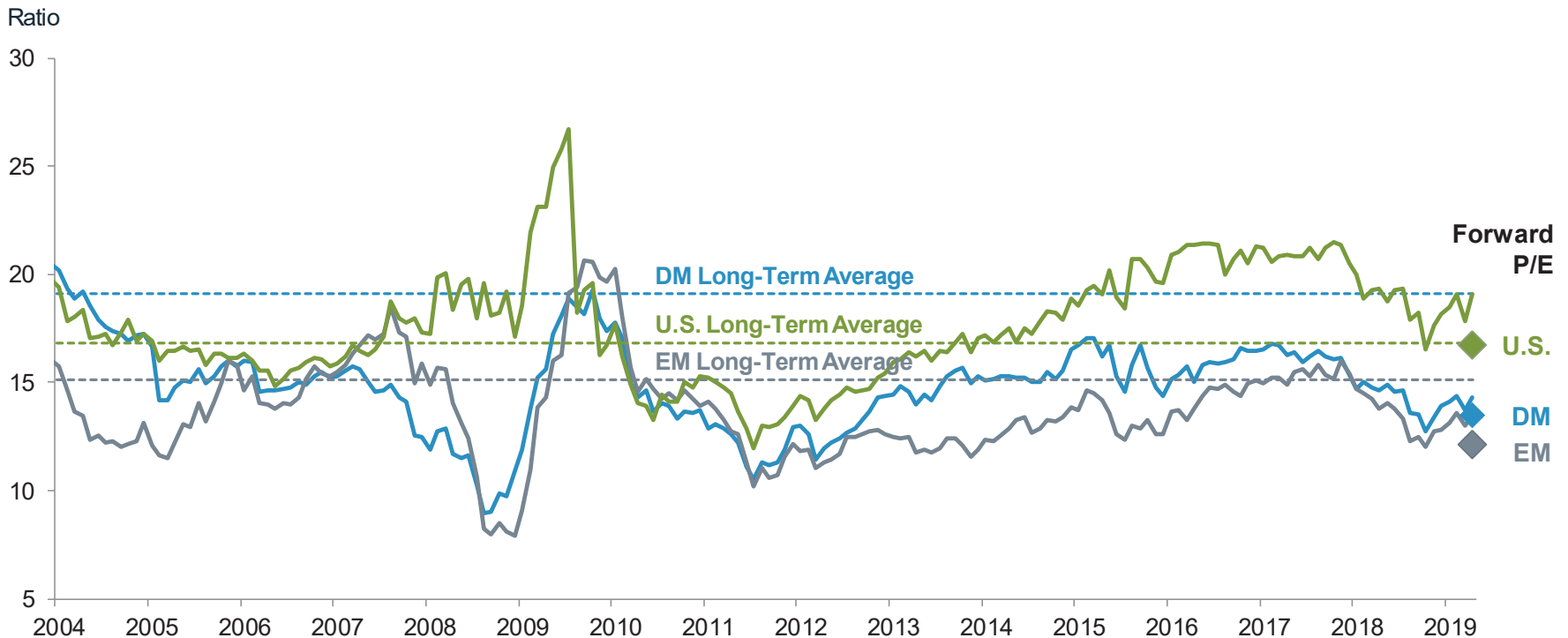
RIGHT: Source: Census Bureau, Statistics Korea, Haver Analytics, Fidelity Investments (AART), as of 5/31/19.

Equity Valuations Mixed Relative to History

Rising stock prices moved U.S. equity valuations higher during Q2, leaving them above their long-term historical average. Price-to-earnings (P/E) ratios for international developed and emerging markets remained below their long-term averages, with forward (expected) P/E ratios at similar levels.

Global Market P/E Ratios

— DM Trailing P/E — EM Trailing P/E — U.S. Trailing P/E ◆ Forward



DM: Developed Markets. EM: Emerging Markets. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Price-to-earnings ratio (P/E): stock price divided by earnings per share. Also known as the multiple, P/E gives investors an idea of how much they are paying for a company's earnings power. Long-term average P/E for Emerging Markets includes data for 1988–2017. Long-term average P/E for Developed Markets includes data for 1973–2016, U.S. 1926–2017. Foreign

Appendix: Important Information

Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or solicitation to buy or sell any securities. Views expressed are as of the date indicated, based on the information available at that time, and may change based on market and other conditions. Unless otherwise noted, the opinions provided are those of the authors and not necessarily those of Fidelity Investments or its affiliates. Fidelity does not assume any duty to update any of the information.

