

QUARTERLY PERFORMANCE REPORT

SAN BERNARDINO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION



March 31, 2018

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BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

MARKET ENVIRONMENT UPDATE AND OUTLOOK

NEPC, LLC

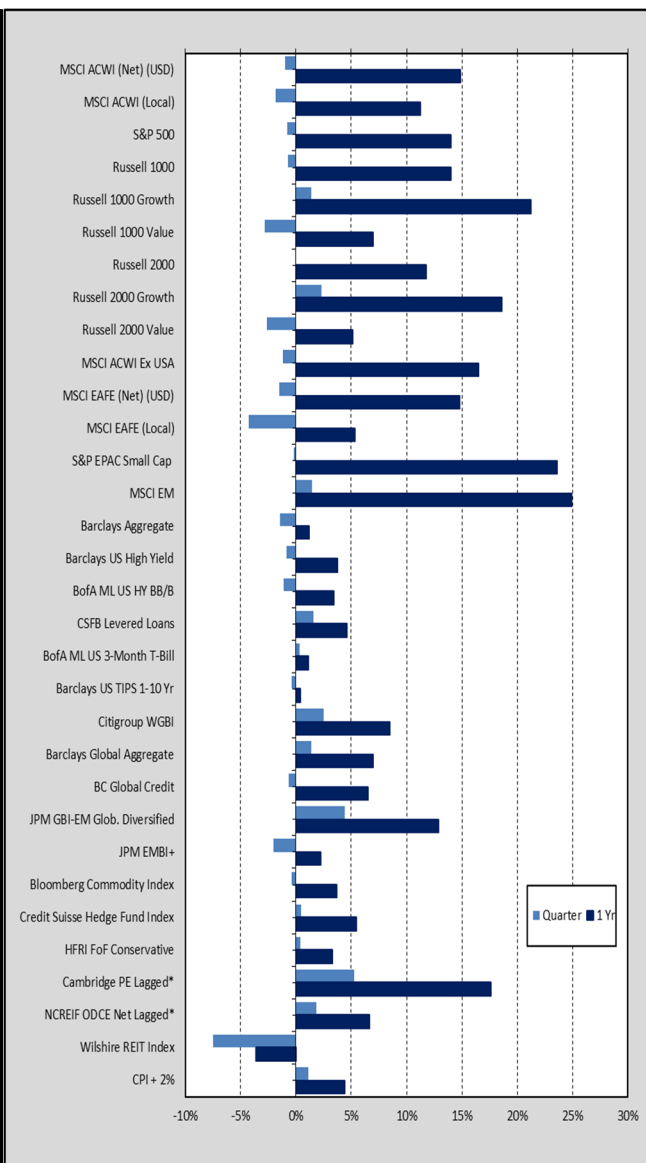
ECONOMIC ENVIRONMENT

- **Fourth quarter GDP growth rate (third estimate) increased at a moderate 2.9%.**
 - Retail sales ended February at +4.2% on a YoY basis. In the same period last year the YoY growth rate was 4.9%.
 - Corporate profits (ended October) as a percent of GDP decreased to 8.5% from 9.5% (in July) and remain elevated relative to historical levels.
 - The inventory-to-sales ratio ended February up at 1.4 from 1.3 and has remained relatively flat since early 2010.
 - The U.S. trade deficit widened by 1.6% ended February and is at its highest level in nearly 10 years.
- **The unemployment rate remained flat at 4.1% Q1; U-6, a broader measure of unemployment, decreased to 8.0% from 8.1% during the first quarter.**
- **The Case-Shiller Home Price Index (ended January) increased to 196.3 from 195.6 and remains at levels higher than that of pre-financial crisis levels of 150.9.**
- **Rolling 12-month seasonally-adjusted CPI saw an up-tick to 2.4% from 2.1% at the end of March; Capacity Utilization marginally increased to 78.0% from 77.9% in Q1.**
- **Fed Funds rate was increased 0.25% to a targeted range of 1.50% - to – 1.75%. The 10-year Treasury Yield (constant maturity) finished Q1 at 2.8% up from 2.4% in December.**
- **The Fed balance sheet decreased slightly during Q1 2018, while the European Central Bank balance sheet continues to increase.**
 - ECB held its benchmark refinance rate at 0%, deposit rates -0.4% and asset purchases would slow from €60 billion per month to €30 billion per month.
- **S&P valuations increased slightly in Q1, remaining above the 10-year and long-term averages.**
 - Cyclically adjusted Shiller PE ratio (32.6x) is above the long-term average of 16.9x and above the 10-year average of 23.5x.



MARKET ENVIRONMENT – Q1 2018 OVERVIEW

| | | Qtr. | 1 Yr. | 3 Yr. | 5 Yr. | 10 Yr. |
|-----------------------------------------|----------------------------------|-------|-------|-------|-------|--------|
| World Equity Benchmarks | | | | | | |
| MSCI ACWI (Net) (USD) | World | -1.0% | 14.8% | 8.1% | 9.2% | 5.6% |
| MSCI ACWI (Local) | World (Local Currency) | -1.9% | 11.2% | 7.3% | 10.4% | 6.6% |
| Domestic Equity Benchmarks | | | | | | |
| S&P 500 | Large Core | -0.8% | 14.0% | 10.8% | 13.3% | 9.5% |
| Russell 1000 | Large Core | -0.7% | 14.0% | 10.4% | 13.2% | 9.6% |
| Russell 1000 Growth | Large Growth | 1.4% | 21.3% | 12.9% | 15.5% | 11.3% |
| Russell 1000 Value | Large Value | -2.8% | 6.9% | 7.9% | 10.8% | 7.8% |
| Russell 2000 | Small Core | -0.1% | 11.8% | 8.4% | 11.5% | 9.8% |
| Russell 2000 Growth | Small Growth | 2.3% | 18.6% | 8.8% | 12.9% | 11.0% |
| Russell 2000 Value | Small Value | -2.6% | 5.1% | 7.9% | 10.0% | 8.6% |
| International Equity Benchmarks | | | | | | |
| MSCI ACWI Ex USA | World ex-US | -1.2% | 16.5% | 6.2% | 5.9% | 2.7% |
| MSCI EAFE (Net) (USD) | Int'l Developed | -1.5% | 14.8% | 5.6% | 6.5% | 2.7% |
| MSCI EAFE (Local) | Int'l Developed (Local Currency) | -4.3% | 5.3% | 3.4% | 8.5% | 4.5% |
| S&P EPAC Small Cap | Small Cap Int'l | -0.2% | 23.6% | 12.0% | 11.4% | 6.3% |
| MSCI EM | Emerging Equity | 1.4% | 24.9% | 8.8% | 5.0% | 3.0% |
| Domestic Fixed Income Benchmarks | | | | | | |
| Barclays Aggregate | Core Bonds | -1.5% | 1.2% | 1.2% | 1.8% | 3.6% |
| Barclays US High Yield | High Yield | -0.9% | 3.8% | 5.2% | 5.0% | 8.3% |
| BofA ML US HY BB/B | High Yield | -1.1% | 3.4% | 4.7% | 4.8% | 7.4% |
| CSFB Levered Loans | Bank Loans | 1.6% | 4.6% | 4.3% | 4.2% | 5.4% |
| BofA ML US 3-Month T-Bill | Cash | 0.4% | 1.1% | 0.5% | 0.3% | 0.3% |
| Barclays US TIPS 1-10 Yr | Inflation | -0.4% | 0.4% | 1.2% | -0.1% | 2.2% |
| Global Fixed Income Benchmarks | | | | | | |
| Citigroup WGBI | World Gov. Bonds | 2.5% | 8.5% | 3.5% | 1.2% | 2.0% |
| Barclays Global Aggregate | Global Core Bonds | 1.4% | 7.0% | 3.1% | 1.5% | 2.6% |
| BC Global Credit | Global Bonds | -0.6% | 6.5% | 3.1% | 2.4% | 3.7% |
| JPM GBI-EM Glob. Diversified | Em. Mkt. Bonds (Local Currency) | 4.4% | 12.9% | 5.4% | -0.7% | 3.8% |
| JPM EMBI+ | Em. Mkt. Bonds | -2.0% | 2.2% | 5.1% | 3.6% | 6.5% |
| Alternative Benchmarks | | | | | | |
| Bloomberg Commodity Index | Commodities | -0.4% | 3.7% | -3.2% | -8.3% | -7.7% |
| Credit Suisse Hedge Fund Index | Hedge Fund | 0.5% | 5.4% | 1.8% | 3.6% | 3.5% |
| HFRI FoF Conservative | Fund of Hedge Funds | 0.4% | 3.3% | 1.6% | 2.9% | 1.3% |
| Cambridge PE Lagged* | Private Equity | 5.3% | 17.6% | 12.0% | 13.6% | 9.8% |
| NCREIF ODCE Net Lagged* | Real Estate | 1.9% | 6.7% | 9.4% | 10.5% | 4.1% |
| Wilshire REIT Index | REIT | -7.5% | -3.6% | 1.0% | 6.1% | 6.2% |
| CPI + 2% | Inflation/Real Assets | 1.1% | 4.4% | 3.9% | 3.5% | 3.6% |



* As of 12/31/2017



MARKET ENVIRONMENT

Global Equity

- **U.S. equities as measured by the S&P 500 posted a loss in the first quarter (-0.8%).**
- **Small cap stocks outperformed large cap stocks during the quarter, with the Russell 2000 Index returning -0.1% and the Russell 1000 Index returning -0.7%.**
- **International equities underperformed U.S. markets during the quarter, returning -1.2%, as measured by the MSCI ACWI ex-U.S. Index. Emerging markets returned 1.4% as measured by the MSCI Emerging Markets Index in U.S. dollar terms.**
 - Developed international markets returned -1.5% in USD terms, while in local currency terms returned -4.3% as measured by the MSCI EAFE Index.

Private Equity

- **Capital commitment momentum slowed to a level not seen since 2015 in Q1 2018.**
- **Private equity fundraising totaled \$80 billion in Q1 2018.**
 - North America focused private equity funds raised \$31.7 billion.
 - Asia focused private equity funds raised \$4.8 billion.
 - Europe focused private equity raised \$42.9 billion.
- **Private equity dry powder continued its increase to record levels and stands at \$1.09 trillion.**



MARKET ENVIRONMENT

Fixed Income

- **The nominal yield curve continued to flatten in Q1. Long term yields decreased 27 –to- 23 basis points across 20 to 30 year treasury bonds while short term yields increased 35 basis points for the 3 month and 33 basis points in the one year.**
- **The spread between two and 10 year rates decreased to 47 basis points from 51 basis points in Q1.**
- **Treasury Inflation-Protected Securities, or TIPS, returned -0.4% during the quarter, as measured by the BBg Barclays US TIPS 1-10 Yr Index.**
- **The BBg Barclays Long Duration Credit Index lost -3.8%.**
- **Long Treasuries lost -3.29% and investment-grade US corporate debt lost -1.5%.**
- **The BBg Barclays 1-3 year US Government/ Credit Index returned -0.20%. US high yield bonds lost -0.9% as spreads widened.**
- **Emerging markets debt had mixed results.**
 - US dollar-denominated debt, as measured by the JP Morgan EMBI Index, returned -2.0%; local currency debt gained 4.4%, according to the JP Morgan GBI-EM BD Index.



MARKET ENVIRONMENT

Real Assets/Inflation-Linked Assets

- **Energy remains attractive despite volatile oil prices.**
 - Private equity and debt opportunities are attractive.
 - Fire sale prices never materialized but focusing on assets outside of the hottest zip codes provides potential for strong returns as market normalizes.
- **Infrastructure – select opportunities to access growth markets.**
 - High quality assets are receiving premium bids from direct investors (Pension Funds and Sovereigns) with low costs of capital and long hold horizons; focus on mismanaged or niche opportunities.
- **Metals & Mining – have commodity prices bottomed?**
 - Improving Metals & Mining fundamentals but limited to assets near production
- **Timber – low return potential and limited opportunity for outperformance.**
- **Agriculture – near-term slowdown in price appreciation creates opportunity to invest in a strong (very) long term outlook supported by demographic trends.**



MARKET ENVIRONMENT

Commodities

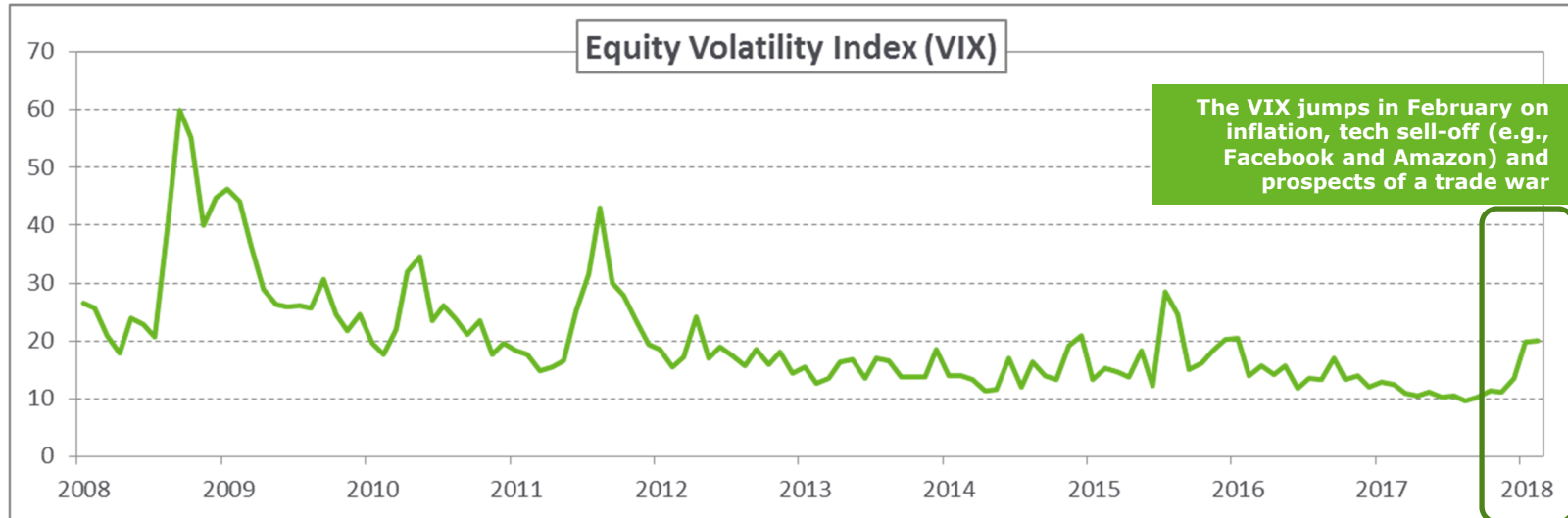
- **Commodities returned -0.4% as measured by the Bloomberg Commodity Index.**
 - Industrial metals led to the index's decline. US Dollar weakness led to increased oil prices.

Real Estate

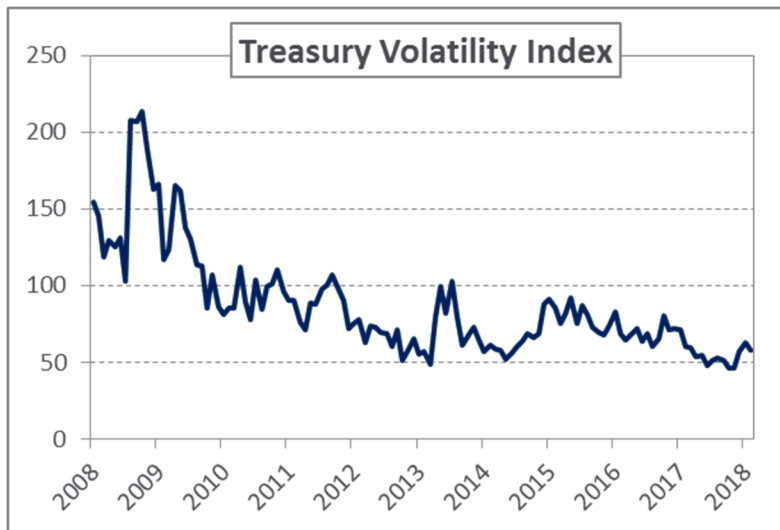
- **NEPC continues to be neutral on core real estate in the US and remains positive on non-core real estate, that is, value-add and opportunistic strategies.**
- **Real estate fundamentals (rent growth, occupancy, net absorption) remain strong; however, valuations are high on an absolute and relative basis.**
 - Rising interest rates have been baked into existing valuations but excess cap rate expansion (beyond general expectations) will reset valuations.
 - REIT sector has been volatile and remain at the high end of historical FFO multiple ranges
- **Overall, the non-core real estate investment environment in the U.S. is normalizing; however, select areas remain attractive.**
- **Europe is viewed as the best place for a marginal dollar of non-core real estate investment.**
- **Emerging markets in Latin America (Brazil) and Asia (China, India) may have strengthening opportunities.**



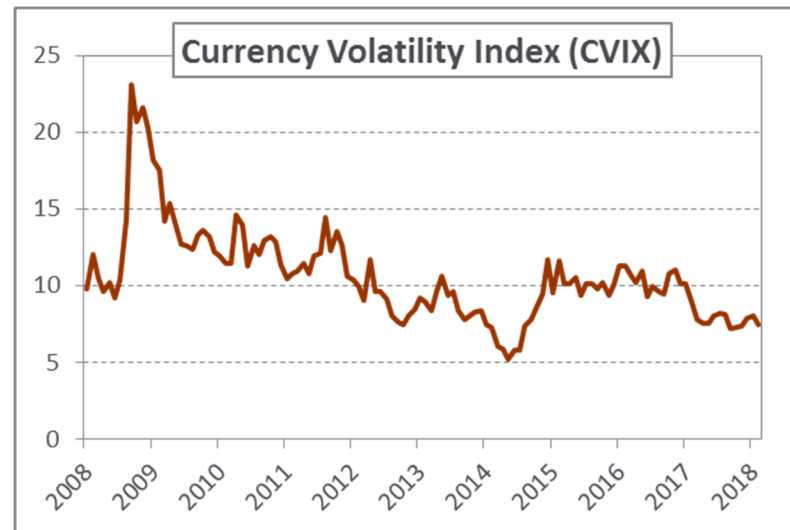
VOLATILITY



Source: CBOE, Bloomberg



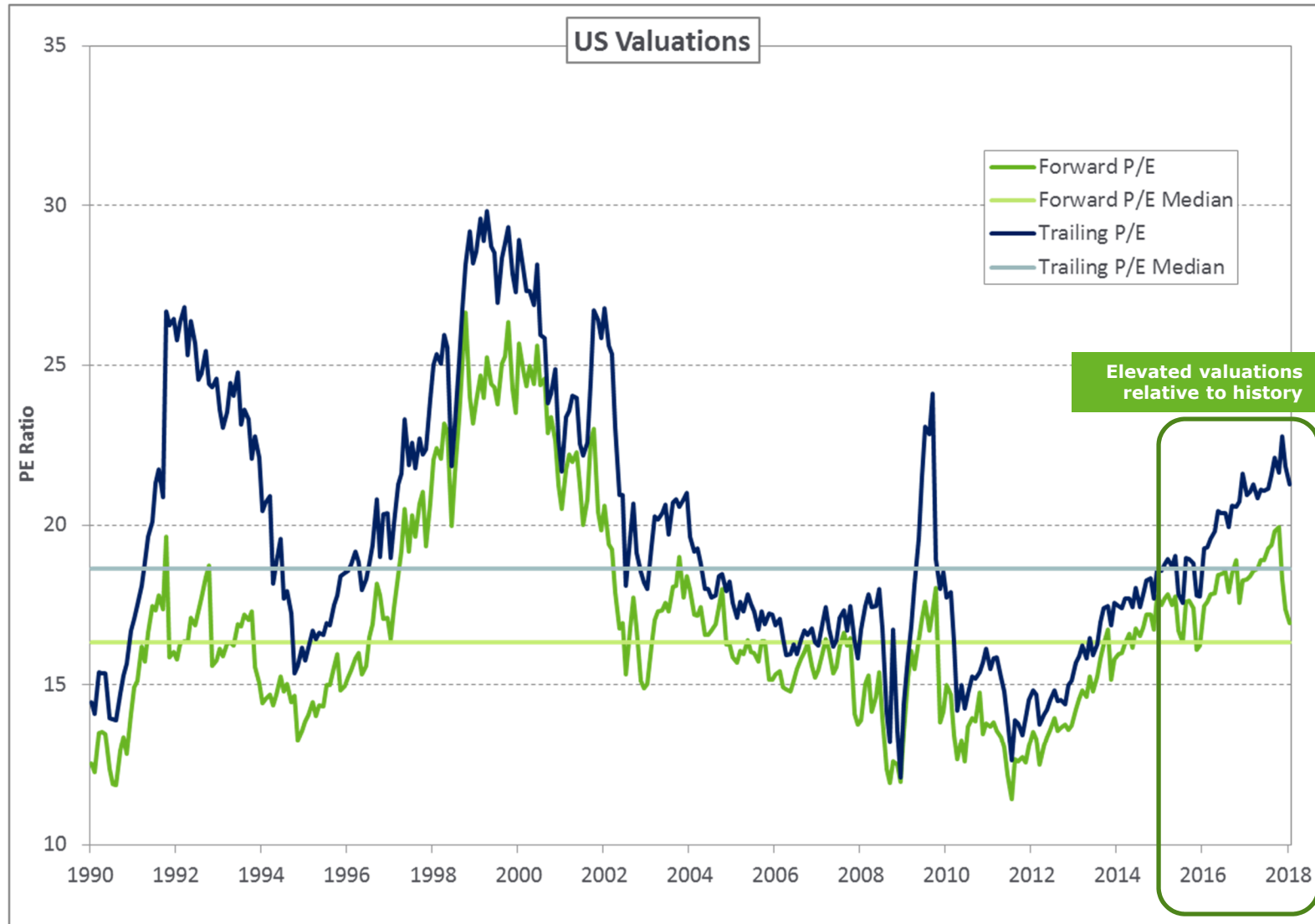
Source: Merrill Lynch, Bloomberg



Source: Deutsche Bank, Bloomberg



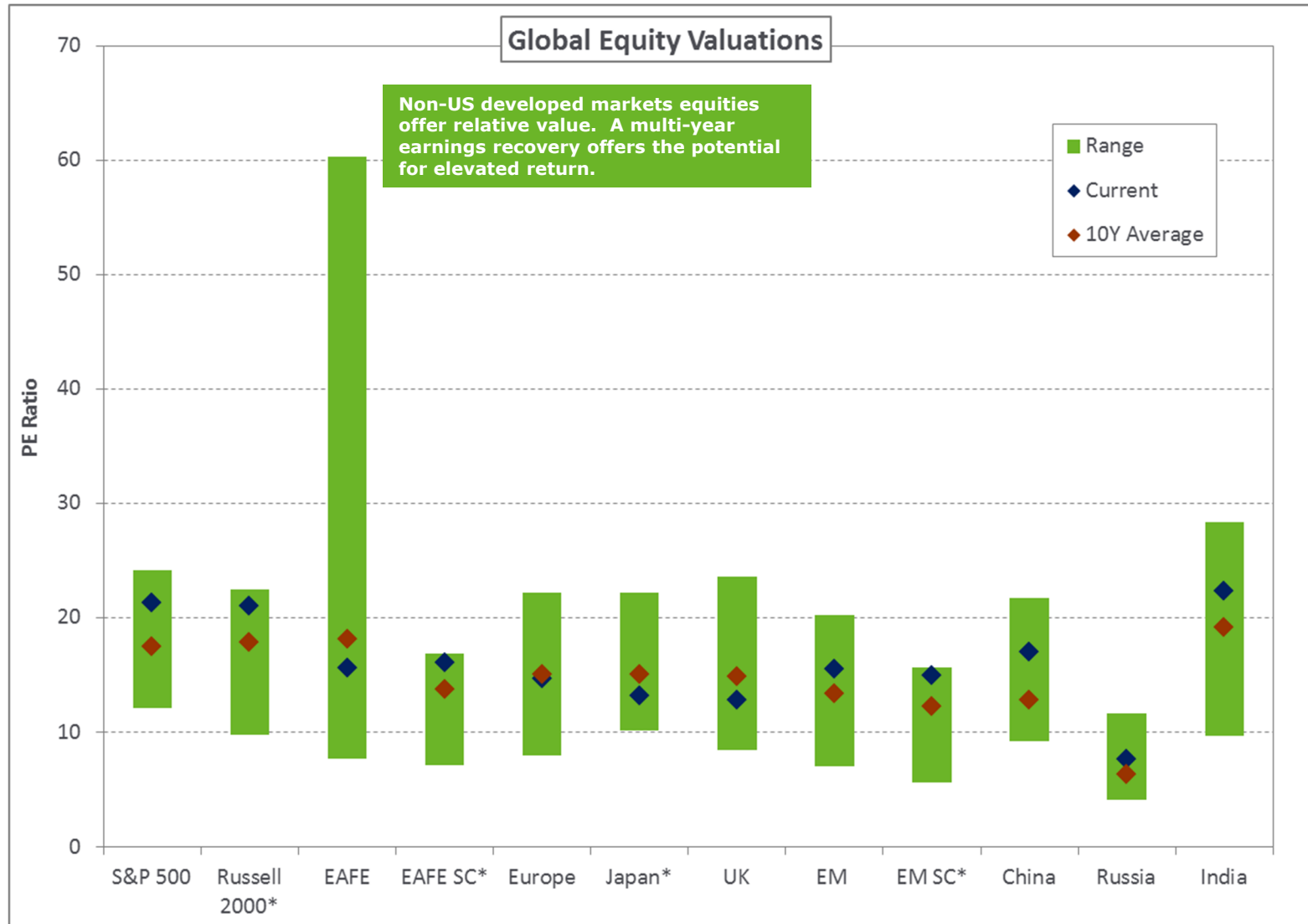
US EQUITY VALUATIONS



Source: S&P, Bloomberg
Medians calculated as of 01/31/1990



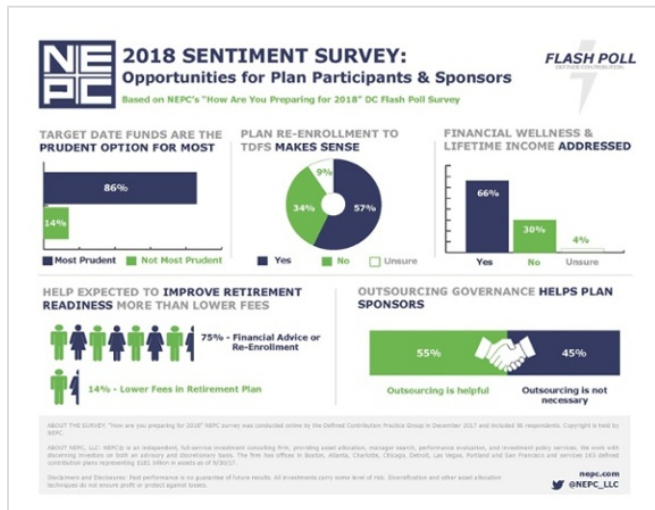
GLOBAL EQUITY VALUATIONS



Source: S&P, Russell, MSCI, Bloomberg, NEPC
 *Denotes the use of index-adjusted positive PE ratio
 Ranges calculated using trailing 10-year figures



HIGHLIGHTS OF FIRST QUARTER HAPPENINGS AT NEPC



NEPC INSIGHTS

- Taking Stock: Corporate Pension Plans: Is it Time to Play Defense?
- White Paper: The Curse of Greed
- Taking Stock: Solar Tariffs: Too Much Shade for Solar?
- 2018 Annual Asset Allocation Letter
- Fourth Quarter Market Thoughts
- Defined Contribution Infographic: How Are You Preparing for 2018?
- Taking Stock: Are CTAs Positioned to Protect Portfolios?
- Taking Stock: Last Week's Market Correction: A Short-Term Blip or a Long-Term Trend?
- Taking Stock: Corporate Pension Plans: Navigating Tax Reform and Q4 Liability Performance
- Taking Stock: Instability and Indecision Fuel Political Uncertainty
- Taking Stock: Italy's Instability and Indecision Fuel Political Uncertainty, Part Due
- March 2018 Endowment & Foundation Survey Results & Infographic
- Taking Stock: What's the Deal with the High Turnover at the Fed?
- Taking Stock: The Fed Sticks to Script; Ups 2019 Projections
- Taking Stock: Ten Years Since the Global Financial Crisis, Part 2: The Ides of March

WEBINAR REPLAYS

- 2018 Market Outlook Webinar Replay

To download NEPC's recent insights and webinar replays, visit: www.NEPC.com/insights

RECENT UPDATES

- Our team continues to grow: Please join us in welcoming back Kristen Colvin, Principal and Member of the Defined Contribution team.
- We have updated our manager rating system! NEPC clients will see these changes in 2018 materials. We transitioned from a qualitatively-named rating system to a numerically-named system.



TOTAL FUND PERFORMANCE

NEPC, LLC

TOTAL FUND PERFORMANCE SUMMARY (GROSS)

| | Market Value | 3 Mo | Rank | Fiscal YTD | Rank | 1 Yr | Rank | 3 Yrs | Rank | 5 Yrs | Rank | 10 Yrs | Rank |
|-------------------------------------------------------|------------------------|-------------|----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| Total Fund | \$9,872,639,719 | 1.0% | 8 | 7.0% | 63 | 9.8% | 75 | 7.3% | 30 | 7.7% | 62 | 5.3% | 97 |
| <i>Policy Index</i> | | 0.3% | 26 | 6.8% | 67 | 9.8% | 79 | 6.1% | 85 | 6.3% | 91 | 5.5% | 90 |
| <i>S&P 500</i> | | -0.8% | 96 | 10.6% | 1 | 14.0% | 4 | 10.8% | 1 | 13.3% | 1 | 9.5% | 1 |
| <i>BBgBarc US Aggregate TR</i> | | -1.5% | 99 | -0.2% | 99 | 1.2% | 99 | 1.2% | 99 | 1.8% | 99 | 3.6% | 99 |
| <i>60% MSCI ACWI (Net) / 40% CITI WGBI</i> | | 0.5% | 23 | 8.3% | 18 | 12.3% | 17 | 6.4% | 74 | 6.1% | 92 | 4.4% | 99 |
| <i>InvestorForce Public DB > \$1B Gross Median</i> | | 0.0% | | 7.4% | | 10.7% | | 7.0% | | 8.0% | | 6.3% | |

In the year ended March 31, 2018 the Fund returned 9.8% ranking in the 75th percentile of Public Funds > \$1Billion and significantly outperformed the actuarial assumed rate of 7.25%. The Fund's assets totaled \$9.87 billion, an increase of \$840.5 million from a year ago.

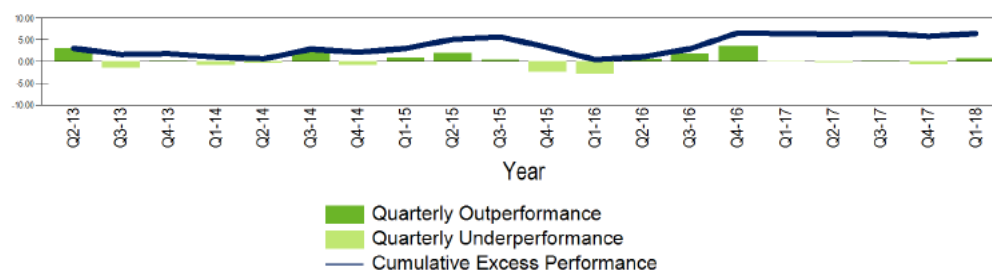
The Fund experienced a net investment gain of \$897.3 million during the year including a net investment gain of \$100.0 million in the first calendar quarter.

In the three –year period ended March 31, 2018 the Fund returned 7.3% and ranked in the 30th percentile among its peers. The Sharpe Ratio over this period of 1.8 ranks in the 1st percentile, indicating that the Fund earned a higher rate of return for each incremental unit of risk taken during the period versus its peers.

In the five-year period ended March 31, 2018 the Fund returned 7.7% per annum and ranked in the 62nd percentile among its peers. On a risk adjusted basis the Fund's Sharpe and Sortino Ratios rank in the 1st percentile indicating both strong returns per unit of risk taken and strong returns per unit of downside risk experienced when compared to a universe of public fund peers >\$1B.

Note: InvestorForce Public Funds >\$1B Gross of Fee prelim universe contains 28 portfolios with \$250 billion in assets.

