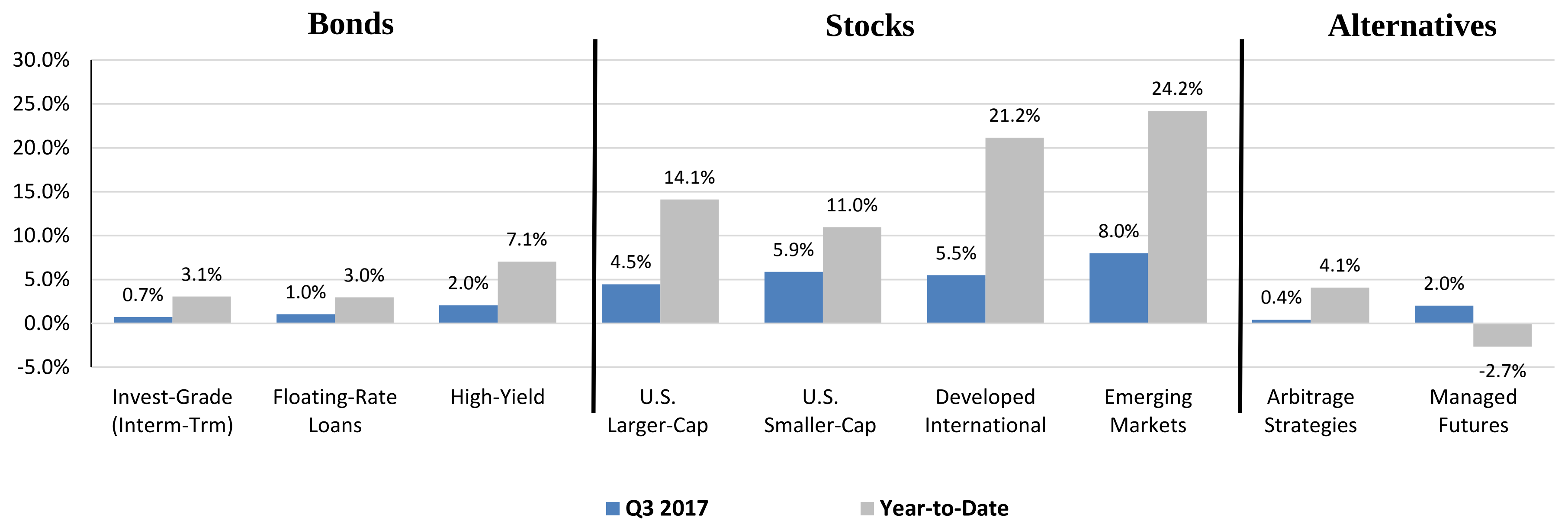
Capital Market Review

Third Quarter 2017

Market Review & Economic Outlook

Market Review



- Global stock markets extended their run of strong performance in the third quarter. Emerging-markets and developed international markets were the strongest-performing global stock markets, propelled higher by improving global economic growth, faster earnings growth, and a falling U.S. dollar (which is positive for dollar-based investors). Within the U.S. equity market, larger-cap growth stocks—technology stocks in particular—continued their dominance over smaller-cap and value stocks.

- Core investment-grade bonds finished slightly positive in the quarter. Ten-year Treasury yields finished the quarter relatively flat at 2.30%; however, that masks an intra-quarter decline when yields bottomed at around 2.06%. Yields were driven lower by a confluence of factors including geopolitical tensions around North Korea, a potential debt-ceiling crisis/government shutdown, along with catastrophic hurricanes in Texas and Florida. Yields rose in the latter half of September, benefiting the more credit-sensitive sectors of the bond market, high-yield and floating-rate loans, which slightly outperformed the core bond index over the entire quarter.

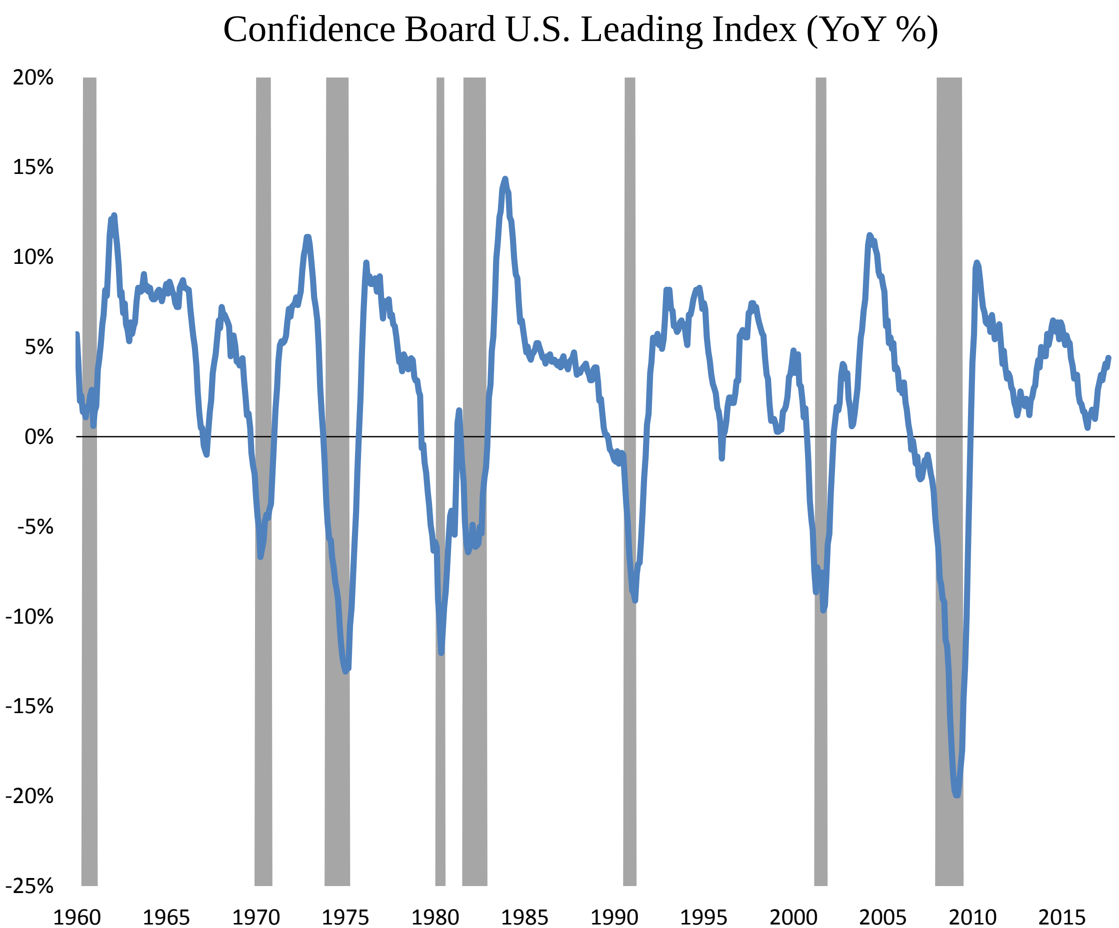
Source: Morningstar Direct. Using price and U.S. dollar returns of investable indexes. Managed futures uses an average of the AQR Managed Futures, Natixis ASG Managed Futures and PIMCO TRENDS Managed Futures Strategies. Data as of 9/30/2017.

