



University of Illinois

Fourth Quarter 2016 Investment Update

Board Report

Reported to the Board of Trustees
March 15, 2017

March 2017

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Market Overview and University Assets

Capital Markets Review

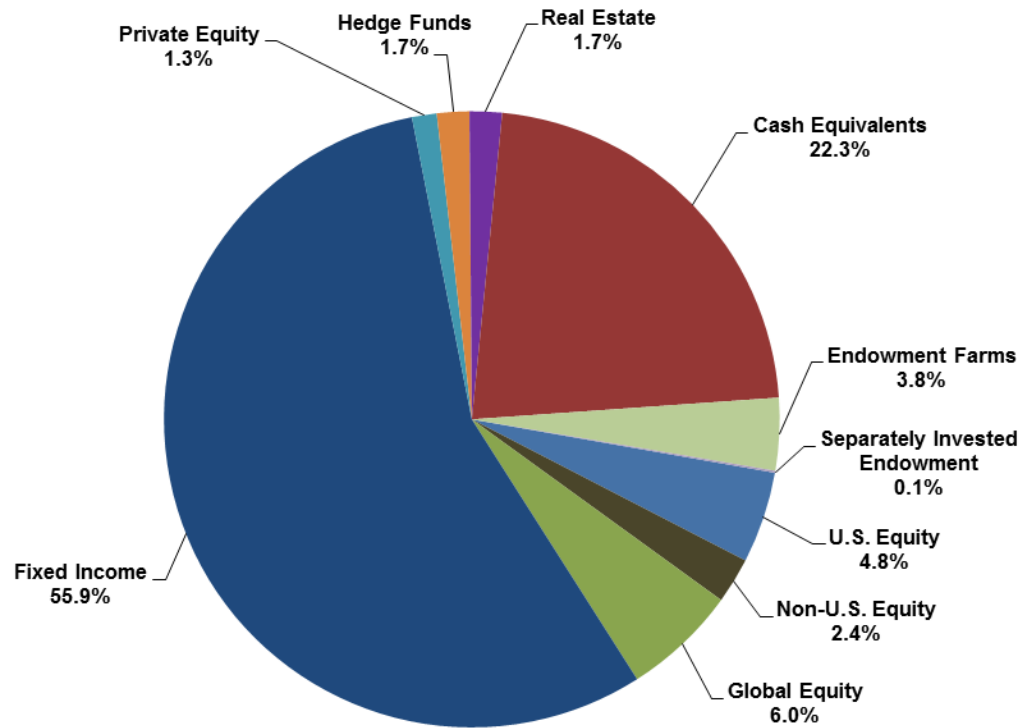
December 31, 2016

	Quarter Ending Dec-2016	One Year	Three Years	Five Years	Ten Years
DJ U.S. Total Stock Market Index	4.1	12.6	8.4	14.6	7.2
MSCI AC World ex USA IMI Index	-1.6	4.4	-1.4	5.3	1.2
MSCI AC World IMI Index	1.3	8.4	3.2	9.6	3.8
Bloomberg Barclays U.S. Aggregate	-3.0	2.6	3.0	2.2	4.3
HFRI Fund Weighted Composite Index	1.2	5.5	2.4	4.5	3.4
NCREIF ODCE Index	1.9	7.8	11.0	11.2	4.8

- Global equity markets rose during the fourth quarter against a backdrop of political uncertainty in the form of the U.S. presidential elections, Italian constitutional referendum, and ongoing Brexit discussions.
 - Expectations of reflationary policies under a Trump administration bolstered the U.S. equity market as investors rotated out of bonds and into equities.
 - The strengthening of the U.S. dollar eroded much of the gains made in other regional equity markets.
 - Expectations of increased protectionism under Trump weighed heavily on emerging markets.
- The U.S. Federal Reserve's decision to increase the target federal funds range by 25bps to 0.50-0.75% drove the Treasury yield curve to shift upward over the fourth quarter with yields rising across the curve.
- During the fourth quarter, hedge fund performance was positive across strategies with the exception of global macro and emerging markets.
- U.S. private market real estate performed well on a relative basis in 2016, despite its clear moderating trend following five years of above average performance. Income growth for the year outpaced appreciation, illustrating that income growth has become the larger driver of sector returns at this mature point in the real estate cycle.

University Assets: December 31, 2016

University Of Illinois Endowment & Operating Assets
\$2.67 Billion as of 12/31/2016



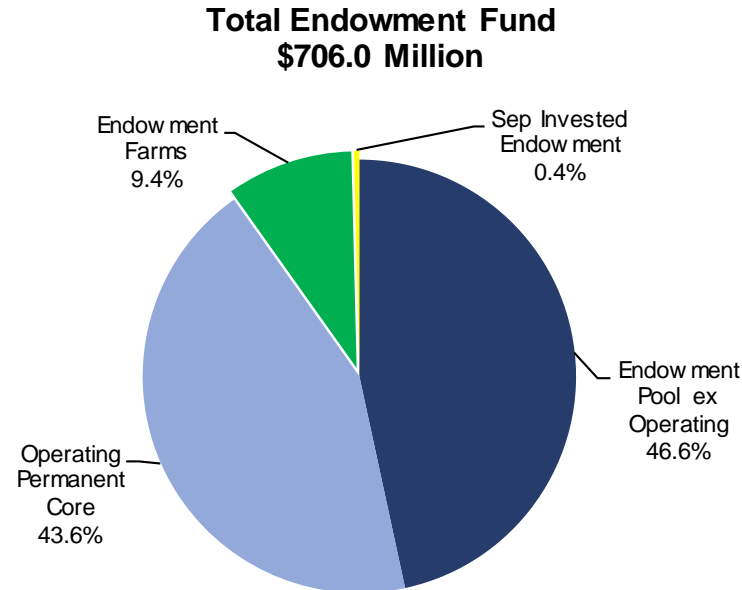
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Endowment Fund Update: December 31, 2016

Total Endowment Assets by Type

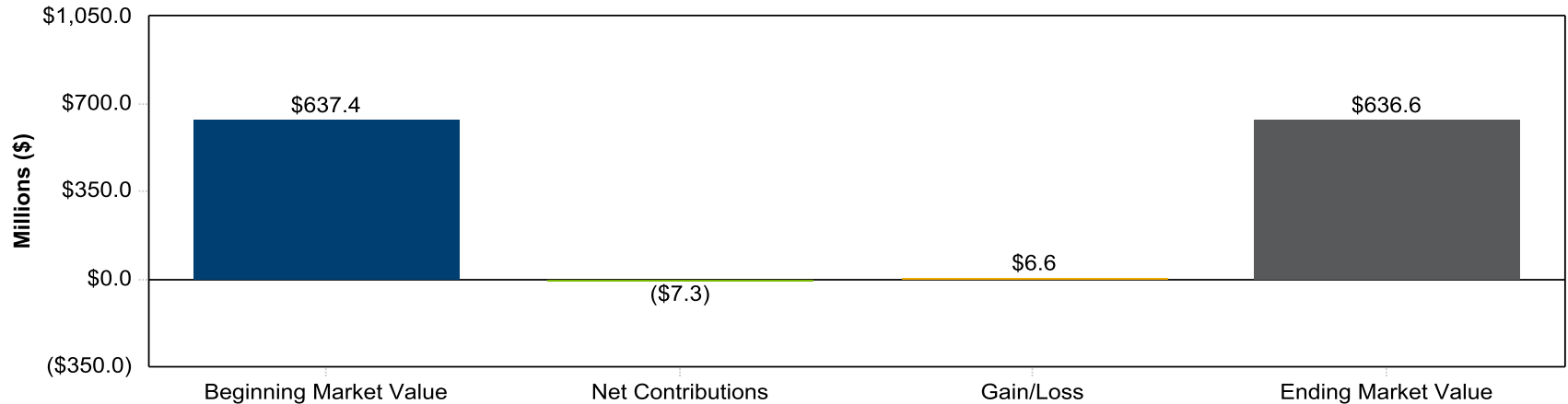
December 31, 2016



- The Total Endowment Fund is valued at \$706.0 million as of December 31, 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 \$636.6 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, 2016 to December 31, 2016



