



# **University of Illinois**

## **Fourth Quarter 2015 Investment Update**

### **Board Report**

**February 2016**

Reported to the Board of Trustees  
March 16, 2016

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# Market Overview and University Assets

# Capital Markets Review

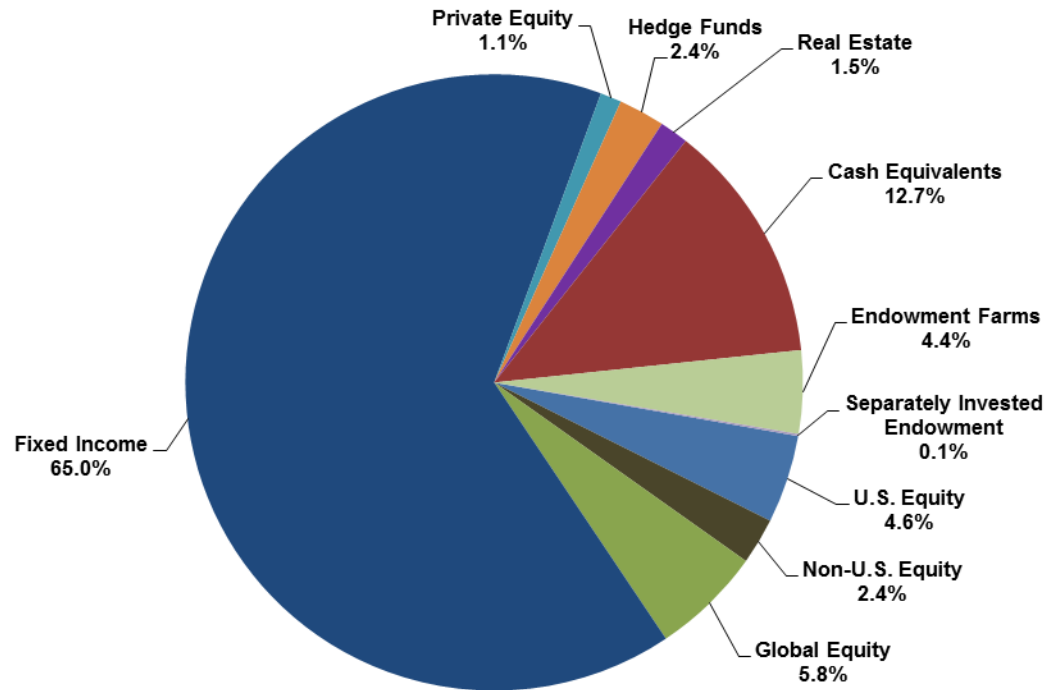
## December 31, 2015

	Quarter Ending Dec-2015	One Year	Three Years	Five Years	Ten Years
DJ U.S. Total Stock Market Index	6.3	0.4	14.7	12.1	7.5
MSCI AC World ex USA IMI Index	3.5	-4.6	2.0	1.3	3.2
MSCI AC World IMI Index	4.9	-2.2	7.9	6.1	5.0
Barclays Aggregate Bond Index	-0.6	0.5	1.4	3.2	4.5
HFRI Fund Weighted Composite	0.8	-1.1	3.6	2.3	4.1
NCREIF ODCE Index	3.1	14.0	12.8	12.6	5.6

- The fourth quarter saw equity markets rebound following the third quarter correction, but they failed to recover all of the losses. The majority of regions performed positively in the fourth quarter as markets were supported by gradual economic improvement from the Eurozone and Japan. Additionally, the Federal Reserve (Fed) expressed a sign of confidence in the prospects of the U.S. economy by raising the interest rate during the quarter. However, Chinese growth concerns remain.
- In December, the Fed raised the target range for the Federal Funds rate to 0.25-0.50%. The market reacted favorably to the news, a stark contrast to the Fed's September announcement where it came close to triggering a major market upset.
- Yields rose during the quarter as expectations of the first interest rate hike in the U.S. were increasingly priced in over the quarter. Investment grade corporate bonds outperformed high yield bonds. Shorter duration bonds outperformed longer duration bonds.
- In 2015, U.S. private real-estate returns marked its fifth year at well above long-term average levels, bolstered by continued improvement in property fundamentals and overall U.S. economic strength.
- Hedge fund index performance was positive over the quarter. Emerging Markets and Equity Hedged strategies were the strongest performers while Distressed-Restructuring strategy was the weakest performer.

# University Assets: December 31, 2015

University Of Illinois Endowment & Operating Assets  
\$2.57 Billion as of 12/31/2015



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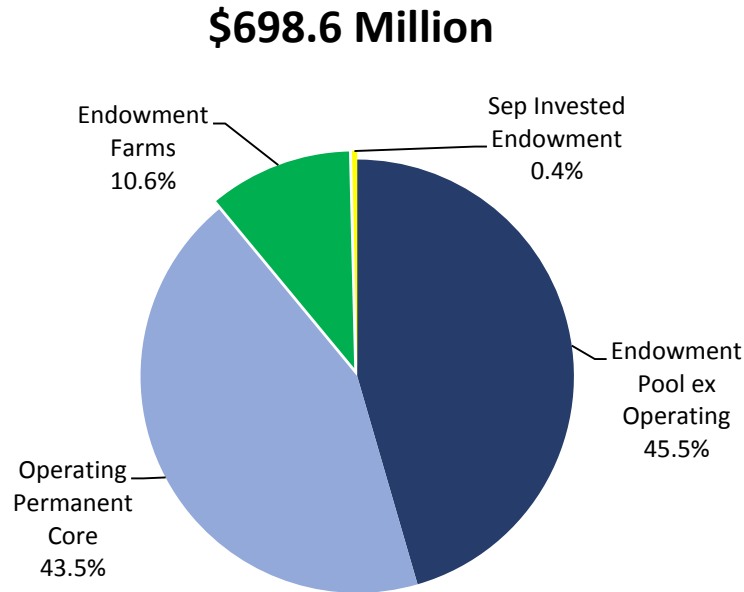


# Endowment Fund Update: December 31, 2015

# Total Endowment Assets by Type

## December 31, 2015

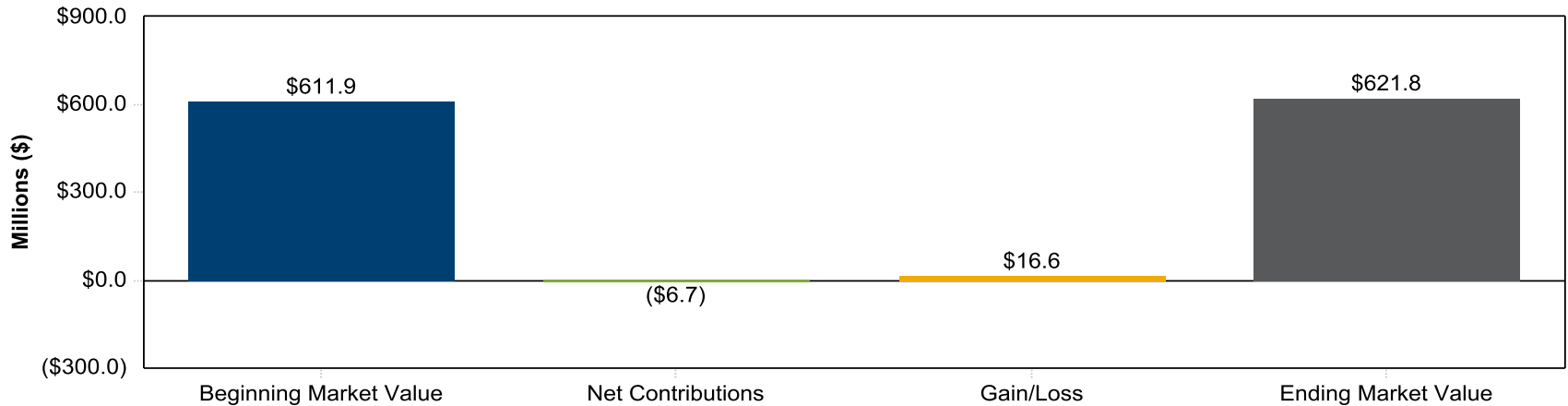
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- The Total Endowment Fund is valued at \$698.6 million. The Operating Pool maintains a permanent core investment in the Endowment Pool (light blue slice). This is a long-term investment to enhance Operating Pool returns. The combined Endowment Pool is valued at \$621.8 million (dark and light blue pie slices) and discussed further on the following pages.