Asset Class Returns

Asset Class	Index	3Q 2017	12 Months	5 Years (Ann.)
U.S. Larger-Cap Blend	Vanguard 500	4.45%	18.46%	14.06%
U.S. Larger-Cap Growth	iShares Russell 1000 Growth	5.76%	21.68%	15.05%
U.S. Larger-Cap Value	iShares Russell 1000 Value	3.00%	14.90%	12.97%
U.S. Smaller-Cap Blend	iShares Russell 2000	5.87%	20.96%	13.86%
U.S. Smaller-Cap Growth	iShares Russell 2000 Growth	6.44%	21.30%	14.46%
U.S. Smaller-Cap Value	iShares Russell 2000 Value	5.30%	20.66%	13.17%
Developed Int'l Stocks	Vanguard FTSE Developed Markets ETF	5.49%	19.31%	8.96%
Emerging-Markets Stocks	Vanguard FTSE Emerging Market ETF	7.97%	18.66%	3.75%
REITs	Vanguard REIT	0.84%	0.27%	9.34%
Investment-Grade Bonds	Vanguard Total Bond	0.71%	-0.22%	1.86%
Municipal Bonds	Bloomberg Barclays Muni-Bond Index	1.06%	0.87%	2.81%
Absolute-Return-Oriented Bonds	Citigroup 3 Month T-Bill Index	0.26%	0.64%	0.19%
High-Yield Bonds	Merrill Lynch High-Yield	2.04%	9.06%	6.38%
Inflation-Protected Bonds	iShares TIPS Bond ETF	0.79%	-1.04%	-0.11%
Floating-Rate Loans	S&P/LSTA Leveraged Loan	1.04%	5.30%	4.09%
Commodity Futures	Dow Jones-UBS Commodities	2.52%	-0.29%	-10.27%
Global Investment-Grade Bonds	Citigroup World Gov’t Bond	1.81%	-2.69%	-0.43%
Emerging-Markets Local-Currency Bonds	JPMorgan GBI-EM Global Div.	3.55%	7.32%	-0.91%

Source: Morningstar Direct. Data as of 9/30/2017.