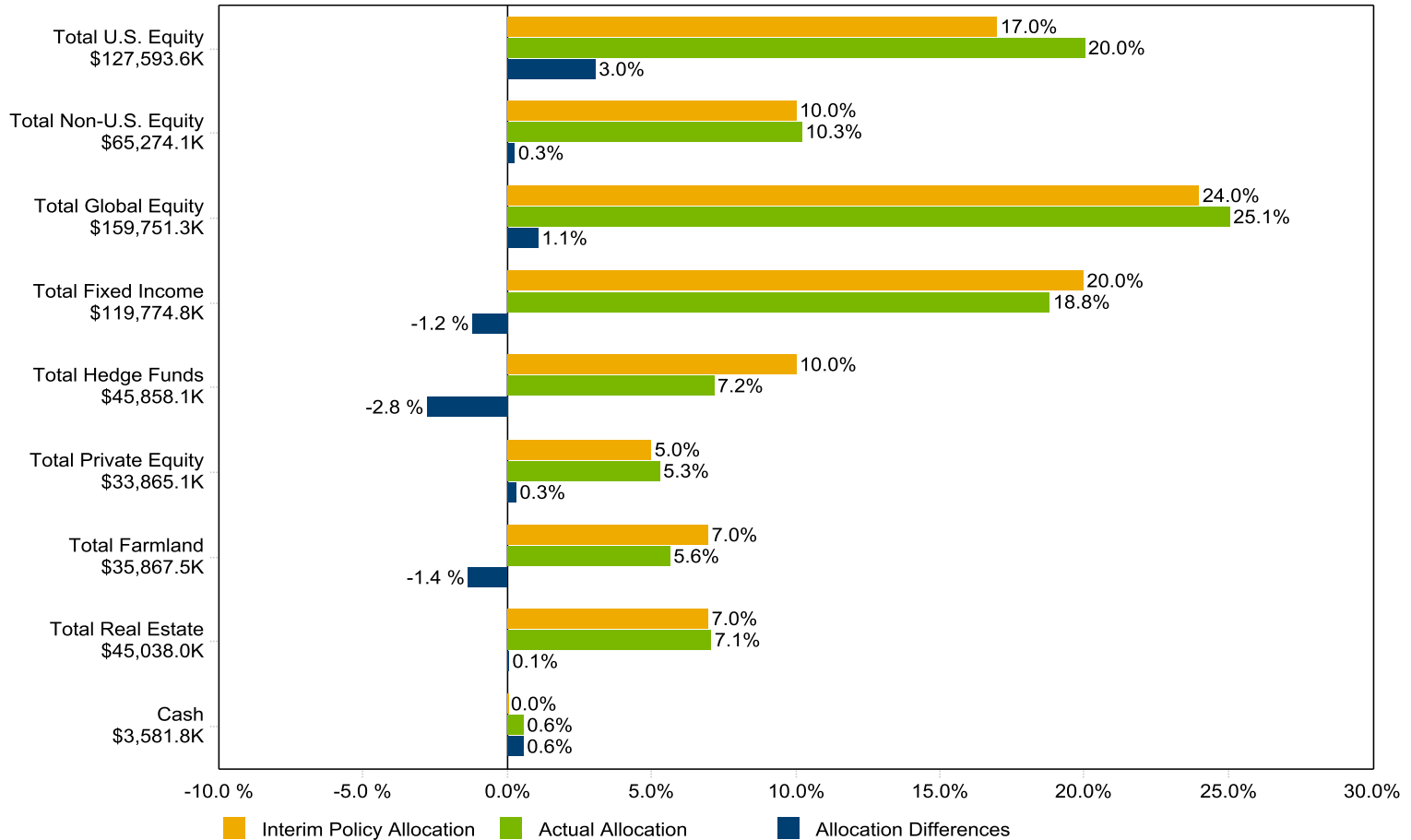
- During the fourth quarter ending December 31, 2016, the Endowment Pool assets decreased by approximately \$0.8 million, from \$637.4 million to \$636.6 million.
- This decrease was the net result of investment gains and negative fund flows. For this period, net outflows were approximately \$7.3 million, and the absolute return of 1.0% in Endowment Pool assets resulted in investment gains of \$6.6 million.

*The beginning market value + net contributions + investment gains referenced in the above table may not equal the ending market value due to rounding.

Market Value and Asset Allocation: Endowment Pool

December 31, 2016

Total Fund \$636,604,390



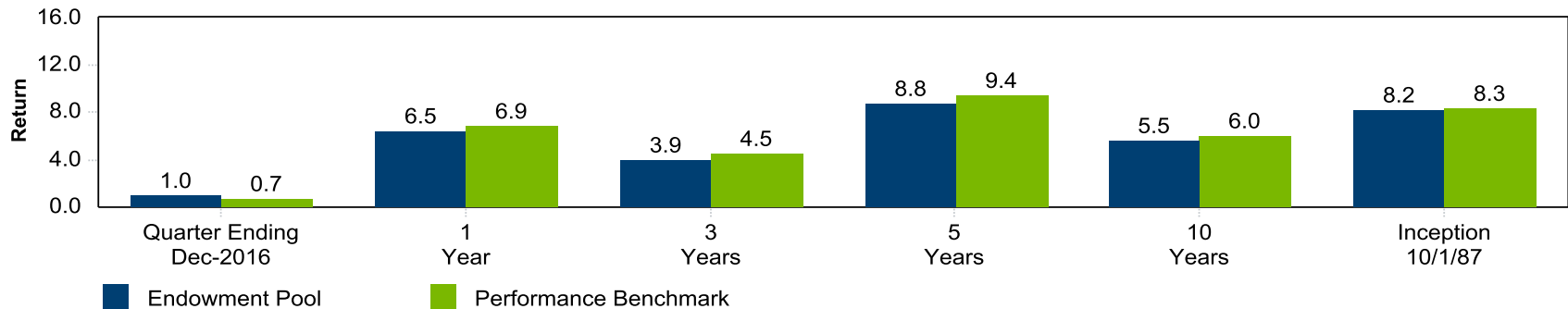
Note: Long-Term Policy Allocations: U.S. Equity 14%, Non-U.S. Equity 10%, Global Equity 24%, Private Equity 8%, Hedge Funds 10%, Fixed Income 20%, Farmland 7%, and Core Real Estate 7%

*Total sum of actual allocations referenced in the above table may not equal 100.0% due to rounding.

