



# **University of Illinois**

## **Second Quarter 2016 Investment Update**

### **Board Report**

**September 2016**

Reported to the Board of Trustees  
November 10, 2016

---

(This page left blank intentionally)

# Table of Contents

---

<u>Section</u>	<u>Page Number</u>
Market Overview and University Assets	5
Endowment Fund Update: June 30, 2016	9
Operating Pool Update: June 30, 2016	17
Appendix:	
Market Environment	21
Explanatory Notes	35

---

(This page left blank intentionally)



# Market Overview and University Assets

# Capital Markets Review

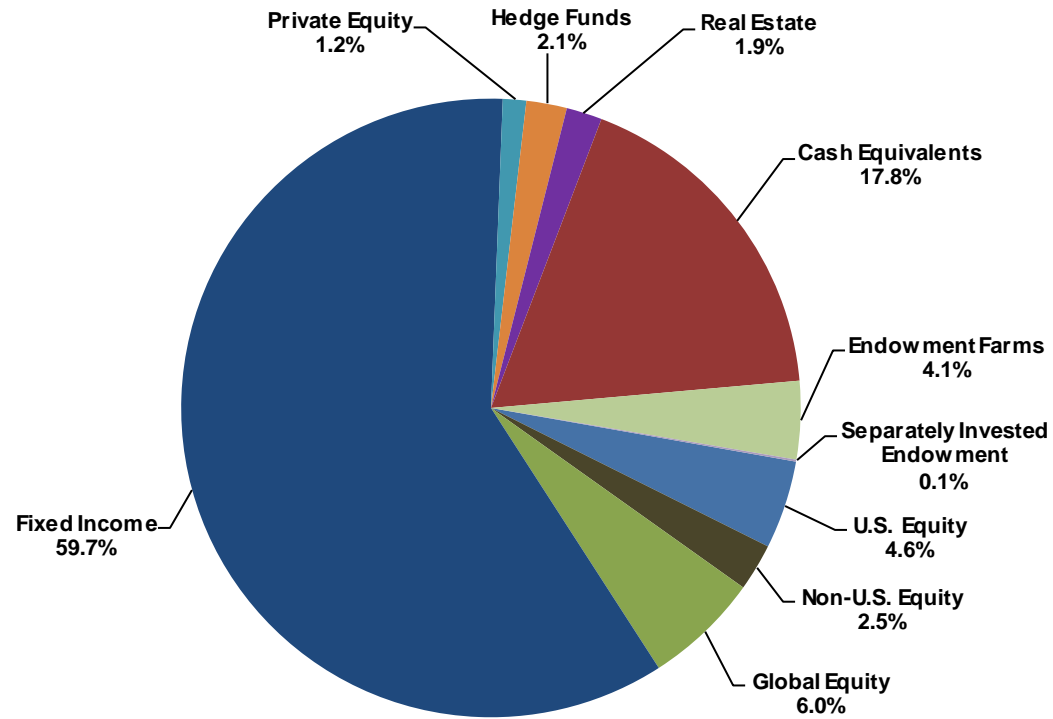
## June 30, 2016

	Quarter Ending Jun-2016	Year To Date	One Year	Three Years	Five Years	Ten Years
DJ U.S. Total Stock Market Index	2.6	3.6	2.0	11.0	11.5	7.5
MSCI AC World ex USA IMI Index	-0.7	-0.9	-9.6	1.7	0.4	2.2
MSCI AC World IMI Index	1.1	1.4	-3.9	6.1	5.4	4.5
Barclays Aggregate Bond Index	2.2	5.3	6.0	4.1	3.8	5.1
HFRI Fund Weighted Composite	1.8	1.2	-2.4	2.9	2.4	3.6
NCREIF ODCE Index	1.9	3.9	10.8	12.0	11.7	5.2

- Global equities, despite falling on the news of “Brexit” (the decision by the UK public to leave the European Union), rebounded somewhat after a volatile first quarter.
  - Central banks responded to the market’s negative reaction to Brexit by reassuring markets that they would maintain accommodative monetary policy helping markets recover quickly; however, much uncertainty remains.
  - Additionally, a rebound in commodity prices boosted performance for emerging markets. However, the Chinese economy continued to slow in its own pace of growth.
- U.S. equities were positive during the quarter. U.S. large cap stocks (Russell 1000) underperformed U.S. small cap stocks (Russell 2000).
- The Treasury yield curve shifted downward over the second quarter with yields falling across most maturities. The primary driver of the fall in yields was the result of the Brexit referendum. The yield curve flattened over the quarter, driven by long maturity bonds falling.
- Hedge Fund performance was positive during the quarter, driven by significant market dislocations across equities, fixed income, currency, and commodity markets. Distressed-Restructuring was the best performer during the quarter.
- U.S. real estate is now in a fairly mature stage of its cycle. Real estate fundamentals remain positive and are expected to continue to support above-average income growth across most property types.

# University Assets: June 30, 2016

University of Illinois Endowment & Operating Assets  
\$2.51 Billion as of 6/30/2016



---

(This page left blank intentionally)



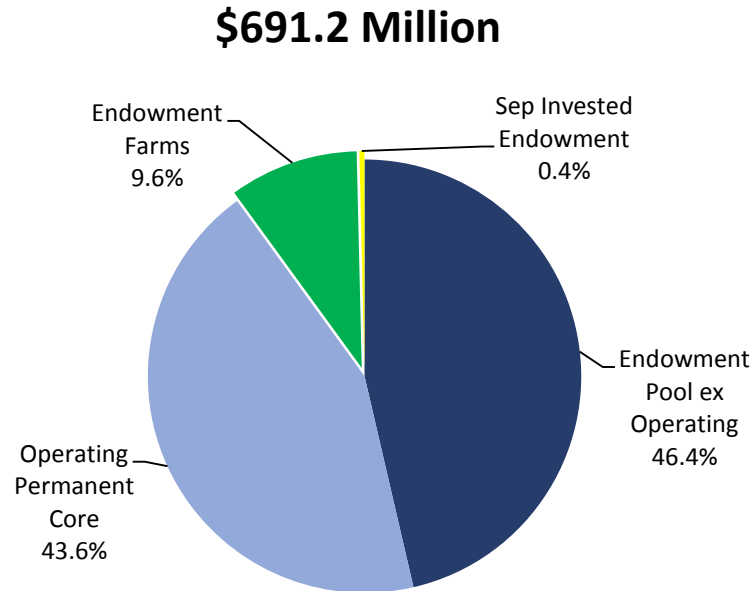


# Endowment Fund Update: June 30, 2016

# Total Endowment Assets by Type

## June 30, 2016

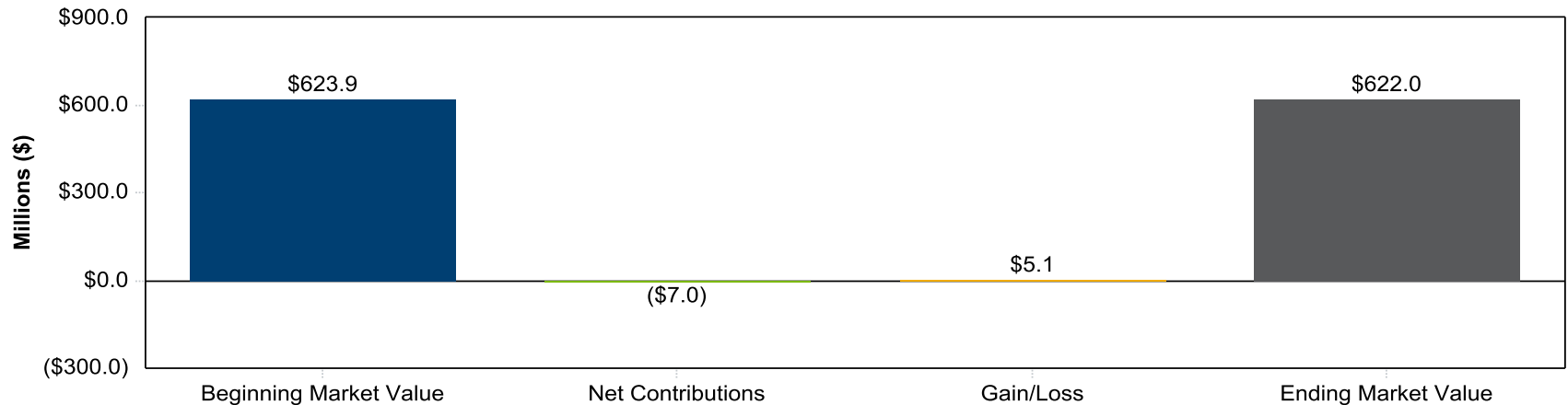
---



- The Total Endowment Fund is valued at \$691.2 million as of June 30, 2016.
- The Operating Pool maintains a permanent core investment in the Endowment Pool (light-blue pie slice), this is a long-term investment to enhance Operating Pool returns.
- The combined Endowment Pool is valued at \$622.0 million (dark- and light- blue pie slices) and discussed further on the following pages.