The Near-Term Outlook for the U.S. Economy is Solid

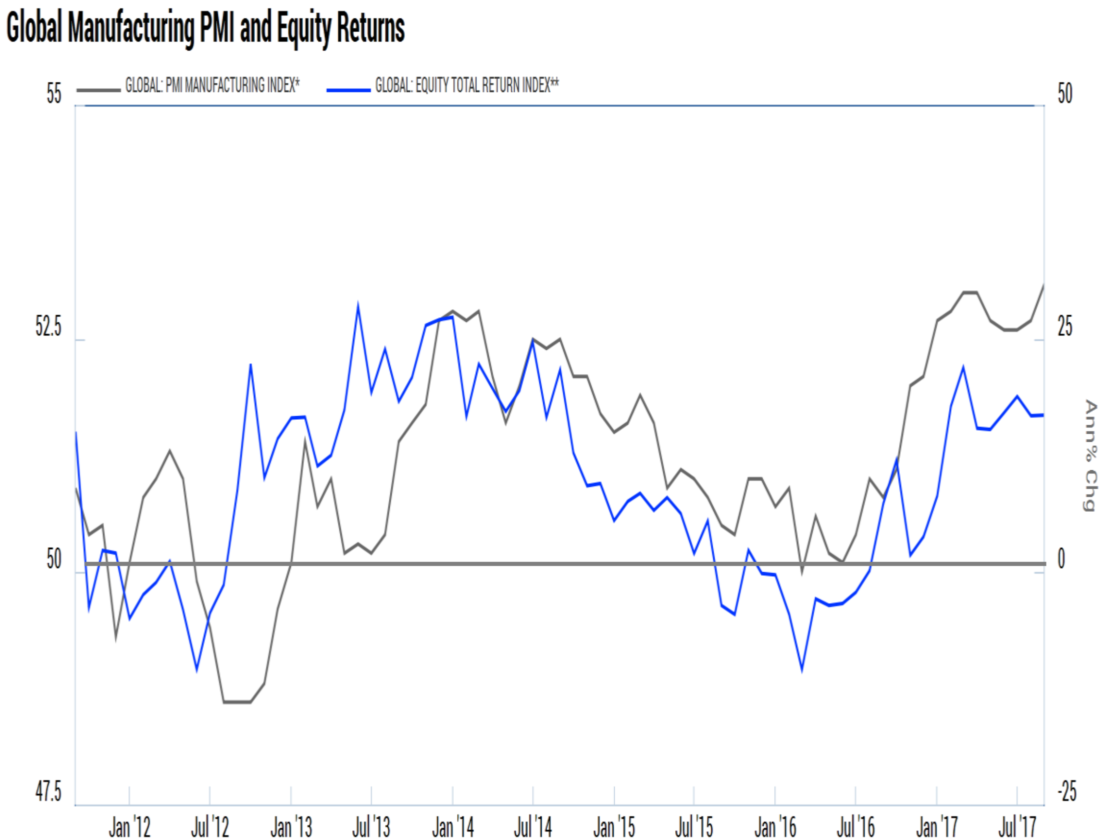


Shaded areas represent recessions (as defined by NBER)

- GDP growth in the United States remains low by historical standards but continues to remain steady at around a 2% annual rate.
- There are several factors supporting economic growth and longer-term trends are in reasonable shape at this point in the economic cycle.
- Looking ahead, a positive sign for the economy is that "financial conditions" have eased over the past year—despite three Fed rate hikes—due to a weaker dollar, lower bond yields, and tightening credit spreads.
- Although the current economic expansion is now the third longest in history, the risk of recession and a corresponding bear market in stocks appears remote for the time being.

Source: Bloomberg. Data as of 8/31/2017.

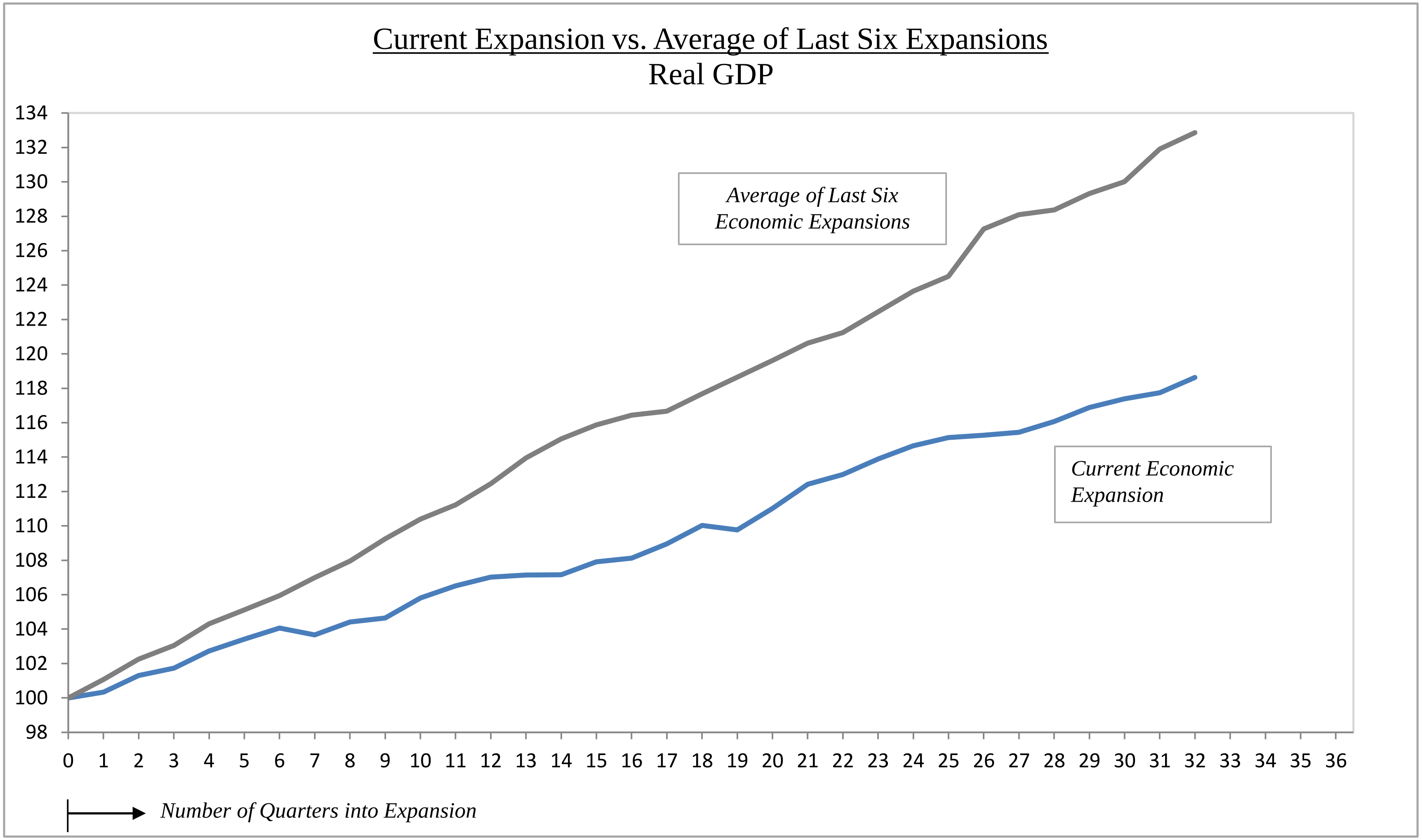
The Global Economy is Firing on all Cylinders for the First Time Since the Financial Crisis



- Economic growth outside the United States continues to improve, providing a solid foundation for corporate earnings growth and financial assets in general.
- The synchronized global economic recovery remains intact. The OECD leading economic indicator hit its highest level since October 2014, while all 45 countries tracked have positive GDP growth this year and are expected to have positive growth next year as well for the first time since 2007.
- Global manufacturing PMI—a widely followed economic indicator—hit it's highest level in over six years, while PMI's in Europe and emerging markets are also at multiyear highs.
- An on-going economic and earnings recovery should be supportive of our international and emerging-market equity exposure.

