

# City of Hollywood

# **ANALYSIS OF INVESTMENT PERFORMANCE**

# **Employees' Retirement Fund**

First Quarter 2018

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#### **ANALYSIS OF INVESTMENT PERFORMANCE**

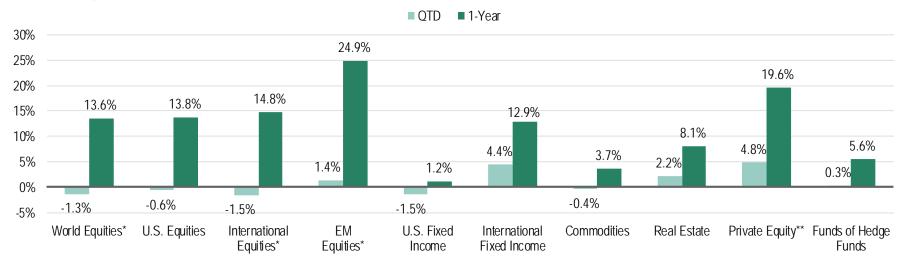
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**Financial Market Conditions** 

## **Q1 2018 In Review**

## **Summary of Investment Returns**



## **Quarterly Synopsis**

- World equity markets fell amid concerns about the global trade outlook and the prospect of further U.S. interest rate hikes.
- U.S. equity declined in Q1. Fears about rising rates and global trade hurt performance despite continued strength in the U.S. economy.
- International equity registered a negative return in the first quarter. Worries about trade policies weighed on European stocks.
- Emerging market equity was positive, partly due to Brazil posting a double-digit gain in Q1 after some political uncertainty subsided.
- U.S. fixed income fell as expectations for interest rates and inflation shifted and volatility returned to markets.
- Non-U.S. fixed income posted a gain in Q1. French, Italian and Spanish yields all fell, though German bund yields rose.
- Hedge funds ended the quarter in positive territory, with multi-strategy and credit arbitrage funds performing well.

<sup>\*</sup> Net of Dividends

<sup>\*\*</sup> Performance reported as of Q4 2017 because Q1 2018 performance data is not yet available. Returns recorded as of May 2, 2018. This data will continually change as more funds report to the Thomson One database.

2 Sources: Investment Metrics. Thomson One, FactSet

## **Q1 2018 Index Returns**

Asset Class	Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
World Equity	MSCI World*	-1.28	-1.28	13.59	7.97	9.70	5.90
U.S. Equity	Russell 3000	-0.64	-0.64	13.81	10.22	13.03	9.62
Non-U.S. Equity	MSCI EAFE*	-1.53	-1.53	14.80	5.55	6.50	2.74
Emerging Market Equity	MSCI EM*	1.42	1.42	24.93	8.81	4.99	3.02
U.S. Fixed Income	Bloomberg Barclays U.S. Aggregate	-1.46	-1.46	1.20	1.20	1.82	3.63
Non-U.S. Fixed Income	Citigroup Non-U.S. WGBI (Unhedged)	4.42	4.42	12.93	5.02	1.36	1.82
Commodities	Bloomberg Commodity Index	-0.40	-0.40	3.71	-3.21	-8.32	-7.71
Private Real Estate	NFI-ODCE**	2.20	2.20	8.07	9.99	11.43	5.11
Private Equity	Thomson Reuters Private Equity***	4.84	4.84	19.62	12.28	14.26	9.48
Hedge Funds	HFRI Fund of Funds Composite	0.29	0.29	5.57	1.87	3.38	1.55

<sup>\*</sup> Net of Dividends
\*\* NCREIF Fund Index (NFI) – Open End Diversified Core Equity (ODCE)
\*\*\* Performance as of Q4 2017 because Q1 2018 performance data is not yet available. Returns recorded as of May 2, 2018. This data will continually change as more funds report to the Thomson One database.
Sources: Investment Metrics, Thomson One, FactSet

## Q1 2018 In Review: U.S. Economy

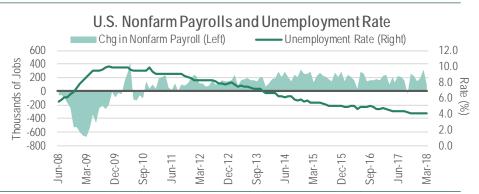
#### **GDP Growth**

- Real GDP grew at a rate of 2.3% in Q1 2018. Revised real GDP growth for Q4 was 2.9%.
- GDP growth in Q1 came from nonresidential fixed investment, exports, personal consumption expenditures (PCE), exports, private inventory investment, state and local government spending and federal government spending.
- The relative slowdown in growth since Q4 2017 came from decelerations in PCE, exports, residential fixed investment and state and local government spending.

### **Employment Picture**

- The unemployment rate held steady at 4.1% at the end of Q1.
- Nonfarm payrolls rose by 605,000 over the quarter.
- Employment grew across almost all sectors, with some of the biggest gains in health care and professional and business services, construction, manufacturing and leisure. Information services and government employment were negative.

#### U.S. Real GDP Growth (QoQ) 6.0 4.0 2.0 % change 0.0 -2.0 -4.0 -6.0 -8.0 -10.0Jun-08 Mar-09 Dec-09 Sep-10 Mar-12 Dec-12 Sep-13 Jun-14 Mar-15 Dec-15 Jun-11 Jun-17



#### **Labor Force Participation**

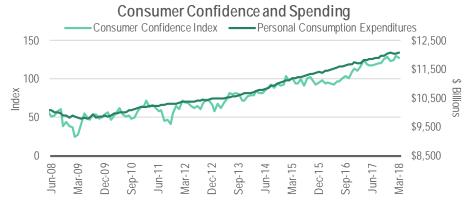
- The labor force participation rate refers to the proportion of people in the entire potential labor force who are either employed or are actively looking for work.
- The labor force participation rate was 62.9% at the end of March, up slightly from Q4 2017.
- Labor force participation has bounced between 62% and 63% since 2014.

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## Q1 2018 In Review: U.S. Economy

#### **Consumer Confidence and Spending**

- Consumer confidence improved in Q1, as the Conference Board's Consumer Confidence Index rose from 123 at the end of December 2017 to 127.7 at the end of March.
- Personal consumption expenditures increased during the quarter.
- Consumer confidence hit an 18-year high in February, but dropped back some in March with concerns about business conditions and global trade.



#### **Retail Sales**

- Retail sales rose slightly in Q1, after a gain in March offset declines in January and February.
- The savings rate rose to 3.1% in Q1 from 2.6% in Q4 2017. The savings rate among consumers in the U.S. had been dropping steadily, suggesting that more people are using credit cards and other debt to finance purchases.



#### **Home Prices**

- Home prices rose 6.3% in Q4 2017\*, as housing inventory remains historically low.
- An improving economy and low unemployment rate have boosted the demand for real estate.

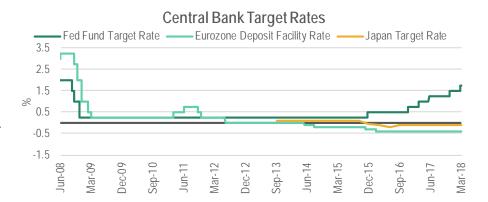


<sup>\*</sup>The most recent quarterly data available. Source this page: FactSet

## Q1 2018 In Review: Global Economy

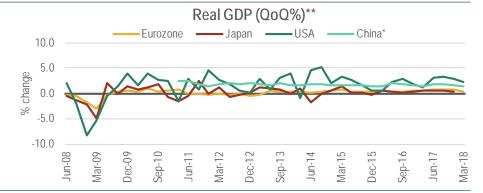
#### **Monetary Policies/Global Interest Rates**

- Central bank deposit rates remain negative in many developed markets.
- The U.S. is the exception—the Federal Reserve (Fed) raised rates again in March after hiking three times in 2017.
   Expectations are for another increase in June and three or four in total in 2018.
- Note that interest rates in the U.S. are well below the historical average of 5.7% (1971-2018).



#### World GDP Growth

- Eurozone GDP growth was 0.4% in Q1, lower than the 0.6% growth it experienced in Q4. Economic growth slowed amid worries about global trade. The Eurozone's annual growth rate is 2.5%.
- China's GDP growth decelerated by 0.2% from Q4 to Q1, to 1.4%. The country's annual growth rate is 6.8%.
- Japan's GDP grew 0.4% QoQ in Q4, and its annual growth in 2017 was 1.6%.\*\*\*



#### **Global Employment Picture**

- Eurozone unemployment fell to 8.5%, the lowest rate since December 2008. The strength of the Eurozone's economy has led to this recent reduction in unemployment.
- Japan's unemployment rate dropped to 2.5% by end of Q1.
   While this is a historic low, slow wage growth has prevented the Bank of Japan from attempting to lift inflation to its 2% target.

## International Unemployment Rates



<sup>\*</sup>Quarter over quarter data calculations began in 2011.

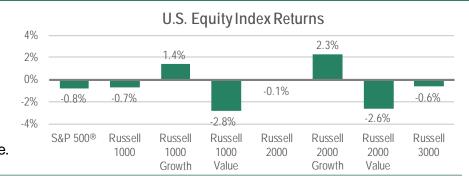
<sup>\*\*</sup>Note that these figures represent the percent change in real GDP from the previous quarter, not the annual growth rate of the countries. \*\*\* Most recent data available.

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Source this page: FactSet

## Q1 2018 In Review: U.S. Equity

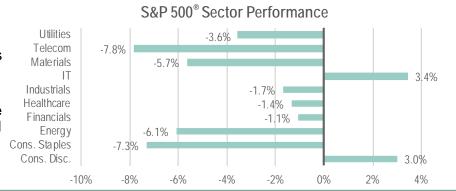
#### **Performance**

- After an extended period of rising markets, U.S. equities experienced a return to more volatile times in Q1 2018. Positive results in January were erased in February and March as the market reacted to daily news flow on both domestic and foreign issues.
- Contrary to expectations during a period of increased volatility, small cap stocks outperformed large caps, and growth beat value.



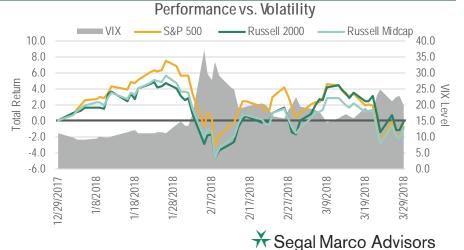
#### **Sector Returns**

- Despite the uptick in volatility, IT and Consumer Discretionary continued to perform well during the quarter amid strong earnings growth.
- All other sectors fell in Q1, most notably Telecom, Consumer Staples and Utilities, which are traditionally considered to be more defensive in nature. Energy and Materials also posted substantial losses during the quarter, while Industrials, Healthcare and Financials fell more modestly.



#### Performance vs. Volatility

- Volatility increased sharply in Q1 2018.
- After hitting extreme lows in 2017, the Chicago Board Options Exchange (CBOE) Volatility Index (VIX)\* spiked and peaked at 37.3 on February 5, well above the level of 30 which is generally considered the threshold for market instability.
- While the VIX fell to more normalized levels as the quarter progressed (a reading of around 20 represents a "normal" market environment), volatility remains higher than its trailing 2-year average.



<sup>\*</sup>The VIX is an index widely used to measure expected future volatility in the equity market. Its calculation is based on prices of options on the S&P 500® index.

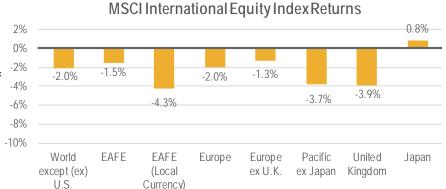
Sources this page: Investment Metrics, FactSet

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## Q1 2018 In Review: International Equity

#### **Performance**

- After a strong start in January, international equity markets pulled back the rest of guarter, ending Q1 at -1.5% as measured by the MSCI EAFE index and -2.0% per the World ex U.S. index. Markets were negatively affected by geopolitical uncertainty and predictions of a rapid rise in inflation and interest rates, as well as fears of an international trade war following President Trump's tariff imposition.
- Many major currencies, including the euro, yen, and pound, strengthened against the U.S. dollar, which boosted returns in USD terms. The Canadian dollar and Swedish krona weakened slightly.
- In terms of style, growth outperformed value, and smaller cap companies performed better than their larger cap peers.



#### **Country Returns**

- Pacific ex Japan fell (-3.7%) amidst rising tensions over trade sanctions on commodities, such as iron ore and steel. Within the region, this was the biggest drag for Australia and New Zealand.
- While European markets were also challenged (-2.0%), with Ireland, Switzerland, and the UK leading the decline, there were some bright spots as Finland, Italy, and Portugal gained the most among all developed nations. The Italian election, bearing no majority winner, had little effect on European equities.
- Japan's stocks rose as that country logged its seventh straight quarter of growth, its longest expansion in more than 15 years.



#### **Sector Performance**

- Sector returns were largely negative to neutral. Energy and Materials fell as commodity prices faced pressure. In an environment of possible rising interest rates, the more defensive sectors such as Consumer Staples, Healthcare, and Telecom also declined.
- In a still-relatively solid economic environment, Tech and Consumer Discretionary stocks rose.

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#### **MSCIEAFE Sector Returns**

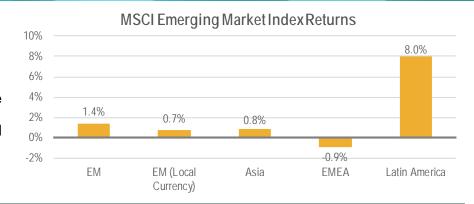


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# Q1 2018 In Review: Emerging Market Equity

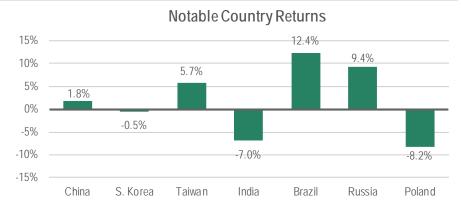
#### **Performance**

- The MSCI Emerging Markets (EM) Index rose by 1.4% in Q1, the only major equity index to finish in positive territory this quarter.
- Despite a rise in market volatility stemming from tensions over global trade, emerging market stocks rose for the fifth consecutive quarter. They were helped by steady economic growth in China and other developing countries, as well as by higher oil prices and a weaker USD.
- The EM local currency index return was 0.7% below that of the USD-based index in Q1 amid continued USD weakness.



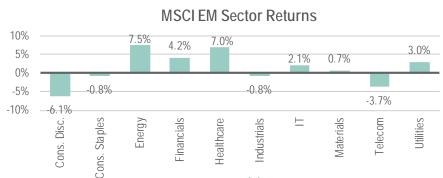
#### **Country Returns**

- Brazil and Russia were among the EM index's top performers, supported by climbing oil prices and signs of improving economic conditions.
- Russia rallied as its central bank cut interest rates and its credit rating was raised to investment grade by Standard & Poor's. Chinese equities overcame trade tensions with the U.S. and finished Q1 in positive territory amid stable macroeconomic data, strong export growth, and rising retail and home sales.
- India fell as asset quality issues at state-owned banks and relative valuations for Indian equities weighed on market sentiment.



#### **Sector Performance**

- EM sector returns were mixed in Q1.
- Energy, Healthcare and Financials outperformed, while Consumer Discretionary and Telecom lagged.



## Q1 2018 In Review: U.S. Fixed Income

#### **Performance**

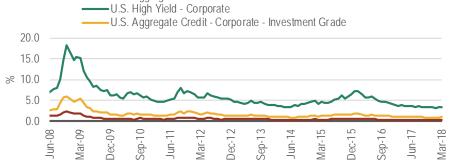
- All sectors of the Bloomberg Barclays U.S. Aggregate Index were negative in Q1.
- Investment grade (IG) corporate bonds returned -2.3%, underperforming MBS at -1.2% and CMBS at -1.2%. High yield bonds outperformed IG corporates with a return of -0.9%.
- The Treasury component of the Aggregate Index was down -1.2% in Q1. The Federal Reserve hiked short-term interest rates again in March.

#### **Spreads**

- All standard U.S. spread sectors were trading below historic medians at quarter end.
- High yield bond spreads ended Q1 at 354 bps over like-duration Treasuries versus 109 bps for IG corporates.
- "AAA" corporates were the best performer in IG, while the "CCC" sector posted the strongest returns in the below-IG liquid corporate credit universe.

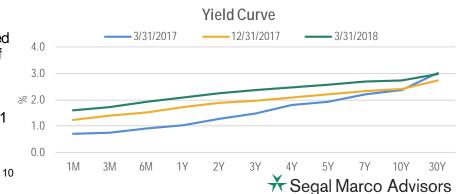
#### U.S. Fixed Income Index Returns\* 2% 0.4% 0.5% -1.6% -2.1% -4% -3.6% -6% Aggre gate Long Govt/Credit Inv Grade CMBS **Mortgage** 3-Month T-Bill Sovt/Credit ntermediate Government nv Grade Corporate **Sovt/Credit** Corporate Stable Value Hueler U.S. \*Bloomberg Barclay's Indices, unless otherwise noted.

# Bloomberg Barclays Option-Adjusted Spreads — U.S. Aggregate



#### **Yield Curve**

- The yield curve steepened in the first half of Q1 due to increased confidence in economic growth, but flattened in the second half of the quarter as expectations of future rate hikes increased. Short-term yields rose more than long rates. The 30-year Treasury yield increased 16 bps to 2.97% in Q1. The 10-year yield rose 28 bps, ending Q1 at 2.74%. The 5-year yield rose 31 bps, ending Q1 at 2.56%.
- The 2-year nominal Treasury yield rose 35 bps to 2.27% by quarter end.



## Q1 2018 In Review: International Fixed Income

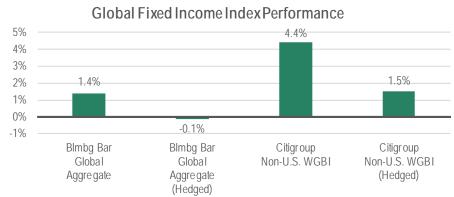
#### **Global Treasuries**

- The USD depreciated in Q1, which benefited most other developed currencies (e.g., the pound, euro and yen) and some select emerging markets currencies (e.g., the Mexican peso and Chinese renminbi).
- Developed sovereign yields rose modestly behind strengthening economic conditions and rising U.S. interest rates.



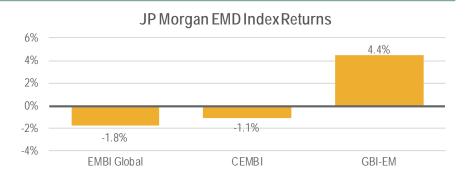
#### Global Fixed Income Index Returns

- The Global Aggregate Index was up 1.4% in Q1 because of currency appreciation, while the USD-hedged version of that index was down -0.1%.
- The Non-U.S. World Government Bond Index returned 4.4%, while the hedged version was up 1.5%.



#### **Emerging Market Debt**

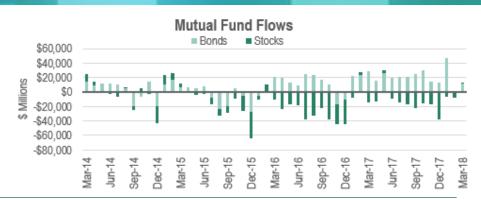
- JPM GBI-EM Index (local currency) advanced by 4.4%, while hard currency bonds (JPM EMBI Global) returned -1.8%.
- The USD-denominated corporate bond index (JPM CEMBI) also declined by -1.1%.