Total Fund Performance: Endowment Pool

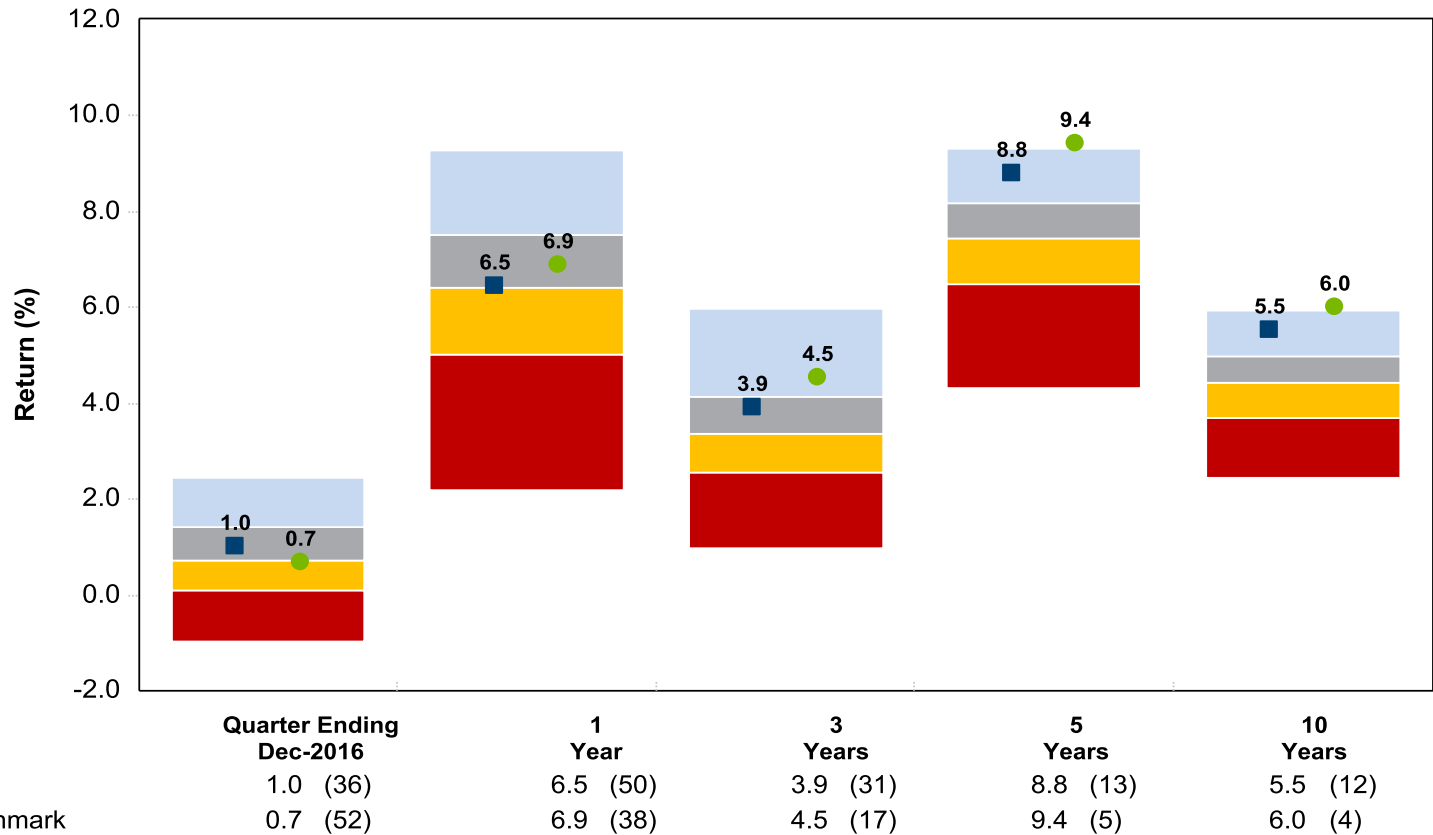
December 31, 2016

Return Summary



- During the quarter ending December 31, 2016, the Endowment Pool gained 1.0 percentage point while outperforming the benchmark.
- Below are the main drivers of the Endowment Pool's quarterly return:
 - U.S. Equity investments outperformed the Dow Jones U.S. Total Stock Market by 0.7 percentage point during the quarter, returning 4.8%.
 - The Hedge Fund portfolio outperformed its benchmark by 0.9 percentage point during the quarter, returning 2.1%.
 - Fixed Income and Non-U.S. Equity investments approximated their respective benchmarks during the quarter, returning -2.9% and -1.6%, respectively.
- Over the trailing one-year period ending December 31, 2016, the Endowment Pool returned 6.5%, relatively underperforming its benchmark.
 - The largest detractors of relative performance were U.S. Equity, Hedge Funds, and Private Equity.

Peer Rankings: Endowment Pool December 31, 2016



- Over the trailing one-year time period, the return of the University of Illinois’s Endowment Pool ranked in the top 50% 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 13% of the Universe, respectively.

Asset Class Performance: Endowment Pool

December 31, 2016

	Quarter Ending Dec-2016	One Year	Three Years	Five Years	Ten Years	Since Inception	Inception Date
Endowment Pool Performance Benchmark	1.0 0.7	6.5 6.9	3.9 4.5	8.8 9.4	5.5 6.0	8.2 8.3	Oct-1987
Total U.S. Equity DJ U.S. Total Stock Market Index	4.8 4.1	11.6 12.6	7.4 8.4	14.2 14.6	7.2 7.2	9.1 9.3	Oct-1987
Total Non-U.S. Equity Non-U.S. Equity Benchmark	-1.6 -1.6	4.4 4.4	-1.5 -1.5	5.5 5.2	0.6 1.1	5.0 5.0	Oct-1993
Total Global Equity Global Equity Benchmark	1.3 1.3	8.7 8.4	2.3 3.3	- -	- -	8.4 9.2	Jul-2012
Total Fixed Income Bloomberg Barclays U.S. Aggregate	-2.9 -3.0	2.8 2.6	3.0 3.0	3.4 2.2	4.9 4.3	7.1 6.6	Oct-1987
Total Hedge Funds HFRI Fund Weighted Composite Index	2.1 1.2	4.4 5.5	4.1 2.4	- -	- -	4.1 3.2	Jun-2013
Total Private Equity¹ Private Equity Benchmark	4.2 4.9	7.9 16.0	10.6 11.6	8.9 18.0	6.8 10.4	1.9 11.4	Feb-2004
Total Real Estate Real Estate Benchmark	1.2 0.9	8.8 8.2	14.7 14.8	- -	- -	14.0 14.1	Sep-2013
Total Farmland² NCREIF Cornbelt Index	0.0 0.0	-3.0 -3.7	-2.0 2.4	5.9 10.5	9.7 11.1	9.7 11.1	Jan-2007

¹The combined Adams Street Partners IRR at September 30, 2016 was 9.1%.

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

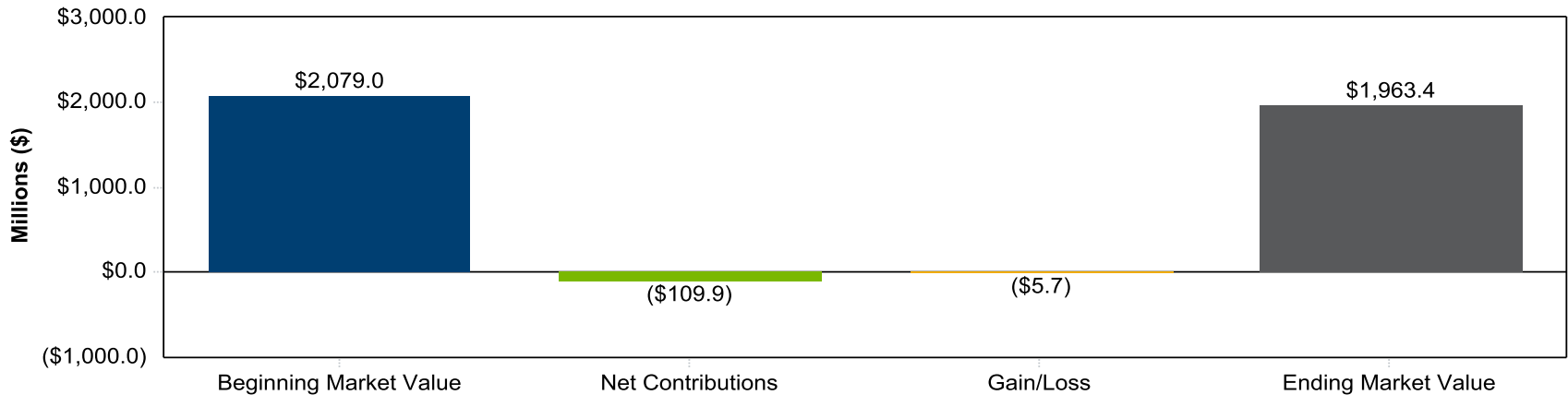
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Operating Pool Update: December 31, 2016

Total Fund Asset Growth: Operating Pool

Change in Market Value
From October 01, 2016 to December 31, 2016



- During the fourth quarter ending December 31, 2016, the Operating Pool assets decreased by approximately \$115.6 million, from \$2.079 billion to \$1.963 billion.
- This decrease was the result of \$109.9 million in net outflows and transfers and \$5.7 million in investment losses.