Quarterly and Cumulative Gross Performance vs. Policy



Statistics Summary

3 Years Ending March 31, 2018

| | Sharpe Ratio | Sharpe Ratio Rank | Sortino Ratio | Sortino Ratio Rank |
|---------------------------------------------|--------------|-------------------|---------------|--------------------|
| Total Fund | 1.8 | 1 | 3.2 | 1 |
| InvestorForce Public DB > \$1B Gross Median | 1.0 | -- | 1.6 | -- |

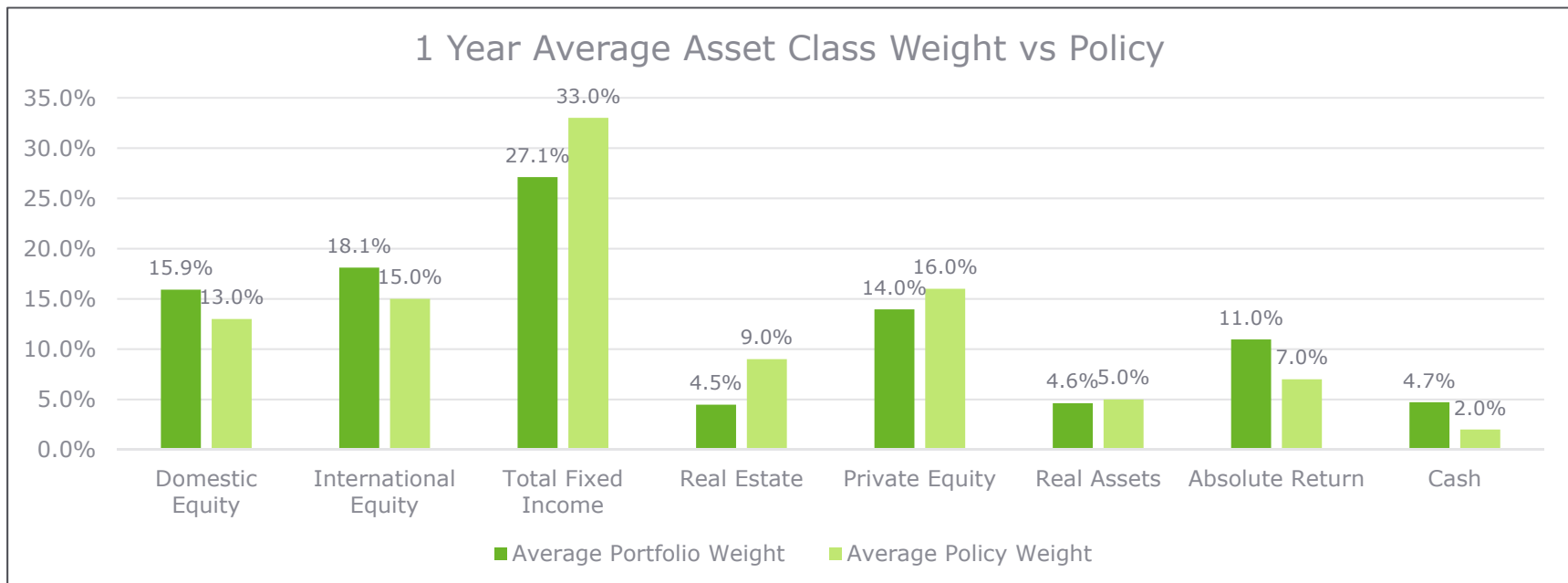
5 Years Ending March 31, 2018

| | Sharpe Ratio | Sharpe Ratio Rank | Sortino Ratio | Sortino Ratio Rank |
|---------------------------------------------|--------------|-------------------|---------------|--------------------|
| Total Fund | 2.2 | 1 | 3.8 | 1 |
| InvestorForce Public DB > \$1B Gross Median | 1.2 | -- | 2.1 | -- |



BETA OVERLAY CONTRIBUTION TO RETURN

| COMPOSITE | 3 Months | 1 Year | 3 Years | 5 Years |
|------------------------------|--------------|-------------|-------------|-------------|
| TOTAL PLAN PLUS BETA OVERLAY | 1.01 | 9.93 | 7.36 | 7.65 |
| TOTAL PLAN EX OVERLAY | 1.19 | 8.98 | 7.18 | 7.20 |
| <i>Over/Under</i> | <i>-0.18</i> | <i>0.95</i> | <i>0.18</i> | <i>0.45</i> |



San Bernardino County Employees' Retirement Association

TOTAL FUND PERFORMANCE SUMMARY

| Statistics Summary | | | | | | | | |
|---------------------------------------------|--------------|-------------------|--------------------------|-------------------------------|--------------|-------------------|---------------|--------------------|
| 1 Year Ending March 31, 2018 | | | | | | | | |
| | Anlzd Return | Anlzd Return Rank | Anlzd Standard Deviation | Anlzd Standard Deviation Rank | Sharpe Ratio | Sharpe Ratio Rank | Sortino Ratio | Sortino Ratio Rank |
| Total Fund | 9.8% | 75 | 2.5% | 1 | 3.4 | 2 | 8.1 | 1 |
| InvestorForce Public DB > \$1B Gross Median | 10.7% | -- | 4.7% | -- | 2.1 | -- | 2.2 | -- |

| Statistics Summary | | | | | | | | |
|---------------------------------------------|--------------|-------------------|--------------------------|-------------------------------|--------------|-------------------|---------------|--------------------|
| 3 Years Ending March 31, 2018 | | | | | | | | |
| | Anlzd Return | Anlzd Return Rank | Anlzd Standard Deviation | Anlzd Standard Deviation Rank | Sharpe Ratio | Sharpe Ratio Rank | Sortino Ratio | Sortino Ratio Rank |
| Total Fund | 7.3% | 30 | 3.7% | 1 | 1.8 | 1 | 3.2 | 1 |
| InvestorForce Public DB > \$1B Gross Median | 7.0% | -- | 6.2% | -- | 1.0 | -- | 1.6 | -- |

| Statistics Summary | | | | | | | | |
|---------------------------------------------|--------------|-------------------|--------------------------|-------------------------------|--------------|-------------------|---------------|--------------------|
| 5 Years Ending March 31, 2018 | | | | | | | | |
| | Anlzd Return | Anlzd Return Rank | Anlzd Standard Deviation | Anlzd Standard Deviation Rank | Sharpe Ratio | Sharpe Ratio Rank | Sortino Ratio | Sortino Ratio Rank |
| Total Fund | 7.7% | 62 | 3.3% | 1 | 2.2 | 1 | 3.8 | 1 |
| InvestorForce Public DB > \$1B Gross Median | 8.0% | -- | 6.2% | -- | 1.2 | -- | 2.1 | -- |

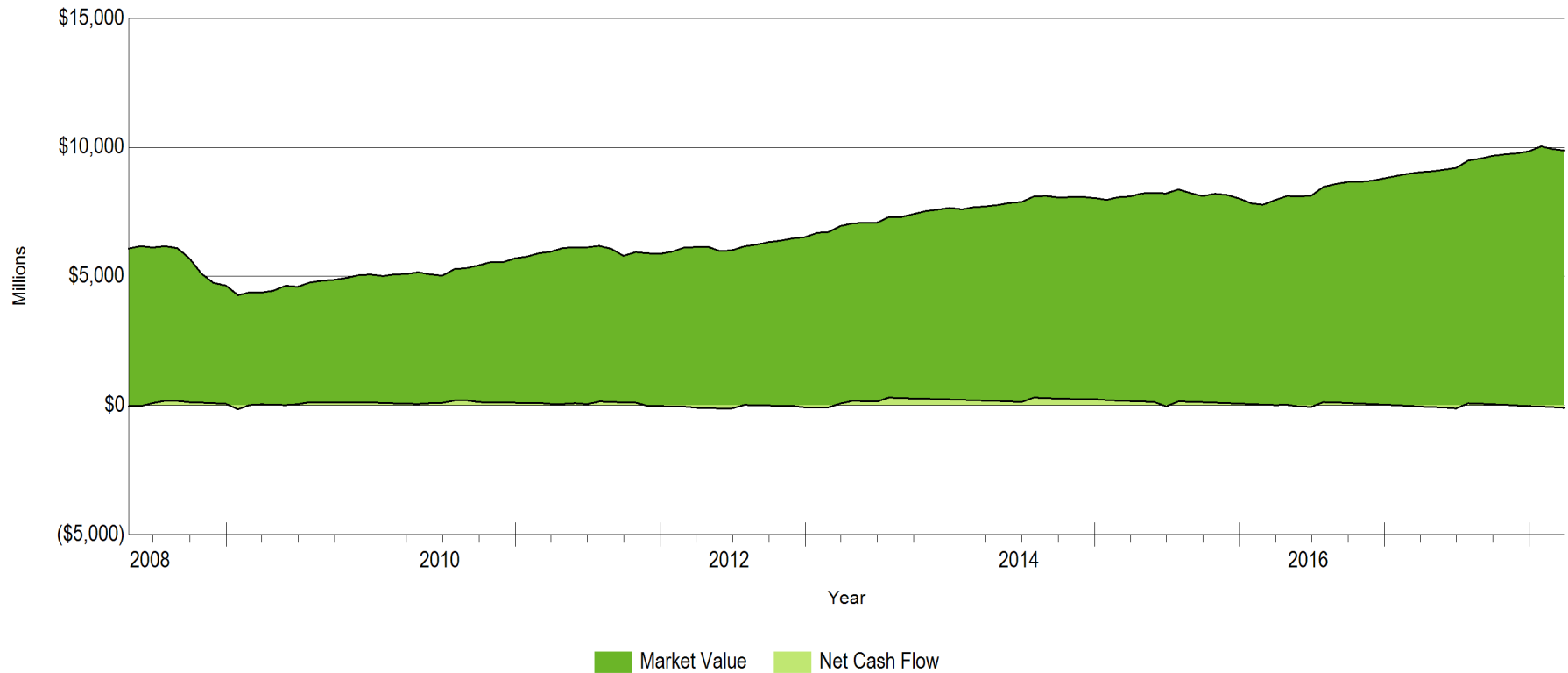
Sortino Ratio requires at least two negative points during the time period in order to calculate



San Bernardino County Employees' Retirement Association

TOTAL FUND ASSET GROWTH SUMMARY

10 Years Ending March 31, 2018

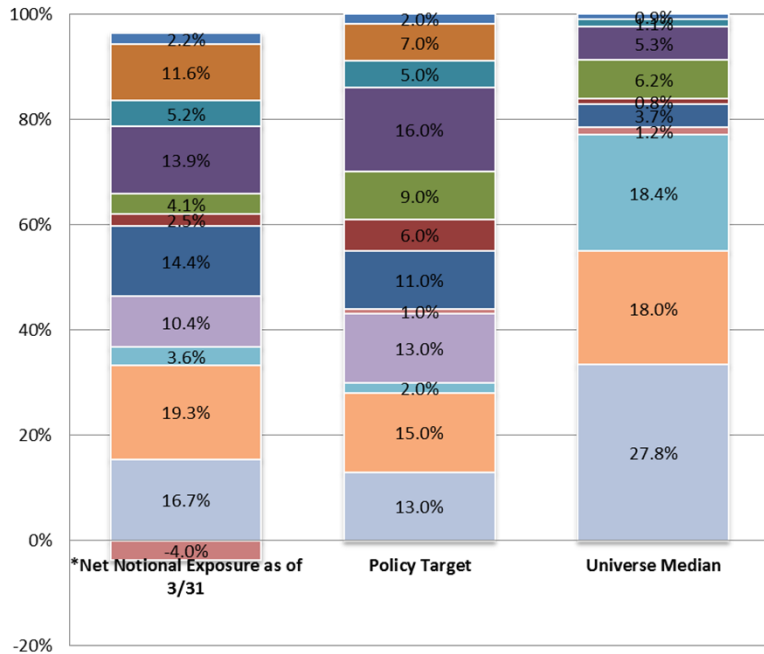


| | Last Three Months | Fiscal Year-To-Date | One Year | Five Years | Ten Years |
|------------------------|-------------------|---------------------|-----------------|-----------------|-----------------|
| Beginning Market Value | \$9,844,615,850 | \$9,197,095,393 | \$9,032,099,324 | \$6,838,061,287 | \$5,947,730,349 |
| Net Cash Flow | -\$72,014,243 | \$20,801,139 | -\$56,786,954 | -\$173,815,109 | -\$84,639,173 |
| Net Investment Change | \$100,038,113 | \$654,743,187 | \$897,327,349 | \$3,208,393,541 | \$4,009,548,543 |
| Ending Market Value | \$9,872,639,719 | \$9,872,639,719 | \$9,872,639,719 | \$9,872,639,719 | \$9,872,639,719 |



San Bernardino County Employees' Retirement Association

TOTAL FUND PERFORMANCE SUMMARY



- US Equities
- U.S. Core
- Non-US Core Fixed Income
- Emerging Market Debt
- Private Equity
- Absolute Return
- Int'l Equities
- US Credit
- Non-US Credit
- Real Estate
- Real Assets
- Cash

| | *Net Notional Exposure | *Net Notional Exposure as of 3/31 | Policy Target | *Difference | Policy Ranges | Within Range |
|---------------------------------|------------------------|-----------------------------------|---------------|--------------|----------------|--------------|
| US Equities | 1,646,109 | 16.7% | 13.0% | 3.7% | 8%-18% | Yes |
| Int'l Equities | 1,905,524 | 19.3% | 15.0% | 4.3% | 10%-20% | Yes |
| U.S. Core | 357,800 | 3.6% | 2.0% | 1.6% | -3%-7% | Yes |
| US Credit | 1,028,890 | 10.4% | 13.0% | -2.6% | 8%-18% | Yes |
| Non-US Core Fixed Income | (394,906) | -4.0% | 1.0% | -5.0% | -4%-6% | Yes |
| Non-US Credit | 1,420,585 | 14.4% | 11.0% | 3.4% | 6%-16% | Yes |
| Emerging Market Debt | 249,194 | 2.5% | 6.0% | -3.5% | 1%-11% | Yes |
| Real Estate | 406,215 | 4.1% | 9.0% | -4.9% | 0%-14% | Yes |
| Private Equity | 1,376,280 | 13.9% | 16.0% | -2.1% | 6%-21% | Yes |
| Real Assets | 514,201 | 5.2% | 5.0% | 0.2% | 0%-10% | Yes |
| Absolute Return | 1,141,371 | 11.6% | 7.0% | 4.6% | 0%-12% | Yes |
| Cash | 221,378 | 2.2% | 2.0% | 0.2% | 0%-10% | Yes |
| | 9,872,640 | 100.0% | 100.0% | | | |



San Bernardino County Employees' Retirement Association

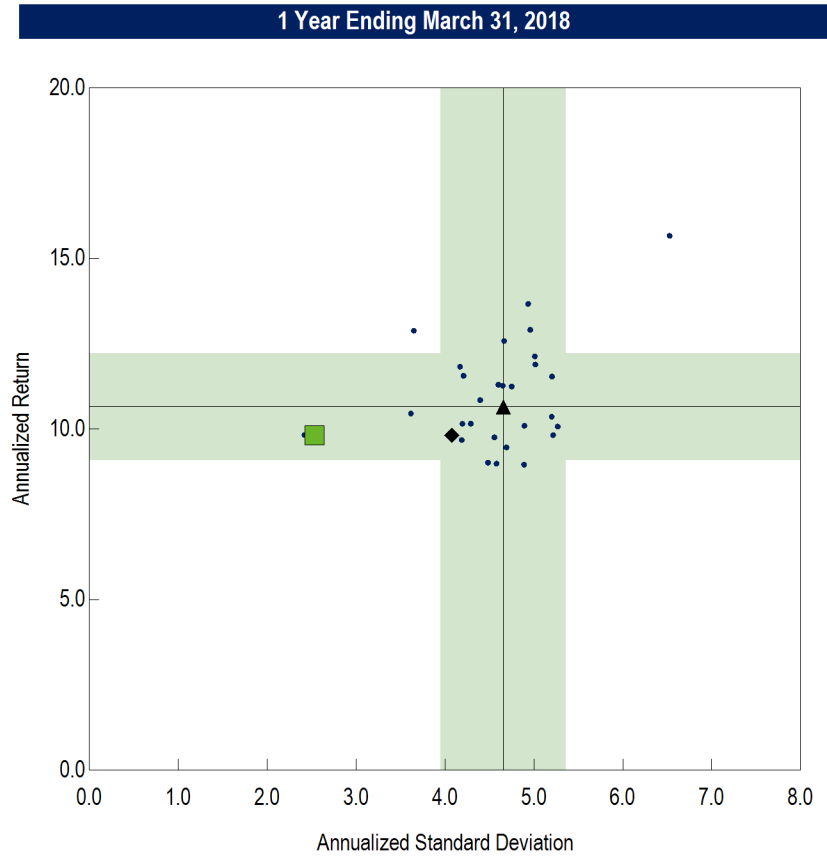
TOTAL FUND PERFORMANCE SUMMARY

| Asset Class | Physical Exposure | | Delta Adjusted Synthetic Exposure | | Net Position | | Overlay Target | | Policy Target | |
|---------------------------|-------------------|---------------|--------------------------------------|----------------|----------------|---------------|----------------|---------------|----------------|---------------|
| | | | | | | | | | | |
| Total Market Value | 9,632.5 | 100.0% | -0.0 | 0.0% | 9,632.5 | 100.0% | 9,632.5 | 100.0% | 9,632.5 | 100.0% |
| Cash | 1,328.8 | 13.79% | -1,249.5 | -12.97% | 79.3 | 0.82% | 0.0 | 0.0% | 0.0 | 0.00% |
| Cash | 1,328.8 | 13.79% | -1,249.5 | -12.97% | 79.3 | 0.82% | 0.0 | 0.0% | 0.0 | 0.00% |
| Equity | 1,677.6 | 17.42% | 1,798.4 | 18.67% | 3,476.0 | 36.09% | 3,558.0 | 36.94% | 3,564.0 | 37.00% |
| Emerging Markets | 487.8 | 5.06% | 284.1 | 2.95% | 771.8 | 8.01% | 769.3 | 7.99% | 770.6 | 8.00% |
| Equity Delta Hedge | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.00% |
| International Developed | 124.7 | 1.29% | 933.3 | 9.69% | 1,058.0 | 10.98% | 1,057.8 | 10.98% | 1,059.6 | 11.00% |
| US Large Cap | 1,065.0 | 11.06% | 321.6 | 3.34% | 1,386.6 | 14.4% | 1,394.4 | 14.48% | 1,396.7 | 14.50% |
| US Small Cap | 0.1 | 0.0% | 259.4 | 2.69% | 259.5 | 2.69% | 336.6 | 3.49% | 337.1 | 3.50% |
| Fixed | 3,220.2 | 33.43% | -548.9 | -5.7% | 2,671.3 | 27.73% | 2,668.5 | 27.7% | 2,673.0 | 27.75% |
| EM High Yield CDX | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.0% | 0.0 | 0.00% |
| Global ex US Fixed Income | 2,157.7 | 22.4% | -906.8 | -9.41% | 1,250.9 | 12.99% | 1,250.1 | 12.98% | 1,252.2 | 13.00% |
| High Yield ** | 1,062.5 | 11.03% | 0.0 | 0.0% | 1,062.5 | 11.03% | 913.6 | 9.48% | 915.1 | 9.50% |
| US Fixed Income | 0.0 | 0.0% | 357.8 | 3.71% | 357.8 | 3.71% | 504.9 | 5.24% | 505.7 | 5.25% |
| Other | 3,405.9 | 35.36% | 0.0 | 0.0% | 3,405.9 | 35.36% | 3,405.9 | 35.36% | 3,395.5 | 35.25% |
| Alternatives | 164.6 | 1.71% | 0.0 | 0.0% | 164.6 | 1.71% | 164.6 | 1.71% | 163.8 | 1.70% |
| Commodities | 180.0 | 1.87% | 0.0 | 0.0% | 180.0 | 1.87% | 180.0 | 1.87% | 192.6 | 2.00% |
| Infrastructure | 163.0 | 1.69% | 0.0 | 0.0% | 163.0 | 1.69% | 163.0 | 1.69% | 163.8 | 1.70% |
| Private Equity | 1,186.9 | 12.32% | 0.0 | 0.0% | 1,186.9 | 12.32% | 1,186.9 | 12.32% | 1,300.4 | 13.50% |
| Real Estate | 483.1 | 5.02% | 0.0 | 0.0% | 483.1 | 5.02% | 483.1 | 5.02% | 346.8 | 3.60% |
| Tactical Cash | 1,228.1 | 12.75% | 0.0 | 0.0% | 1,228.1 | 12.75% | 1,228.1 | 12.75% | 1,228.1 | 12.75% |

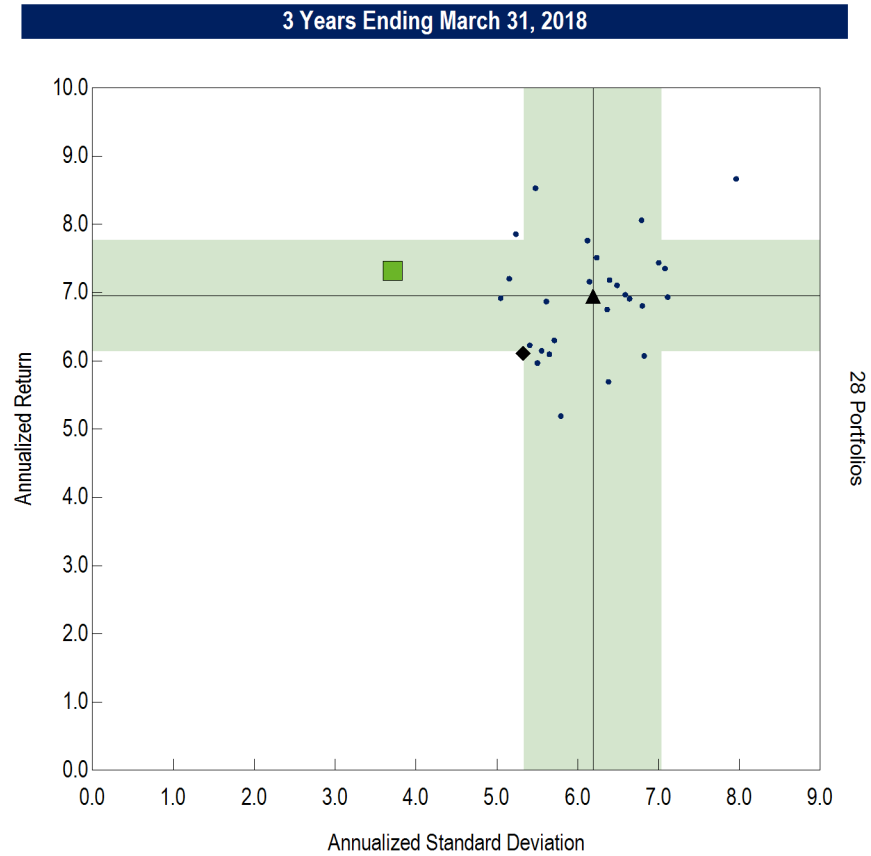


San Bernardino County Employees' Retirement Association

TOTAL FUND RISK/RETURN



- Total Fund
- ◆ Policy Index
- ▲ Universe Median
- ▭ 68% Confidence Interval
- InvestorForce Public DB > \$1B Gross

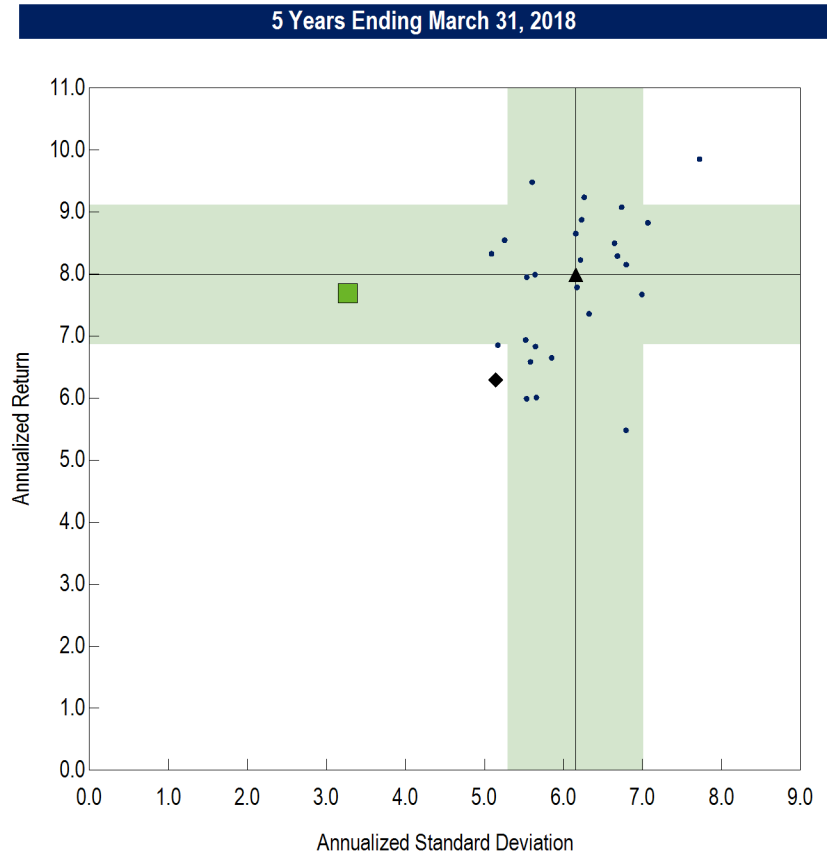


- Total Fund
- ◆ Policy Index
- ▲ Universe Median
- ▭ 68% Confidence Interval
- InvestorForce Public DB > \$1B Gross

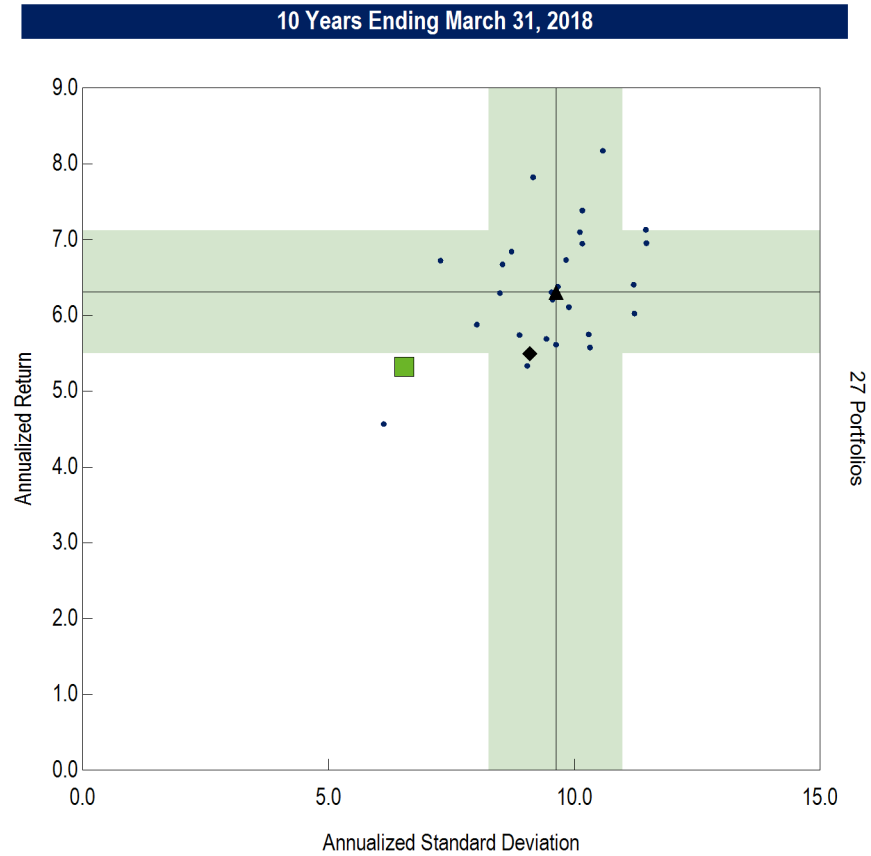


San Bernardino County Employees' Retirement Association

TOTAL FUND RISK/RETURN



- Total Fund
- ◆ Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Gross

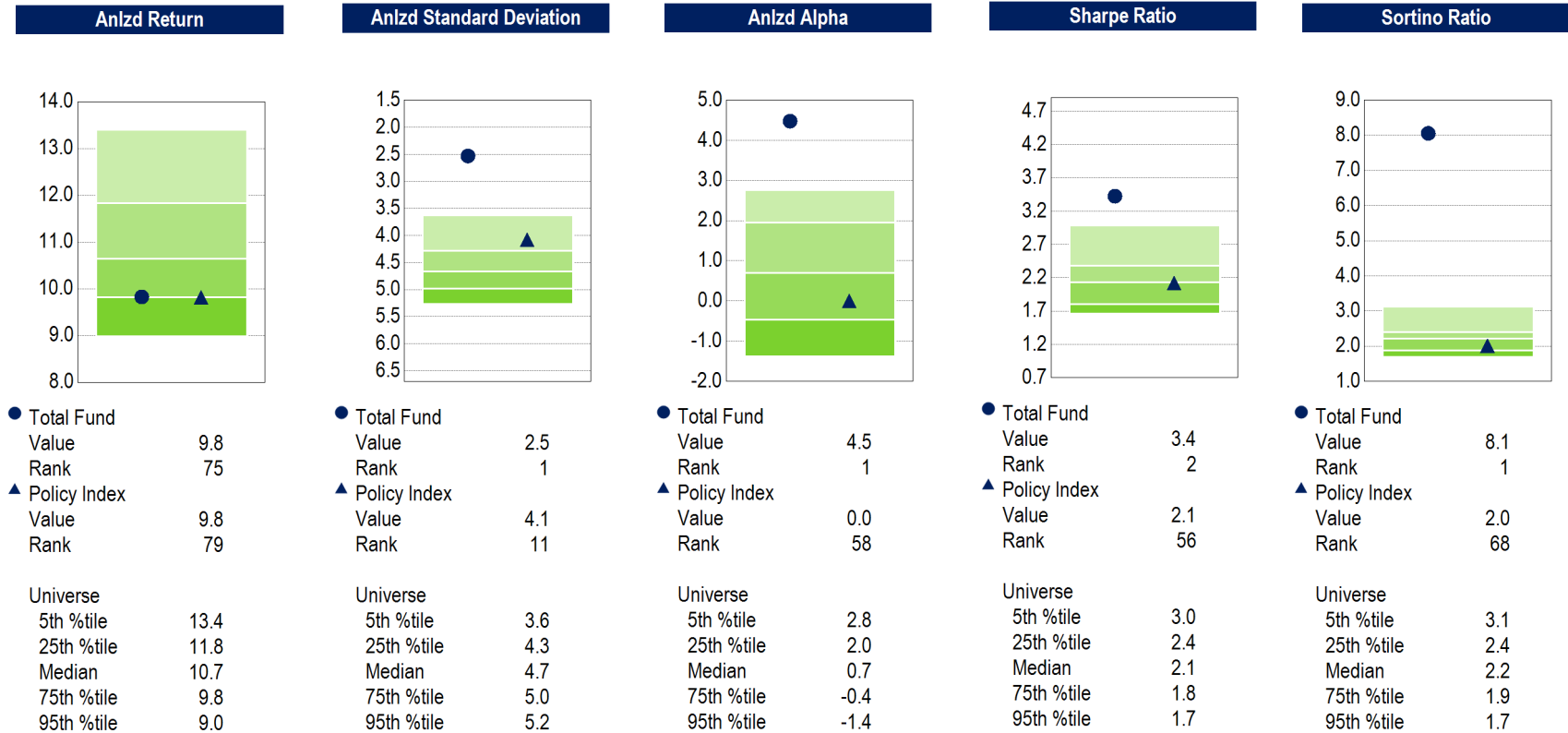


- Total Fund
- ◆ Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Gross



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

Total Fund vs. InvestorForce Public DB > \$1B Gross (USD) 1 Year



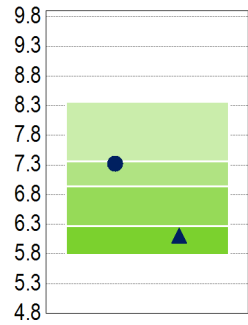
Sortino Ratio requires at least two negative points during the time period in order to calculate.
Sample size is 28 Portfolios



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

Total Fund vs. InvestorForce Public DB > \$1B Gross (USD) 3 Years

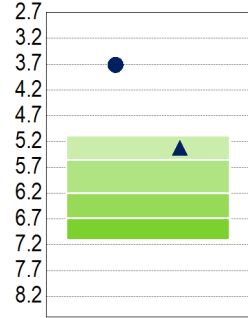
Anlzd Return



| | |
|----------------|-----|
| ● Total Fund | |
| Value | 7.3 |
| Rank | 30 |
| ▲ Policy Index | |
| Value | 6.1 |
| Rank | 85 |

| | |
|------------|-----|
| Universe | |
| 5th %tile | 8.4 |
| 25th %tile | 7.4 |
| Median | 7.0 |
| 75th %tile | 6.3 |
| 95th %tile | 5.8 |

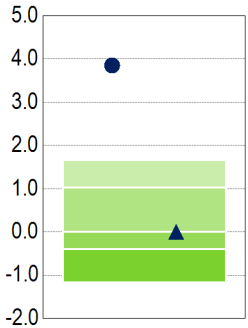
Anlzd Standard Deviation



| | |
|----------------|-----|
| ● Total Fund | |
| Value | 3.7 |
| Rank | 1 |
| ▲ Policy Index | |
| Value | 5.3 |
| Rank | 14 |

| | |
|------------|-----|
| Universe | |
| 5th %tile | 5.1 |
| 25th %tile | 5.5 |
| Median | 6.2 |
| 75th %tile | 6.7 |
| 95th %tile | 7.1 |

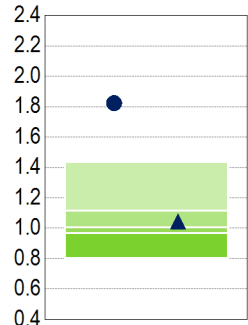
Anlzd Alpha



| | |
|----------------|-----|
| ● Total Fund | |
| Value | 3.9 |
| Rank | 1 |
| ▲ Policy Index | |
| Value | 0.0 |
| Rank | 58 |

| | |
|------------|------|
| Universe | |
| 5th %tile | 1.7 |
| 25th %tile | 1.0 |
| Median | 0.0 |
| 75th %tile | -0.4 |
| 95th %tile | -1.2 |

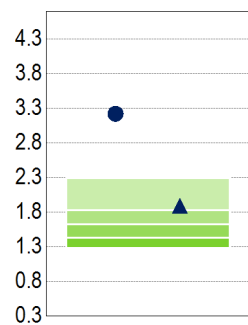
Sharpe Ratio



| | |
|----------------|-----|
| ● Total Fund | |
| Value | 1.8 |
| Rank | 1 |
| ▲ Policy Index | |
| Value | 1.0 |
| Rank | 39 |

| | |
|------------|-----|
| Universe | |
| 5th %tile | 1.4 |
| 25th %tile | 1.1 |
| Median | 1.0 |
| 75th %tile | 1.0 |
| 95th %tile | 0.8 |

Sortino Ratio



| | |
|----------------|-----|
| ● Total Fund | |
| Value | 3.2 |
| Rank | 1 |
| ▲ Policy Index | |
| Value | 1.9 |
| Rank | 13 |

| | |
|------------|-----|
| Universe | |
| 5th %tile | 2.3 |
| 25th %tile | 1.8 |
| Median | 1.6 |
| 75th %tile | 1.4 |
| 95th %tile | 1.3 |

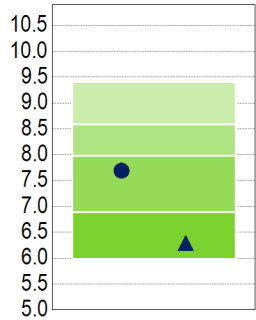
Sortino Ratio requires at least two negative points during the time period in order to calculate.
Sample size is 28 Portfolios



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

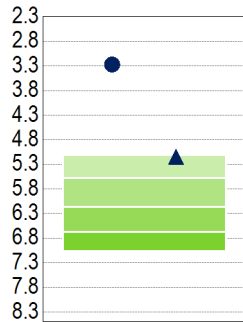
Total Fund vs. InvestorForce Public DB > \$1B Gross (USD) 5 Years

Anlzd Return



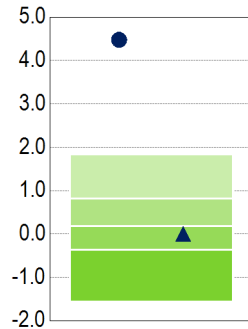
| | |
|----------------|-----|
| ● Total Fund | |
| Value | 7.7 |
| Rank | 62 |
| ▲ Policy Index | |
| Value | 6.3 |
| Rank | 91 |
| Universe | |
| 5th %tile | 9.4 |
| 25th %tile | 8.6 |
| Median | 8.0 |
| 75th %tile | 6.9 |
| 95th %tile | 6.0 |

Anlzd Standard Deviation



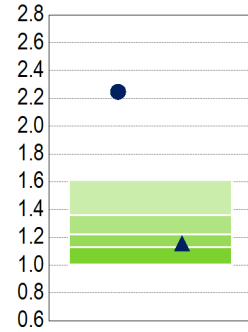
| | |
|----------------|-----|
| ● Total Fund | |
| Value | 3.3 |
| Rank | 1 |
| ▲ Policy Index | |
| Value | 5.1 |
| Rank | 7 |
| Universe | |
| 5th %tile | 5.1 |
| 25th %tile | 5.6 |
| Median | 6.2 |
| 75th %tile | 6.7 |
| 95th %tile | 7.0 |