## Q1 2018 In Review: Mutual Fund Flows

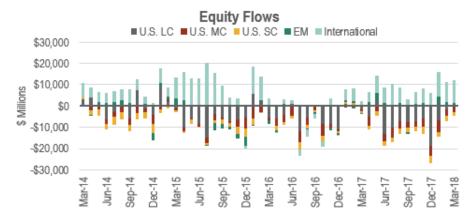
#### **Equity and Fixed Income Flows**

- Fixed income received net new inflows of approximately \$58.8 billion in Q1. Revised flows for Q4 were positive at \$58.2 billion.
- Equity experienced net outflows of approximately \$15.4 billion in Q1. Equity mutual funds had net outflows of \$70.7 billion in Q4.



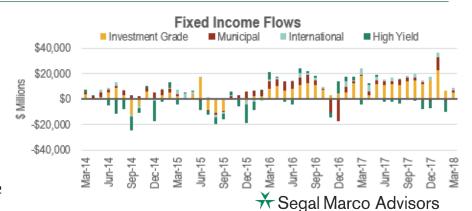
#### **Equity Flows**

- U.S. equity saw net outflows of \$56.2 billion, which exceeded net inflows from both international and emerging market equity, causing total equity net new cash flow to be negative in Q1.
- Net outflows were registered for mutual funds of every capitalization size within U.S. equity.
- International equity received the highest inflows at \$33.8 billion.



#### **Fixed Income Flows**

- Investment grade bonds saw the greatest net inflows in Q1 with approximately \$34.5 billion.
- High yield experienced its third consecutive quarter of net outflows with a loss of \$10.2 billion.
- Municipal bonds received \$10.5 billion in new capital during the quarter.
- International bonds gained \$5 billion in inflows.

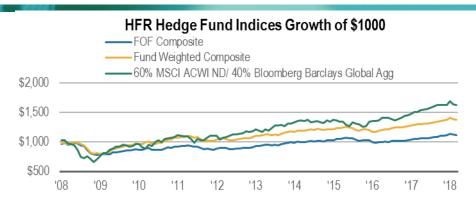


\*The most recent data available. Source this page: FactSet

## **Q1 2018 In Review: Absolute Return Strategies**

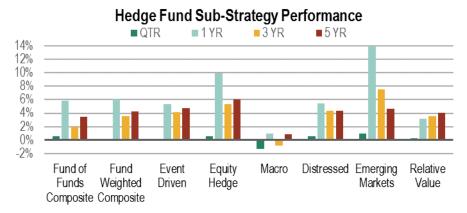
#### **Hedge Funds and Fund of Funds**

- Q1 hedge fund performance, as represented by the HFRI Fund Weighted Composite Index, was flat. The index has posted trailing 1-, 3-, and 5-year returns of 5.9%, 3.5%, and 4.2%, respectively.
- The HFRI Fund of Funds Composite Index was positive for the eighth straight quarter and up 0.3% in Q1. The index's respective trailing 1-, 3-, and 5-year returns were 5.6%, 1.9%, and 3.4%.



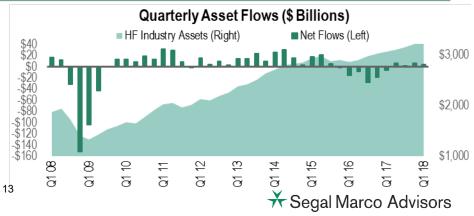
#### **Hedge Fund Sub-Strategies**

- Emerging markets, up 1.1%, led sub-strategy performance in Q1. The gain was driven largely by returns in Middle East/Africa and Russia/Eastern Europe.
- Equity Hedge gained 0.4% and benefited from sub-strategy performance in Technology, which saw a gain of 4.8% in Q1.
   Event Driven strategies were also positive, up 0.2% and aided by Credit Arbitrage and Distressed managers.
- Macro experienced a loss of -1.4% in Q1, led by declines in CTA strategies of -2.7% after a -6.2% loss in February, which was the worst month in the history of the CTA Index.



## **Hedge Fund Industry Asset Flows**

- Total hedge fund industry capital rose for the eighth consecutive quarter. Industry-wide assets totaled \$3.22 trillion by the end of Q1.
- Assets increased by \$4 billion in Q1 as investors continued to look to reduce equity beta through M&A, Activist, and Creditsensitive Event Driven strategy allocations. Over the trailing 12-month period, hedge fund industry capital has increased by 4.8%.



## **Q1 2018 In Review: Private Equity**

#### **Performance**

- The total return for private equity funds, comprising performance across all regions and strategies, was 4.8% in Q4 2017\* and 19.6% over the 1-year period ending Q4.
- Over the longer term, 5- and 20-year returns were 14.3% and 13.6%, respectively. The 10-year return lagged due to its inclusion of poor returns from the Global Financial Crisis, but increased from 9.1% to 9.5% QoQ.
- Performance for 2011 through 2015 vintage-year funds is strong, with all vintages generating mid- to high-teen returns.

# Private Equity Performance by Investment Horizon and Vintage Year: All Regions



"Vintage year" refers to the first year that capital was committed in a particular fund. Vintage-year performance is calculated as the median percentile returns of all funds reporting as pooled IRRs.

#### **Fundraising**

- U.S. private equity funds raised approximately \$66.5 billion across 242 funds in Q1 through March 15, the most recent data available.
- Global private equity fundraising reached a record high in December 2017 and the trend is expected to continue in 2018.
   The prospect of achieving superior returns to the more volatile public markets has been one driver of investors' increased allocations to private equity over the last several years.
- Strong fundraising and high asset valuations have contributed to rising levels of dry powder\*\*. While more capital flows into the asset class, managers are cautiously putting the money to work.

#### Private Equity Commitments: United States Other (Includes fund of funds, mezzanine, and secondaries) ■ Venture Buyout/Corporate Finance 400,000 350.000 300,000 250,000 200,000 150,000 100,000 50,000 2005 2006 2008 2009 2010 2013 2015 2016 2007 2011 2012

### **Exit Activity**

Exit activity continued to drop, falling from 401 exits in Q4 to 313 in Q1. Aggregate deal value slightly decreased from Q4, mostly due to M&A activities. Despite the QoQ decline, aggregate deal value was up 46% from one year ago and investor appetite for private equity is still strong. Venture capital financings were very active in Q1, up 57% in aggregate deal value from one year ago. Several large deals contributed to this increase, notably Go-Jek Indonesia's \$1.5 billion financing.

Private Equity Exit: All Regions

600,000

1PO M&A Number of Deals

3,000

2,000

1,000

2,000

1,000

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\*The most recent data available. Returns recorded as of May 2, 2018. This data will continually change as more funds report to the Thomson One database. \*\*Dry powder is capital raised that hasn't yet been invested.

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Sources this page: Thomson Reuters, *Private Equity Analyst*, Pregin

## Q1 2018 In Review: Real Estate

#### **U.S. Private Real Estate**

- The NCREIF NPI outperformed the ODCE index in Q1 2018 by 27 bps.
   For the trailing 1-year period, the ODCE posted a better result, returning 8.1% versus the NPI's 7.1%.
- Of the NPI property types, Industrial (3.3%) continued to outperform, up 150 bps over Office (1.8%), the index's second-best performer. Retail (0.7%) registered the weakest return in Q1.
- Of the NPI regions, the West (2.2%) remained in the top spot, albeit down 10 bps QoQ, outperforming the South (1.8%) by approximately 30 bps. The Midwest (1.3%) surpassed the East (1.2%).

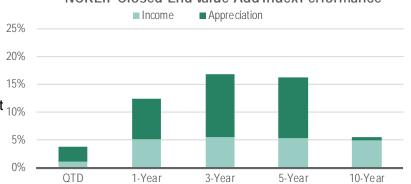
#### NCREIF NPI and ODCE Performance ■ Income ■ Appreciation 15.0% 10.0% 5.0% 0.0% ODCE ODCE ODCE ODCE NPI ODCE -5.0% QTD 3-Year 10-Year 1-Year 5-Year

The NPI (NCREIF Property Index) is a U.S. direct investment real estate index based on gross, market value weighted returns of individual properties and the NFI-ODCE (NCREIF Fund Index - Open-end Diversified Core Equity) is a fund-level cap-weighted, gross of fee, time-weighted return index.

#### Value-Add Real Estate

- The NFI-CEVA time-weighted gross total return was 4.2% in Q1, up 52 bps QoQ, and consisted of a 1.2% income yield and 3.0% appreciation return. For the trailing year, the total return was 13.3%, derived from approximately 4.9% income and 8.1% appreciation\*.
- Apartments, at 35.7%, represented most of the NFI-CEVA market value, followed by Office at 31.9%. Retail, Hotel, and Industrial comprised about 15.4% of market value with the remaining distributed to "Other."
- The Pacific sub-region's 28.3% market share drove the regional allocation heavily in favor of the West (37.3%) with the next two largest sub-regions being South East (15.4%) and North East (14.9%) pushing the South ahead of the East by 2.1%.

#### NCREIF Closed-End Value-Add Index Performance



#### **Public Real Estate**

- Global property stocks fell in Q1. The U.S. declined the most, down 780 bps. Europe and Asia registered losses of -0.7% and -0.2%, respectively.
- The U.S. operating environment remains favorable but has experienced decelerating/stabilizing cash flow growth, supported by modest economic growth and supply that is relatively in equilibrium with demand.
- Key Asian markets generally experienced modest growth with the exception of Tokyo office demand. There was a continuation of recent strength in Hong Kong retail sales.

Regional Real Estate Securities Performance U.S. Europe Asia 30% 25% 20% 15% 10% 5% 0% -5% -10% OTD 1-Year 3-Year 5-Year 10-Year

U.S.: FTSE EPRA/NAREIT U.S. Index Europe: FTSE EPRA/NAREIT Europe Developed Index Asia: FTSE EPRA/NAREIT Asia Developed Index

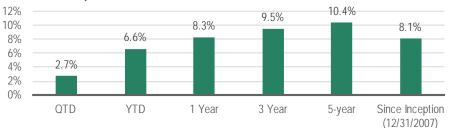
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## Q1 2018 In Review: Infrastructure

#### **Private Infrastructure Performance**

- Private infrastructure posted a 2.7% return in Q3 2017\*, bringing the Pregin Infrastructure Index's year to date return to 6.6%.
- The 1-, 3-, and 5-year numbers exceeded since-inception performance, indicating the asset class has recovered nicely from the financial crisis.



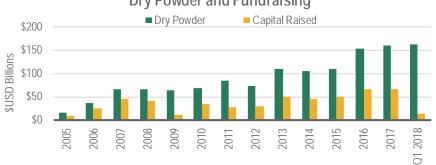


According to Preqin, the Preqin Infrastructure Index captures the average returns earned by investors in their infrastructure portfolios, based on the actual amount of money invested. The Preqin Infrastructure index is calculated on a guarterly basis using data from Preqin's Infrastructure Online services.

#### **Dry Powder and Fundraising**

- Infrastructure funds raised \$13 billion in Q1 2018, up from the \$9.2 billion raised in Q4 2017. The number of fund closings declined from 12 to 8 over the same period.
- Dry powder\*\* increased minimally from Q4 to Q1, as managers were able to deploy capital even with the uptick in fundraising.

#### Dry Powder and Fundraising



#### **Public Infrastructure Performance**

- The FTSE Global Infrastructure 50/50 Index returned -4.3% in Q1 2018.
- Infrastructure underperformed the global public equity market as measured by the FTSE All World Index (-0.9%), which also posted a loss in Q1.
- Infrastructure stocks tied to trade (railways and ports) faced pressure from continued discussion of a possible trade war. Midstream energy continued to struggle amidst increased uncertainty surrounding ongoing company restructurings.

#### FTSE Global Core Infrastructure 50/50 Index 9.2% 10.0% 7.5% 8.0% 6.1% 5.4% 6.0% 4.0% 2.0% 0.0% -2.0% -4.0% -6.0% -4.3% Q1 2018 1 Year 3 Years 5 Years 7 Years

## Q1 2018 In Review: Commodities and Currencies

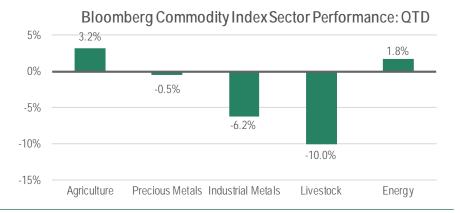
#### **Commodity Performance**

- The Bloomberg Commodity Index returned -0.4% in Q1. The trailing 1-year return remained positive, however, due to strong performance in the second half of 2017.
- With regard to sectors, 1-year returns through Q1 2018 varied widely, as losses in Livestock (-4.4%) and Agriculture (-5.4%) were offset by large gains in Energy (9.9%) and Industrial Metals (12.7%).



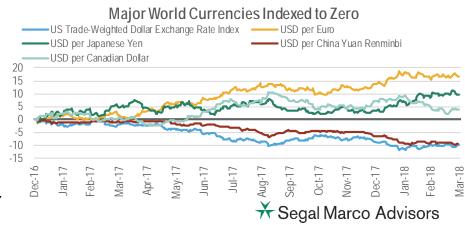
#### **Sector Returns**

- Agriculture was the best-performing sector in Q1, with its return attributed to gains for soybean meal and corn. Wheat was also positive during the quarter as dry and freezing weather limited supply in the U.S. Great Plains region.
- Energy rose as crude oil and petroleum products performed well. Strong demand and compliance with the OPEC-led production cut led global inventories to decrease. Natural gas fell due to increased U.S. production.
- Livestock declined after China (one of the largest pork importers) announced new tariffs on U.S. pork and beef.



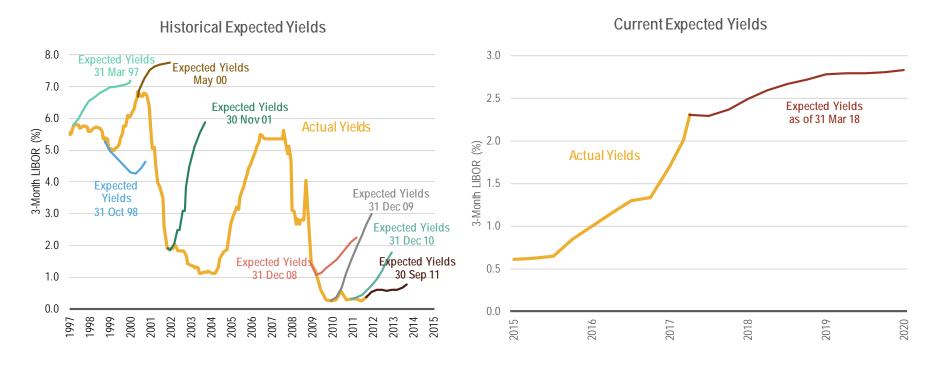
#### **Currencies**

- The USD remained weak relative to other major world currencies in Q1.
- The Federal Reserve raised U.S. interest rates to a range of 1.5%-1.75% in March, and more rate hikes are projected in 2018, but the rate increases are not strengthening the USD as they have in the past.
- Improving economic growth outside of the U.S. and worries about tariffs and global trade are potential drivers of a depreciating USD.



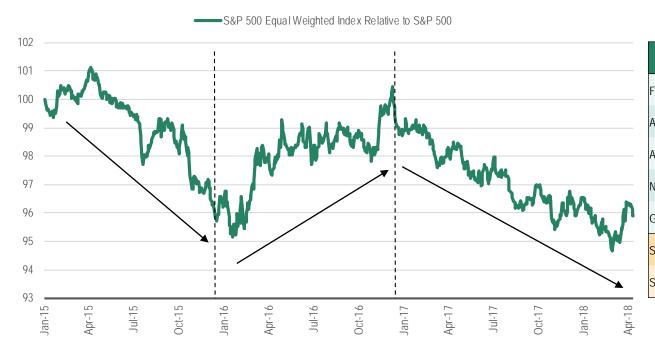
#### Yield Projections: Wrong For So Long, But Right This Time?

- Throughout history we have seen several inaccurate (and, in hindsight, almost comical) near-term interest rate forecasts measured by
  implied futures contracts (see graph, bottom left). Especially since 2009, yields were expected to rise, but the Federal Reserve stayed
  with its zero policy rate.
- Actual yields have finally come up since 2015. But future short-term yields are expected to be tamer relative to the forecasts we have seen since 2009 (see graph, bottom right). While the Fed wants to address improved economic conditions and the potential for inflation, it is limited in how much it can tighten given that longer rates are not moving up as fast. If that relationship continues, the Fed risks a socalled "inverted yield curve" scenario, which is commonly a precursor to recession.
- The expected yield forecasts for three-month implied futures look more accurate this time around. The market could actually get it right, even though its track record has not been very good.



#### S&P 500 Equal-Weighted Index vs. Cap-Weighted Index

- The graph below shows the relative performance of the S&P 500 index, which is weighted by the market capitalization of each stock
  within it (also known as a cap-weighted index), and the S&P 500 Equal-Weighted index, which includes the same companies as the
  cap-weighted index, but applies an equal weighting to each stock.
- When the line in the graph below decreases, the cap-weighted S&P 500 index outperforms the equal-weighted index. The recent
  outperformance of the cap-weighted S&P 500 index was driven by large and mega-cap stocks, and the FAANG\* stocks in particular,
  as shown in the table.
- Given the FAANG stocks' concentration in the cap-weighted index, they are likely to contribute meaningfully to equity returns and volatility in the future if valuations return to more normalized levels.



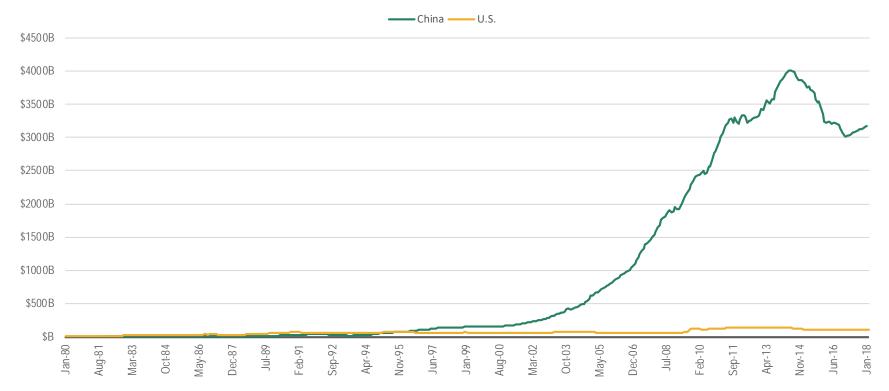
#### **Annual Returns**

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
- acebook	34%	10%	53%	-7%
Amazon	118%	11%	56%	23%
Apple	-3%	12%	48%	2%
Vetflix	134%	8%	55%	60%
Google (Alphabet)	47%	2%	33%	-2%
S&P 500 Equal Weight	-2%	15%	19%	-1%
S&P 500 Cap Weight	1%	12%	22%	0%

#### Reserves and a Trade War

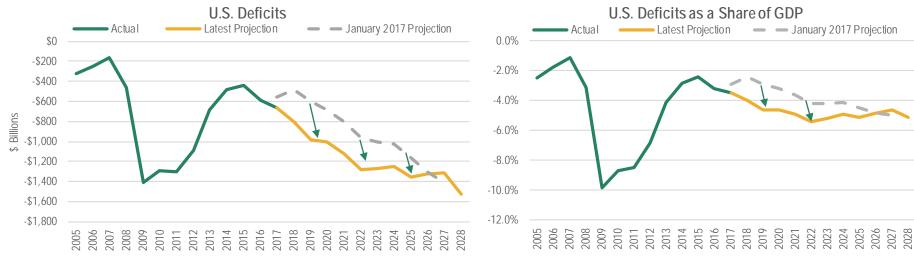
- The vast majority of total reserves relate to foreign exchange representing foreign currencies held by a country's central bank.
- A key use of these reserves is to provide stability, but they also enable the holder to maintain a lower currency value relative to the USD.
- The U.S.'s low reserves may be less problematic given the USD acting as the reserve currency and the U.S.'s ability to borrow.
- Yet, if a trade war were to occur between China and the U.S., China's ability to apply reserves to support exports appears strong.