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

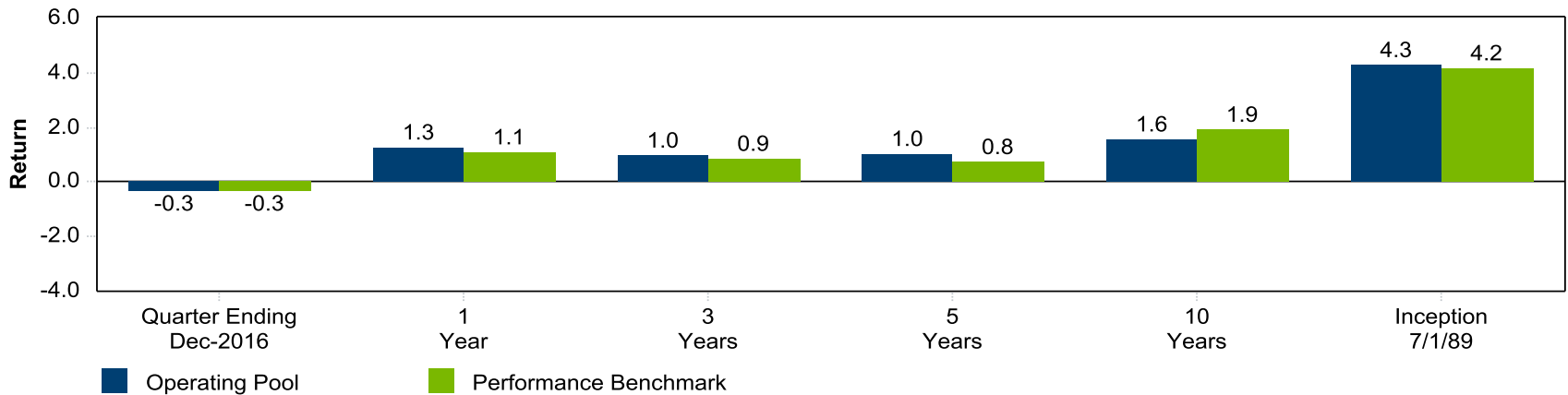
*The beginning market value + net contributions + investment gains referenced in the above table may not equal the ending market value due to rounding.

Total Fund Performance: Operating Pool

December 31, 2016

Total Fund
\$1,963,373,529

Return Summary



- The Operating Pool's performance during the fourth quarter was -0.3%, performing inline with its benchmark return for this time period.
- All of the Operating Pool's managers except for two approximated or outperformed their respective benchmarks during the quarter.

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

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Appendix:

Market Environment

Market Highlights

Returns of the Major Capital Markets					
	Fourth Quarter	1-Year	3-Year ¹	5-Year ¹	Periods Ending 12/31/2016 10-Year ¹
Equity					
MSCI All Country World IMI	1.27%	8.36%	3.25%	9.62%	3.84%
MSCI All Country World	1.19%	7.86%	3.13%	9.36%	3.56%
Dow Jones U.S. Total Stock Market	4.14%	12.62%	8.36%	14.59%	7.18%
Russell 3000	4.21%	12.74%	8.43%	14.67%	7.07%
S&P 500	3.82%	11.96%	8.87%	14.66%	6.95%
Russell 2000	8.83%	21.31%	6.74%	14.46%	7.07%
MSCI All Country World ex-U.S. IMI	-1.57%	4.41%	-1.44%	5.35%	1.22%
MSCI All Country World ex-U.S.	-1.25%	4.50%	-1.78%	5.00%	0.96%
MSCI EAFE	-0.71%	1.00%	-1.60%	6.53%	0.75%
MSCI EAFE (Local Currency)	7.07%	5.34%	5.53%	11.84%	2.20%
MSCI Emerging Markets	-4.16%	11.19%	-2.55%	1.28%	1.84%
Fixed Income					
Bloomberg Barclays Global Aggregate	-7.07%	2.09%	-0.19%	0.21%	3.29%
Bloomberg Barclays Aggregate	-2.98%	2.65%	3.03%	2.23%	4.34%
Bloomberg Barclays Long Gov't	-11.50%	1.43%	7.71%	2.57%	6.60%
Bloomberg Barclays Long Credit	-5.40%	10.22%	6.98%	5.20%	6.87%
Bloomberg Barclays Long Gov't/Credit	-7.84%	6.67%	7.16%	4.07%	6.85%
Bloomberg Barclays US TIPS	-2.41%	4.68%	2.26%	0.89%	4.36%
Bloomberg Barclays High Yield	1.75%	17.13%	4.66%	7.36%	7.45%
Citi Group Non-U.S. WGBI	-10.84%	1.81%	-2.18%	-1.94%	2.54%
JP Morgan EMBI Global (Emerging Markets)	-4.21%	10.19%	5.59%	5.44%	6.76%
Commodities					
Bloomberg Commodity Index	2.66%	11.74%	-11.26%	-8.96%	-5.58%
Goldman Sachs Commodity Index	5.76%	11.37%	-20.60%	-13.13%	-8.10%
Hedge Funds					
HFR I Fund-Weighted Composite ²	1.21%	5.47%	2.41%	4.51%	3.36%
HFR I Fund of Funds ²	0.88%	0.53%	1.20%	3.42%	1.31%
Real Estate					
NAREIT U.S. Equity REITS	-2.89%	8.52%	13.38%	12.01%	5.08%
NCREIF NFI - ODCE ³	2.07%	8.72%	12.05%	12.20%	5.81%
Infrastructure					
Macquarie Global Infrastructure - North America	-2.80%	9.30%	2.95%	5.60%	3.08%

MSCI Indices show net returns.

All other indices show total returns.

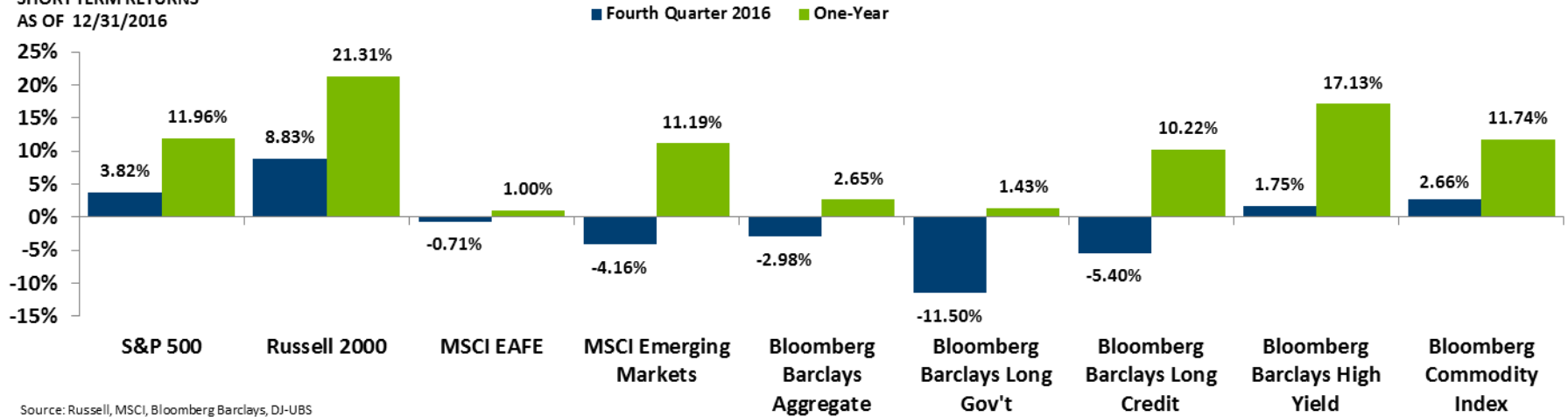
¹ Periods are annualized.

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

³ Fourth quarter results are preliminary and gross of fees.