# Total Fund Asset Growth: Endowment Pool

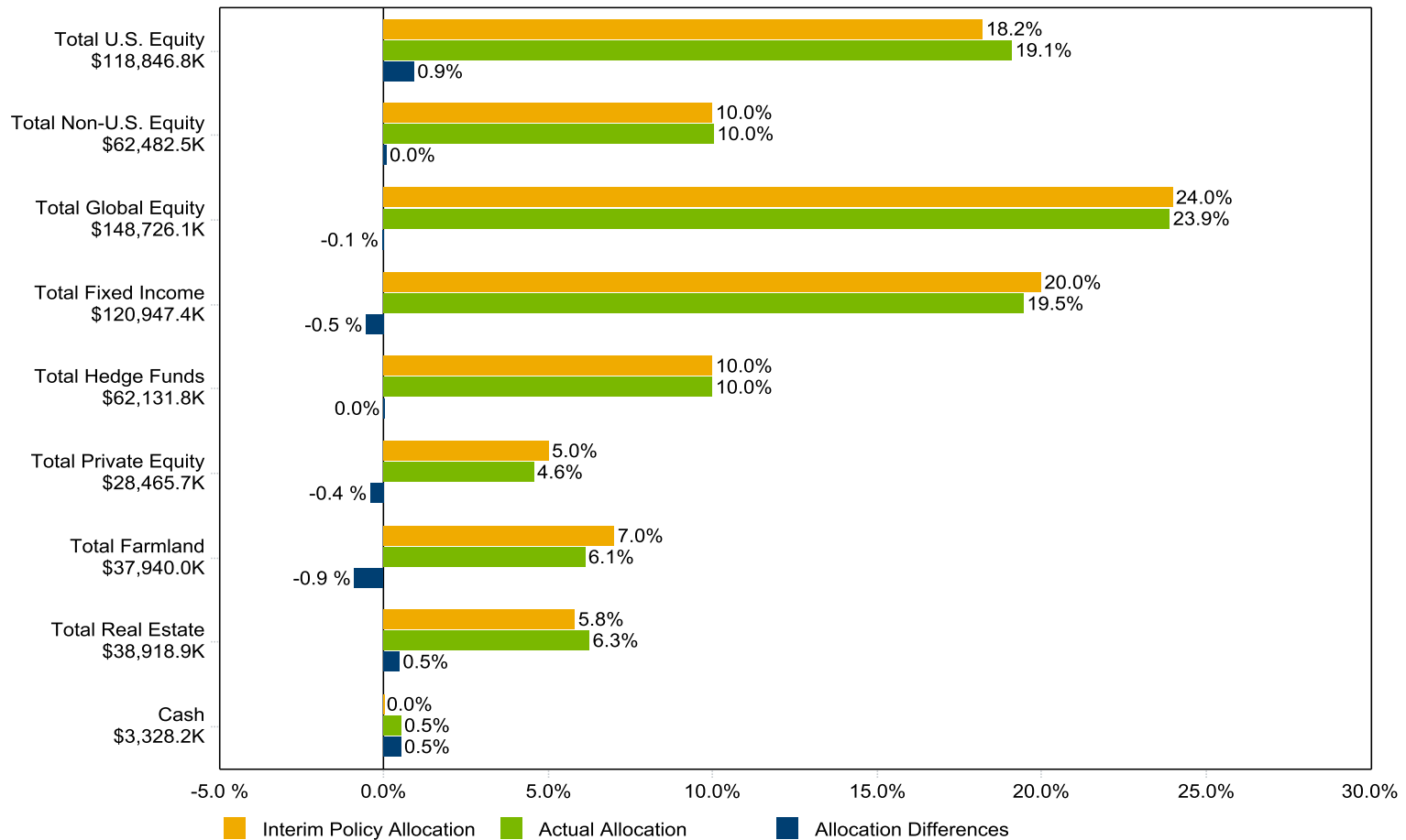
Change in Market Value  
From October 01, 2015 to December 31, 2015



- During the fourth quarter, Endowment Pool assets increased by approximately \$9.9 million from \$611.9 million to \$621.8 million.
- This increase was the net result of investment gains and negative fund flows. For this period, net outflows were approximately \$6.7 million and the absolute return of 2.7% in Endowment assets resulted in investment gains of \$16.6 million.

# Market Value and Asset Allocation: Endowment Pool December 31, 2015

## Total Fund \$621,792,857

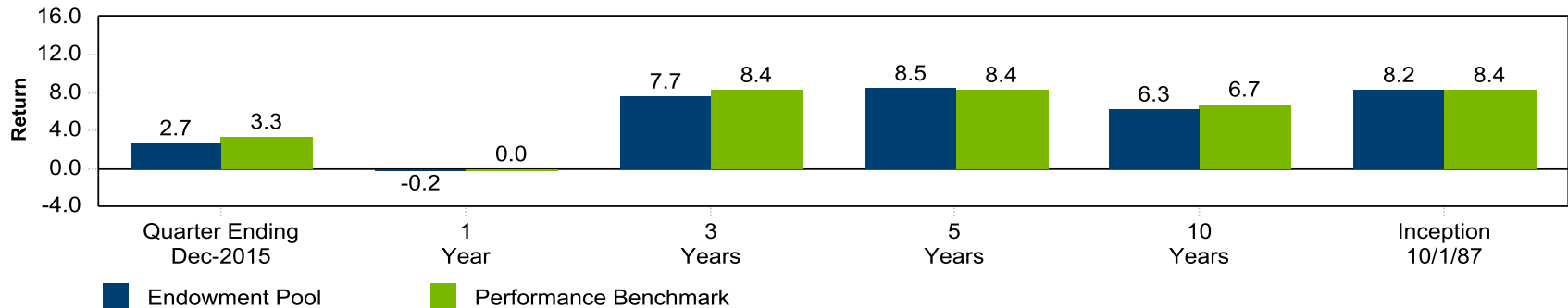


\* Long Term Policy Allocations: U.S. Equity 14%, Non-U.S. Equity 10%, Global Equity 24%, Private Equity 8%, Hedge Funds 10%, Fixed Income 20%, Farmland 7%, and Core Real Estate 7%