#### **Federal Deficit Projections**

- The recent Federal tax cuts and increased spending bill are expected to push the U.S. national deficit beyond \$1 trillion by 2020 and
  upwards of \$1.5 trillion by 2028 according to the latest projections published by the Congressional Budget Office (CBO). The graphs below
  show the shift in projected deficits in dollar terms and as a share of GDP from January 2017, the start of the current administration's term,
  to April 2018, the date of the most recent projections, which factor in the policy changes by the Federal government.
- The CBO estimates the deficit average from 2019-2018 will be 4.9% of GDP, which is the highest since World War II, except for during the 2007-2009 Great Recession.
- Debt held by the public is expected to rise from 78% of GDP in 2018 to 96% of GDP by 2028, a level that would place significant and concerning financial burdens on the economy.
- With debt levels this high, U.S. debt interest payments would increase significantly, particularly due to the anticipated rise in interest rates, and the Federal government would therefore have less money to spend on growing its economy or to use in the case of unexpected events. To reduce the deficit, there would likely be heightened political focus on trimming entitlement programs such as Social Security and Medicare during a time of greater need as the Baby Boomer generation enters retirement.
- The CBO expects economic growth to be relatively strong in 2018 and 2019 as a result of the recent policy changes, and then moderate in the years following. Should real GDP increase beyond the CBO's current forecast, it could reduce the estimated deficits shown below.
   There is a large degree of uncertainty surrounding many economic factors the CBO considered to determine these deficit projections, and we will likely see additional revisions in either direction as time progresses.

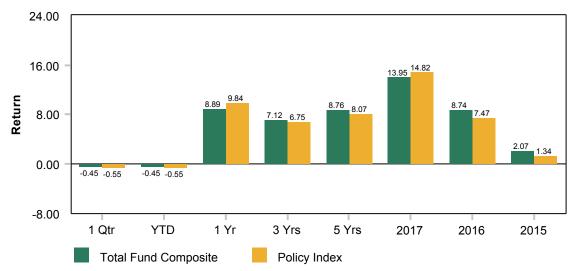


**Total Fund Composite** 

#### **Asset Allocation by Segment**

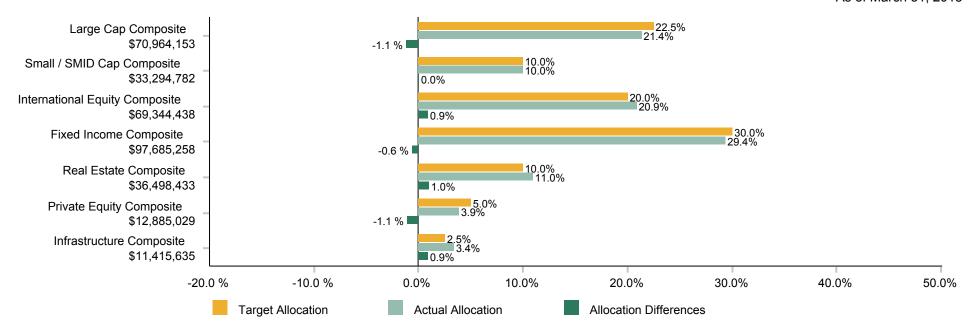
	Market Value	Allocation
Segments	(\$)	(%)
Domestic Equity	103,558,432	31.16
Domestic Fixed Income	83,311,212	25.07
International Equity	69,260,233	20.84
Real Estate	36,498,282	10.98
Private Equity	21,232,170	6.39
Alternative Investment	11,415,635	3.44
Cash	7,033,254	2.12

#### **Performance Bar Chart**



#### Gain / Loss

1 Qtr		YTD	1 Yr	3 Yrs	5 Yrs
Total Fund Composite					
Beginning Market Value	339,004,581	339,004,581	310,685,824	303,567,180	255,425,266
Net Cash Flows	-6,026,233	-6,026,233	-8,608,440	-36,979,547	-45,157,204
Income	938,298	938,298	4,009,071	13,472,681	20,966,791
Gain/Loss	-1,607,428	-1,607,428	26,222,763	52,248,904	101,074,365
Ending Market Value	332,309,218	332,309,218	332,309,218	332,309,218	332,309,218



	Asset Allocation (\$)	Asset Allocation (%)	Interim Target Allocation (%)	Differences (%)	Minimum Allocation (%)	Maximum Allocation (%)
Total Fund Composite	332,309,218	100.00	100.00	0.00	N/A	N/A
Large Cap Composite	70,964,153	21.35	22.50	-1.15	15.00	30.00
Small / SMID Cap Composite	33,294,782	10.02	10.00	0.02	7.00	15.50
International Equity Composite	69,344,438	20.87	20.00	0.87	15.00	25.00
Fixed Income Composite	97,685,258	29.40	30.00	-0.60	25.00	37.50
Real Estate Composite	36,498,433	10.98	10.00	0.98	7.00	14.00
Private Equity Composite	12,885,029	3.88	5.00	-1.12	0.00	15.00
Infrastructure Composite	11,415,635	3.44	2.50	0.94	0.00	5.00

	Total Fu	nd
	(\$)	%
Total Fund Composite	332,309,218	100.00
Domestic Equity Composite	104,258,936	31.37
Large Cap Composite	70,964,153	21.35
Northern Trust S&P 500	70,964,153	21.35
Small / SMID Cap Composite	33,294,782	10.02
TSW - SMID Value	16,754,823	5.04
Frontier Capital	16,539,959	4.98
International Equity Composite	69,344,438	20.87
Brandes International Small Cap	15,512,665	4.67
Wellington International	53,831,773	16.20
Fixed Income Composite	97,685,258	29.40
Baird Core Plus Bond	43,843,460	13.19
Neuberger & Berman Short Duration	33,157,101	9.98
AG Direct Lending Fund II, L.P.	8,347,141	2.51
GoldenTree Multi-Sector LP	12,337,557	3.71
Real Estate Composite	36,498,433	10.98
Morgan Stanley	26,360,608	7.93
Principal Enhanced Property Fund	10,137,824	3.05
Private Equity Composite	12,885,029	3.88
NB Crossroads Fund XXI	10,352,856	3.12
HarbourVest Dover Fund IX	2,532,173	0.76
Infrastructure Composite	11,415,635	3.44
IFM Global Infrastructure	11,415,635	3.44
Investment Cash Account	221,490	0.07

					Perform	ance (%)				
	1 Quarter	Year To Date	Oct-2017 To Mar-2018	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
<b>Total Fund Composite</b>	-0.45	-0.45	2.69	8.89	7.12	8.76	8.52	6.90	7.92	02/01/1991
Policy Index	-0.55	-0.55	3.22	9.84	6.75	8.07	8.11	6.85	8.03	
Large Cap Composite	-0.77	-0.77	5.82	14.01	10.76	13.30	12.15	8.68	8.95	09/01/2002
S&P 500	-0.76	-0.76	5.84	13.99	10.78	13.31	12.71	9.49	9.24	
Small / SMID Cap Composite	-1.47	-1.47	1.88	6.79	7.15	11.96	10.92	8.63	10.71	09/01/2002
Small / SMID Policy	-0.24	-0.24	4.99	12.31	8.15	11.80	10.62	10.00	10.72	
International Equity Composite	-0.85	-0.85	2.58	12.82	7.56	6.96	N/A	N/A	7.08	05/01/2013
MSCI AC World ex USA (Net)	-1.18	-1.18	3.76	16.53	6.18	5.89	4.26	2.70	5.21	
Fixed Income Composite	-0.92	-0.92	-0.31	2.32	1.82	1.95	2.89	3.41	7.31	02/01/1991
Bond Index	-1.46	-1.46	-1.08	0.47	1.00	1.44	2.33	3.17	5.26	
Real Estate Composite	2.19	2.19	4.35	9.15	11.31	12.91	13.01	5.78	5.78	04/01/2008
Real Estate Policy	2.05	2.05	4.16	7.90	9.87	11.11	11.50	5.23	5.23	

					Perform	nance (%)				•
			Oct-2017	_		_	_	40		
	1 Quarter	Year To Date	To Mar-2018	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Large Cap Composite	-0.77	-0.77	5.82	14.01	10.76	13.30	12.15	8.68	8.95	09/01/2002
S&P 500	-0.76	-0.76	5.84	13.99	10.78	13.31	12.71	9.49	9.24	
Northern Trust S&P 500	-0.77	-0.77	5.82	14.01	10.76	13.30	N/A	N/A	14.62	11/01/2012
S&P 500	-0.76	-0.76	5.84	13.99	10.78	13.31	12.71	9.49	14.64	
IM U.S. Large Cap Core Equity (SA+CF) Median	-0.44	-0.44	6.14	14.02	10.23	13.32	12.73	9.75	14.69	
Northern Trust S&P 500 Rank	66	66	60	51	34	53	N/A	N/A	54	
Small / SMID Cap Composite	-1.47	-1.47	1.88	6.79	7.15	11.96	10.92	8.63	10.71	09/01/2002
Small / SMID Policy	-0.24	-0.24	4.99	12.31	8.15	11.80	10.62	10.00	10.72	
TSW - SMID Value	-0.55	-0.55	2.25	3.70	6.09	N/A	N/A	N/A	8.59	11/01/2013
Russell 2500 Value Index	-2.65	-2.65	1.49	5.72	7.26	9.88	9.95	9.34	8.32	
IM U.S. SMID Cap Value Equity (SA+CF) Median	-1.28	-1.28	3.72	9.14	7.85	11.35	11.20	10.88	9.33	
TSW - SMID Value Rank	31	31	73	90	79	N/A	N/A	N/A	65	
Frontier Capital	-2.49	-2.49	1.38	9.91	7.91	N/A	N/A	N/A	11.81	08/01/2013
Russell 2500 Growth Index	2.38	2.38	8.88	19.92	9.11	13.37	11.83	11.17	11.89	
IM U.S. SMID Cap Growth Equity (SA+CF) Median	3.30	3.30	9.43	19.95	9.42	12.88	12.05	11.70	11.31	
Frontier Capital Rank	99	99	99	97	77	N/A	N/A	N/A	45	
International Equity Composite	-0.85	-0.85	2.58	12.82	7.56	6.96	N/A	N/A	7.08	05/01/2013
MSCI AC World ex USA (Net)	-1.18	-1.18	3.76	16.53	6.18	5.89	4.26	2.70	5.21	
Brandes International Small Cap	-1.58	-1.58	-0.07	4.10	N/A	N/A	N/A	N/A	7.16	05/01/2015
MSCI EAFE Small Cap (Net)	0.24	0.24	6.31	23.49	12.25	11.10	8.74	6.48	10.90	
IM International Small Cap Equity (SA+CF) Median	0.36	0.36	6.68	24.97	12.19	11.32	9.92	8.05	10.77	
Brandes International Small Cap Rank	88	88	97	100	N/A	N/A	N/A	N/A	93	
Wellington International	-0.57	-0.57	3.55	16.19	7.34	N/A	N/A	N/A	6.22	11/01/2013
MSCI AC World ex USA (Net)	-1.18	-1.18	3.76	16.53	6.18	5.89	4.26	2.70	4.29	
IM International Core Equity (SA+CF) Median	-0.65	-0.65	3.57	18.13	7.22	8.10	6.77	4.24	6.00	
Wellington International Rank	48	48	52	68	48	N/A	N/A	N/A	46	

	Performance (%)										
			Oct-2017		_	_	_				
	1 Quarter	Year To Date	To Mar-2018	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date	
Fixed Income Composite	-0.92	-0.92	-0.31	2.32	1.82	1.95	2.89	3.41	7.31	02/01/199	
Bond Index	-1.46	-1.46	-1.08	0.47	1.00	1.44	2.33	3.17	5.26	02/01/100	
Baird Core Plus Bond	-1.33	-1.33	-0.70	N/A	N/A	N/A	N/A	N/A	0.41	06/01/20	
Blmbg. Barc. U.S. Aggregate	-1.46	-1.46	-1.08	1.20	1.20	1.82	2.92	3.63	-0.34		
IM U.S. Broad Market Core+ Fixed Income (MF) Median	-1.39	-1.39	-1.06	1.71	1.66	2.03	3.37	4.34	0.11		
Baird Core Plus Bond Rank	42	42	27	N/A	N/A	N/A	N/A	N/A	32		
NB Fixed Income Composite	-0.95	-0.95	-1.05	0.49	0.78	0.94	N/A	N/A	0.92	01/01/201	
Neuberger & Berman Short Duration	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.28	02/01/201	
NB Blended Benchmark*	0.13	0.13	0.22	0.76	0.58	0.51	0.54	0.83	0.17		
IM U.S. Short Duration Fixed Income (MF) Median	-0.17	-0.17	-0.19	0.76	0.77	0.70	1.02	1.61	0.03		
Neuberger & Berman Short Duration Rank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	92		
GoldenTree Multi-Sector LP	1.47	1.47	2.81	N/A	N/A	N/A	N/A	N/A	2.81	10/01/20	
GT Blended Index**	0.44	0.44	1.51	4.46	4.83	4.38	5.03	6.37	1.51		
Blmbg. Barc. U.S. Aggregate	-1.46	-1.46	-1.08	1.20	1.20	1.82	2.92	3.63	-1.08		
M U.S. Broad Market Core+ Fixed Income (MF) Median	-1.39	-1.39	-1.06	1.71	1.66	2.03	3.37	4.34	-1.06		
GoldenTree Multi-Sector LP Rank	1	1	1	N/A	N/A	N/A	N/A	N/A	1		
Real Estate Composite	2.19	2.19	4.35	9.15	11.31	12.91	13.01	5.78	5.78	04/01/20	
Real Estate Policy	2.05	2.05	4.16	7.90	9.87	11.11	11.50	5.23	5.23		
Morgan Stanley	2.00	2.00	4.12	8.83	10.47	12.43	12.67	5.56	5.56	04/01/20	
NCREIF ODCE Equal Weighted	2.17	2.17	4.37	8.16	10.26	11.48	11.82	4.93	4.93		
Principal Enhanced Property Fund	2.66	2.66	4.92	9.97	13.84	N/A	N/A	N/A	14.00	11/01/20	
NCREIF Property Index	1.70	1.70	3.53	7.12	8.72	10.00	10.55	6.09	9.85		
nfrastructure Composite	7.11	7.11	11.70	N/A	N/A	N/A	N/A	N/A	14.25	09/01/20	
IFM Global Infrastructure	7.11	7.11	11.70	N/A	N/A	N/A	N/A	N/A	14.25		

<sup>\*</sup>NB Blended Benchmark consists of 40% Bloomberg Barclays 1-3 Year Gov/Credit and 60% BofA Merrill Lynch 3 Month T-Bill.

\*\*GT Blended Index consists of 33.34% BofA Merrill Lynch High Yield Master II, 33.33% HFRI RV: Fixed Income-Corporate Index, and 33.33% S&P/LSTA Leveraged Loan Index.

	Market Value (\$)	%	1 Quarter	Oct-2017 To Mar-2018	1 Year	3 Years	5 Years	7 Years	Since Inception	Inception Date
Private Equity										
Private Equity Composite	12,885,029	3.88	0.00	0.35	8.25	N/A	N/A	N/A	8.62	06/23/2016
NB Crossroads Fund XXI	10,352,856	3.12	0.00	0.00	4.32	N/A	N/A	N/A	3.61	06/23/2016
HarbourVest Dover Fund IX	2,532,173	0.76	0.00	1.81	27.56	N/A	N/A	N/A	45.80	12/16/2016
Private Debt										
AG Direct Lending Fund II, L.P.	8,347,141	2.51	0.00	2.23	N/A	N/A	N/A	N/A	6.63	05/31/2017

	Performance (%)											
	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2006	
Total Fund Composite	13.95	8.74	2.07	8.14	19.47	12.40	0.74	13.24	15.81	-23.72	11.23	
Policy Index	14.82	7.47	1.34	6.92	17.92	11.54	2.70	13.36	16.85	-22.38	11.61	
Large Cap Composite	21.83	11.89	1.41	13.67	32.30	17.06	-3.31	16.46	29.59	-40.76	15.25	
S&P 500	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.06	26.46	-37.00	15.79	
Small / SMID Cap Composite	13.57	20.32	-3.16	10.71	36.00	12.94	1.91	21.00	14.96	-36.71	15.33	
Small / SMID Policy	16.81	17.59	-2.90	7.07	37.79	16.35	-4.18	26.85	27.17	-33.79	18.37	
International Equity Composite	21.90	4.08	3.39	-2.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MSCI AC World ex USA (Net)	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	26.65	
Fixed Income Composite	4.28	3.08	0.68	4.57	-1.85	4.44	6.64	6.20	6.02	3.36	4.52	
Bond Index	2.65	1.97	1.21	4.12	-1.02	3.56	5.97	6.15	6.46	4.86	4.57	
Real Estate Composite	8.88	10.28	15.88	14.03	16.03	11.68	16.33	15.15	-33.00	N/A	N/A	
Real Estate Policy	7.59	8.94	14.71	12.24	12.76	10.91	15.53	15.38	-27.37	-9.40	16.26	

