



Review of Market Performance Fiscal Year 2016



- ♦ In the fiscal year ended June 30, 2016, the S&P 500 (4.0%) outperformed international equivalents, as investors navigating the marketplace dealt with concerns about the trajectory of global growth and the dramatic increase in negative-yielding debt. Among major developed markets equities, the United Kingdom (-12.1%)\* fared the worst for USD investors, with losses due to a sharply falling pound following the European Union (EU) membership referendum. Japan (-8.9%) and Europe ex UK (-10.8%) nearly matched the United Kingdom's dismal performance, despite new stimulative monetary policies. In developed markets, defensive sectors tended to outperform cyclicals as materials (-9.0%) and financials (-13.3%) lagged.
- ♦ Emerging markets equities (-11.7%) suffered heavy losses this fiscal year, even as several markets rebounded sharply in recent months. The reversal, driven in part by currency gains and the recovery in commodity prices, was most evident in Brazil (-5.7%) and Colombia (-12.4%), whose markets gained 46.5% and 26.0% in the first half of 2016, respectively. Investor concerns continued to be focused on China (-23.2%), with its sluggish economy and overleveraged corporate sector. Emerging markets investors had few places to hide this fiscal year, with all sectors losing ground.
- Global bond markets were clear toasts of the town, with the Citigroup World Government Bond Index (11.3%) and ten-year Treasuries (10.1%) both experiencing gains as investors flocked to safety. The price gains pushed yields on government debt in various countries to record lows, plunging ~40% of the world's debt into negative-yielding territory, as measured by the Barclays Global Aggregate Bond Index. The sovereign gains led to flattening yield curves, with the spread between ten-year and two-year Treasuries falling to its lowest point since the global financial crisis. Investor preferences for safety also led to larger gains in US investment-grade debt (7.9%) than US high-yield bonds (1.6%).

<sup>\*</sup> All returns are total returns in USD terms unless otherwise noted. Equity returns represent MSCI indexes unless otherwise noted.



- ♦ Among real assets, the FTSE/NAREIT All Equity REITs Index (23.6%) and gold (13.0%) shined in the fiscal year, as the Bloomberg Commodity Total Return Index (-13.3%) faced stiff headwinds linked to commodity market imbalances. But the recovery in oil prices, which bottomed in February, led to a dramatic recovery for a number of assets—the Datastream World Mining Index (-1.6%), Datastream World Oil & Gas Index (-6.8%), and Alerian MLP Index (-13.1%), while still negative for the fiscal year, all experienced double-digits gains in recent months.
- Preliminary data from Hedge Fund Research, Inc., suggest short-biased hedge funds (11.8%) outpaced other strategies this fiscal year, taking advantage of market turmoil in the first months of 2016. Hedge fund returns at a broad industry level were lackluster, with the widely followed HFRI Fund Weighted Composite returning a preliminary -2.0%, and the HFRI Equity Hedge, -4.8%.
- ♦ For the one-year period ended March 31, 2016, the Cambridge Associates LLC US Private Equity Index® and the Cambridge Associates LLC US Venture Capital Index® delivered preliminary horizon internal rates of return (IRRs) of 3.2% and 4.8%, respectively. Over the five-year period ended March 31, 2016, the same indexes posted preliminary horizon IRRs of 12.0% and 14.6%, respectively.
- The US dollar strengthened against all major developed currencies this fiscal year, except the Japanese yen, which, like the US dollar, benefited from risk-averse investors looking for a safe haven. The British pound hit a 31-year low against the US dollar in the final days of the fiscal year, following the country's referendum on the EU, and dropped a total of 15.0% in the fiscal year. Of the 20 emerging markets currencies we track, 17 depreciated against the dollar, with none gaining more than 1.0%.



### US equities, government bonds, and gold were among the top performers

Investors preferred safe-haven assets given uncertainties in the global macro environment

#### **Global Asset Class Performance: FY 2016**

As of June 30, 2016 • US Dollar • Total Return (%)



Sources: Barclays, Bloomberg L.P., Citigroup Global Markets, FTSE International Limited, Hedge Fund Research, Inc., MSCI Inc., National Association of Real Estate Investment Trusts, Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: All returns are total returns in USD terms, except gold, for which returns are based on changes in the spot price. Asset classes represented by: MSCI World ("Developed"), S&P 500 ("United States"), MSCI UK ("United Kingdom"), MSCI Europe ex UK ("Europe ex UK"), MSCI Japan ("Japan"), MSCI Emerging Markets ("Emerging Markets"), US 10-Year Treasury Bond ("10-Yr US Treasury"), Citigroup World Government Bond ("World Gvt Bonds"), Barclays US Corporate ("US IG Credit"), Barclays US High-Yield Composite Bond ("US HY Bonds"), 80% Datastream World Oil & Gas and 20% Datastream World Mining ("NREs"), FTSE® NAREIT All Equity REITs ("US REITs"), Bloomberg Commodity TR ("Cmdty"), Gold Bullion Prices ("Gold"), and HFRI Fund Weighted Composite ("Hedge Funds"). Total returns for MSCI developed markets indexes are net of dividend taxes. Total returns for MSCI emerging markets indexes are gross of dividend taxes. Hedge Fund Research data preliminary for the preceding five months.

