University of Illinois System
First Quarter 2017 Investment Update
Board Report

May 2017
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Market Overview and System Assets
The "reflation trade" that drove global equity markets higher during the fourth quarter was bolstered in the first quarter by a continuation of improving economic fundamentals across regions.

- Momentum in equity markets, however, waned toward the end of the quarter as the U.S. administration’s struggles to revise health care reform led to more realistic expectations for pro-growth policies.
- All major regions generated positive returns with Emerging Markets being the strongest-performing region, rebounding from underperformance late in 2016.

The Treasury yield curve flattened over the quarter as yields of short maturity bonds rose while yields at longer maturities fell. High yield bonds outperformed investment grade corporate bonds across different credit qualities.

Hedge Fund performance was positive across all strategies with the exception of Global Macro during the quarter. Emerging Markets was the best performer.

Core Real Estate returns moderated throughout 2016, and this trend continued in the first quarter of 2017. Income continued to outpace appreciation, and as asset appreciation abates, investment returns will likely continue to moderate toward the long-run average.
System Assets: March 31, 2017

System Endowment & Operating Assets
$2.77 Billion as of 3/31/2017

- Fixed Income: 54.2%
- U.S. Equity: 4.6%
- Non-U.S. Equity: 2.6%
- Global Equity: 6.2%
- Cash Equivalents: 24.0%
- Endowment Farms: 3.7%
- Separately Invested Endowment: 0.1%
- Hedge Funds: 1.7%
- Real Estate: 1.6%
- Private Equity: 1.3%

System Endowment & Operating Assets: $2.77 Billion as of 3/31/2017
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Endowment Fund Update: March 31, 2017
The Total Endowment Fund is valued at $726.8 million as of March 31, 2017.

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 $657.4 million (dark- and light-blue pie slices) and is discussed further on the following slides.
Total Fund Asset Growth: Endowment Pool

During the first quarter ending March 31, 2017, the Endowment Pool assets increased by approximately $20.8 million, from $636.6 million to $657.4 million.

This increase was the net result of investment gains and negative fund flows. For this period, net outflows were approximately $6.5 million, and the absolute return of 4.3% in Endowment Pool assets resulted in investment gains of $27.3 million.

Note: 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
March 31, 2017

Total Fund
$657,434,025

- Total U.S. Equity $128,581.2K
  - Interim Policy Allocation 17.0%
  - Actual Allocation 19.6%
  - Allocation Differences

- Total Non-U.S. Equity $70,446.4K
  - Interim Policy Allocation 10.0%
  - Actual Allocation 10.7%
  - Allocation Differences

- Total Global Equity $170,728.2K
  - Interim Policy Allocation 24.0%
  - Actual Allocation 26.0%
  - Allocation Differences

- Total Fixed Income $121,025.4K
  - Interim Policy Allocation -1.6%
  - Actual Allocation 20.0%
  - Allocation Differences

- Total Hedge Funds $46,666.7K
  - Interim Policy Allocation 10.0%
  - Actual Allocation 7.1%
  - Allocation Differences

- Total Private Equity $35,620.1K
  - Interim Policy Allocation 5.0%
  - Actual Allocation 5.4%
  - Allocation Differences

- Total Farmland $35,867.5K
  - Interim Policy Allocation 7.0%
  - Actual Allocation 5.5%
  - Allocation Differences

- Total Real Estate $46,412.4K
  - Interim Policy Allocation 7.0%
  - Actual Allocation 6.9%
  - Allocation Differences

- Cash $3,086.1K
  - Interim Policy Allocation 0.0%
  - Actual Allocation 0.5%
  - Allocation Differences

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%

Note: Total sum of actual allocations referenced in the above table may not equal 100% due to rounding.
### Total Fund Performance: Endowment Pool March 31, 2017

- **During the first quarter ending March 31, 2017, the Endowment Pool gained 4.3 percentage points while outperforming the benchmark.**
- **Below are the main drivers of the Endowment Pool’s quarterly return:**
  - Fixed Income investment outperformed the Bloomberg Barclays U.S. Aggregate Index by 0.2 percentage points during the quarter, returning 1.0%.
  - The Endowment’s overweight allocation to U.S., Non-U.S., and Global Equities was additive as these three asset classes had some of the strongest market returns during the quarter.
- **Over the trailing one-year period ending March 31, 2017, the Endowment Pool returned 9.8%, relatively underperforming its benchmark.**
  - The largest detractors of relative performance were Hedge Funds and Private Equity.