Source: BCA Research. Data as of 8/31/2017.

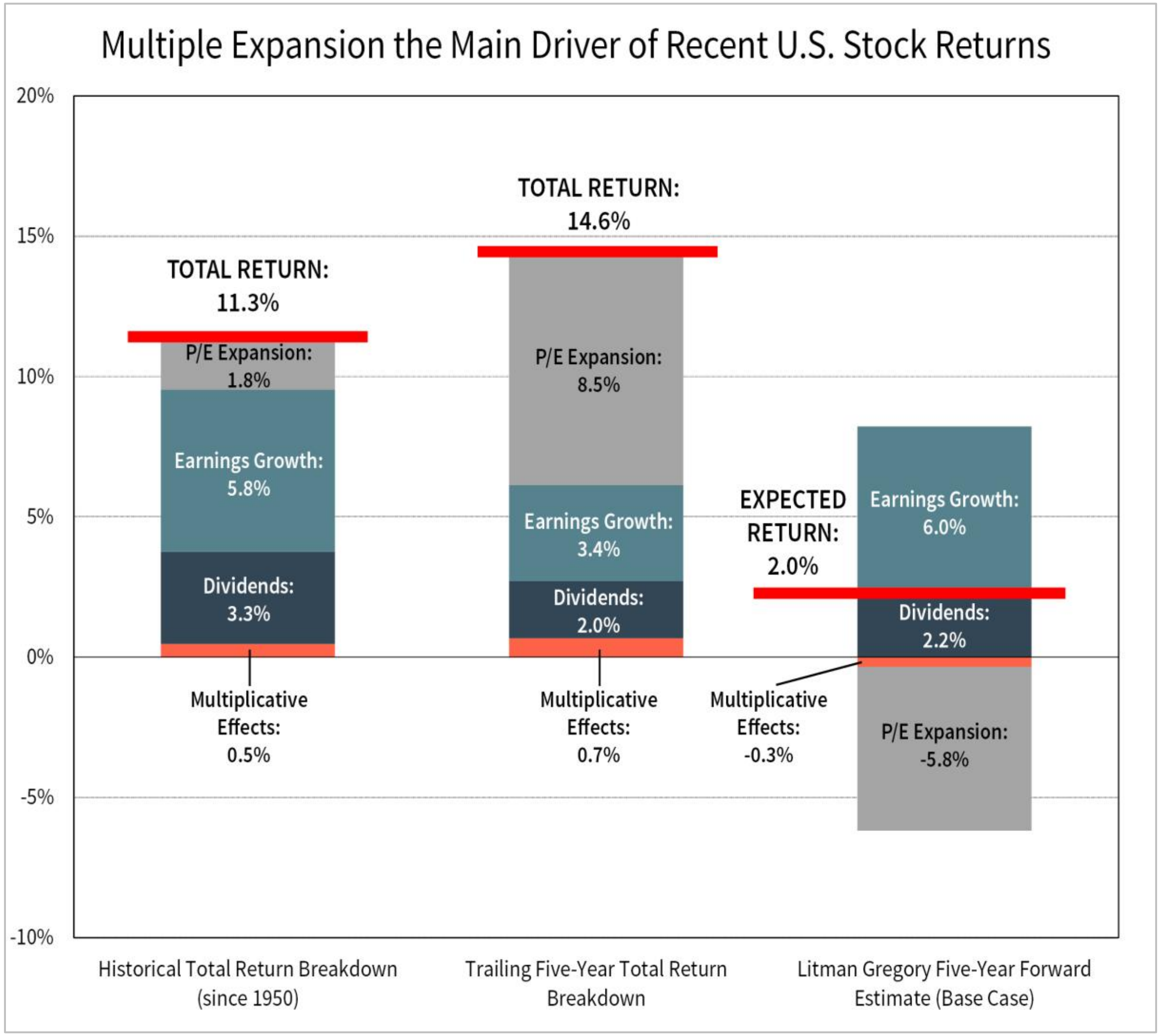
The Current Economic Expansion is Now the Third Longest in U.S. History but Subpar in its Strength



Source: Bureau of Economic Analysis. Data as of 6/30/2017.