# Total Fund Performance: Endowment Pool

## December 31, 2015

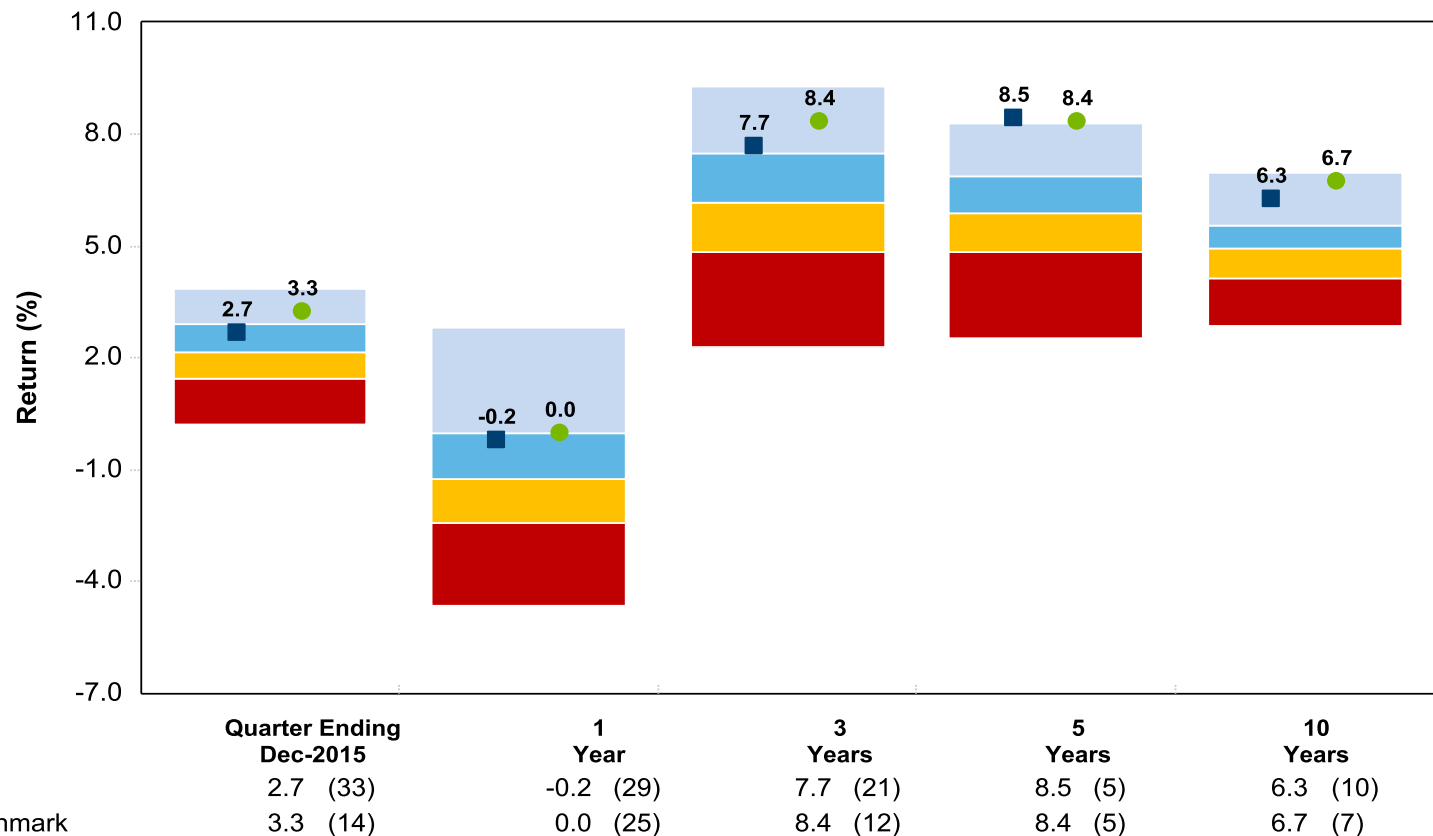
### Return Summary



- During the quarter, the Endowment Pool gained 2.7 percentage points and underperformed the benchmark by 60 basis points. The public equity asset classes drove the Endowment Pool's strong absolute performance while also contributing to the Pool's underperformance on a relative basis.
  - The U.S. Equity investments underperformed the Dow Jones U.S. Total Stock Market Index by 40 basis points during the quarter, returning 5.9%.
  - The Endowment's Global Equity portfolio underperformed its benchmark by 70 basis points during the quarter with a return of 4.2%.
  
- Over the trailing one-year period, the Endowment Pool fell by 0.2%, slightly underperforming its benchmark. The key contributors of relative performance were Hedge Funds and Private Equity while the key detractors were U.S. Equity, Global Equity, and Farmland.

# Peer Rankings: Endowment Pool

## December 31, 2015



- Over the trailing one-year time period, the return of the University of Illinois' 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 21% and 5% of the universe, respectively.

# Asset Class Performance: Endowment Pool

## December 31, 2015

	Quarter Ending Dec-2015	One Year	Three Years	Five Years	Ten Years	Since Inception	Inception Date
<b>Endowment Pool</b>	<b>2.7</b>	<b>-0.2</b>	<b>7.7</b>	<b>8.5</b>	<b>6.3</b>	<b>8.2</b>	<b>Oct-1987</b>
Performance Benchmark	3.3	0.0	8.4	8.4	6.7	8.4	
<b>Total U.S. Equity</b>	<b>5.9</b>	<b>-0.9</b>	<b>14.5</b>	<b>12.1</b>	<b>7.4</b>	<b>9.0</b>	<b>Oct-1987</b>
DJ U.S. Total Stock Market Index	6.3	0.4	14.7	12.1	7.5	9.2	
<b>Total Non-U.S. Equity</b>	<b>3.5</b>	<b>-4.8</b>	<b>2.3</b>	<b>2.2</b>	<b>2.8</b>	<b>5.0</b>	<b>Oct-1993</b>
Non-U.S. Equity Benchmark	3.5	-4.7	1.9	1.3	3.0	5.1	
<b>Total Global Equity</b>	<b>4.2</b>	<b>-3.4</b>	<b>6.6</b>	<b>-</b>	<b>-</b>	<b>8.4</b>	<b>Jul-2012</b>
Global Equity Benchmark	4.9	-2.4	7.7	-	-	9.4	
<b>Total Fixed Income</b>	<b>-0.8</b>	<b>1.2</b>	<b>1.6</b>	<b>4.2</b>	<b>5.3</b>	<b>7.3</b>	<b>Oct-1987</b>
Barclays Aggregate Index	-0.6	0.5	1.4	3.2	4.5	6.8	
<b>Total Hedge Funds</b>	<b>0.4</b>	<b>3.2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4.0</b>	<b>Jun-2013</b>
HFRI Fund Weighted Composite Index	0.8	-1.1	-	-	-	2.3	
<b>Total Private Equity<sup>1</sup></b>	<b>0.4</b>	<b>11.4</b>	<b>10.2</b>	<b>9.8</b>	<b>5.7</b>	<b>1.5</b>	<b>Feb-2004</b>
Private Equity Benchmark	7.0	3.5	18.1	15.5	10.7	11.0	
<b>Total Real Estate</b>	<b>4.3</b>	<b>10.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>16.4</b>	<b>Sep-2013</b>
Real Estate Benchmark	4.4	10.5	-	-	-	16.7	
<b>Total Farmland<sup>2</sup></b>	<b>0.0</b>	<b>-3.1</b>	<b>4.0</b>	<b>15.0</b>	<b>-</b>	<b>11.3</b>	<b>Jan-2007</b>
NCREIF Cornbelt Index	0.0	0.3	10.3	14.8	-	12.9	

<sup>1</sup>The combined Adams Street Partners IRR at 9/30/2015 was 9.2%.

<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, 2015.

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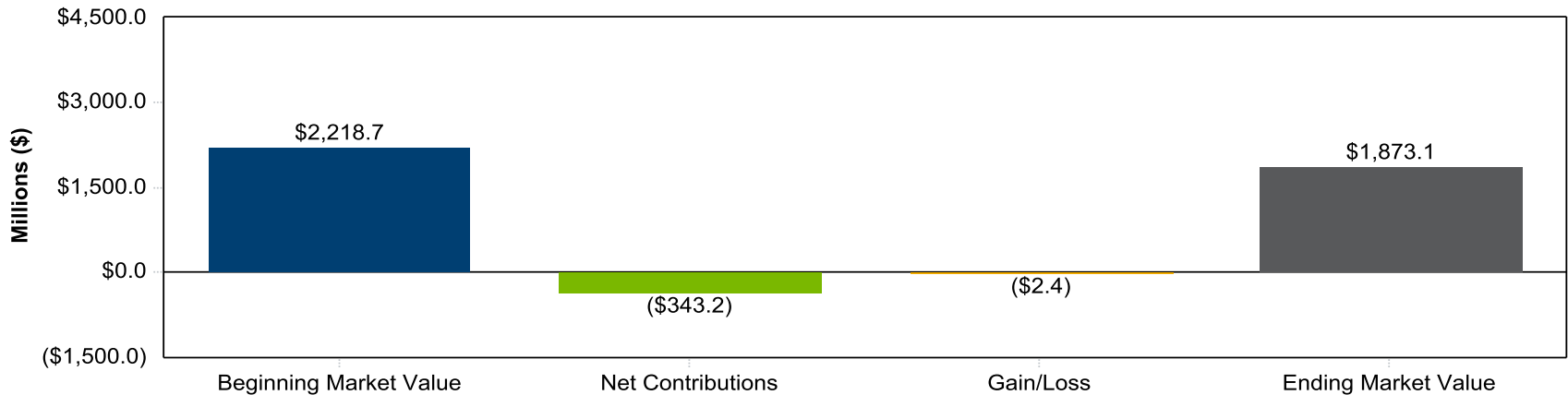




# Operating Pool Update: December 31, 2015

# Total Fund Asset Growth: Operating Pool

**Change in Market Value  
From October 01, 2015 to December 31, 2015**



- During the fourth quarter, the Operating Pool assets decreased by approximately \$345.6 million from \$2.219 billion to \$1.873 billion. This decrease was the result of \$343.2 million in net outflows and transfers as well as investment losses of \$2.4 million during the period.