# Total Fund Asset Growth: Endowment Pool

Change in Market Value  
From April 01, 2016 to June 30, 2016

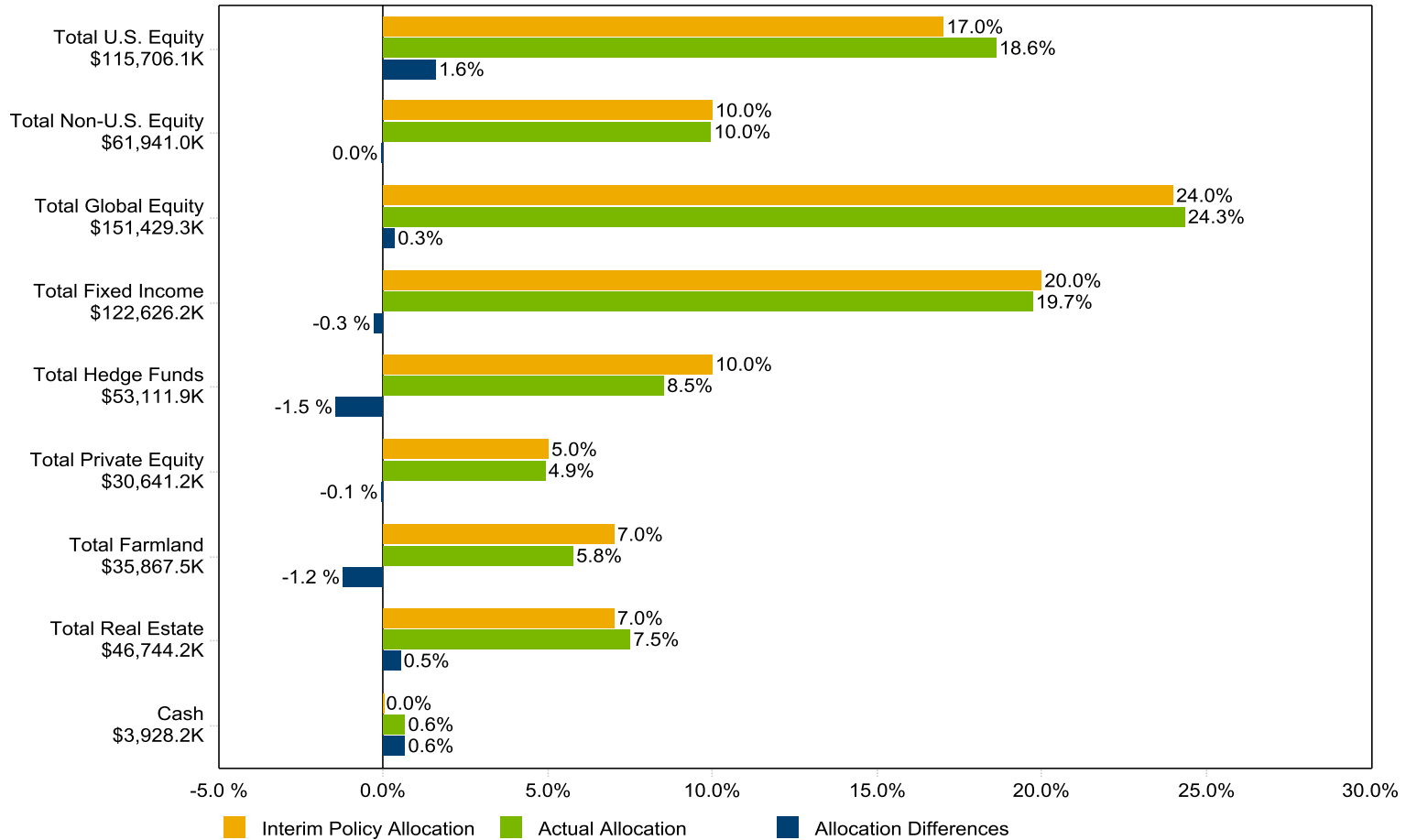


- During the second quarter ending June 30, 2016, the Endowment Pool assets decreased by approximately \$1.9 million, from \$623.9 million to \$622.0 million.
- This decrease was the net result of investment gains and negative fund flows. For this period, net outflows were approximately \$7.0 million, and the absolute return of 0.8% in Endowment assets resulted in investment gains of \$5.1 million.

# Market Value and Asset Allocation: Endowment Pool

## June 30, 2016

### Total Fund \$621,995,571



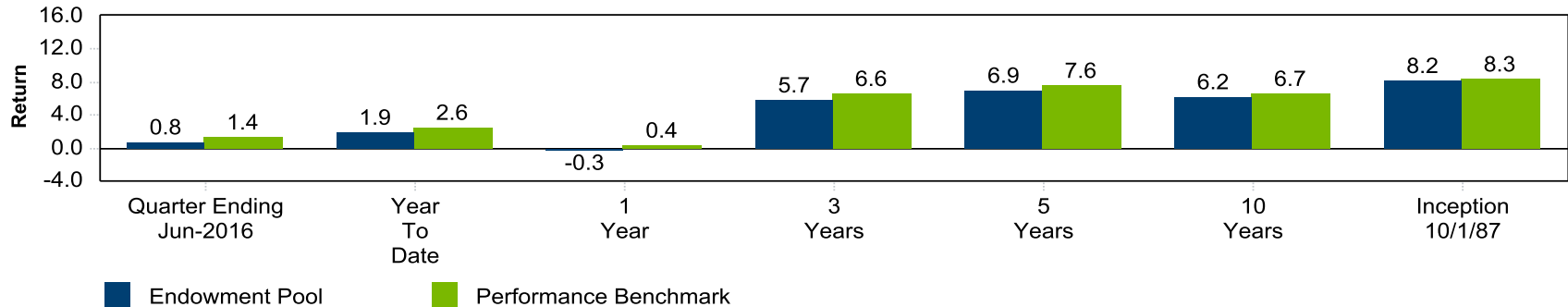
Note: Long-Term Policy Allocations: U.S. Equity 14%, Non-U.S. Equity 10%, Global Equity 24%, Private Equity 8%, Hedge Funds 10%, Fixed Income 20%, Farmland 7%, and Core Real Estate 7%



