

University of Illinois
First Quarter 2016 Investment Update
Board Report

Reported to the Board of Trustees July 21, 2016

May 2016



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Market Overview and University Assets



Capital Markets Review March 31, 2016

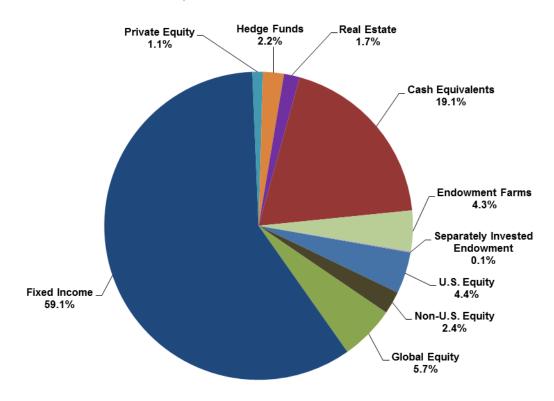
	Quarter Ending Mar-2016	One Year	Three Years	Five Years	Ten Years
DJ U.S. Total Stock Market Index	0.9	-0.4	11.1	11.0	7.0
MSCI AC World ex USA IMI Index	-0.2	-8.1	0.8	0.6	2.2
MSCI AC World IMI Index	0.3	-4.4	5.6	5.2	4.3
Barclays Aggregate Bond Index	3.0	2.0	2.5	3.8	4.9
HFRI Fund Weighted Composite	-0.6	-3.8	2.2	1.8	3.4
NCREIF ODCE Index	2.0	12.6	12.6	12.2	5.4

- Global equities got off to a rocky start in 2016 due to renewed concerns over subdued Chinese economic growth, deteriorating economic data globally and falling commodity prices. However, the global markets reversed most of their losses in the second-half of the quarter following a rebound in energy prices and a loosening of monetary policy from central banks in Europe and Japan.
- In March, the U.S. Federal Reserve (Fed) maintained the target range for the Federal Funds rate at 0.25-0.50%, in line with market expectations. The Fed did however downgrade expectations of how many rate rises they expect to see in 2016, from four to two.
- The U.S. Treasury yields on the long-end of the curve fell during the quarter as fears of a global growth slowdown and dovish tones
 from the Fed were increasingly priced in. Medium credit quality investment grade corporate bonds outperformed high yield bonds.
 Longer duration bonds outperformed shorter duration bonds.
- In the first quarter, U.S. Core real estate returns were modest. This quarter's performance is more closely aligned with the sector's long run average and marks the first time in 3 years that the income return outpaced appreciation.
- Hedge fund performance was mixed across strategies. Global macro was the strongest performer while equity hedged was the weakest performer during the quarter.

Empower Results

University Assets: March 31, 2016

University Of Illinois Endowment & Operating Assets \$2.62 Billion as of 3/31/2016





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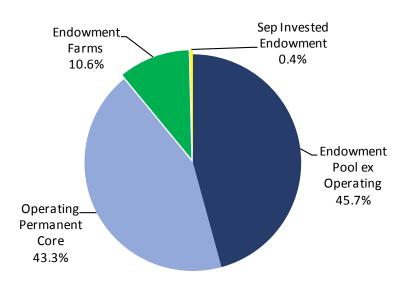


Endowment Fund Update: March 31, 2016



Total Endowment Assets by Type March 31, 2016

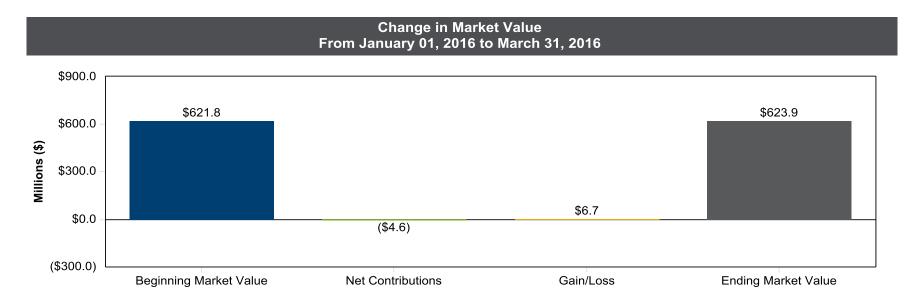
\$700.8 Million



The Total Endowment Fund is valued at \$700.8 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 \$623.9 million (dark and light blue pie slices) and discussed further on the following pages.