Investment Outlook

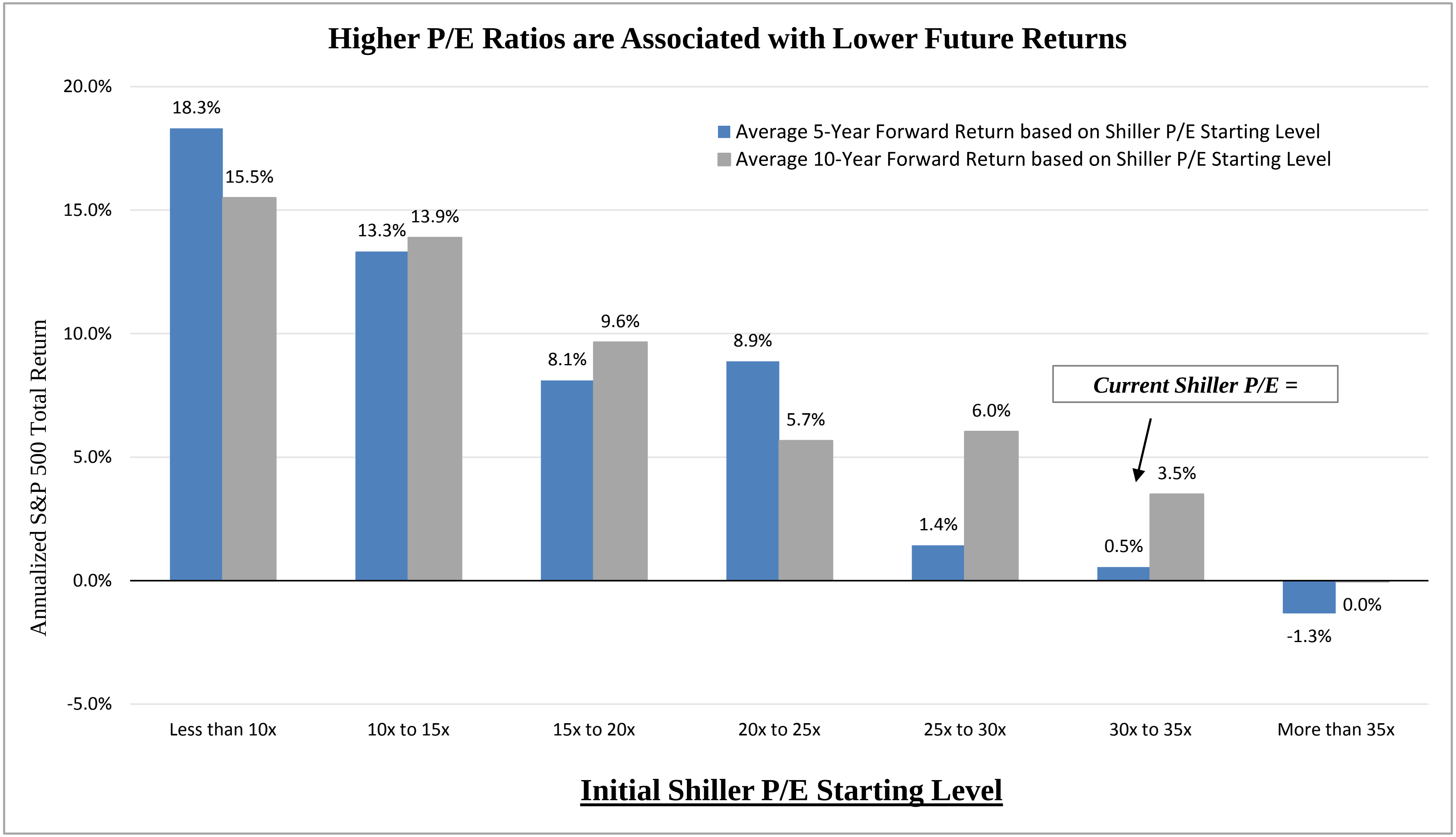
U.S. Stocks are Risky Due to Expensive Starting Valuations



- Our outlook for U.S. stocks is somewhat bearish—we expect low single-digit annualized returns in our base case scenario over the next several years—a potential return that is not high enough to compensate for their downside risk. As such, we remain underweight to U.S. stocks in our portfolios.
- Our bearish assessment of U.S. stocks is driven primarily by "valuation risk." Much of the rally in U.S. stocks over the past few years has been driven by expanding valuation multiples—investors paying higher prices to own U.S. stocks.
- In our base case scenario, we expect valuation multiples to decline toward historical norms over the next several years, which will have a negative impact on total returns.

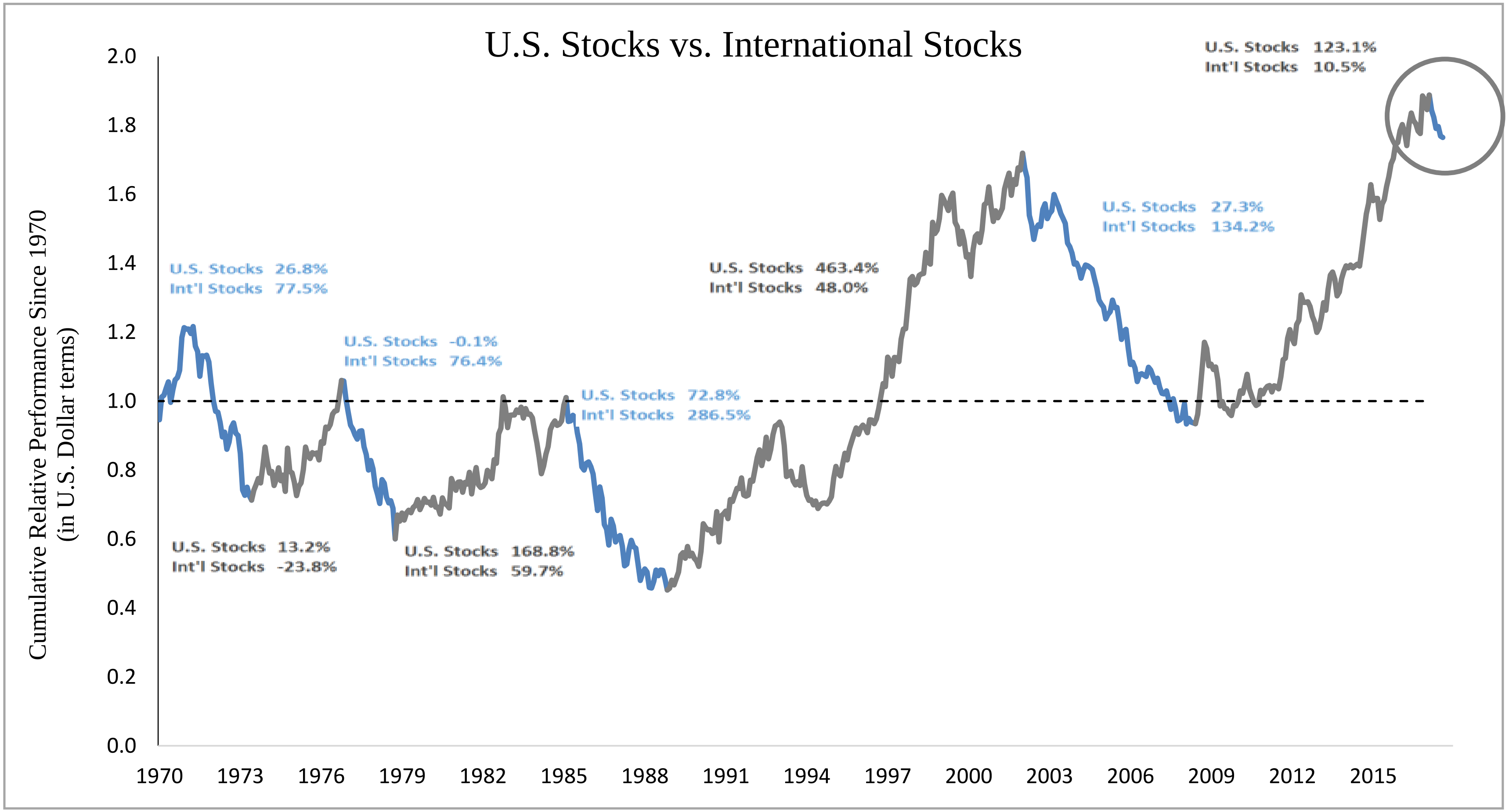
Source: Litman Gregory, Standard & Poor's, and Robert Shiller. Data as of 6/30/2017.