Anlzd Alpha



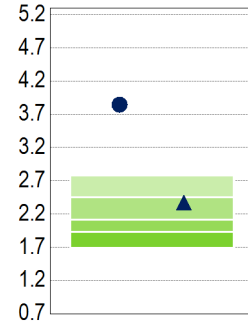
| | |
|----------------|------|
| ● Total Fund | |
| Value | 4.5 |
| Rank | 1 |
| ▲ Policy Index | |
| Value | 0.0 |
| Rank | 57 |
| Universe | |
| 5th %tile | 1.8 |
| 25th %tile | 0.8 |
| Median | 0.2 |
| 75th %tile | -0.3 |
| 95th %tile | -1.5 |

Sharpe Ratio



| | |
|----------------|-----|
| ● Total Fund | |
| Value | 2.2 |
| Rank | 1 |
| ▲ Policy Index | |
| Value | 1.2 |
| Rank | 69 |
| Universe | |
| 5th %tile | 1.6 |
| 25th %tile | 1.4 |
| Median | 1.2 |
| 75th %tile | 1.1 |
| 95th %tile | 1.0 |

Sortino Ratio



| | |
|----------------|-----|
| ● Total Fund | |
| Value | 3.8 |
| Rank | 1 |
| ▲ Policy Index | |
| Value | 2.4 |
| Rank | 31 |
| Universe | |
| 5th %tile | 2.8 |
| 25th %tile | 2.5 |
| Median | 2.1 |
| 75th %tile | 1.9 |
| 95th %tile | 1.7 |

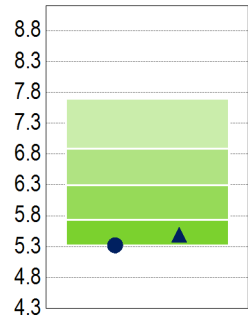
Sortino Ratio requires at least two negative points during the time period in order to calculate.
Sample size is 28 Portfolios



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

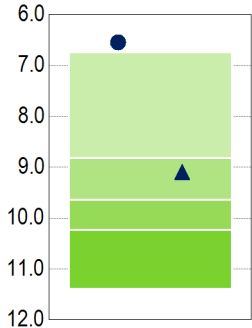
**Total Fund vs. InvestorForce Public DB > \$1B Gross (USD)
10 Years**

Anlzd Return



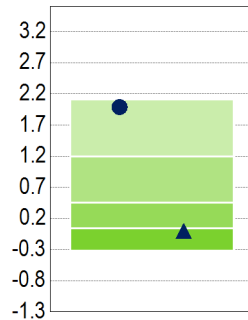
| | |
|----------------|-----|
| ● Total Fund | |
| Value | 5.3 |
| Rank | 97 |
| ▲ Policy Index | |
| Value | 5.5 |
| Rank | 90 |
| Universe | |
| 5th %tile | 7.7 |
| 25th %tile | 6.9 |
| Median | 6.3 |
| 75th %tile | 5.7 |
| 95th %tile | 5.3 |

Anlzd Standard Deviation



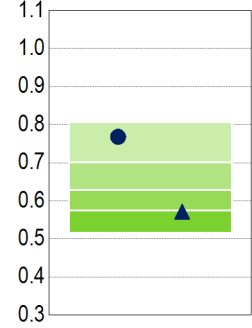
| | |
|----------------|------|
| ● Total Fund | |
| Value | 6.5 |
| Rank | 4 |
| ▲ Policy Index | |
| Value | 9.1 |
| Rank | 33 |
| Universe | |
| 5th %tile | 6.7 |
| 25th %tile | 8.8 |
| Median | 9.6 |
| 75th %tile | 10.2 |
| 95th %tile | 11.4 |

Anlzd Alpha



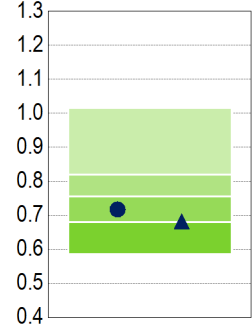
| | |
|----------------|------|
| ● Total Fund | |
| Value | 2.0 |
| Rank | 7 |
| ▲ Policy Index | |
| Value | 0.0 |
| Rank | 81 |
| Universe | |
| 5th %tile | 2.1 |
| 25th %tile | 1.2 |
| Median | 0.5 |
| 75th %tile | 0.1 |
| 95th %tile | -0.3 |

Sharpe Ratio



| | |
|----------------|-----|
| ● Total Fund | |
| Value | 0.8 |
| Rank | 9 |
| ▲ Policy Index | |
| Value | 0.6 |
| Rank | 78 |
| Universe | |
| 5th %tile | 0.8 |
| 25th %tile | 0.7 |
| Median | 0.6 |
| 75th %tile | 0.6 |
| 95th %tile | 0.5 |

Sortino Ratio



| | |
|----------------|-----|
| ● Total Fund | |
| Value | 0.7 |
| Rank | 66 |
| ▲ Policy Index | |
| Value | 0.7 |
| Rank | 76 |
| Universe | |
| 5th %tile | 1.0 |
| 25th %tile | 0.8 |
| Median | 0.8 |
| 75th %tile | 0.7 |
| 95th %tile | 0.6 |

Sortino Ratio requires at least two negative points during the time period in order to calculate.
Sample size is 28 Portfolios



San Bernardino County Employees' Retirement Association

TOTAL FUND RISK STATISTICS

| 1 Years Ending March 31, 2018 | | | | | | | | |
|-------------------------------------------------------------------------------|----------|-----------|------|---------------|------|----------------|------------|------|
| | % of Tot | Anlzd Ret | Rank | Anlzd Std Dev | Rank | Tracking Error | Info Ratio | Rank |
| Domestic Equity With Beta Overlay | 16.7% | 9.3% | 99 | 6.1% | 1 | 2.8% | -1.6 | -- |
| Russell 3000 | -- | 13.8% | 40 | 8.0% | 90 | 0.0% | -- | -- |
| Domestic Equity | 10.8% | 2.8% | -- | 5.5% | -- | 3.3% | -3.3 | -- |
| Russell 3000 | -- | 13.8% | -- | 8.0% | -- | 0.0% | -- | -- |
| International Equity With Beta Overlay | 19.3% | 12.0% | 94 | 7.4% | 10 | 3.4% | -1.5 | -- |
| MSCI ACWI ex USA Gross | -- | 17.0% | 27 | 9.2% | 97 | 0.0% | -- | -- |
| International Developed | 1.3% | 1.2% | 99 | 0.1% | 1 | 8.9% | -1.5 | -- |
| MSCI EAFE | -- | 14.8% | 90 | 8.9% | 76 | 0.0% | -- | -- |
| International Emerging | 5.7% | 23.2% | -- | 9.6% | -- | 3.3% | -0.5 | -- |
| MSCI Emerging Markets | -- | 24.9% | -- | 11.9% | -- | 0.0% | -- | -- |
| U.S. Credit Strategies | 10.6% | 7.4% | 20 | 3.1% | 58 | 3.5% | 0.9 | 40 |
| 50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index | -- | 4.0% | 65 | 1.5% | 3 | 0.0% | -- | -- |
| Non-U.S. Credit Composite | 14.2% | 12.9% | -- | 3.3% | -- | 9.1% | -0.8 | -- |
| ICE BofA Merrill Lynch Euro High Yield Constrained | -- | 20.1% | -- | 7.4% | -- | 0.0% | -- | -- |
| Emerging Markets Debt Composite | 7.7% | 7.5% | 45 | 3.9% | 64 | 4.6% | -0.2 | -- |
| 50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified | -- | 8.6% | 40 | 4.1% | 65 | 0.0% | -- | -- |
| Alpha Pool Composite | 18.7% | 5.2% | 51 | 1.5% | 7 | 1.5% | 0.7 | 12 |
| 91 Day T-Bill + 3% | -- | 4.2% | 66 | 0.1% | 1 | 0.0% | -- | -- |

| | % of Tot | Anlzd Ret | Rank | Anlzd Std Dev | Rank |
|----------------------------------------------|----------|-----------|------|---------------|------|
| Private Equity Composite | 13.9% | 18.9% | -- | 3.6% | -- |
| Cambridge Associates Global All PE (Qtr Lag) | -- | 18.4% | -- | 7.4% | -- |
| Real Estate Composite | 4.1% | 5.3% | 93 | 3.9% | 81 |
| NCREIF Property Index 1 Qtr Lag | -- | 7.0% | 47 | 2.9% | 62 |
| Real Assets Composite | 5.2% | -0.9% | 88 | 3.8% | 14 |
| Real Assets Custom Blend | -- | 3.7% | 74 | 2.9% | 9 |

Percent of Total equals 86.5% because Beta Overlay is not included as these statistics are not relevant for alternative asset classes.



San Bernardino County Employees' Retirement Association

TOTAL FUND RISK STATISTICS

| 3 Years Ending March 31, 2018 | | | | | | | | |
|-------------------------------------------------------------------------------|----------|-----------|------|---------------|------|----------------|------------|------|
| | % of Tot | Anlzd Ret | Rank | Anlzd Std Dev | Rank | Tracking Error | Info Ratio | Rank |
| Domestic Equity With Beta Overlay | 16.7% | 5.5% | 99 | 4.8% | 1 | 7.3% | -0.6 | -- |
| Russell 3000 | -- | 10.2% | 43 | 10.4% | 70 | 0.0% | -- | -- |
| Domestic Equity | 10.8% | 2.0% | -- | 4.3% | -- | 11.4% | -0.7 | -- |
| Russell 3000 | -- | 10.2% | -- | 10.4% | -- | 0.0% | -- | -- |
| International Equity With Beta Overlay | 19.3% | 5.1% | 99 | 12.3% | 97 | 3.4% | -0.5 | -- |
| MSCI ACWI ex USA Gross | -- | 6.7% | 92 | 12.5% | 99 | 0.0% | -- | -- |
| International Developed | 1.3% | 3.1% | 99 | 23.2% | 99 | 18.0% | -0.1 | -- |
| MSCI EAFE | -- | 5.6% | 39 | 12.3% | 69 | 0.0% | -- | -- |
| International Emerging | 5.7% | 5.9% | -- | 13.1% | -- | 5.2% | -0.6 | -- |
| MSCI Emerging Markets | -- | 8.8% | -- | 16.5% | -- | 0.0% | -- | -- |
| U.S. Credit Strategies | 10.6% | 6.8% | 3 | 3.4% | 23 | 3.9% | 0.6 | 1 |
| 50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index | -- | 4.5% | 14 | 3.6% | 31 | 0.0% | -- | -- |
| Non-U.S. Credit Composite | 14.2% | 10.1% | -- | 3.3% | -- | 10.4% | 0.1 | -- |
| ICE BofA Merrill Lynch Euro High Yield Constrained | -- | 9.1% | -- | 9.3% | -- | 0.0% | -- | -- |
| Emerging Markets Debt Composite | 7.7% | 7.6% | 22 | 5.8% | 37 | 5.5% | 0.4 | 34 |
| 50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified | -- | 5.7% | 74 | 7.8% | 67 | 0.0% | -- | -- |
| Alpha Pool Composite | 18.7% | 4.7% | 6 | 3.9% | 56 | 3.9% | 0.3 | 26 |
| 91 Day T-Bill + 3% | -- | 3.6% | 10 | 0.1% | 1 | 0.0% | -- | -- |

| | % of Tot | Anlzd Ret | Rank | Anlzd Std Dev | Rank |
|----------------------------------------------|----------|-----------|------|---------------|------|
| Private Equity Composite | 13.9% | 13.4% | -- | 3.8% | -- |
| Cambridge Associates Global All PE (Qtr Lag) | -- | 11.4% | -- | 5.9% | -- |
| Real Estate Composite | 4.1% | 9.3% | 39 | 3.1% | 35 |
| NCREIF Property Index 1 Qtr Lag | -- | 9.4% | 31 | 4.0% | 50 |
| Real Assets Composite | 5.2% | -2.0% | 80 | 5.3% | 16 |
| Real Assets Custom Blend | -- | 0.4% | 70 | 6.2% | 23 |

Percent of Total equals 86.5% because Beta Overlay is not included as these statistics are not relevant for alternative asset classes.



San Bernardino County Employees' Retirement Association

TOTAL FUND RISK STATISTICS

| | 5 Years Ending March 31, 2018 | | | | | | | |
|-------------------------------------------------------------------------------|-------------------------------|-----------|------|---------------|------|----------------|------------|------|
| | % of Tot | Anlzd Ret | Rank | Anlzd Std Dev | Rank | Tracking Error | Info Ratio | Rank |
| Domestic Equity | 10.8% | 0.6% | -- | 4.7% | -- | 12.2% | -1.0 | -- |
| Russell 3000 | -- | 13.0% | -- | 10.0% | -- | 0.0% | -- | -- |
| International Developed | 1.3% | 7.2% | 24 | 18.8% | 99 | 14.8% | 0.0 | 35 |
| MSCI EAFE | -- | 6.5% | 38 | 11.9% | 81 | 0.0% | -- | -- |
| International Emerging | 5.7% | 2.2% | -- | 12.6% | -- | 4.5% | -0.6 | -- |
| MSCI Emerging Markets | -- | 5.0% | -- | 15.0% | -- | 0.0% | -- | -- |
| U.S. Credit Strategies | 10.6% | 7.1% | 2 | 3.0% | 2 | 3.8% | 0.7 | 2 |
| 50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index | -- | 4.5% | 18 | 3.4% | 5 | 0.0% | -- | -- |
| Non-U.S. Credit Composite | 14.2% | 8.3% | -- | 3.4% | -- | 9.6% | 0.3 | -- |
| ICE BofA Merrill Lynch Euro High Yield Constrained | -- | 5.0% | -- | 9.7% | -- | 0.0% | -- | -- |
| Emerging Markets Debt Composite | 7.7% | 4.0% | 42 | 6.2% | 28 | 5.4% | 0.4 | 52 |
| 50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified | -- | 2.0% | 68 | 8.3% | 66 | 0.0% | -- | -- |
| Alpha Pool Composite | 18.7% | 4.9% | 24 | 3.2% | 6 | 3.1% | 0.5 | 28 |
| 91 Day T-Bill + 3% | -- | 3.3% | 76 | 0.1% | 1 | 0.0% | -- | -- |

| | % of Tot | Anlzd Ret | Rank | Anlzd Std Dev | Rank |
|----------------------------------------------|----------|-----------|------|---------------|------|
| Private Equity Composite | 13.9% | 14.1% | -- | 4.0% | -- |
| Cambridge Associates Global All PE (Qtr Lag) | -- | 12.9% | -- | 6.5% | -- |
| Real Estate Composite | 4.1% | 9.9% | 86 | 3.5% | 38 |
| NCREIF Property Index 1 Qtr Lag | -- | 10.2% | 74 | 4.2% | 48 |
| Real Assets Composite | 5.2% | 0.7% | 69 | 4.9% | 16 |
| Real Assets Custom Blend | -- | -1.1% | 74 | 6.1% | 26 |

Percent of Total equals 86.5% because Beta Overlay is not included as these statistics are not relevant for alternative asset classes.



PUBLIC EQUITY PORTFOLIO

| | | | |
|------------------------------------------------|-----------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Public Equity Portfolio (28% Target) | US Equities (13% Target) | Large Cap (8%) | Russell Investments (Russell1000 Index) StateStreet Global Advisors S&P500 Buy/Write Call Option Strategy TOBAM Anti-Benchmark US Equity Fund |
| | | Small Cap (2%) | Russell Investments (Russell2000 Index) |
| | | Volatility (3%) | Russell Investments (Russell1000 Index) |
| | International Equities (15% Target) | Developed Markets (6%) | Russell Investments (MSCI EAFE Index) TOBAM Anti-Benchmark World ex-US Fund |
| | | Emerging Markets (6%) | Gramercy EM Equity Separate Account Mondrian Emerging Markets Equity Fund LP Russell Investments (MSCI EM Index) TOBAM Anti-Benchmark EM Equity Fund |
| | | Volatility (3%) | Russell Investments (MSCI EAFE Index) |



San Bernardino County Employees' Retirement Association

GLOBAL EQUITY STRATEGIES - GROSS

| | Market Value (\$) | % of Portfolio | 3 Mo (%) | Rank | Fiscal YTD (%) | Rank | 1 Yr (%) | Rank | 3 Yrs (%) | Rank | 5 Yrs (%) | Rank | 10 Yrs (%) | Rank |
|-----------------------------------------------|----------------------|----------------|-------------|-----------|----------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|
| Total Equity | 1,750,872,572 | 17.7 | -1.0 | 96 | 7.3 | 99 | 9.8 | 99 | 4.6 | 99 | 3.0 | 99 | 2.4 | 99 |
| MSCI ACWI | | | -1.0 | 93 | 10.1 | 56 | 14.8 | 43 | 8.1 | 99 | 9.2 | 93 | 5.6 | 99 |
| Excess Return | | | 0.0 | | -2.8 | | -5.0 | | -3.5 | | -6.2 | | -3.2 | |
| InvestorForce Public DB Total Eq Gross Median | | | -0.3 | | 10.2 | | 14.7 | | 9.2 | | 10.8 | | 7.6 | |
| Domestic Equity With Beta Overlay | 1,646,108,843 | 16.7 | 0.1 | 22 | 8.1 | 99 | 9.3 | 99 | 5.5 | 99 | -- | -- | -- | -- |
| Russell 3000 | | | -0.6 | 63 | 10.5 | 49 | 13.8 | 40 | 10.2 | 43 | 13.0 | 39 | 9.6 | 64 |
| Excess Return | | | 0.7 | | -2.4 | | -4.5 | | -4.7 | | | | | |
| InvestorForce Public DB US Eq Gross Median | | | -0.5 | | 10.5 | | 13.6 | | 10.1 | | 12.8 | | 9.8 | |
| Domestic Equity | 1,063,269,893 | 10.8 | -3.1 | -- | 1.9 | -- | 2.8 | -- | 2.0 | -- | 0.6 | -- | 0.3 | -- |
| Russell 3000 | | | -0.6 | -- | 10.5 | -- | 13.8 | -- | 10.2 | -- | 13.0 | -- | 9.6 | -- |
| Excess Return | | | -2.5 | | -8.6 | | -11.0 | | -8.2 | | -12.4 | | -9.3 | |
| Tobam AB US Equity | 292,060,200 | 3.0 | | | | | | | | | | | | |
| Large Cap Equity | 771,113,873 | 7.8 | -2.7 | 85 | 2.3 | 95 | 3.0 | 95 | 3.6 | 96 | 1.5 | 99 | 1.0 | 99 |
| S&P 500 | | | -0.8 | 54 | 10.6 | 45 | 14.0 | 43 | 10.8 | 29 | 13.3 | 39 | 9.5 | 72 |
| Excess Return | | | -1.9 | | -8.3 | | -11.0 | | -7.2 | | -11.8 | | -8.5 | |
| eV All US Equity Gross Median | | | -0.6 | | 10.1 | | 13.2 | | 9.4 | | 12.7 | | 10.3 | |
| SsgA S&P500 | 767,426,030 | 7.8 | -2.7 | 84 | 3.7 | 93 | 5.4 | 91 | 6.2 | 88 | 6.7 | 98 | 3.9 | 99 |
| S&P 500 | | | -0.8 | 54 | 10.6 | 45 | 14.0 | 43 | 10.8 | 29 | 13.3 | 39 | 9.5 | 72 |
| Excess Return | | | -1.9 | | -6.9 | | -8.6 | | -4.6 | | -6.6 | | -5.6 | |
| eV All US Equity Gross Median | | | -0.6 | | 10.1 | | 13.2 | | 9.4 | | 12.7 | | 10.3 | |
| Russell US Large Cap Volatility | 3,687,843 | 0.0 | | | | | | | | | | | | |
| Small Cap Equity | 95,820 | 0.0 | | | | | | | | | | | | |
| Russell US Small Cap Volatility | 95,820 | 0.0 | | | | | | | | | | | | |



Beta overlay exposures and performance sourced from Russell Investments

San Bernardino County Employees' Retirement Association

GLOBAL EQUITY STRATEGIES - GROSS

| | Market Value (\$) | % of Portfolio | 3 Mo (%) | Rank | Fiscal YTD (%) | Rank | 1 Yr (%) | Rank | 3 Yrs (%) | Rank | 5 Yrs (%) | Rank | 10 Yrs (%) | Rank |
|-------------------------------------------------------|----------------------|----------------|-------------|-----------|----------------|-----------|--------------|-----------|-------------|-----------|-------------|-----------|-------------|----------|
| International Equity With Beta Overlay | 1,905,523,750 | 19.3 | -1.6 | 94 | 8.5 | 92 | 12.0 | 94 | 5.1 | 99 | -- | -- | -- | -- |
| MSCI ACWI ex USA Gross | | | <u>-1.1</u> | 92 | <u>10.4</u> | 31 | <u>17.0</u> | 27 | <u>6.7</u> | 92 | <u>6.4</u> | 99 | <u>3.2</u> | 99 |
| Excess Return | | | -0.5 | | -1.9 | | -5.0 | | -1.6 | | | | | |
| InvestorForce Public DB Gbl Eq Gross Median | | | -0.1 | | 9.2 | | 16.5 | | 8.2 | | 10.9 | | 3.4 | |
| International Equity | 687,602,679 | 7.0 | 1.6 | -- | 14.1 | -- | 18.6 | -- | 6.6 | -- | 5.5 | -- | 4.0 | -- |
| MSCI ACWI | | | <u>-1.0</u> | -- | <u>10.1</u> | -- | <u>14.8</u> | -- | <u>8.1</u> | -- | <u>9.2</u> | -- | <u>5.6</u> | -- |
| Excess Return | | | 2.6 | | 4.0 | | 3.8 | | -1.5 | | -3.7 | | -1.6 | |
| International Developed | 123,471,855 | 1.3 | 0.4 | 10 | 1.0 | 99 | 1.2 | 99 | 3.1 | 99 | 7.2 | 24 | 5.9 | 1 |
| MSCI EAFE | | | <u>-1.5</u> | 89 | <u>8.2</u> | 89 | <u>14.8</u> | 90 | <u>5.6</u> | 39 | <u>6.5</u> | 38 | <u>2.7</u> | 54 |
| Excess Return | | | 1.9 | | -7.2 | | -13.6 | | -2.5 | | 0.7 | | 3.2 | |
| InvestorForce Public DB Dev Mkt ex-US Eq Gross Median | | | -0.2 | | 9.7 | | 16.0 | | 5.5 | | 6.3 | | 2.8 | |
| Russell International Volatility | 123,471,855 | 1.3 | | | | | | | | | | | | |
| International Emerging | 564,130,824 | 5.7 | 1.9 | -- | 17.5 | -- | 23.2 | -- | 5.9 | -- | 2.2 | -- | 2.2 | -- |
| MSCI Emerging Markets | | | <u>1.4</u> | -- | <u>17.6</u> | -- | <u>24.9</u> | -- | <u>8.8</u> | -- | <u>5.0</u> | -- | <u>3.0</u> | -- |
| Excess Return | | | 0.5 | | -0.1 | | -1.7 | | -2.9 | | -2.8 | | -0.8 | |
| Mondrian | 150,793,759 | 1.5 | 0.3 | 80 | 10.6 | 93 | 15.1 | 96 | 5.1 | 96 | 1.4 | 99 | 3.6 | 77 |
| MSCI Emerging Markets | | | <u>1.4</u> | 59 | <u>17.6</u> | 49 | <u>24.9</u> | 50 | <u>8.8</u> | 70 | <u>5.0</u> | 76 | <u>3.0</u> | 88 |
| Excess Return | | | -1.1 | | -7.0 | | -9.8 | | -3.7 | | -3.6 | | 0.6 | |
| eV Emg Mkts Equity Gross Median | | | 1.8 | | 17.4 | | 24.9 | | 10.4 | | 6.3 | | 4.7 | |
| Gramercy Emerging Market Equity | 88,576,112 | 0.9 | 4.8 | 6 | 15.5 | 67 | 26.4 | 39 | 10.0 | 56 | -- | -- | -- | -- |
| MSCI Emerging Markets | | | <u>1.4</u> | 59 | <u>17.6</u> | 49 | <u>24.9</u> | 50 | <u>8.8</u> | 70 | <u>5.0</u> | 76 | <u>3.0</u> | 88 |
| Excess Return | | | 3.4 | | -2.1 | | 1.5 | | 1.2 | | | | | |
| eV Emg Mkts Equity Gross Median | | | 1.8 | | 17.4 | | 24.9 | | 10.4 | | 6.3 | | 4.7 | |
| Tobam | 324,661,785 | 3.3 | 1.8 | 49 | 21.5 | 19 | 26.4 | 39 | -- | -- | -- | -- | -- | -- |
| MSCI Emerging Markets | | | <u>1.4</u> | 59 | <u>17.6</u> | 49 | <u>24.9</u> | 50 | <u>8.8</u> | 70 | <u>5.0</u> | 76 | <u>3.0</u> | 88 |
| Excess Return | | | 0.4 | | 3.9 | | 1.5 | | | | | | | |
| eV Emg Mkts Equity Gross Median | | | 1.8 | | 17.4 | | 24.9 | | 10.4 | | 6.3 | | 4.7 | |



Beta overlay exposures and performance sourced from Russell Investments

GLOBAL DEBT STRATEGIES

| | | | |
|-----------------------------------------------|--------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Global Debt Strategies (33% Target) | US Fixed Income (15% Target) | Core Fixed Income (2%) | Russell Investments (Bloomberg Barclays US Agg. Bond TR Index) |
| | | Credit Strategies/ High Yield Strategies (13%) | Apollo Credit Strategies Fund LP (MCA) Beach Point Select Fund LP GoldenTree Credit Opportunities - Gold Coast X GoldenTree Distressed Debt Fund 2010 GoldenTree Asset Management SMA - Gold Coast X Halcyon Direct Portfolio (MCA) Halcyon Solutions Fund LP (MCA) MacKay Shields High Yield Bond Strategy - Gold Coast III Manulife Asset Management - Gold Coast IV Tricadia Credit Strategies LTD Waterfall - Sutherland REIT Holdings LP (MCA) Waterfall Asset Management SMA (MCA) Waterfall Victoria Fund LP (MCA) |
| | Global Fixed Income (18% Target) | International Core (1%) | Russell Investments (Barclays Global Aggregate ex US Unhedged) |
| | | International Credit (11%) | Alcentra Clareant European Direct Lending Fund - Kneiff Tower Alcentra Clareant Strategic Credit Fund - Kneiff Tower Alcentra Limited SMA - Kneiff Tower Alcentra Mezzanine III/Alcentra Capital Corp. - Kneiff Tower Alcentra Structured Credit Opportunity Fund III - Kneiff Tower Cairn Capital Limited SMA - Kneiff Tower Cairn European CLO Strategy - Kneiff Tower Cairn Loan Investments - Kneiff Tower Cairn Special Opportunities Credit Fund - Kneiff Tower Cairn Strata Credit Fund - Kneiff Tower Cairn Subordinated Financials Fund II - Kneiff Tower Halcyon European Credit Opportunities Fund Ltd. (MCA) Marathon Asset Management SMA - Gold Coast I Marathon CLO Equity Fund - Gold Coast I Marathon Distressed Debt Fund - Gold Coast I Marathon European Credit Opportunity Fund II - Gold Coast I Marathon European Credit Opportunity Fund III - Gold Coast I Marathon Structured Product Strategies Fund - Gold Coast I York Global Credit Income Fund |
| | | Emerging Market Debt (6%) | Ashmore Emerging Markets MCA Gramercy Distressed Argentina Fund III Private (MCA) Gramercy Distressed Opportunity Fund II (MCA) Gramercy Distressed Opportunity Fund III (MCA) Gramercy Emerging Markets Debt Allocation Fund (MCA) Gramercy Separate Account (MCA) Gramercy Venezuela Opportunity Fund (MCA) Marathon Global Emerging Markets Fund - Gold Coast I PGIM Emerging Market Debt Opportunities Fund |
| | | | |



San Bernardino County Employees' Retirement Association

GLOBAL DEBT STRATEGIES - GROSS

| | Market Value (\$) | % of Portfolio | 3 Mo (%) | Rank | Fiscal YTD (%) | Rank | 1 Yr (%) | Rank | 3 Yrs (%) | Rank | 5 Yrs (%) | Rank | 10 Yrs (%) | Rank |
|-----------------------------------------------------------------------------------|----------------------|-------------------|-------------|-----------|----------------------|-----------|-------------|-----------|--------------|-----------|--------------|-----------|---------------|-----------|
| Global Fixed Income With Beta Overlay | 2,663,877,045 | 27.0 | 1.8 | -- | 1.5 | -- | 1.3 | -- | 3.9 | -- | -- | -- | -- | -- |
| Total Fixed | 3,212,877,045 | 32.5 | 2.5 | 1 | 6.5 | 1 | 9.7 | 1 | 8.4 | 1 | 7.1 | 1 | 8.0 | 1 |
| <i>InvestorForce Public DB Total Fix Inc Gross Median</i> | | | -0.8 | | 0.7 | | 2.3 | | 2.1 | | 2.2 | | 4.5 | |
| U.S. Credit Strategies | 1,051,187,167 | 10.6 | 3.0 | 1 | 6.8 | 7 | 7.4 | 20 | 6.8 | 3 | 7.1 | 2 | 9.6 | 1 |
| <i>50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index</i> | | | <u>0.2</u> | 18 | <u>2.5</u> | 49 | <u>4.0</u> | 65 | <u>4.5</u> | 14 | <u>4.5</u> | 18 | <u>6.4</u> | 14 |
| <i>Excess Return</i> | | | 2.8 | | 4.3 | | 3.4 | | 2.3 | | 2.6 | | 3.2 | |
| <i>ICE BofAML US High Yield TR</i> | | | -0.9 | 55 | 1.5 | 76 | 3.7 | 72 | 5.2 | 8 | 5.0 | 13 | 8.1 | 1 |
| <i>eV Global Credit Fixed Income Gross Median</i> | | | -0.8 | | 2.4 | | 5.1 | | 3.5 | | 3.5 | | 5.4 | |
| AG Capital | 84,643 | 0.0 | 0.0 | 19 | -7.6 | 99 | -6.1 | 99 | -4.0 | 99 | 1.0 | 99 | 3.5 | 62 |
| Golden Tree Asset Management | 382,028,906 | 3.9 | 4.9 | 1 | 10.2 | 1 | 8.9 | 12 | 9.3 | 1 | 11.5 | 1 | -- | -- |
| Beach Point Capital (Formerly Post) | 152,173,309 | 1.5 | 2.5 | 1 | 6.2 | 9 | 7.5 | 20 | 9.0 | 1 | 9.1 | 1 | -- | -- |
| Golden Tree Distressed Debt | 23,800,193 | 0.2 | -0.1 | 20 | 10.1 | 1 | 16.1 | 1 | 7.1 | 2 | 13.6 | 1 | -- | -- |
| Mackay / Gold Coast | 105,875,112 | 1.1 | -0.8 | 50 | 1.8 | 68 | 3.9 | 66 | 4.2 | 16 | 4.9 | 13 | 8.2 | 1 |
| Mariner Tricadia | 54,018,797 | 0.5 | 0.7 | 12 | 5.2 | 12 | 6.8 | 42 | 2.1 | 92 | 3.8 | 48 | -- | -- |
| MD SASS Waterfall Victoria | 28,169,128 | 0.3 | 2.3 | -- | 7.1 | -- | 9.0 | -- | -- | -- | -- | -- | -- | -- |
| Russell Interest Rate Hedging | 22,297,478 | 0.2 | 25.9 | 1 | -13.0 | 99 | -22.0 | 99 | -15.8 | 99 | -21.6 | 99 | -- | -- |
| Stone Tower Credit (Apollo) | 86,388,172 | 0.9 | 1.0 | 37 | 6.8 | 13 | 7.1 | 36 | 6.6 | 7 | 6.1 | 6 | -- | -- |
| Gold Coast Capital IV | 97,820,180 | 1.0 | 1.0 | -- | 3.8 | -- | 5.9 | -- | -- | -- | -- | -- | -- | -- |
| Waterfall Asset Management | 52,470,114 | 0.5 | 1.4 | -- | 9.6 | -- | 16.3 | -- | -- | -- | -- | -- | -- | -- |
| Waterfall Victoria | 45,872,368 | 0.5 | 3.6 | -- | 7.7 | -- | 9.8 | -- | 9.4 | -- | -- | -- | -- | -- |



Beta overlay exposures and performance sourced from Russell Investments

San Bernardino County Employees' Retirement Association

GLOBAL DEBT STRATEGIES - GROSS

| | Market Value (\$) | % of Portfolio | 3 Mo (%) | Rank | Fiscal YTD (%) | Rank | 1 Yr (%) | Rank | 3 Yrs (%) | Rank | 5 Yrs (%) | Rank | 10 Yrs (%) | Rank |
|-----------------------------------------------------------|----------------------|-------------------|-------------|----------|----------------------|----------|-------------|----------|--------------|----------|--------------|----------|---------------|-----------|
| Non-U.S. Fixed Income Composite | 2,161,689,877 | 21.9 | 2.3 | 1 | 6.3 | 1 | 11.0 | 1 | 9.3 | 1 | 7.0 | 1 | 5.4 | 22 |
| <i>BBgBarc Global Aggregate TR</i> | | | <u>1.4</u> | 1 | <u>4.3</u> | 1 | <u>7.0</u> | 1 | <u>3.1</u> | 21 | <u>1.5</u> | 79 | <u>2.6</u> | 99 |
| Excess Return | | | 0.9 | | 2.0 | | 4.0 | | 6.2 | | 5.5 | | 2.8 | |
| <i>InvestorForce Public DB Total Fix Inc Gross Median</i> | | | -0.8 | | 0.7 | | 2.3 | | 2.1 | | 2.2 | | 4.5 | |
| Non-U.S. Credit Composite | 1,400,601,805 | 14.2 | 3.0 | -- | 8.3 | -- | 12.9 | -- | 10.1 | -- | 8.3 | -- | -- | -- |
| <i>ICE BofA Merrill Lynch Euro High Yield Constrained</i> | | | <u>1.9</u> | -- | <u>10.1</u> | -- | <u>20.1</u> | -- | <u>9.1</u> | -- | <u>5.0</u> | -- | <u>6.5</u> | -- |
| Excess Return | | | 1.1 | | -1.8 | | -7.2 | | 1.0 | | 3.3 | | | |
| Marathon/Gold Coast | 218,049,174 | 2.2 | 3.6 | 1 | 11.1 | 1 | 13.7 | 6 | 7.8 | 1 | 9.3 | 1 | -- | -- |
| Alcentra Core European Credit | 440,672,473 | 4.5 | 2.4 | 1 | 10.4 | 1 | 11.8 | 10 | 14.9 | 1 | 13.6 | 1 | -- | -- |
| Halcyon Asset Management | 161,203,467 | 1.6 | 1.3 | 7 | -1.8 | 99 | -4.2 | 99 | -- | -- | -- | -- | -- | -- |
| <i>ICE BofA Merrill Lynch Euro High Yield Constrained</i> | | | <u>1.9</u> | 2 | <u>10.1</u> | 1 | <u>20.1</u> | 1 | <u>9.1</u> | 1 | <u>5.0</u> | 12 | <u>6.5</u> | 13 |
| Excess Return | | | -0.6 | | -11.9 | | -24.3 | | | | | | | |
| <i>eV Global Credit Fixed Income Gross Median</i> | | | -0.8 | | 2.4 | | 5.1 | | 3.5 | | 3.5 | | 5.4 | |
| York Global Credit | 157,909,924 | 1.6 | 2.8 | 1 | 6.4 | 8 | 8.8 | 12 | 8.1 | 1 | 8.4 | 1 | -- | -- |
| <i>ICE BofA Merrill Lynch Euro High Yield Constrained</i> | | | <u>1.9</u> | 2 | <u>10.1</u> | 1 | <u>20.1</u> | 1 | <u>9.1</u> | 1 | <u>5.0</u> | 12 | <u>6.5</u> | 13 |
| Excess Return | | | 0.9 | | -3.7 | | -11.3 | | -1.0 | | 3.4 | | | |
| <i>eV Global Credit Fixed Income Gross Median</i> | | | -0.8 | | 2.4 | | 5.1 | | 3.5 | | 3.5 | | 5.4 | |
| Cairn Composite | 422,766,766 | 4.3 | 3.9 | 1 | 9.6 | 1 | 23.1 | 1 | 11.1 | 1 | 6.6 | 3 | -- | -- |
| <i>ICE BofA Merrill Lynch Euro High Yield Constrained</i> | | | <u>1.9</u> | 2 | <u>10.1</u> | 1 | <u>20.1</u> | 1 | <u>9.1</u> | 1 | <u>5.0</u> | 12 | <u>6.5</u> | 13 |
| Excess Return | | | 2.0 | | -0.5 | | 3.0 | | 2.0 | | 1.6 | | | |
| <i>eV Global Credit Fixed Income Gross Median</i> | | | -0.8 | | 2.4 | | 5.1 | | 3.5 | | 3.5 | | 5.4 | |