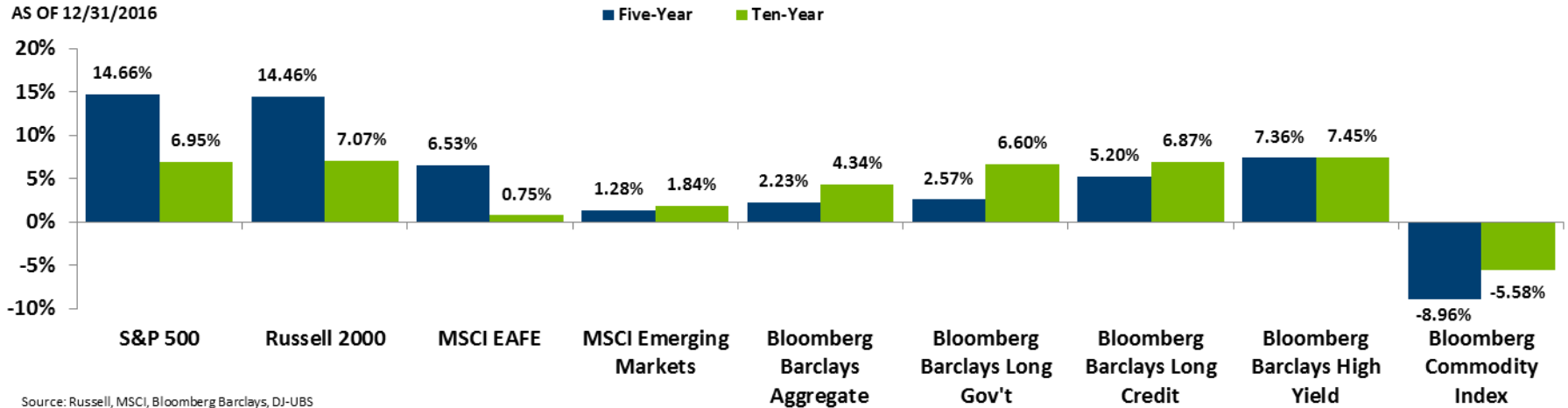
Market Highlights

SHORT TERM RETURNS AS OF 12/31/2016



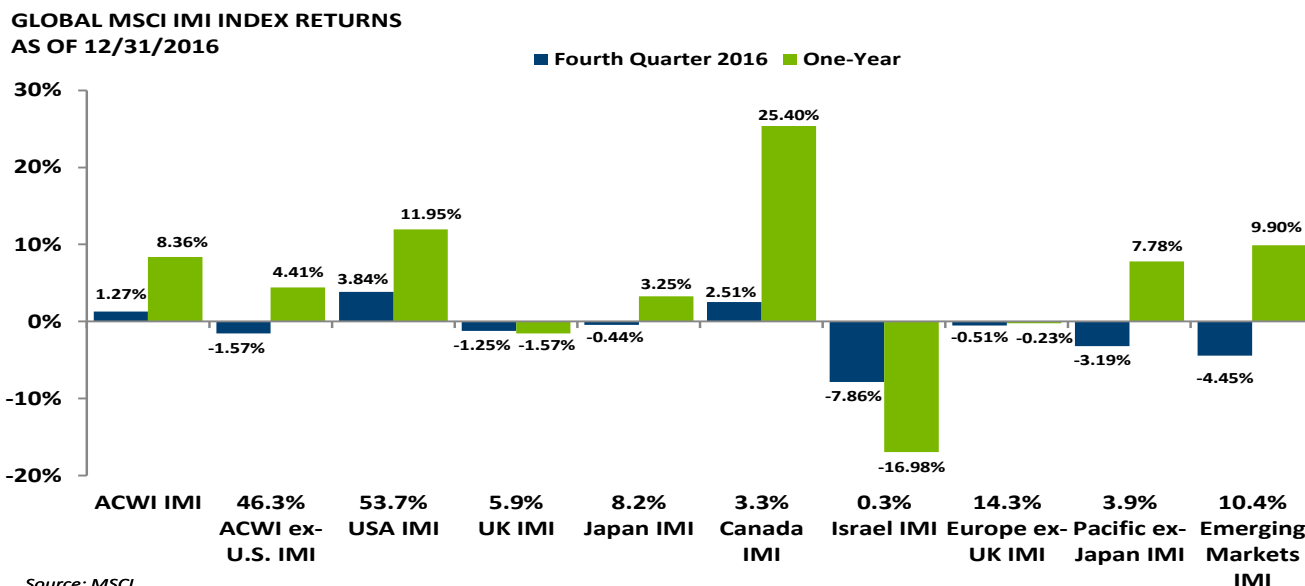
Source: Russell, MSCI, Bloomberg Barclays, DJ-UBS

LONG TERM ANNUALIZED RETURNS AS OF 12/31/2016



Source: Russell, MSCI, Bloomberg Barclays, DJ-UBS

Global Equity Markets

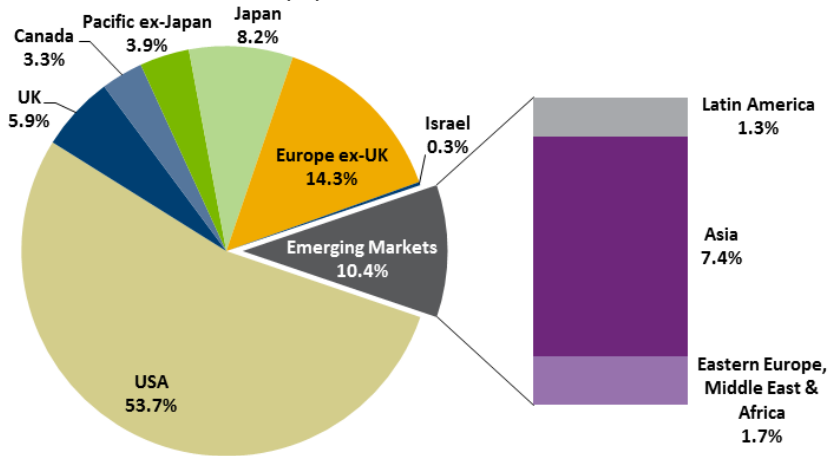


- Global equity markets rose against a backdrop of political uncertainty in the form of the U.S. presidential election, Italian constitutional referendum, and ongoing Brexit discussions. Markets entered positive territory toward the end of the quarter on the hopes of Trump's fiscal reform policies and rising crude oil prices.
- Global equity markets returned 1.27% in Q4 2016 with only U.S. and Canada regions generating positive returns. The U.S. was the best performing market with a return of 3.84% during the quarter as Q3 2016 GDP data was strong and inflation expectations grew over promises of greater fiscal spending under Trump's administration.