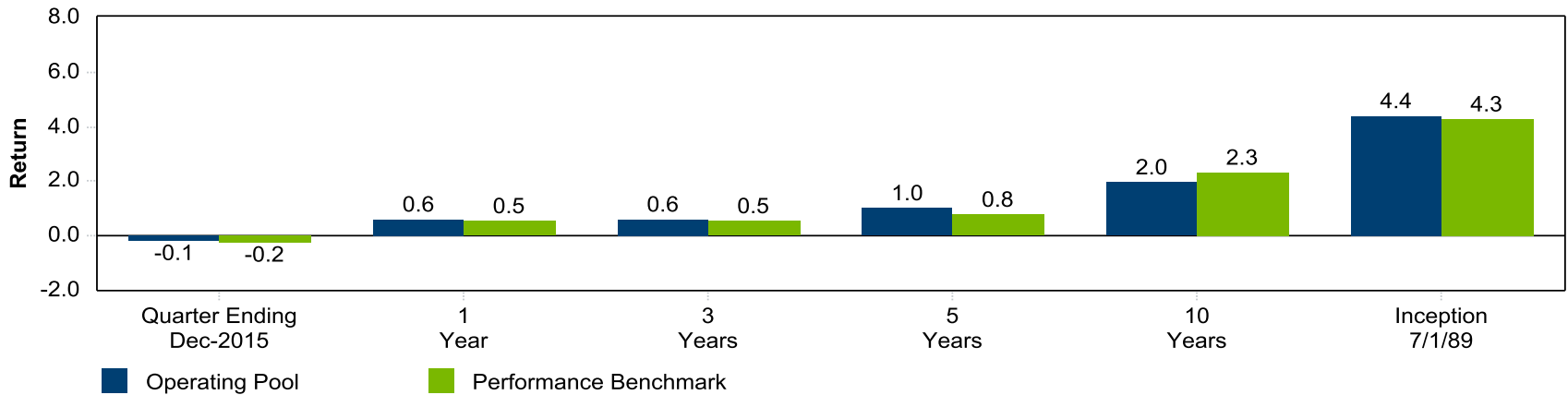
\* The Total Fund's beginning and ending market values include bank balances in which the University earns credit to offset bank fees.

# Total Fund Performance: Operating Pool

## December 31, 2015

**Total Fund**  
**\$1,873,098,808**

### Return Summary



- The Operating Pool's performance during the fourth quarter was -0.1%, outperforming the benchmark return for this time period. All of the managers matched or outperformed their respective benchmarks during the quarter.

\* Total Fund performance excludes the JP Morgan bank balances.

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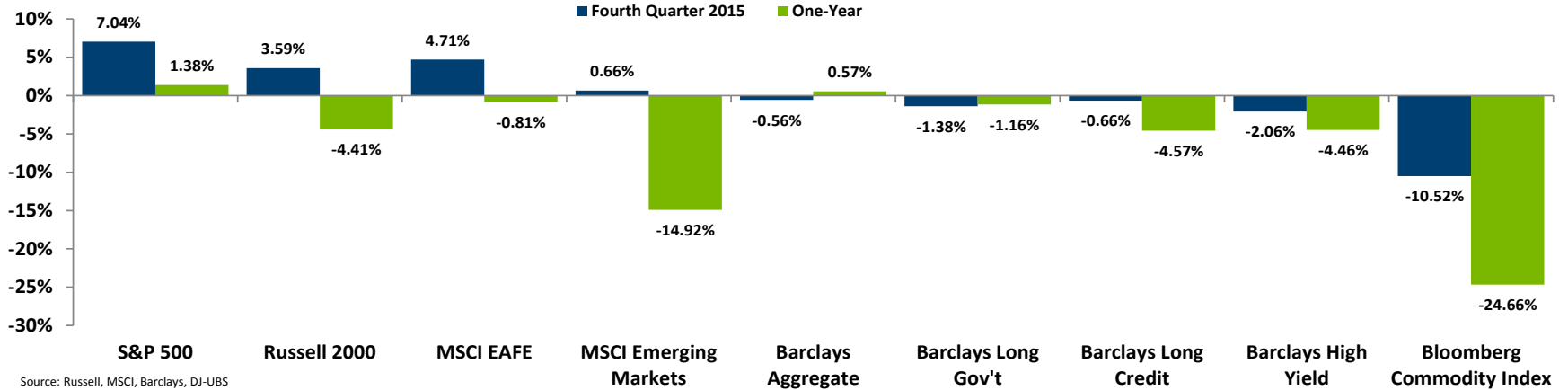
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**Appendix:**