# Total Fund Performance: Endowment Pool

## June 30, 2016

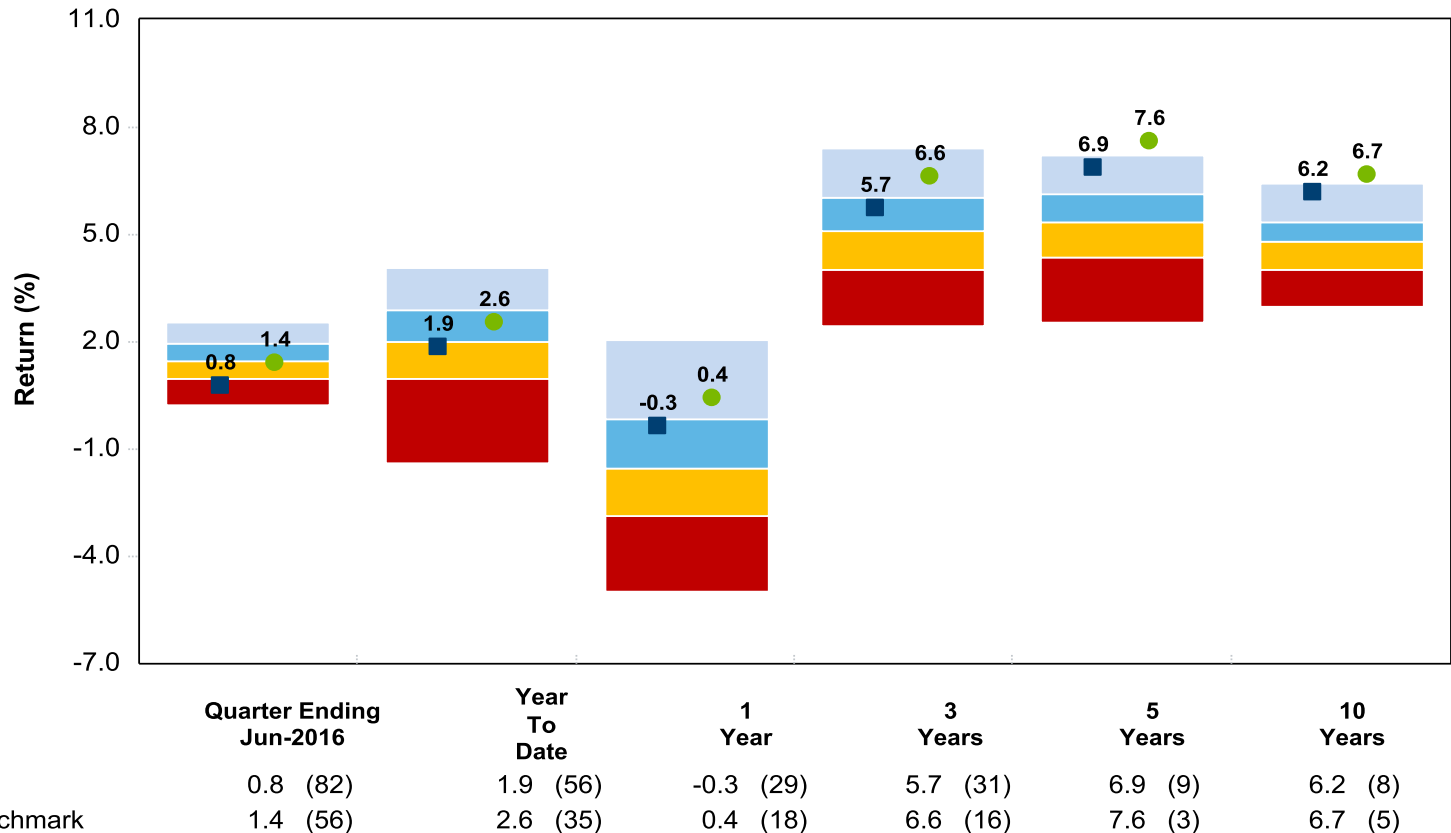
### Return Summary



- During the quarter ending June 30, 2016, the Endowment Pool gained 0.8 percentage points while underperforming the benchmark.
- Below are the main drivers of the Endowment Pool's quarterly return:
  - U.S. Equity investments underperformed the Dow Jones U.S. Total Stock Market by 1.5 percentage points during the quarter, returning 1.1%.
  - The Hedge Fund portfolio underperformed its benchmark by 1.7 percentage points during the quarter, returning 0.1%.
  - On an absolute basis, the Fixed Income and Real Estate investments drove the positive absolute performance during the quarter, returning 2.3% and 3.1%, respectively.
- Over the trailing one-year period ending June 30, 2016, the Endowment Pool fell by 0.3%, relatively underperforming its benchmark.
  - The key contributors of relative performance were Hedge Funds while the key detractors were U.S. Equity and Global Equity.

# Peer Rankings: Endowment Pool

## June 30, 2016



- Over the trailing one-year time period, the return of the University of Illinois's Endowment Pool ranked in the top 29% of the Investment Metrics/BNY Mellon Endowment Fund and Foundation Universe returns, and the three- and five-year returns ranked in the top 31% and 9% of the Universe, respectively.

# Asset Class Performance: Endowment Pool

## June 30, 2016

	Quarter Ending Jun-2016	Year To Date	One Year	Three Years	Five Years	Ten Years	Since Inception	Inception Date
<b>Endowment Pool</b> Performance Benchmark	<b>0.8</b> 1.4	<b>1.9</b> 2.6	<b>-0.3</b> 0.4	<b>5.7</b> 6.6	<b>6.9</b> 7.6	<b>6.2</b> 6.7	<b>8.2</b> 8.3	<b>Oct-1987</b>
<b>Total U.S. Equity</b> DJ U.S. Total Stock Market Index	<b>1.1</b> 2.6	<b>1.2</b> 3.6	<b>-2.2</b> 2.0	<b>10.0</b> 11.0	<b>11.0</b> 11.5	<b>7.4</b> 7.5	<b>8.9</b> 9.2	<b>Oct-1987</b>
<b>Total Non-U.S. Equity</b> Non-U.S. Equity Benchmark	<b>-0.6</b> -0.7	<b>-0.9</b> -0.9	<b>-9.7</b> -9.6	<b>1.5</b> 1.6	<b>0.6</b> 0.3	<b>1.7</b> 2.0	<b>4.8</b> 4.9	<b>Oct-1993</b>
<b>Total Global Equity</b> Global Equity Benchmark	<b>0.9</b> 1.1	<b>1.8</b> 1.4	<b>-4.7</b> -3.9	<b>5.1</b> 6.0	<b>-</b> -	<b>-</b> -	<b>7.8</b> 8.6	<b>Jul-2012</b>
<b>Total Fixed Income</b> Barclays Aggregate Index	<b>2.3</b> 2.2	<b>5.3</b> 5.3	<b>6.0</b> 6.0	<b>4.0</b> 4.1	<b>4.4</b> 3.8	<b>5.9</b> 5.1	<b>7.3</b> 6.8	<b>Oct-1987</b>
<b>Total Hedge Funds</b> HFRI Fund Weighted Composite Index	<b>0.1</b> 1.8	<b>0.2</b> 1.2	<b>2.6</b> -2.4	<b>3.5</b> 2.9	<b>-</b> -	<b>-</b> -	<b>3.4</b> 2.3	<b>Jun-2013</b>
<b>Total Private Equity<sup>1</sup></b> Private Equity Benchmark	<b>-1.1</b> 3.4	<b>0.6</b> 5.1	<b>6.3</b> 5.1	<b>9.6</b> 14.3	<b>7.5</b> 14.9	<b>6.1</b> 10.7	<b>1.5</b> 11.0	<b>Feb-2004</b>
<b>Total Real Estate</b> Real Estate Benchmark	<b>3.1</b> 3.1	<b>6.2</b> 6.5	<b>14.4</b> 14.6	<b>-</b> -	<b>-</b> -	<b>-</b> -	<b>15.7</b> 16.1	<b>Sep-2013</b>
<b>Total Farmland<sup>2</sup></b> NCREIF Cornbelt Index	<b>-3.0</b> -3.7	<b>-3.0</b> -3.7	<b>-3.0</b> -3.7	<b>-2.0</b> 2.4	<b>5.9</b> 10.5	<b>-</b> -	<b>10.3</b> 11.7	<b>Jan-2007</b>

<sup>1</sup>The combined Adams Street Partners IRR at March 31, 2016 was 8.8%.

<sup>2</sup>Farmland is valued annually on June 30th. As such, the one-year return reflected above is the one-year return for Farmland as of June 30, 2016.

---

(This page left blank intentionally)

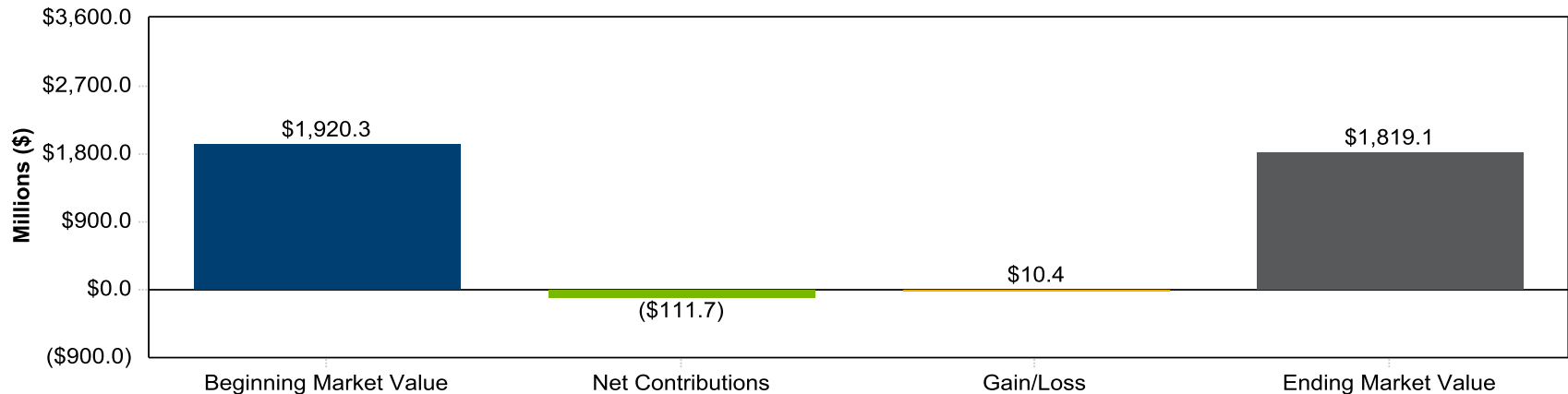




# Operating Pool Update: June 30, 2016

# Total Fund Asset Growth: Operating Pool

Change in Market Value  
From April 01, 2016 to June 30, 2016



- During the second quarter ending June 30, 2016, the Operating Pool assets decreased by approximately \$101.3 million, from \$1.920 billion to \$1.819 billion.
- This decrease was the result of \$111.7 million in net outflows and transfers.
- Additionally, the Operating Pool had investment gains of \$10.4 million during the period.