![Return Summary Chart](chart.png)
Over the trailing one-year time period, the return of the University of Illinois’s Endowment Pool ranked in the top 67% of the Investment Metrics/BNY Mellon Endowment Fund and Foundation Universe returns, and the three- and five-year returns ranked in the top 33% and 15% of the Universe, respectively.
Asset Class Performance: Endowment Pool  
March 31, 2017

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Quarter Ending Mar-2017</th>
<th>One Year</th>
<th>Three Years</th>
<th>Five Years</th>
<th>Ten Years</th>
<th>Since Inception</th>
<th>Inception Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endowment Pool</td>
<td>4.3</td>
<td>9.8</td>
<td>4.9</td>
<td>8.0</td>
<td>5.8</td>
<td>8.3</td>
<td>Oct-1987</td>
</tr>
<tr>
<td>Performance Benchmark</td>
<td>4.2</td>
<td>10.1</td>
<td>5.4</td>
<td>8.5</td>
<td>6.3</td>
<td>8.4</td>
<td></td>
</tr>
<tr>
<td>Total U.S. Equity</td>
<td>5.7</td>
<td>17.9</td>
<td>8.9</td>
<td>12.9</td>
<td>7.7</td>
<td>9.2</td>
<td>Oct-1987</td>
</tr>
<tr>
<td>DJ U.S. Total Stock Market Index</td>
<td>5.8</td>
<td>18.1</td>
<td>9.7</td>
<td>13.1</td>
<td>7.6</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>Total Non-U.S. Equity</td>
<td>8.0</td>
<td>13.0</td>
<td>0.8</td>
<td>5.1</td>
<td>1.0</td>
<td>5.2</td>
<td>Oct-1993</td>
</tr>
<tr>
<td>Non-U.S. Equity Benchmark</td>
<td>8.0</td>
<td>13.0</td>
<td>0.9</td>
<td>4.6</td>
<td>1.5</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>Total Global Equity</td>
<td>6.9</td>
<td>15.1</td>
<td>4.0</td>
<td>-</td>
<td>-</td>
<td>9.5</td>
<td>Jul-2012</td>
</tr>
<tr>
<td>Global Equity Benchmark</td>
<td>6.8</td>
<td>15.4</td>
<td>5.2</td>
<td>-</td>
<td>-</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td>Total Fixed Income</td>
<td>1.0</td>
<td>1.0</td>
<td>2.8</td>
<td>3.0</td>
<td>4.9</td>
<td>7.1</td>
<td>Oct-1987</td>
</tr>
<tr>
<td>Bloomberg Barclays U.S. Aggregate</td>
<td>0.8</td>
<td>0.4</td>
<td>2.7</td>
<td>2.3</td>
<td>4.3</td>
<td>6.6</td>
<td></td>
</tr>
<tr>
<td>Total Hedge Funds</td>
<td>1.8</td>
<td>6.2</td>
<td>4.8</td>
<td>-</td>
<td>-</td>
<td>4.3</td>
<td>Jun-2013</td>
</tr>
<tr>
<td>HFRI Fund Weighted Composite Index</td>
<td>2.5</td>
<td>8.7</td>
<td>2.8</td>
<td>-</td>
<td>-</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>Total Private Equity¹</td>
<td>3.2</td>
<td>9.4</td>
<td>9.7</td>
<td>9.1</td>
<td>6.7</td>
<td>2.1</td>
<td>Feb-2004</td>
</tr>
<tr>
<td>Private Equity Benchmark</td>
<td>6.6</td>
<td>21.6</td>
<td>12.9</td>
<td>16.5</td>
<td>10.9</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Total Real Estate</td>
<td>1.1</td>
<td>6.8</td>
<td>11.6</td>
<td>-</td>
<td>-</td>
<td>13.4</td>
<td>Sep-2013</td>
</tr>
<tr>
<td>Real Estate Benchmark</td>
<td>1.5</td>
<td>6.7</td>
<td>11.7</td>
<td>-</td>
<td>-</td>
<td>13.5</td>
<td></td>
</tr>
<tr>
<td>Total Farmland²</td>
<td>0.0</td>
<td>-3.0</td>
<td>-2.0</td>
<td>5.9</td>
<td>9.7</td>
<td>9.5</td>
<td>Jan-2007</td>
</tr>
<tr>
<td>NCREIF Cornbelt Index</td>
<td>0.0</td>
<td>-3.7</td>
<td>2.4</td>
<td>10.5</td>
<td>11.1</td>
<td>10.8</td>
<td></td>
</tr>
</tbody>
</table>

¹The combined Adams Street Partners IRR at December 31, 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: March 31, 2017
During the first quarter ending March 31, 2017, the Operating Pool assets increased by approximately $75.8 million, from $1.963 billion to $2.039 billion.