# **Market Environment**

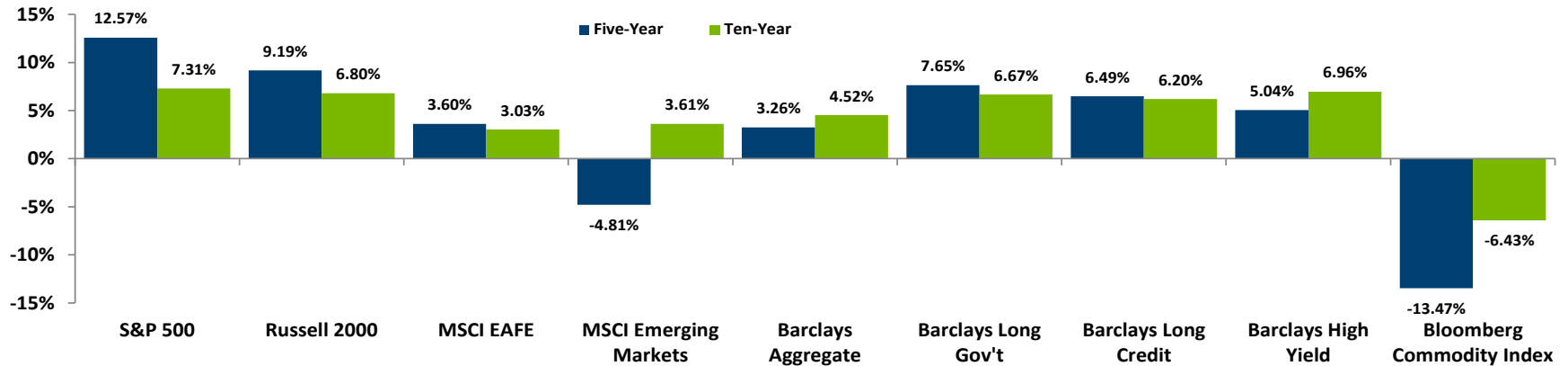
# Market Highlights

## SHORT TERM RETURNS AS OF 12/31/2015



Source: Russell, MSCI, Barclays, DJ-UBS

## LONG TERM ANNUALIZED RETURNS AS OF 12/31/2015



Source: Russell, MSCI, Barclays, DJ-UBS

# Market Highlights

## Returns of the Major Capital Markets

	Periods Ending 12/31/2015				
	Fourth Quarter	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	4.9%	-2.2%	7.9%	6.1%	5.0%
MSCI All Country World	5.0%	-2.4%	7.7%	6.1%	4.8%
Dow Jones U.S. Total Stock Market	6.3%	0.4%	14.7%	12.1%	7.5%
Russell 3000	6.3%	0.5%	14.7%	12.2%	7.4%
S&P 500	7.0%	1.4%	15.1%	12.6%	7.3%
Russell 2000	3.6%	-4.4%	11.7%	9.2%	6.8%
MSCI All Country World ex-U.S. IMI	3.5%	-4.6%	2.0%	1.3%	3.2%
MSCI All Country World ex-U.S.	3.2%	-5.7%	1.5%	1.1%	2.9%
MSCI EAFE	4.7%	-0.8%	5.0%	3.6%	3.0%
MSCI EAFE (Local Currency)	6.3%	5.3%	12.3%	7.9%	3.2%
MSCI Emerging Markets	0.7%	-14.9%	-6.8%	-4.8%	3.6%
<b>Fixed Income</b>					
Barclays Global Aggregate	-0.9%	-3.2%	-1.7%	0.9%	3.7%
Barclays Aggregate	-0.6%	0.5%	1.4%	3.2%	4.5%
Barclays Long Gov't	-1.4%	-1.2%	2.5%	7.6%	6.7%
Barclays Long Credit	-0.7%	-4.6%	1.2%	6.5%	6.2%
Barclays Long Gov't/Credit	-0.9%	-3.3%	1.7%	7.0%	6.4%
Barclays US TIPS	-0.6%	-1.4%	-2.3%	2.5%	3.9%
Barclays High Yield	-2.1%	-4.5%	1.7%	5.0%	7.0%
Citi Group Non-U.S. WGBI	-1.4%	-5.5%	-4.3%	-1.3%	3.0%
JP Morgan EMBI Global (Emerging Markets)	1.5%	1.2%	-0.1%	5.1%	6.7%
<b>Commodities</b>					
Bloomberg Commodity Index	-10.5%	-24.7%	-17.3%	-13.5%	-6.4%
Goldman Sachs Commodity Index	-16.6%	-32.9%	-23.7%	-15.2%	-10.6%
<b>Hedge Funds</b>					
HFRI Fund-Weighted Composite <sup>2</sup>	0.8%	-1.1%	3.6%	2.3%	4.1%
HFRI Fund of Funds <sup>2</sup>	0.7%	-0.3%	4.0%	2.1%	2.3%
<b>Real Estate</b>					
NAREIT U.S. Equity REITS	7.3%	3.2%	11.2%	12.0%	7.4%
NCREIF NFJ - ODCE <sup>3</sup>	3.1%	14.0%	12.8%	12.6%	5.6%
<b>Private Equity</b>					
Burgiss Private iQ Global Private Equity <sup>4</sup>	4.0%	7.9%	14.2%	14.1%	12.2%
<b>Infrastructure</b>					
Macquarie Global Infrastructure - North America	-3.3%	-15.6%	5.7%	8.4%	6.8%

MSCI Indices show net returns.

All other indices show total returns.

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

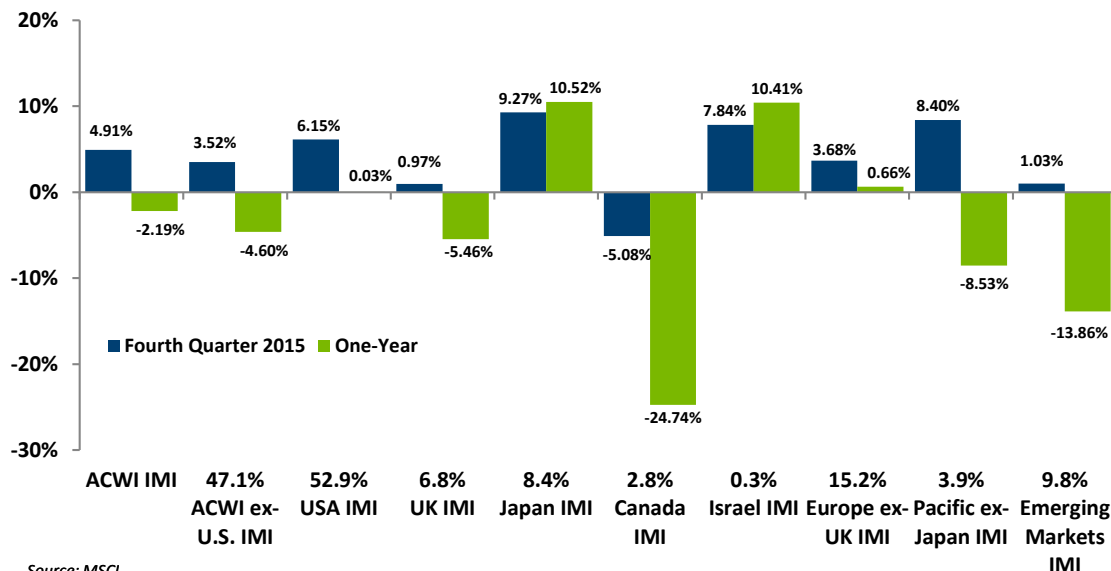
<sup>2</sup> Latest 5 months of HFR data are estimated by HFR and may change in the future.

<sup>3</sup> Fourth quarter results are preliminary.

<sup>4</sup> Source: Burgiss Private iQ. Benchmark is as of 6/30/2015.

# Global Equity Markets

GLOBAL MSCI IMI INDEX RETURNS  
AS OF 12/31/2015



Source: MSCI

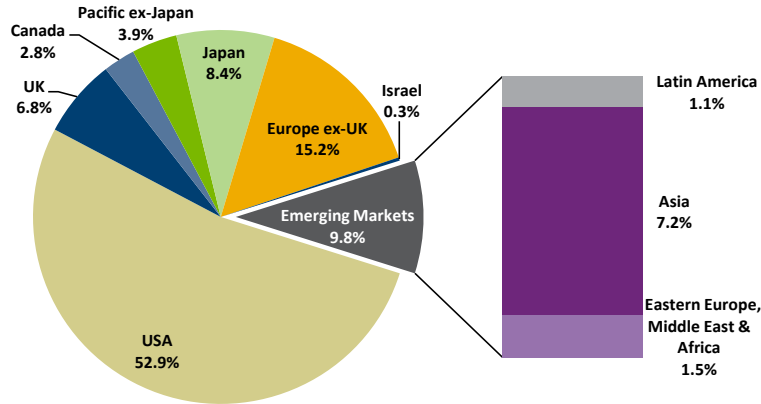
- Global equity markets returned 4.91% during the fourth quarter of 2015 after a poor performance in third quarter. Markets were supported by the Eurozone's economic data, generally surprising on the upside. Additionally, the U.S. Federal Reserve's vote on the confidence of the U.S. economy by raising the interest rate was viewed favorably. However, Chinese growth concerns remain.
- Equity markets rose across the globe with the exception of Canada. Canadian equities fell driven by falling energy and commodity prices. Canadian dollar weakness also pushed down the returns in U.S. dollar terms.
- Japan was the best performer with a return of 9.27% helped by better than expected economic data as business spending was higher than originally perceived and unemployment fell to 3.3% in November.

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



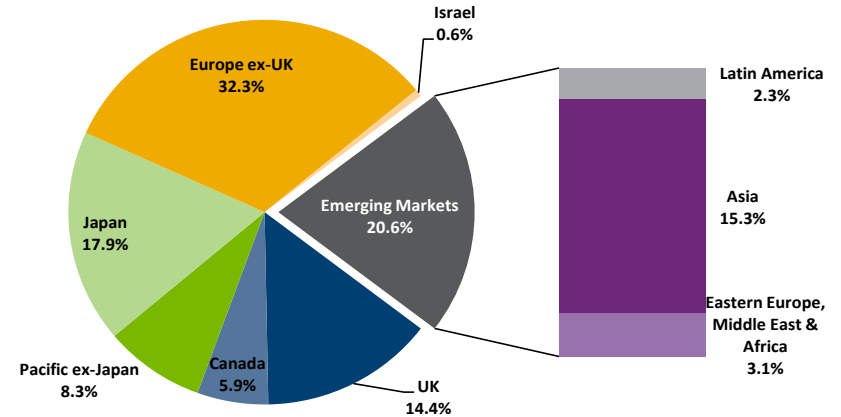
# Global Equity Markets

MSCI ALL COUNTRY WORLD IMI INDEX  
GEOGRAPHIC ALLOCATION AS OF 12/31/2015



Source: MSCI

MSCI ALL COUNTRY WORLD EX-U.S. IMI INDEX  
GEOGRAPHIC ALLOCATION AS OF 12/31/2015

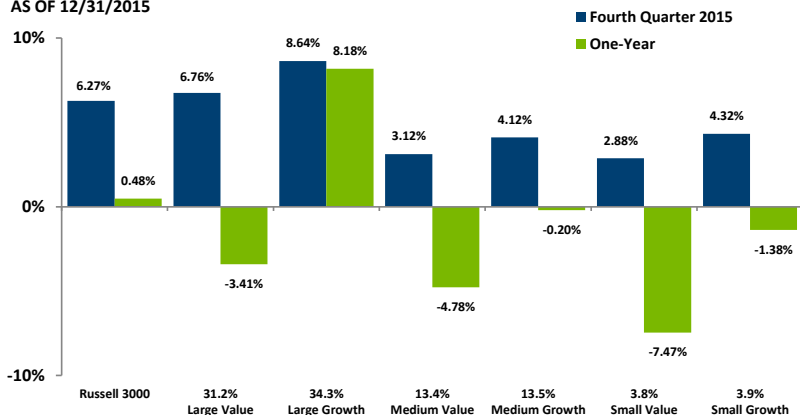


Source: MSCI

- 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.