Expensive Starting Valuations Imply Lower Future Returns



Source: Robert J. Shiller and Morningstar Direct. Data as of 8/31/2017.

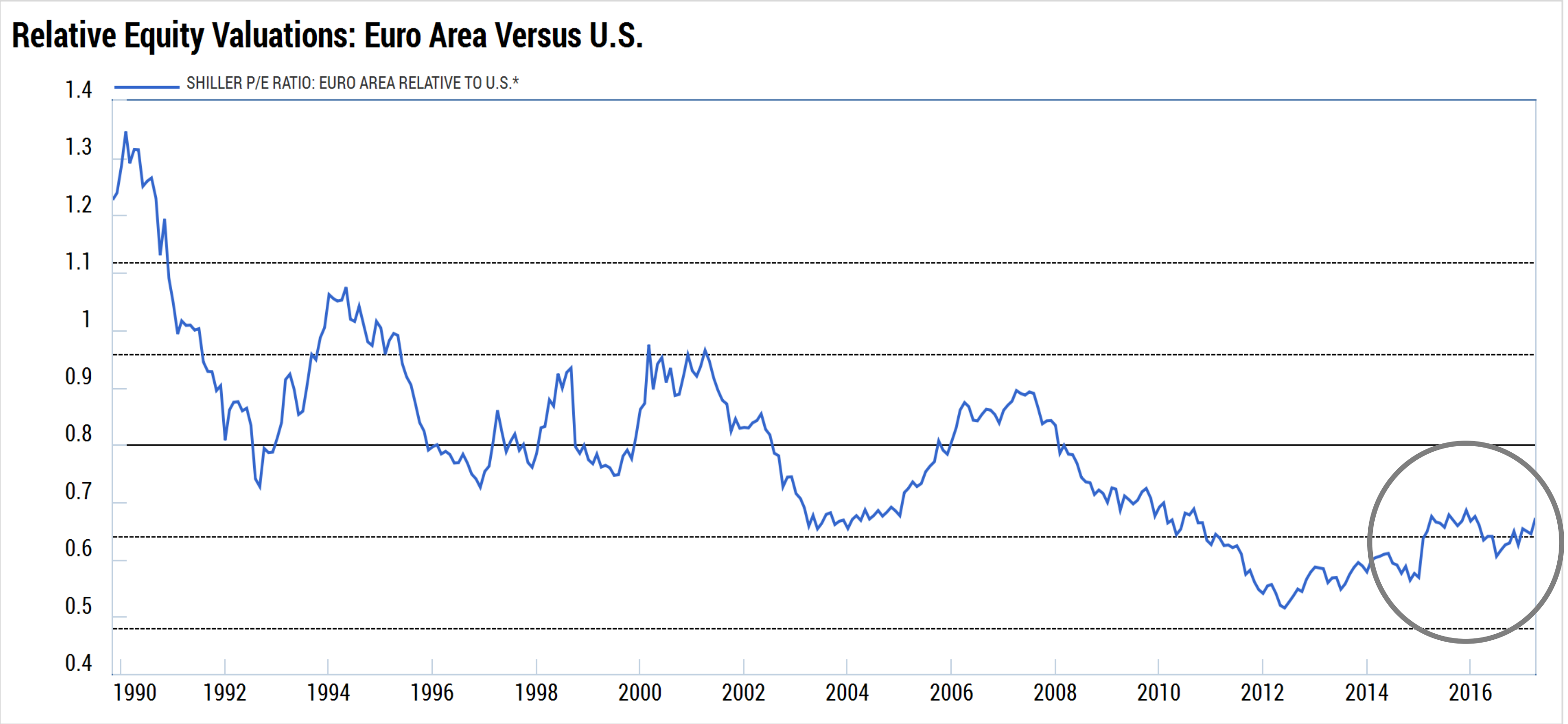
The Cycle of U.S. Equity Outperformance May be Turning in Favor of International Stocks



Source: Morningstar Direct. Data as of 8/31/2017.

Note: Int'l stocks is represented by MSCI World ex. U.S. from 1970 to 1988 and MSCI ACWI ex. U.S. from 1988 onward.