	1				D (		- (0/)			73 OI IV	naich 51,
	Performance (%) 2017   2016   2015   2014   2013   2012   2011   2010   2009   2008								2000	2000	
1 O O											2006
Large Cap Composite	21.83	11.89	1.41	13.67	32.30	17.06	-3.31	16.46	29.59	-40.76	15.25
S&P 500	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.06	26.46	-37.00	15.79
Northern Trust S&P 500	21.83	11.89	1.41	13.67	32.30	N/A	N/A	N/A	N/A	N/A	N/A
S&P 500	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.06	26.46	-37.00	15.79
IM U.S. Large Cap Core Equity (SA+CF) Median	21.82	10.50	1.39	13.43	32.98	15.71	2.03	14.80	26.53	-35.97	15.57
Northern Trust S&P 500 Rank	50	33	50	44	61	N/A	N/A	N/A	N/A	N/A	N/A
Small / SMID Cap Composite	13.57	20.32	-3.16	10.71	36.00	12.94	1.91	21.00	14.96	-36.71	15.33
Small / SMID Policy	16.81	17.59	-2.90	7.07	37.79	16.35	-4.18	26.85	27.17	-33.79	18.37
TSW - SMID Value	7.51	19.19	-1.03	8.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Value Index	10.36	25.20	-5.49	7.11	33.32	19.21	-3.36	24.82	27.68	-31.99	20.18
IM U.S. SMID Cap Value Equity (SA+CF) Median	14.78	19.40	-3.01	7.06	35.78	16.99	-2.09	25.50	35.44	-35.68	17.87
TSW - SMID Value Rank	92	52	29	39	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Frontier Capital	19.76	21.33	-5.69	13.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Growth Index	24.46	9.73	-0.19	7.05	40.65	16.13	-1.57	28.86	41.65	-41.50	12.26
IM U.S. SMID Cap Growth Equity (SA+CF) Median	24.95	8.56	0.09	5.65	40.05	15.55	-1.74	30.03	37.43	-41.46	11.13
Frontier Capital Rank	80	2	93	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
International Equity Composite	21.90	4.08	3.39	-2.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI AC World ex USA (Net)	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	26.65
Brandes International Small Cap	12.81	10.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI EAFE Small Cap (Net)	33.01	2.18	9.59	-4.95	29.30	20.00	-15.94	22.04	46.78	-47.01	19.31
IM International Small Cap Equity (SA+CF) Median	34.97	1.19	10.24	-3.41	31.17	23.58	-13.62	23.68	46.07	-47.08	29.39
Brandes International Small Cap Rank	100	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wellington International	25.40	1.76	1.86	-2.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI AC World ex USA (Net)	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	26.65
IM International Core Equity (SA+CF) Median	28.10	1.31	1.09	-3.49	23.96	19.73	-12.37	11.89	33.85	-44.14	27.77
Wellington International Rank	73	46	45	40	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	Performance (%)								iaicii 5 i,		
	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2006
Fixed Income Composite	4.28	3.08	0.68	4.57	-1.85	4.44	6.64	6.20	6.02	3.36	4.52
Bond Index	2.65	1.97	1.21	4.12	-1.02	3.56	5.97	6.15	6.46	4.86	4.57
Baird Core Plus Bond	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Aggregate	3.54	2.65	0.55	5.97	-2.02	4.21	7.84	6.54	5.93	5.24	4.34
IM U.S. Broad Market Core+ Fixed Income (MF) Median	4.47	4.19	-0.30	5.28	-1.06	8.25	5.95	8.32	14.81	-3.29	4.25
Baird Core Plus Bond Rank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NB Fixed Income Composite	2.18	1.50	0.94	2.43	-1.24	N/A	N/A	N/A	N/A	N/A	N/A
Neuberger & Berman Short Duration	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NB Blended Benchmark*	0.85	0.71	0.29	0.33	0.30	0.57	0.70	1.19	1.64	3.22	4.61
IM U.S. Short Duration Fixed Income (MF) Median	1.31	1.42	0.27	0.62	0.23	2.35	1.16	3.17	6.00	-1.06	4.06
Neuberger & Berman Short Duration Rank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GoldenTree Multi-Sector LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GT Blended Index**	6.08	13.03	-2.36	1.79	6.14	12.06	2.27	12.39	46.32	-26.43	9.76
Blmbg. Barc. U.S. Aggregate	3.54	2.65	0.55	5.97	-2.02	4.21	7.84	6.54	5.93	5.24	4.34
IM U.S. Broad Market Core+ Fixed Income (MF) Median	4.47	4.19	-0.30	5.28	-1.06	8.25	5.95	8.32	14.81	-3.29	4.25
GoldenTree Multi-Sector LP Rank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Estate Composite	8.88	10.28	15.88	14.03	16.03	11.68	16.33	15.15	-33.00	N/A	N/A
Real Estate Policy	7.59	8.94	14.71	12.24	12.76	10.91	15.53	15.38	-27.37	-9.40	16.26
Morgan Stanley	8.75	9.23	14.59	14.15	16.20	11.68	16.33	15.15	-33.00	N/A	N/A
NCREIF ODCE Equal Weighted	7.80	9.27	15.17	12.38	13.36	11.03	15.96	16.14	-30.65	-10.37	16.15
Principal Enhanced Property Fund	9.21	13.34	20.25	13.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Property Index	6.96	7.97	13.33	11.82	10.98	10.54	14.26	13.11	-16.85	-6.46	16.60
Infrastructure Composite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IFM Global Infrastructure	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

<sup>\*</sup>NB Blended Benchmark consists of 40% Bloomberg Barclays 1-3 Year Gov/Credit and 60% BofA Merrill Lynch 3 Month T-Bill.

\*\*GT Blended Index consists of 33.34% BofA Merrill Lynch High Yield Master II, 33.33% HFRI RV: Fixed Income-Corporate Index, and 33.33% S&P/LSTA Leveraged Loan Index.

## **Comparative Performance**

	Allocation		Performance (%)												
		Oct-2004	Oct-2005	Oct-2006	Oct-2007	Oct-2008	Oct-2009	Oct-2010	Oct-2011	Oct-2012	Oct-2013	Oct-2014	Oct-2015	Oct-2016	Oct-2017
	Market Value	То	То	To	To	То	To	To	То	То	To	То	То	То	To
	(\$000)	Sep-2005	Sep-2006	Sep-2007	Sep-2008	Sep-2009	Sep-2010	Sep-2011	Sep-2012	Sep-2013	Sep-2014	Sep-2015	Sep-2016	Sep-2017	Mar-2018
<b>Total Fund Composite</b>	332,309	9.78	7.74	12.55	-12.76	-2.12	8.82	0.36	20.29	13.62	11.04	1.80	11.33	11.65	2.69
Policy Index		8.25	7.64	11.79	-11.28	-1.82	9.29	2.00	19.44	12.76	9.80	0.64	9.85	11.66	3.22

	Performance (%)									
	_		Oct-2017			_				
	1 Quarter	Year To Date	To Mar-2018	1 Year	3 Years	5 Years				
Total Fund Commonite	-									
Total Fund Composite	-0.53	-0.53	2.52	8.53	6.75	8.43				
Policy Index	-0.55	-0.55	3.22	9.84	6.75	8.07				
Northern Trust S&P 500	-0.77	-0.77	5.82	14.01	10.76	13.28				
S&P 500	-0.76	-0.76	5.84	13.99	10.78	13.31				
TSW - SMID Value	-0.75	-0.75	1.90	2.89	5.22	N/A				
Russell 2500 Value Index	-2.65	-2.65	1.49	5.72	7.26	9.88				
Frontier Capital	-2.70	-2.70	0.97	9.06	7.05	N/A				
Russell 2500 Growth Index	2.38	2.38	8.88	19.92	9.11	13.37				
Brandes International Small Cap	-1.81	-1.81	-0.55	3.10	N/A	N/A				
MSCI EAFE Small Cap (Net)	0.24	0.24	6.31	23.49	12.25	11.10				
Wellington International	-0.74	-0.74	3.20	15.42	6.59	N/A				
MSCI AC World ex USA (Net)	-1.18	-1.18	3.76	16.53	6.18	5.89				
Baird Core Plus Bond	-1.45	-1.45	-0.95	N/A	N/A	N/A				
Blmbg. Barc. U.S. Aggregate	-1.46	-1.46	-1.08	1.20	1.20	1.82				
Neuberger & Berman Short Duration	N/A	N/A	N/A	N/A	N/A	N/A				
NB Blended Benchmark*	0.13	0.13	0.22	0.76	0.58	0.51				
GoldenTree Multi-Sector LP	1.47	1.47	2.81	N/A	N/A	N/A				
GT Blended Index**	0.44	0.44	1.51	4.46	4.83	4.38				
Blmbg. Barc. U.S. Aggregate	-1.46	-1.46	-1.08	1.20	1.20	1.82				
Morgan Stanley	2.00	2.00	4.12	8.83	10.47	12.43				
NCREIF ODCE Equal Weighted	2.17	2.17	4.37	8.16	10.26	11.48				
Principal Enhanced Property Fund	2.66	2.66	4.92	9.97	13.84	N/A				
NCREIF Property Index	1.70	1.70	3.53	7.12	8.72	10.00				
IFM Global Infrastructure	7.11	7.11	11.70	N/A	N/A	N/A				

<sup>\*</sup>NB Blended Benchmark consists of 40% Bloomberg Barclays 1-3 Year Gov/Credit and 60% BofA Merrill Lynch 3 Month T-Bill.

<sup>\*\*</sup>GT Blended Index consists of 33.34% BofA Merrill Lynch High Yield Master II, 33.33% HFRI RV: Fixed Income-Corporate Index, and 33.33% S&P/LSTA Leveraged Loan Index.

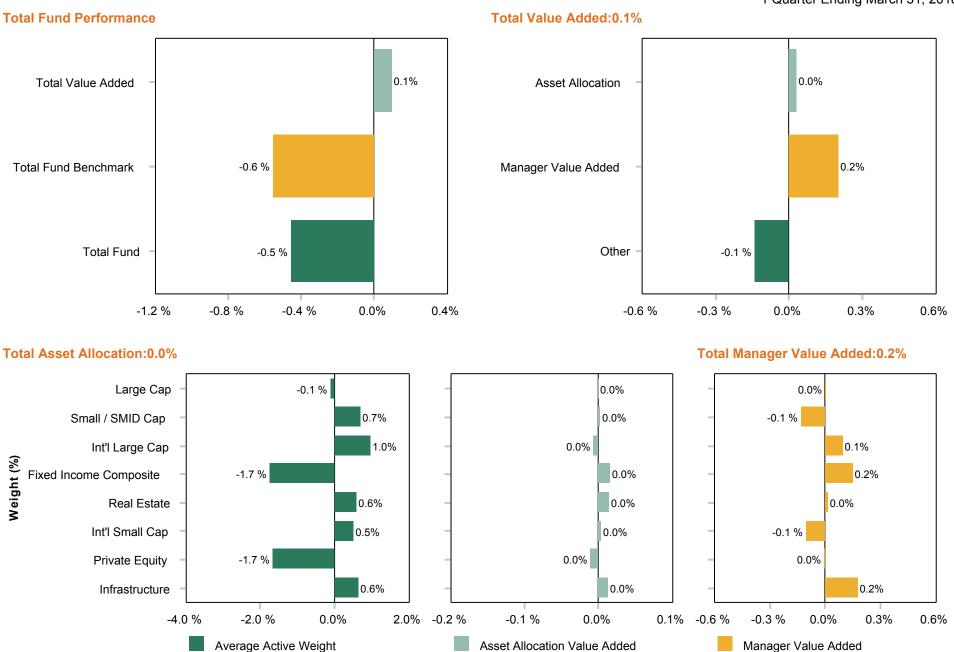


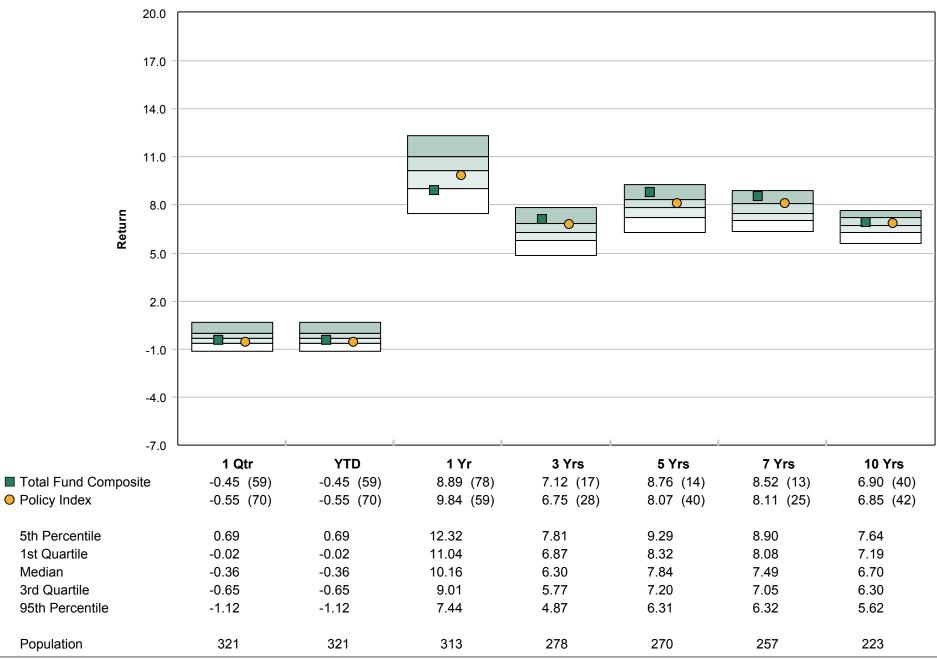
# Watch List – March 31, 2018

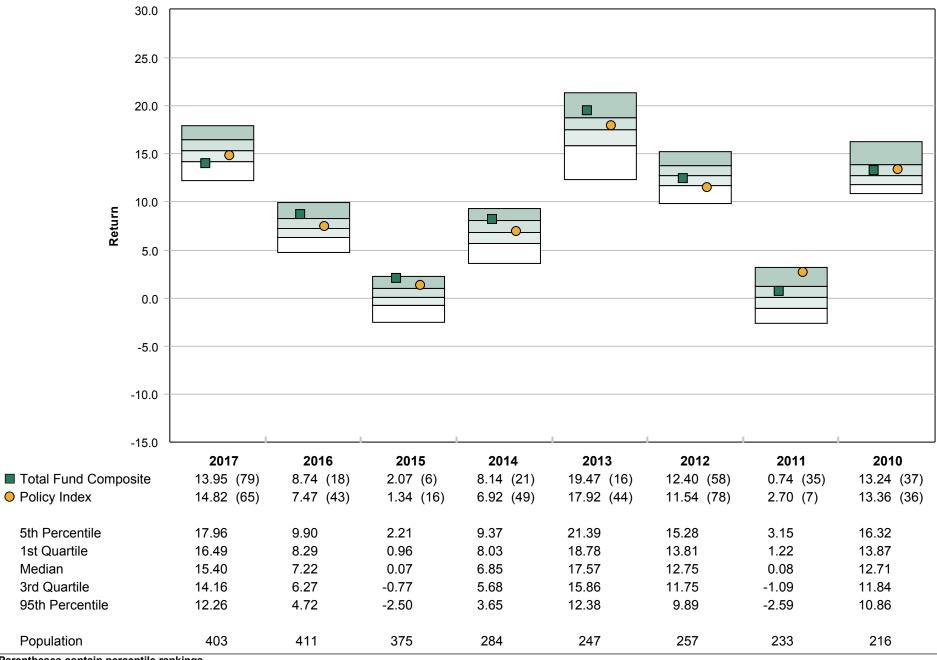
Equity Managers	Strategy	Rating	Renchmark Criteria			Evreed Pee				Comments				
. , 3			3-Yr	Manager Returns %	Benchmark Returns %	5-Yr	Manager Returns %	Benchmark Returns %	Inception*	Manager Returns %	Benchmark Returns %		5-Yr	
Frontier	SMId Cap Growth	Recommended	No	7.1	9.1	NA	NA	NA	Yes	10.9	11.9	77	N/A	Performance & Communication

<sup>\*</sup> Frontier placed on "Watch List" February 22, 2018. Performance is Net of Fees. Inception Date - Frontier: 8/1/2013

1 Quarter Ending March 31, 2018



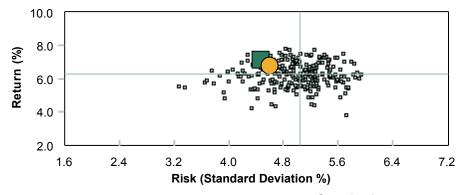




The City of Hollywood

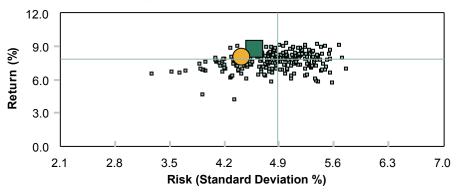
## As of March 31, 2018

# Risk & Return Plan Sponsor — 3 Years



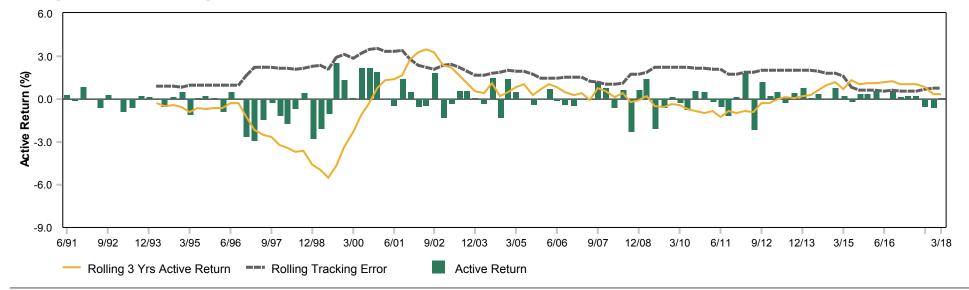
		Standard
	Return	Deviation
■ Total Fund Composite	7.12	4.47
<ul><li>Policy Index</li></ul>	6.75	4.61
Median	6.30	5.04

## Risk & Return Plan Sponsor — 5 Years



	Return	Standard Deviation
■ Total Fund Composite	8.76	4.58
<ul><li>Policy Index</li></ul>	8.07	4.42
Median	7.84	4.89

# **Rolling Return and Tracking Error**



			A3 OI Walcii
Policy Index	Weight (%)	Policy Index	Weight (%)
Jan-1973		Apr-2008	
Blmbg. Barc. Intermed. U.S. Government/Credit	45.00	S&P 500	40.00
Blmbg. Barc. U.S. Government: Intermediate	25.00	Blmbg. Barc. U.S. Intermediate Aggregate	35.00
S&P 500	25.00	Russell 2000 Index	15.00
90 Day U.S. Treasury Bill	5.00	MSCI EAFE (Net)	5.00
Jan-1995		NCREIF ODCE Equal Weighted	5.00
Blmbg. Barc. Intermed. U.S. Government/Credit	26.00	Sep-2010	
Blmbg. Barc. U.S. Government: Intermediate	14.00	S&P 500	40.00
S&P 500	55.00	Blmbg. Barc. U.S. Intermediate Aggregate	35.00
Russell 2000 Index	5.00	Russell 2000 Index	15.00
		90 Day U.S. Treasury Bill	5.00
Jan-2003		NCREIF ODCE Equal Weighted	5.00
Blmbg. Barc. Intermed. U.S. Government/Credit	29.00	0.4.0040	
Blmbg. Barc. U.S. Government: Intermediate	16.00	Oct-2010	40.00
S&P 500	40.00	S&P 500	40.00
Russell 2000 Index	15.00	Blmbg. Barc. U.S. Intermediate Aggregate	35.00
Oct-2004		Russell 2000 Index	15.00
Blmbg. Barc. Intermed. U.S. Government/Credit	30.00	MSCI AC World ex USA (Net)	5.00
Blmbg. Barc. U.S. Government: Intermediate	15.00	NCREIF ODCE Equal Weighted	5.00
S&P 500	40.00	May-2013	
Russell 2000 Index	15.00	S&P 500	32.50
		Blmbg. Barc. U.S. Intermediate Aggregate	32.50
Oct-2005		Russell 2000 Index	12.50
S&P 500	40.00	MSCI AC World ex USA (Net)	15.00
Russell 2000 Index	15.00	NCREIF ODCE Equal Weighted	7.50
Blmbg. Barc. U.S. Intermediate Aggregate	45.00		
Jul-2006		Nov-2013	
S&P 500	40.00	S&P 500	30.00
Russell 2000 Index	15.00	Blmbg. Barc. U.S. Intermediate Aggregate	32.50
Blmbg. Barc. U.S. Intermediate Aggregate	40.00	Russell 2500 Index	12.50
MSCI EAFE (Net)	5.00	MSCI AC World ex USA (Net)	15.00
( ,	2.30	NCREIF ODCE Equal Weighted	7.50
		NCREIF Property Index	2.50