This increase was the result of $68.5 million in net inflows and transfers and $7.3 million in investment gains.

Note: The Total Fund’s beginning and ending market values include bank balances in which the System earns credit to offset bank fees. Note: The beginning market value + net contributions + investment gains referenced in the above table may not equal the ending market value due to rounding.
The Operating Pool’s performance during the first quarter was 0.3%, performing inline with its benchmark return for this time period.

All of the Operating Pool’s managers except for one approximated or outperformed their respective benchmarks during the quarter.

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

Market Environment
## Market Highlights

### Returns of the Major Capital Markets

<table>
<thead>
<tr>
<th></th>
<th>First Quarter</th>
<th>1-Year</th>
<th>3-Year&lt;sup&gt;1&lt;/sup&gt;</th>
<th>5-Year&lt;sup&gt;1&lt;/sup&gt;</th>
<th>10-Year&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSCI All Country World IMI</td>
<td>6.79%</td>
<td>15.37%</td>
<td>5.07%</td>
<td>8.55%</td>
<td>4.23%</td>
</tr>
<tr>
<td>MSCI All Country World</td>
<td>6.91%</td>
<td>15.04%</td>
<td>5.08%</td>
<td>8.37%</td>
<td>4.00%</td>
</tr>
<tr>
<td>Dow Jones U.S. Total Stock Market</td>
<td>5.79%</td>
<td>18.06%</td>
<td>9.68%</td>
<td>13.11%</td>
<td>7.64%</td>
</tr>
<tr>
<td>Russell 3000</td>
<td>5.74%</td>
<td>18.07%</td>
<td>9.76%</td>
<td>13.18%</td>
<td>7.54%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>6.07%</td>
<td>17.17%</td>
<td>10.37%</td>
<td>13.30%</td>
<td>7.51%</td>
</tr>
<tr>
<td>Russell 2000</td>
<td>2.47%</td>
<td>26.22%</td>
<td>7.22%</td>
<td>12.35%</td>
<td>7.12%</td>
</tr>
<tr>
<td>MSCI All Country World ex-U.S. IMI</td>
<td>7.99%</td>
<td>13.01%</td>
<td>0.82%</td>
<td>4.66%</td>
<td>1.59%</td>
</tr>
<tr>
<td>MSCI All Country World ex-U.S.</td>
<td>7.86%</td>
<td>13.13%</td>
<td>0.56%</td>
<td>4.36%</td>
<td>1.35%</td>
</tr>
<tr>
<td>MSCI EAFE</td>
<td>7.25%</td>
<td>11.67%</td>
<td>0.50%</td>
<td>5.83%</td>
<td>1.05%</td>
</tr>
<tr>
<td>MSCI EAFE (Local Currency)</td>
<td>4.71%</td>
<td>18.00%</td>
<td>7.26%</td>
<td>10.70%</td>
<td>2.33%</td>
</tr>
<tr>
<td>MSCI Emerging Markets</td>
<td>11.44%</td>
<td>17.21%</td>
<td>1.18%</td>
<td>0.81%</td>
<td>2.72%</td>
</tr>
<tr>
<td><strong>Fixed Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barclays Global Aggregate</td>
<td>1.76%</td>
<td>-1.90%</td>
<td>-0.39%</td>
<td>0.38%</td>
<td>3.34%</td>
</tr>
<tr>
<td>Barclays Aggregate</td>
<td>0.82%</td>
<td>0.44%</td>
<td>2.68%</td>
<td>2.34%</td>
<td>4.27%</td>
</tr>
<tr>
<td>Barclays Long Gov't</td>
<td>1.45%</td>
<td>-4.78%</td>
<td>5.81%</td>
<td>4.05%</td>
<td>6.65%</td>
</tr>
<tr>
<td>Barclays Long Credit</td>
<td>1.66%</td>
<td>4.89%</td>
<td>5.40%</td>
<td>5.38%</td>
<td>6.94%</td>
</tr>
<tr>
<td>Barclays Long Gov't/Credit</td>
<td>1.58%</td>
<td>0.98%</td>
<td>5.47%</td>
<td>4.84%</td>
<td>6.92%</td>
</tr>
<tr>
<td>Barclays US TIPS</td>
<td>1.26%</td>
<td>1.48%</td>
<td>2.03%</td>
<td>0.97%</td>
<td>4.24%</td>
</tr>
<tr>
<td>Barclays High Yield</td>
<td>2.70%</td>
<td>16.39%</td>
<td>4.56%</td>
<td>6.82%</td>
<td>7.46%</td>
</tr>
<tr>
<td>Citi Group Non-U.S. WGBI</td>
<td>2.02%</td>
<td>-4.79%</td>
<td>-2.56%</td>
<td>-1.50%</td>
<td>2.63%</td>
</tr>
<tr>
<td>JP Morgan EMBI Global (Emerging Markets)</td>
<td>3.90%</td>
<td>8.82%</td>
<td>5.73%</td>
<td>5.25%</td>
<td>6.91%</td>
</tr>
<tr>
<td><strong>Commodities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bloomberg Commodity Index</td>
<td>-2.33%</td>
<td>8.71%</td>
<td>-13.91%</td>
<td>-9.54%</td>
<td>-6.22%</td>
</tr>
<tr>
<td>Goldman Sachs Commodity Index</td>
<td>-5.05%</td>
<td>8.45%</td>
<td>-22.71%</td>
<td>-15.00%</td>
<td>-9.04%</td>
</tr>
<tr>
<td><strong>Hedge Funds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HFRI Fund-Weighted Composite&lt;sup&gt;2&lt;/sup&gt;</td>
<td>2.45%</td>
<td>8.68%</td>
<td>2.84%</td>
<td>4.05%</td>
<td>3.32%</td>
</tr>
<tr>
<td>HFRI Fund of Funds&lt;sup&gt;2&lt;/sup&gt;</td>
<td>2.39%</td>
<td>6.23%</td>
<td>1.80%</td>
<td>3.22%</td>
<td>1.24%</td>
</tr>
<tr>
<td><strong>Real Estate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAREIT U.S. Equity REITS</td>
<td>1.16%</td>
<td>3.56%</td>
<td>10.26%</td>
<td>9.99%</td>
<td>4.85%</td>
</tr>
<tr>
<td>NCREIF NFI - ODCE&lt;sup&gt;3&lt;/sup&gt;</td>
<td>1.77%</td>
<td>8.33%</td>
<td>11.79%</td>
<td>11.98%</td>
<td>5.59%</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTSE Global Core Infrastructure</td>
<td>6.19%</td>
<td>7.90%</td>
<td>3.62%</td>
<td>6.45%</td>
<td>3.15%</td>
</tr>
</tbody>
</table>

