NEW JERSEY DIVISION OF INVESTMENT

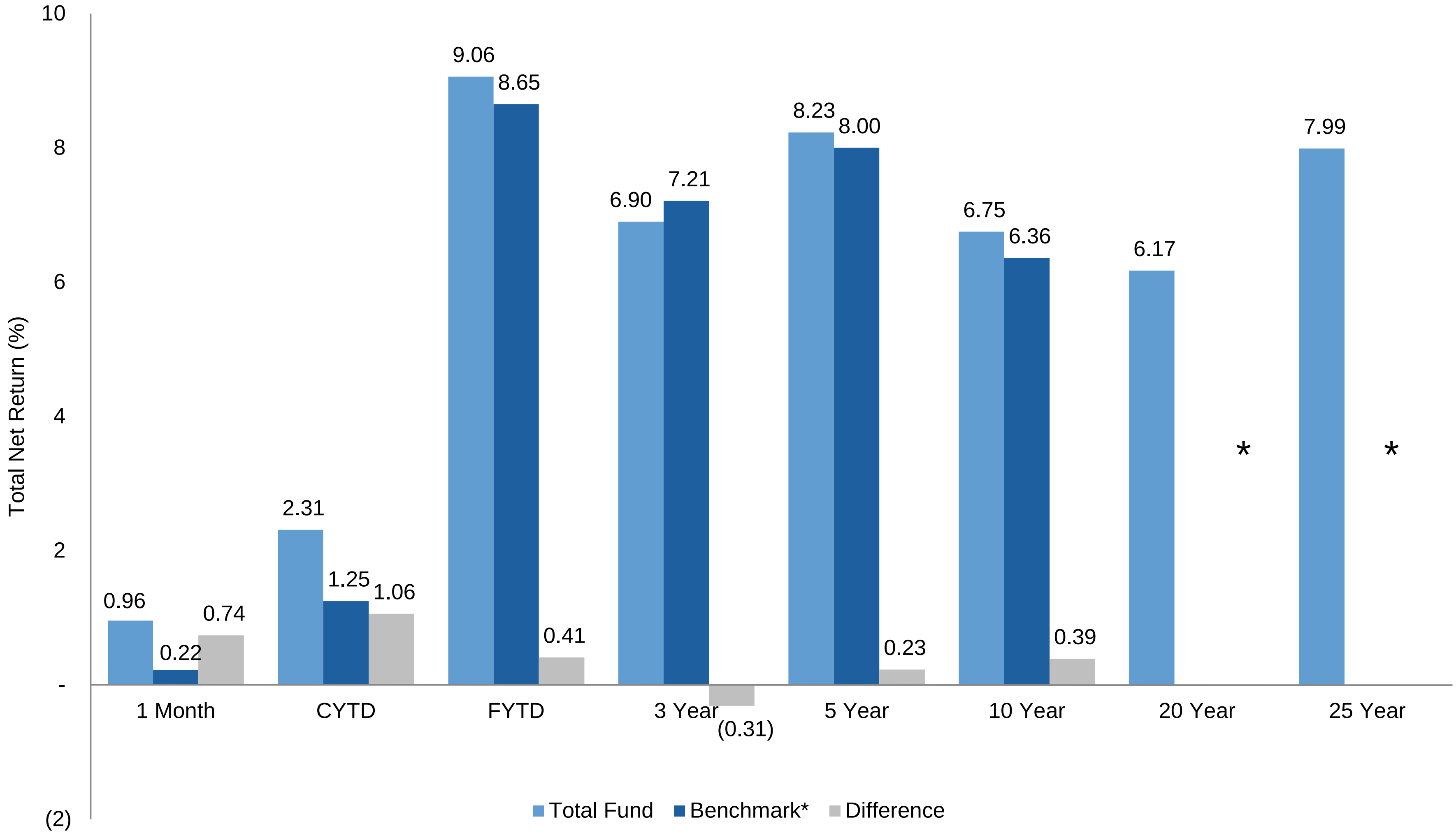
Director's Report

September 27, 2018

State Investment Council Meeting

"The mission of the New Jersey Division of Investment is to achieve the best possible return at an acceptable level of risk using the highest fiduciary standards."