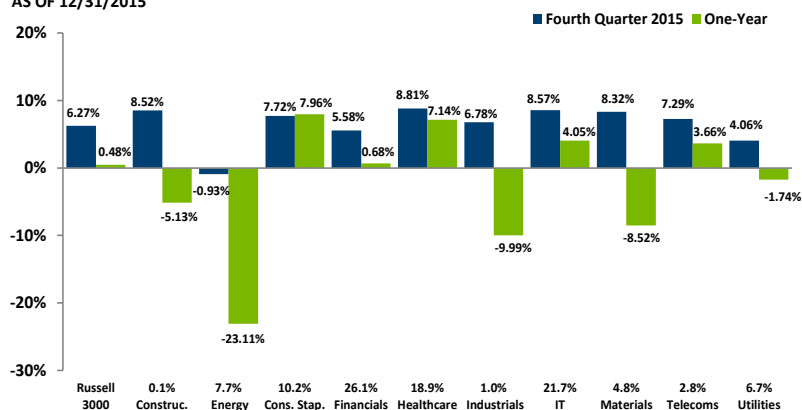
# U.S. Equity Markets

RUSSELL STYLE RETURNS  
AS OF 12/31/2015



Source: Russell Indexes

RUSSELL RGS SECTOR RETURNS  
AS OF 12/31/2015

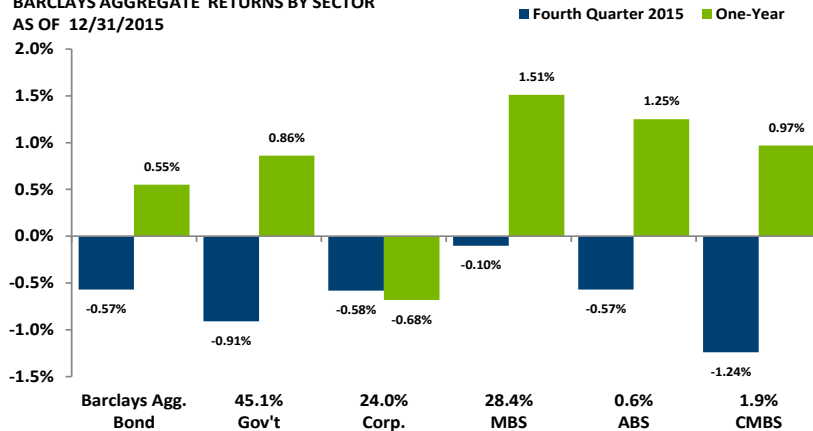


Source: Russell Indexes

- The Russell 3000 Index returned 6.27% during the fourth quarter and returned 0.48% over the one-year period.
- During the fourth quarter, healthcare was the strongest performer, posting returns of 8.81%. The energy and utilities sectors were the weakest performers, producing returns of -0.93% and 4.06%, respectively.
- Performance across the market capitalization spectrum was positive over the quarter. Large cap stocks outperformed the smaller segments of the markets and growth outperformed value across the capitalizations during the fourth quarter.

# U.S. Fixed Income Markets

BARCLAYS AGGREGATE RETURNS BY SECTOR  
AS OF 12/31/2015



Source: Barclays Live

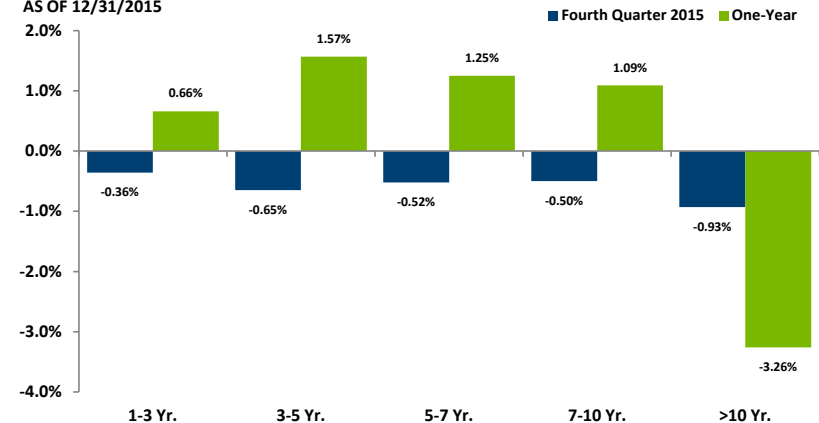
BARCLAYS AGGREGATE RETURNS BY QUALITY AND HIGH YIELD RETURNS  
AS OF 12/31/2015



Source: Barclays Live

- The Barclays Aggregate Bond Index returned -0.57% in the fourth quarter. MBS bonds were the strongest performing index segment, falling the least by -0.10%.
- Investment grade corporate bonds outperformed high yield bonds during the quarter.
- Shorter duration bonds outperformed longer duration bonds during the quarter.

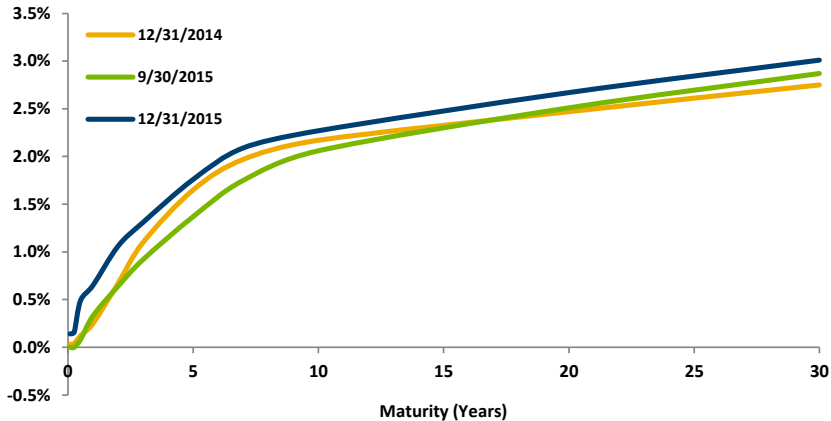
BARCLAYS AGGREGATE RETURNS BY MATURITY  
AS OF 12/31/2015



Source: Barclays Live

# U.S. Fixed Income Markets

U.S. TREASURY YIELD CURVE



Source: U.S. Department of Treasury

U.S. 10-YEAR TREASURY AND TIPS YIELDS



Source: U.S. Department of Treasury

- The Treasury yield curve shifted upwards during the fourth quarter as yields rose across all the maturities.
- The 10-year U.S. Treasury yield ended the quarter at 2.27%, 21 basis points higher than its level at the beginning of the quarter.
- The 10-year TIPS yield rose by 8 basis points over the quarter and ended the period at 0.73%.