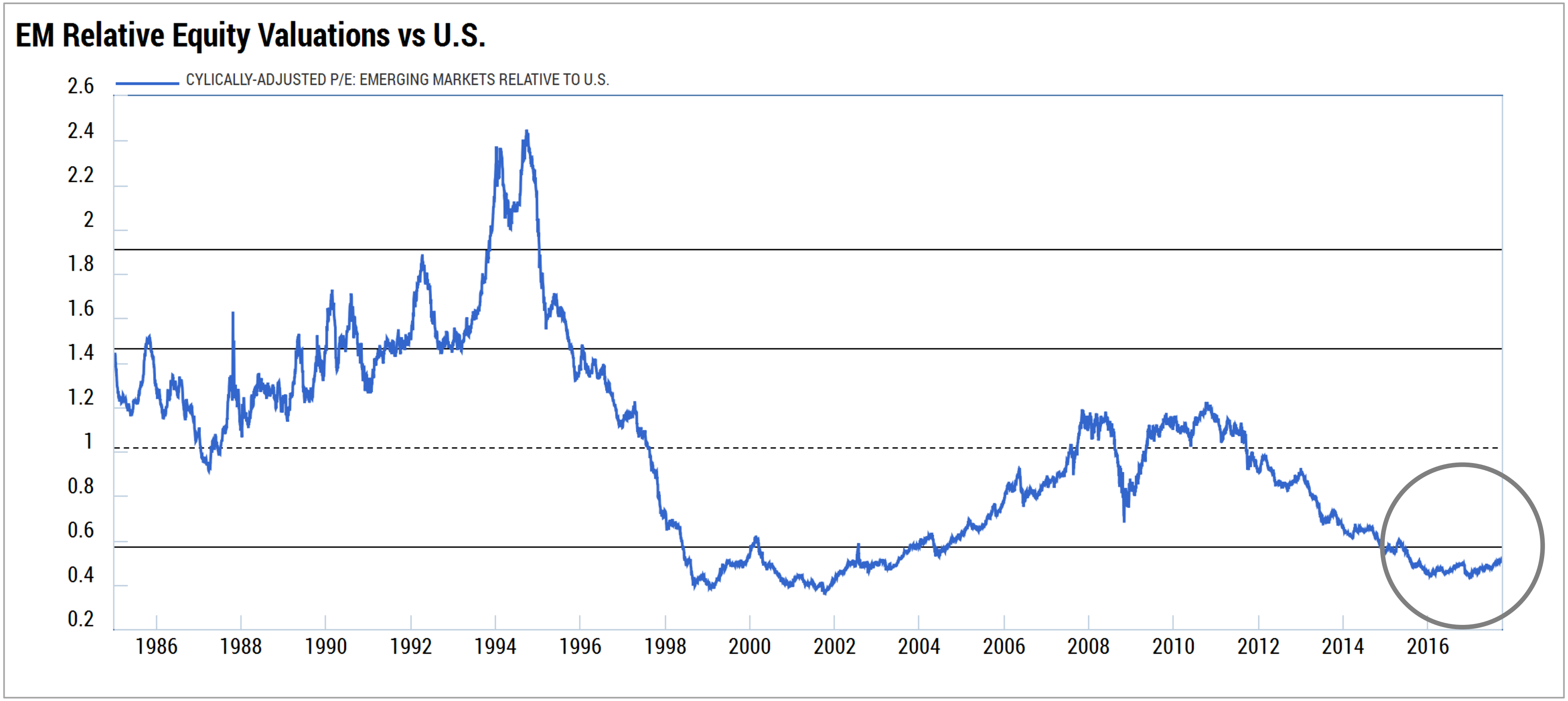
Valuations and Expected Returns for European Stocks Remain Attractive Relative to U.S. Stocks



- Despite Europe's outperformance versus U.S. stocks year to date, valuations for European stocks remain attractive both in absolute terms, and especially relative to U.S. stocks.
- Longer term, we expect to benefit from valuation multiple expansion, consistent with the economic and earnings recovery unfolding in the eurozone.

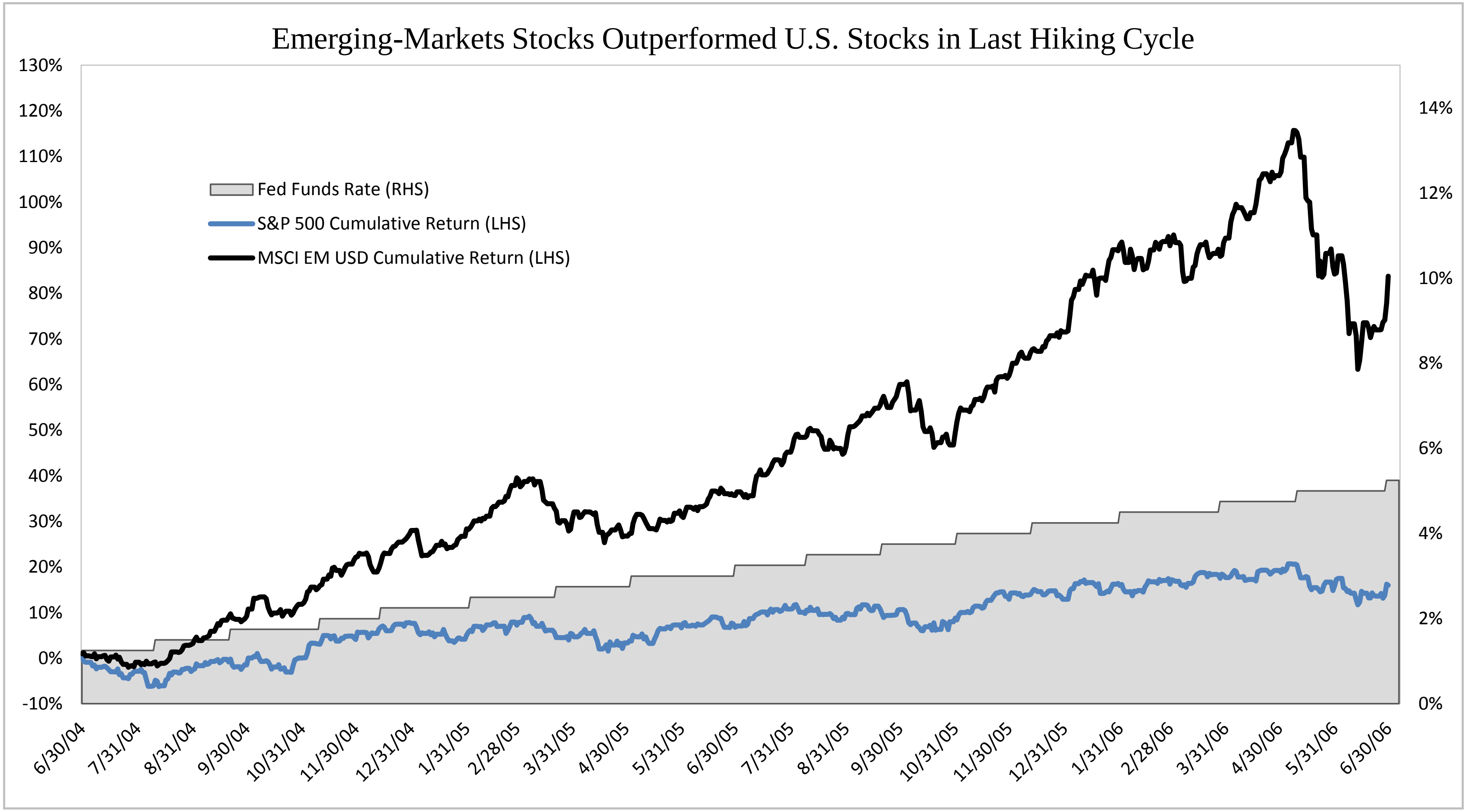
Source: BCA Research. Data as of 8/31/2017.