<sup>\*</sup> Based on preliminary data.

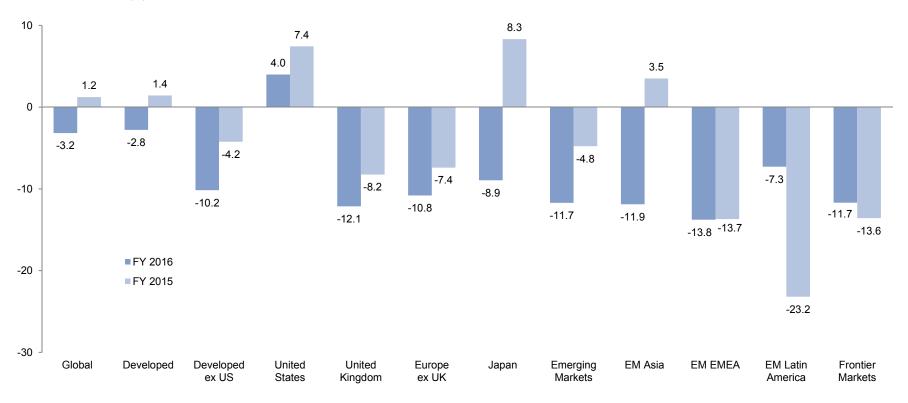


# Aside from US equities, every major equity index lost ground in FY 2016

And nearly all posted worse returns this fiscal year than last

#### Global Equity Performance: FY 2016 vs FY 2015

US Dollar • Total Return (%)



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Asset classes represented by the following: MSCI All Country World ("Global"), MSCI World ("Developed"), MSCI EAFE ("Developed ex US"), S&P 500 ("United States"), MSCI UK ("United Kingdom"), MSCI Europe ex UK ("Europe ex UK"), MSCI Japan ("Japan"), MSCI Emerging Markets ("Emerging Markets"), MSCI Emerging Markets Asia ("EM Asia"), MSCI Emerging Markets Europe, the Middle East and Africa ("EM EMEA"), MSCI Emerging Markets Latin America ("EM Latin America"), and MSCI Frontier Markets ("Frontier Markets"). Total returns for MSCI developed markets indexes are net of dividend taxes. Total returns for MSCI emerging markets indexes are gross of dividend taxes.

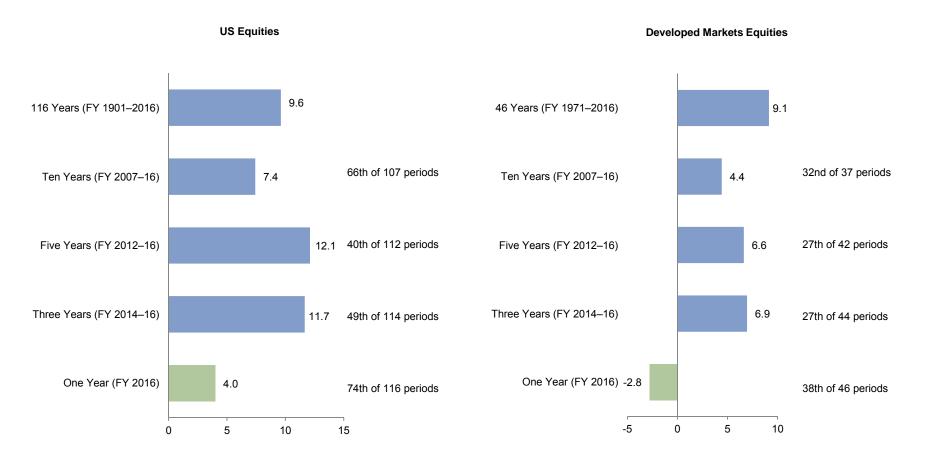


## US and developed equity index returns were low relative to history

This fiscal year's US equity performance was the lowest since FY 2009

#### **Average Annual Compound Returns for Various Time Periods**

Periods Ended June 30, 2016 • US Dollar • Percent (%)