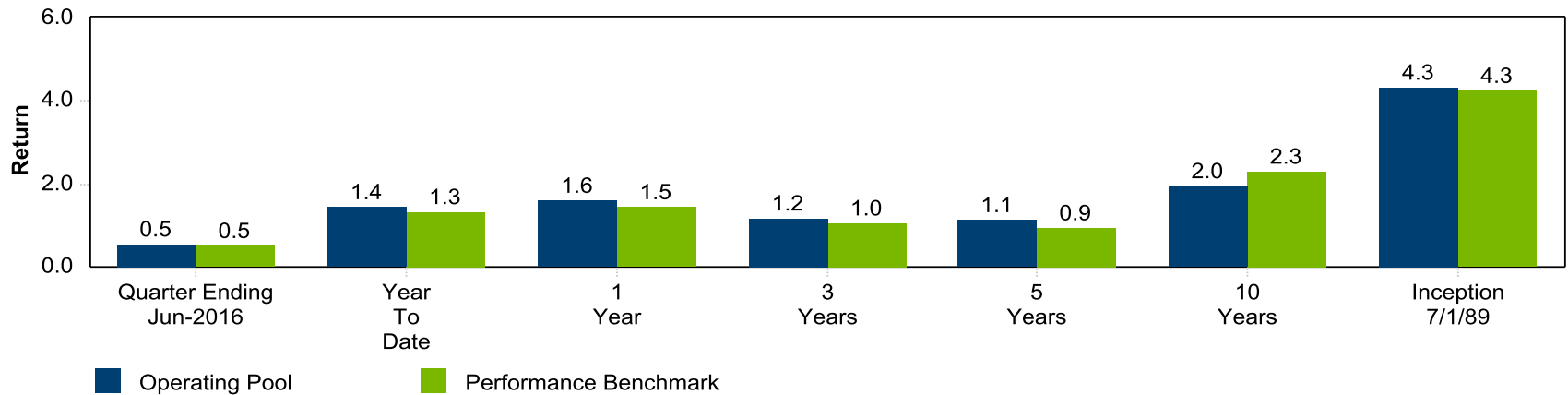
Note: The Total Fund's beginning and ending market values include bank balances in which the University earns credit to offset bank fees.

# Total Fund Performance: Operating Pool

## June 30, 2016

**Total Fund**  
**\$1,819,062,998**

### Return Summary



- The Operating Pool's performance during the second quarter was 0.5%, performing inline with the benchmark return for this time period.
- The majority of the Operating Pool's managers matched or outperformed their respective benchmarks during the quarter.

Note: Total Fund performance excludes the JP Morgan bank balance.

---

(This page left blank intentionally)

---

**Appendix:**

# **Market Environment**

# Market Highlights

## Returns of the Major Capital Markets

	Periods Ending 6/30/2016					
	Second Quarter	Year-to-Date	1-Year	3-Year <sup>1</sup>	5-Year <sup>1</sup>	10-Year <sup>1</sup>
<b>Equity</b>						
MSCI All Country World IMI	1.06%	1.36%	-3.87%	6.13%	5.43%	4.48%
MSCI All Country World	0.99%	1.23%	-3.73%	6.03%	5.38%	4.26%
Dow Jones U.S. Total Stock Market	2.61%	3.55%	2.05%	11.00%	11.55%	7.50%
Russell 3000	2.63%	3.62%	2.14%	11.13%	11.60%	7.40%
S&P 500	2.46%	3.84%	3.99%	11.66%	12.10%	7.42%
Russell 2000	3.79%	2.22%	-6.73%	7.09%	8.35%	6.20%
MSCI All Country World ex-U.S. IMI	-0.68%	-0.91%	-9.61%	1.65%	0.39%	2.16%
MSCI All Country World ex-U.S.	-0.64%	-1.02%	-10.24%	1.16%	0.10%	1.87%
MSCI EAFE	-1.46%	-4.42%	-10.16%	2.06%	1.68%	1.58%
MSCI EAFE (Local Currency)	-0.74%	-7.21%	-10.19%	5.78%	6.21%	2.10%
MSCI Emerging Markets	0.66%	6.41%	-12.05%	-1.56%	-3.78%	3.54%
<b>Fixed Income</b>						
Barclays Global Aggregate	2.89%	8.96%	8.87%	2.80%	1.77%	4.40%
Barclays Aggregate	2.21%	5.31%	6.00%	4.06%	3.76%	5.13%
Barclays Long Gov't	6.37%	14.94%	18.98%	10.38%	10.17%	8.69%
Barclays Long Credit	6.65%	13.92%	13.76%	8.70%	8.45%	8.14%
Barclays Long Gov't/Credit	6.55%	14.33%	15.72%	9.33%	9.18%	8.42%
Barclays US TIPS	1.71%	6.24%	4.35%	2.31%	2.63%	4.76%
Barclays High Yield	5.52%	9.06%	1.62%	4.18%	5.84%	7.56%
Citi Group Non-U.S. WGBI	4.04%	13.50%	13.85%	2.36%	0.31%	3.97%
JP Morgan EMBI Global (Emerging Markets)	5.40%	10.90%	10.32%	6.44%	6.25%	7.91%
<b>Commodities</b>						
Bloomberg Commodity Index	12.76%	13.23%	-13.34%	-10.56%	-10.83%	-5.59%
Goldman Sachs Commodity Index	12.67%	9.86%	-26.08%	-19.81%	-14.03%	-10.18%
<b>Hedge Funds</b>						
HFRI Fund-Weighted Composite <sup>2</sup>	1.81%	1.20%	-2.39%	2.90%	2.38%	3.58%
HFRI Fund of Funds <sup>2</sup>	0.56%	-2.58%	-5.40%	1.92%	1.63%	1.58%
<b>Real Estate</b>						
NAREIT U.S. Equity REITS	6.96%	13.38%	24.04%	13.58%	12.60%	7.45%
NCREIF NFI - ODCE <sup>3</sup>	2.13%	4.36%	11.82%	13.00%	12.72%	6.17%
<b>Private Equity</b>						
Burgiss Private iQ Global Private Equity <sup>4</sup>	1.26%	6.37%	6.37%	11.97%	11.22%	10.78%
<b>Infrastructure</b>						
Macquarie Global Infrastructure - North America	8.45%	25.05%	16.26%	10.77%	11.02%	8.69%

MSCI Indices show net returns.

All other indices show total returns.