Emerging-Market Stocks Have Outperformed U.S. Stocks Year to Date and Valuations Remain Attractive



Source: BCA Research. Data as of 9/26/2017.

Emerging-Markets Stocks Outperformed U.S. Stocks in the Last Interest Rate Hiking Cycle



Source: Federal Reserve and Morningstar Direct.

Estimated Asset Class Returns Over Different Economic Scenarios

Average Annual Returns Over Next Five Years

Equity Asset Classes

	Bear Case	**BASE CASE**	Bull Case
U.S. Larger Cap	-7.5%	**1.5%**	8.6%
Developed International - Europe	-7.5%	**10.5%**	17.6%
Emerging Markets	-3.8%	**7.0%**	13.9%
REITS	3.5%	**5.1%**	4.0%

Fixed-Income Asset Classes

	Bear Case	**BASE CASE**	Bull Case
Investment-Grade Bonds	2.6%	**1.8%**	0.9%
High-Yield Bonds	1.4%	**2.0%**	1.7%
Floating-Rate Loans	6.7%	**6.2%**	6.8%
Treasury Inflation-Protected Securities (TIPS)	2.2%	**1.0%**	-1.2%

Alternative Asset Classes

	Bear Case	**BASE CASE**	Bull Case
Alternative Strategies	Mid-single-digit returns in most scenarios		

As of 9/30/2017, S&P 500 at 2519, Barclays Aggregate yield at 2.5%, MSCI Europe Index at 1763, MCSI EM Index at 1082, BofA High Yield Cash Pay Index at 5.5%. Asset-class return estimates, with the exception of TIPS, are in nominal terms. TIPS return estimates are shown in real terms i.e., inflation-adjusted. Litman Gregory Analytics

Appendix

Disclosures

Asset Class Descriptions:

Domestic Investment-Grade Bonds (Barclays Capital U.S. Aggregate Bond Index): We are currently using the Vanguard Total Bond Market Index Fund to represent the Barclays Capital U.S. Aggregate Bond Index, an index of domestic investment grade bonds.

Floating Rate Loans (S&P/LSTA Leveraged Loan Index): We are currently using the S&P/LSTA Leveraged Loan Index to represent an index of floating rate loans.

High Yield Bonds (Merrill Lynch U.S. High Yield Master Cash Pay Index): We are currently using the Merrill Lynch U.S. High Yield Master Cash Pay Index to represent an index of domestic high yield bonds.

Domestic Larger-Cap Stocks (S&P 500 Index): We are currently using the Vanguard 500 Index Fund to represent the S&P 500, an index of primarily domestic larger-cap stocks.

Domestic Smaller-Cap Stocks (Russell 2000 Index): We are currently using the Russell 2000 Index iShares Exchange Traded Fund (ETF) to represent the Russell 2000, an index of primarily domestic smaller-cap stocks.

International Developed-Market Stocks (FTSE Developed ex North America Index): We are currently using the Vanguard FTSE Developed Markets Exchange Trade Fund (ETF) to represent an index of international developed-market stocks. Prior to May 2013, this Vanguard Exchange Traded Fund followed MSCI-EAFE. Prior to the July 2007 inception of Vanguard MSCI EAFE ETF, we use iShares MSCI EAFE Index from September 2001 to July 2007, and the MSCI EAFE Index adjusted for 0.35% expenses annually prior to September 2001.

International Emerging-Market Stocks (FTSE Emerging Markets Index): We are currently using the Vanguard FTSE Emerging Markets Index Exchange Traded Fund (ETF) to represent an index of emerging market stocks. Prior to January 2013, this Vanguard Exchange Traded Fund followed the MSCI Emerging Markets Index. Prior to the March 2005 inception of Vanguard MSCI Emerging Markets ETF, we use iShares MSCI Emerging Markets Index from May 2003 to March 2005, and the MSCI Emerging Markets Index adjusted for 0.67% expenses annually prior to May 2003.

Managed Futures: We are currently using an average of the AQR Managed Futures Strategy HV, Natixis ASG Managed Futures Strategy Y and PIMCO TRENDS Managed Futures Strategy.

Arbitrage Strategies: We are currently using an average of the AQR Diversified Arbitrage Strategy (ADAIX) and the Arbitrage Event Driven Strategy (AEDNX).