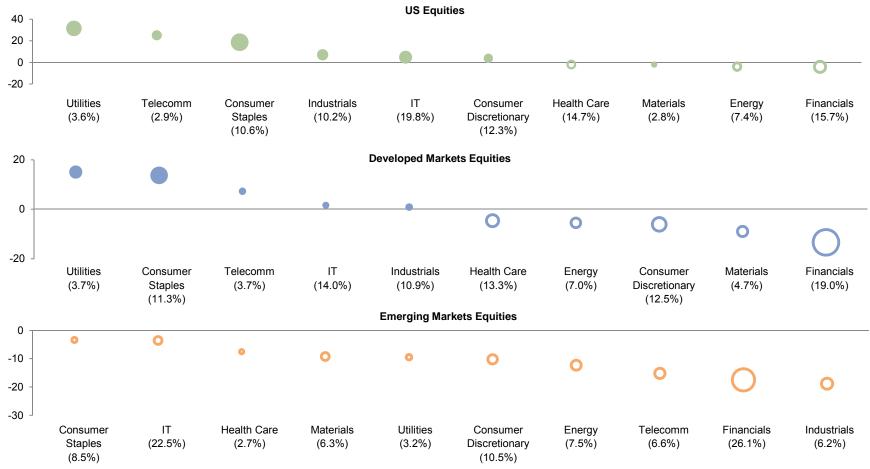
Sources: Global Financial Data, Inc., MSCI Inc., Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties. Notes: A ranking of first indicates the best performance among all periods. Total returns for MSCI developed markets indexes are net of dividend taxes. US equities represents return for S&P 500 Index, and developed markets equities, MSCI World Index.

### **Defensive sectors outperformed cyclicals**

### Financials weighed down by record low sovereign yields

#### **Global Equity Sector Performance: FY 2016**

As of June 30, 2016 • US Dollar • Total Return (%)



Sources: MSCI Inc., Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

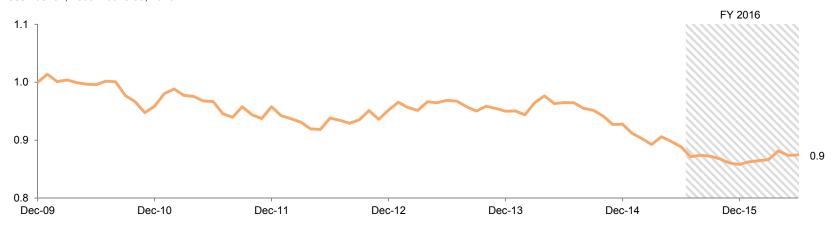
Notes: Total returns for MSCI developed market indexes are net of dividend taxes. Total returns for MSCI emerging markets indexes are gross of dividend taxes. Bubble size determined by contribution to return. Bubbles with outlines were negative contributors to the overall index return. Sector weight below index name as of fiscal year-end 2016. US equities are represented by S&P 500, developed markets equities by MSCI World, and emerging markets equities by MSCI Emerging Markets.

## Value continued to underperform growth

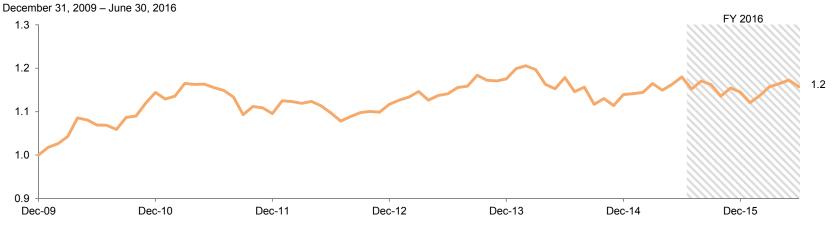
In contrast, small-cap equities' recent run of outperformance relative to large cap ended this fiscal year

#### Relative Cumulative Wealth: MSCI World Value vs MSCI World Growth

December 31, 2009 – June 30, 2016



### Relative Cumulative Wealth: MSCI World Small Cap vs MSCI World Large Cap



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

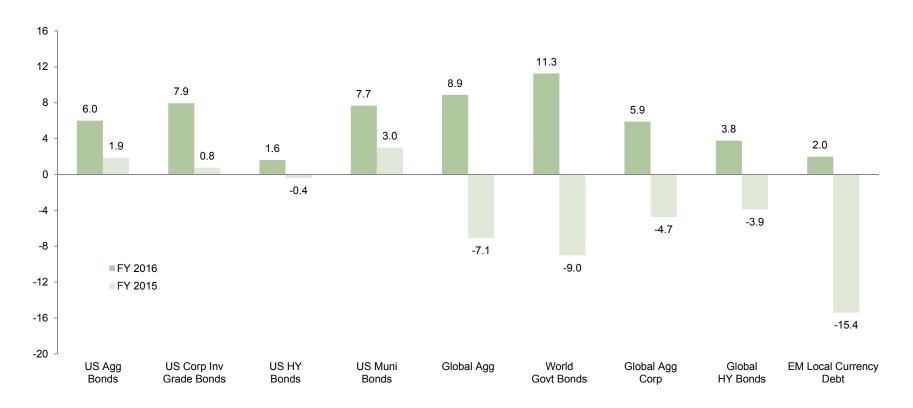
Notes: Data are monthly. Relative cumulative wealth calculations are based on total returns net of dividend taxes and were rebased to 1.0 for each index at December 31, 2009.