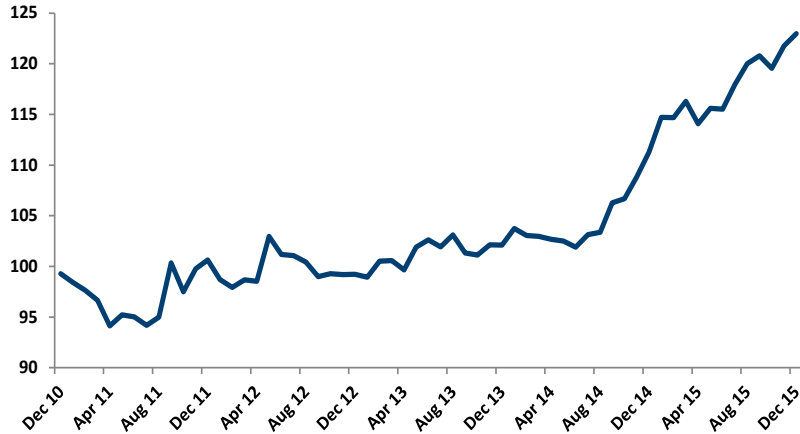
## Credit Spreads

Spread (bps)	31/12/2015	30/09/2015	31/12/2014	Quarterly Change (bps)	1-Year Change (bps)
U.S. Aggregate	56	59	48	-3	8
Long Gov't	4	4	4	0	0
Long Credit	225	230	185	-5	40
Long Gov't/Credit	138	143	119	-5	19
MBS	24	31	27	-7	-3
CMBS	121	108	98	13	23
ABS	72	69	58	3	14
Corporate	165	169	131	-4	34
High Yield	660	630	483	30	177
Global Emerging Markets	389	418	365	-29	24

- During the fourth quarter, credit spreads were mixed across all areas of the bond market.
- High yield spreads rose by 30 basis points, the most over the quarter. This was followed by CMBS spreads, which rose by 13 basis points.

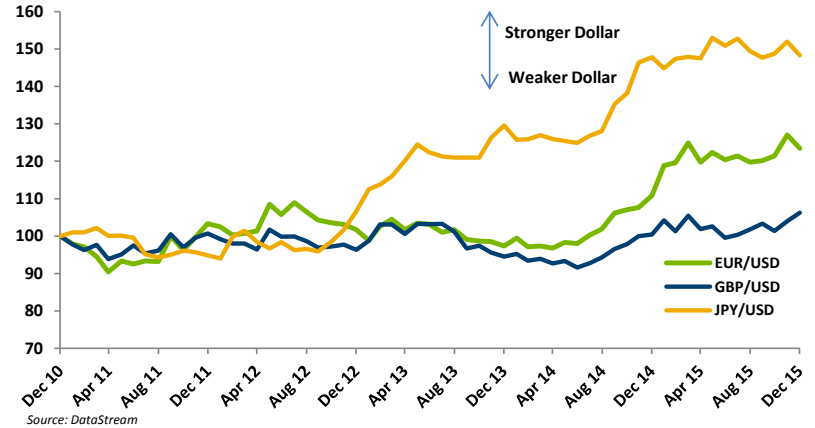
# Currency

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



Source: Federal Reserve

U.S. DOLLAR RELATIVE TO EUR, GBP AND JPY  
REBASED TO 100 AT 9/30/2010

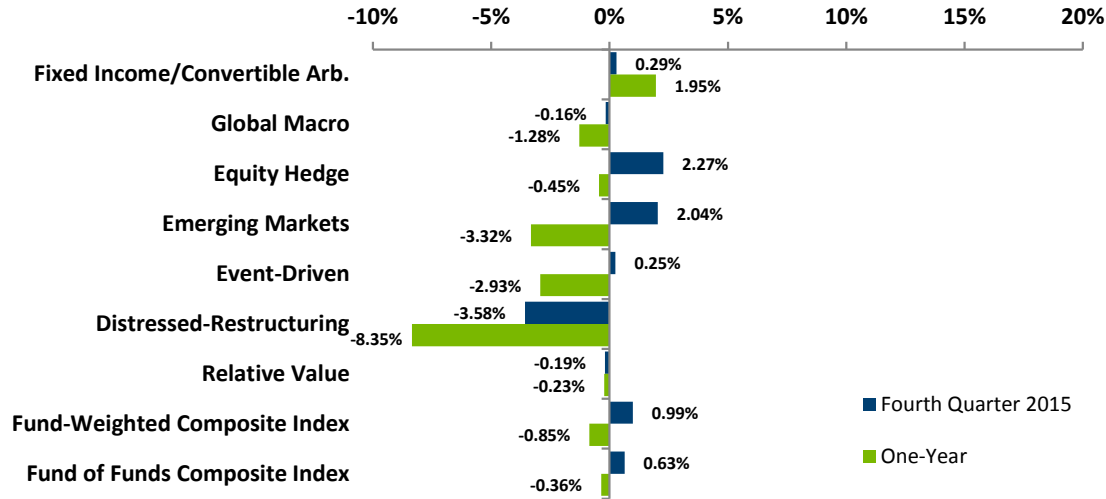


Source: DataStream

- As measured through the broad trade weighted U.S. dollar index, the U.S. dollar strengthened during the quarter.
- The U.S. dollar appreciated against all the major currencies owing to the monetary policy divergence between the U.S. and the other developed markets.

# Hedge Fund Markets Overview

## HEDGE FUND PERFORMANCE AS OF 12/31/2015



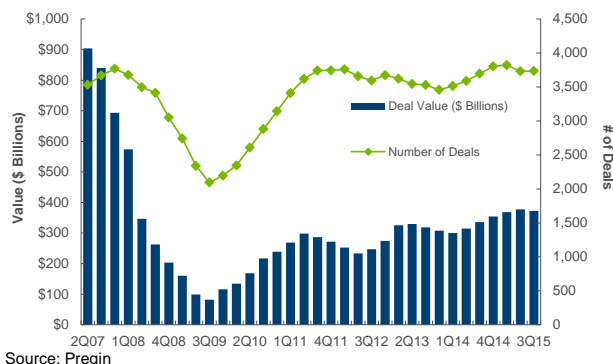
Note: Latest 5 months of HFR data are estimated by HFR and may change in the future.

Source: HFR

- Hedge fund performance was mixed over the quarter.
- The HFRI Fund-Weighted Composite Index and the HFRI Fund of Funds Composite Index produced returns of 0.99% and 0.63%, respectively, during the quarter.
- Distressed-Restructuring strategy was the weakest performer, with a return of -3.58% in the fourth quarter.