Total Fund Asset Growth: Endowment Pool

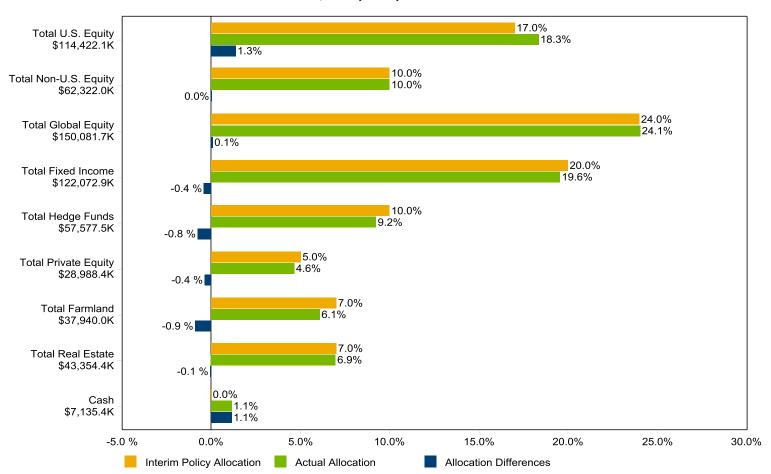


- During the first quarter, the Endowment Pool assets increased by approximately \$2.1 million from \$621.8 million to \$623.9 million.
- This increase was the net result of investment gains and negative fund flows. For this period, net outflows were approximately \$4.6 million and the absolute return of 1.1% in Endowment assets resulted in investment gains of \$6.7 million.



Market Value and Asset Allocation: Endowment Pool March 31, 2016

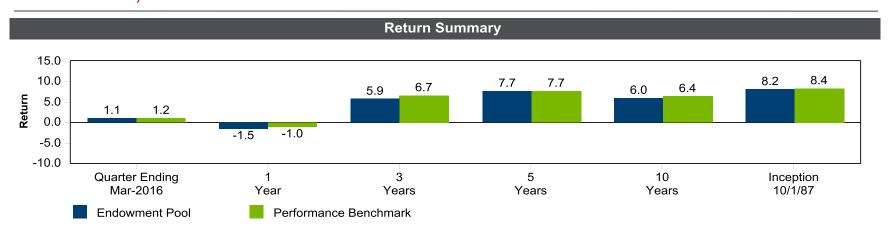
Total Fund \$623,900,057



^{*} 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%



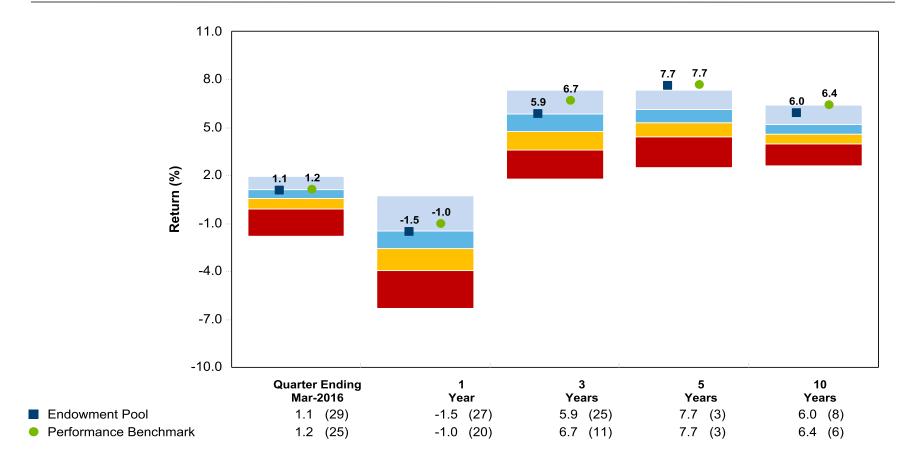
Total Fund Performance: Endowment Pool March 31, 2016