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Past performance and dividend rates are historical and do not guarantee future results.

Investing involves risk, including risk of loss.

Diversification does not ensure a profit or guarantee against loss.

Index or benchmark performance presented in this document does not reflect the deduction of advisory fees, transaction charges, and other expenses, which would reduce performance.

Indexes are unmanaged. It is not possible to invest directly in an index.

Although bonds generally present less short-term risk and volatility than stocks, bonds do contain interest rate risk (as interest rates rise, bond prices usually fall, and vice versa) and the risk of default, or the risk that an issuer will be unable to make income or principal payments.

Additionally, bonds and short-term investments entail greater inflation risk—or the risk that the return of an investment will not keep up with increases in the prices of goods and services—than stocks. Increases in real interest rates can cause the price of inflation-protected debt securities to decrease.

Stock markets, especially non-U.S. markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Foreign securities are subject to interest rate, currency exchange rate, economic, and political risks, all of which are magnified in emerging markets.

The securities of smaller, less well-known companies can be more volatile than those of larger companies.

Growth stocks can perform differently from the market as a whole and from other types of stocks, and can be more volatile than other types of stocks. Value stocks can perform differently from other types of stocks and can continue to be undervalued by the market for long periods of time.

Lower-quality debt securities generally offer higher yields but also involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Any fixed income security sold or redeemed prior to maturity may be subject to loss.

Floating rate loans generally are subject to restrictions on resale, and sometimes trade infrequently in the secondary market; as a result, they may be more difficult to value, buy, or sell. A floating rate loan may not be fully collateralized and therefore may decline significantly in value.

The municipal market can be affected by adverse tax, legislative, or political changes, and by the financial condition of the issuers of municipal securities. Interest income generated by municipal bonds is generally expected to be exempt from federal income taxes and, if the bonds are held by an investor resident in the state of issuance, from state and local income taxes. Such interest income may be subject to federal and/or state alternative minimum taxes. Investing in municipal bonds for the purpose of generating tax-exempt income may not be appropriate for investors in all tax brackets. Generally, tax-exempt municipal securities are not appropriate holdings for tax-advantaged accounts such as IRAs and 401(k)s.

The commodities industry can be significantly affected by commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions.

The gold industry can be significantly affected by international monetary and political developments, such as currency devaluations or revaluations, central bank movements, economic and social conditions within a country, trade imbalances, or trade or currency restrictions between countries.

Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry.

Leverage can magnify the impact that adverse issuer, political, regulatory, market, or economic developments have on a company. In the event of bankruptcy, a company's creditors take precedence over the company's stockholders.

Appendix: Important Information

Market Indexes

Index returns on slide 24 represented by: Growth - Russell 3000® Growth Index; Large Caps - S&P 500® index; Mid Caps - Russell MidCap® Index; Small Caps—Russell 2000® Index; Value - Russell 3000® Value Index; ACWI ex USA—MSCI All Country World Index (ACWI); Canada—MSCI Canada Index; Commodities—Bloomberg Commodity Index; EAFE—MSCI EAFE (Europe, Australasia, Far East) Index; EAFE Small Cap—MSCI EAFE Small Cap Index; EM Asia—MSCI Emerging Markets Asia Index; EMEA (Europe, Middle East, and Africa)—MSCI EM EMEA Index; Emerging Markets (EM)—MSCI EM Index; Europe—MSCI Europe Index; Gold—Gold Bullion Price, LBMA PM Fix; Japan—MSCI Japan Index; Latin America—MSCI EM Latin America Index; ABS (Asset-Backed Securities)—Bloomberg Barclays ABS Index; Agency—Bloomberg Barclays U.S. Agency Index; Aggregate—Bloomberg Barclays U.S. Aggregate Bond Index; CMBS (Commercial Mortgage-Backed Securities)—Bloomberg Barclays Investment-Grade CMBS Index; Credit—Bloomberg Barclays U.S. Credit Bond Index; EM Debt (Emerging-Market Debt)—JP Morgan EMBI Global Index; High Yield—ICE BofAML U.S. High Yield Index; Leveraged Loan—S&P/LSTA Leveraged Loan Index; Long Government & Credit (Investment-Grade)—Bloomberg Barclays Long Government & Credit Index; MBS (Mortgage-Backed Securities)—Bloomberg Barclays MBS Index; Municipal—Bloomberg Barclays Municipal Bond Index; TIPS (Treasury Inflation-Protected Securities)—Bloomberg Barclays U.S. TIPS Index; Treasuries—Bloomberg Barclays U.S. Treasury Index.