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 and gross of fees.
Market Highlights

**SHORT TERM RETURNS**
**AS OF 03/31/2017**

- **S&P 500**: 17.17%
- **Russell 2000**: 2.47%
- **MSCI EAFE**: 7.25%
- **MSCI Emerging Markets**: 11.44%
- **Barclays Aggregate**: 11.44%
- **Barclays Long Gov’t**: 0.82%
- **Barclays Long Credit**: 1.45%
- **Barclays High Yield**: 1.66%
- **Bloomberg Commodity Index**: 16.39%

- **One-Year**:
  - **S&P 500**: 6.07%
  - **Russell 2000**: 2.47%
  - **MSCI EAFE**: 7.25%
  - **MSCI Emerging Markets**: 11.44%
  - **Barclays Aggregate**: 11.44%
  - **Barclays Long Gov’t**: 0.82%
  - **Barclays Long Credit**: 1.45%
  - **Barclays High Yield**: 1.66%
  - **Bloomberg Commodity Index**: 4.89%

Source: Russell, MSCI, Barclays, DJ-UBS

**LONG TERM ANNUALIZED RETURNS**
**AS OF 03/31/2017**

- **S&P 500**: 13.30%
- **Russell 2000**: 12.35%
- **MSCI EAFE**: 7.12%
- **MSCI Emerging Markets**: 5.83%
- **Barclays Aggregate**: 0.81%
- **Barclays Long Gov’t**: 2.34%
- **Barclays Long Credit**: 4.27%
- **Barclays High Yield**: 6.65%
- **Bloomberg Commodity Index**: 6.82%