Policy Index	Weight (%)
May-2015	
S&P 500	25.00
Blmbg. Barc. U.S. Intermediate Aggregate	32.50
Russell 2500 Index	12.50
MSCI AC World ex USA (Net)	15.00
MSCI EAFE Small Cap (Net)	5.00
NCREIF ODCE Equal Weighted	7.50
NCREIF Property Index	2.50
Sep-2017	
S&P 500	22.50
Blmbg. Barc. U.S. Aggregate	30.00
Russell 2500 Index	10.00
MSCI AC World ex USA (Net)	15.00
MSCI EAFE Small Cap (Net)	5.00
NCREIF ODCE Equal Weighted	7.50
NCREIF Property Index	2.50
Russell 3000 + 300 bps	5.00
CPI + 350 bps	2.50

Since Inception Ending March 31, 2018

	Beginning Market Value	Net Cash Flow	Gain/Loss	Ending Market Value	
Periods Ending	(\$)	(\$)	(\$)	(\$)	%Return
From 02/1991	70,755,814	-989,948	12,022,401	81,788,267	17.12
1992	81,788,267	-1,336,854	5,335,405	85,786,818	6.61
1993	85,786,818	-1,701,361	6,296,512	90,381,969	7.40
1994	90,381,969	-2,167,186	-604,142	87,610,641	-0.65
1995	87,610,641	-7,369,636	28,373,068	108,614,073	26.80
1996	108,614,073	-3,018,593	12,427,929	118,023,409	11.61
1997	118,023,409	-3,547,921	18,037,393	132,512,881	15.53
1998	132,512,881	-3,098,858	18,542,125	147,956,148	14.15
1999	147,956,148	-3,767,247	19,605,945	163,794,846	13.48
2000	163,794,846	-3,956,267	8,750,636	168,589,215	5.40
2001	168,589,215	-4,286,260	-2,541,460	161,761,495	-1.45
2002	161,761,495	-3,046,457	-16,516,527	142,198,511	-10.18
2003	142,198,511	-2,782,412	28,678,451	168,094,550	20.38
2004	168,094,550	-3,400,914	15,868,038	180,561,674	9.61
2005	180,561,674	-2,378,899	6,433,750	184,616,525	3.61
2006	184,616,525	-1,930,035	20,325,723	203,012,213	11.23
2007	203,012,213	-1,809,758	15,134,283	216,336,738	7.47
2008	216,336,738	-518,994	-51,672,638	164,145,106	-23.72
2009	164,145,106	12,591,369	25,994,218	202,730,693	15.81
2010	202,730,693	-1,203,962	25,533,405	227,060,136	13.24
2011	227,060,136	-17,100,000	1,847,245	211,807,381	0.74
2012	211,807,381	5,708,540	26,036,403	243,552,324	12.40
2013	243,552,324	-19,856,941	45,832,555	269,527,938	19.47
2014	269,527,938	14,261,469	19,462,684	303,252,091	8.14
2015	303,252,091	-11,289,150	6,253,257	298,216,198	2.07
2016	298,216,198	-18,200,974	24,105,719	304,120,942	8.74
2017	304,120,942	-8,545,375	43,429,014	339,004,581	13.95
To 03/2018	339,004,581	-6,026,233	-669,130	332,309,218	-0.45
	•		· ·	•	

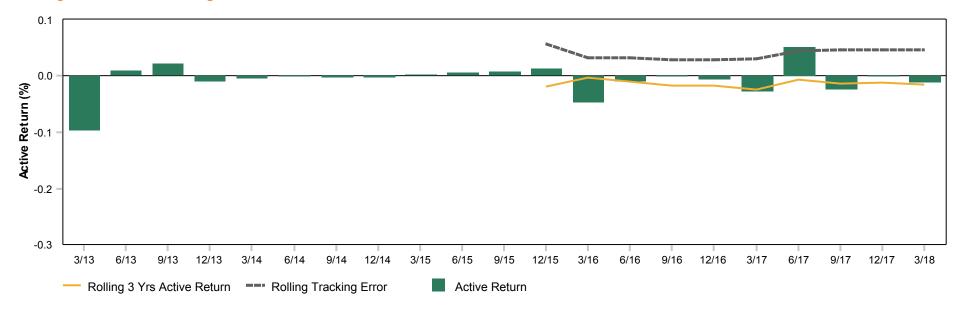
**Investment Manager Performance** 

**Domestic Equity** 

## Gain / Loss

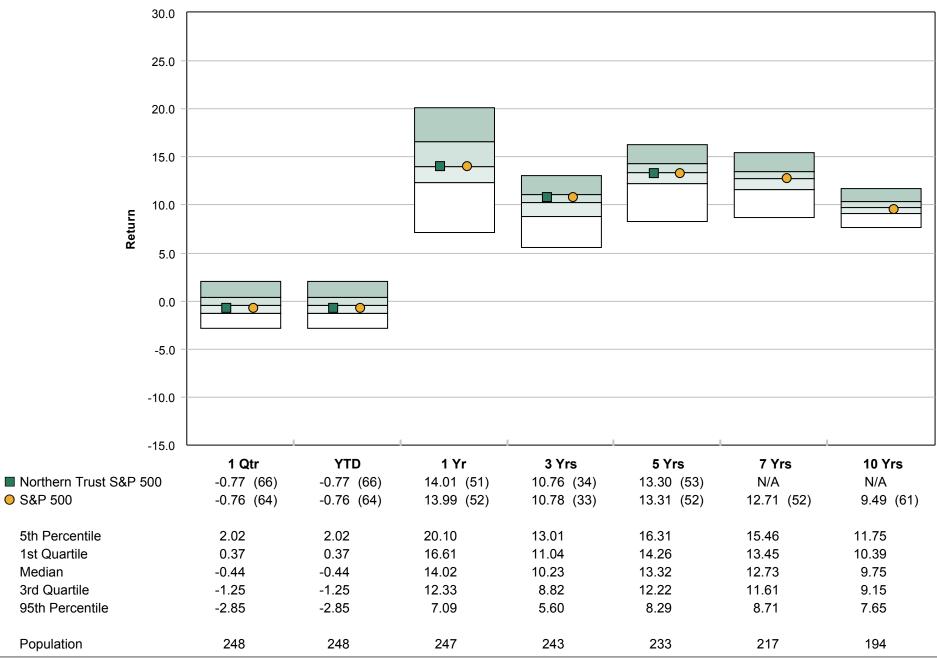
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
Northern Trust S&P 500					
Beginning Market Value	75,917,694	75,917,694	83,467,426	93,968,145	137,746,880
Net Cash Flows	-4,500,000	-4,500,000	-22,500,098	-46,350,962	-120,275,286
Income	9	9	29	560	560
Gain/Loss	-453,549	-453,549	9,996,795	23,346,410	53,491,999
Ending Market Value	70,964,153	70,964,153	70,964,153	70,964,153	70,964,153

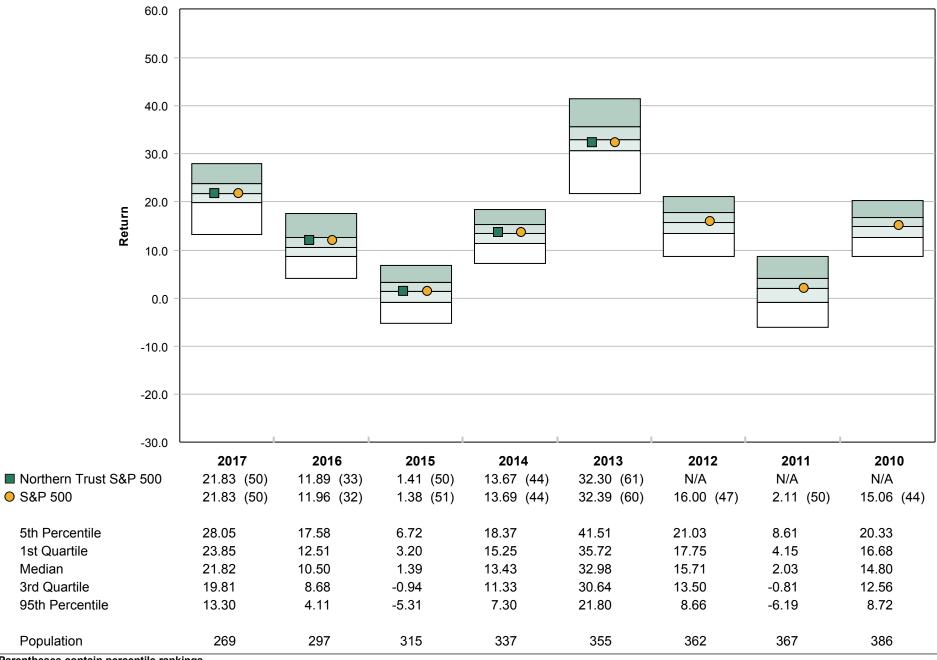
## **Rolling Return and Tracking Error**



## **Performance**

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Northern Trust S&P 500	-0.77	-0.77	14.01	10.76	13.30	N/A	N/A
S&P 500	-0.76	-0.76	13.99	10.78	13.31	12.71	9.49
Difference	-0.01	-0.01	0.02	-0.02	-0.01	N/A	N/A

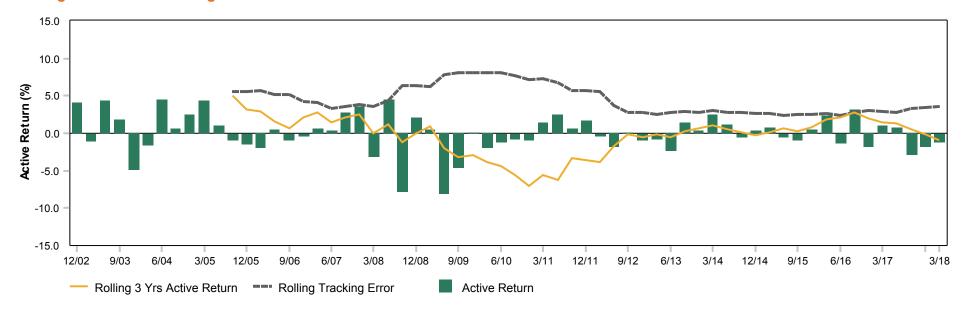




#### Gain / Loss

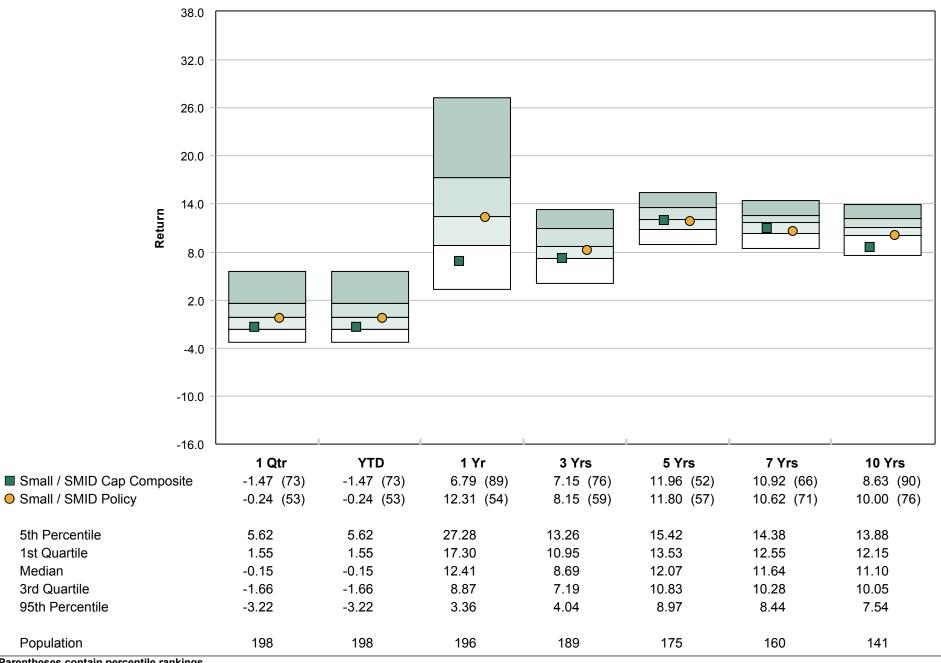
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
Small / SMID Cap Composite					
Beginning Market Value	36,344,261	36,344,261	44,916,448	44,770,157	45,530,485
Net Cash Flows	-2,500,127	-2,500,127	-13,998,046	-19,000,401	-33,173,055
Income	101,895	101,895	423,439	1,181,548	1,692,768
Gain/Loss	-651,248	-651,248	1,952,941	6,343,478	19,244,585
Ending Market Value	33,294,782	33,294,782	33,294,782	33,294,782	33,294,782

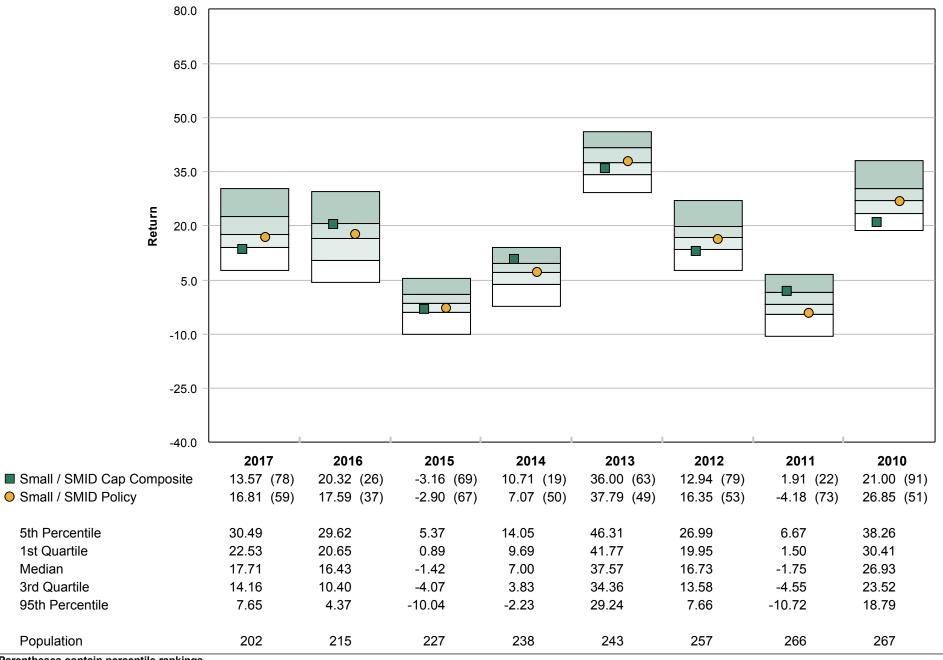
# **Rolling Return and Tracking Error**



#### **Performance**

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Small / SMID Cap Composite	-1.47	-1.47	6.79	7.15	11.96	10.92	8.63
Small / SMID Policy	-0.24	-0.24	12.31	8.15	11.80	10.62	10.00
Difference	-1.23	-1.23	-5.52	-1.00	0.16	0.30	-1.37

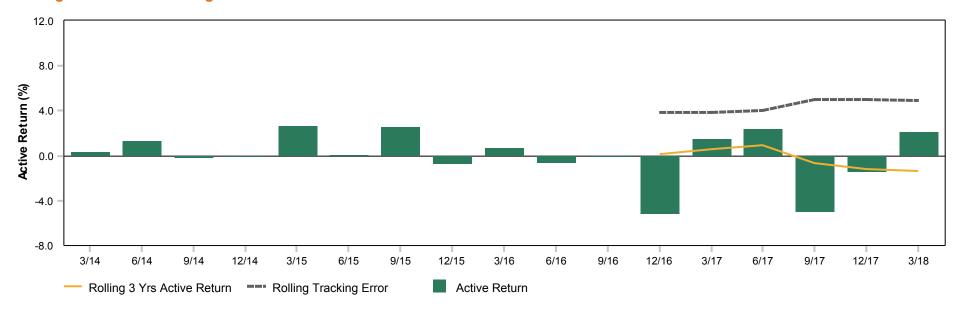




## Gain / Loss

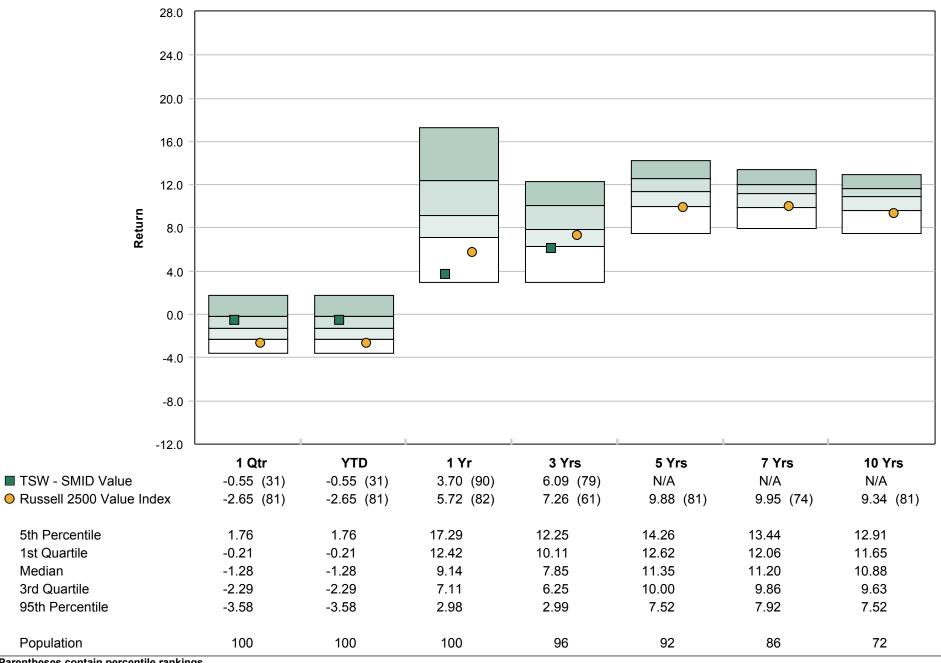
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
TSW - SMID Value					
Beginning Market Value	16,848,133	16,848,133	20,593,201	22,944,666	-
Net Cash Flows	-124	-124	-4,496,936	-9,498,400	-
Income	101,859	101,859	415,499	1,167,124	-
Gain/Loss	-195,045	-195,045	243,059	2,141,433	-
Ending Market Value	16,754,823	16,754,823	16,754,823	16,754,823	-