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

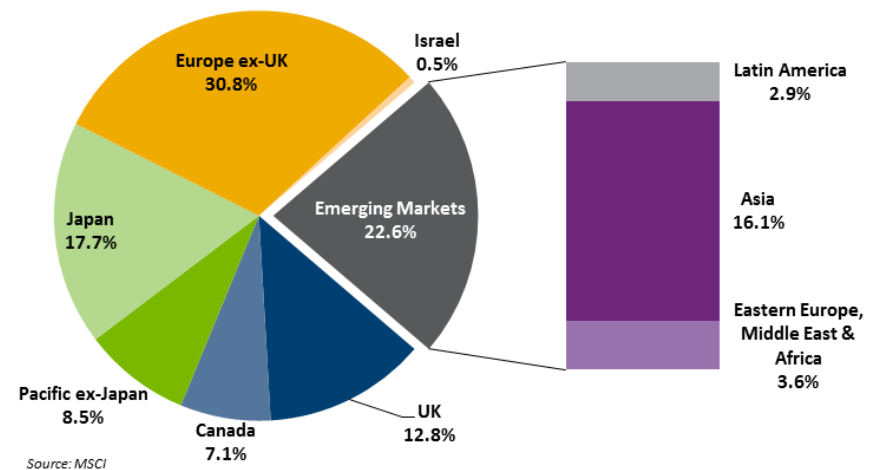
Global Equity Markets

MSCI ALL COUNTRY WORLD IMI INDEX
GEOGRAPHIC ALLOCATION AS OF 12/31/2016



Source: MSCI

MSCI ALL COUNTRY WORLD EX-U.S. IMI INDEX
GEOGRAPHIC ALLOCATION AS OF 12/31/2016

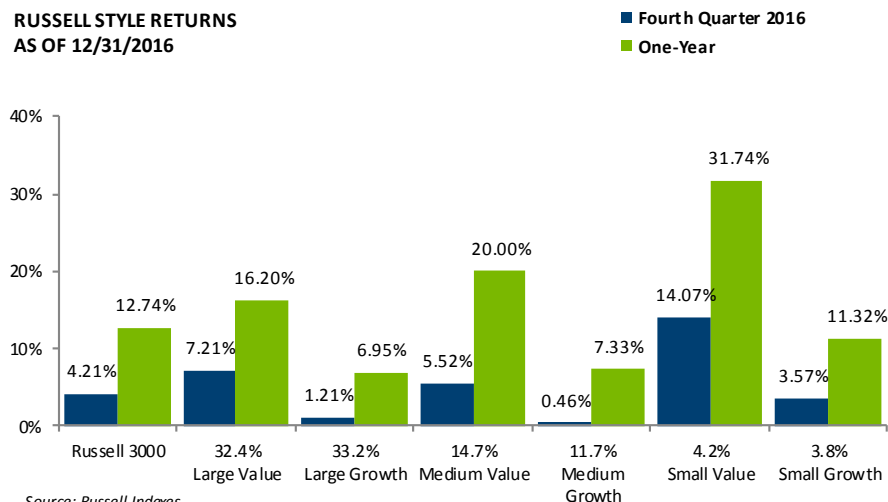


Source: MSCI

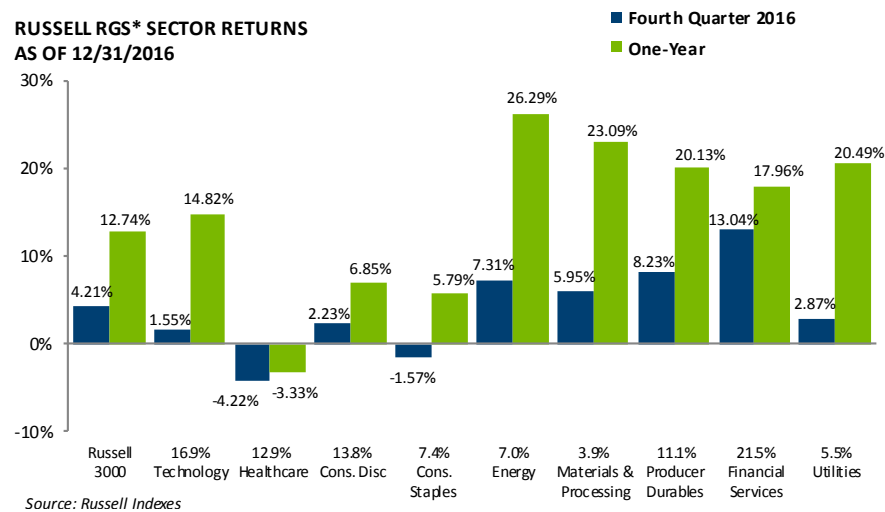
- The two exhibits on this slide illustrate the percentage that each country/region represents of the global equity market as measured by the MSCI All Country World IMI Index and the MSCI All Country World ex-U.S. IMI Index.

U.S. Equity Markets

**RUSSELL STYLE RETURNS
AS OF 12/31/2016**



**RUSSELL RGS* SECTOR RETURNS
AS OF 12/31/2016**

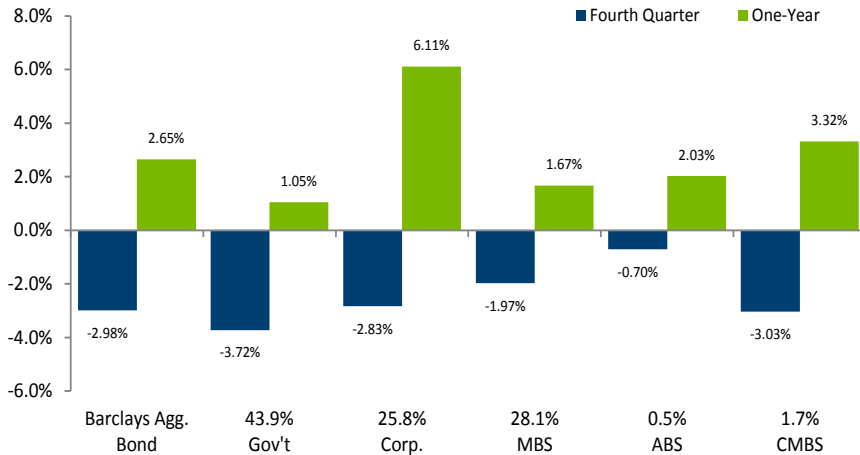


- The Russell 3000 Index returned 4.21% during the fourth quarter and returned 12.74% over the one-year period.
- Performance across the market capitalization spectrum was positive over the quarter. Small cap stocks outperformed the other segments in growth and value stocks. Value stocks continued their outperformance relative to growth stocks over 2016 across the capitalizations.
- During the fourth quarter, the financial services sector was the strongest performer, returning 13.04%. The healthcare and consumer staples sectors were the weakest performers, with returns of -4.22% and -1.57%, respectively.

*RGS stands for Russell Global Sectors.

U.S. Fixed Income Markets

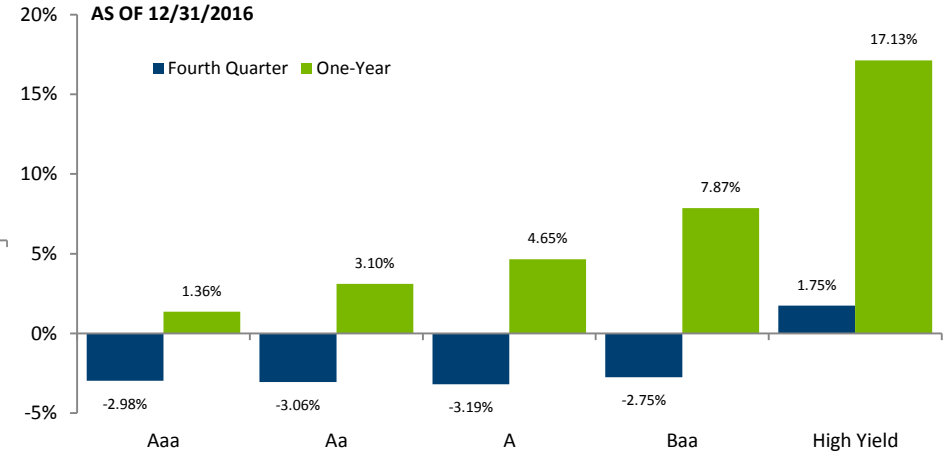
**BLOOMBERG BARCLAYS AGGREGATE RETURNS BY SECTOR
AS OF 12/31/2016**



Source: Bloomberg Barclays Live

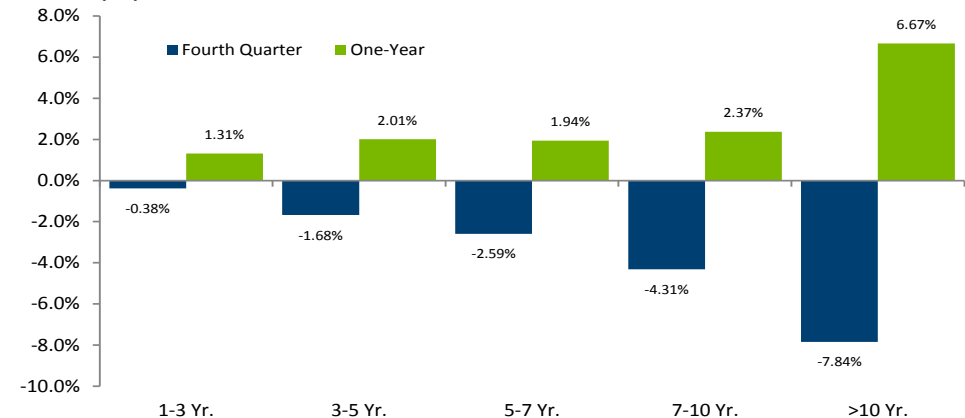
- The Bloomberg Barclays Aggregate Bond Index fell 2.98% in the fourth quarter. ABS bonds fell by the least with a return of -0.70% while Government bonds fell by the most, returning -3.72%.
- High yield bonds outperformed investment grade corporate bonds, as high yield spreads fell by 71bps (according to the Bloomberg Barclays Live indices).
- Shortest duration bonds outperformed all other bonds in different maturities. This particularly benefited high yield bonds, which typically have low duration.