- **Five-Year**:
  - **S&P 500**: 13.30%
  - **Russell 2000**: 12.35%
  - **MSCI EAFE**: 7.12%
  - **MSCI Emerging Markets**: 5.83%
  - **Barclays Aggregate**: 0.81%
  - **Barclays Long Gov’t**: 2.34%
  - **Barclays Long Credit**: 4.27%
  - **Barclays High Yield**: 6.65%
  - **Bloomberg Commodity Index**: 7.46%

- **Ten-Year**:
  - **S&P 500**: 7.51%
  - **Russell 2000**: 7.12%
  - **MSCI EAFE**: 1.05%
  - **MSCI Emerging Markets**: 0.81%
  - **Barclays Aggregate**: 2.72%
  - **Barclays Long Gov’t**: 4.05%
  - **Barclays Long Credit**: 6.65%
  - **Barclays High Yield**: 5.38%
  - **Bloomberg Commodity Index**: -9.54%

Source: Russell, MSCI, Barclays, DJ-UBS
Global Equity Markets

The "reflation trade" that drove global equity markets higher last quarter was bolstered in Q1 by a continuation of improving economic fundamentals across regions. Global equities (measured by the MSCI All Country World Index) returned 5.8% in local currency terms. Momentum in equity markets, however, waned toward the end of the quarter as the U.S. administration's struggles to revise health care reform led to more realistic expectations for pro-growth policies.

All regions generated positive returns with Emerging Markets being the strongest-performing region, rebounding from underperformance late in 2016. Despite an uncertain outlook for the region given the protectionist stance from the U.S. administration, strong capital inflows and improving macroeconomic fundamentals led Emerging Markets equities higher. A weaker U.S. dollar also acted as a tailwind for the region.

Note: Percentages along the bottom of the graph show the proportion of the sub-index within the ACWI IMI Index.
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.
The Russell 3000 Index returned 5.74% during the first quarter and returned 18.07% over the one-year period.

Performance across the market capitalization spectrum was mostly positive over the quarter. Small-cap stocks, across both Value and Growth equity styles, underperformed relative to their large- and mid-cap peers. Across all capitalizations, Growth stocks outperformed Value stocks over the first quarter of 2017.

During the first quarter and over the one-year period, the technology sector was the strongest performer, posting returns of 12.71% and 27.21%, respectively. The energy sector was the weakest performer and the only sector that posted negative returns in Q1 2017, falling 6.77%.

*RGS stands for Russell Global Sectors.
The Bloomberg Barclays Aggregate Bond returned 0.82% in the first quarter of 2017. Corporate bonds returned the most at 1.22% while Mortgage Backed Securities returned the least at only 0.47%.

High yield bonds outperformed investment grade corporate bonds across different credit qualities, as high yield bond spreads fell by 26 basis points while changes in investment grade corporate bond spreads were more muted.

Longest duration bonds outperformed all bonds of lower maturities as the yield curve flattened over the quarter.
The Treasury yield curve flattened over the quarter as yields of short maturity bonds rose while yields at longer maturities fell.

The 10-year U.S. Treasury yield ended the quarter at 2.40%, 5 basis points lower than the 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 0.43%.
Credit Spreads

During the first quarter of 2017, movement in credit spreads was mixed across different areas of the bond market.

- Spreads on lower-quality credit such as high yield and global emerging markets fell the most over the first few months, falling by 26 and 31 basis points, respectively. Spreads on mortgage backed securities (MBS) rose by 12 basis points. Long Government and Long Credit spreads were relatively unchanged over this period.

<table>
<thead>
<tr>
<th>Spread (bps)</th>
<th>03/31/2017</th>
<th>12/31/2016</th>
<th>03/31/2016</th>
<th>Quarterly Change (bps)</th>
<th>1-Year Change (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Aggregate</td>
<td>44</td>
<td>43</td>
<td>56</td>
<td>1</td>
<td>-12</td>
</tr>
<tr>
<td>Long Gov't</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>Long Credit</td>
<td>168</td>
<td>167</td>
<td>223</td>
<td>1</td>
<td>-55</td>
</tr>
<tr>
<td>Long Gov't/Credit</td>
<td>101</td>
<td>104</td>
<td>136</td>
<td>-3</td>
<td>-35</td>
</tr>
<tr>
<td>MBS</td>
<td>27</td>
<td>15</td>
<td>22</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>CMBS</td>
<td>77</td>
<td>75</td>
<td>109</td>
<td>2</td>
<td>-32</td>
</tr>
<tr>
<td>ABS</td>
<td>54</td>
<td>59</td>
<td>74</td>
<td>-5</td>
<td>-20</td>
</tr>
<tr>
<td>Corporate</td>
<td>118</td>
<td>123</td>
<td>163</td>
<td>-5</td>
<td>-45</td>
</tr>
<tr>
<td>High Yield</td>
<td>383</td>
<td>409</td>
<td>656</td>
<td>-26</td>
<td>-273</td>
</tr>
<tr>
<td>Global Emerging Markets</td>
<td>257</td>
<td>288</td>
<td>382</td>
<td>-31</td>
<td>-125</td>
</tr>
</tbody>
</table>