San Bernardino County Employees' Retirement Association

GLOBAL DEBT STRATEGIES - GROSS

| | Market Value (\$) | % of Portfolio | 3 Mo (%) | Rank | Fiscal YTD (%) | Rank | 1 Yr (%) | Rank | 3 Yrs (%) | Rank | 5 Yrs (%) | Rank | 10 Yrs (%) | Rank |
|--------------------------------------------------------------------------------|----------------------|-------------------|-------------|-----------|----------------------|-----------|-------------|-----------|--------------|-----------|--------------|-----------|---------------|-----------|
| Emerging Markets Debt Composite | 761,088,072 | 7.7 | 0.9 | 37 | 2.7 | 83 | 7.5 | 45 | 7.6 | 22 | 4.0 | 42 | 4.0 | 82 |
| <i>50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified</i> | | | <u>1.3</u> | 35 | <u>5.5</u> | 42 | <u>8.6</u> | 40 | <u>5.7</u> | 74 | <u>2.0</u> | 68 | <u>5.5</u> | 65 |
| Excess Return | | | -0.4 | | -2.8 | | -1.1 | | 1.9 | | 2.0 | | -1.5 | |
| <i>eV All Emg Mkts Fixed Inc Gross Median</i> | | | -0.4 | | 4.2 | | 6.9 | | 6.3 | | 3.6 | | 6.9 | |
| Ashmore Emerging Markets Liquid Investments | 178,891,374 | 1.8 | 1.3 | 35 | 5.5 | 42 | 8.6 | 40 | 5.7 | 74 | 2.0 | 68 | 5.5 | 65 |
| <i>JP Morgan GBI - EM Global Diversified Index</i> | | | <u>4.4</u> | 18 | <u>9.0</u> | 18 | <u>12.9</u> | 17 | <u>5.4</u> | 79 | <u>-0.7</u> | 94 | <u>3.8</u> | 83 |
| Excess Return | | | -3.1 | | -3.5 | | -4.3 | | 0.3 | | 2.7 | | 1.7 | |
| <i>eV All Emg Mkts Fixed Inc Gross Median</i> | | | -0.4 | | 4.2 | | 6.9 | | 6.3 | | 3.6 | | 6.9 | |
| Ashmore Local Currency | 95,262,353 | 1.0 | 4.4 | 2 | 10.4 | 1 | 14.0 | 6 | 6.6 | 7 | -0.5 | 97 | -- | -- |
| <i>JP Morgan ELMI+</i> | | | <u>2.5</u> | 10 | <u>6.7</u> | 14 | <u>8.7</u> | 22 | <u>3.9</u> | 45 | <u>-0.1</u> | 95 | <u>1.0</u> | 99 |
| Excess Return | | | 1.9 | | 3.7 | | 5.3 | | 2.7 | | -0.4 | | | |
| <i>JP Morgan EMBI Global Index</i> | | | -1.8 | 97 | 1.1 | 90 | 3.3 | 84 | 5.5 | 18 | 3.9 | 34 | 6.8 | 18 |
| <i>eV All Global Fixed Inc Gross Median</i> | | | 0.3 | | 3.2 | | 5.5 | | 3.7 | | 3.0 | | 4.2 | |
| Gramercy Funds Management LLC | 384,708,345 | 3.9 | -1.1 | 72 | -2.3 | 99 | 2.8 | 98 | 7.9 | 19 | 9.8 | 1 | -- | -- |
| <i>JP Morgan ELMI+</i> | | | <u>2.5</u> | 26 | <u>6.7</u> | 34 | <u>8.7</u> | 39 | <u>3.9</u> | 94 | <u>-0.1</u> | 87 | <u>1.0</u> | 99 |
| Excess Return | | | -3.6 | | -9.0 | | -5.9 | | 4.0 | | 9.9 | | | |
| <i>JP Morgan EMBI Global Index</i> | | | -1.8 | 95 | 1.1 | 97 | 3.3 | 96 | 5.5 | 77 | 3.9 | 44 | 6.8 | 54 |
| <i>eV All Emg Mkts Fixed Inc Gross Median</i> | | | -0.4 | | 4.2 | | 6.9 | | 6.3 | | 3.6 | | 6.9 | |
| Prudential Investment Management | 102,226,000 | 1.0 | 3.0 | 25 | 6.6 | 34 | 13.7 | 11 | 8.5 | 12 | -- | -- | -- | -- |
| <i>JP Morgan ELMI+</i> | | | <u>2.5</u> | 26 | <u>6.7</u> | 34 | <u>8.7</u> | 39 | <u>3.9</u> | 94 | <u>-0.1</u> | 87 | <u>1.0</u> | 99 |
| Excess Return | | | 0.5 | | -0.1 | | 5.0 | | 4.6 | | | | | |
| <i>JP Morgan EMBI Global Index</i> | | | -1.8 | 95 | 1.1 | 97 | 3.3 | 96 | 5.5 | 77 | 3.9 | 44 | 6.8 | 54 |
| <i>eV All Emg Mkts Fixed Inc Gross Median</i> | | | -0.4 | | 4.2 | | 6.9 | | 6.3 | | 3.6 | | 6.9 | |



ABSOLUTE RETURN (ALPHA POOL)

| | |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Absolute Return (Alpha Pool) (7% Target)</p> | <p>Core & Credit Strategies (7%)</p> <ul style="list-style-type: none">Apollo Accord Fund (MCA)Apollo Global SMA (MCA)Apollo MicCap Financial Holdings Trust (MCA)Apollo Offshore Credit Fund LTD (MCA)Apollo Structured Credit Recovery Fund III (MCA)Ares Enhanced Credit Opportunites Master Fund II, LTD (MCA)Birch Grove Credit Strategies FundCorrum Capital Global Credit Opportunities FundCorrum Capital GCO Co-Invest FundStateStreet Global Advisors Short Term Treasury Strategy SMAZais Group SMAZais Opportunity Fund, LTDZais Zephyr A-6, LP |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



San Bernardino County Employees' Retirement Association

ALPHA POOL STRATEGIES - GROSS

| | Market Value (\$) | % of Portfolio | 3 Mo (%) | Rank | Fiscal YTD (%) | Rank | 1 Yr (%) | Rank | 3 Yrs (%) | Rank | 5 Yrs (%) | Rank | 10 Yrs (%) | Rank |
|-------------------------------|----------------------|-------------------|-------------|-----------|----------------------|-----------|-------------|-----------|--------------|----------|--------------|-----------|---------------|----------|
| Alpha Pool Composite | 1,849,965,750 | 18.7 | 1.4 | 13 | 4.3 | 38 | 5.2 | 51 | 4.7 | 6 | 4.9 | 24 | 5.2 | 1 |
| 91 Day T-Bill + 3% | | | <u>1.1</u> | 20 | <u>3.2</u> | 62 | <u>4.2</u> | 66 | <u>3.6</u> | 10 | <u>3.3</u> | 76 | <u>3.3</u> | 7 |
| Excess Return | | | 0.3 | | 1.1 | | 1.0 | | 1.1 | | 1.6 | | 1.9 | |
| Alpha Liquidity (Ssga) | 158,015,125 | 1.6 | 0.4 | 50 | 1.0 | 91 | 1.2 | 98 | 0.7 | 98 | 0.5 | 93 | -- | -- |
| Apollo Global Management | 69,246,219 | 0.7 | -1.3 | 91 | 4.7 | 27 | 6.2 | 45 | -- | -- | -- | -- | -- | -- |
| Ares Eco Master Fund II | 421,458,596 | 4.3 | 1.3 | 32 | 4.0 | 38 | 1.0 | 99 | -- | -- | -- | -- | -- | -- |
| Birch Grove Credit Strategies | 123,812,900 | 1.3 | 1.9 | 21 | 6.4 | 15 | 7.3 | 33 | 4.6 | 29 | -- | -- | -- | -- |
| Sterling Stamos | 194,924,291 | 2.0 | 0.0 | 58 | 2.3 | 68 | 4.0 | 71 | 5.6 | 16 | 5.2 | 12 | 2.3 | 89 |
| Stone Tower Off (Apollo) | 373,045,622 | 3.8 | 1.2 | 34 | 3.6 | 43 | 4.7 | 61 | 5.6 | 18 | 6.1 | 6 | -- | -- |
| Zais | 134,079,784 | 1.4 | 2.0 | 17 | 3.6 | 43 | 4.9 | 58 | 5.1 | 20 | 6.5 | 4 | 11.7 | 1 |
| Zais Group Invest Advisors | 256,664,178 | 2.6 | 2.8 | 8 | 7.7 | 8 | 10.0 | 15 | 10.2 | 1 | 9.7 | 1 | -- | -- |
| Zais Zephyr A 6 LP | 85,430,275 | 0.9 | 2.8 | -- | 9.8 | -- | 12.9 | -- | -- | -- | -- | -- | -- | -- |
| Apollo Accord | 7,915,073 | 0.1 | 2.8 | 8 | 6.9 | 13 | 7.0 | 38 | -- | -- | -- | -- | -- | -- |



PRIVATE ASSETS

| | | | |
|------------------------------|----------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Private Assets (1.6% Target) | Private Equity | Diversified | Partners Group SMA (MCA) Pathway Capital SMA (MCA) Pathway PE Fund VII LLC SL Capital European Strategic Partners 2004 SL Capital European Strategic Partners 2008 |
| | | Buyout Funds | Aurora Equity Partners IV Kayne Partners Fund IV LP (MCA) Partners Group Direct Equity 2016 (MCA) Partners Group Direct Investments 2012 LP (MCA) Partners Group European Buyout 2005 (A) LP (MCA) |
| | | Venture Funds | Industry Ventures Direct LP (MCA) Industry Ventures Fund V LP (MCA) Industry Ventures Fund VI LP (MCA) Industry Ventures Partnership Holdings II LP (MCA) Industry Ventures Partnership Holdings III LP (MCA) Industry Ventures Partnership Holdings III-A LP (MCA) Industry Ventures Partnership Holdings IV LP (MCA) Industry Ventures Special Opportunities Fund II-A LP (MCA) |
| | | Secondary Funds | Industry Ventures Secondary VII LP (MCA) Industry Ventures Secondary VIII LP (MCA) Lexington Capital Partners VI Lexington Capital Partners VII Lexington Middle Market Investors I Lexington Middle Market Investors II Newberger Berman Secondary Opportunities Fund II Partners Group Secondary 2004 LP (MCA) Partners Group Secondary 2006 LP (MCA) Partners Group Secondary 2008 LP (MCA) SL Capital Secondary Opportunities Fund I SL Capital Secondary Opportunities Fund II SL Capital Secondary Opportunities Fund III |
| | | Sector Specific Funds | Kayne Anderson Energy Fund VII LP (MCA) Tennenbaum Energy Opportunities Fund LP (MCA) |
| | Private Debt | Direct Lending | Ares Private Credit Solutions Fund (MCA) Tennenbaum Lending Fund VIII LLC (MCA) Tennenbaum Waterman Fund LP (MCA) |
| | | Mezzanine Funds | Crescent Mezzanine Partners V Partners Group European Mezzanine 2005 (MCA) |
| | | Credit/Distressed/ Opportunistic/ Special Situations | Apollo Private Equity Fund VII Ares European Loan Funding LP (MCA) Ares ICOF II (MCA) Ares ICOF III (MCA) Ares SMA (MCA) Ares Special Situations Fund IV (MCA) Catalyst Fund LP II Crestline Portfolio Financing Fund Sigular Guff Distressed Opportunity Fund III LP Tennenbaum Opportunities Fund V LLC (MCA) Tennenbaum Opportunities Fund VI LLC (MCA) Tennenbaum Special Situations Fund IX LLC (MCA) |



REAL ESTATE

| | | | | |
|------------------------------------------|----------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Real Estate Portfolio (9% Target) | Core Real Estate (6%) | Core Real Estate | PRISA II 348 West Hospitality Invesco Real Estate Asia Fund | |
| | Non-Core Real Estate (3%) | Enhanced Real Estate/ High Return | Apollo Real Estate Fund II LP (MCA) Bryanston Retail Opportunity Fortress Japan Opportunity Fund II Kayne Anderson Real Estate Partners V LP (MCA) Morgan Stanley RE Fund V International Oaktree RE Opportunities Fund V Starwood Global Opportunity Fund VII-A Starwood Opportunity Fund VII Walton Street Real Estate Fund V | |
| | | | Real Estate Secondaries | Partners Group Real Estate Secondary 2013 A LP (MCA) Partners Group Real Estate Secondary 2017 A LP (MCA) |
| | | | Real Estate Debt | Kayne Anderson Real Estate Debt III (MCA) Marathon Real Estate Debt Fund Pramerica Real Estate Capital VI LP Square Mile Partners III Tri Continental Capital VII |



REAL ASSETS

| | | |
|--------------------------------------------|--------------------------------------|-------------------------------------------------------|
| Real Asset Portfolio (5% Target) | Commodities (2% Target) | Energy Spectrum Partners VI LP |
| | | Pinnacle Natural Resources LP |
| | | Pinnacle Physicals & Financing LTD |
| | | Starwood Energy Infrastructure Fund |
| | Infrastructure (1% Target) | Fortress Worldwide Transportation & Infrastructure LP |
| | | Highstar Capital III |
| | | Kayne Anderson MLP Strategy (MCA) |
| | Timber (2% Target) | Hancock Timberland VII & VIII LP |
| | | Timbervest Crossover Partners II LP |
| Timbervest Partners II LP | | |



San Bernardino County Employees' Retirement Association

ALTERNATIVES - GROSS

| | Market Value (\$) | % of Portfolio | 3 Mo (%) | Rank | Fiscal YTD (%) | Rank | 1 Yr (%) | Rank | 3 Yrs (%) | Rank | 5 Yrs (%) | Rank | 10 Yrs (%) | Rank |
|----------------------------------------------|----------------------|----------------|--------------|-----------|----------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| Private Equity Composite | 1,376,280,123 | 13.9 | 2.5 | -- | 11.1 | -- | 18.9 | -- | 13.4 | -- | 14.1 | -- | 8.1 | -- |
| Cambridge Associates Global All PE (Qtr Lag) | | | <u>5.0</u> | -- | <u>14.1</u> | -- | <u>18.4</u> | -- | <u>11.4</u> | -- | <u>12.9</u> | -- | <u>8.7</u> | -- |
| Excess Return | | | -2.5 | | -3.0 | | 0.5 | | 2.0 | | 1.2 | | -0.6 | |
| Russell 3000 | | | -0.6 | -- | 10.5 | -- | 13.8 | -- | 10.2 | -- | 13.0 | -- | 9.6 | -- |
| Cambridge Associates US All PE (1 Qtr Lag) | | | 5.3 | -- | 13.2 | -- | 17.6 | -- | 12.0 | -- | 13.6 | -- | 9.8 | -- |
| Real Estate Composite | 406,215,003 | 4.1 | 3.6 | 1 | 7.1 | 3 | 5.3 | 93 | 9.3 | 39 | 9.9 | 86 | 1.6 | 99 |
| NCREIF Property Index 1 Qtr Lag | | | <u>1.8</u> | 30 | <u>5.3</u> | 46 | <u>7.0</u> | 47 | <u>9.4</u> | 31 | <u>10.2</u> | 74 | <u>6.1</u> | 49 |
| Excess Return | | | 1.8 | | 1.8 | | -1.7 | | -0.1 | | -0.3 | | -4.5 | |
| InvestorForce Public DB Real Estate Pub+Priv | | | 0.4 | | 5.0 | | 6.8 | | 8.6 | | 10.6 | | 5.9 | |
| Gross Median | | | | | | | | | | | | | | |
| Real Assets Composite | 514,200,767 | 5.2 | -4.3 | 87 | -0.5 | 90 | -0.9 | 88 | -2.0 | 80 | 0.7 | 69 | 0.9 | -- |
| Real Assets Custom Blend | | | <u>0.6</u> | 33 | <u>4.9</u> | 64 | <u>3.7</u> | 74 | <u>0.4</u> | 70 | <u>-1.1</u> | 74 | <u>-1.4</u> | -- |
| Excess Return | | | -4.9 | | -5.4 | | -4.6 | | -2.4 | | 1.8 | | 2.3 | |
| NCREIF Timberland 1 Qtr Lag | | | 1.5 | 29 | 2.8 | 72 | 3.6 | 75 | 3.8 | 42 | 6.2 | 32 | 4.4 | -- |
| Timber | 164,618,248 | 1.7 | 0.0 | -- | -1.3 | -- | -4.0 | -- | -1.1 | -- | 2.2 | -- | 0.6 | -- |
| NCREIF Timberland 1 Qtr Lag | | | <u>1.5</u> | -- | <u>2.8</u> | -- | <u>3.6</u> | -- | <u>3.8</u> | -- | <u>6.2</u> | -- | <u>4.4</u> | -- |
| Excess Return | | | -1.5 | | -4.1 | | -7.6 | | -4.9 | | -4.0 | | -3.8 | |
| Infrastructure | 157,624,268 | 1.6 | -14.6 | -- | 0.1 | -- | 5.3 | -- | 0.9 | -- | 0.3 | -- | 4.6 | -- |
| Russell 3000 | | | <u>-0.6</u> | -- | <u>10.5</u> | -- | <u>13.8</u> | -- | <u>10.2</u> | -- | <u>13.0</u> | -- | <u>9.6</u> | -- |
| Excess Return | | | -14.0 | | -10.4 | | -8.5 | | -9.3 | | -12.7 | | -5.0 | |
| Commodities | 191,958,251 | 1.9 | 1.1 | -- | 4.7 | -- | 4.8 | -- | -1.9 | -- | 0.4 | -- | 1.5 | -- |
| Bloomberg Commodity Index | | | <u>-0.4</u> | -- | <u>6.9</u> | -- | <u>3.7</u> | -- | <u>-3.2</u> | -- | <u>-8.3</u> | -- | <u>-7.7</u> | -- |
| Excess Return | | | 1.5 | | -2.2 | | 1.1 | | 1.3 | | 8.7 | | 9.2 | |



APPENDIX: PRIVATE EQUITY, REAL ESTATE AND REAL ASSETS PERFORMANCE

NEPC, LLC

REAL ESTATE PERFORMANCE ENDED SEPTEMBER 30, 2017

| Investment Name | Vintage Year | Commitment Amount | Paid in Capital | Cumulative Distributions | Valuation | TVPI Ratio | IRR |
|-------------------------------------------------|--------------|-------------------|-----------------|--------------------------|----------------|------------|---------|
| American Realty Advisors | 1996 | \$ 128,009,773 | \$ 128,009,773 | \$ 241,548,126 | \$ 39,612,119 | 2.20 | 6.96% |
| American Realty Value Add | 2006 | \$ 13,125,215 | \$ 13,125,215 | \$ 32,065,484 | \$ 57,635 | 2.45 | 10.93% |
| Apollo US Real Estate Fund II | 2015 | \$ 20,000,000 | \$ 9,147,352 | \$ 2,142,637 | \$ 10,507,521 | 1.38 | 22.83% |
| Beacon Capital Strategic Partners IV, L.P. | 2006 | \$ 39,000,000 | \$ 38,000,000 | \$ 31,290,518 | \$ 131,425 | 0.83 | -3.26% |
| Beacon Capital Strategic Partners V, L.P. | 2007 | \$ 20,000,000 | \$ 18,000,000 | \$ 11,030,231 | \$ 155,760 | 0.62 | -7.86% |
| BlackRock Diamond Property Fund | 2005 | \$ 25,000,000 | \$ 25,000,000 | \$ 15,093,876 | \$ 86,361 | 0.61 | -9.43% |
| Bryanston Real Estate Opportunity Fund II, L.P. | 2009 | \$ 20,000,000 | \$ 8,589,256 | \$ 11,824,142 | \$ 40,129 | 1.38 | 10.23% |
| Bryanston Retail Opportunity Fund, L.P. | 2004 | \$ 20,000,000 | \$ 8,228,165 | \$ 18,828,095 | \$ 9,207,691 | 3.41 | 70.94% |
| CBRE Strategic Partners III | 2003 | \$ 10,000,000 | \$ 10,000,000 | \$ 12,698,783 | \$ - | 1.27 | 8.02% |
| CBRE Strategic Partners IV | 2005 | \$ 40,000,000 | \$ 40,000,000 | \$ 2,432,836 | \$ 1,381,003 | 0.10 | -22.94% |
| Fillmore East Fund | 2006 | \$ 25,000,000 | \$ 31,403,818 | \$ 20,777,177 | \$ - | 0.66 | -9.78% |
| Fillmore West Fund | 2008 | \$ 20,000,000 | \$ 19,561,557 | \$ 16,174,286 | \$ 4,667,894 | 1.07 | 0.92% |
| Fortress Japan Opportunity Fund II | 2012 | \$ 21,739,130 | \$ 4,677,581 | \$ 9,015,054 | \$ 14,658,673 | 4.99 | 25.43% |
| Invesco Asian Real Estate Partners II (USD), LP | 2007 | \$ 20,000,000 | \$ 8,412,833 | \$ 11,279,521 | \$ 198,159 | 1.37 | 7.59% |
| Invesco High Yield Debt Fund I | 2007 | \$ 20,000,000 | \$ 20,000,000 | \$ 8,567,605 | \$ - | 0.43 | -35.57% |
| Invesco Real Estate Asia Fund | 2014 | \$ 51,732,500 | \$ 51,732,500 | \$ 5,802,524 | \$ 62,092,128 | 1.29 | 8.55% |
| INVESCO Real Estate Fund I | 2005 | \$ 10,000,000 | \$ 9,248,390 | \$ 10,015,656 | \$ 2,819 | 1.08 | 1.54% |
| LaSalle Income & Growth Fund IV | 2005 | \$ 20,000,000 | \$ 19,469,417 | \$ 13,482,024 | \$ - | 0.69 | -5.51% |
| North Haven Real Estate Fund V International | 2005 | \$ 27,500,000 | \$ 27,377,414 | \$ 31,921,668 | \$ 1,321,037 | 1.21 | 7.02% |
| Oaktree Real Estate Opportunities V | 2012 | \$ 25,000,000 | \$ 25,000,000 | \$ 33,606,685 | \$ 6,596,122 | 1.58 | 13.74% |
| Partners Group Project Camino | 2016 | \$ 8,415,776 | \$ 5,265,926 | \$ - | \$ 5,865,559 | 1.11 | 8.77% |
| Partners Group RE Secondary 2013 (USD) A | 2014 | \$ 65,000,000 | \$ 40,166,135 | \$ 9,000,437 | \$ 48,179,954 | 1.42 | 24.43% |
| Partners Group RE Secondary 2017 (USD) A | 2017 | \$ 25,000,000 | \$ 1,125,000 | \$ - | \$ 1,139,563 | 1.01 | 1.29% |
| Pramerica Real Estate Capital VI | 2016 | \$ 26,342,922 | \$ 5,569,947 | \$ - | \$ 6,805,995 | 1.21 | 17.83% |
| Prologis Japan Fund | 2005 | \$ 25,290,819 | \$ 25,290,819 | \$ 33,126,118 | \$ - | 1.31 | 4.81% |
| Prudential PRISA II | 2004 | \$ 140,000,000 | \$ 140,000,000 | \$ 36,839,954 | \$ 156,612,563 | 1.33 | 8.19% |
| Prudential PRISA III | 2003 | \$ 40,000,000 | \$ 43,138,076 | \$ 41,007,336 | \$ 38,319,487 | 1.70 | 19.14% |
| RREEF America REIT III | 2004 | \$ 20,000,000 | \$ 20,539,309 | \$ 23,555,134 | \$ 106,245 | 1.15 | 3.01% |
| RREEF North American Infrastructure Fund | 2007 | \$ 50,000,000 | \$ 50,000,000 | \$ 55,238,754 | \$ - | 1.09 | 12.09% |
| Square Mile Partners II | 2007 | \$ 20,000,000 | \$ 19,831,232 | \$ 5,311,330 | \$ 115,514 | 0.27 | -18.56% |
| Square Mile Partners III LP | 2008 | \$ 20,000,000 | \$ 19,730,190 | \$ 26,164,802 | \$ 2,871,612 | 1.47 | 11.79% |
| Starwood Capital Hospitality Fund I-2 | 2006 | \$ 30,000,000 | \$ 30,000,000 | \$ 24,678,932 | \$ 5,586,037 | 1.01 | 0.12% |
| Starwood Debt Fund II, LP | 2008 | \$ 20,000,000 | \$ 17,599,882 | \$ 21,858,788 | \$ 58,001 | 1.25 | 6.45% |
| Starwood Opportunity Fund VII - A | 2006 | \$ 25,000,000 | \$ 25,000,000 | \$ 17,292,969 | \$ 2,918,176 | 0.81 | -2.37% |
| Structured Real Estate III, LP (Guggenheim) | 2008 | \$ 20,000,000 | \$ 20,000,000 | \$ 16,320,664 | \$ - | 0.82 | -4.99% |
| Tri Continental Capital VII | 2005 | \$ 23,000,000 | \$ 22,343,057 | \$ 1,809,668 | \$ 1,457,979 | 0.15 | -18.22% |
| Tuckerman Multi-Family Development Fund III | 2002 | \$ 10,000,000 | \$ 10,219,311 | \$ 16,939,699 | \$ - | 1.66 | 26.67% |
| Walton Street Real Estate Fund IV, LP | 2003 | \$ 10,000,000 | \$ 9,770,890 | \$ 15,750,925 | \$ 334,379 | 1.65 | 10.80% |
| Walton Street Real Estate Fund V, LP | 2006 | \$ 40,000,000 | \$ 40,000,000 | \$ 20,895,961 | \$ 11,351,569 | 0.81 | -2.48% |

Note: all metrics are calculated since inception

* Denotes cash adjusted



REAL ASSETS PERFORMANCE ENDED SEPTEMBER 30, 2017

| Investment Name | Vintage Year | Commitment Amount | Paid in Capital | Cumulative Distributions | Valuation | TVPI Ratio | IRR |
|--------------------------------------------|--------------|-------------------|-----------------|--------------------------|--------------|------------|--------|
| Fortress Transportation Infrastructure LLC | 2015 | \$ 45,403,354 | \$ 45,403,354 | \$ 7,050,875 | \$48,180,979 | 1.22 | 11.77% |
| Hancock Timberland VII | 2005 | \$ 90,000,000 | \$ 90,000,000 | \$ 13,590,900 | \$90,368,751 | 1.16 | 1.37% |
| Hancock Timberland VIII | 2006 | \$ 40,000,000 | \$ 40,000,000 | \$ 4,597,950 | \$33,806,905 | 0.96 | -0.46% |
| Highstar Capital III, L.P. | 2007 | \$ 60,000,000 | \$ 59,119,119 | \$ 36,686,038 | \$31,200,669 | 1.15 | 1.92% |
| Timbervest Crossover Partners II, L.P. | 2008 | \$ 30,000,000 | \$ 30,000,000 | \$ 12,735,000 | \$16,651,155 | 0.98 | -0.39% |
| Timbervest Partners II, L.P. | 2007 | \$ 50,000,000 | \$ 50,000,000 | \$ 13,650,000 | \$40,346,450 | 1.08 | 0.90% |

Note: all metrics are calculated since inception

** Denotes cash adjusted*



PRIVATE EQUITY PERFORMANCE ENDED SEPTEMBER 30, 2017

| Investment Name | Vintage Year | Commitment Amount | Paid in Capital | Cumulative Distributions | Valuation | TVPI Ratio | IRR |
|---------------------------------------------------------|--------------|-------------------|-----------------|--------------------------|---------------|------------|---------|
| Advent International GPE VIII, LP | 2016 | \$ 10,000,000 | \$ 4,515,000 | \$ - | \$ 4,685,619 | 1.04 | 11.59% |
| Apollo Accord Fund, LP | 2017 | \$ 30,000,000 | \$ 6,000,000 | \$ - | \$ 6,196,861 | 1.03 | 5.11% |
| Apollo European Principal Finance Fund (Feeder), L | 2009 | \$ 54,194,674 | \$ 46,373,293 | \$ 68,533,114 | \$ 869,389 | 1.50 | 11.85% |
| Apollo Investment Fund VII, L.P. | 2008 | \$ 10,000,000 | \$ 8,544,168 | \$ 14,906,669 | \$ 2,530,499 | 2.04 | 23.79% |
| Apollo PCPL Webb V | 2010 | \$ 4,844,398 | \$ 4,844,398 | \$ 5,196,757 | \$ 35,999 | 1.08 | 6.45% |
| Apollo PCPL Webb VIII | 2010 | \$ 4,734,303 | \$ 4,734,303 | \$ 12,146,258 | \$ 2,475 | 2.57 | 46.47% |
| Ares European Loan Funding, S.L.P. | 2016 | \$ 17,719,200 | \$ - | \$ - | | 0.00 | N/A |
| ARES European Loan Opp Fund | 2015 | \$ 15,000,000 | \$ 8,413,136 | \$ 7,613,498 | \$ - | 0.90 | -6.02% |
| Ares Special Situations Fund IV, LP | 2015 | \$ 50,000,000 | \$ 21,287,129 | \$ 72,407 | \$ 15,323,751 | 0.72 | -16.28% |
| Aurora Equity Partners III, L.P. | 2005 | \$ 25,000,000 | \$ 23,544,536 | \$ 41,738,196 | \$ 841,491 | 1.69 | 13.85% |
| Aurora Equity Partners IV, L.P. | 2012 | \$ 20,000,000 | \$ 15,995,098 | \$ 25,279,576 | \$ 8,954,305 | 1.85 | 18.23% |
| Aurora Resurgence Fund, L.P. | 2008 | \$ 15,000,000 | \$ 5,653,009 | \$ 10,350,965 | \$ - | 1.82 | 17.60% |
| Baring Asia Private Equity Fund IV, L.P. | 2015 | \$ 2,931,918 | \$ 3,246,042 | \$ 3,491,541 | \$ 211,284 | 1.14 | 6.63% |
| BNY Mellon - Alcentra Mezzanine III | 2012 | \$ 25,000,000 | \$ 23,254,658 | \$ 26,736,979 | \$ - | 1.15 | 12.73% |
| Catalyst Fund II, L.P. | 2007 | \$ 10,000,000 | \$ 9,934,668 | \$ 4,256,332 | \$ 17,740,388 | 2.20 | 11.72% |
| Catalyst Fund LP IV, L.P. | 2015 | \$ 8,000,000 | \$ 4,385,720 | \$ - | \$ 4,903,654 | 1.12 | 8.34% |
| Charlesbank Equity Fund VIII | 2015 | \$ 7,500,000 | \$ 5,690,634 | \$ 422,938 | \$ 5,956,274 | 1.12 | 8.45% |
| DRI II, L.P. | 2009 | \$ 20,000,000 | \$ 19,917,669 | \$ 26,302,807 | \$ - | 1.33 | 19.64% |
| European Strategic Partners 2004 | 2004 | \$ 241,779,733 | \$ 220,597,962 | \$ 249,710,589 | \$ 27,584,468 | 1.26 | 3.92% |
| European Strategic Partners 2008 | 2010 | \$ 31,519,411 | \$ 27,333,039 | \$ 17,292,375 | \$ 19,807,663 | 1.35 | 8.52% |
| Industry Ventures Direct, LP | 2016 | \$ 25,000,000 | \$ 6,796,400 | \$ - | \$ 7,222,336 | 1.06 | 9.50% |
| Industry Ventures Fund V | 2008 | \$ 10,000,000 | \$ 9,500,000 | \$ 21,111,856 | \$ 8,140,504 | 3.08 | 31.75% |
| Industry Ventures Fund VI | 2011 | \$ 20,000,000 | \$ 18,400,000 | \$ 12,576,461 | \$ 12,127,548 | 1.34 | 9.99% |
| Industry Ventures Partnership Holdings Fund II, L.P. | 2012 | \$ 25,000,000 | \$ 23,500,000 | \$ 5,231,047 | \$ 45,825,159 | 2.17 | 24.86% |
| Industry Ventures Partnership Holdings Fund III, L.P. | 2013 | \$ 25,000,000 | \$ 19,500,000 | \$ 2,412,108 | \$ 23,103,347 | 1.31 | 13.41% |
| Industry Ventures Partnership Holdings Fund III-A, L.P. | 2014 | \$ 12,500,000 | \$ 10,437,500 | \$ 3,352,672 | \$ 7,546,359 | 1.04 | 2.22% |
| Industry Ventures Partnership Holdings IV, LP | 2016 | \$ 25,000,000 | \$ 7,750,000 | \$ - | \$ 8,881,690 | 1.15 | 28.89% |
| Industry Ventures Secondary VII, L.P. | 2013 | \$ 25,000,000 | \$ 21,500,000 | \$ 2,854,366 | \$ 23,153,273 | 1.21 | 10.03% |
| Industry Ventures Secondary VIII | 2017 | \$ 25,000,000 | \$ 1,750,000 | \$ - | \$ 2,050,916 | 1.17 | 54.42% |
| Industry Ventures Special Opportunities II-A | 2016 | \$ 12,500,000 | \$ 62,500 | \$ - | \$ 74,228 | 1.19 | 11.97% |
| Insight Venture Partners III Co-Invest | 2014 | \$ 4,000,000 | \$ 4,000,000 | \$ 134,902 | \$ 5,526,842 | 1.42 | 13.61% |
| Kayne Anderson Energy Fund VII, L.P. | 2017 | \$ 10,000,000 | \$ 6,126,202 | \$ 1,195,420 | \$ 7,167,122 | 1.37 | 53.22% |
| Lexington Capital Partners VI-B | 2006 | \$ 25,000,000 | \$ 24,591,319 | \$ 29,583,621 | \$ 4,944,739 | 1.40 | 6.88% |
| Lexington Capital Partners VII (Offshore) | 2011 | \$ 25,000,000 | \$ 19,788,432 | \$ 21,376,921 | \$ 9,579,267 | 1.56 | 15.95% |
| Lexington Middle Market I | 2005 | \$ 25,000,000 | \$ 24,771,942 | \$ 34,013,066 | \$ 5,694,830 | 1.60 | 11.56% |
| Lexington Middle Market II - Offshore | 2008 | \$ 10,000,000 | \$ 9,773,736 | \$ 10,153,812 | \$ 5,225,549 | 1.57 | 14.30% |
| Madison Dearborn VII | 2016 | \$ 10,000,000 | \$ 2,413,400 | \$ - | \$ 2,326,272 | 0.96 | -4.27% |
| NB Secondary Opportunities I, LP | 2005 | \$ 20,000,000 | \$ 18,500,843 | \$ 22,705,008 | \$ 1,658,407 | 1.32 | 6.54% |
| NB Secondary Opportunities II, LP | 2008 | \$ 20,000,000 | \$ 17,080,642 | \$ 22,399,333 | \$ 4,514,044 | 1.55 | 15.02% |