## Major bond indexes gained ground in FY 2016

### All posted better performance this fiscal year than last

#### Global Bond Performance: FY 2016 vs FY 2015

US Dollar • Total Return (%)



Sources: Barclays, Citigroup, J.P. Morgan Securities, Inc., and Thomson Reuters Datastream.

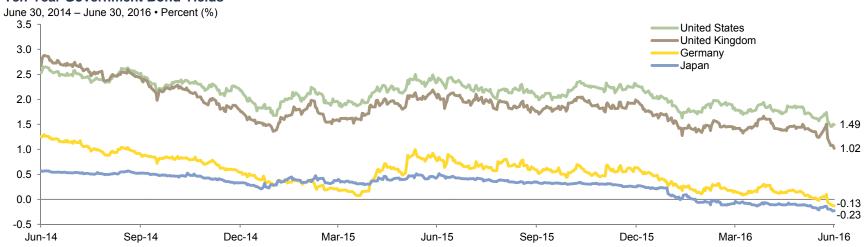
Notes: Asset classes represented by Barclays US Aggregate Bond Index ("US Agg Bonds"), Barclays US Corporate Investment Grade Bond Index ("US Corp Inv Grade Bonds"), Barclays High Yield Composite Bond Index ("US HY Bonds"), Barclays US Municipal Bond Index ("US Muni Bonds"), Barclays Global Aggregate Bond Index ("Global Agg"), Citigroup World Government Bond Index ("World Govt Bonds"), Barclays Global Aggregate Corporate Bond Index ("Global Agg Corp"), Barclays Global High Yield Bond Index ("Global HY Bonds"), and J.P. Morgan GBI-EM Global Diversified Index ("EM Local Currency Debt").



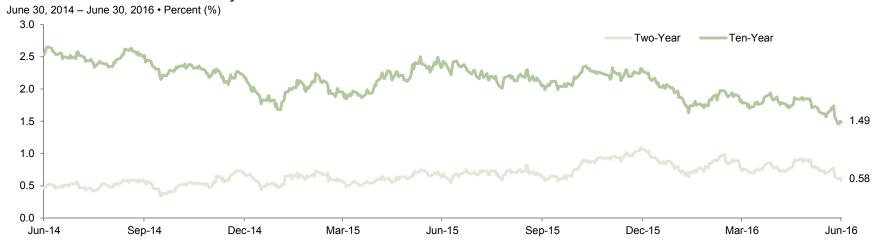
# Government bond yields plummeted to record lows

The ten-year, two-year US Treasury spread compressed, heightening recession concerns

#### **Ten-Year Government Bond Yields**



#### Ten-Year and Two-Year US Treasury Yields



Sources: Federal Reserve and Thomson Reuters Datastream.

Note: Data are daily.

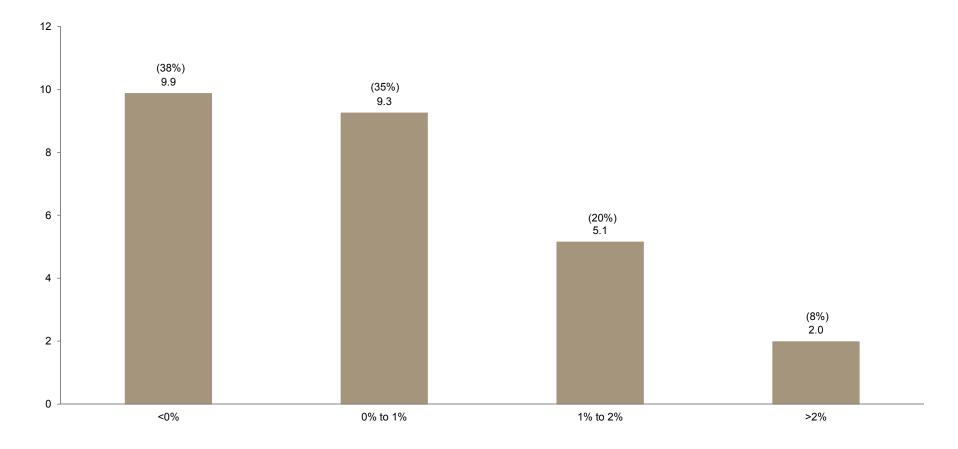


# Global negative-yielding debt surged to unprecedented levels

Two years ago, in mid-2014, negative-yielding debt was almost non-existent

#### **Yields of Global Bonds**

As of June 30, 2016 • US Dollar (trillions)



Source: Barclays.