- During the quarter, the Endowment Pool gained 1.1 percentage points approximating the benchmark.
 - The Endowment's U.S. Equity investments underperformed the Dow Jones U.S. Total Stock Market by 80 basis points during the quarter, returning 0.1%.
 - The Endowment's Hedge Fund portfolio outperformed its benchmark by 60 basis points during the quarter, returning 0.0%.
 - On an absolute basis, the Fixed Income and Real Estate investments drove the Endowment Pool's
 positive absolute performance during the quarter returning 2.9% and 3.0%, respectively.
- Over the trailing one-year period, the Endowment Pool fell by 1.5%, 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 March 31, 2016



 Over the trailing one-year time period, the return of the University of Illinois' Endowment Pool ranked in the top 27% of the Investment Metrics / BNY Mellon Endowment Fund and Foundation Universe returns, and the three- and five-year returns ranked in the top 25% and 3% of the Universe, respectively.

Asset Class Performance: Endowment Pool March 31, 2016

	Quarter Ending Mar-2016	One Year	Three Years	Five Years	Ten Years	Since Inception	Inception Date
Endowment Pool	1.1	-1.5	5.9	7.7	6.0	8.2	Oct-1987
Performance Benchmark	1.2	-1.0	6.7	7.7	6.4	8.4	
Total U.S. Equity	0.1	-3.3	10.3	10.8	6.9	8.9	Oct-1987
DJ U.S. Total Stock Market Index	0.9	-0.4	11.1	11.0	7.0	9.2	
Total Non-U.S. Equity	-0.3	-8.3	0.6	1.1	2.0	4.9	Oct-1993
Non-U.S. Equity Benchmark	-0.2	-8.1	0.7	0.6	2.1	5.0	
Total Global Equity	0.9	-5.0	4.7	-	-	8.0	Jul-2012
Global Equity Benchmark	0.3	-4.4	5.5	_	_	8.9	
Total Fixed Income	2.9	2.4	2.4	4.4	5.6	7.3	Oct-1987
Barclays Aggregate Index	3.0	2.0	2.5	3.8	4.9	6.8	
Total Hedge Funds	0.0	1.1	=	-	-	3.6	Jun-2013
HFRI Fund Weighted Composite Index	-0.6	-3.8	-	-	-	1.9	
Total Private Equity¹	1.8	8.6	10.5	8.5	5.9	1.6	Feb-2004
Private Equity Benchmark	1.7	2.6	14.4	14.3	10.2	10.9	
Total Real Estate	3.0	9.8	-	-	_	16.0	Sep-2013
Real Estate Benchmark	3.2	10.0	-	-	-	16.4	•
Total Farmland²	0.0	-3.1	4.0	15.0	_	10.9	Jan-2007
NCREIF Cornbelt Index	0.0	0.3	10.3	14.8	_	12.5	

¹The combined Adams Street Partners IRR at 12/31/2015 was 9.2%.

²Farmland 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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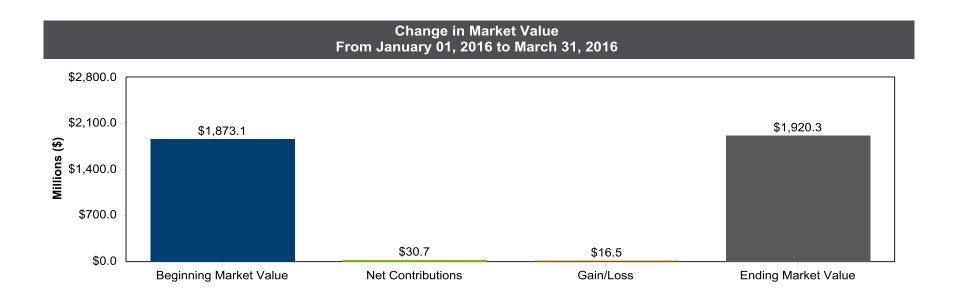




Operating Pool Update: March 31, 2016



Total Fund Asset Growth: Operating Pool



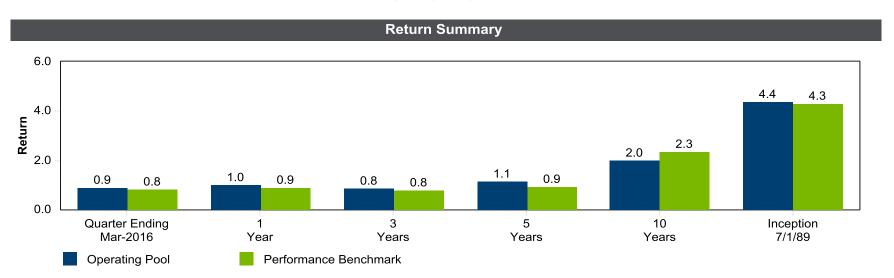
 During the first quarter, the Operating Pool assets increased by approximately \$47.2 million from \$1.873 billion to \$1.920 billion. This increase was the result of \$30.7 million in net inflows and transfers as well as investment gains of \$16.5 million during the period.