Note: all metrics are calculated since inception

* Denotes Cash adjusted value



PRIVATE EQUITY PERFORMANCE ENDED SEPTEMBER 30, 2017

| Investment Name | Vintage Year | Commitment Amount | Paid in Capital | Cumulative Distributions | Valuation | TVPI Ratio | IRR |
|---------------------------------------------|--------------|-------------------|-----------------|--------------------------|----------------|------------|---------|
| Partners Group Access 216 LP | 2017 | \$ 7,174,081 | \$ 7,174,081 | \$ - | \$ 8,022,696 | 1.13 | 12.31% |
| Partners Group Access 384, L.P. | 2017 | \$ 8,360,000 | \$ 8,360,000 | \$ - | \$ 8,360,000 | 1.00 | 0.00% |
| Partners Group Access 632, L.P. | 2014 | \$ 2,782,028 | \$ 2,782,028 | \$ 4,627,741 | \$ 1 | 1.65 | 16.01% |
| Partners Group Access 648, L.P. | 2014 | \$ 4,336,795 | \$ 4,843,537 | \$ 19,449 | \$ 3,710,251 | 0.77 | -9.72% |
| Partners Group Access 680 L.P. | 2015 | \$ 7,279,749 | \$ 7,206,011 | \$ - | \$ 10,202,591 | 1.42 | 21.13% |
| Partners Group CA Infrastructure, LP Inc | 2016 | \$ 6,246,500 | \$ 1,644,056 | \$ - | \$ 1,642,647 | 1.00 | -0.45% |
| Partners Group Client Access 8 LP | 2014 | \$ 5,531,585 | \$ 5,531,585 | \$ 12,335,385 | \$ 18,611,537 | 5.59 | 71.21% |
| Partners Group Direct Equity 2016 USD A | 2016 | \$ 20,000,000 | \$ 6,437,296 | \$ - | \$ 6,345,766 | 0.99 | -1.36% |
| Partners Group Direct Investment 2012, L.P. | 2013 | \$ 18,253,977 | \$ 16,509,621 | \$ 9,040,890 | \$ 18,362,591 | 1.66 | 20.83% |
| Partners Group European Mandate, L.P. | 2004 | \$ 239,952,774 | \$ 196,136,552 | \$ 234,214,060 | \$ 33,046,719 | 1.36 | 5.83% |
| Partners Group European Mezzanine 2005 | 2005 | \$ 101,076,654 | \$ 101,076,654 | \$ 111,113,798 | \$ 13,065,988 | 1.23 | 3.34% |
| Partners Group Global Opp Limited | 2017 | \$ 4,001,119 | \$ 4,001,119 | \$ 888,306 | \$ 4,198,340 | 1.27 | 28.21% |
| Partners Group Princess Learning IC LTD | 2014 | \$ 9,113,906 | \$ 4,492,827 | \$ - | \$ 6,294,009 | 1.40 | 16.06% |
| Partners Group Seabras Holdings, LLC | 2015 | \$ 4,800,000 | \$ 3,465,156 | \$ - | \$ 3,343,351 | 0.96 | -2.23% |
| Partners Group Secondary 2006 LP | 2006 | \$ 54,615,438 | \$ 51,077,528 | \$ 52,235,614 | \$ 8,407,550 | 1.19 | 3.59% |
| Partners Group Secondary 2008, L.P. | 2009 | \$ 26,777,241 | \$ 23,690,725 | \$ 29,888,630 | \$ 5,252,348 | 1.47 | 9.17% |
| Partners Group Starfrost Limited | 2014 | \$ 6,389,961 | \$ 3,736,806 | \$ 1,880,411 | \$ 3,285,645 | 1.38 | 9.59% |
| Pathway Private Equity Fund VII, L.P. | 2004 | \$ 904,500,000 | \$ 801,305,264 | \$ 854,956,011 | \$ 470,875,626 | 1.62 | 10.17% |
| Quad-C Partners IX, LP | 2017 | \$ 8,000,000 | \$ 344,368 | \$ - | \$ 256,372 | 0.74 | -25.55% |
| Quantum Energy Partners VII, LP | 2017 | \$ 6,700,000 | \$ 418,723 | \$ 1,195 | \$ 376,855 | 0.90 | -8.90% |
| Siguler Guff DOF II | 2006 | \$ 30,000,000 | \$ 30,000,000 | \$ 41,855,070 | \$ 679,657 | 1.42 | 8.71% |
| Siguler Guff DOF III | 2008 | \$ 10,000,000 | \$ 9,700,000 | \$ 12,905,528 | \$ 2,418,636 | 1.58 | 10.71% |
| SL Capital SOF I LP | 2014 | \$ 25,000,000 | \$ 16,835,198 | \$ 4,789,369 | \$ 17,779,591 | 1.34 | 13.88% |
| SL Capital SOF III LP | 2017 | \$ 25,000,000 | \$ 846,024 | \$ - | \$ 819,537 | 0.97 | -3.13% |
| TCP Direct Lending Fund VIII-L, LLC | 2016 | \$ 40,000,000 | \$ 14,674,724 | \$ - | \$ 15,492,892 | 1.05 | 9.76% |
| TCV IX, L.P. | 2016 | \$ 10,000,000 | \$ 1,859,000 | \$ - | \$ 1,884,855 | 1.01 | 3.33% |
| TCW/Crescent Mezzanine IV, L.P. | 2006 | \$ 40,000,000 | \$ 39,590,976 | \$ 44,193,173 | \$ 473,408 | 1.13 | 2.87% |
| TCW/Crescent Mezzanine V, L.P. | 2008 | \$ 20,000,000 | \$ 19,949,723 | \$ 23,938,696 | \$ 2,732,154 | 1.34 | 9.66% |
| Tennenbaum Energy Opportunities Fund, LP | 2016 | \$ 20,000,000 | \$ 7,437,801 | \$ 1,259,594 | \$ 7,904,546 | 1.23 | 19.95% |
| Tennenbaum Opportunities Fund V, L.P. | 2007 | \$ 10,000,000 | \$ 10,000,000 | \$ 10,765,359 | \$ 4,115,128 | 1.49 | 6.16% |
| Tennenbaum Opportunities Fund VI, L.P. | 2011 | \$ 20,000,000 | \$ 12,747,170 | \$ 8,839,420 | \$ 11,548,808 | 1.60 | 9.37% |
| Tennenbaum Special Situations Fund IX | 2015 | \$ 50,000,000 | \$ 21,837,087 | \$ 3,192,018 | \$ 22,715,363 | 1.19 | 11.24% |
| Tennenbaum Waterman Fund, LP | 2012 | \$ 70,000,000 | \$ 70,000,000 | \$ 27,547,234 | \$ 72,990,392 | 1.44 | 11.28% |
| The Huron Fund V | 2017 | \$ 10,000,000 | \$ - | \$ - | \$ - | 0.00 | N/A |
| The Resolute Fund II - Secondary | 2016 | \$ 1,720,184 | \$ 1,441,552 | \$ 208,339 | \$ 1,412,253 | 1.12 | 8.75% |
| The Resolute Fund III | 2014 | \$ 8,000,000 | \$ 4,954,358 | \$ 1,998,902 | \$ 4,504,102 | 1.31 | 18.67% |
| Thoma Bravo Discover Fund I | 2015 | \$ 3,000,000 | \$ 1,879,013 | \$ - | \$ 2,064,606 | 1.10 | 10.25% |
| Thoma Bravo XI | 2014 | \$ 8,000,000 | \$ 7,113,340 | \$ - | \$ 9,465,046 | 1.33 | 12.32% |
| Thoma Bravo XII | 2016 | \$ 10,000,000 | \$ 4,049,936 | \$ - | \$ 4,055,693 | 1.00 | 0.13% |
| Towerbrook III 2ndry | 2017 | \$ 1,520,778 | \$ 365,413 | \$ 44,533 | \$ 416,096 | 1.24 | 26.96% |
| Towerbrook IV (OS) 2ndry | 2017 | \$ 760,389 | \$ 261,625 | \$ 1,524 | \$ 318,254 | 1.22 | 26.60% |
| Vista Foundation Fund III | 2016 | \$ 10,000,000 | \$ 2,997,408 | \$ - | \$ 2,792,556 | 0.93 | -15.43% |

Note: all metrics are calculated since inception

* Denotes Cash adjusted value

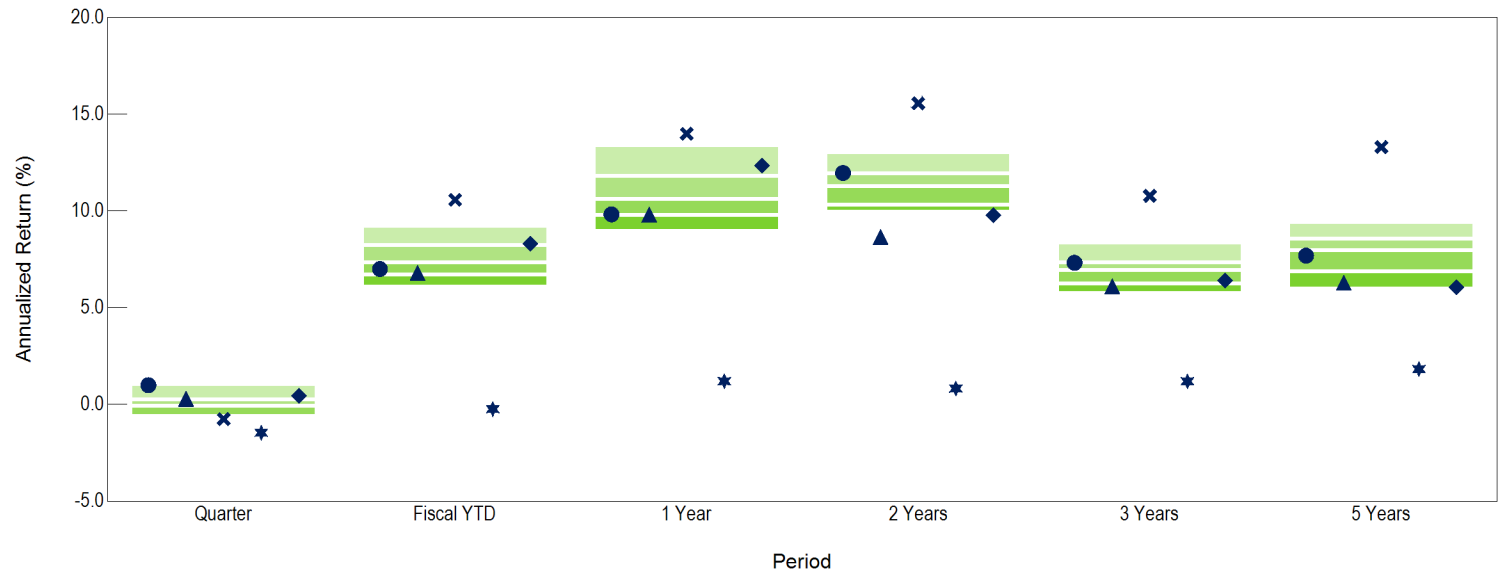


APPENDIX: MARKET ENVIRONMENT

NEPC, LLC

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

Total Fund vs. InvestorForce Public DB > \$1B Gross



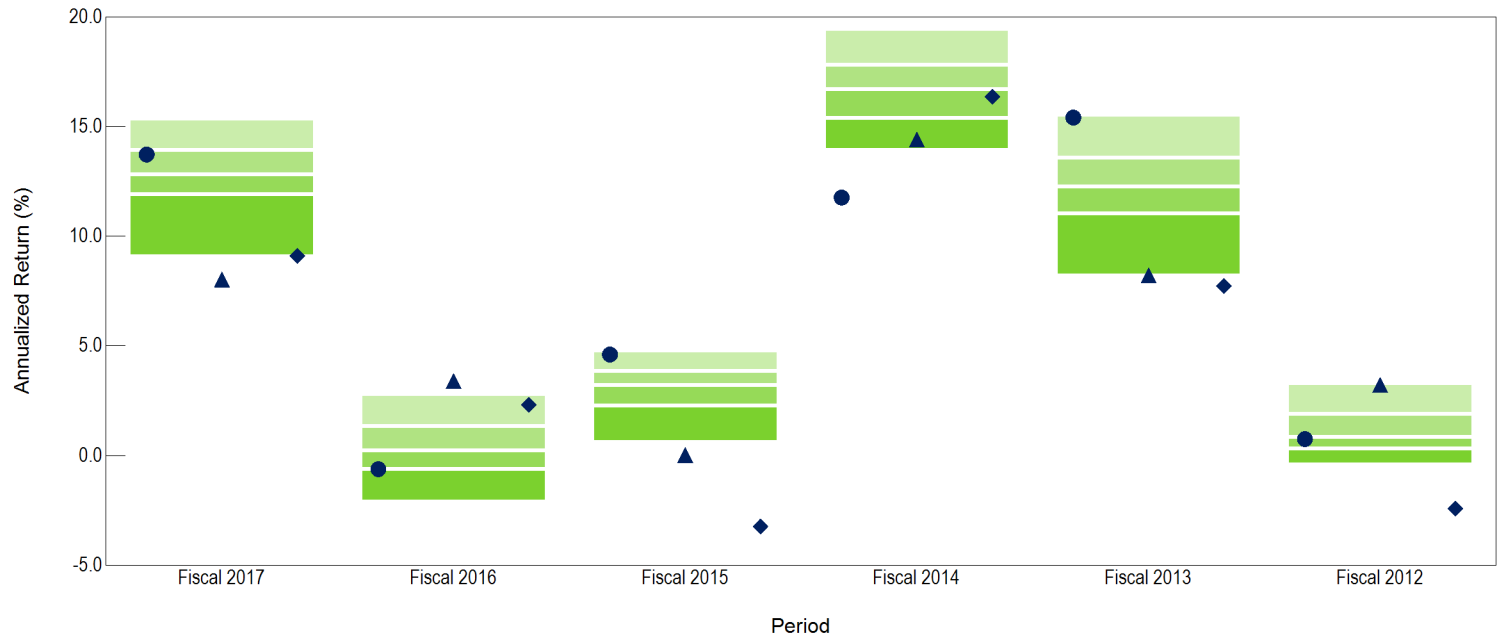
| | Return (Rank) | | | | | | | | | | | |
|---------------------------------------|---------------|------|------|------|------|------|------|------|------|------|------|------|
| 5th Percentile | 1.1 | | 9.2 | | 13.4 | | 13.0 | | 8.4 | | 9.4 | |
| 25th Percentile | 0.3 | | 8.3 | | 11.8 | | 12.0 | | 7.4 | | 8.6 | |
| Median | 0.0 | | 7.4 | | 10.7 | | 11.3 | | 7.0 | | 8.0 | |
| 75th Percentile | -0.6 | | 6.7 | | 9.8 | | 10.3 | | 6.3 | | 6.9 | |
| 95th Percentile | -0.7 | | 6.1 | | 9.0 | | 10.0 | | 5.8 | | 6.0 | |
| # of Portfolios | 28 | | 28 | | 28 | | 28 | | 28 | | 27 | |
| ● Total Fund | 1.0 | (8) | 7.0 | (63) | 9.8 | (75) | 12.0 | (26) | 7.3 | (30) | 7.7 | (62) |
| ▲ Policy Index | 0.3 | (26) | 6.8 | (67) | 9.8 | (79) | 8.7 | (99) | 6.1 | (85) | 6.3 | (91) |
| × S&P 500 | -0.8 | (96) | 10.6 | (1) | 14.0 | (4) | 15.6 | (1) | 10.8 | (1) | 13.3 | (1) |
| * BBgBarc US Aggregate TR | -1.5 | (99) | -0.2 | (99) | 1.2 | (99) | 0.8 | (99) | 1.2 | (99) | 1.8 | (99) |
| ◆ 60% MSCI ACWI (Net) / 40% CITI WGBI | 0.5 | (23) | 8.3 | (18) | 12.3 | (17) | 9.8 | (97) | 6.4 | (74) | 6.1 | (92) |



San Bernardino County Employees' Retirement Association

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

Total Fund vs. InvestorForce Public DB > \$1B Gross



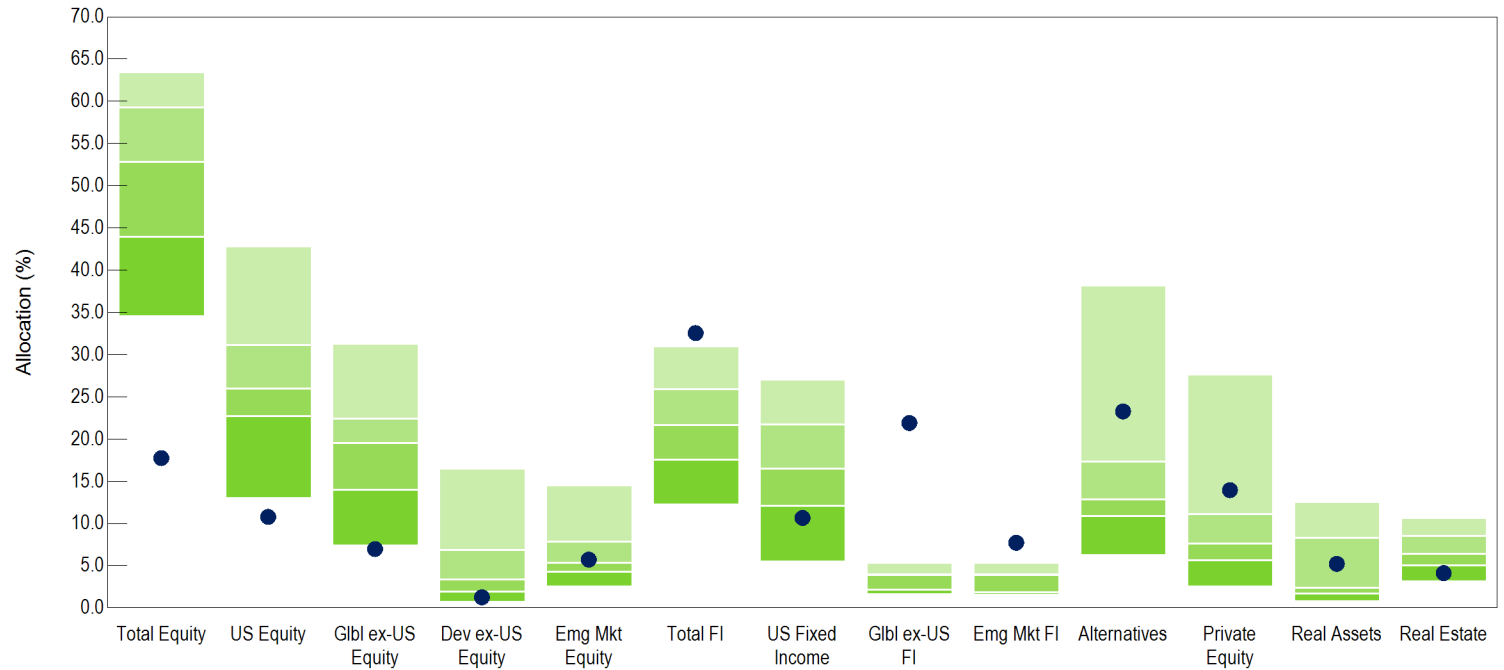
| | Fiscal 2017 | | Fiscal 2016 | | Fiscal 2015 | | Fiscal 2014 | | Fiscal 2013 | | Fiscal 2012 | |
|---------------------------------------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|
| | Return | (Rank) | Return | (Rank) | Return | (Rank) | Return | (Rank) | Return | (Rank) | Return | (Rank) |
| 5th Percentile | 15.3 | | 2.8 | | 4.8 | | 19.4 | | 15.5 | | 3.3 | |
| 25th Percentile | 14.0 | | 1.4 | | 3.9 | | 17.8 | | 13.6 | | 1.9 | |
| Median | 12.9 | | 0.3 | | 3.2 | | 16.7 | | 12.3 | | 0.9 | |
| 75th Percentile | 11.9 | | -0.6 | | 2.3 | | 15.4 | | 11.0 | | 0.3 | |
| 95th Percentile | 9.1 | | -2.1 | | 0.6 | | 13.9 | | 8.2 | | -0.4 | |
| # of Portfolios | 108 | | 91 | | 92 | | 65 | | 78 | | 70 | |
| ● Total Fund | 13.7 | (29) | -0.6 | (77) | 4.6 | (7) | 11.8 | (99) | 15.4 | (7) | 0.8 | (58) |
| ▲ Policy Index | 8.0 | (97) | 3.4 | (3) | 0.0 | (97) | 14.4 | (87) | 8.2 | (96) | 3.2 | (6) |
| ◆ 60% MSCI ACWI (Net) / 40% CITI WGBI | 9.1 | (95) | 2.3 | (11) | -3.2 | (99) | 16.4 | (58) | 7.7 | (97) | -2.4 | (99) |



San Bernardino County Employees' Retirement Association

TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE

Total Plan Allocation vs. InvestorForce Public DB > \$1B Gross



| | Allocation (Rank) | | | | | | | | | | | | | |
|-----------------|-------------------|-----------|------------------|------------------|----------------|----------|-----------------|--------------|------------|--------------|----------------|-------------|-------------|----|
| | Total Equity | US Equity | Gbl ex-US Equity | Dev ex-US Equity | Emg Mkt Equity | Total FI | US Fixed Income | Gbl ex-US FI | Emg Mkt FI | Alternatives | Private Equity | Real Assets | Real Estate | |
| 5th Percentile | 63.5 | 42.8 | 31.3 | 16.5 | 14.5 | 31.0 | 27.0 | 5.3 | 5.3 | 38.2 | 27.6 | 12.6 | 10.6 | -- |
| 25th Percentile | 59.4 | 31.2 | 22.5 | 6.9 | 7.9 | 25.9 | 21.8 | 4.0 | 4.0 | 17.4 | 11.2 | 8.3 | 8.6 | -- |
| Median | 52.9 | 26.1 | 19.6 | 3.5 | 5.4 | 21.7 | 16.6 | 4.0 | 4.0 | 12.9 | 7.7 | 2.5 | 6.5 | -- |
| 75th Percentile | 44.0 | 22.8 | 14.0 | 2.0 | 4.3 | 17.7 | 12.1 | 2.3 | 1.9 | 11.0 | 5.7 | 1.8 | 5.1 | -- |
| 95th Percentile | 34.6 | 13.1 | 7.5 | 0.8 | 2.6 | 12.3 | 5.6 | 1.7 | 1.6 | 6.3 | 2.6 | 0.8 | 3.2 | -- |
| # of Portfolios | 23 | 21 | 22 | 11 | 18 | 24 | 22 | 12 | 12 | 19 | 18 | 11 | 19 | -- |
| ● Total Fund | 17.7 (99) | 10.8 (98) | 7.0 (97) | 1.3 (83) | 5.7 (47) | 32.5 (1) | 10.6 (79) | 21.9 (1) | 7.7 (1) | 23.3 (13) | 13.9 (11) | 5.2 (37) | 4.1 (92) | -- |



CALENDAR YEAR INDEX PERFORMANCE

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Jan | Feb | Mar | Q1 | YTD |
|-------------------------------|-------|--------|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| US Large Cap | 15.1% | 2.1% | 16.0% | 32.4% | 13.7% | 1.4% | 12.0% | 21.8% | 5.7% | -3.7% | -2.5% | -0.8% | -0.8% |
| US Small/Mid Cap | 26.7% | -2.5% | 17.9% | 36.8% | 7.1% | -2.9% | 17.6% | 16.8% | 3.0% | -4.1% | 1.0% | -0.2% | -0.2% |
| Int'l Developed Equity | 7.8% | -12.1% | 17.3% | 22.8% | -4.9% | -0.8% | 1.0% | 25.0% | 5.0% | -4.5% | -1.8% | -1.5% | -1.5% |
| Emerging Market Equity | 18.9% | -18.4% | 18.2% | -2.6% | -2.2% | -14.9% | 11.2% | 37.3% | 8.3% | -4.6% | -1.9% | 1.4% | 1.4% |
| US Aggregate | 6.5% | 7.8% | 4.2% | -2.0% | 6.0% | 0.5% | 2.6% | 3.5% | -1.2% | -0.9% | 0.6% | -1.5% | -1.5% |
| US High Yield | 15.1% | 5.0% | 15.8% | 7.4% | 2.5% | -4.5% | 17.1% | 7.5% | 0.6% | -0.8% | -0.6% | -0.9% | -0.9% |
| US Long Treasuries | 9.4% | 29.9% | 3.6% | -12.7% | 25.1% | -1.2% | 1.3% | 8.5% | -3.2% | -3.0% | 3.0% | -3.3% | -3.3% |
| EM Local Credit | 15.7% | -1.8% | 16.8% | -9.0% | -5.7% | -14.9% | 9.9% | 15.2% | 4.5% | -1.0% | 1.0% | 4.4% | 4.4% |
| Global Credit | -5.3% | -5.3% | -4.1% | 2.7% | -0.6% | 3.3% | 2.1% | 7.4% | 1.2% | -0.9% | 1.1% | 1.4% | 1.4% |
| Commodities | 16.8% | -13.3% | -1.1% | -9.5% | -17.0% | -24.7% | 11.8% | 1.7% | 2.0% | -1.7% | -0.6% | -0.4% | -0.4% |

Source: Bloomberg, Barclays, S&P, Russell, MSCI, JP Morgan, Credit Suisse

S&P 500 = US Large Cap
 Russell 2500 = US Small/Mid Cap
 MSCI EAFE = International Developed Equity
 MSCI EM = Emerging Market Equity
 Barclays Aggregate = US Aggregate
 Barclays Long Treasury = US Long Treasuries
 Barclays High Yield = US HY
 Barclays Global Aggregate = Global Credit
 GBI-EM Global Diversified = EM Local Credit
 Bloomberg Commodity = Commodities



CALENDAR YEAR INDEX PERFORMANCE

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Jan | Feb | Mar | Q1 | YTD |
|-----------------------|--------|-------|--------|-------|--------|--------|--------|-------|--------|-------|-------|-------|--------|--------|
| S&P 500 | 26.5% | 15.1% | 2.1% | 16.0% | 32.4% | 13.7% | 1.4% | 12.0% | 21.8% | 5.7% | -3.7% | -2.5% | -0.8% | -0.8% |
| Russell 1000 | 28.4% | 16.1% | 1.5% | 16.4% | 33.1% | 13.2% | 0.9% | 12.1% | 21.7% | 5.5% | -3.7% | -2.3% | -0.7% | -0.7% |
| Russell 2000 | 27.2% | 26.9% | -4.2% | 16.3% | 38.8% | 4.9% | -4.4% | 21.3% | 14.6% | 2.6% | -3.9% | 1.3% | -0.1% | -0.1% |
| Russell 2500 | 34.4% | 26.7% | -2.5% | 17.9% | 36.8% | 7.1% | -2.9% | 17.6% | 16.8% | 3.0% | -4.1% | 1.0% | -0.2% | -0.2% |
| MSCI EAFE | 31.8% | 7.8% | -12.1% | 17.3% | 22.8% | -4.9% | -0.8% | 1.0% | 25.0% | 5.0% | -4.5% | -1.8% | -1.5% | -1.5% |
| MSCI EM | 78.5% | 18.9% | -18.4% | 18.2% | -2.6% | -2.2% | -14.9% | 11.2% | 37.3% | 8.3% | -4.6% | -1.9% | 1.4% | 1.4% |
| MSCI ACWI | 34.6% | 12.7% | -7.3% | 16.1% | 22.8% | 4.2% | -2.4% | 7.9% | 24.0% | 5.6% | -4.2% | -2.1% | -1.0% | -1.0% |
| Private Equity* | 13.7% | 19.7% | 7.9% | 12.5% | 20.6% | 12.7% | 9.6% | 8.3% | 13.7%* | - | - | - | - | - |
| BC TIPS | 11.4% | 6.3% | 13.6% | 7.0% | -8.6% | 3.6% | -1.4% | 4.7% | 3.0% | -0.9% | -1.0% | 1.1% | -0.8% | -0.8% |
| BC Municipal Bond | 12.9% | 2.4% | 10.7% | 6.8% | -2.6% | 9.1% | 3.3% | 0.2% | 6.2% | -1.2% | -0.3% | 0.4% | -1.1% | -1.1% |
| BC Muni High Yield | 32.7% | 7.8% | 9.2% | 18.1% | -5.5% | 13.8% | 1.8% | 3.0% | 9.7% | -0.9% | 0.1% | 1.5% | 0.6% | 0.6% |
| BC US Corp High Yield | 58.2% | 15.1% | 5.0% | 15.8% | 7.4% | 2.5% | -4.5% | 17.1% | 7.5% | 0.6% | -0.8% | -0.6% | -0.9% | -0.9% |
| BC US Aggregate | 5.9% | 6.5% | 7.8% | 4.2% | -2.0% | 6.0% | 0.5% | 2.6% | 4.2% | -1.2% | -0.9% | 0.6% | -1.5% | -1.5% |
| BC Global Aggregate | -6.5% | -5.3% | -5.3% | -4.1% | 2.7% | -0.6% | 3.3% | 2.1% | 7.4% | 1.2% | -0.9% | 1.1% | 1.4% | 1.4% |
| BC Long Treasuries | -12.9% | 9.4% | 29.9% | 3.6% | -12.7% | 25.1% | -1.2% | 1.3% | 8.5% | -3.2% | -3.0% | 3.0% | -3.3% | -3.3% |
| BC US Long Credit | 16.8% | 10.7% | 17.1% | 12.7% | -6.6% | 16.4% | -4.6% | 10.2% | 13.7% | -1.3% | -3.3% | 0.7% | -3.8% | -3.8% |
| BC US STRIPS 20+ Yr | -36.0% | 10.9% | 58.5% | 3.0% | -21.0% | 46.4% | -3.7% | 1.4% | 10.7% | -4.2% | -4.6% | 4.4% | -4.6% | -4.6% |
| JPM GBI-EM Glob Div | 22.0% | 15.7% | -1.8% | 16.8% | -9.0% | -5.7% | -14.9% | 9.9% | 14.6% | 4.5% | -1.0% | 1.0% | 4.4% | 4.4% |
| JPM EMBI Glob Div | 29.8% | 12.2% | 7.3% | 17.4% | -5.3% | 7.4% | 1.2% | 10.2% | 12.2% | 0.0% | -2.0% | 0.3% | -1.7% | -1.7% |
| CS Leveraged Loan | 44.9% | 10.0% | 1.8% | 9.4% | 6.2% | 2.1% | -0.4% | 9.9% | 5.2% | 1.1% | 0.2% | 0.3% | 1.6% | 1.6% |
| CS Hedge Fund | 18.6% | 10.9% | -2.5% | 7.7% | 9.7% | 4.1% | -0.7% | 1.2% | 7.1% | 2.7% | -2.1% | - | 0.5% | 0.5% |
| BBG Commodity | 18.9% | 16.8% | -13.3% | -1.1% | -9.5% | -17.0% | -24.7% | 11.8% | 0.8% | 2.0% | -1.7% | -0.6% | -0.4% | -0.4% |
| Alerian MLP | 76.4% | 35.9% | 13.9% | 4.8% | 27.6% | 4.8% | -32.6% | 18.3% | -6.5% | 5.8% | -9.7% | -6.9% | -11.1% | -11.1% |
| FTSE NAREIT Eqy REITs | 28.0% | 28.0% | 8.3% | 18.1% | 2.5% | 30.1% | 3.2% | 8.5% | 3.5% | -4.2% | -7.7% | 3.8% | -8.2% | -8.2% |

Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse, Thomson One
 *Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag



TRAILING ANNUAL INDEX PERFORMANCE

| Equity | | | | | | |
|------------------------|--------|-------|-------|-------|-------|-------|
| | Mar-18 | YTD | 1 YR | 3 YR | 5 YR | 10 YR |
| Global Equity | -2.1% | -1.0% | 14.8% | 8.1% | 9.2% | 5.6% |
| US Large Cap | -2.5% | -0.8% | 14.0% | 10.8% | 13.3% | 9.5% |
| US Small/Mid Cap | 1.0% | -0.2% | 12.3% | 8.1% | 11.6% | 10.3% |
| Int'l Developed Equity | -1.8% | -1.5% | 14.8% | 5.6% | 6.5% | 2.7% |
| Emerging Market Equity | -1.9% | 1.4% | 24.9% | 8.8% | 5.0% | 3.0% |

| Rates/Credit | | | | | | |
|------------------|--------|-------|-------|------|-------|-------|
| | Mar-18 | YTD | 1 YR | 3 YR | 5 YR | 10 YR |
| Global Aggregate | 1.1% | 1.4% | 7.0% | 3.1% | 1.5% | 2.6% |
| US Aggregate | 0.6% | -1.5% | 1.2% | 1.2% | 1.8% | 3.6% |
| US Credit | 0.3% | -2.1% | 2.6% | 2.2% | 2.8% | 5.1% |
| US High Yield | -0.6% | -0.9% | 3.8% | 5.2% | 5.0% | 8.3% |
| EM Local Debt | 1.0% | 4.4% | 13.0% | 5.4% | -0.7% | 3.8% |

| Real Assets | | | | | | |
|-------------|--------|--------|--------|--------|-------|-------|
| | Mar-18 | YTD | 1 YR | 3 YR | 5 YR | 10 YR |
| Commodities | -0.6% | -0.4% | 3.7% | -3.2% | -8.3% | -7.7% |
| MLPs | -6.9% | -11.1% | -20.1% | -11.2% | -5.8% | 5.5% |

Source: Bloomberg, Barclays, MSCI, S&P, Russell, JP Morgan, Alerian



TRAILING ANNUAL INDEX PERFORMANCE

| Equity | | | | | | |
|-----------------------|--------|-------|-------|-------|-------|-------|
| | Mar-18 | YTD | 1 YR | 3 YR | 5 YR | 10 YR |
| MSCI ACWI | -2.1% | -1.0% | 14.8% | 8.1% | 9.2% | 5.6% |
| S&P 500 | -2.5% | -0.8% | 14.0% | 10.8% | 13.3% | 9.5% |
| Russell 1000 | -2.3% | -0.7% | 14.0% | 10.4% | 13.2% | 9.6% |
| Russell 2000 | 1.3% | -0.1% | 11.8% | 8.4% | 11.5% | 9.8% |
| Russell 2500 | 1.0% | -0.2% | 12.3% | 8.1% | 11.6% | 10.3% |
| MSCI EAFE | -1.8% | -1.5% | 14.8% | 5.6% | 6.5% | 2.7% |
| MSCI Emerging Markets | -1.9% | 1.4% | 24.9% | 8.8% | 5.0% | 3.0% |