Source: Barclays Live
After reaching new heights in early 2017, the U.S. dollar fell sharply over the quarter as measured through the broad trade weighted U.S. dollar index.

The U.S. dollar depreciated against all the major currencies despite the Fed hiking the target range for the federal funds rate to 0.75%-1.00%, a continuation of the divergent interest rate paths of the US. and other developed markets. Less uncertainty following the UK Prime Minister’s comments indicating a “hard” Brexit stance alongside a slowing of the reflation trade led to the pound strengthening by 1.2% against the U.S. dollar.

Yen appreciation this quarter was a partial correction of the substantial weakening that occurred in the last few months of 2016. The yen rose sharply by 4.7% against the U.S. dollar through March 2017.
Hedge Fund Markets Overview

HEDGE FUND PERFORMANCE
AS OF 03/31/2017

-5% 0% 5% 10% 15% 20%

Fixed Income/Convertible Arb. 1.47% 10.16%
Global Macro -0.24% -0.75% 3.82% 11.46%
Equity Hedge 2.19% 13.97%
Emerging Markets 6.09% 13.80%
Event-Driven 1.69% 19.02%
Distressed-Restructuring 2.20% 10.41%
Relative Value 2.45% 8.68%
Fund-Weighted Composite Index 2.39% 6.23%
Fund of Funds Composite Index

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 all strategies with the exception of Global Macro.
- The HFRI Fund-Weighted Composite Index and the HFRI Fund of Funds Composite Index produced returns of 2.45% and 2.39%, respectively, during the quarter.
- Emerging Markets was the best performer with a return of 6.09% in the first quarter.
Private Equity Market Overview

- In Q4 2016, $162.0 billion was raised by 302 funds, which was down 42.4% on a capital basis and 15.7% by number of deals from the prior quarter.
  - On an annual basis, private equity fundraising totaled $527.3 billion, which was up 12.5% year over year.¹
  - Dry powder stood at $1.2 trillion at the end of 2016, up 7.3% and 26.0% compared to 2015 and the five-year average, respectively.¹
- Global private equity-backed buyout deals totaled $339.3 billion in 2016, which was down 19.8% from the prior year but above the five-year average of $331.4 billion.¹
  - In 2016, 4,181 deals were completed for an aggregate deal value of $339.3 billion compared to 4,043 transactions totaling $423.2 billion at the end of 2015.
  - At the end of 2016, the average purchase price multiple for all U.S. LBOs was 10.0x EBITDA, down from 10.3x as of the end of 2015. Both large-cap and middle-market purchase price multiples decreased year over year.
  - Middle-market purchase price multiples decreased from 10.7x in 2015 to 10.2x in 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
Note: YTD: Year to date; LTM: Last twelve months (aka trailing twelve months); PPM: Purchase Price Multiples: Total Purchase Price /EBITDA.
U.S. Core real estate returned 1.77% for the quarter, which is 34 bps lower than the fourth quarter of 2016 and down 41 bps year-over-year.

Income (1.06%) continued to outpace appreciation (0.70%) and as asset appreciation abates, investment returns are likely to continue to moderate toward the long-run average.

Following gains of 7.6% in 2016, U.S. REITs were slightly positive in the first quarter, generating 0.2% (FTSE NAREIT Equity REIT Index), although fell almost 3% in March as growth expectations for the sector faded over the year. Overall, operating fundamentals still remain favorable, although the pace of cash flow growth has decelerated. U.S. REITs ended the quarter trading at slight premiums to NAVs, although this was largely driven by REIT sectors, such as health care and net lease, providing higher dividends. Excluding these two sectors, REITs trade at a 5% discount.

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.
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 391 Endowment and Foundations. The average market value within the Endowment and Foundations universe was $898.3 million as of quarter-end.