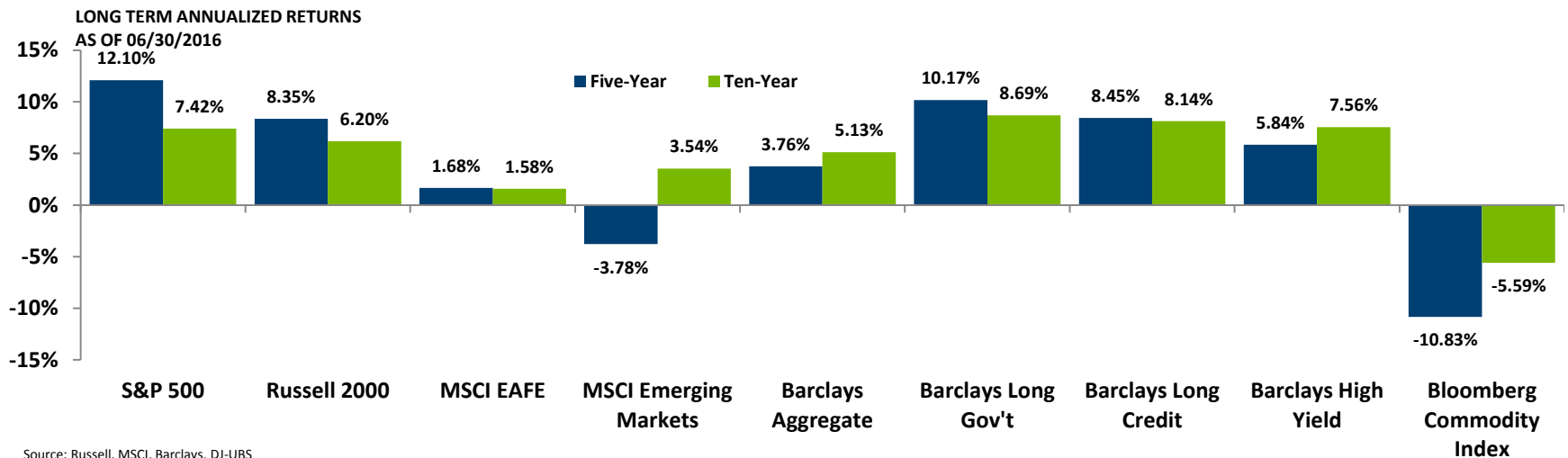
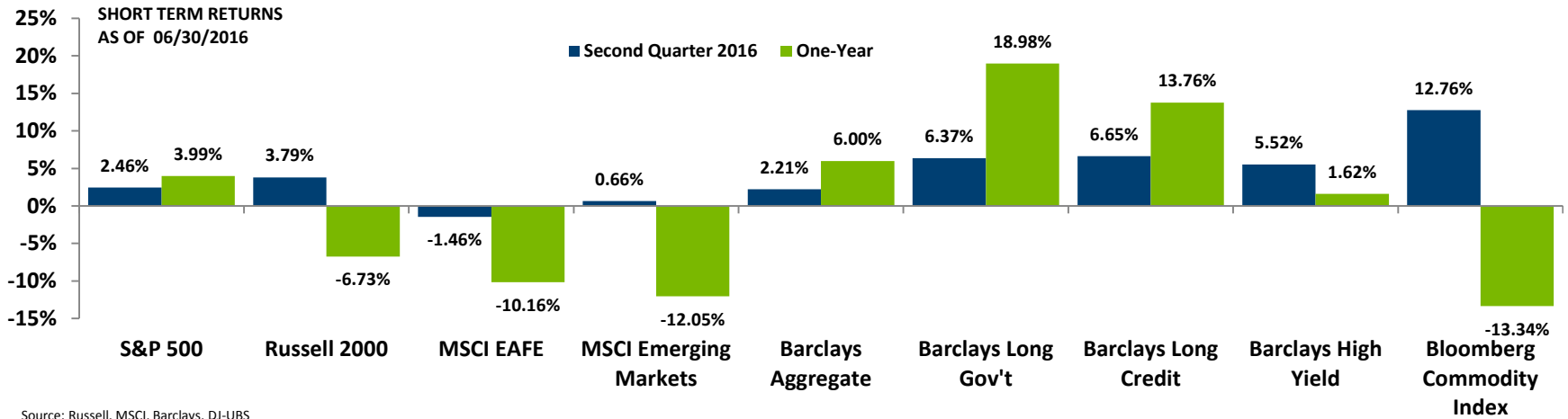
<sup>1</sup> Periods are annualized.

<sup>2</sup> Latest 5 months of HFR data are estimated by HFR and may change in the future.

<sup>3</sup> Second quarter results are preliminary. Returns are gross of fee.

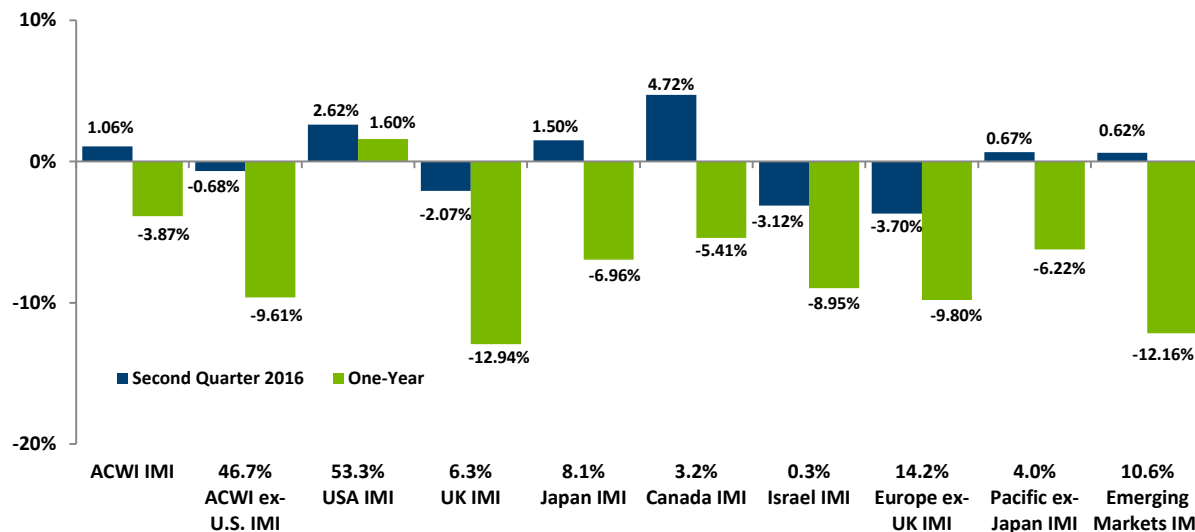
<sup>4</sup> Source: Burgiss Private iQ. Benchmark is as of 12/31/2015.

# Market Highlights



# Global Equity Markets

GLOBAL MSCI IMI INDEX RETURNS  
AS OF 06/30/2016



Source: MSCI

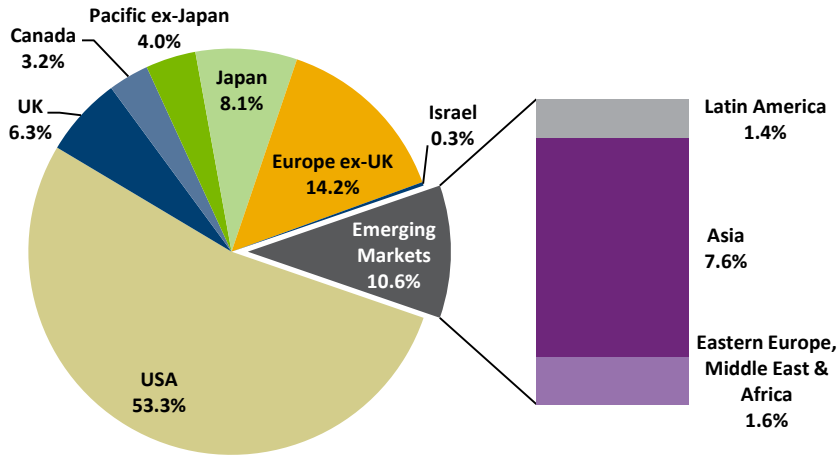
- Despite falling on the news of Brexit, global equities rebounded somewhat after a volatile first quarter. Central banks responded to the market's negative reaction to Brexit by reassuring markets that they would maintain accommodative monetary policy helping markets recover quickly; however, much uncertainty remains.
- Global equity markets returned 1.06% in Q2 2016 with notable differences in regional returns. Canada continued to be the best performer with a return of 4.72% in Q2 2016.

Note: Percentages along the bottom of the graph show the proportion of the sub-index within the ACWI IMI Index.