Notes: As of June 30, 2016, the Barclays Global Aggregate Bond Index total market value was \$26.3 trillion, \$9.9 trillion (38%) of which carried a negative yield. The number in parentheses represents the percent of the Barclays Global Aggregate Bond Index in each yield category. The Barclays Global Aggregate Bond Index contains only bonds with maturities greater than one year.

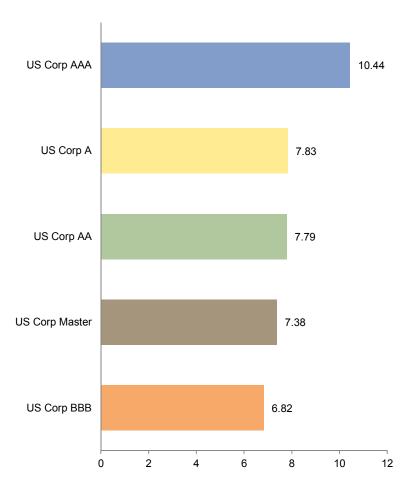


# High-quality bonds outperformed, as investors looked to safety

Energy sector concerns contributed to a spike in option-adjusted spreads in early 2016

### FY 2016 Returns for US Corporate Bonds

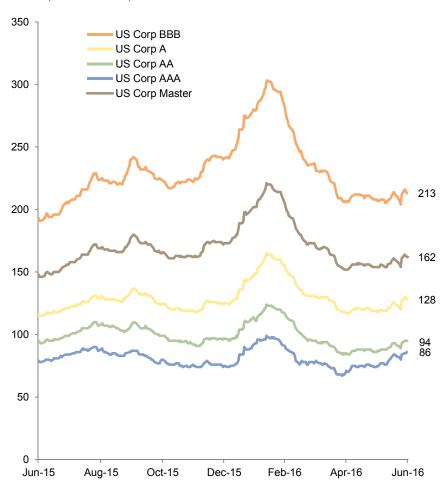
As of June 30, 2016 • Total Return (%)



Source: BofA Merrill Lynch. Note: OAS graph uses daily data.

### **Option-Adjusted Spreads for US Corporate Bonds**

June 30, 2015 – June 30, 2016 • Basis Points



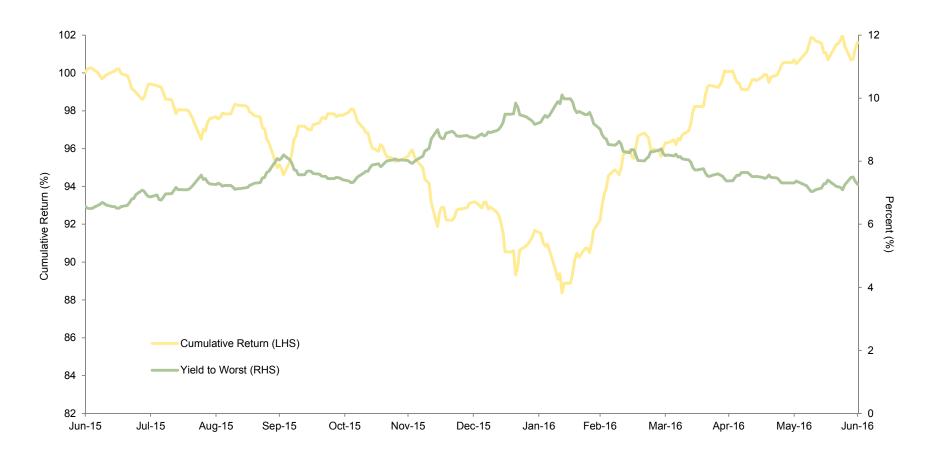


# The high-yield bond market rebounded sharply in recent months

Like investment-grade debt, the spike in yields was linked to energy sector concerns

#### **Barclays US High Yield Bond Index**

June 30, 2015 – June 30, 2016 • Cumulative Return Rebased to 100 at June 30, 2015



Sources: Barclays and Thomson Reuters Datastream.

Note: Data are daily.