Bloomberg Barclays ABS Index is a market value-weighted index that covers fixed-rate asset-backed securities with average lives greater than or equal to one year and that are part of a public deal; the index covers the following collateral types: credit cards, autos, home equity loans, stranded-cost utility (rate-reduction bonds), and manufactured housing.

Bloomberg Barclays CMBS Index is designed to mirror commercial mortgage-backed securities of investment-grade quality (Baa3/BBB-/BBB- or above) using Moody's, S&P, and Fitch, respectively, with maturities of at least one year. **Bloomberg Barclays Long U.S. Government Credit Index** includes all publicly issued U.S. government and corporate securities that have a remaining maturity of 10 or more years, are rated investment-grade, and have \$250 million or more of outstanding face value.

Bloomberg Barclays Municipal Bond Index is a market value-weighted index of investment-grade municipal bonds with maturities of one year or more. **Bloomberg Barclays U.S. Agency Bond Index** is a market value-weighted index of U.S. Agency government and investment-grade corporate fixed-rate debt issues. **Bloomberg Barclays U.S. Aggregate Bond** is a broad-based, market value-weighted benchmark that measures the performance of the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market. **Bloomberg Barclays U.S. Credit Bond Index** is a market value-weighted index of investment-grade corporate fixed-rate debt issues with maturities of one year or more.

Bloomberg Barclays U.S. MBS Index is a market value-weighted index of fixed-rate securities that represent interests in pools of mortgage loans, including balloon mortgages, with original terms of 15 and 30 years that are issued by the Government National Mortgage Association (GNMA), the Federal National Mortgage Association (FNMA), and the Federal Home Loan Mortgage Corp. (FHLMC).

Bloomberg Barclays U.S. Treasury Inflation-Protected Securities (TIPS) Index (Series-L) is a market value-weighted index that measures the performance of inflation-protected securities issued by the U.S. Treasury. **Bloomberg Barclays U.S. Treasury Bond Index** is a market value-weighted index of public obligations of the U.S. Treasury with maturities of one year or more. **Bloomberg Commodity Index** measures the performance of the commodities market. It consists of exchange traded futures contracts on physical commodities that are weighted to account for the economic significance and market liquidity of each commodity.

Dow Jones U.S. Total Stock Market IndexSM is a full market capitalization-weighted index of all equity securities of U.S.-headquartered companies with readily available price data.

FTSE® National Association of Real Estate Investment Trusts (NAREIT®) All REITs Index is a market capitalization-weighted index that is designed to measure the performance of all tax-qualified REITs listed on the NYSE, the American Stock Exchange, or the NASDAQ National Market List. **FTSE® NAREIT® Equity REIT Index** is an unmanaged market value-weighted index based on the last closing price of the month for tax-qualified REITs listed on the New York Stock Exchange (NYSE).

ICE BofAML U.S. High Yield Index is a market capitalization-weighted index of U.S. dollar-denominated, below-investment-grade corporate debt publicly issued in the U.S. market.

JPM® EMBI Global Index, and its country sub-indexes, tracks total returns for the U.S. dollar-denominated debt instruments issued by emerging-market sovereign and quasi-sovereign entities, such as Brady bonds, loans, and Eurobonds.

MSCI All Country World Index (ACWI) is a market capitalization-weighted index designed to measure the investable equity market performance for global investors of developed and emerging markets. **MSCI ACWI (All Country World Index) ex USA Index** is a market capitalization-weighted index designed to measure the investable equity market performance for global investors of large and mid cap stocks in developed and emerging markets, excluding the United States.

MSCI Emerging Markets (EM) Index is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors in emerging markets. **MSCI EM Asia Index** is a market capitalization-weighted index designed to measure equity market performance in Asia. **MSCI EM Europe, Middle East, and Africa (EMEA) Index** is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors in the emerging-market countries of Europe, the Middle East, and Africa. **MSCI EM Latin America Index** is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors in the emerging-market countries of Latin America.

MSCI Europe, Australasia, Far East Index (EAFE) is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors in developed markets, excluding the U.S. and Canada. **MSCI EAFE Small Cap Index** is a market capitalization-weighted index that is designed to measure the investable equity market performance of small cap stocks for global investors in developed markets, excluding the U.S. and Canada.

Appendix: Important Information

Market Indexes (continued)

MSCI Europe Index is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors of the developed markets in Europe.

MSCI Canada Index is a market capitalization-weighted index designed to measure equity market performance in Canada. **MSCI Japan Index** is a market capitalization-weighted index designed to measure equity market performance in Japan.