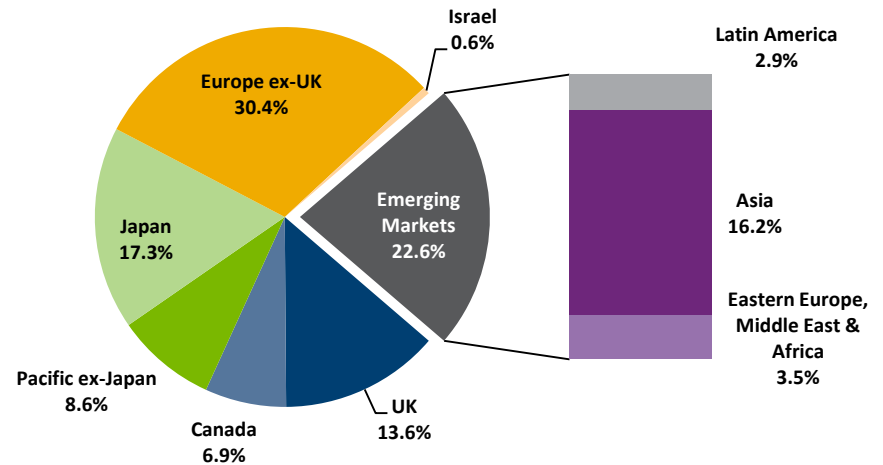
# Global Equity Markets

MSCI ALL COUNTRY WORLD IMI INDEX  
GEOGRAPHIC ALLOCATION AS OF 06/30/2016



Source: MSCI

MSCI ALL COUNTRY WORLD EX-U.S. IMI INDEX  
GEOGRAPHIC ALLOCATION AS OF 06/30/2016

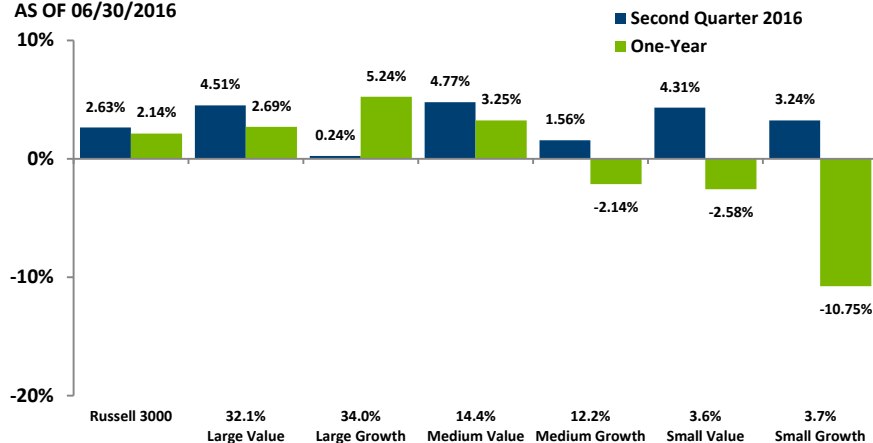


Source: MSCI

- The two exhibits on this slide illustrate the percentage that each country/region represents of the global equity market as measured by the MSCI All Country World IMI Index and the MSCI All Country World ex-U.S. IMI Index.

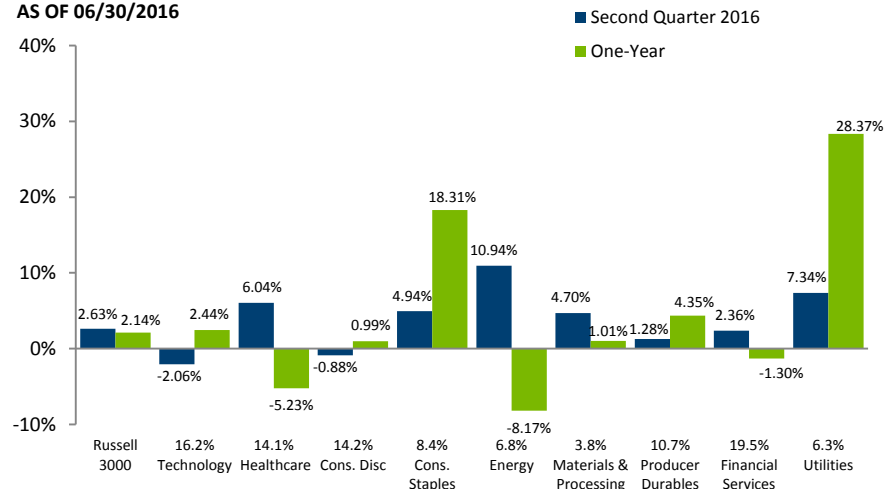
# U.S. Equity Markets

**RUSSELL STYLE RETURNS  
AS OF 06/30/2016**



Source: Russell Indexes

**RUSSELL RGS\* SECTOR RETURNS  
AS OF 06/30/2016**



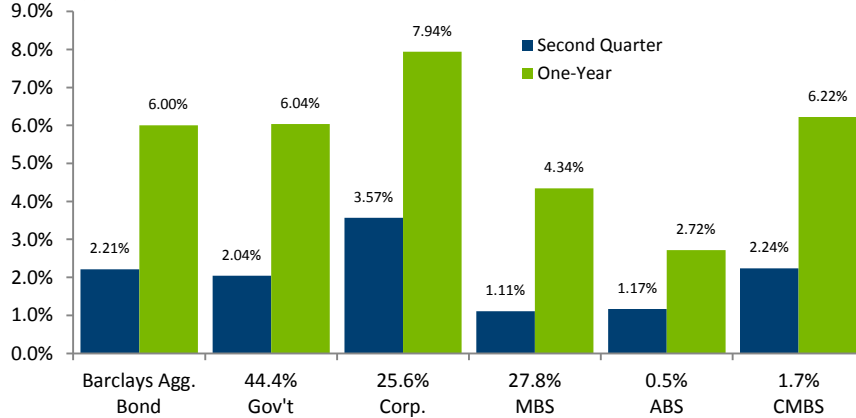
Source: Russell Indexes

- The Russell 3000 Index returned 2.63% during the second quarter and returned 2.14% over the one-year period.
- Performance across the market capitalization spectrum was positive over the quarter. Medium cap stocks outperformed both the larger and smaller segments in value stocks. Small cap stocks outperformed the other segments in growth stocks. Value stocks outperformed growth stocks across the capitalizations.
- During the second quarter, the energy sector was the strongest performer, posting returns of 10.94%. The technology and consumer discretionary sectors were the weakest performers, producing returns of -2.06% and -0.88%, respectively.

\*RGS Stands for Russell Global Sectors

# U.S. Fixed Income Markets

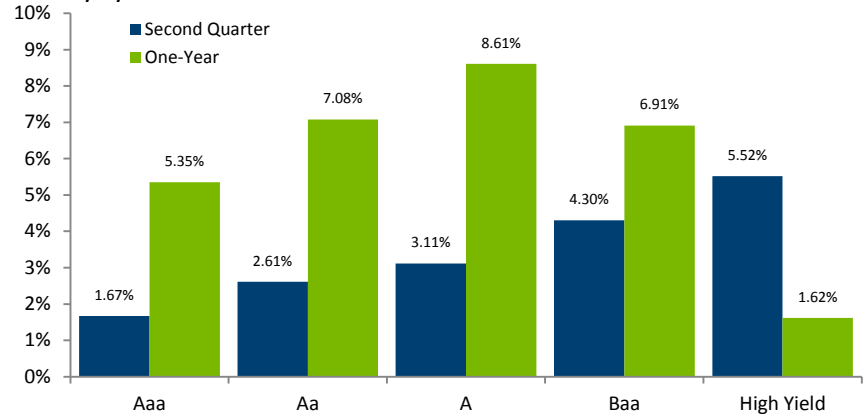
**BARCLAYS AGGREGATE RETURNS BY SECTOR  
AS OF 6/30/2016**



Source: Barclays Live

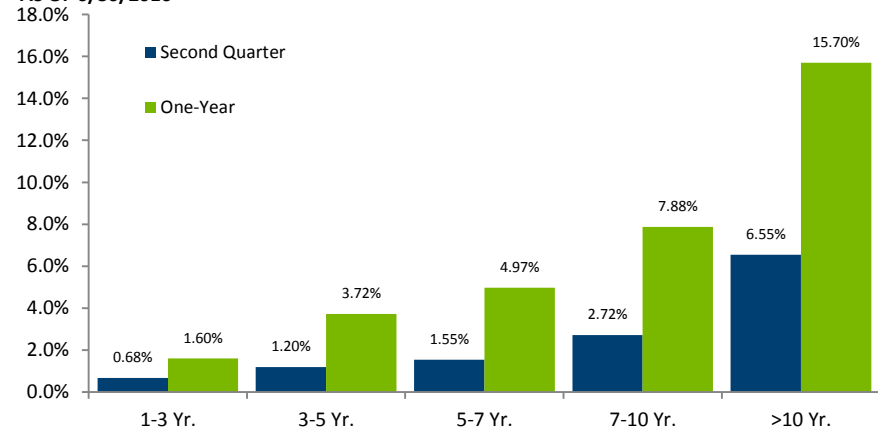
- The Barclays Aggregate Bond Index returned 2.21% in the second quarter. Corporate bonds were the strongest performing index segment, returning 3.57%.
- High yield bonds outperformed all the other investment grade corporate bonds in all different credit qualities.
- Longer duration bonds outperformed shorter duration bonds.