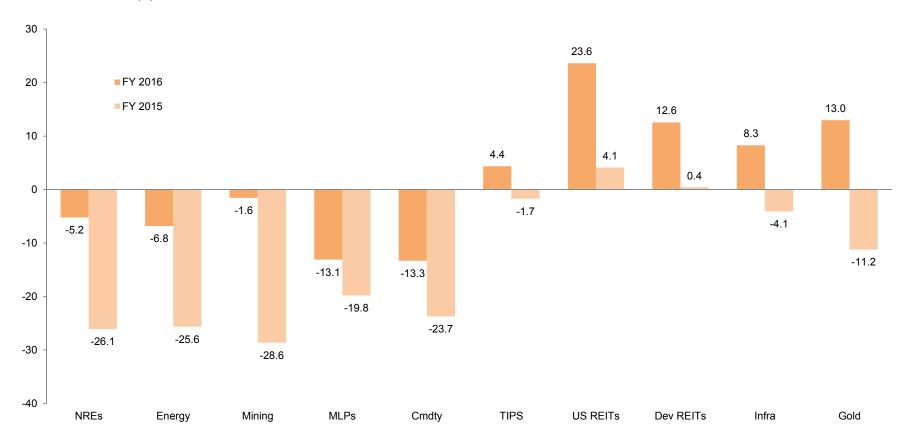


# US REITs were the top-performing marketable real asset strategy in FY 2016

Major real asset indexes fared better this fiscal year than last

#### Real Asset Performance: FY 2016 vs FY 2015

US Dollar • Total Return (%)



Sources: Barclays, Bloomberg L.P., Citigroup Global Markets, Credit Suisse, FTSE International Limited, Hedge Fund Research, Inc., J.P. Morgan Securities, Inc., MSCI Inc., National Association of Real Estate Investment Trusts, Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: All returns are total returns in USD terms, except gold, for which returns are based on changes in the spot price. Asset classes represented by the following: 80% Datastream World Oil & Gas and 20% Datastream World Mining ("NREs"), Datastream Oil & Gas Index ("Energy"), Datastream Mining Index ("Mining"), Alerian MLP Index ("MLPs"), Bloomberg Commodity TR Index ("Cmdty"), Barclays TIPS Index ("TIPS"), FTSE® NAREIT All Equity REITs ("US REITs"), FTSE® EPRA/NAREIT Developed REITs ("Dev REITs"), MSCI World Infrastructure Index ("Infra"), and Gold Bullion Prices ("Gold").

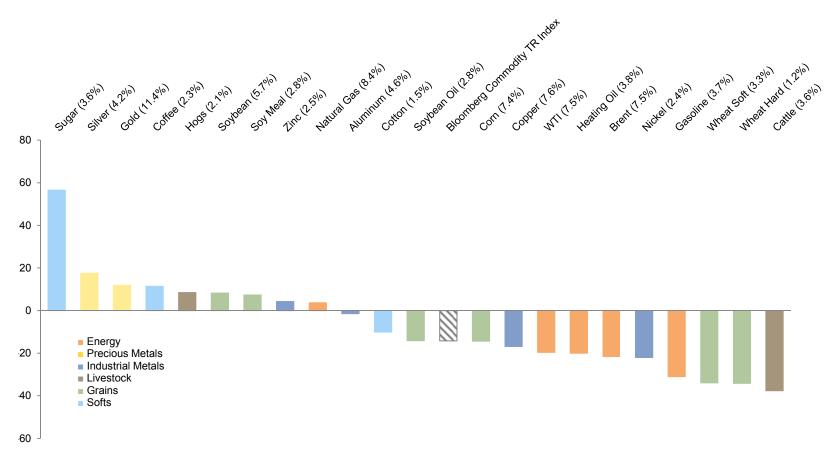


# Softs and precious metals led commodity subsector performance

Following the Brexit vote, gold posted its largest one-day gain since the global financial crisis

### **Commodity Performance: FY 2016**

As of June 30, 2016 • Commodity (Index Weight)



Sources: Bloomberg L.P. and Thomson Reuters Datastream.

Notes: Bloomberg Commodity Index levels are based on the total return index. Percentages in parenthesis represent the Bloomberg Commodity Index 2016 target weight. Color coding on graph represents commodity groups.



# Energy-linked assets rebounded as oil prices recovered

High levels of excess supply challenged oil & gas markets

#### **Cumulative Wealth of Energy Indexes vs Crude Oil**

June 30, 2015 - June 30, 2016 • June 30, 2015 = \$100



Sources: Alerian, Barclays, Bloomberg L.P., and Thomson Reuters Datastream.

Notes: All returns are total returns in USD terms, except oil, for which returns are based on changes in the spot price. Data are daily. Asset classes represented by the following: Alerian MLP Index ("Master Limited Partnerships"), Bloomberg Commodity TR Index ("Commodities"), Crude Oil Spot Price ("Oil"), 80% Datastream World Oil & Gas and 20% Datastream World Mining ("Natural Resource Equities"), and Barclays HY Energy Index ("High-Yield Energy").