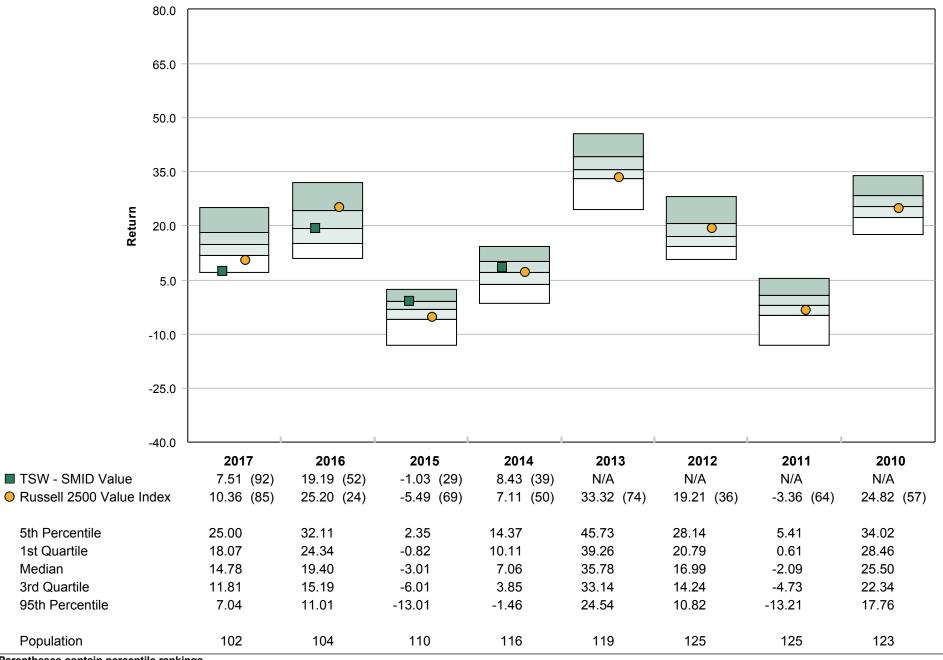
# **Rolling Return and Tracking Error**

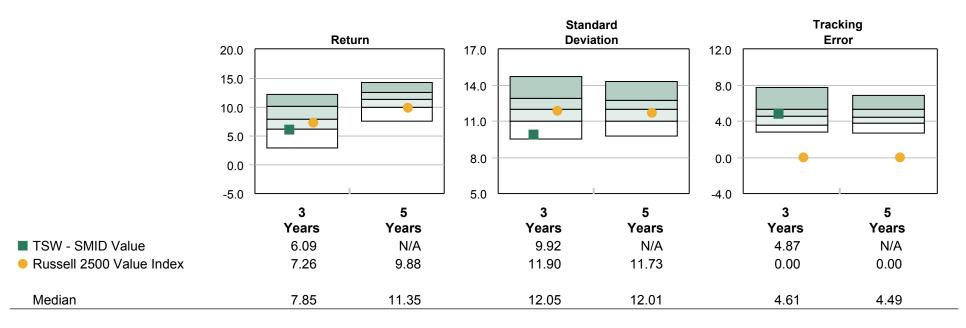


## **Performance**

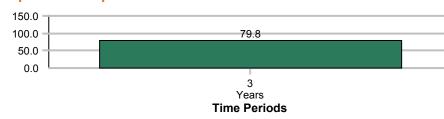
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
TSW - SMID Value	-0.55	-0.55	3.70	6.09	N/A	N/A	N/A
Russell 2500 Value Index	-2.65	-2.65	5.72	7.26	9.88	9.95	9.34
Difference	2.10	2.10	-2.02	-1.17	N/A	N/A	N/A



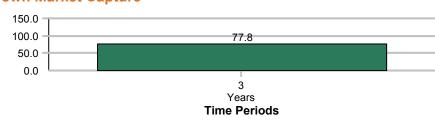


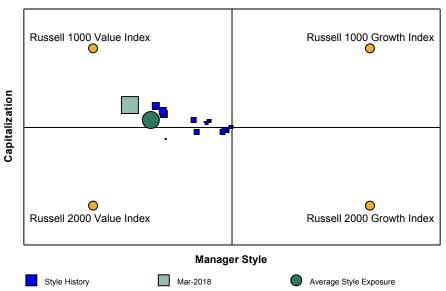


## **Up Market Capture**



# **Down Market Capture**

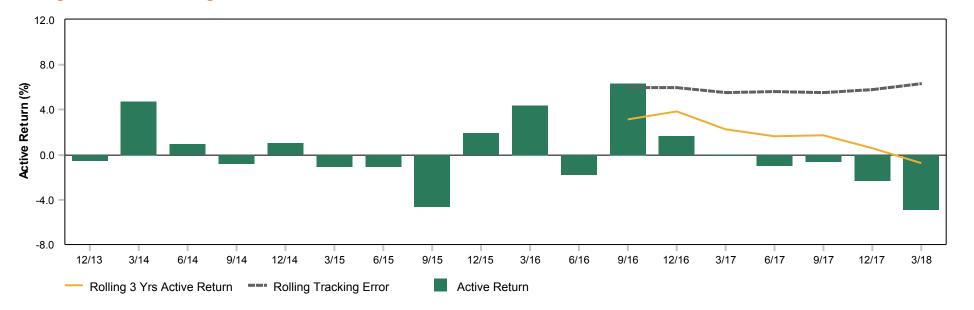




## Gain / Loss

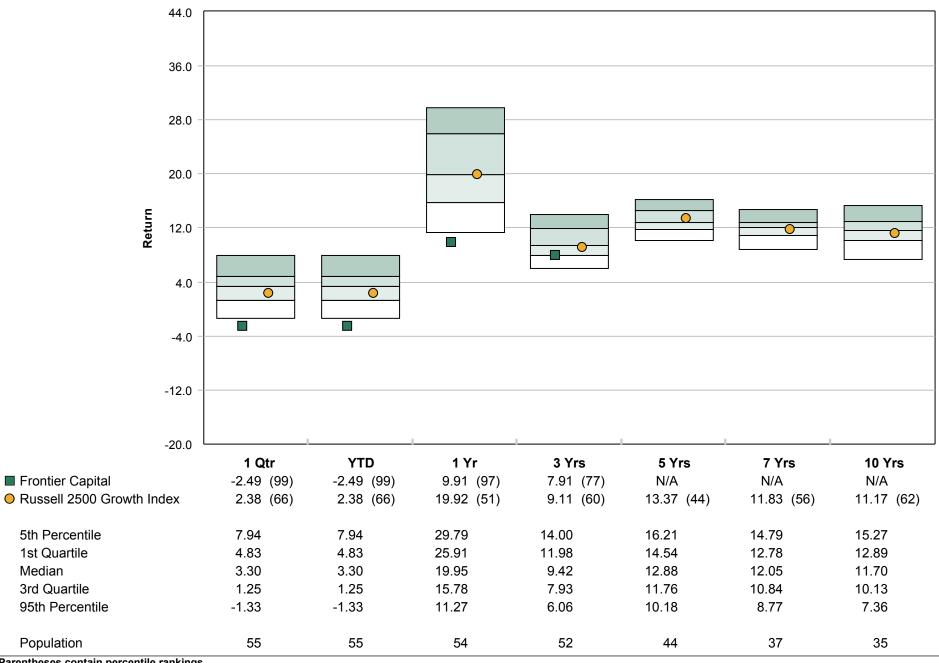
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
Frontier Capital					
Beginning Market Value	19,496,129	19,496,129	24,323,247	21,825,491	-
Net Cash Flows	-2,500,003	-2,500,003	-9,501,110	-9,502,001	-
Income	36	36	7,940	14,424	-
Gain/Loss	-456,203	-456,203	1,709,882	4,202,046	-
Ending Market Value	16,539,959	16,539,959	16,539,959	16,539,959	-

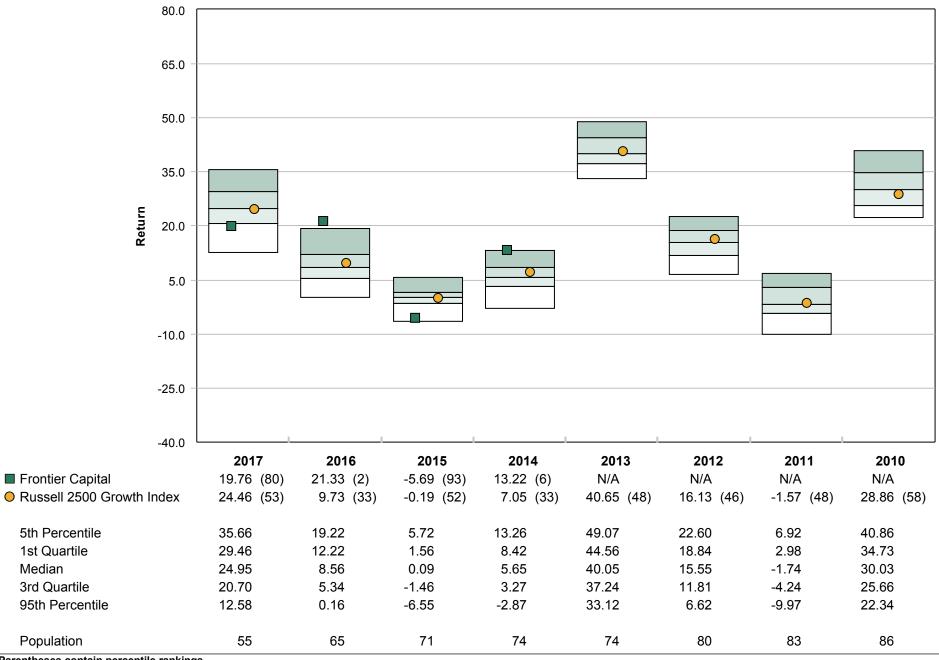
# **Rolling Return and Tracking Error**

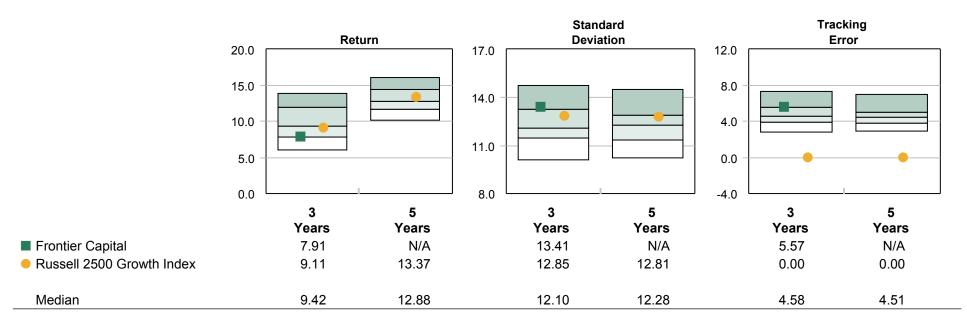


## **Performance**

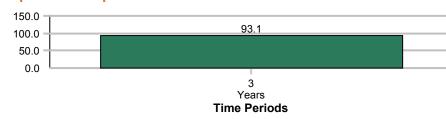
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Frontier Capital	-2.49	-2.49	9.91	7.91	N/A	N/A	N/A
Russell 2500 Growth Index	2.38	2.38	19.92	9.11	13.37	11.83	11.17
Difference	-4.87	-4.87	-10.01	-1.20	N/A	N/A	N/A



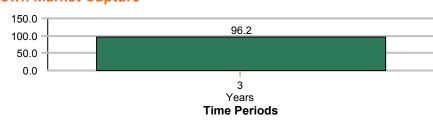


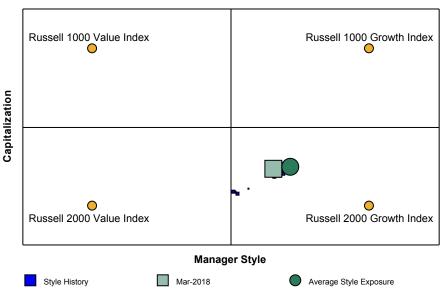


## **Up Market Capture**



# **Down Market Capture**



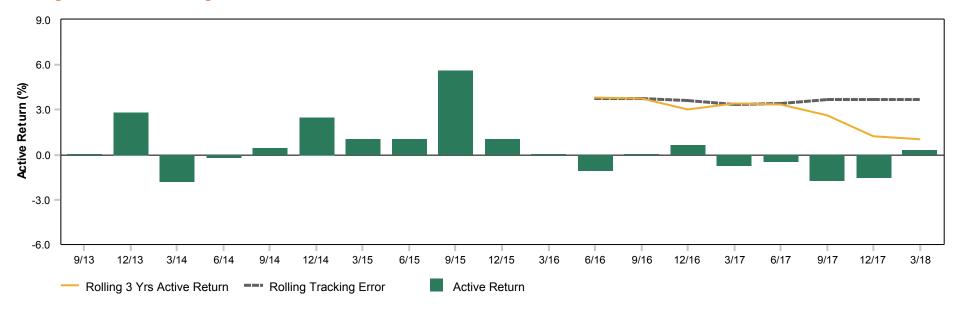


**International Equity** 

#### Gain / Loss

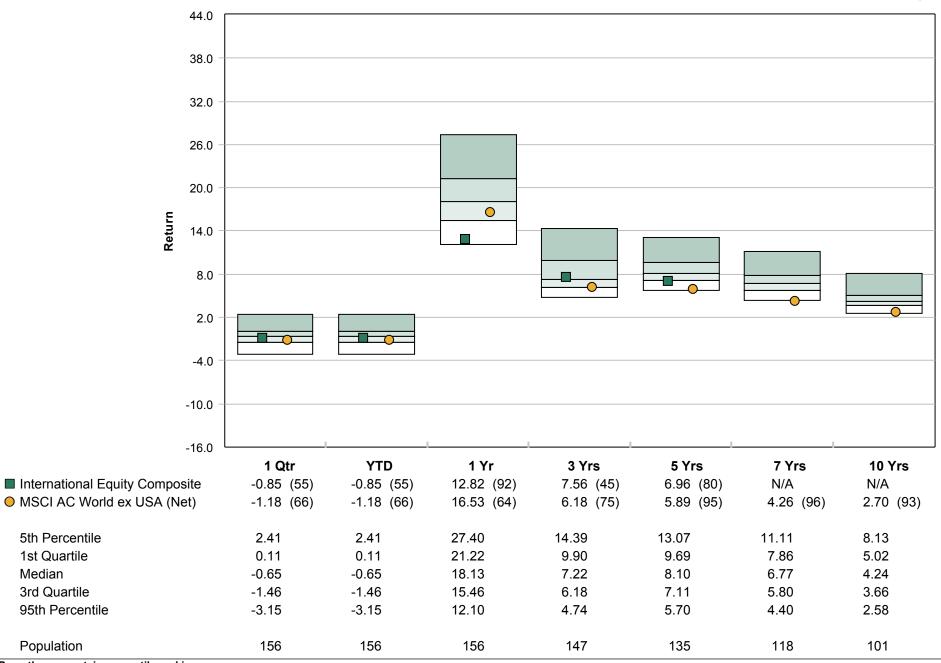
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
International Equity Composite					
Beginning Market Value	72,894,196	72,894,196	63,985,219	43,458,854	39,874,810
Net Cash Flows	-2,998,747	-2,998,747	-2,921,864	12,078,093	13,278,093
Income	255,996	255,996	1,027,414	2,792,043	3,802,769
Gain/Loss	-807,007	-807,007	7,253,669	11,015,448	12,388,767
Ending Market Value	69,344,438	69,344,438	69,344,438	69,344,438	69,344,438

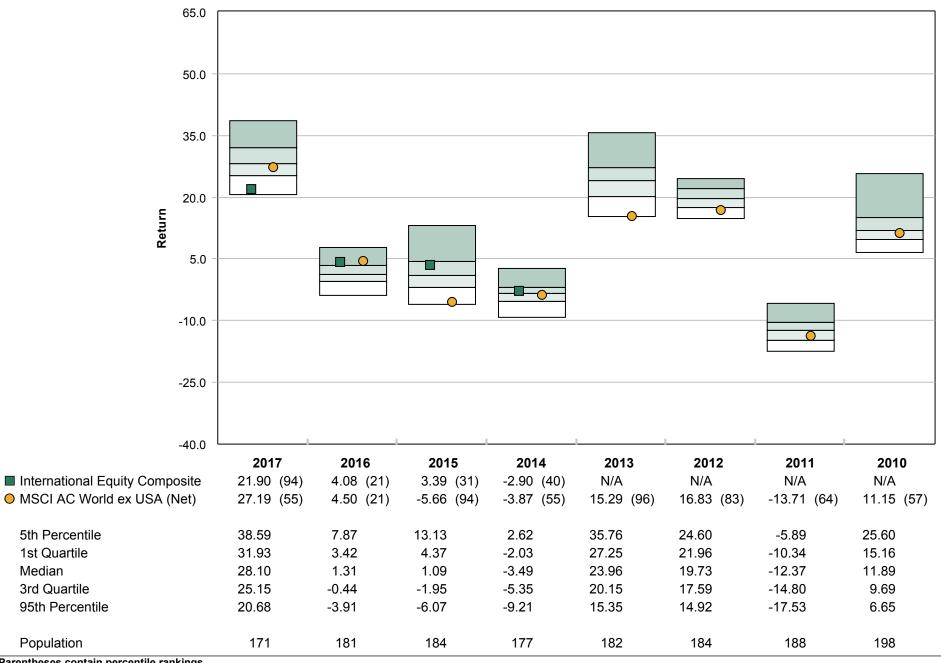
## **Rolling Return and Tracking Error**



## **Performance**

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
International Equity Composite	-0.85	-0.85	12.82	7.56	6.96	N/A	N/A
MSCI AC World ex USA (Net)	-1.18	-1.18	16.53	6.18	5.89	4.26	2.70
Difference	0.33	0.33	-3.71	1.38	1.07	N/A	N/A

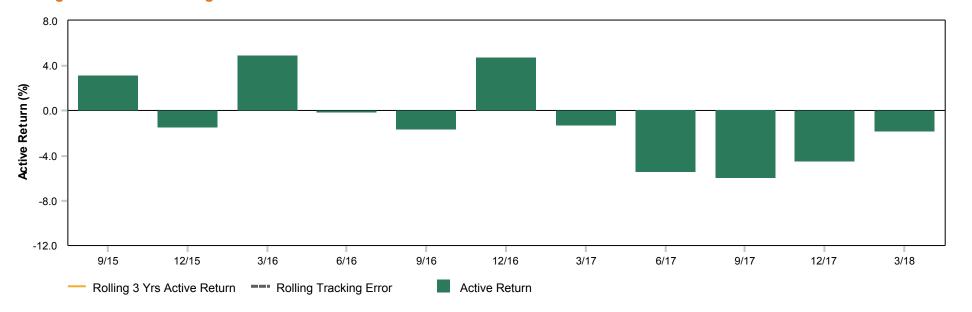




#### Gain / Loss

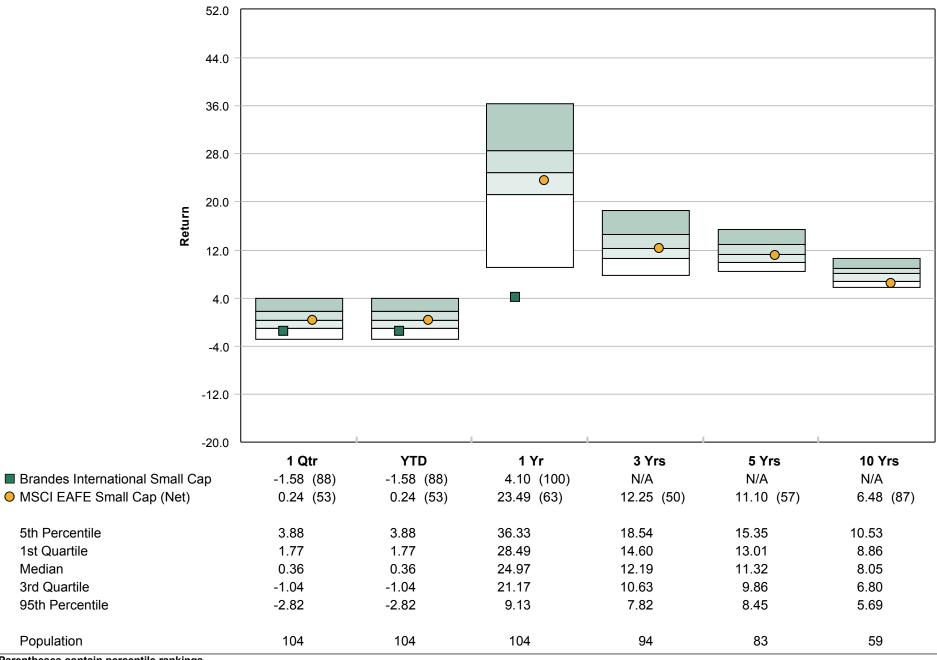
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
Brandes International Small Cap					
Beginning Market Value	18,754,540	18,754,540	17,731,962	-	-
Net Cash Flows	-3,000,000	-3,000,000	-3,000,000	-	-
Income	-	-	-	-	-
Gain/Loss	-241,875	-241,875	780,704	-	-
Ending Market Value	15,512,665	15,512,665	15,512,665	-	-