**BLOOMBERG BARCLAYS AGGREGATE RETURNS BY QUALITY AND HIGH YIELD RETURNS
AS OF 12/31/2016**



Source: Bloomberg Barclays Live

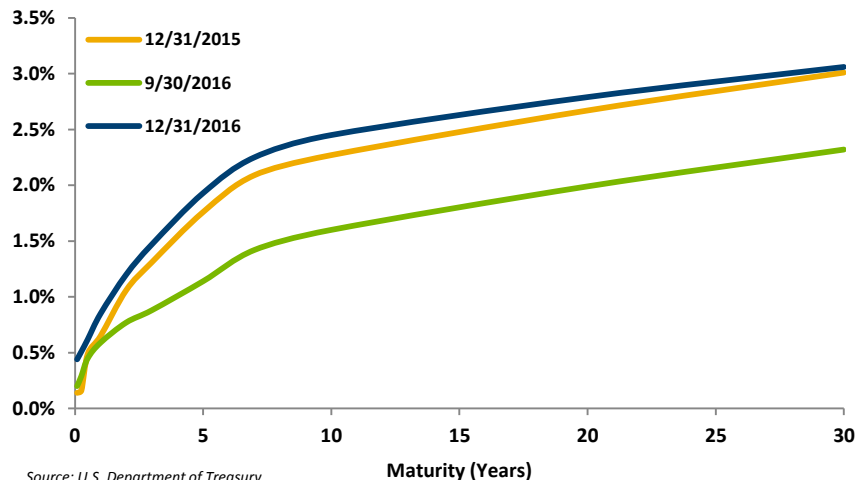
**BLOOMBERG BARCLAYS AGGREGATE RETURNS BY MATURITY
AS OF 12/31/2016**



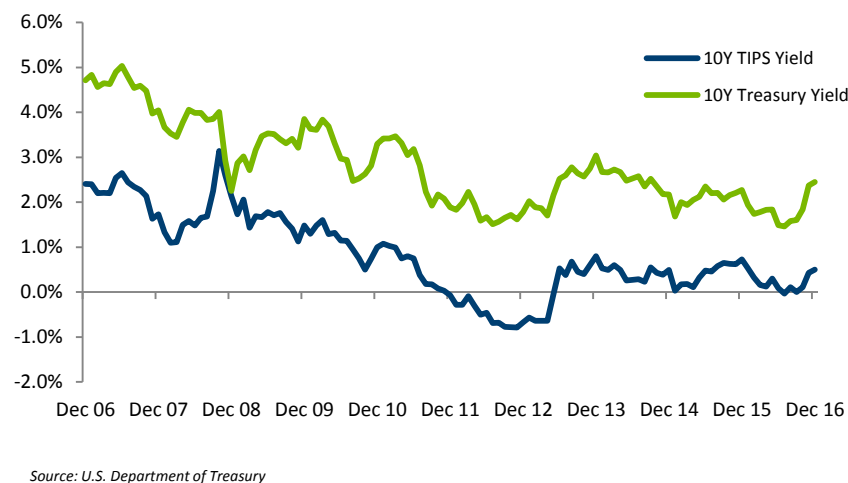
Source: Bloomberg Barclays Live

U.S. Fixed Income Markets

U.S. TREASURY YIELD CURVE



U.S. 10-YEAR TREASURY AND TIPS YIELDS



- The Treasury yield curve shifted upward over the fourth quarter with yields rising across the curve. The yield curve also steepened over the quarter, driven by long maturity bonds rising faster than short maturity bonds.
- The U.S. Federal Reserve's decision to increase the target federal funds range by 25bps to 0.50-0.75% alongside higher breakeven inflation drove yields higher.
- The 10-year U.S. Treasury yield ended the quarter at 2.45%, 85 basis points higher than its level at the beginning of the quarter.
- The 10-year TIPS yield rose by 50 basis points over the quarter and ended the period at 0.50%.

Credit Spreads

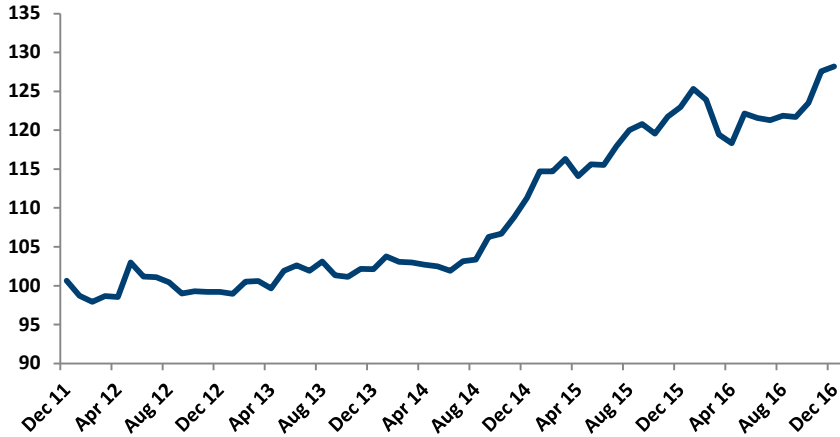
Spread (bps)	12/31/2016	9/30/2016	12/31/2015	Quarterly Change (bps)	1-Year Change (bps)
U.S. Aggregate	43	47	56	-4	-13
Long Gov't	3	3	4	0	-1
Long Credit	167	195	225	-28	-58
Long Gov't/Credit	104	118	138	-14	-34
MBS	15	14	24	1	-9
CMBS	75	84	121	-9	-46
ABS	59	55	72	4	-13
Corporate	123	138	165	-15	-42
High Yield	409	480	660	-71	-251
Global Emerging Markets	288	299	389	-11	-101

Source: Barclays Live

- During the fourth quarter, credit spreads were mixed across all areas of the bond market.
- ABS bond spreads rose by 4 basis points, the most over the quarter, whereas high yield and long-dated credit spreads fell by 71 and 28 basis points, respectively.

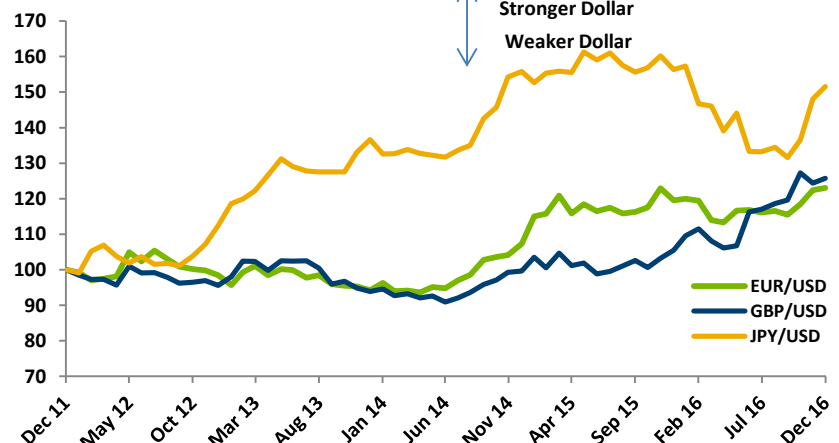
Currency

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



Source: Federal Reserve

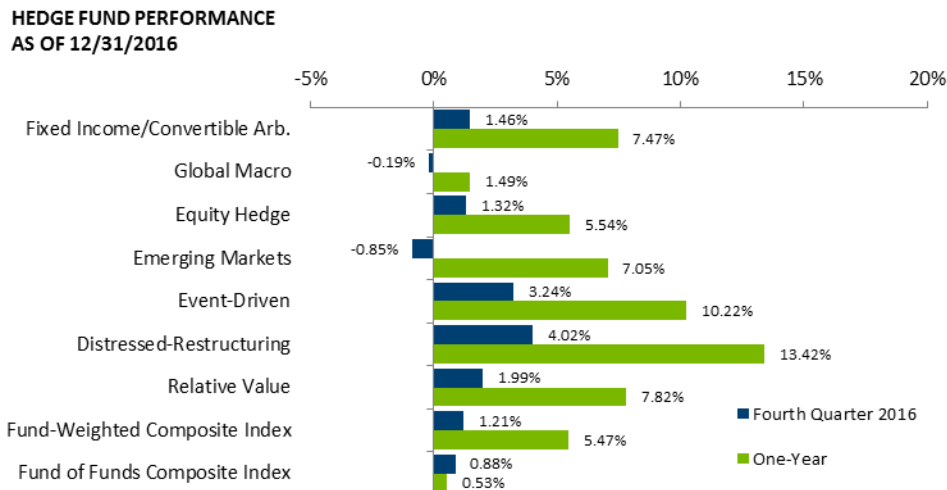
U.S. DOLLAR RELATIVE TO EUR, GBP AND JPY
REBASED TO 100 AT 06/30/2011



Source: DataStream

- As measured through the broad trade weighted U.S. dollar index, the U.S. dollar rose sharply over the quarter.
- The U.S. dollar appreciated sharply against all major currencies as expectations of greater fiscal spending and increased number of future interest rate hikes led to significant U.S. dollar inflows. The pound was dragged down by worries over the possibility of a hard-Brexit. The yen depreciated sharply against the dollar, primarily due to the divergent monetary policy stances of the two central banks.