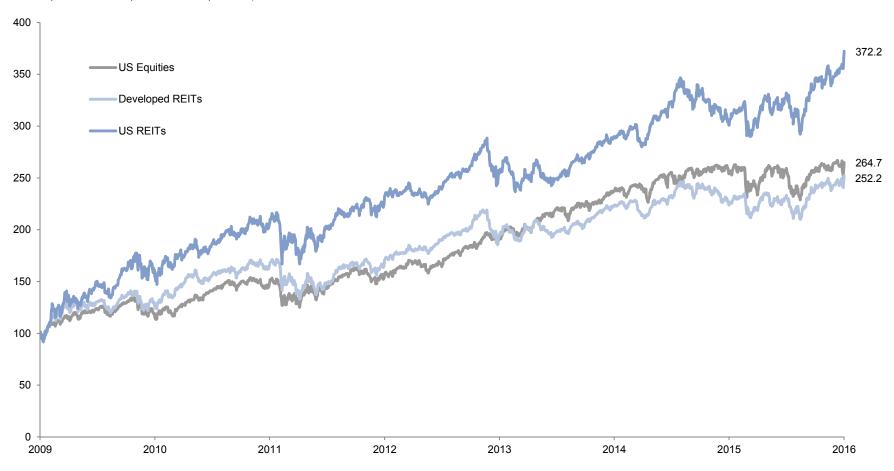


# **US REITs have outpaced US equities in recent years**

Low levels of new construction have improved vacancy rates, improving rental income

#### **Cumulative Wealth of Real Estate Indexes vs US Equities**

June 30, 2009 – June 30, 2016 • June 30, 2009 = \$100



Sources: FTSE International Limited, National Association of Real Estate Investment Trusts, Standard & Poor's, and Thomson Reuters Datastream. Note: Data are daily.

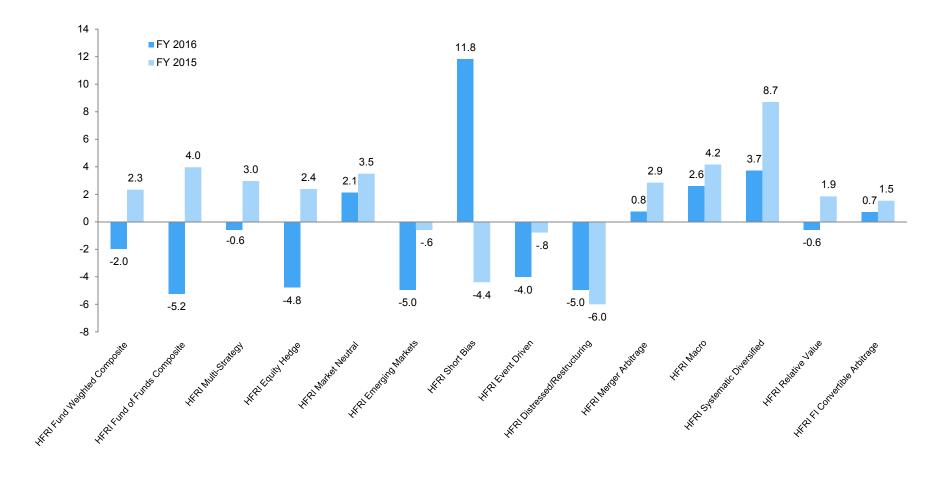


# Short-biased hedge funds outperformed other strategies in FY 2016

They benefited from market turmoil in the first two months of 2016

### Hedge Fund Performance: Preliminary FY 2016 vs FY 2015

US Dollar • Total Return (%)



Source: Hedge Fund Research, Inc.

Note: Hedge Fund Research data are preliminary for the preceding five months.

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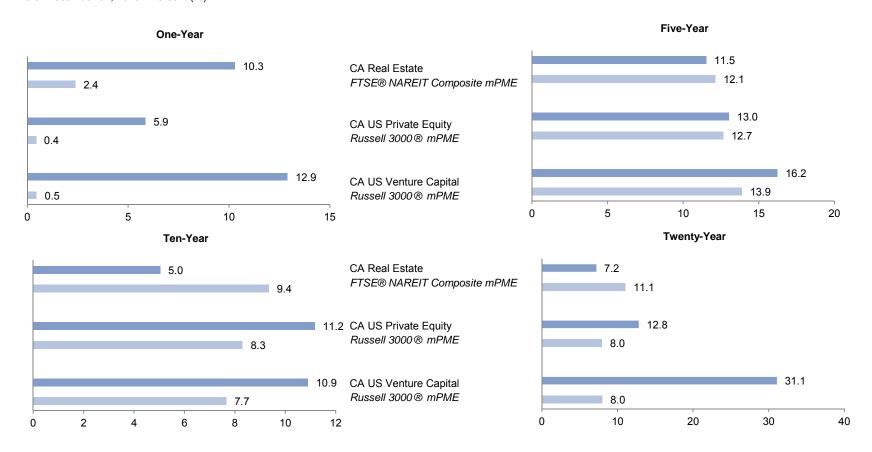


## Private investments outperformed public equivalents last calendar year

US venture capital delivered stellar performance over the five- and ten-year periods as well

#### Performance of Select Cambridge Associates Private Investment Indexes vs Public Equivalents

As of December 31, 2015 • Percent (%)



Sources: Cambridge Associates LLC, Frank Russell Company, FTSE International Limited, National Association of Real Estate Investment Trusts, and Thomson Reuters Datastream.