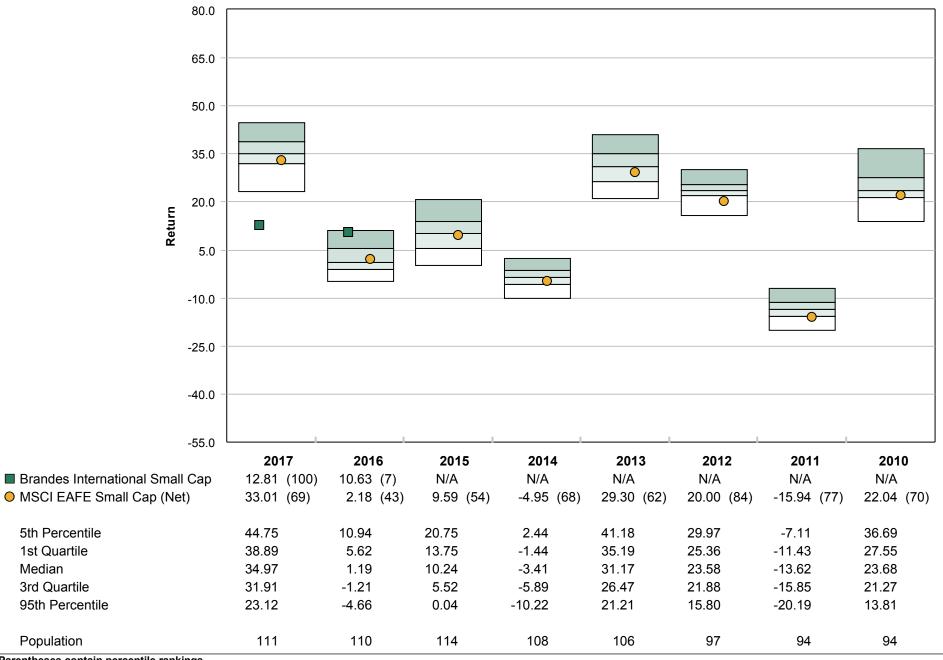
# **Rolling Return and Tracking Error**



## **Performance**

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Brandes International Small Cap	-1.58	-1.58	4.10	N/A	N/A	N/A	N/A
MSCI EAFE Small Cap (Net)	0.24	0.24	23.49	12.25	11.10	8.74	6.48
Difference	-1.82	-1.82	-19.39	N/A	N/A	N/A	N/A

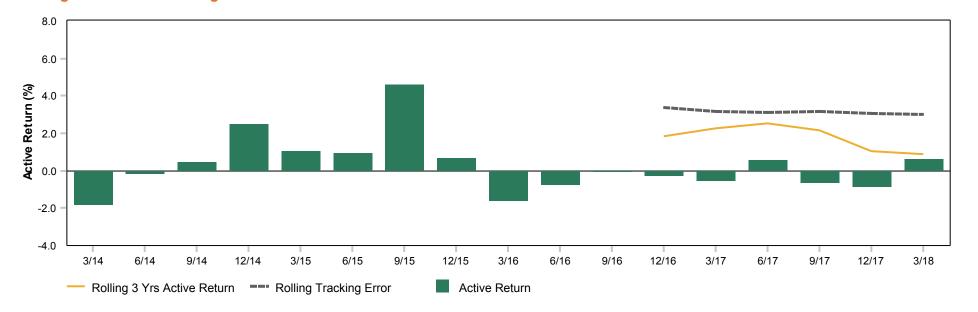




#### Gain / Loss

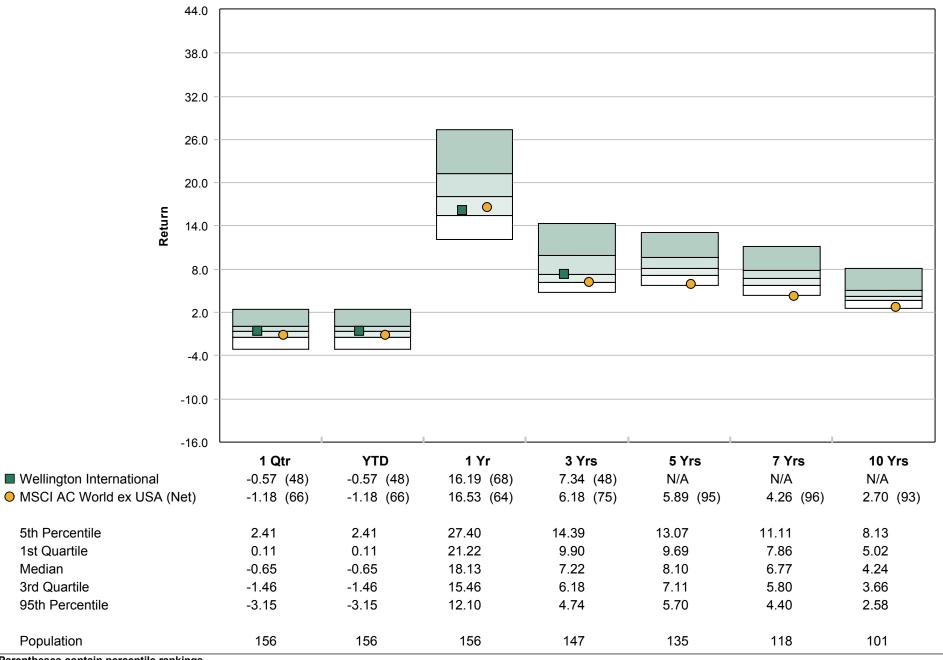
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
Wellington International					
Beginning Market Value	54,139,656	54,139,656	46,253,258	43,458,854	-
Net Cash Flows	1,253	1,253	78,136	78,136	-
Income	255,996	255,996	1,027,414	2,791,973	-
Gain/Loss	-565,132	-565,132	6,472,965	7,502,809	-
Ending Market Value	53,831,773	53,831,773	53,831,773	53,831,773	-

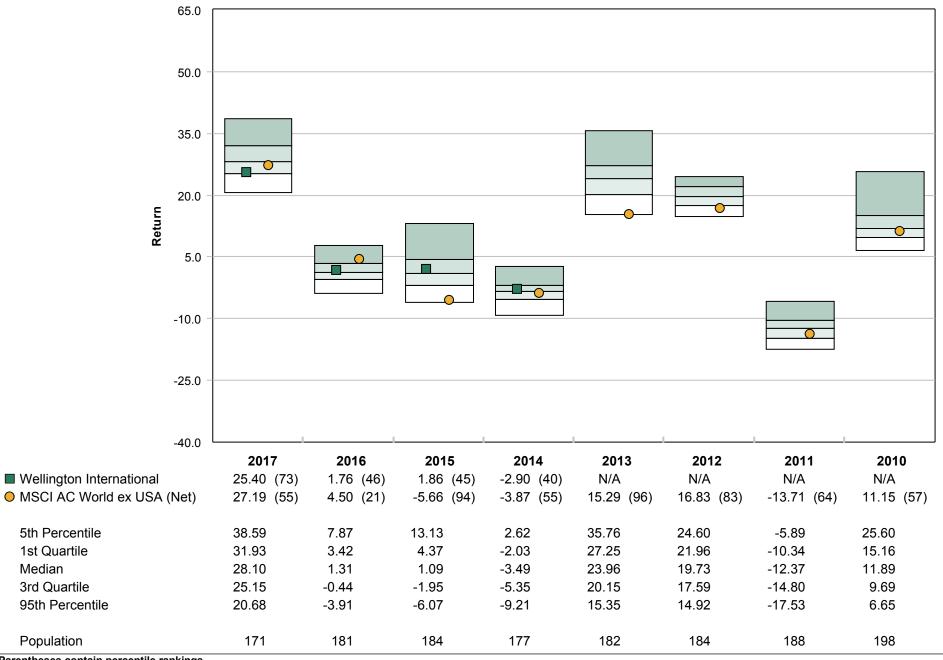
# **Rolling Return and Tracking Error**

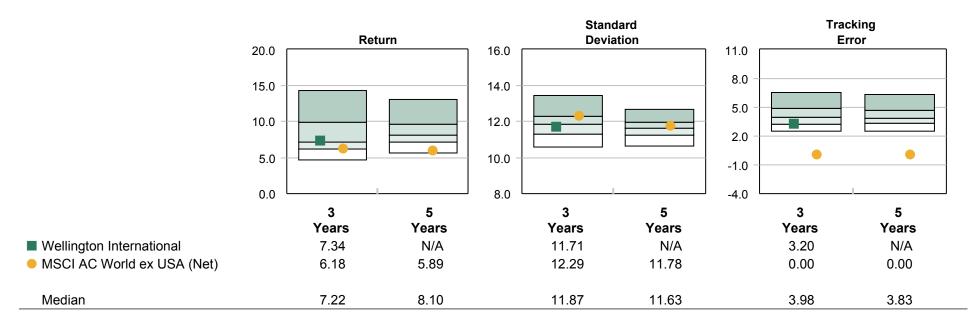


## **Performance**

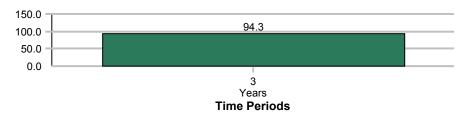
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Wellington International	-0.57	-0.57	16.19	7.34	N/A	N/A	N/A
MSCI AC World ex USA (Net)	-1.18	-1.18	16.53	6.18	5.89	4.26	2.70
Difference	0.61	0.61	-0.34	1.16	N/A	N/A	N/A



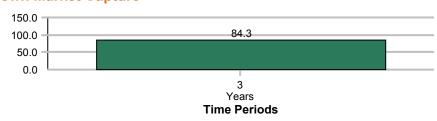


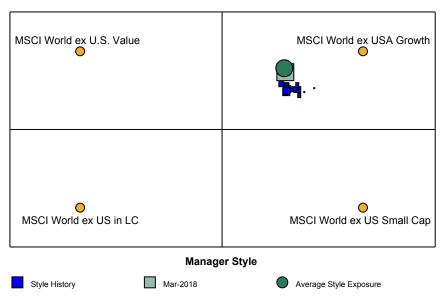


## **Up Market Capture**



## **Down Market Capture**





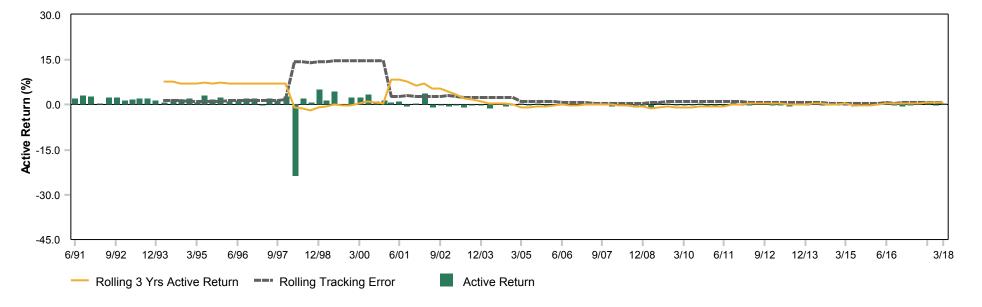


**Fixed Income** 

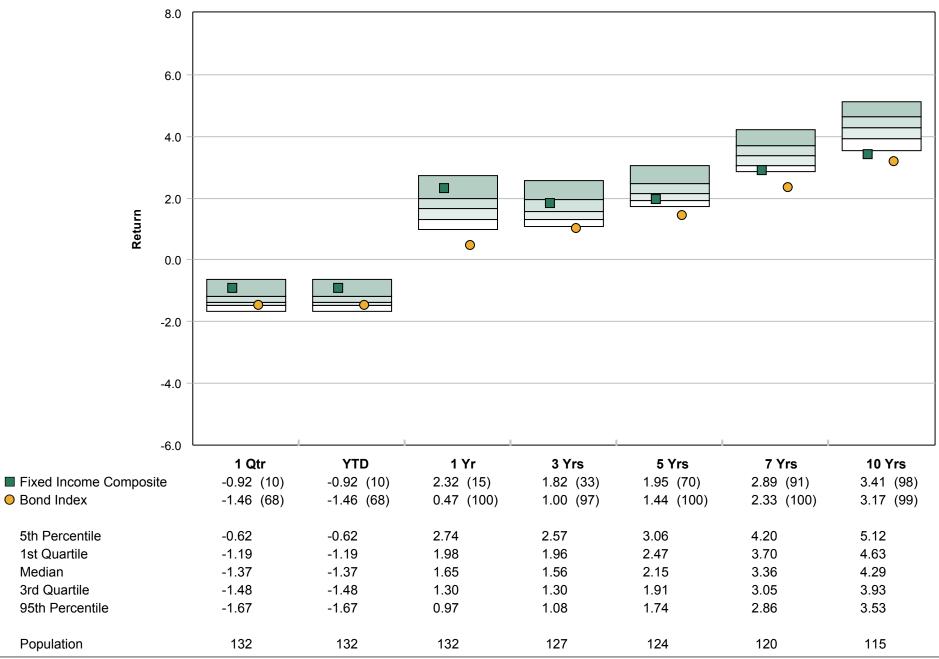
## Gain / Loss

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
Fixed Income Composite					
Beginning Market Value	95,777,709	95,777,709	79,564,562	88,038,758	52,656,349
Net Cash Flows	2,603,064	2,603,064	14,076,788	2,827,532	35,151,133
Income	323,757	323,757	1,568,435	6,423,122	10,605,594
Gain/Loss	-1,019,271	-1,019,271	2,475,473	395,846	-727,818
Ending Market Value	97,685,258	97,685,258	97,685,258	97,685,258	97,685,258

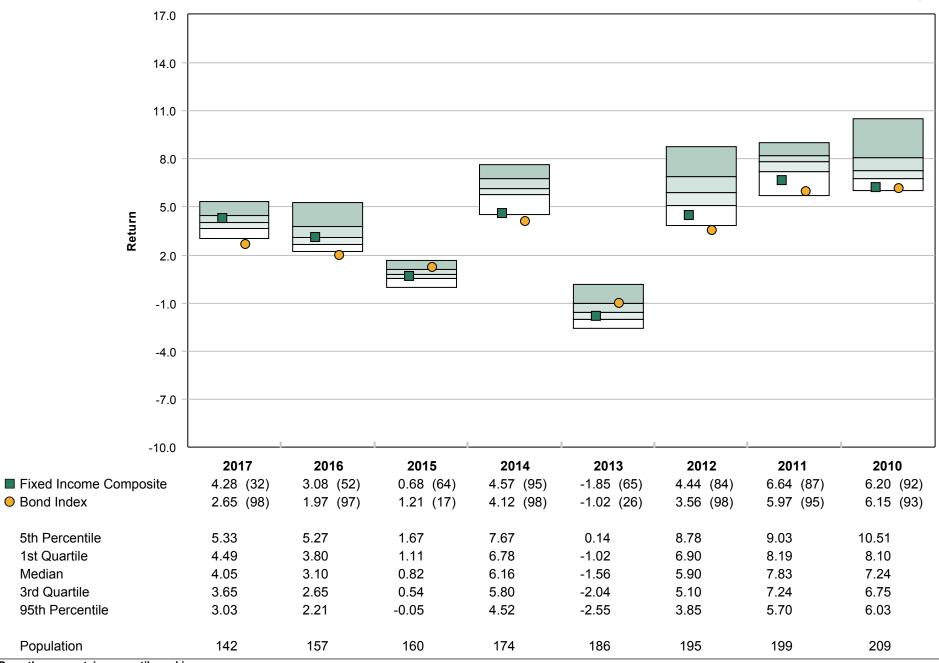
# **Rolling Return and Tracking Error**



	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Fixed Income Composite	-0.92	-0.92	2.32	1.82	1.95	2.89	3.41
Bond Index	-1.46	-1.46	0.47	1.00	1.44	2.33	3.17
Difference	0.54	0.54	1.85	0.82	0.51	0.56	0.24



Parentheses contain percentile rankings. Calculation based on quarterly periodicity.

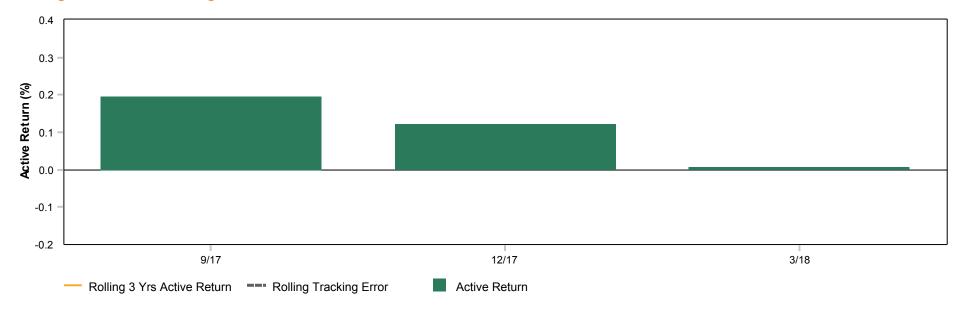


Parentheses contain percentile rankings. Calculation based on monthly periodicity.