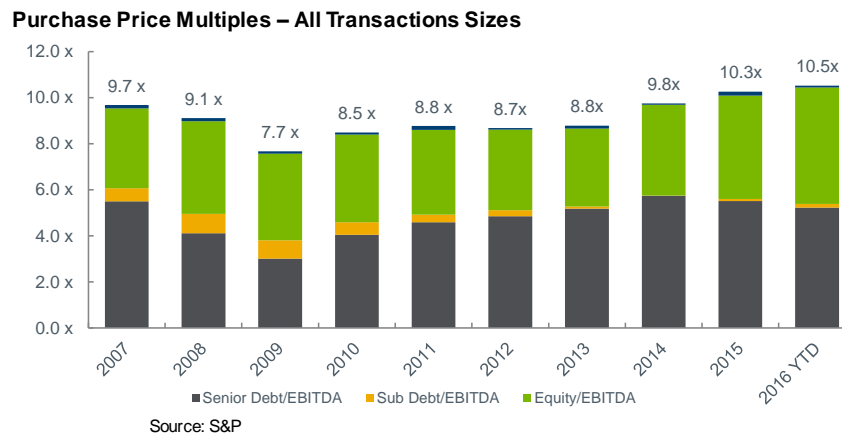
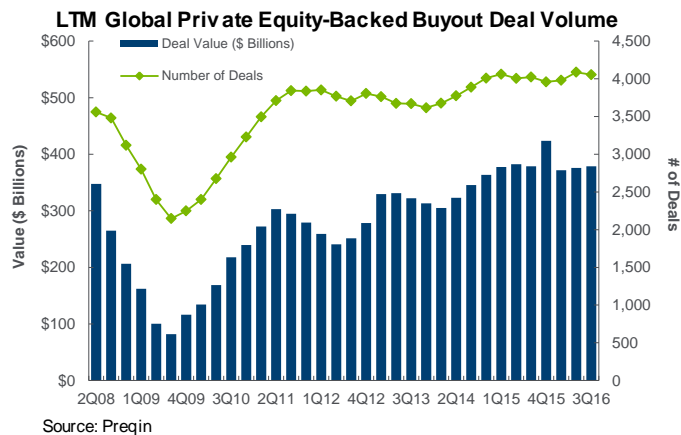
Hedge Fund Markets Overview



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

- Hedge fund performance was positive across strategies with the exception of global macro and emerging markets.
- The HFRI Fund-Weighted Composite Index and the HFRI Fund of Funds Composite Index produced returns of 1.21% and 0.88%, respectively, during the quarter.
- Distressed-restructuring was the best performer, with a return of 4.02% in the fourth quarter.

Private Equity Market Overview

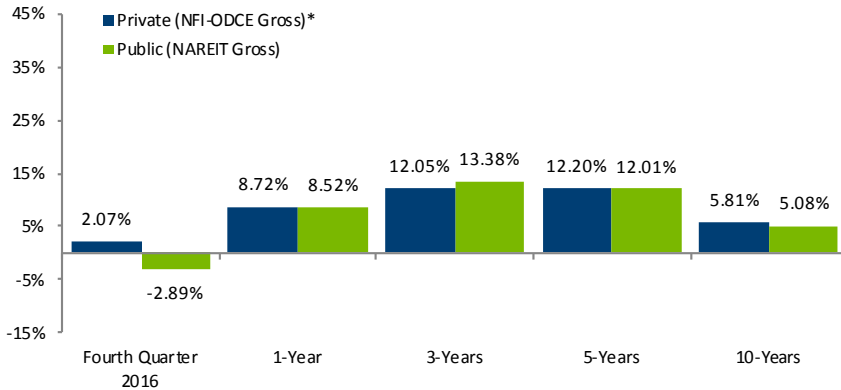


- In Q3 2016, \$108.4 billion was raised by 243 funds, which was down 21.3% on a capital basis and 13.2% by number of deals from the prior quarter.
 - On a year-to-date basis, private equity fundraising totaled \$357.2 billion, which was up 6.8% year over year.¹
 - Dry powder was up roughly 4.5% compared to Q2 2016’s peak of \$1.2 trillion and remained well above the five year average level of \$910.4 billion.¹
- Global private equity-backed buyout deals totaled \$90.6 billion in the third quarter, which was down 9.2% from the prior quarter, but above the five year quarterly average of \$82.7 billion.¹
 - Over the last twelve months, 4,055 deals were completed as of 3Q 2016 for an aggregate deal value of \$378.6 billion compared to 4,087 transactions totaling \$375.9 billion at the end of Q2 2016.¹
 - At the end of Q3 2016, average purchase price multiples for all U.S. LBOs were 10.5x EBITDA, up from 10.1x as of the end of Q2 2016. Both large cap and middle-market purchase price multiples increased on a year-to-date basis quarter over quarter.
 - Middle-market purchase price multiples increased from 8.2x through 1H 2016 to 9.9x through 3Q 2016.²

Sources: ¹ Preqin ² Standard & Poors ³ PWC / National Venture Capital Association (NVCA) MoneyTree Report ⁴ PitchBook ⁵ Fitch Ratings ⁶ Thomson Reuters ⁷ UBS
Notes: YTD: Year to date; LTM: Last twelve months (aka trailing twelve months); PPM: Purchase Price Multiples: Total Purchase Price/EBITDA.

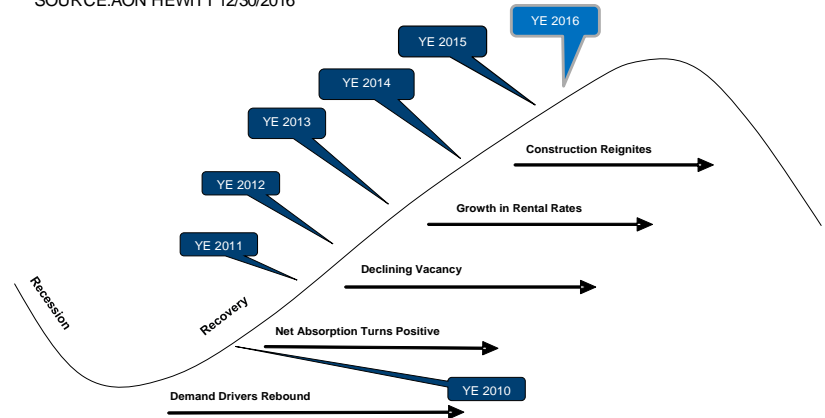
U.S. Commercial Real Estate Market

PRIVATE VS. PUBLIC REAL ESTATE RETURNS AS OF 12/31/2016



*Fourth quarter returns are preliminary
Sources: NCREIF, NAREIT

Stages of Fundamental Recovery in the Real Estate Market Cycle
SOURCE:AON HEWITT 12/30/2016



- U.S. Core real estate returned 8.72%* for the calendar year, which is roughly in line with the sector's long run average.
- The income return (+4.48%)* for the year outpaced appreciation (+4.09%)* 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 posted similar gains for the year, up 8.5% (FTSE NAREIT Equity REIT Index), but it was a bumpy road with elevated volatility quarter to quarter. U.S. REITs ended the year trading at an approximate 1.5% premium to NAVs, although excluding the health care and net lease sectors, the REIT sector ended the year at an approximate 4.0% discount to private market valuations.
- As we enter 2017, the U.S. real estate cycle is mature and thus more susceptible to bumps along the road. While solid income returns are forecasted to continue to support attractive relative returns against many other asset classes, portfolio construction consideration is essential. At this point in the cycle, appropriate risk mitigation measures should be a staple in all investment portfolios as new investments will likely be required to ride out a cyclical downturn.

*Indicates preliminary NFI-ODCE data gross of fees

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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 95th percentile to the 5th 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 417 Endowment and Foundations. The average market value within the Endowment and Foundations universe was \$849.8 million as of quarter-end.