Russell 2000® Index is a market capitalization-weighted index designed to measure the performance of the small-cap segment of the U.S. equity market. It includes approximately 2,000 of the smallest securities in the Russell 3000 Index. **Russell 3000® Index** is a market capitalization-weighted index designed to measure the performance of the 3,000 largest companies in the U.S. equity market. **Russell 3000 Growth Index** is a market capitalization-weighted index designed to measure the performance of the broad growth segment of the U.S. equity market. It includes those Russell 3000 Index companies with higher price-to-book ratios and higher forecasted growth rates. **Russell 3000 Value Index** is a market capitalization-weighted index designed to measure the performance of the small to mid cap value segment of the U.S. equity market. It includes those Russell 3000 Index companies with lower price-to-book ratios and lower forecasted growth rates. **Russell MidCap® Index** is a market capitalization-weighted index designed to measure the performance of the mid cap segment of the U.S. equity market. It contains approximately 800 of the smallest securities in the Russell 1000 Index.

The **S&P 500®** is a market capitalization-weighted index of 500 common stocks chosen for market size, liquidity, and industry group representation to represent U.S. equity performance. S&P 500 is a registered service mark of The McGraw-Hill Companies, Inc., and has been licensed for use by Fidelity Distributors Corporation and its affiliates.

The **Sectors and Industries** are defined by Global Industry Classification Standards (GICS®), except where noted otherwise. **S&P 500 sectors** are defined as follows: Consumer Discretionary—companies that tend to be the most sensitive to economic cycles. Consumer Staples—companies whose businesses are less sensitive to economic cycles. Energy—companies whose businesses are dominated by either of the following activities: the construction or provision of oil rigs, drilling equipment, and other energy-related services and equipment, including seismic data collection; or the exploration, production, marketing, refining, and/or transportation of oil and gas products, coal, and consumable fuels. Financials—companies involved in activities such as banking, consumer finance, investment banking and brokerage, asset management, insurance and investments, and mortgage real estate investment trusts (REITs). Health Care—companies in two main industry groups: health care equipment suppliers, manufacturers, and providers of health care services; and companies involved in research, development, production, and marketing of pharmaceuticals and biotechnology products. Industrials—companies that manufacture and distribute capital goods, provide commercial services and supplies, or provide transportation services. Information Technology—companies in technology software and services and technology hardware and equipment. Materials—companies that engage in a wide range of commodity-related manufacturing. Real Estate—companies in real estate development, operations, and related services, as well

as equity REITs. Communication Services—companies that facilitate communication and offer related content through various media; it includes media companies moved from Consumer Discretionary and internet services companies moved from Information Technology. Utilities—companies considered electric, gas, or water utilities, or that operate as independent producers and/or distributors of power.

Standard & Poor's/Loan Syndications and Trading Association (S&P/LSTA)

Leveraged Performing Loan Index is a market value-weighted index designed to represent the performance of U.S. dollar-denominated institutional leveraged performing loan portfolios (excluding loans in payment default) using current market weightings, spreads, and interest payments.

Other Indexes

The Consumer Price Index (CPI) is a monthly inflation indicator that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food, and transportation.

The London Bullion Market Association (LBMA) publishes the international benchmark price of gold in USD, twice daily. The **LBMA Gold price** auction takes place by ICE Benchmark Administration (IBA) at 10:30 and 15:00 with the price set in U.S. dollars per fine troy ounce.

Definitions

Correlation coefficient measures the interdependencies of two random variables that range in value from -1 to +1, indicating perfect negative correlation at -1, absence of correlation at 0, and perfect positive correlation at +1.

Price-to-Earnings (P/E) ratio is the ratio of a company's current share price to its current earnings, typically trailing 12-months earnings per share. A Forward P/E calculation will typically use an average of analysts' published estimates of earnings for the next 12 months in the denominator.

Excess return is the amount by which a portfolio's performance exceeds its benchmark, net (in the case of the analysis in this article) or gross of operating expenses, in percentage points.

Option-Adjusted Spread (OAS) is the measurement of the spread between a fixed-income security's rate and the risk-free rate of return, which is adjusted to take into account any embedded options.

Appendix: Important Information

The Chartered Financial Analyst® (CFA®) designation is offered by CFA Institute. To obtain the CFA charter, candidates must pass three exams demonstrating their competence, integrity, and extensive knowledge in accounting, ethical and professional standards, economics, portfolio management, and security analysis, and must also have at least four years of qualifying work experience, among other requirements.

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