^{*} 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 March 31, 2016

Total Fund \$1,920,347,844



■ The Operating Pool's performance during the first quarter was 0.9%, outperforming the benchmark return for this time period. The majority of the Operating Pool's managers matched or outperformed their respective benchmarks during the quarter.



^{*} Total Fund performance excludes the JP Morgan bank balance.

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Appendix:

Market Environment



Market Highlights





Market Highlights

Returns of the Major Capital Markets					
	First Quarter	1-Year	3-Year ¹	5-Year ¹	Periods Ending 3/31/2016 10-Year ¹
Equity					
MSCI All Country World IMI	0.3%	-4.4%	5.6%	5.2%	4.3%
MSCI All Country World	0.2%	-4.3%	5.5%	5.2%	4.1%
Dow Jones U.S. Total Stock Market	0.9%	-0.4%	11.1%	11.0%	7.0%
Russell 3000	1.0%	-0.3%	11.1%	11.0%	6.9%
S&P 500	1.3%	1.8%	11.8%	11.6%	7.0%
Russell 2000	-1.5%	-9.8%	6.8%	7.2%	5.3%
MSCI All Country World ex-U.S. IMI	-0.2%	-8.1%	0.8%	0.6%	2.2%
MSCI All Country World ex-U.S.	-0.4%	-9.2%	0.3%	0.3%	1.9%
MSCIEAFE	-3.0%	-8.3%	2.2%	2.3%	1.8%
MSCI EAFE (Local Currency)	-6.5%	-11.2%	6.5%	6.2%	1.7%
MSCI Emerging Markets	5.7%	-12.0%	-4.5%	-4.1%	3.0%
Fixed Income					
Barclays Global Aggregate	5.9%	4.6%	0.9%	1.8%	4.3%
BarclaysAggregate	3.0%	2.0%	2.5%	3.8%	4.9%
BarclaysLong Gov't	8.1%	2.8%	6.0%	9.5%	7.9%
BarclaysLong Credit	6.8%	-1.1%	4.1%	7.8%	7.2%
BarclaysLong Gov't/Credit	7.3%	0.4%	4.8%	8.5%	7.6%
Barclays US TIPS	4.5%	1.5%	-0.7%	3.0%	4.6%
Barclays High Yield	3.4%	-3.7%	1.8%	4.9%	7.0%
Citi Group Non-U.S. WGBI	9.1%	7.7%	-0.2%	0.2%	4.0%
JP Morgan EMBI Global (Emerging Markets)	5.2%	4.4%	2.4%	6.0%	7.1%
Commodities					
Bloomberg Commodity Index	0.4%	-19.6%	-16.9%	-14.1%	-6.2%
Goldman Sachs Commodity Index	-2.5%	-28.7%	-24.5%	-17.4%	-10.7%
Hedge Funds					
HFRI Fund-Weighted Composite ²	-0.6%	-3.8%	2.2%	1.8%	3.4%
HFRI Fund of Funds ²	-3.1%	-5.7%	1.8%	1.3%	1.5%
Real Estate					
NAREIT U.S. Equity REITS	6.0%	4.4%	10.5%	11.9%	6.6%
NCREIF NFI - ODCE ³	2.2%	13.7%	13.6%	13.3%	6.4%
Private Equity					10.00
Burgiss Private iQ Global Private Equity4	4.0%	7.9%	14.2%	14.1%	12.2%
Infrastructure	45.00/	4.40/	0.00/	40.404	0.40/
Macquarie Global Infrastructure - North America	15.3%	1.4%	6.8%	10.4%	8.4%

MSCI Indices show net returns.

All other indices show total returns.