Notes: Private indexes are pooled horizon-IRRs, net of fees, expenses, and carried interest. CA Modified Public Market Equivalent (mPME) replicates private investment performance under public market conditions. The public index's shares are purchased and sold according to the private fund cash flow schedule, with distributions calculated in the same proportion as the private fund, and mPME net asset value is a function of mPME cash flows and public index returns.

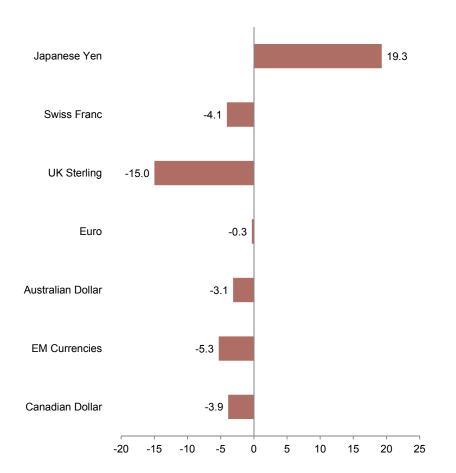


# The British pound plummeted to multi-decade lows following the Brexit vote

The US dollar strengthened against baskets of developed and emerging markets currencies this fiscal year

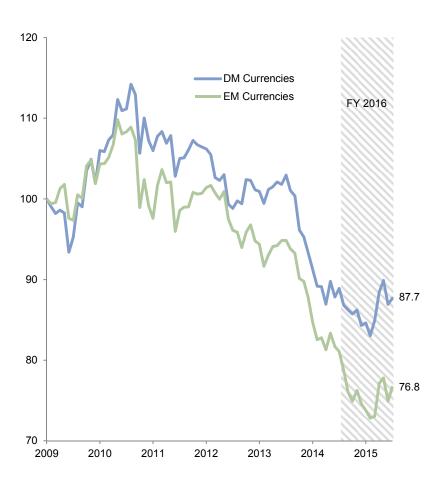
#### **Currency Performance vs the US Dollar: FY 2016**

As of June 30, 2016 • Percent Change (%)



### **Cumulative Wealth for Various Currencies in USD Terms**

December 31, 2009 – June 30, 2016 • December 31, 2009 = \$100



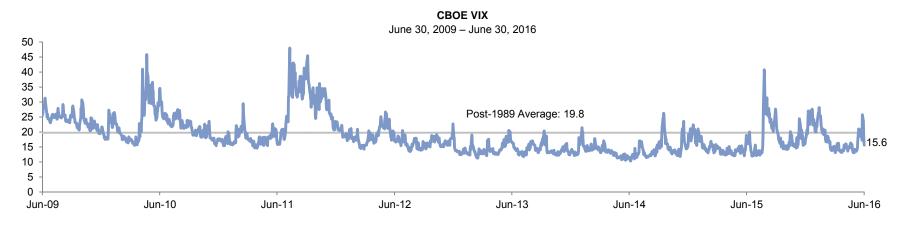
Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties. Notes: DM currencies is an equal-weighted basket of six currencies. EM currencies is an equal-weighted basket of 20 currencies.

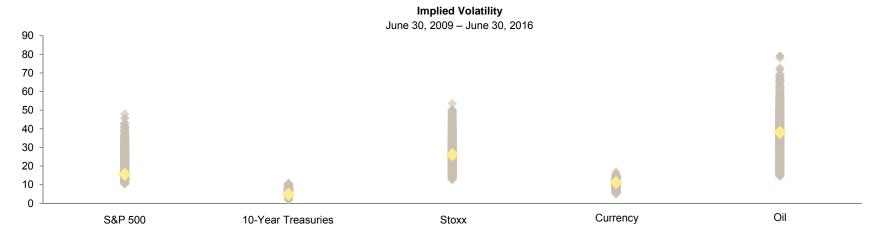


# The VIX spiked to a multi-year high in August amid China growth concerns

Leading volatility measures ended this fiscal year broadly near median levels for this cycle

#### **Volatility of Various Markets**





Sources: Bloomberg L.P., Chicago Board of Exchange, Chicago Board of Trade, J.P. Morgan Securities, Inc., Standard & Poor's, STOXX, and Thomson Reuters

Notes: Data are daily. Asset classes represented by the following: CBOE SPX Volatility (VIX) Index ("S&P 500"), CBOE/CBOT 10-Year US Treasury Note Volatility Index ("10-Year

Treasuries"), VSTOXX Volatility Index ("Stoxx"), J.P. Morgan G7 Volatility Index ("Currency"), and CBOE Crude Oil Volatility Index ("Oil"). Yellow marker represents most recent value.