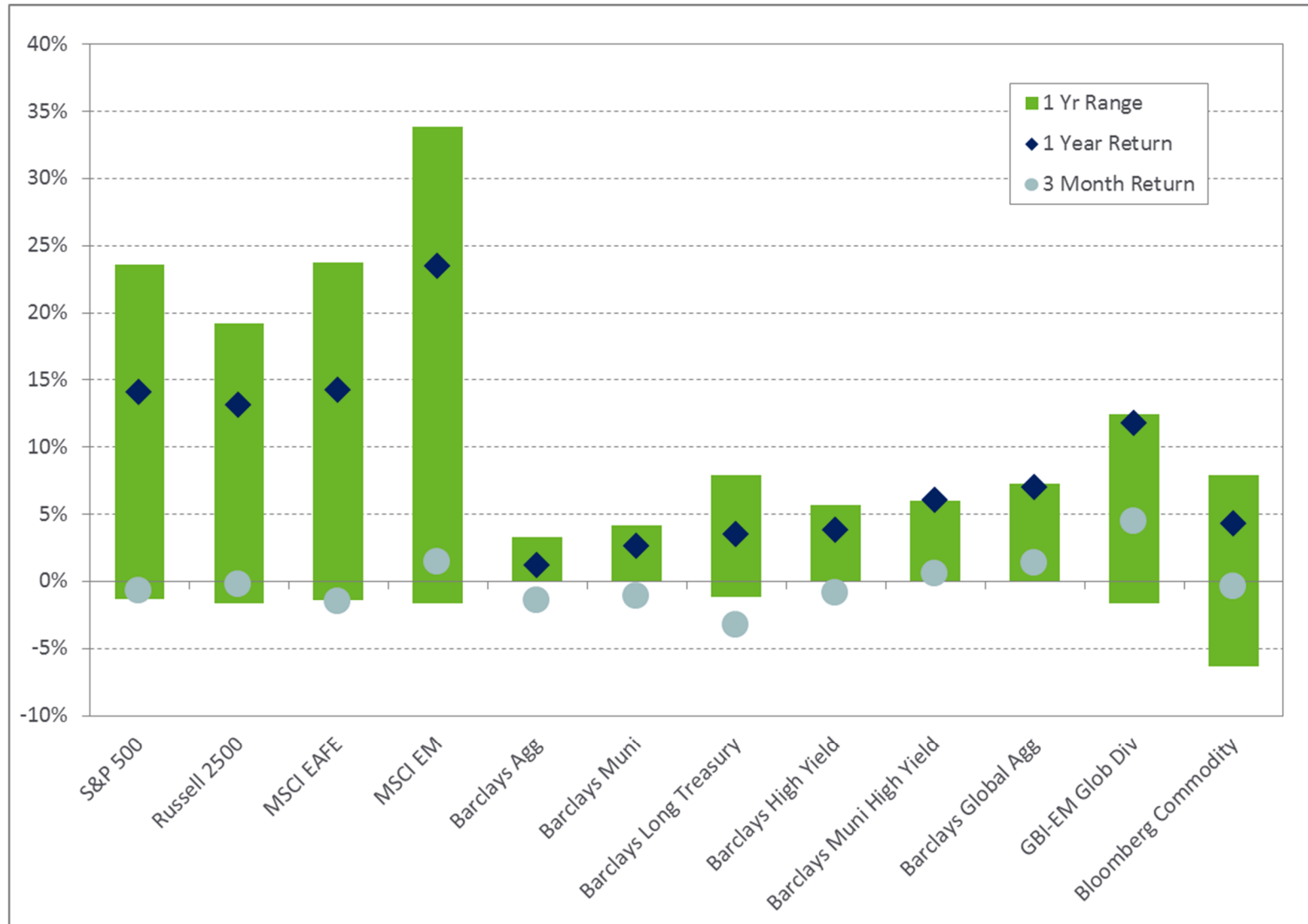
| Rates/Credit | | | | | | |
|-------------------------|--------|-------|-------|------|-------|-------|
| | Mar-18 | YTD | 1 YR | 3 YR | 5 YR | 10 YR |
| BC Global Aggregate | 1.1% | 1.4% | 7.0% | 3.1% | 1.5% | 2.6% |
| BC US Aggregate | 0.6% | -1.5% | 1.2% | 1.2% | 1.8% | 3.6% |
| BC Credit | 0.3% | -2.1% | 2.6% | 2.2% | 2.8% | 5.1% |
| BC US High Yield | -0.6% | -0.9% | 3.8% | 5.2% | 5.0% | 8.3% |
| BC Municipal Bond | 0.4% | -1.1% | 2.7% | 2.3% | 2.7% | 4.4% |
| BC Municipal High Yield | 1.5% | 0.6% | 6.0% | 4.6% | 4.1% | 5.6% |
| BC TIPS | 1.1% | -0.8% | 0.9% | 1.3% | 0.0% | 2.9% |
| BC 20+ STRIPS | 4.4% | -4.6% | 6.6% | 0.1% | 5.3% | 8.2% |
| BC Long Treasuries | 3.0% | -3.3% | 3.5% | 0.4% | 3.3% | 5.8% |
| BC Long Credit | 0.7% | -3.8% | 6.2% | 3.3% | 4.7% | 7.5% |
| BC Gov/Credit 1-3 Yr | 0.2% | -0.2% | 0.2% | 0.7% | 0.8% | 1.6% |
| CS Lev Loan | 0.3% | 1.6% | 4.6% | 4.3% | 4.2% | 5.4% |
| JPM EMBI Glob Div | 0.3% | -1.7% | 4.3% | 5.8% | 4.7% | 7.0% |
| JPM GBI-EM Glob Div | 1.0% | 4.4% | 13.0% | 5.4% | -0.7% | 3.8% |

| Real Assets | | | | | | |
|--------------------------|--------|--------|--------|--------|-------|-------|
| | Mar-18 | YTD | 1 YR | 3 YR | 5 YR | 10 YR |
| BBG Commodity | -0.6% | -0.4% | 3.7% | -3.2% | -8.3% | -7.7% |
| Alerian MLP | -6.9% | -11.1% | -20.1% | -11.2% | -5.8% | 5.5% |
| FTSE NAREIT Equity REITs | 3.7% | -6.7% | -1.1% | 2.9% | 6.7% | 6.9% |

Source: Bloomberg, Barclays, S&P, Russell, MSCI, JP Morgan, Credit Suisse, Alerian, NAREIT



SHORT-TERM PERFORMANCE SUMMARY



Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, JP Morgan
 *1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago



LONG-TERM PERFORMANCE SUMMARY



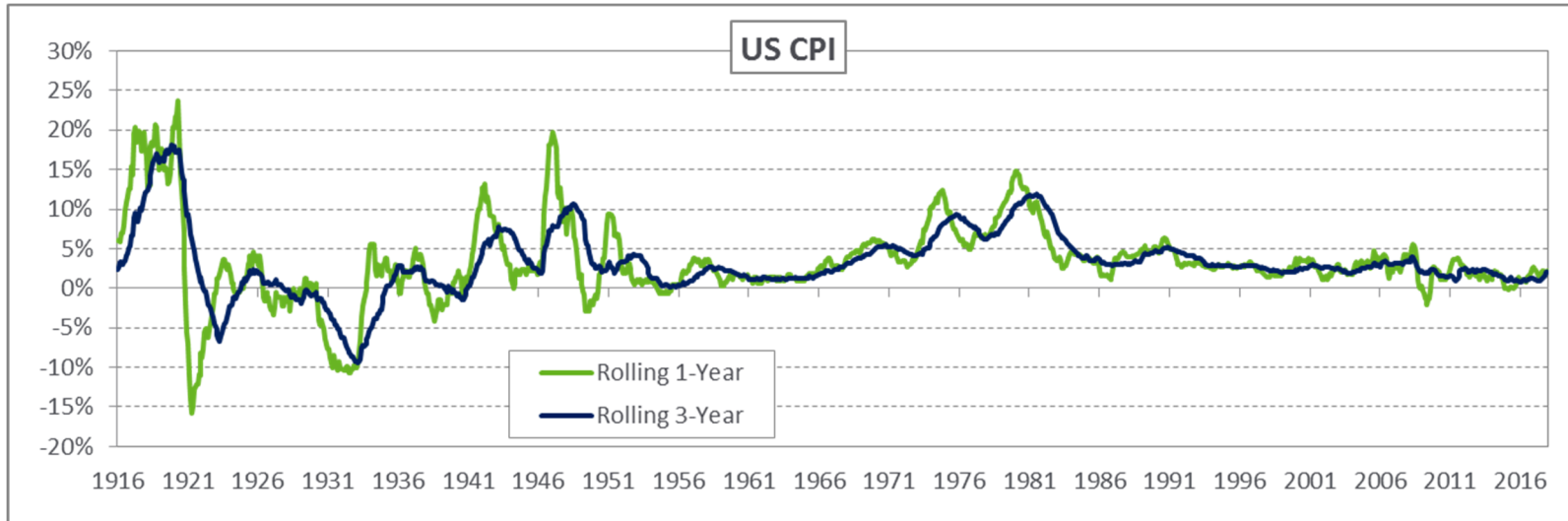
Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, JP Morgan



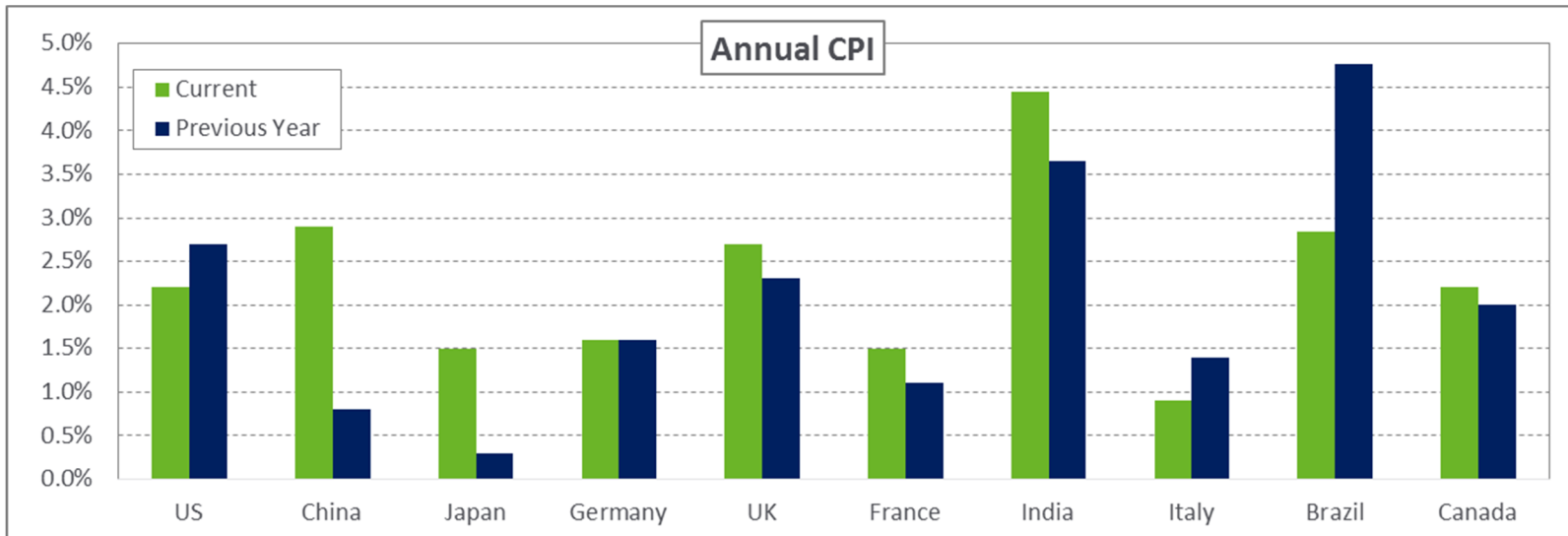
MACRO

NEPC, LLC

INFLATION



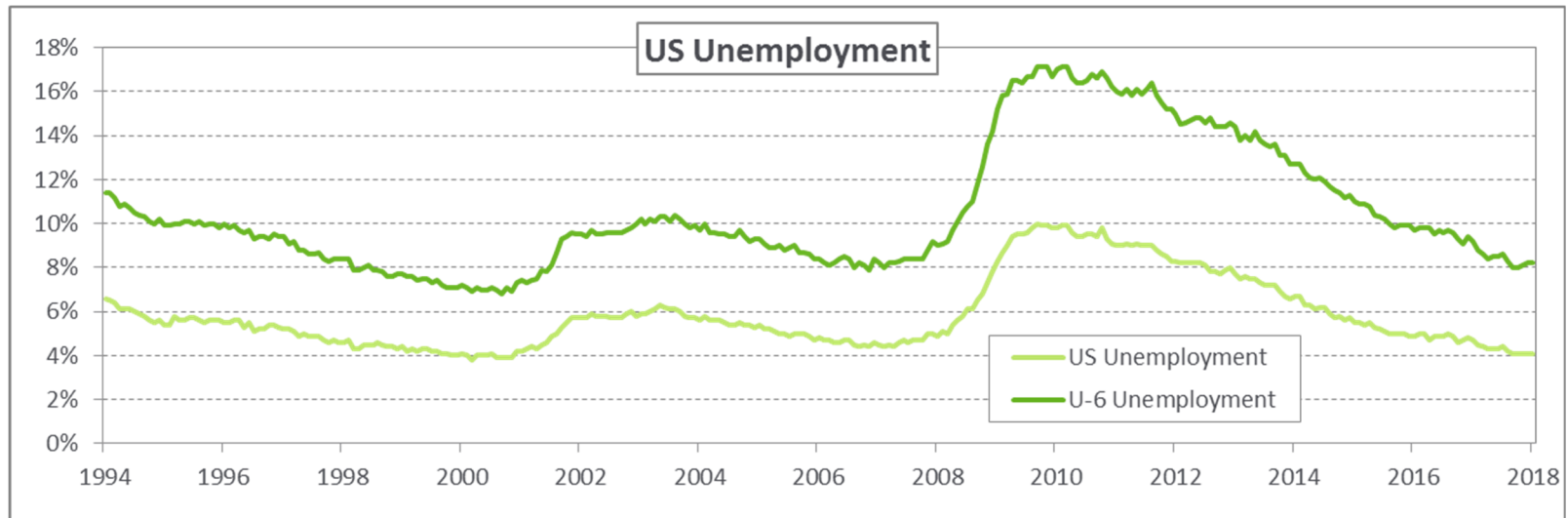
Source: Bureau of Labor Statistics, Bloomberg, NEPC



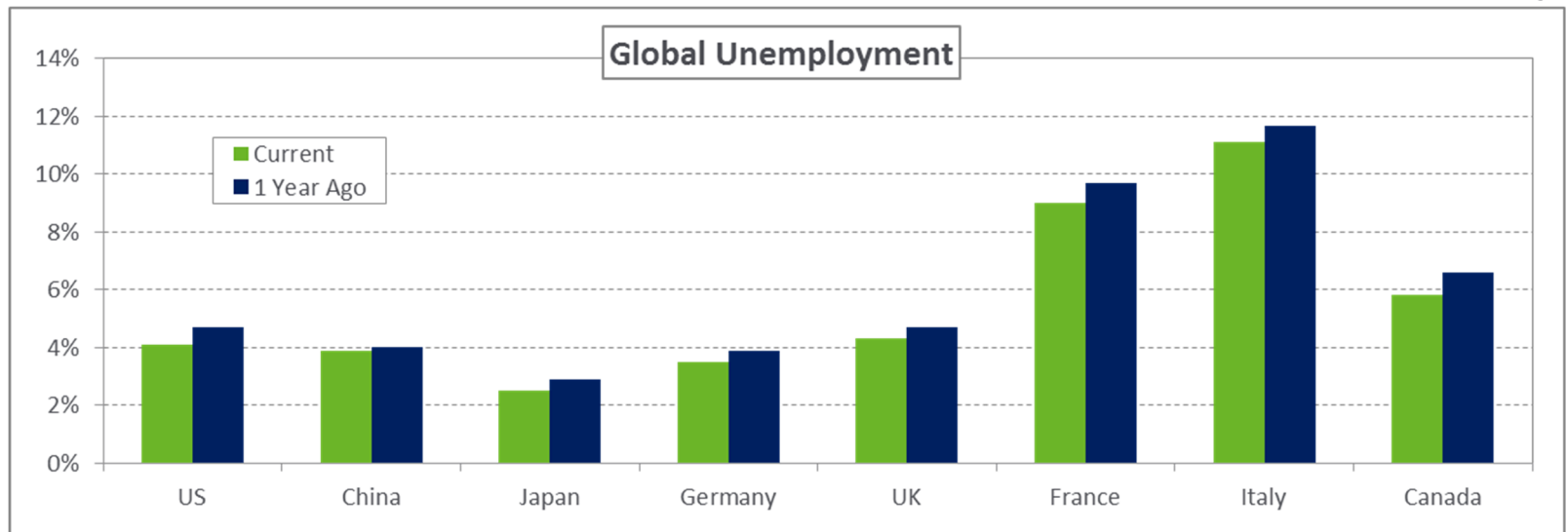
Source: Bureau of Labor Statistics, National Bureau of Statistics of China, Ministry of Internal Affairs and Communications (Japan), German Federal Statistics Office, UK Office for National Statistics, National Statistics Office of France, India Central Statistical Organization, ISTAT, IBGE, STCA, Bloomberg



UNEMPLOYMENT



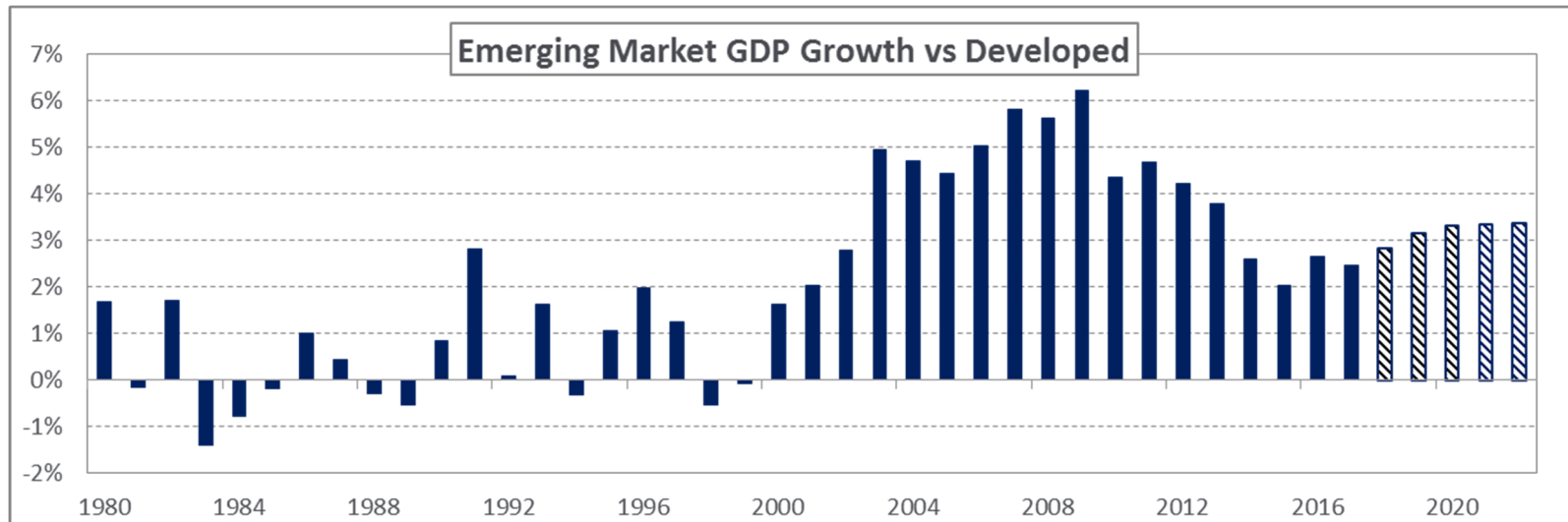
Source: Bureau of Labor Statistics, Bloomberg



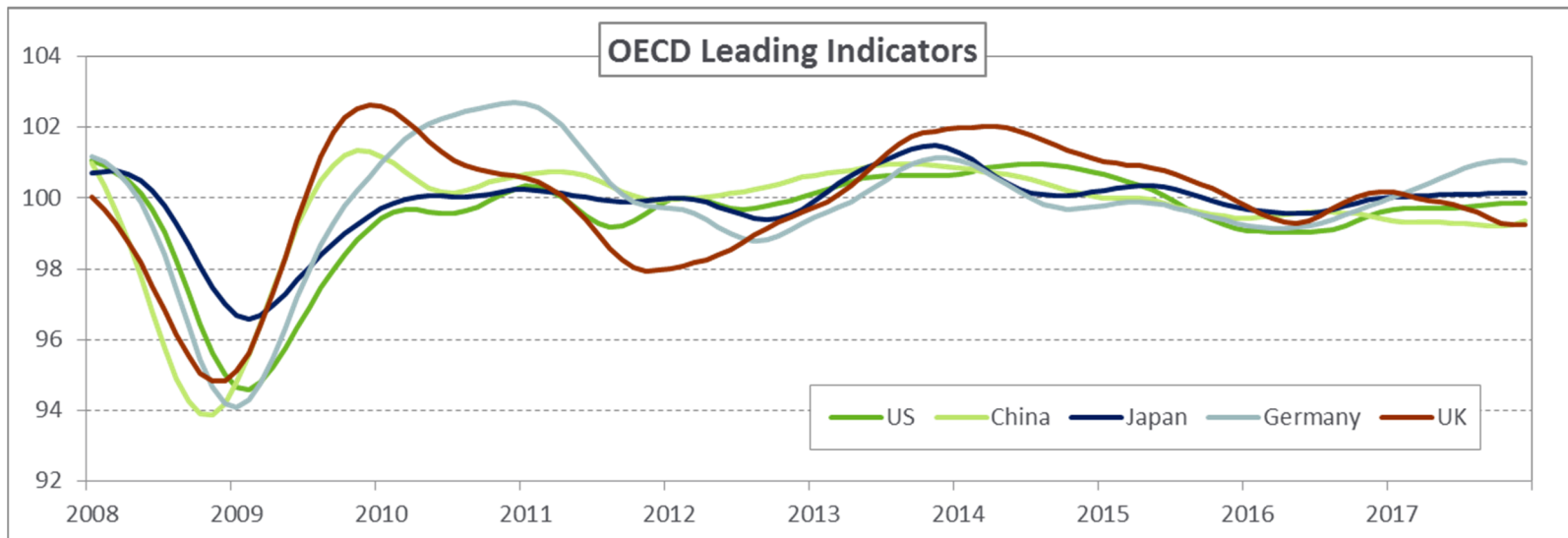
Source: Bureau of Labor Statistics, STA, National Bureau of Statistics of China, Ministry of Internal Affairs and Communications (Japan), German Federal Statistics Office, UK Office for National Statistics, National Statistics Office of France, ISTAT, IBGE, Bloomberg