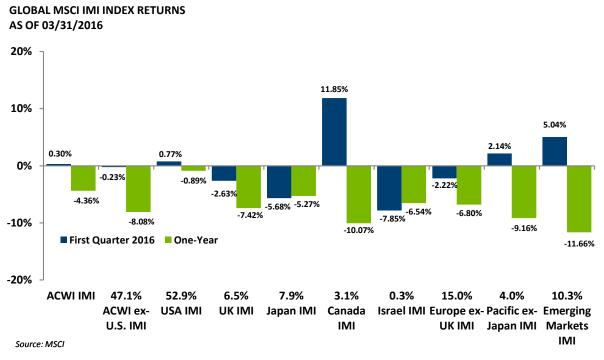
¹ Periods are annualized.

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

³ First quarter results are preliminary.

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

Global Equity Markets

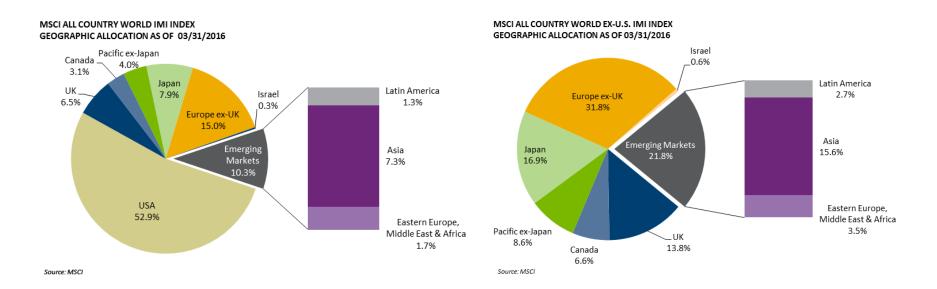


- Global equities got off to a rocky start in 2016 as renewed concerns over subdued Chinese economic growth, deteriorating economic data globally and falling commodity prices spooked equity market investors. However, markets reversed their losses in the second-half of the quarter following a rebound in energy prices. Further monetary easing and dovish statements by the major central banks also helped. Global equity markets returned 0.30% in the first quarter with notable differences in regional returns.
- Canada was the best performer with a return of 11.85% during the quarter. The stronger Canadian dollar pushed up the returns for U.S. investors.



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

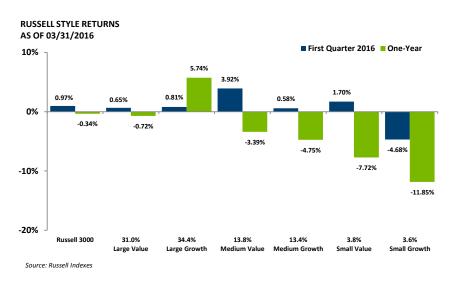
Global Equity Markets

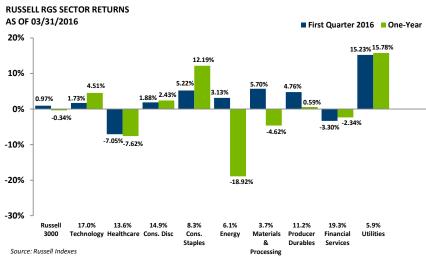


• The two exhibits on this slide illustrate the percentage that each country/region represents of the global equity market as measured by the MSCI All Country World IMI Index and the MSCI All Country World ex-U.S. IMI Index.



U.S. Equity Markets

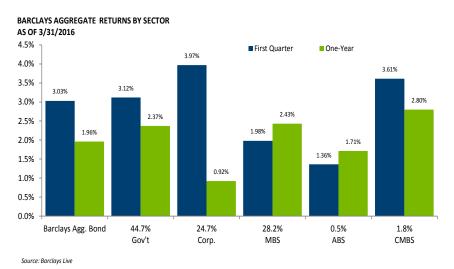




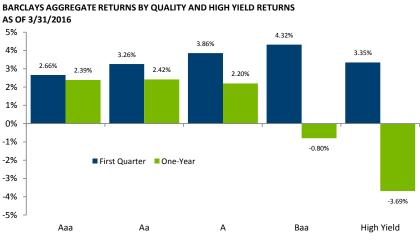
- The Russell 3000 Index returned 0.97% during the first quarter and returned -0.34% over the one-year period.
- During the first quarter, utilities was the strongest performer, posting returns of 15.23%. The healthcare and financial services sectors were the weakest performers, producing returns of -7.05% and -3.30%, respectively.
- Performance across the market capitalization spectrum was positive over the quarter except for small cap growth stocks. Medium cap stocks outperformed both the larger and smaller segments of the market except for medium cap growth, which underperformed large cap growth. Value stocks outperformed growth stocks across the capitalizations except for the larger segment.