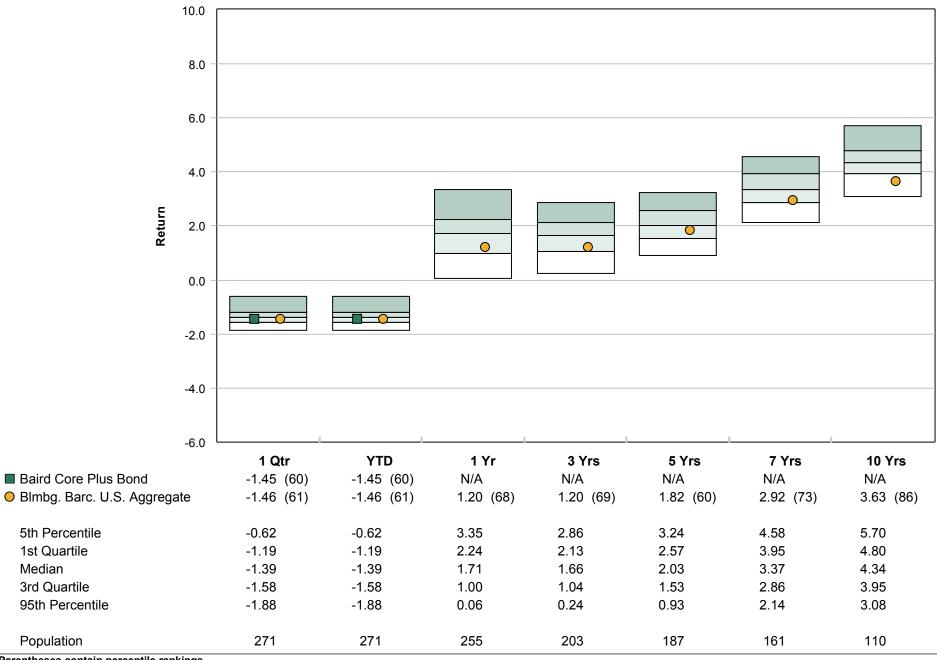
## Gain / Loss

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
Baird Core Plus Bond					
Beginning Market Value	44,363,445	44,363,445	-	-	-
Net Cash Flows	-1,482	-1,482	-	-	-
Income	268,059	268,059	-	-	-
Gain/Loss	-786,563	-786,563	-	-	-
Ending Market Value	43,843,460	43,843,460	-	-	-

# **Rolling Return and Tracking Error**



	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Baird Core Plus Bond	-1.45	-1.45	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Aggregate	-1.46	-1.46	1.20	1.20	1.82	2.92	3.63
Difference	0.01	0.01	N/A	N/A	N/A	N/A	N/A

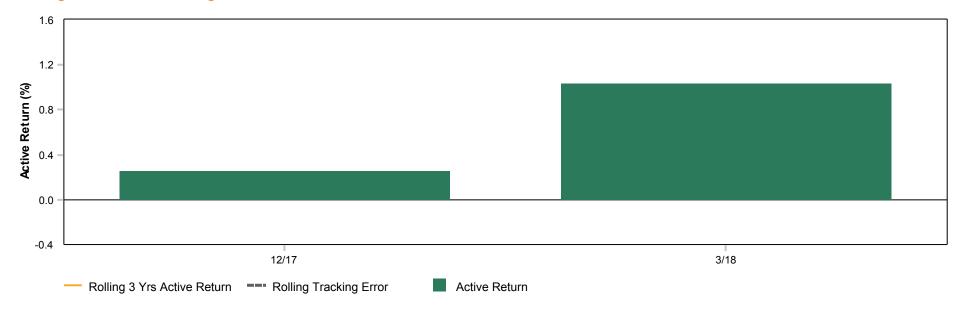


Parentheses contain percentile rankings. Calculation based on monthly periodicity.

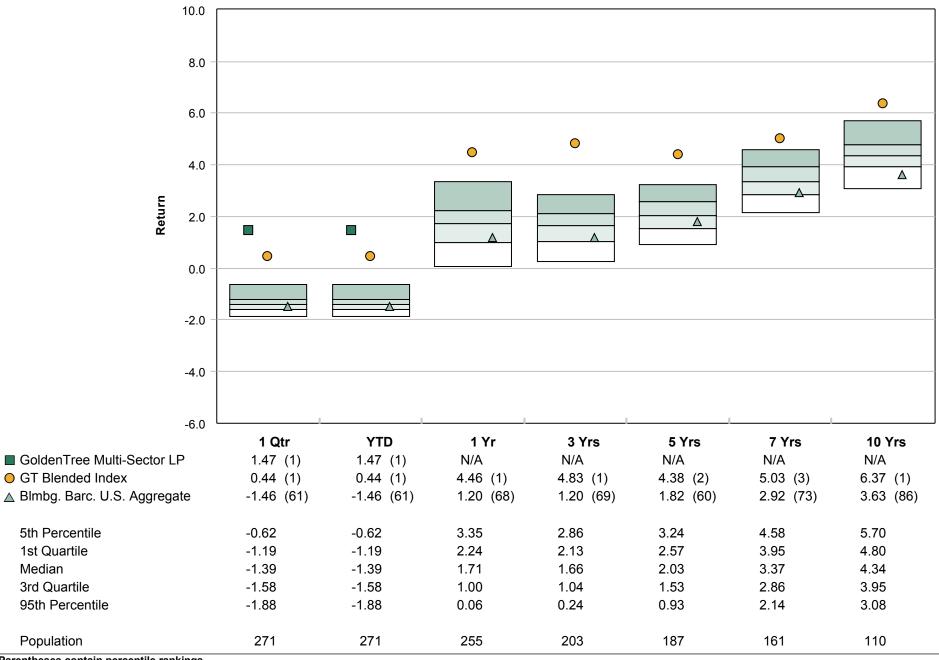
### Gain / Loss

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
GoldenTree Multi-Sector LP					
Beginning Market Value	12,158,597	12,158,597	-	-	-
Net Cash Flows	-	-	-	-	-
Income	<del>-</del>	-	-	-	-
Gain/Loss	178,960	178,960	-	-	-
Ending Market Value	12,337,557	12,337,557	-	-	-

# **Rolling Return and Tracking Error**



	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
GoldenTree Multi-Sector LP	1.47	1.47	N/A	N/A	N/A	N/A	N/A
GT Blended Index	0.44	0.44	4.46	4.83	4.38	5.03	6.37
Difference	1.03	1.03	N/A	N/A	N/A	N/A	N/A



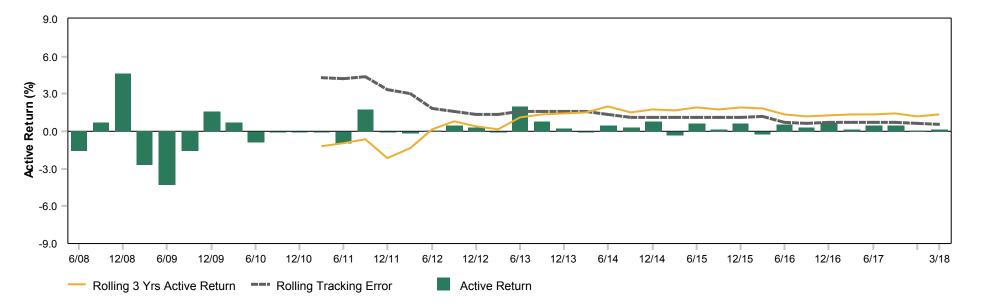
Parentheses contain percentile rankings. Calculation based on monthly periodicity.

**Real Estate** 

### Gain / Loss

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
Real Estate Composite					
Beginning Market Value	35,903,467	35,903,467	33,612,790	33,331,266	19,491,552
Net Cash Flows	-225,626	-225,626	-327,961	-8,456,295	-2,433,355
Income	254,827	254,827	987,938	3,073,593	4,863,030
Gain/Loss	565,766	565,766	2,225,666	8,549,869	14,577,205
Ending Market Value	36,498,433	36,498,433	36,498,433	36,498,433	36,498,433

# **Rolling Return and Tracking Error**

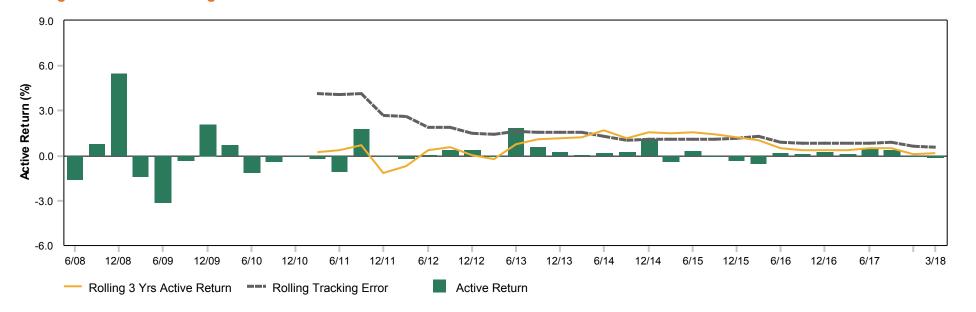


	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Real Estate Composite	2.19	2.19	9.15	11.31	12.91	13.01	5.78
Real Estate Policy	2.05	2.05	7.90	9.87	11.11	11.50	5.23
Difference	0.14	0.14	1.25	1.44	1.80	1.51	0.55

# Gain / Loss

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
Morgan Stanley					
Beginning Market Value	25,843,858	25,843,858	24,221,866	25,966,850	19,491,552
Net Cash Flows	-	-	-	-7,500,000	-7,500,000
Income	254,827	254,827	987,938	3,073,593	4,863,030
Gain/Loss	261,923	261,923	1,150,805	4,820,166	9,506,027
Ending Market Value	26,360,608	26,360,608	26,360,608	26,360,608	26,360,608

# **Rolling Return and Tracking Error**

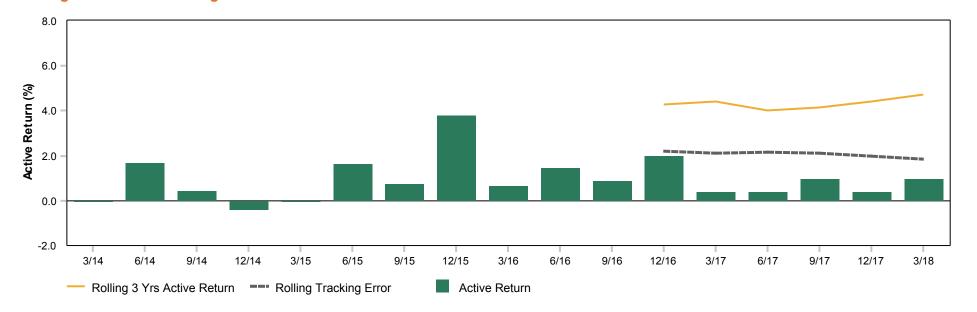


	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Morgan Stanley	2.00	2.00	8.83	10.47	12.43	12.67	5.56
NCREIF ODCE Equal Weighted	2.17	2.17	8.16	10.26	11.48	11.82	4.93
Difference	-0.17	-0.17	0.67	0.21	0.95	0.85	0.63

### Gain / Loss

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
Principal Enhanced Property Fund					
Beginning Market Value	10,059,608	10,059,608	9,390,924	7,364,417	-
Net Cash Flows	-225,626	-225,626	-327,961	-956,294	-
Income	-	-	-	-	-
Gain/Loss	303,842	303,842	1,074,861	3,729,702	-
Ending Market Value	10,137,824	10,137,824	10,137,824	10,137,824	-

# **Rolling Return and Tracking Error**



	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Principal Enhanced Property Fund	2.66	2.66	9.97	13.84	N/A	N/A	N/A
NCREIF Property Index	1.70	1.70	7.12	8.72	10.00	10.55	6.09
Difference	0.96	0.96	2.85	5.12	N/A	N/A	N/A

**Private Equity** 

## **Cash Flow Summary**

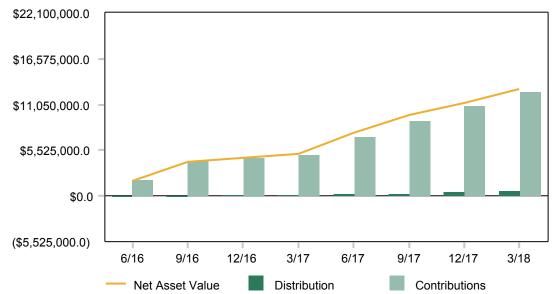
Capital Committed: \$30,000,000
Total Contributions: \$12,600,000
Remaining Capital Commitment: \$17,400,000

Total Distributions: \$679,863 Market Value: \$12,885,029

Inception Date: 06/23/2016

Inception IRR: 8.62 TVPI: 1.08

# **Cash Flow Analysis**



### **Private Equity Portfolio**

Partnerships	Investment Type	Investment Strategy	Capital Committed (\$)	Total Contribution (\$)	Total Distribution (\$)	Market Value (\$)	IRR (%)	TVPI Multiple
NB Crossroads Fund XXI	Fund Of Funds	Other	20,000,000	10,000,000	-	10,352,856	3.61	1.04
HarbourVest Dover Fund IX	Fund Of Funds	Secondaries	10,000,000	2,600,000	679,863	2,532,173	45.80	1.24
Private Equity Composite	Total Fund	Hybrid	30,000,000	12,600,000	679,863	12,885,029	8.62	1.08

**Fund Information** 

Type of Fund: Fund Of Funds Vintage Year: 2015

Strategy Type: Other Management Fee: Based on Commitments: Year 1: 20bps, Years 2-4: 40

bps, Years 5-8: 40 bps, Years 9-10: 5 bps, Years 11-12:

0 bps

Size of Fund: 650,000,000 Preferred Return: 8.0%

Inception: 04/15/2015 General Partner: Neuberger Berman Group LLC

**Final Close:** 10/15/2016

Investment Strategy: NB Crossroads Fund XXI ("Crossroads Fund XXI") is an investment fund formed by affiliates of Neuberger Berman Group LLC

("Neuberger Berman" or the "Firm") that seeks to achieve attractive risk-adjusted returns on capital (primarily through long-term capital gains) by investing in a diversified global portfolio of high-performing private equity funds. Crossroads Fund XXI will also seek to purchase limited partner interests in more mature private equity funds in the secondary market and to co-invest directly in transactions alongside high-performing private equity firms. Crossroads Fund XXI will be diversified across four strategic asset classes: (i) small and mid-cap buyout; (ii) large-cap buyout; (iii) special situations (primarily distressed debt, turnaround and restructuring strategies); and (iv) venture and growth capital. While each fund has a target allocation, clients are able to customize their commitment's allocation between

investment types, even at a <\$1m commitment level.

#### **Cash Flow Summary**

Capital Committed: \$20,000,000

Total Contributions: \$10,000,000

Remaining Capital Commitment: \$10,000,000

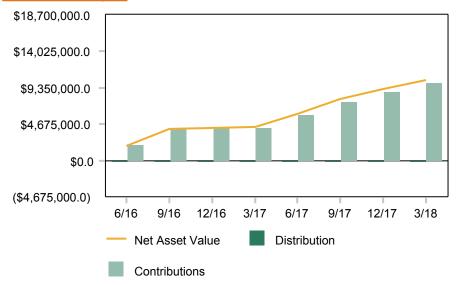
Total Distributions:

**Market Value:** \$10,352,856

Inception Date: 06/23/2016
Inception IRR: 3.61

TVPI: 1.04

### **Cash Flow Analysis**



Due to the inconsistencies in reporting methodologies among managers, we do not report on Capital Invested, Management Fees, Expenses and Interest. However, the Market Value is net of all fees and expenses, and Total Contributions reflects interest paid.

**Fund Information** 

**Type of Fund:** Fund Of Funds **Vintage Year:** 2016

Strategy Type: Secondaries Management Fee: The average annual management fee is 0.75% on

committed capital. Year 1: 0.25%, Year 2: 0.50%, Year 3: 0.85%, Years 4-7: 1.25%, Year 8: 1.20%, Year 9: 1.15%, Year 10: 1.10%. (0.70% of capital commitments -

average annual management fee)

Preferred Return: 8% compounded annually Inception: 06/01/2016

General Partner: HarbourVest Partners

Investment Strategy: The Dover Street Fund IX will seek to be diversified across transaction type, geography, stage, vintage year and industry and is expected

to have approximately 25 - 40 transactions with an average size expected to be between \$100 - \$150 million. The team has the ability to commit 10% to primary funds, however this option has seldom been utilized in predecessor funds and the expectation is that it will not be used in Dover Street IX. HarbourVest anticipates that there will not be co-investment opportunities for Limited Partners. HarbourVest has the ability to commit up to 30% of proceeds received in new transactions, which may result in more than 100% of the limited partner's commitment being called over the life of the Fund. HarbourVest may also invest up to 5% in secondary transactions of real estate and

infrastructure assets and debt.

### **Cash Flow Summary**

Capital Committed:\$10,000,000Total Contributions:\$2,600,000Remaining Capital Commitment:\$7,400,000

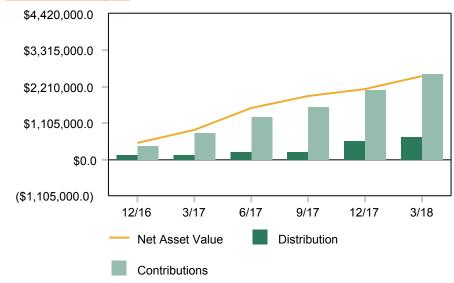
**Total Distributions:** \$679,863 **Market Value:** \$2,532,173

 Inception Date:
 12/16/2016

 Inception IRR:
 45.80

 TVPI:
 1.24

#### **Cash Flow Analysis**



Due to the inconsistencies in reporting methodologies among managers, we do not report on Capital Invested, Management Fees, Expenses and Interest. However, the Market Value is net of all fees and expenses, and Total Contributions reflects interest paid.

**Private Debt** 

#### **Fund Information**

Type of Fund: Vintage Year: 2016 Direct

Strategy Type: **Management Fee:** Other 1% of cost basis of investments

Size of Fund: 1,600,000,000 Preferred Return:

Angelo Gordon Inception: 10/28/2016 **General Partner:** 

**Final Close:** 7/14/2017

Investment Strategy: We seek to capitalize on the long-term investment opportunity in middle market direct lending. The investment strategy is to source,

underwrite and actively manage a diversified portfolio of middle market, floating rate, senior secured loans with a focus on first lien

secured debt with a loan-to-value target of 40-55%.

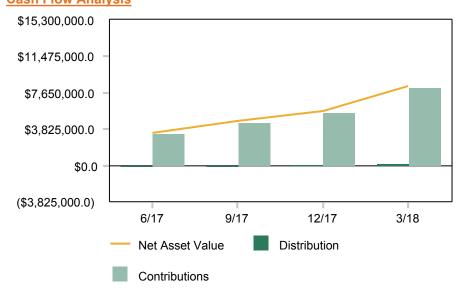
## **Cash Flow Summary**

**Capital Committed:** \$12,000,000 **Total Contributions:** \$8,183,388 Remaining Capital Commitment: \$3,840,000

**Total Distributions:** \$159,320 Market Value: \$8,347,141

**Inception Date:** 05/26/2017 Inception IRR: 6.69 TVPI: 1.04

## **Cash Flow Analysis**



Due to the inconsistencies in reporting methodologies among managers, we do not report on Capital Invested, Management Fees, Expenses and Interest. However, the Market Value is net of all fees and expenses, and Total Contributions reflects interest paid.

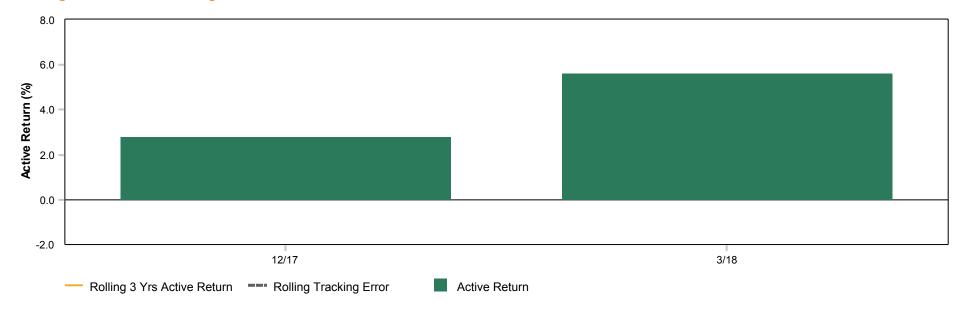


Infrastructure

## Gain / Loss

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs
IFM Global Infrastructure					
Beginning Market Value	10,657,727	10,657,727	-	-	-
Net Cash Flows	-	-	-	-	-
Income	-	-	-	-	-
Gain/Loss	757,908	757,908	-	-	-
Ending Market Value	11,415,635	11,415,635	-	-	-

# **Rolling Return and Tracking Error**



	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
IFM Global Infrastructure	7.11	7.11	N/A	N/A	N/A	N/A	N/A
CPI + 350 bps	1.50	1.50	5.94	5.44	4.99	5.17	5.13
Difference	5.61	5.61	N/A	N/A	N/A	N/A	N/A