ECONOMIC INDICATORS



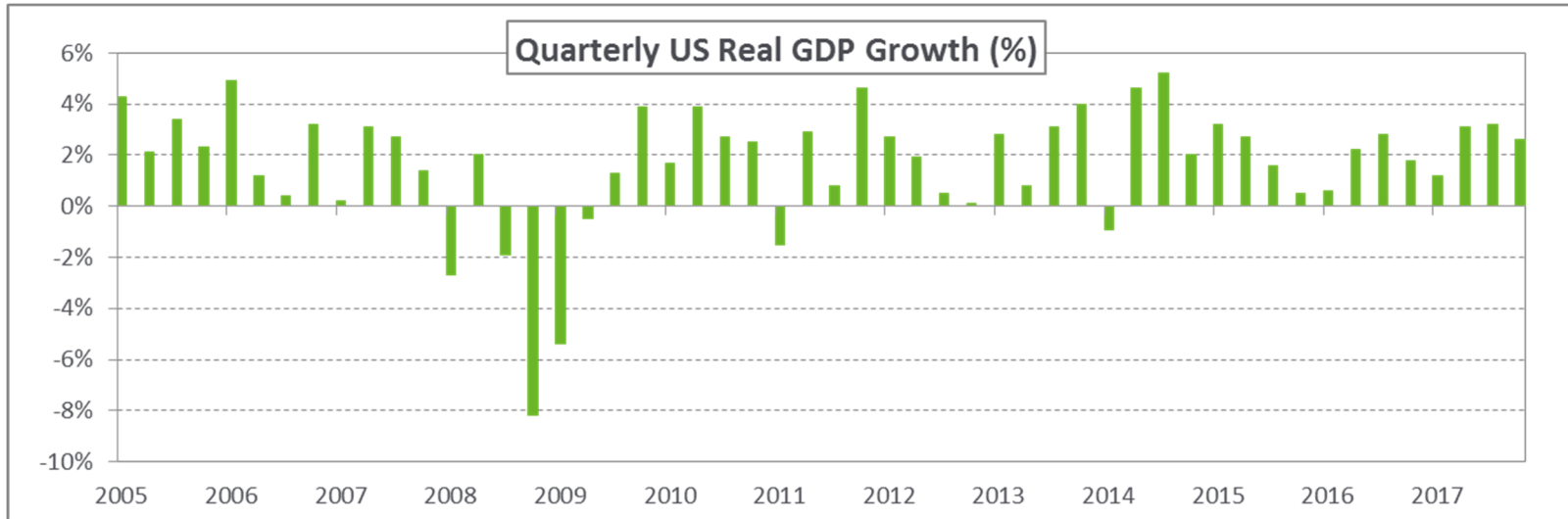
Source: IMF



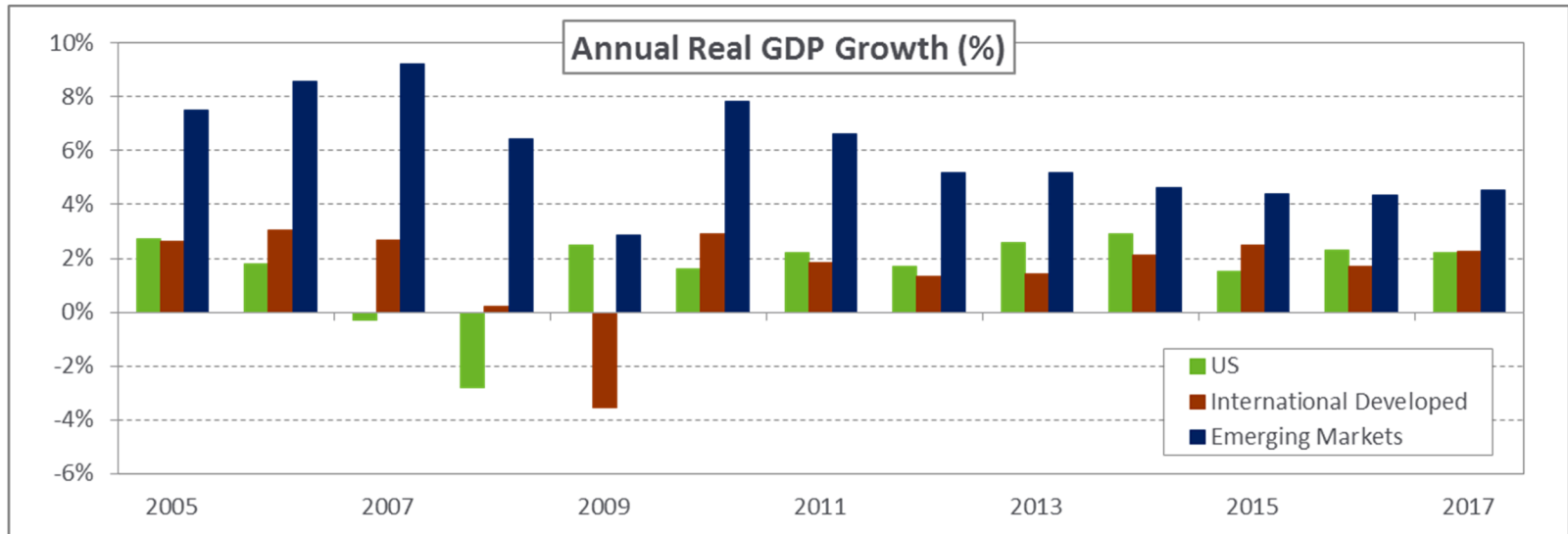
Source: OECD, Bloomberg



GROSS DOMESTIC PRODUCT



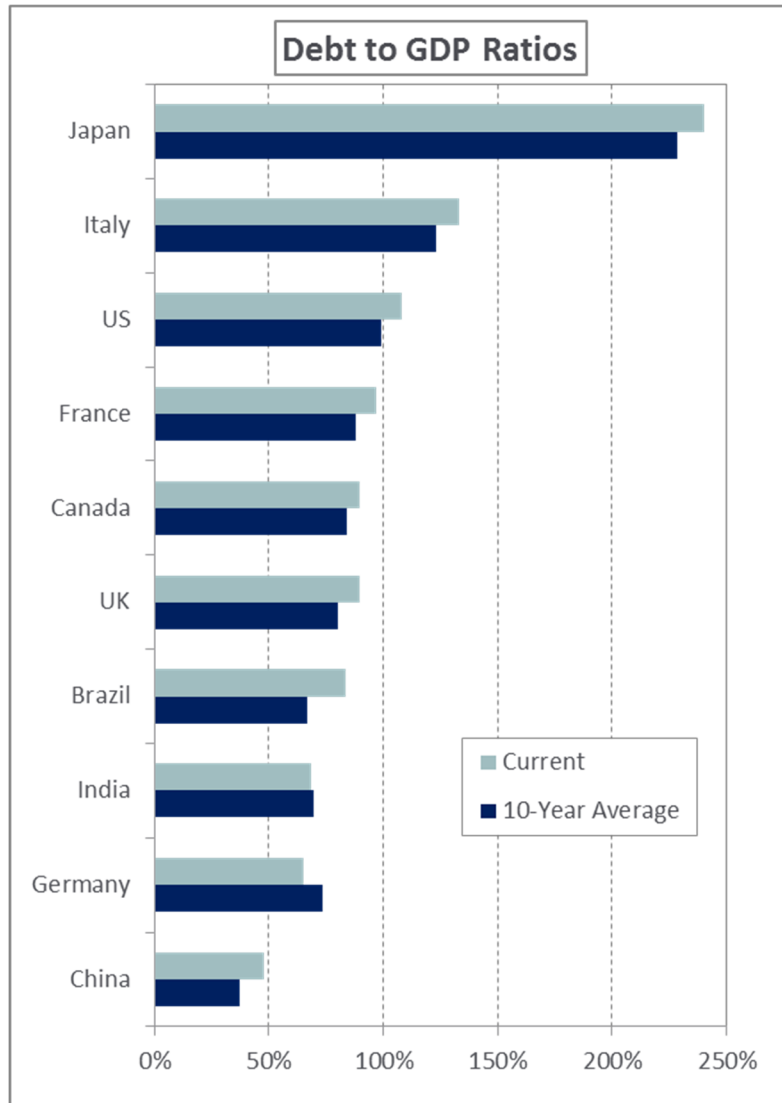
Source: Bloomberg



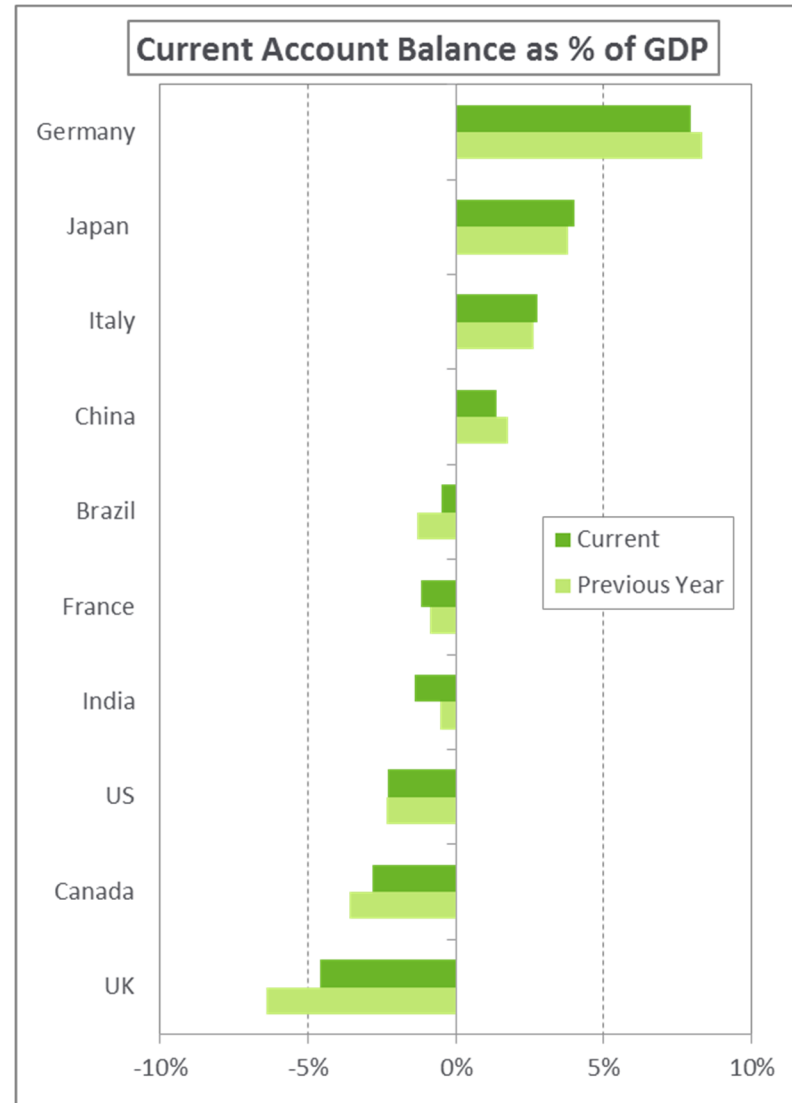
Source: Bloomberg



GROSS DOMESTIC PRODUCT METRICS



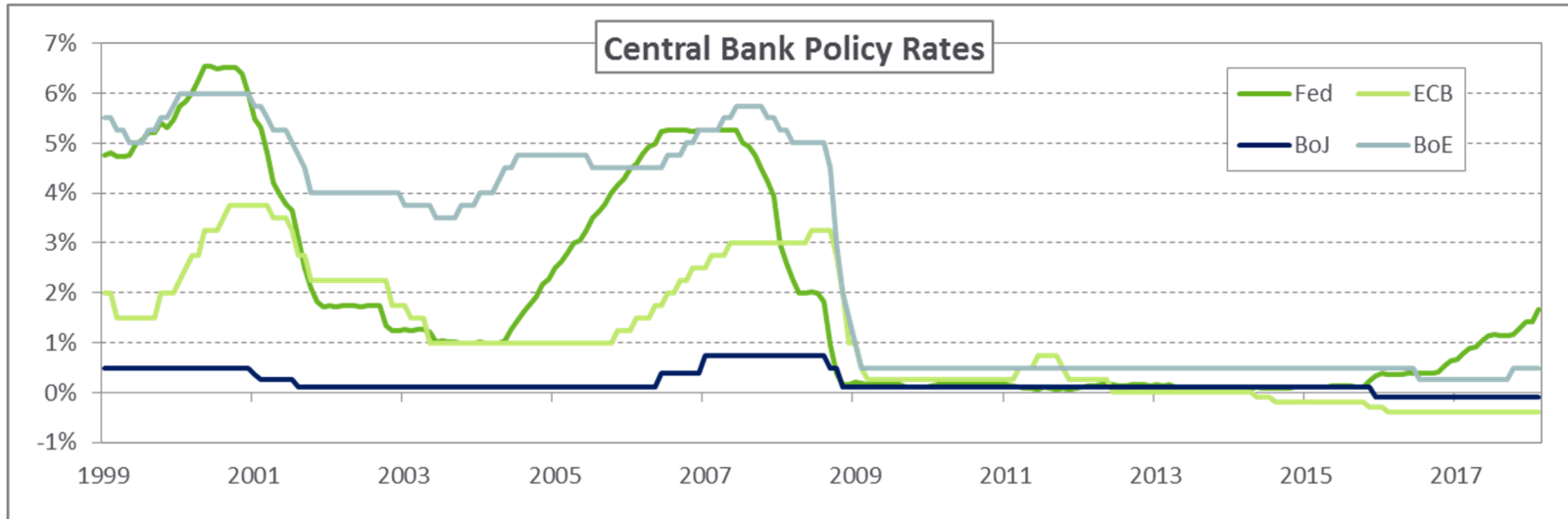
Source: IMF, Bloomberg



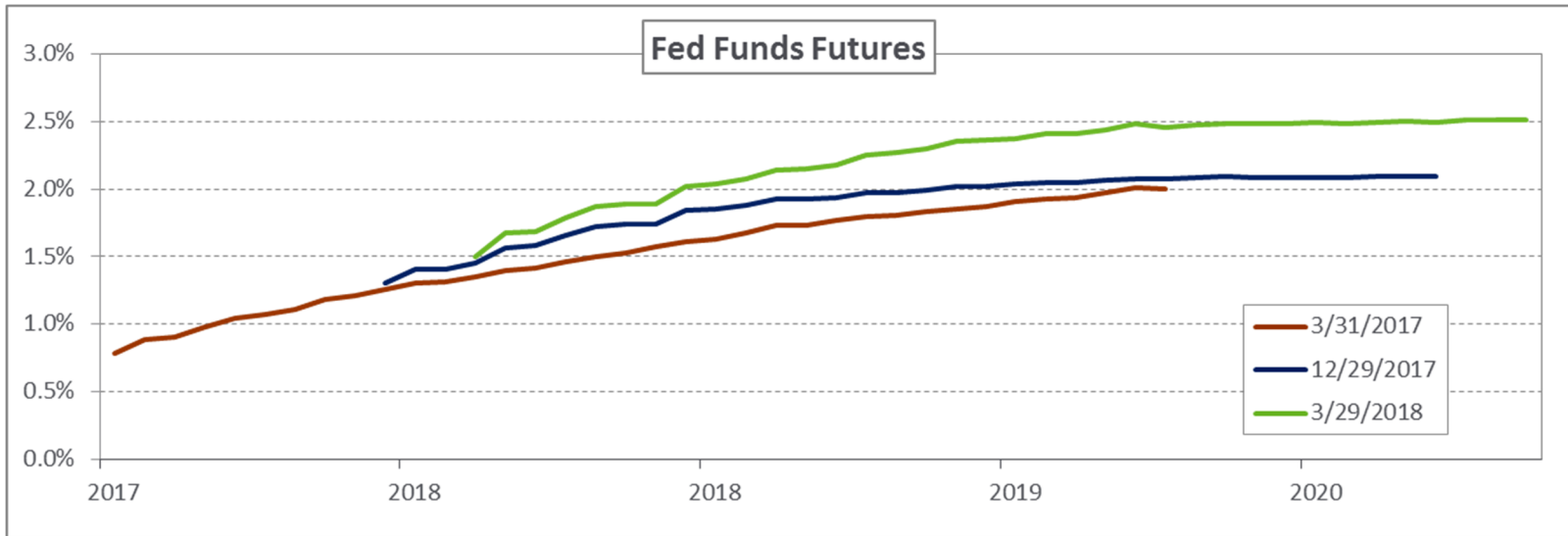
Source: Bloomberg



CENTRAL BANK RATES



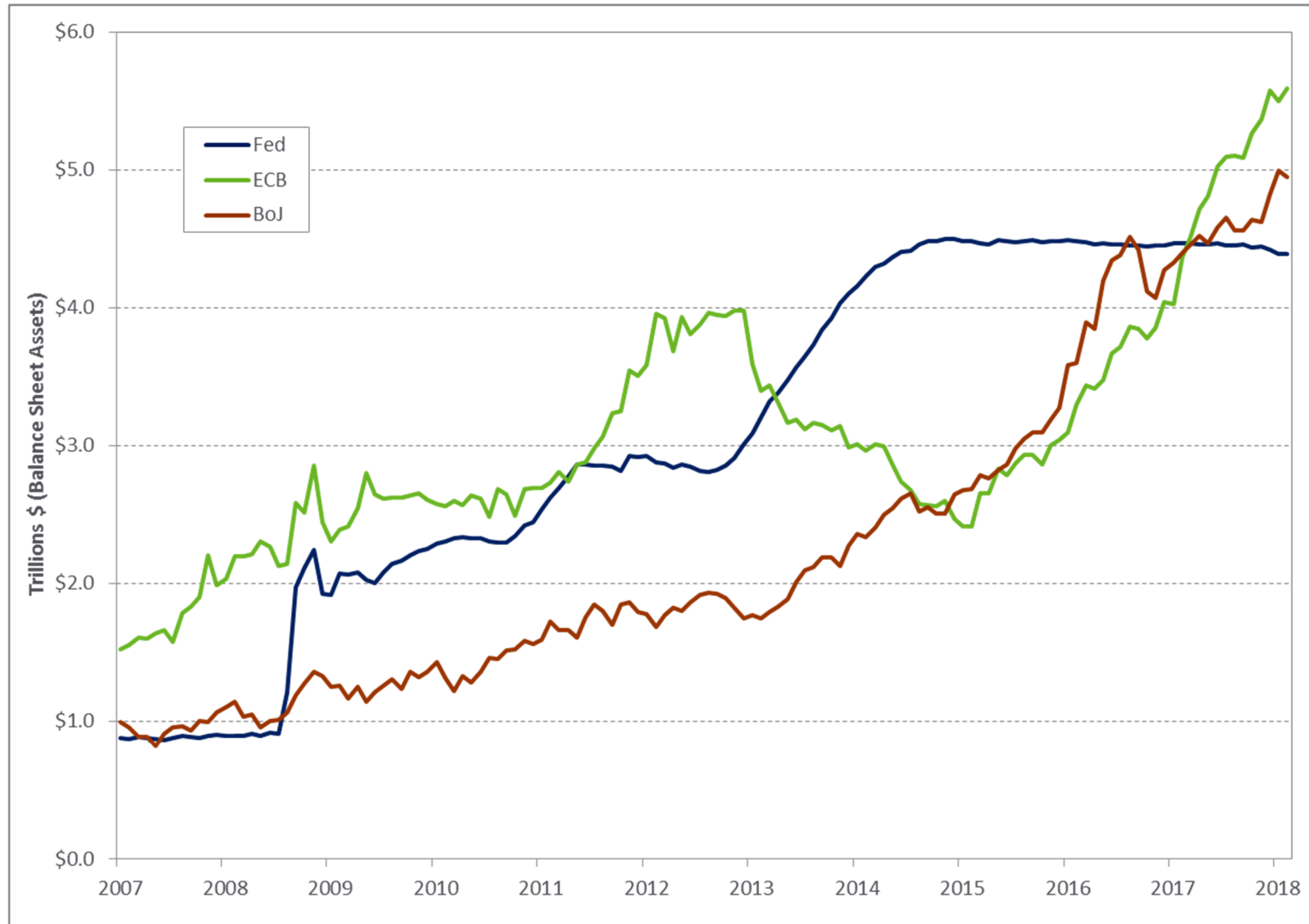
Source: Federal Reserve, ECB, Bank of Japan, Bank of England, Bloomberg



Source: Bloomberg



CENTRAL BANK BALANCE SHEETS



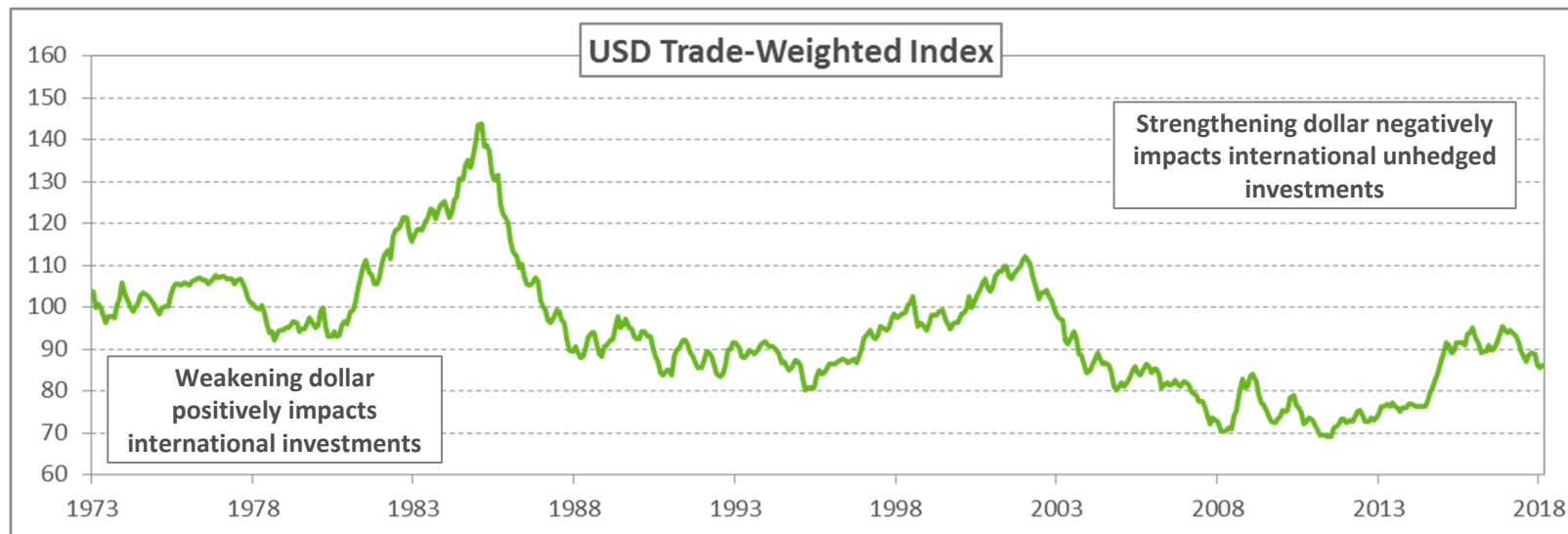
Source: Federal Reserve, Bank of Japan, ECB, Bloomberg, NEPC



CURRENCIES

| Currencies | % Change Relative to USD | | | |
|--------------------|--------------------------|---------|-------|--------|
| | Spot | 1 Month | YTD | 1 Year |
| Euro | 1.23 | 1.1% | 2.7% | 15.7% |
| British Pound | 1.40 | 1.9% | 3.7% | 11.7% |
| Japanese Yen | 106.28 | 0.4% | 6.0% | 4.8% |
| Swiss Franc | 0.95 | -1.0% | 2.1% | 5.1% |
| Australian Dollar | 0.77 | -1.1% | -1.7% | 0.7% |
| Chinese Yuan | 6.29 | 0.6% | 3.4% | 9.3% |
| Brazilian Real | 3.31 | -2.0% | 0.2% | -5.6% |
| Russian Ruble | 57.34 | -1.7% | 0.6% | -1.9% |
| Indian Rupee | 65.08 | 0.3% | -1.9% | -0.4% |
| Mexican Peso | 18.18 | 3.6% | 8.1% | 3.0% |
| South African Rand | 11.84 | -0.4% | 4.5% | 13.4% |

Source: Bloomberg



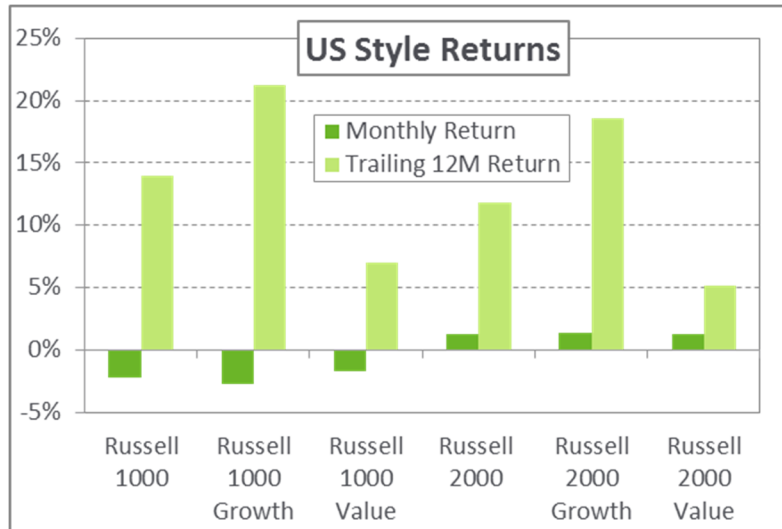
Source: Bloomberg



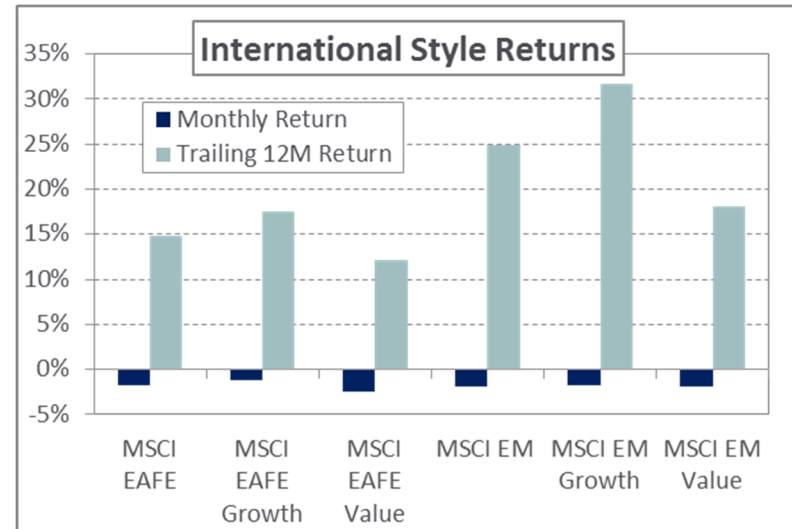
EQUITY

NEPC, LLC

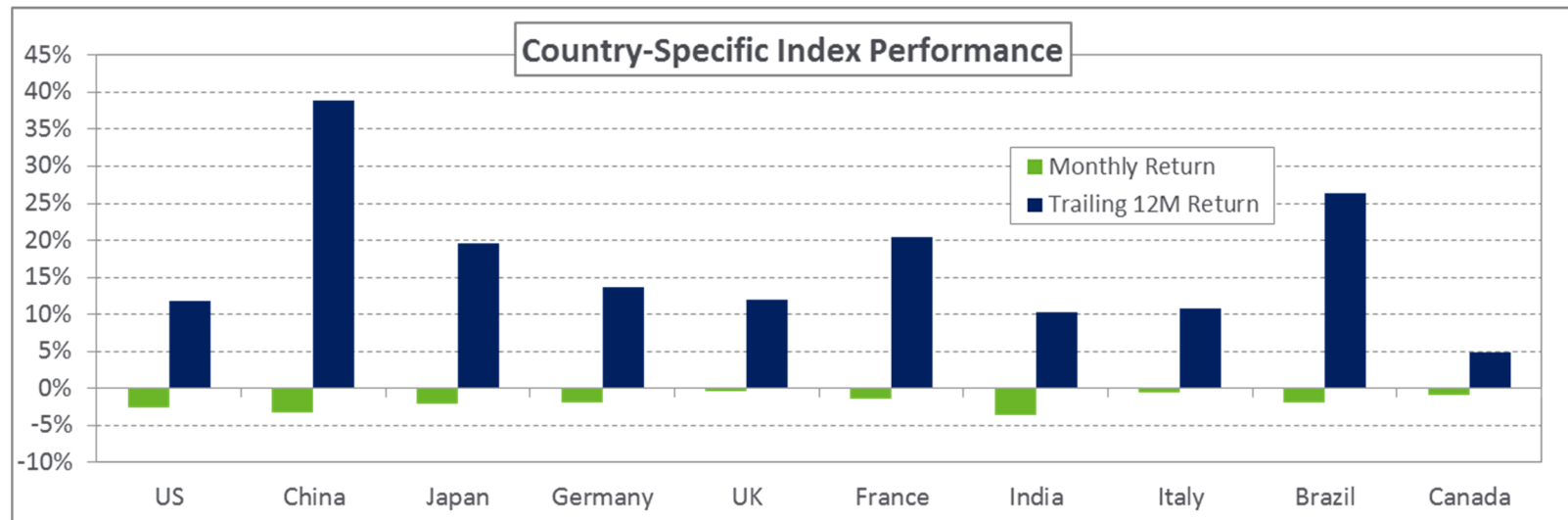
EQUITY INDEX PERFORMANCE



Source: Russell, Bloomberg



Source: MSCI, Bloomberg



Source: MSCI, Bloomberg
Represents returns in USD

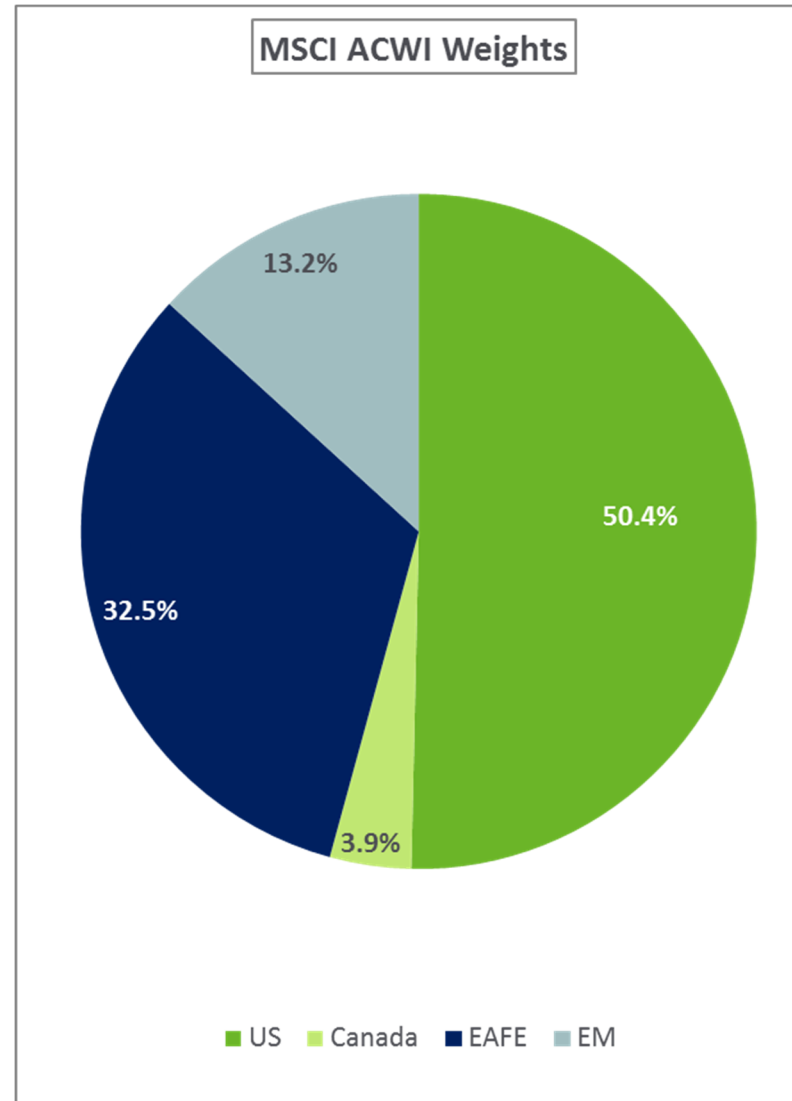


INDEX COMPOSITION

| | MTD | QTD | YTD | Index Weight |
|--------------------|--------------|--------------|--------------|--------------|
| S&P 500 | -2.5% | -0.8% | -0.8% | 100% |
| Cons Disc | -2.4% | 3.0% | 3.0% | 12.7% |
| Cons Staples | -1.0% | -7.3% | -7.3% | 7.7% |
| Energy | 1.6% | -6.1% | -6.1% | 5.8% |
| Financials | -4.4% | -1.1% | -1.1% | 14.2% |
| Health Care | -3.1% | -1.3% | -1.3% | 13.9% |
| Industrials | -2.7% | -1.7% | -1.7% | 10.3% |
| Info Tech | -3.9% | 3.4% | 3.4% | 24.8% |
| Materials | -4.3% | -5.7% | -5.7% | 2.9% |
| Real Estate | 3.6% | -5.3% | -5.3% | 2.8% |
| Telecom | -1.0% | -7.8% | -7.8% | 2.0% |
| Utilities | 3.7% | -3.6% | -3.6% | 2.9% |

| | MTD | QTD | YTD | Index Weight |
|------------------|--------------|--------------|--------------|--------------|
| MSCI ACWI | -2.1% | -0.9% | -0.9% | 100% |
| Cons Disc | -2.7% | 1.0% | 1.0% | 12.0% |
| Cons Staples | 0.1% | -4.9% | -4.9% | 8.0% |
| Energy | 0.7% | -3.8% | -3.8% | 6.3% |
| Financials | -3.8% | -1.0% | -1.0% | 18.5% |
| Health Care | -2.0% | -1.0% | -1.0% | 10.6% |
| Industrials | -2.4% | -1.6% | -1.6% | 11.1% |
| Info Tech | -3.0% | 3.2% | 3.2% | 18.9% |
| Materials | -3.6% | -3.7% | -3.7% | 5.4% |
| Real Estate | 2.1% | -3.6% | -3.6% | 3.2% |
| Telecom | -1.5% | -5.4% | -5.4% | 3.1% |
| Utilities | 3.8% | -1.3% | -1.3% | 2.9% |

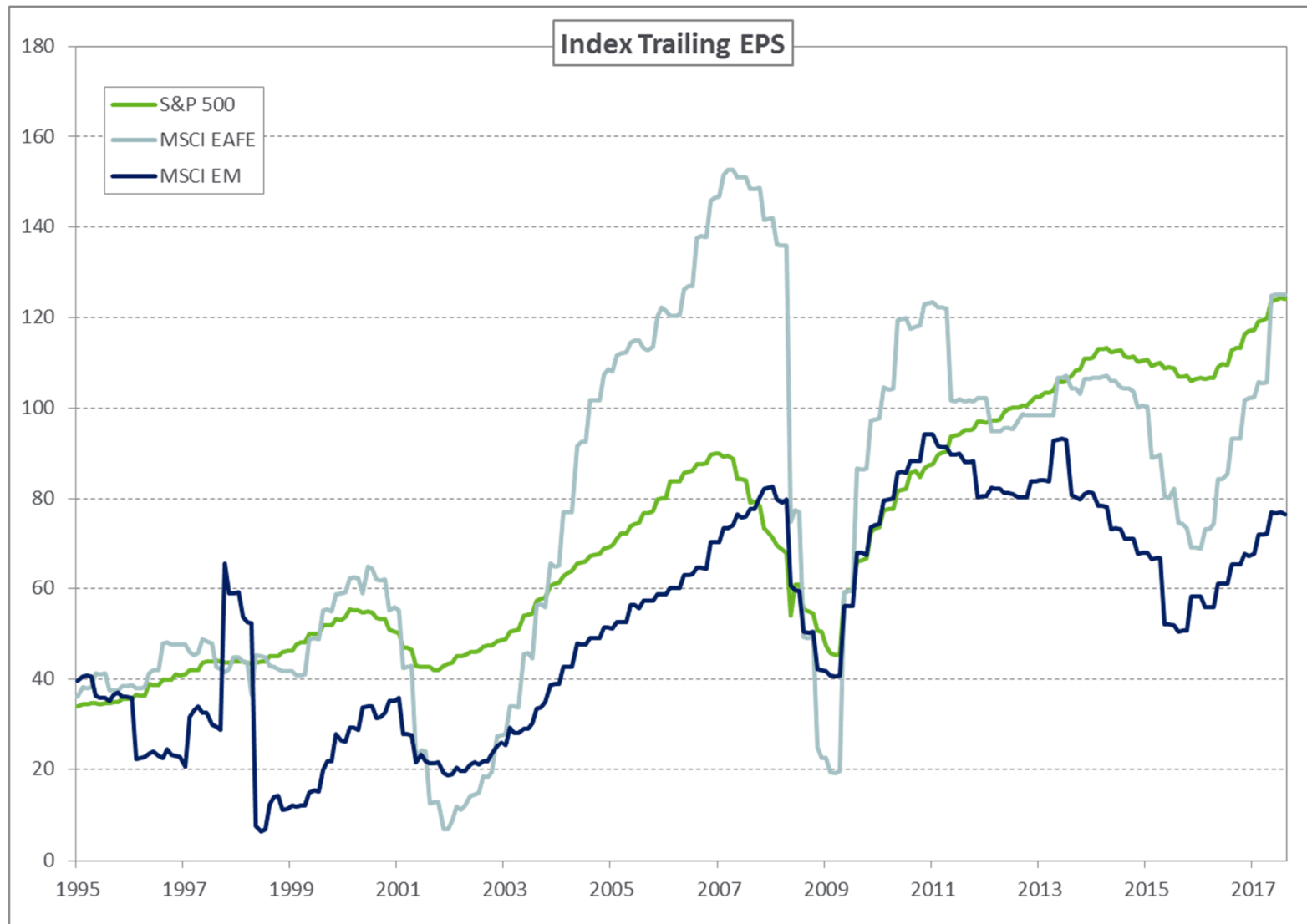
Source: S&P, MSCI, Bloomberg



Source: MSCI, Bloomberg



EARNINGS



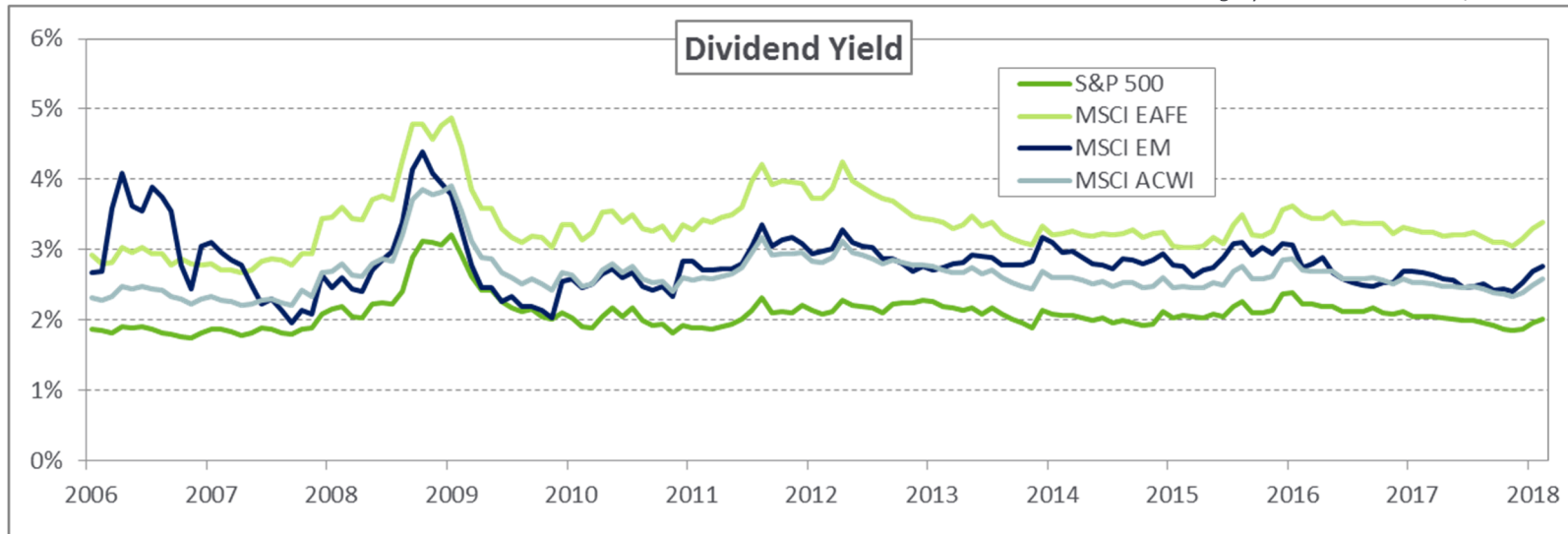
Source: S&P, MSCI, Bloomberg



YIELDS



Source: S&P, MSCI, Bloomberg
Earnings yield calculated as 1/PE Ratio



Source: S&P, MSCI, Bloomberg



CREDIT

NEPC, LLC

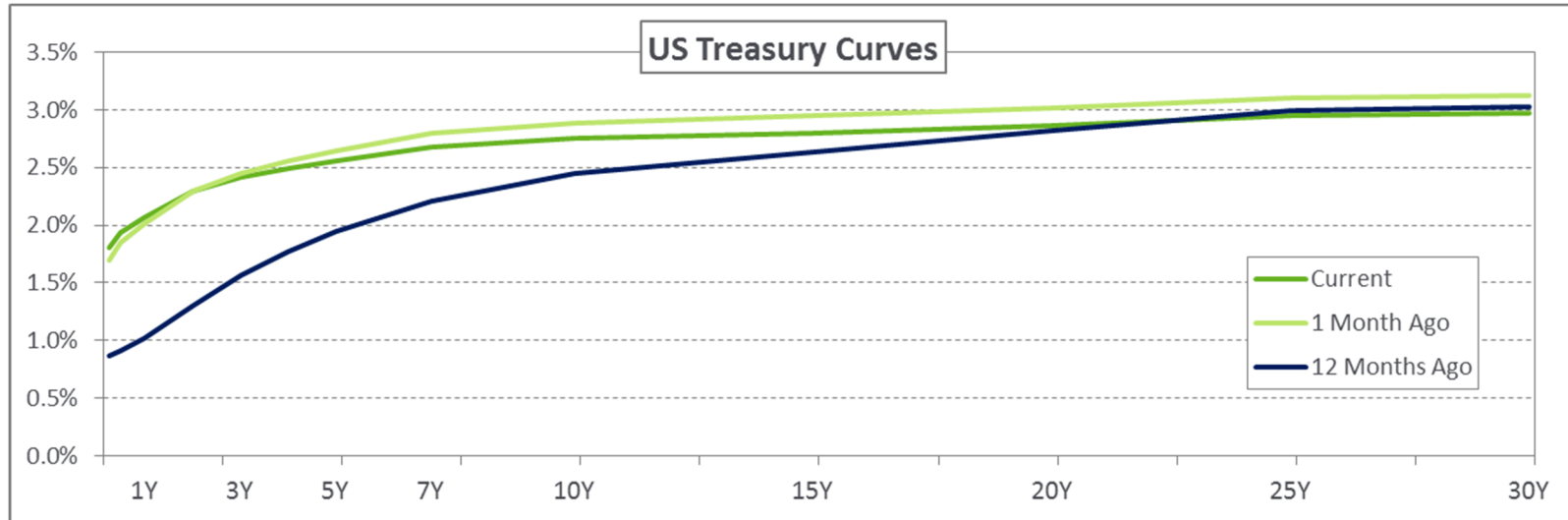
FIXED INCOME CHARACTERISTICS

| | Averages | | | Total Returns (%) | | |
|---------------------|----------------|--------------|------------------|-------------------|-------|--------|
| | Yield to Worst | Spread (bps) | Duration (Years) | 1-Month | YTD | 1-Year |
| Barclays Aggregate | 3.1% | 41 | 6.1 | 0.6% | -1.5% | 1.2% |
| Barclays Treasury | 2.6% | - | 6.1 | 0.9% | -1.2% | 0.4% |
| Barclays Agency | 2.6% | 12 | 3.9 | 0.6% | -0.5% | 0.8% |
| Barclays MBS | 3.3% | 29 | 5.1 | 0.6% | -1.2% | 0.8% |
| Barclays ABS | 2.8% | 43 | 2.3 | 0.2% | -0.5% | 0.5% |
| Barclays CMBS | 3.3% | 67 | 5.4 | 0.4% | -1.3% | 1.1% |
| Barclays Corp IG | 3.8% | 109 | 7.5 | 0.3% | -2.3% | 2.7% |
| Barclays Muni | 2.7% | - | 6.0 | 0.4% | -1.1% | 2.7% |
| Barclays HY Muni | 5.3% | - | 8.1 | 1.5% | 0.6% | 6.0% |
| Barclays TIPS | 2.8% | - | 5.0 | 1.1% | -0.8% | 0.9% |
| Barclays HY | 6.2% | 354 | 4.1 | -0.6% | -0.9% | 3.8% |
| Barclays Global Agg | 1.8% | 38 | 7.1 | 1.1% | 1.4% | 7.0% |
| JPM EMBI Glob Div | 5.9% | 326 | 7.4 | 0.3% | -1.7% | 4.3% |
| JPM CEMBI Broad | 4.6% | 244 | 4.7 | -0.2% | -1.1% | 3.7% |
| JPM GBI - EM | 6.0% | - | 5.2 | 1.0% | 4.4% | 13.0% |