U.S. Fixed Income Markets



- The Barclays Aggregate Bond Index returned 3.03% in the first quarter. Corporate bonds were the strongest performing index segment, returning the most at 3.97%.
- Medium credit quality investment grade corporate bonds 6.0% outperformed high yield bonds.
- Longer duration bonds outperformed shorter duration bonds.



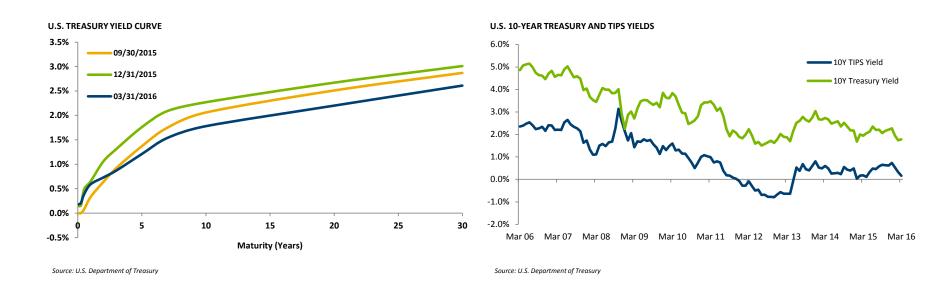


Source: Barclays Live





U.S. Fixed Income Markets



- The Treasury yield curve flattened over the first quarter driven by short bond yields rising and long bond yields falling.
- The 10-year U.S. Treasury yield ended the quarter at 1.78%, 49 basis points lower than its level at the beginning of the quarter.
- The 10-year TIPS yield fell by 57 basis points over the guarter and ended the period at 0.16%.



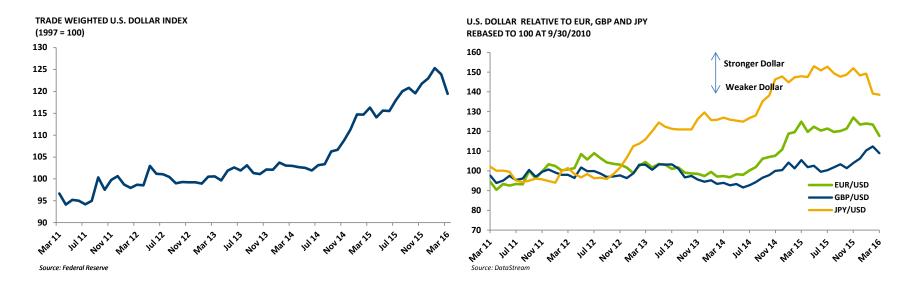
Credit Spreads

Spread (bps)	03/31/2016	12/31/2015	03/31/2015	Quarterly Change (bps)	1-Year Change (bps)
U.S. Aggregate	56	56	46	0	10
Long Gov't	4	4	3	0	1
Long Credit	223	225	187	-2	36
Long Gov't/Credit	136	138	118	-2	18
MBS	22	24	20	-2	2
CMBS	109	121	95	-12	14
ABS	74	72	62	2	12
Corporate	163	165	129	-2	34
High Yield	656	660	466	-4	190
Global Emerging Markets	382	389	354	-7	28

- During the first quarter, credit spreads generally tightened.
- CMBS spreads fell by 12 basis points, the most over the quarter. Global emerging markets and high yield spreads followed falling by 7 and 4 basis points, respectively. The only bond spreads to rise were ABS spreads rising by 2 basis points.



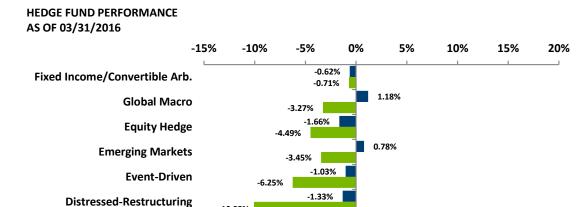
Currency



- As measured through the broad trade weighted U.S. dollar index, the U.S. dollar weakened during the quarter.
- The U.S. dollar depreciated sharply against the Euro and the Yen but appreciated against the British Pound Sterling. The British Pound weakened due to the uncertainty over Brexit and the downgrade of economic growth forecasts. Despite the Bank of Japan's easing measures, the Yen appreciated sharply against the U.S. dollar.