**BARCLAYS AGGREGATE RETURNS BY QUALITY AND HIGH YIELD RETURNS  
AS OF 6/30/2016**



Source: Barclays Live

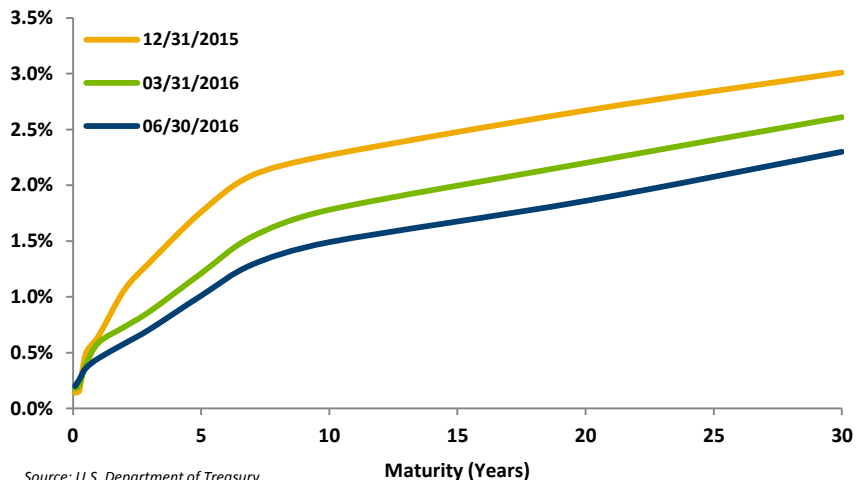
**BARCLAYS AGGREGATE RETURNS BY MATURITY  
AS OF 6/30/2016**



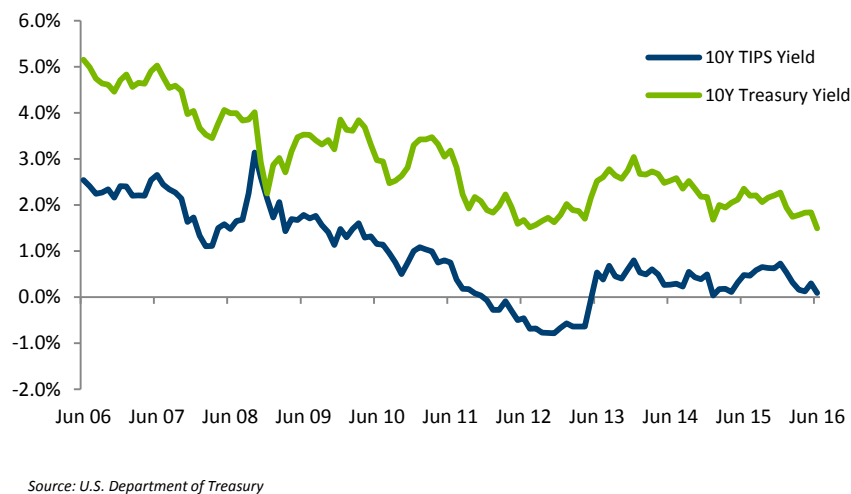
Source: Barclays Live

# U.S. Fixed Income Markets

U.S. TREASURY YIELD CURVE



U.S. 10-YEAR TREASURY AND TIPS YIELDS



- The Treasury yield curve shifted downward over the second quarter with yields falling across most maturities. The yield curve flattened over the quarter, driven by long maturity bond yields falling.
- The results of the Brexit referendum were the main driver behind the collapse of yields over the quarter.
- The 10-year U.S. Treasury yield ended the quarter at 1.49%, 29 basis points lower than its level at the beginning of the quarter.
- The 10-year TIPS yield fell by 7 basis points over the quarter and ended the period at 0.09%.

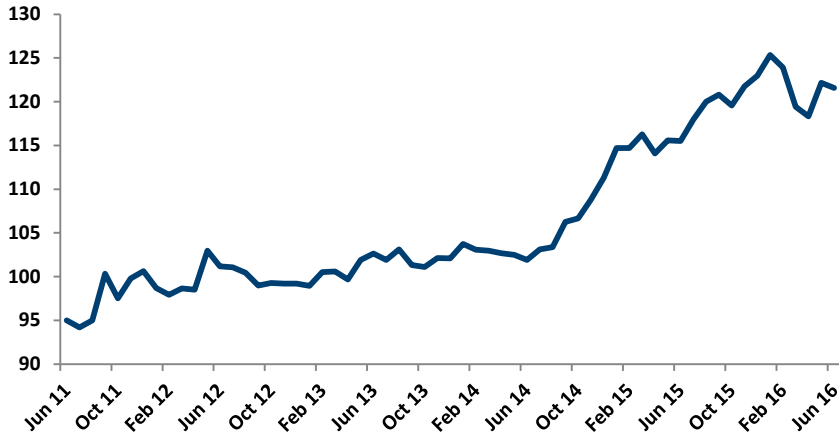
## Credit Spreads

Spread (bps)	06/30/2016	03/31/2016	06/30/2015	Quarterly Change (bps)	1-Year Change (bps)
U.S. Aggregate	55	56	51	-1	4
Long Gov't	3	4	4	-1	-1
Long Credit	215	223	202	-8	13
Long Gov't/Credit	130	136	128	-6	2
MBS	27	22	26	5	1
CMBS	98	109	101	-11	-3
ABS	61	74	62	-13	-1
Corporate	156	163	145	-7	11
High Yield	594	656	476	-62	118
Global Emerging Markets	345	382	328	-37	17

- During the second quarter, credit spreads fell across all the areas of the bond market with the exception of MBS spreads.
- High yield spreads fell by 62 basis points, the most over the quarter. Global emerging markets and ABS spreads followed, falling by 37 and 13 basis points, respectively.

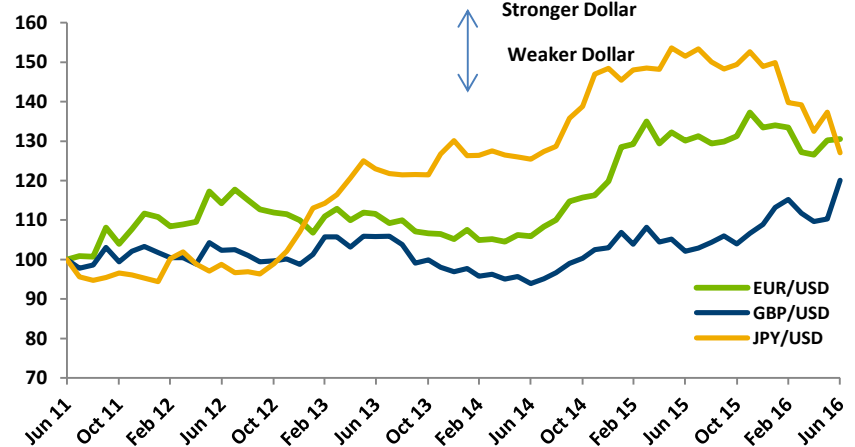
# Currency

TRADE WEIGHTED U.S. DOLLAR INDEX  
(1997 = 100)



Source: Federal Reserve

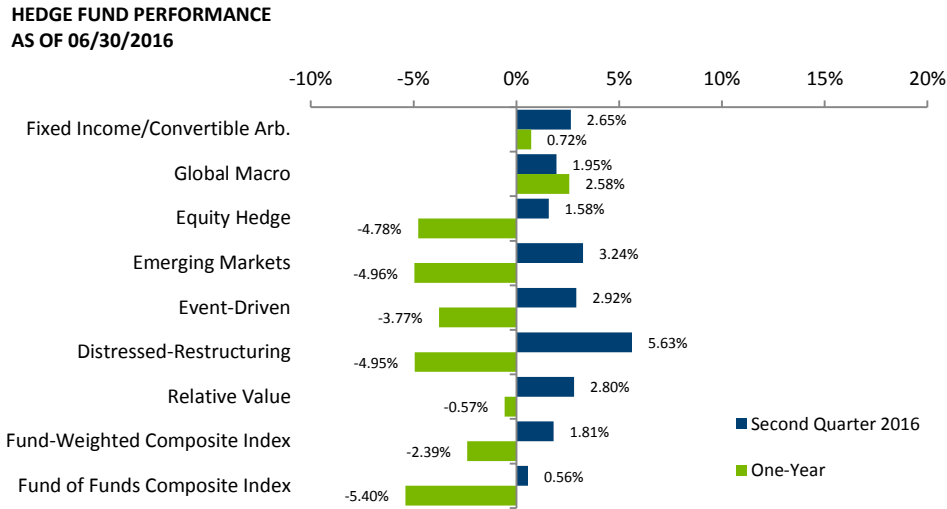
U.S. DOLLAR RELATIVE TO EUR, GBP AND JPY  
REBASED TO 100 AT 06/30/2011



Source: DataStream

- As measured through the broad trade weighted U.S. dollar index, the U.S. dollar strengthened during the quarter.
- The U.S. dollar appreciated sharply against the pound and the euro but depreciated against the yen. The pound weakened on confirmation of Brexit and ensuing speculation over an interest rate cut by the Bank of England (BOE). The yen appreciated sharply against the dollar as the Bank of Japan (BOJ) kept the monetary policy unchanged over the quarter, contrary to expectations.