Source: Barclays, JPM, Bloomberg



TREASURIES



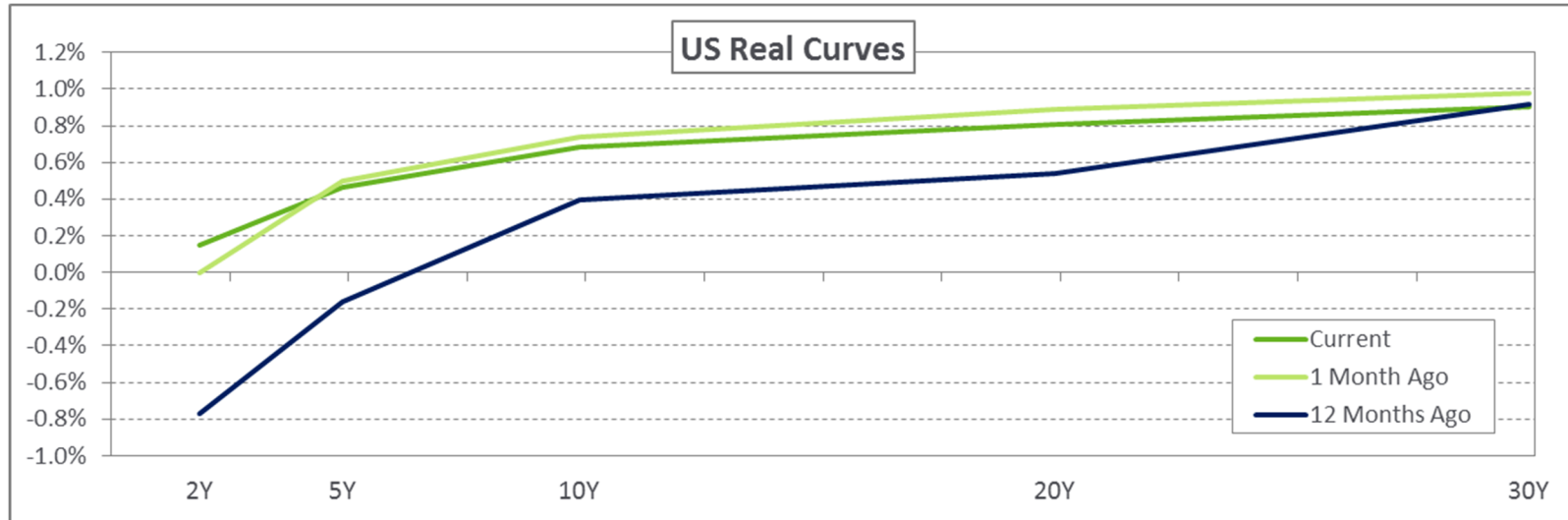
Source: Bloomberg

| | Yield (%) | | | Total Return (%) | |
|---------------------|-----------|-------------|---------------|------------------|-----------|
| | Current | 1 Month Ago | 12 Months Ago | 1 Month | 12 Months |
| 3M Treasury | 1.81% | 1.70% | 0.86% | 0.13% | 1.05% |
| 6M Treasury | 1.94% | 1.85% | 0.91% | 0.14% | 1.07% |
| 2Y Treasury | 2.30% | 2.29% | 1.31% | 0.17% | -0.17% |
| 5Y Treasury | 2.56% | 2.65% | 1.94% | 0.65% | -0.81% |
| 10Y Treasury | 2.75% | 2.89% | 2.45% | 1.32% | -1.09% |
| 30Y Treasury | 2.98% | 3.13% | 3.03% | 3.37% | 3.54% |

Source: Barclays, Bloomberg



REAL YIELDS



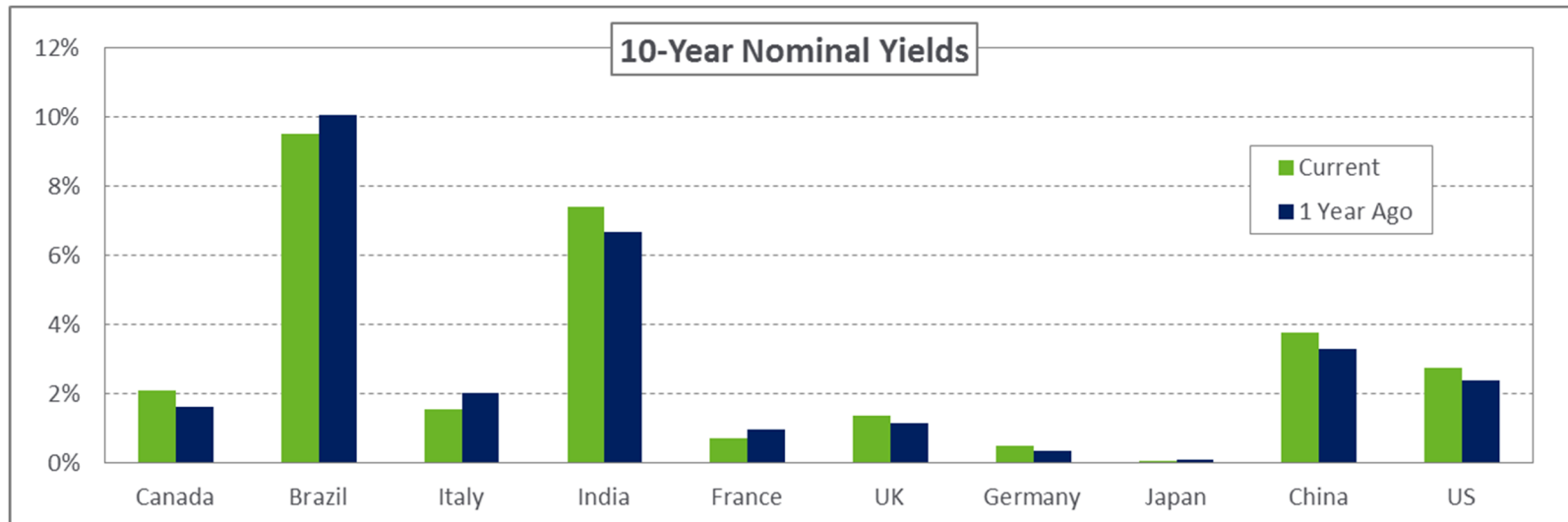
Source: Bloomberg

| | Real Rates | | | Breakeven Rates | |
|--------------|------------|-------------|---------------|-----------------|---------------|
| | Current | 1 Month Ago | 12 Months Ago | Current | 12 Months Ago |
| 2Y Treasury | 0.15% | 0.00% | -0.77% | 1.98% | 1.82% |
| 5Y Treasury | 0.47% | 0.50% | -0.16% | 2.04% | 1.95% |
| 10Y Treasury | 0.68% | 0.74% | 0.40% | 2.06% | 1.98% |
| 20Y Treasury | 0.81% | 0.89% | 0.54% | 2.00% | 1.94% |
| 30Y Treasury | 0.90% | 0.98% | 0.91% | 2.07% | 2.09% |

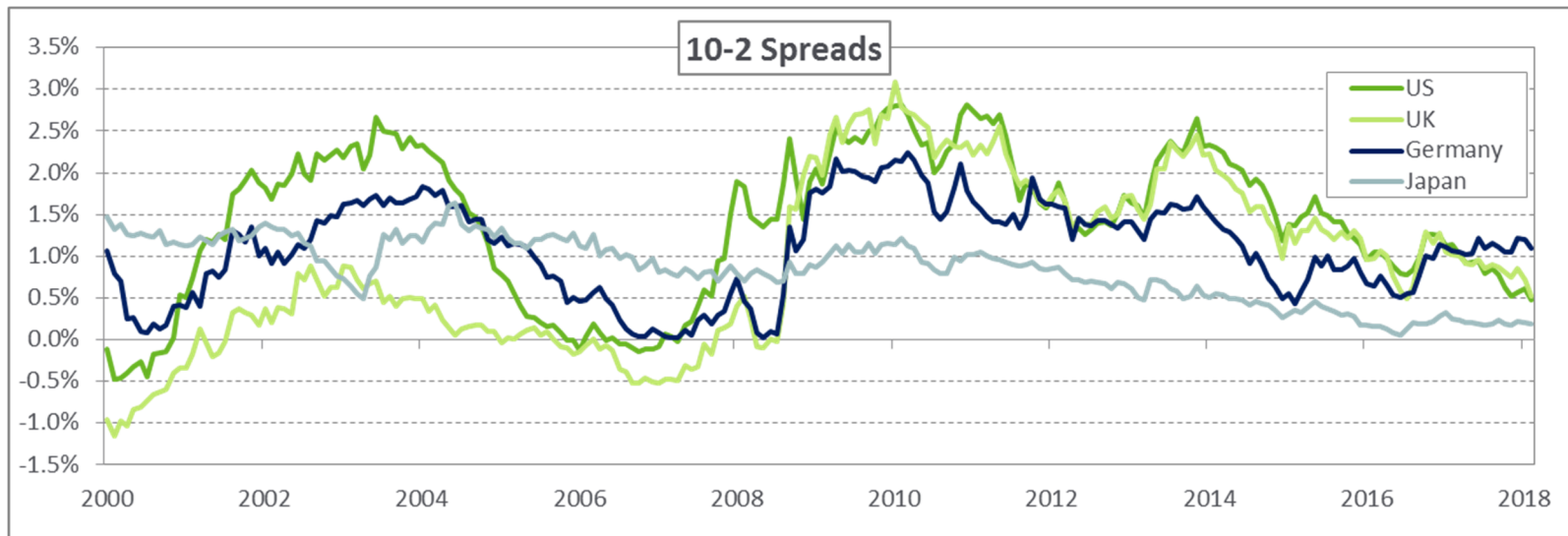
Source: Barclays, Bloomberg



NOMINAL YIELDS



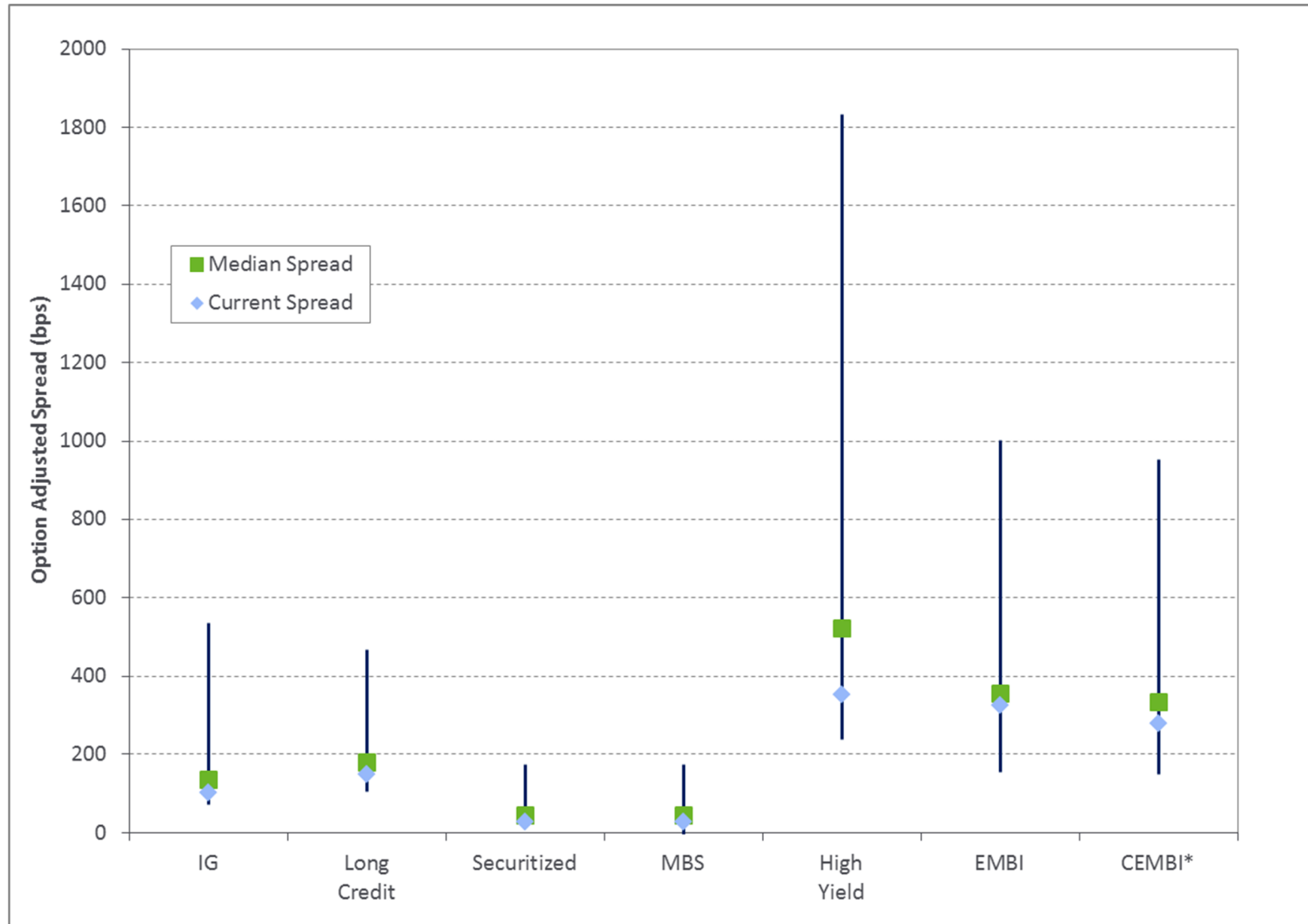
Source: Bloomberg



Source: Bloomberg



CREDIT SPREADS



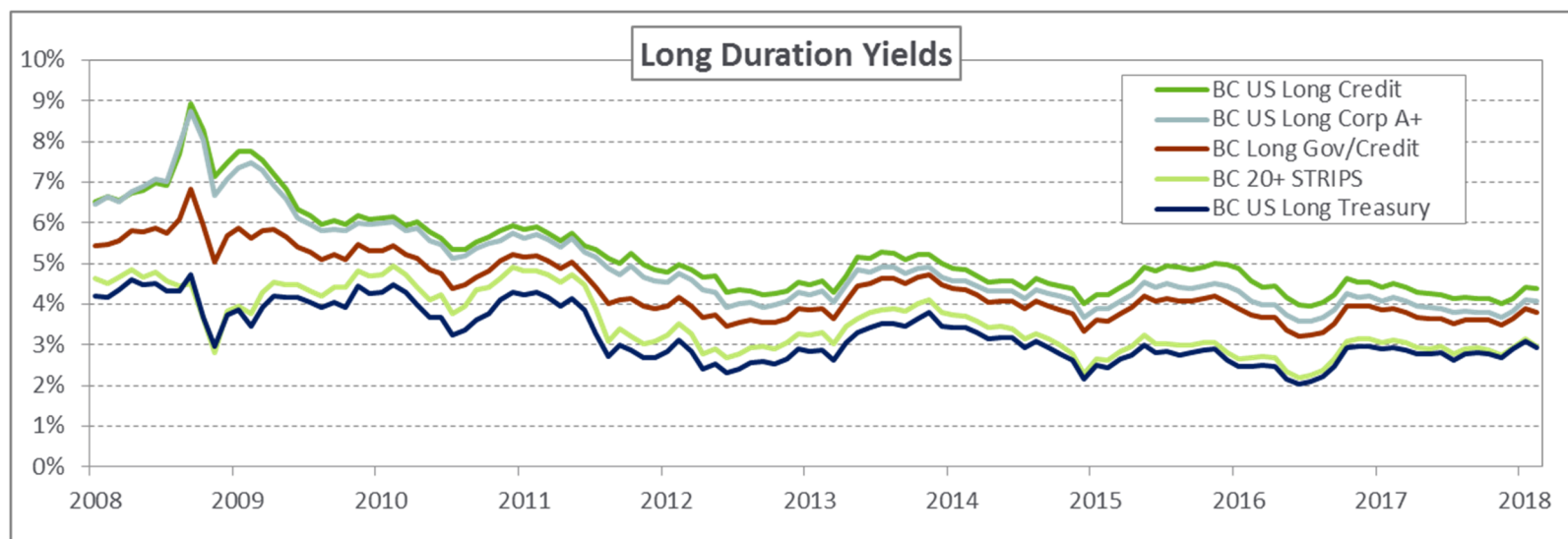
Source: Barclays, JPM, Bloomberg
Ranges calculated since 01/31/2000
*JPM CEMBI calculated as of 12/31/2001



LONG DURATION

| Index | Month-End Yield | 1 Month Prior Yield | 1 Year Prior Yield | Duration |
|--------------------------|-----------------|---------------------|--------------------|----------|
| Barclays Long Treasury | 2.9% | 3.1% | 3.0% | 17.3 |
| Barclays 20+ STRIPS | 3.0% | 3.2% | 3.1% | 25.5 |
| Barclays Long Gov/Credit | 3.8% | 3.9% | 3.9% | 15.2 |
| Barclays Long Credit | 4.4% | 4.4% | 4.5% | 13.8 |
| Barclays Long Corp A+ | 4.1% | 4.1% | 4.2% | 14.4 |

Source: Barclays, Bloomberg



Source: Barclays, Bloomberg



REAL ASSETS

NEPC, LLC

REAL ASSETS INDEX PERFORMANCE

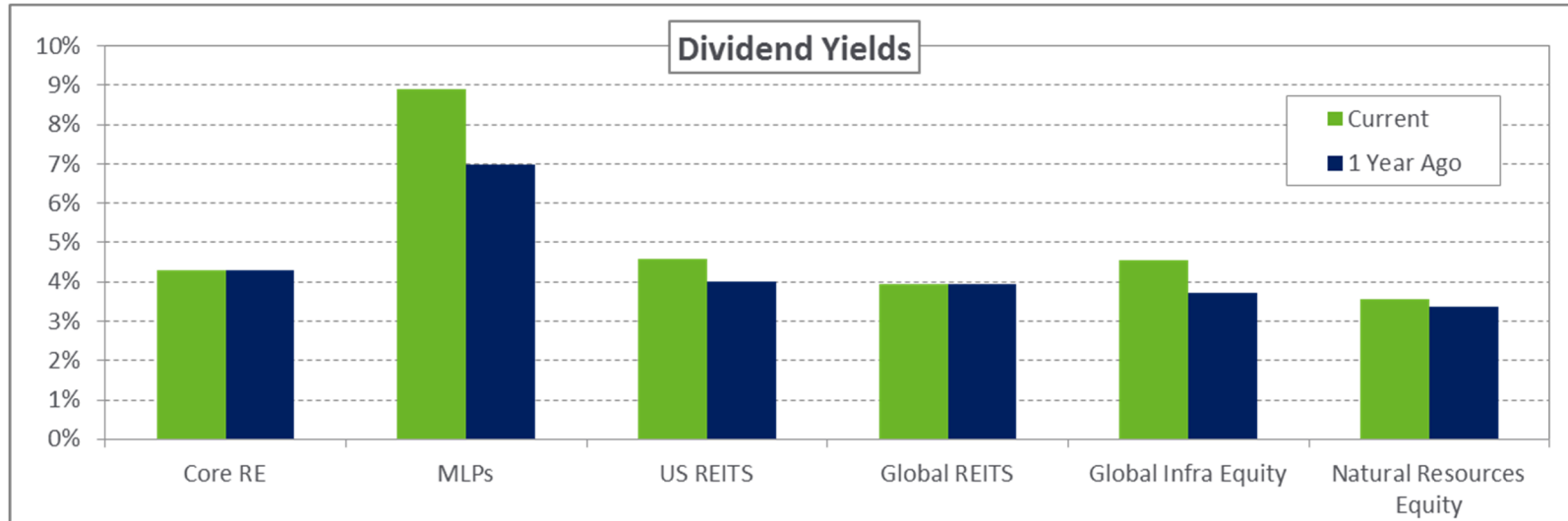
| Index | 1 Month | 3 Month | YTD | 1 Year | 3 Year | 5 Year |
|----------------------------------------|--------------|---------------|---------------|--------------|--------------|---------------|
| Bloomberg Commodity Index | -0.6% | -0.4% | -0.4% | 3.7% | -3.2% | -8.3% |
| Bloomberg Sub Agriculture Index | -2.8% | 3.1% | 3.1% | -5.4% | -4.6% | -8.7% |
| Coffee | -3.0% | -7.6% | -7.6% | -22.5% | -12.6% | -11.7% |
| Corn | 1.6% | 8.7% | 8.7% | -5.9% | -9.1% | -15.8% |
| Cotton | -1.6% | 2.6% | 2.6% | 7.0% | 8.0% | -0.6% |
| Soybean | -1.0% | 7.5% | 7.5% | 4.9% | 0.3% | -0.2% |
| Soybean Oil | -1.1% | -4.8% | -4.8% | -3.5% | -2.7% | -11.8% |
| Sugar | -7.6% | -17.9% | -17.9% | -28.8% | -4.5% | -15.2% |
| Wheat | -8.8% | 3.2% | 3.2% | -11.3% | -15.0% | -16.7% |
| Bloomberg Sub Energy | 4.9% | 1.8% | 1.8% | 9.9% | -9.0% | -16.2% |
| Brent Crude | 7.2% | 5.4% | 5.4% | 30.5% | -3.2% | -14.6% |
| Heating Oil | 6.2% | -0.3% | -0.3% | 27.7% | -2.9% | -11.7% |
| Natural Gas | 1.5% | -6.9% | -6.9% | -28.6% | -23.9% | -24.3% |
| Unleaded Gas | 4.3% | 0.9% | 0.9% | 18.1% | -1.5% | -12.2% |
| WTI Crude Oil | 5.8% | 8.8% | 8.8% | 25.7% | -7.1% | -16.4% |
| Bloomberg Sub Industrial Metals | -4.4% | -6.2% | -6.2% | 12.7% | 4.0% | -1.5% |
| Aluminum | -6.2% | -12.0% | -12.0% | 0.0% | 0.6% | -3.7% |
| Copper | -3.3% | -8.6% | -8.6% | 12.0% | 1.8% | -3.4% |
| Nickel | -3.6% | 4.2% | 4.2% | 31.3% | 1.0% | -5.8% |
| Zinc | -4.9% | -0.8% | -0.8% | 19.7% | 15.3% | 9.3% |
| Bloomberg Sub Precious Metals | 0.2% | -0.5% | -0.5% | 0.5% | 1.8% | -6.1% |
| Gold | 0.4% | 1.0% | 1.0% | 5.2% | 3.1% | -4.2% |
| Silver | -0.7% | -5.2% | -5.2% | -12.0% | -2.0% | -11.7% |
| Bloomberg Sub Livestock | -7.1% | -10.0% | -10.0% | -4.4% | -6.7% | -3.4% |
| Lean Hogs | -0.6% | -10.7% | -10.7% | -1.4% | -4.8% | -7.6% |
| Live Cattle | -10.4% | -10.4% | -10.4% | -7.0% | -7.9% | -1.0% |

Source: Bloomberg

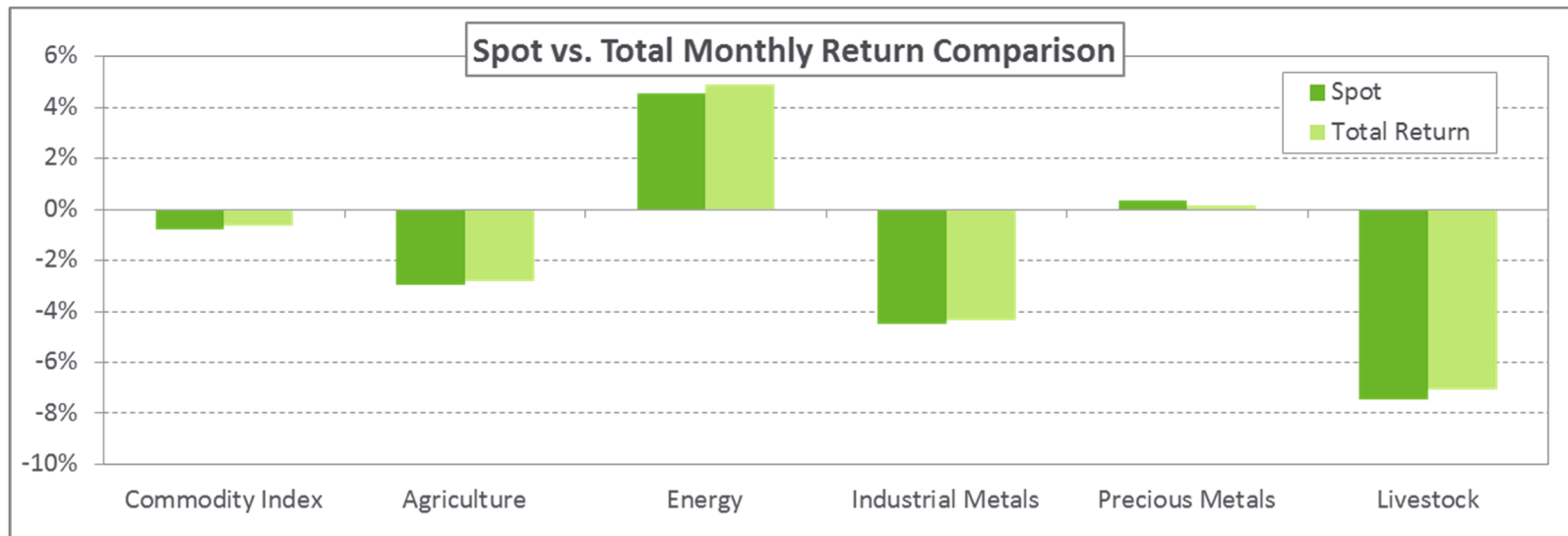
Bloomberg subindex total return indices reflects the return of the underlying one month commodity futures price movements



INCOME YIELD



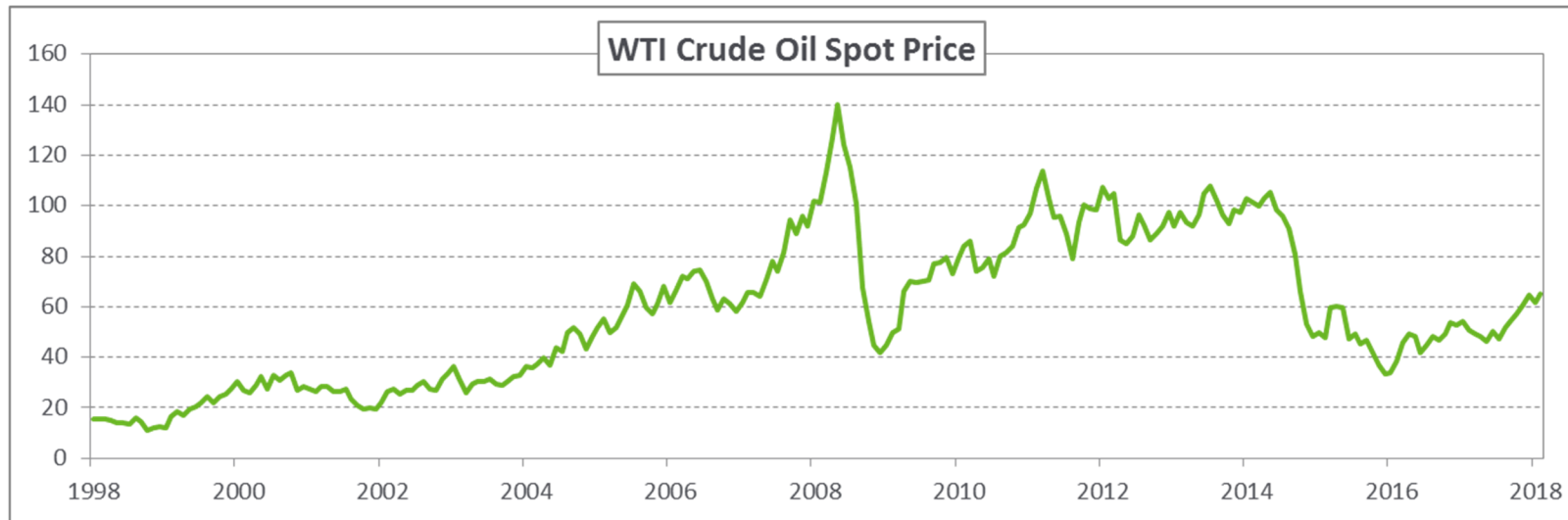
Source: Alerian, NAREIT, S&P, Bloomberg



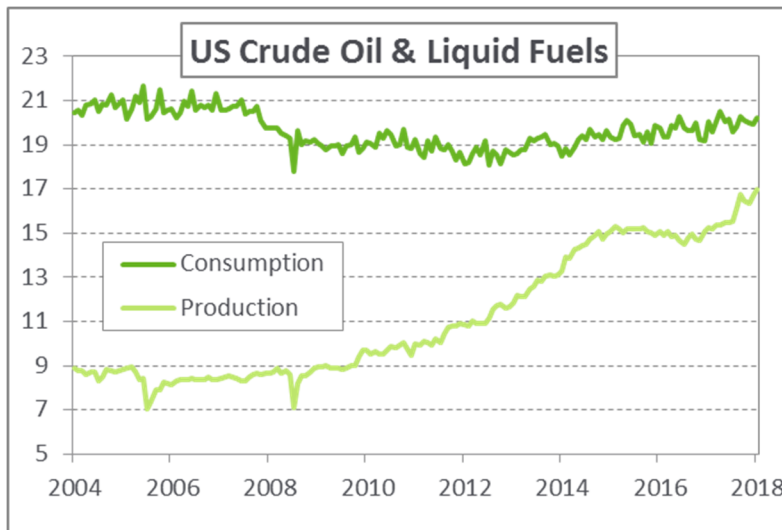
Source: Bloomberg, NEPC



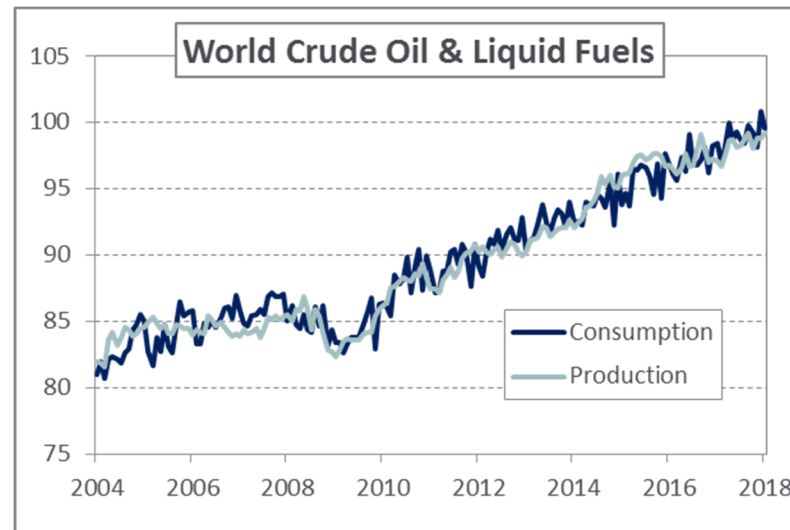
OIL MARKETS



Source: New York Mercantile Exchange, Bloomberg



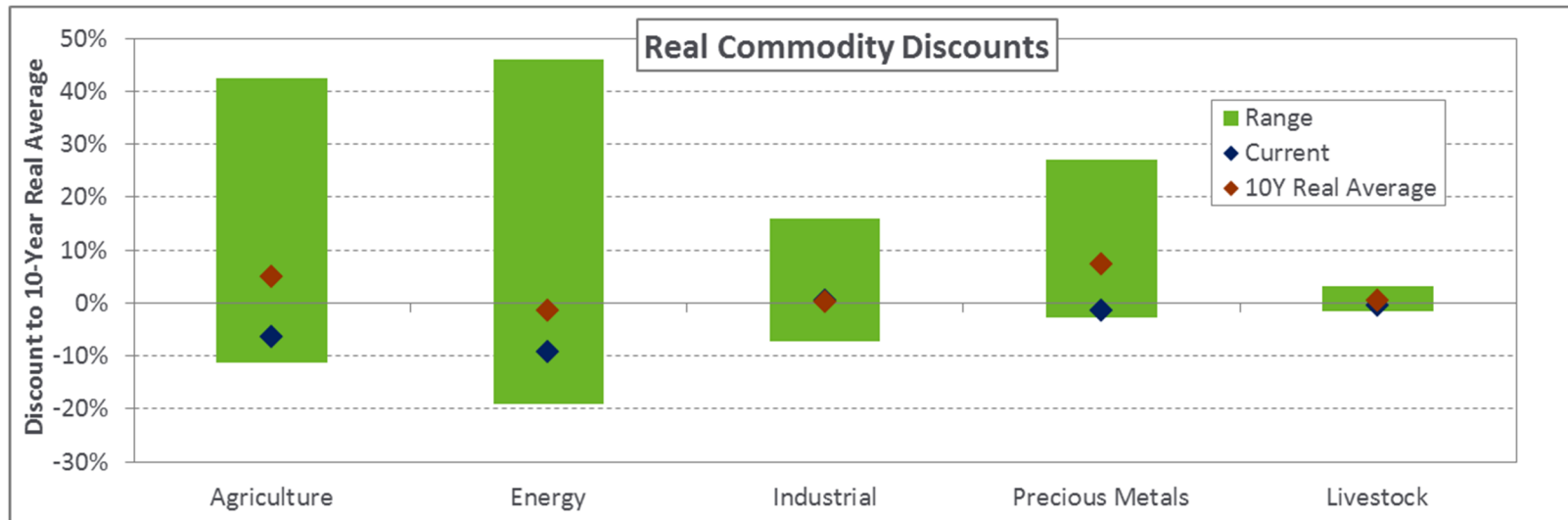
Source: US Department of Energy, Bloomberg



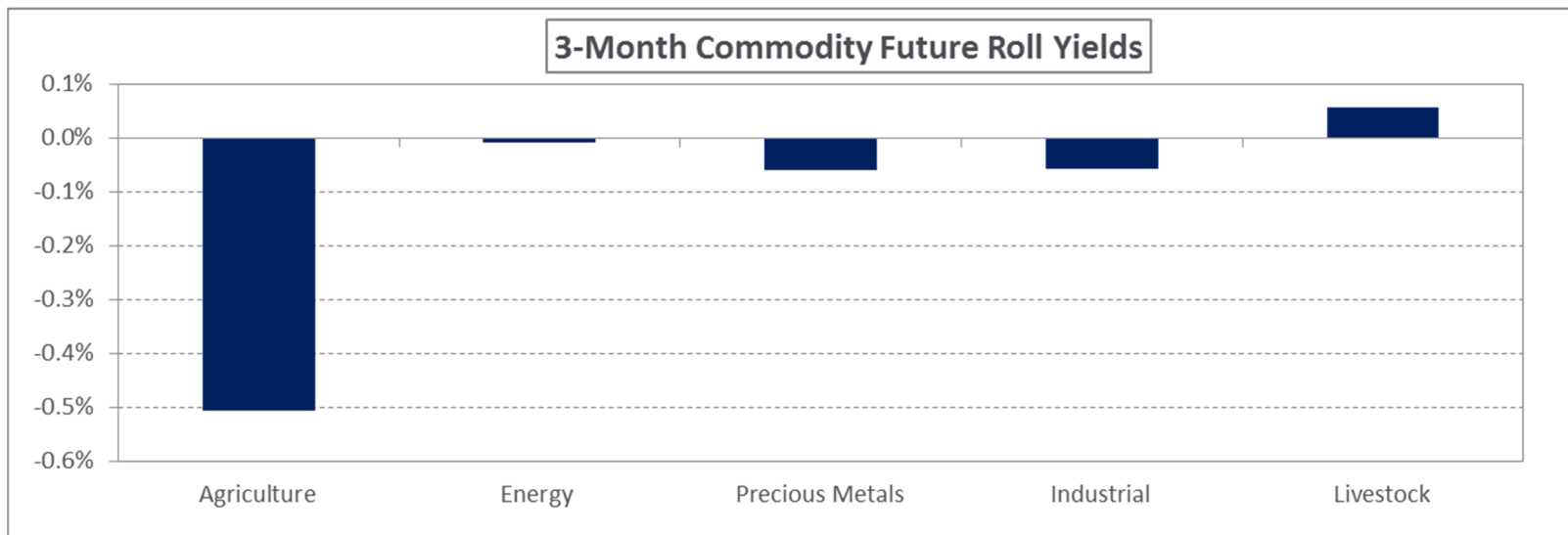
Source: OECD, Bloomberg



VALUATIONS



Source: Bloomberg, NEPC



Source: Bloomberg



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- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
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- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.