Hedge Fund Markets Overview



-2.03%

0.05%

■ First Quarter 2016

One-Year

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

-5.11%

-10.08%

Relative Value

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 -0.83% and -2.52%, respectively, during the quarter.
- Global Macro was the best performer with a return of 1.18% in the first quarter.

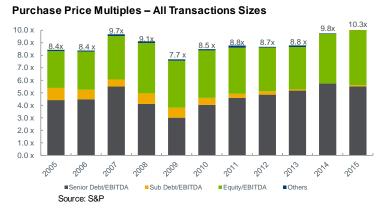
Fund-Weighted Composite Index

Fund of Funds Composite Index



Private Equity Market Overview





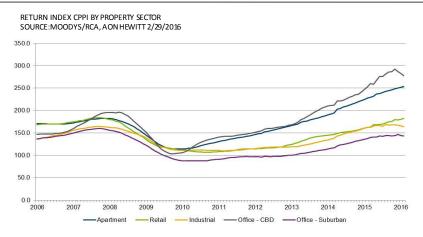
- Fundraising: In 2015, \$441.2 billion was raised by 965 funds, which was flat with the prior year but up 26.9% over the five year average. Fourth quarter fundraising totaled \$112.1 billion across 222 funds compared to \$112.3 billion raised by 199 partnerships in 3Q 2015. Dry powder was down 2.5% compared to 3Q 2015's peak of \$1.1 trillion but remained well above the five year average level of \$861.6 billion¹.
- **Buyout:** Global priv ate equity-backed buyout deals totaled \$137.6 billion in the fourth quarter, which was up 60.6% over the prior quarter and represented the highest quarterly volume since 2Q 2007. Three thousand seven hundred seventy-six deals were completed in 2015 for an aggregate deal value of \$423.1 billion compared to 3,890 transactions totaling \$362.3 billion in 2014¹. Despite quarterly purchase price multiples for total, large cap, and middle market transactions each decreasing compared to 3Q, annual average purchase price multiples for all transactions sizes in 2015 remained above record levels². The average purchase price multiple across all European transactions sizes fell from 9.8x in 2014 to 9.2x. Purchase prices for transactions of €1.0 billion or more and for transactions between €500.0 million and €1.0 billion remained flat year over year, standing at 10.4x and 10.2x, respectively². Globally, the exit value totaled \$423.9 billion on 1,757 deals in 2015; the total value was down 9.7% and the number of deals was down by 5.1% from 2014¹.
- Venture: During 2015 deploy ment increased 15.7% year over year to \$58.8 billion, up 81.3% compared to the five year average³. This marked the second largest annual total in the last 20 years but remained well below the peak level of \$105.0 billion observed in 2000. There were 16 venture-backed initial public offerings in 4Q 2015, bringing 2015's full year total to 77, which represented a decrease of 34.2% from 2014. The number of M&A transactions totaled 91 deals in 4Q and 372 deals in all of 2015, down 19.5% and 23.3% from the prior quarter and year, respectively ⁴.
- **Mezzanine:** In 2015, 40 funds closed on \$20.1 billion in capital, which was up considerably compared to the prior year and five year average levels of \$9.6 billion and \$12.9 billion, respectively. Estimated dry powder was \$43.8 billion at the end of 2015, down 3.3% over 3Q 2015¹. Fundraising has seen a strong comeback over the past 12 months despite competition from private lending platforms and business development companies (BDCs). We expect to see continued interest in mezzanine funds during 2016.
- **Distressed Debt:** The last twelve months' U.S. high-yield default rate was 3.4% at year end 2015 compared to 2.9% in 3Q 2015⁵. Default rates are expected to rise further in 2016 due to ongoing developments and challenges in the energy and mining/minerals sectors⁶. Distressed debt and bankruptcy restructuring activity in 2015 decreased substantially compared to 2014 on both a number of deals and deal value basis ⁶.
- Secondaries: Six funds raised \$8.1 billion during the fourth quarter, up from \$1.1 billion by three funds in 3Q 2015. On a full y ear basis, secondary capital raised totaled \$20.4 billion, up from the \$19.4 billion five year average but below 2014's full year total of \$29.7 billion. In 2015, transaction volume totaled \$33.0 billion, representing a decrease of 12.0% from the record level observed in 2014. The average discount rate for all private equity sectors increased slightly quarter over quarter from 8.4% to 8.5% but remains very favorable for potential sellers.
- Infrastructure: Thirty-six billion dollars of capital was raised by 46 f unds in 2015 compared to \$43.4 billion of capital closed on by 54 partnerships during 2014. The average fund size in 2015 increased to \$858.0 million, marking a new record level. At the end of 2015, dry powder stood at \$108.0 billion, down slightly from last quarter's total of \$115.0 billion. Infrastructure managers completed 661 deals with an estimated aggregate deal value of \$349.0 billion in 2015 compared to 914 deals totaling \$444.0 billion in 2014.
- Natural Resources: During 2015, 35 funds closed on \$38.1 billion compared to 41 funds totaling \$24.3 billion in 2014. Energy and utilities industry managers completed 148 deals totaling a reported \$23.3 billion during 2015, down from 255 deals in 2014 for a total reported value of \$33.5 billion f.