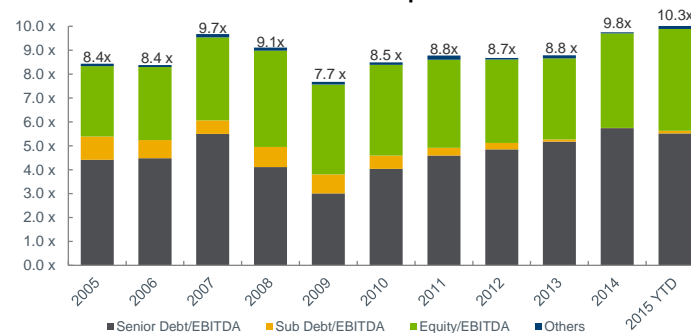
# Private Equity Market Overview

LTM Global Private Equity-Backed Buyout Deal Volume



Source: Preqin

Purchase Price Multiples



Source: S&P

- Fundraising:** \$108.2 billion was raised in the third quarter by 178 funds, up 19.2% over the five year quarterly average. Fundraising increased from both the prior quarter and same period last year, which saw \$103.8 billion raised by 288 managers and \$85.9 billion raised by 238 managers, respectively. Dry powder reached a new peak of \$1.1 trillion, representing a 3.7% increase from 2Q 2015's value and was 25.5% higher than the five year average<sup>1</sup>.
- Buyout:** Global private equity-backed buyout deals totaled \$83.9 billion in the third quarter, which was down 11.7% over the prior quarter, but up 8.0% compared to the five year quarterly average. 3,734 deals were completed on a trailing twelve months basis as of 3Q 2015, flat with 2Q 2015. YTD average purchase price multiples for total, large cap, and middle market transactions were above record levels when compared to fiscal year end marks. 3Q purchase price multiples for total and mid cap transactions reached or exceeded the quarterly highs of 11.2x observed in 3Q 2014<sup>3</sup>. The average purchase price multiple across all European transaction sizes remained flat with the prior quarter at 9.2x. Transaction sizes of €1.0 billion or more stood at 11.1x, which was down from 11.5x in 2Q 2015, but was well above the 9.3x average purchase price multiple observed during the same period last year<sup>5</sup>. Globally, the trailing twelve months total exit value totaled \$447.3 billion in 3Q 2015 on 1,746 deals, falling 4.8% short of 1Q 2015's record level<sup>1</sup>.
- Venture:** 3Q 2015 deployment decreased 5.5% quarter over quarter to \$16.3 billion, but remains well above the five year quarterly average of \$9.0 billion. Year to date capital invested through 3Q represented 92.9% of 2014's full year total and was greater than the full year totals observed in 17 of the last 20 years<sup>7</sup>. The IPO market slowed during the third quarter, with just 13 venture-backed IPOs compared to 29 in 2Q 2015. The number of M&A transactions totaled 90 deals, up 21.6% quarter over quarter<sup>8</sup>.
- Mezzanine:** During 3Q 2015, eight funds closed on \$4.3 billion in capital, which was up compared to the prior quarter and five year quarterly average levels of \$1.9 billion and \$3.6 billion, respectively. Estimated dry powder was \$45.3 billion at the end of 3Q, down 1.3% over 2Q 2015<sup>1</sup>. Fundraising has remained limited due to competition from private lending platforms and business development companies (BDCs) in the middle market focused on unitranche debt and second lien lending. However, we have seen a small increase in the use of traditional senior debt and mezzanine structures as rising purchase price multiples have made this type of financing more enticing to private equity sponsors. As a result, we expect to see a slight increase in the number of mezzanine funds coming to market in 2016.
- Distressed Debt:** The trailing twelve months, U.S. high-yield default rate was 2.9% in the third quarter compared to 3.7% in 2Q 2015<sup>6</sup>. Default rates are expected to rise due to ongoing developments in the energy and mining/minerals sectors. These sectors accounted for 90% of defaults in 3Q 2015 and are at their highest default rate levels since 1999<sup>6</sup>. Distressed debt and bankruptcy restructuring activity decreased substantially compared to the same period last year on both a number of deals and deal value basis<sup>5</sup>.
- Secondaries:** Fundraising slowed considerably in the third quarter with capital raised totaling just \$0.9 billion compared to \$10.6 billion in 2Q 2015<sup>1</sup>. The average discount rate for all private equity sectors increased quarter over quarter from 7.5% to 8.4%, but remains very favorable for potential sellers<sup>2</sup>.
- Infrastructure:** \$14.2 billion of capital was raised by nine funds in 3Q 2015, compared to \$8.7 billion of capital closed on by 17 partnerships during 2Q 2015<sup>1</sup>. At the end of 3Q 2015, dry powder stood at \$115.0 billion, up 3.6% over the prior quarter. During 3Q 2015, infrastructure managers completed 158 deals with an estimated aggregate deal value of \$99.4 billion for an average value of \$629.1 million, up 6.6% from 2Q 2015. The total number of deals reported in 3Q 2015 (158) increased 11.3% quarter over quarter, but was 27.9% lower than in 3Q 2014<sup>1</sup>.
- Natural Resources:** During 3Q 2015, six funds closed on \$6.1 billion, compared to ten funds totaling \$13.1 billion in 2Q 2015. Energy and utilities industry managers completed 42 deals totaling a reported \$3.9 billion during the third quarter, compared to 44 deals in 2Q 2015 for a total reported value of \$6.9 billion<sup>1</sup>.

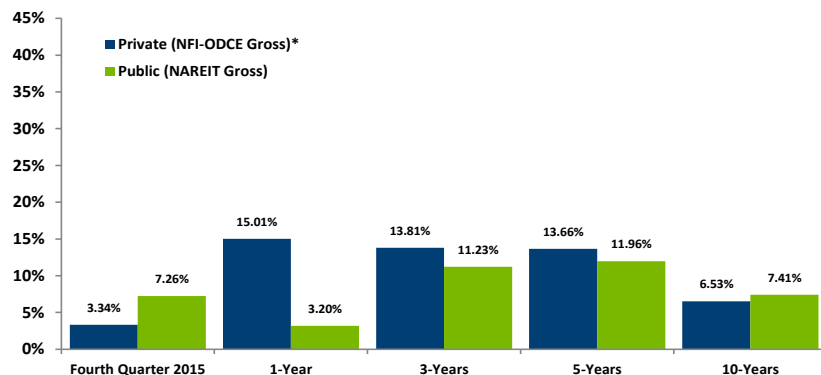
Sources: <sup>1</sup> Preqin <sup>2</sup> UBS <sup>3</sup> Standard & Poors <sup>4</sup> Aon Hewitt Investment Consulting <sup>5</sup> Thomson Reuters <sup>6</sup> Fitch Ratings <sup>7</sup> PWC / National Venture Capital Association (NVCA) MoneyTree Report <sup>8</sup> Thomson Reuters and NVCA <sup>9</sup> Cooley Venture Financing Report <sup>10</sup> Federal Reserve <sup>11</sup> U.S. Energy Information Administration <sup>12</sup> Bloomberg

Notes: FY: Fiscal year ended 12/31; YTD: Year to date; LTM: Last twelve months (aka trailing twelve months); PPM: Purchase Price Multiples: Total Purchase Price / EBITDA.



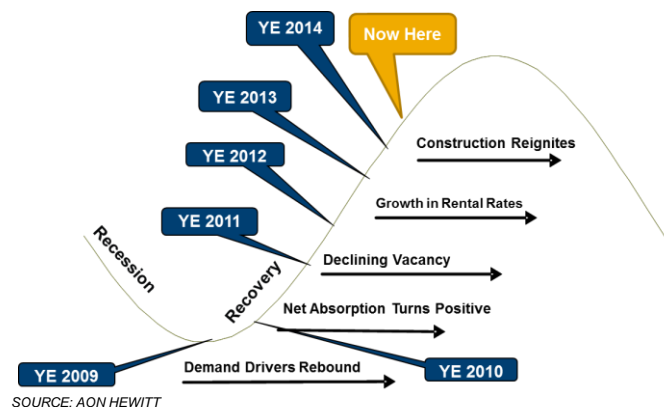
# U.S. Commercial Real Estate Market

PRIVATE VS. PUBLIC REAL ESTATE RETURNS  
AS OF 12/31/2015



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

STAGES OF FUNDAMENTAL RECOVERY IN THE REAL ESTATE MARKET CYCLE  
AS OF 9/30/2015



SOURCE: AON HEWITT

- In 2015 U.S. private returns marked its fifth year at well above long-term average levels, bolstered by continued improvement in property fundamentals and overall U.S. economic strength. The NFI-ODCE returned 3.3%\* (gross of fees) in 4<sup>th</sup> quarter and a robust 15.0%\* over the trailing one-year. The one-year return now exceeds the five year average by 135 bps. Returns are still being driven by price appreciation.
- The U.S. real estate cycle continues on its path of maturing, with some property types and markets now entering a new construction phase as shown above. Apartments and Central Business District office lead in maturity, with Industrial catching up quickly in key markets. Retail and Suburban Office continue to lag, though both have shown measurable improvement year over year.
- Real estate fundamentals remain generally healthy, with most markets continuing to experience occupancy gains (or already fully recovered) and above average rental rate growth. This is expected to support sector pricing in 2016—though generally now fully valued (or more) in at least the primary markets.
- Looking forward, new supply will continue to expand and the Fed tightening has begun. While strong underlying market fundamentals suggest that 2016 will be another solid year for private real estate performance, investors should expect moderating returns (PREA's Consensus Forecast for the NCREIF Property Index is back in line with long run averages at 8.5% for 2016). Manager and strategy selection is crucial to help reduce risk at this stage in the cycle, as new dollars deployed will likely have to withstand a down cycle before being returned to investors.
- The U.S. REIT market rallied in 4Q gaining 7.3%, bringing the year's total return to 3.2%. While REITs outperformed the broader equity market, which gained only 1.4% (S&P), 2015 was characterized by high volatility. U.S. growth, interest rate movements, the outlook for oil/commodities and the economic issues in China and Greece were the main contributors. Capital investment is continuing to be seen disproportionately deployed to private real estate versus listed real estate resulting in strong asset valuations in direct property markets as shown above. As of year-end, REITs traded at roughly a 5% discount to private market net asset valuations. Additionally, REITs' dividends of 3.9% are 165 bps over the 10-Year U.S. Treasury yield.

\*Indicates preliminary NFI-ODCE data gross of fees

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# Explanatory Notes

## Explanatory Notes

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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 319 Endowment and Foundations. The average market value within the Endowment and Foundations universe was \$1.0 billion as of quarter-end.