# Hedge Fund Markets Overview

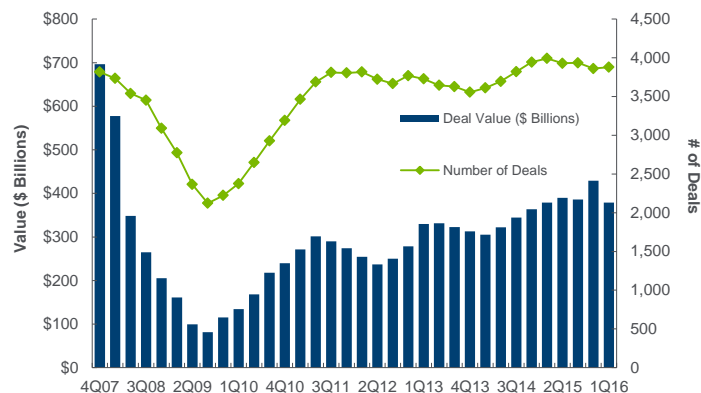


*Note: Latest 5 months of HFR data are estimated by HFR and may change in the future.  
Source: HFR*

- Hedge Fund performance was positive over the quarter.
- The HFRI Fund-Weighted Composite Index and the HFRI Fund of Funds Composite Index produced returns of 1.81% and 0.56%, respectively, during the quarter.
- Distressed-Restructuring was the best performer, with a return of 5.63% in the second quarter.

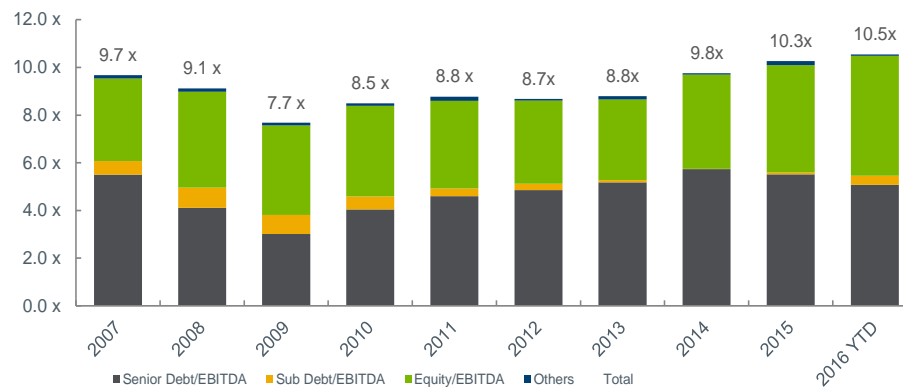
# Private Equity Market Overview

LTM Global Private Equity-Backed Buyout Deal Volume



Source: Preqin

Purchase Price Multiples – All Transactions Sizes



Source: S&P

- In Q1 2016, \$102.3 billion was raised by 207 funds, which was down 15.6% and 6.5% on a capital basis compared to the prior quarter and the same period last year, respectively.

  - Over the last twelve months, private equity fundraising totaled \$449.5 billion, which although down slightly quarter-over-quarter (1.6%), remained well above the five-year annual average of \$391.0 billion.
  - Dry powder was up 7.0% compared to Q4 2015's peak of \$1.1 trillion and remained well above the five-year average level of \$911.1 billion<sup>1</sup>.
- Global private equity-backed buyout deals totaled just \$52.0 billion in the first quarter, which was down 62.4% and 37.3% from the prior quarter and the five-year quarterly average, respectively.

  - This marked the lowest quarterly total since Q1 2012, which saw \$43.6 billion in volume<sup>1</sup>.
  - First quarter entry multiples for all buyout transaction sizes stood at 10.5x EBITDA, up from Q4 2015 and full-year 2015 levels of 10.1x and 10.3x, respectively, despite middle market purchase prices matching their lowest quarterly total since Q1 2014 (8.3x EBITDA)<sup>2</sup>.

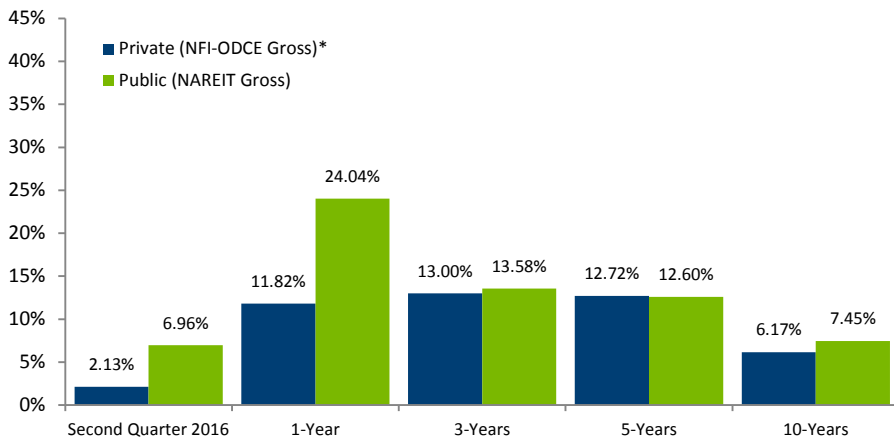
Sources: <sup>1</sup> Preqin

Notes: LTM: Last twelve months (trailing twelve months); PPM: Purchase Price Multiples: Total Purchase Price /EBITDA.

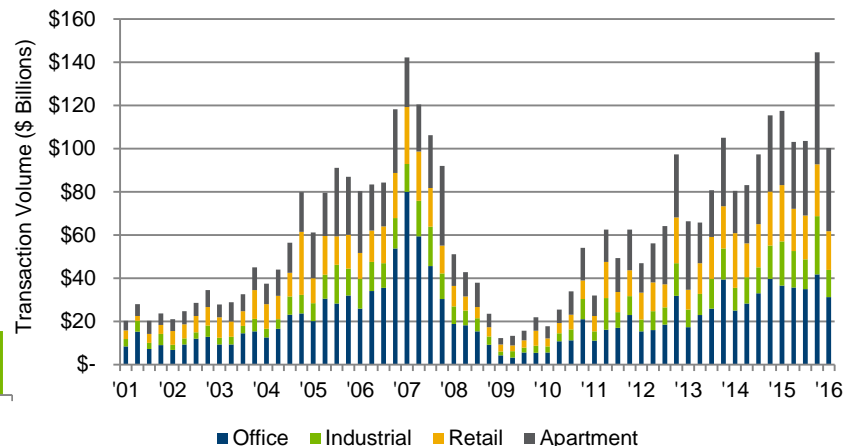


# U.S. Commercial Real Estate Market

## PRIVATE VS. PUBLIC REAL ESTATE RETURNS AS OF 6/30/2016



\*Second quarter returns are preliminary  
Sources: NCREIF, NAREIT



- U.S. Core real estate returned 2.13%\* this quarter, which is roughly inline with the first quarter but down 126 bps on a year-over-year basis. Year-to-date performance is now more closely aligned with the sector's long-run average.
- The income return (+1.12%) again outpaced appreciation (+1.01%) illustrating our expectation that net income growth will be a larger driver of returns at this mature point in the real estate cycle.
- The U.S. REIT sector gained 6.96% in the second quarter (FTSE NAREIT Equity REIT Index), marking a 13.38% gain year-to-date ending June 30, 2016. U.S. REITs ended the quarter trading at premiums to NAVs. The lower global yields following Brexit have made the U.S. property market a favorable place for stability and yield.
- In the second quarter, U.S. sales volumes continued to post declines (data available through May) at similar levels to the first quarter.

\*Indicates preliminary NFI-ODCE data gross of fees

---

(This page left blank intentionally)



# Explanatory Notes

## Explanatory Notes

---

Note: Market values are used in this report to calculate performance for the Endowment and Operating pools. Market values reflect trade date accounting provided by the custodial bank Northern Trust.

Peer Universe Comparison Floating Bar Chart: In this chart, the universe returns are shown in percentiles, with the lowest percentile/rank representing the best performance in that time period. The shaded blocks shown for each time period represent the range of returns in the peer universe from the 95<sup>th</sup> percentile to the 5<sup>th</sup> percentile. Returns below the red boxes fall in the worst 5 percent for that period, and returns above the light-blue boxes fall in the top 5 percent. The Investment Metrics/BNY Mellon Universe includes reported performance from 358 Endowment and Foundations. The average market value within the Endowment and Foundations universe was \$926.8 million as of quarter-end.