Sources: 1 Preqin 2 Standard & Poors 3 PWC / National Venture Capital Association (NVCA) Money Tree Report 4 Thomson Reuters 5 Fitch Ratings 6 Thomson Reuters 7 UBS 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.

University of Illinois 32 Empower Results®

U.S. Commercial Real Estate Market





- 2016 Theme: The U.S. property cycle is mature with expectations of moderating, albeit still healthy—and relatively attractive—returns. Expectations are for volatile quarter-to-quarter movements in market indicators. The cycle is now more susceptible to bumps along the road from economic, capital markets, or political factors. At this point in the cycle, appropriate risk mitigation measures should be a staple in all real estate investment portfolios.
- In the first quarter, U.S. Core real estate returns moderated to 2.2%*, which is 71 bps lower than the fourth quarter and down 119 bps on a year-over-year basis. This quarter's performance is more closely aligned with the sector's long run average and marks the first time in three years that the income return (1.12%) outpaced appreciation (1.09%). This illustrates our expectation that net income growth will be a larger driver of returns as the cycle matures further.
- U.S. property sales also moderated in the first quarter with preliminary data showing deal volume down 27% from a year earlier. Pricing, however, appeared to hold fairly steady with cap rates generally in line with 1Q15 levels. The slowing in volume suggests the continuation of elevated market uncertainty that was present in 2H15 with buyers and sellers moving apart on pricing expectations.
- The U.S. REIT market continued to display market volatility declining more than 10% through mid-February and then rallying in March to end the quarter up 6.0%. Fears of weaker economic growth and credit markets plagued the sector, and broader equities in general, during the first half of the quarter. Additionally, concerns that asset pricing may have peaked or are even poised to decline after significant appreciation also attributed to the sector's volatility. REITs outperformed the broader equity market during the quarter, which gained 1.4% (S&P 500). Despite all the public market volatility, U.S. REITs ended the quarter trading at approximately 5% premium to private market net asset values. Real estate income remains attractive, especially versus other asset classes, helping to continue to drive robust capital flows to the sector. REITs' dividends of 3.8% are 203 bps over the 10-Year U.S. Treasury yield.
- Strong underlying sector fundamentals are expected to support healthy income growth and high occupancies across most property types in 2016. This solid foundation should help real estate offset rising interest rates, though the offset is not expected to be complete. At this point in the cycle it is important to focus on going forward underwriting assumptions, especially rent growth expectations, new supply impacts, and exit cap rate, as well as monitor use of leverage. Preferred equity and debt structures are also important considerations to help mitigate medium term cyclical risks.

^{*}Indicates preliminary NFI-ODCE data gross of fees

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Explanatory Notes



Explanatory Notes

<u>Note:</u> 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.

<u>Peer Universe Comparison Floating Bar Chart</u> – 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 314 Endowment and Foundations. The average market value within the Endowment and Foundations universe was \$1.0 billion as of quarter-end.