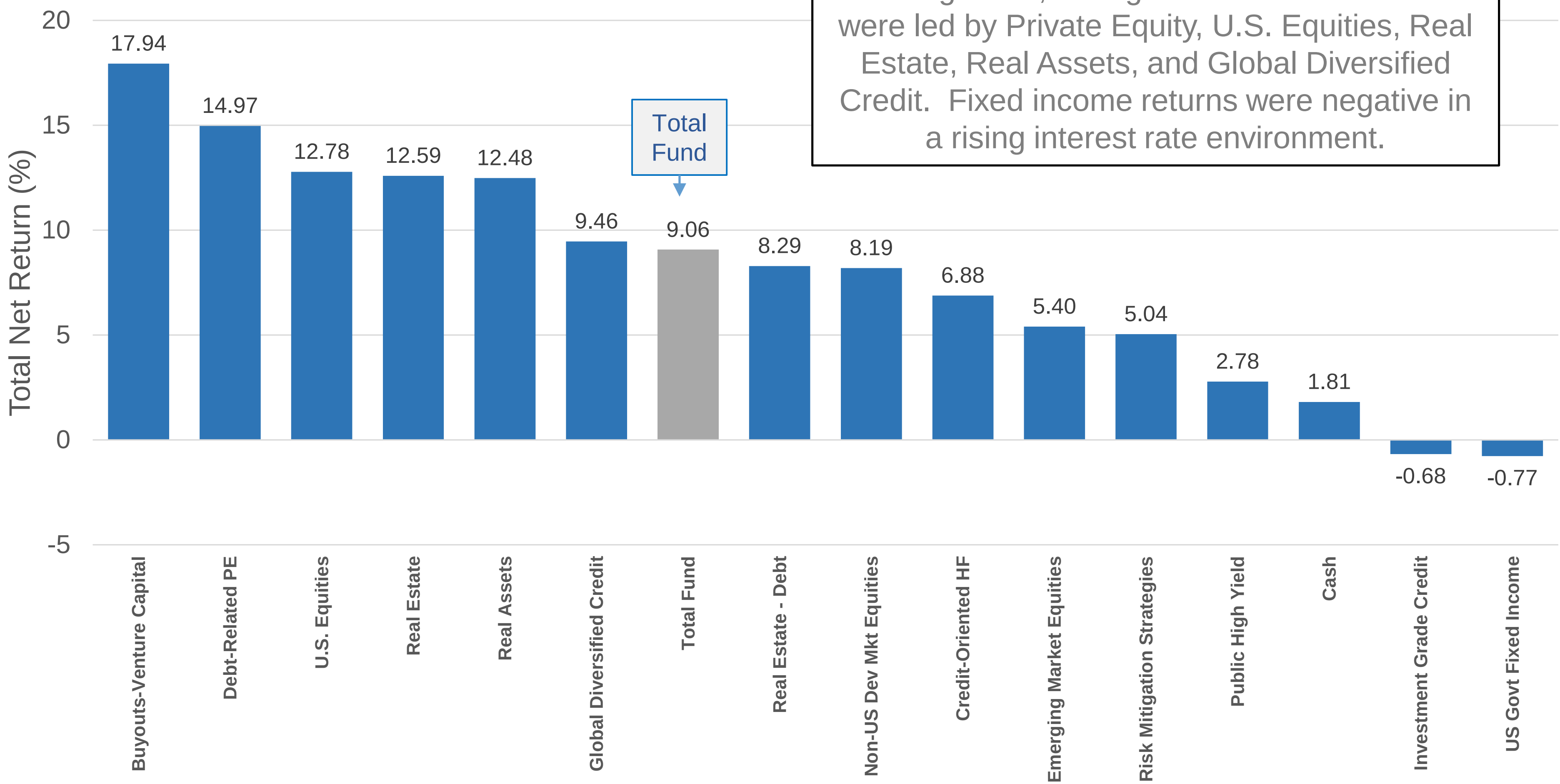
Pension Fund Net Returns[1] for Periods Ending June 30, 2018



(1) Returns are net of all fees and unaudited. Pension Fund return excludes Police and Fire Mortgage Program.

*Benchmark return not available for 20 and 25-Year period.

Pension Fund Net Returns[1] By Asset Class and Strategy: Fiscal Year 2018



During FY18, strong Pension Fund returns were led by Private Equity, U.S. Equities, Real Estate, Real Assets, and Global Diversified Credit. Fixed income returns were negative in a rising interest rate environment.

(1) Returns are net of all fees and unaudited. Pension Fund return excludes Police and Fire Mortgage Program.

Asset Allocation and Net Returns[1] by Asset Class (June 30, 2018)

	ASSET ALLOCATION				PERFORMANCE (for periods ending June 30, 2018)[1]					
	As of June 30, 2018				Calendar YTD		FYTD		Trailing Three Years	
Asset Class	Mkt Value	Actual (%)	Target (%)	Difference	Pension Fund	Bench	Pension Fund	Bench	Pension Fund	Bench
RISK MITIGATION										
RISK MITIGATION STRATEGIES	**3,664**	**4.76%**	**5.00%**	**-0.24%**	**3.28%**	**2.32%**	**5.04%**	**4.44%**	**2.03%**	**3.74%**
LIQUIDITY										
Cash Eqv & Short Term	3,848	5.00%	5.50%	-0.50%	1.03%	0.81%	1.81%	1.36%	1.31%	0.68%
U.S. Government	1,237	1.61%	3.00%	-1.39%	-1.31%	-1.08%	-0.77%	-0.65%	0.28%	0.88%
TOTAL LIQUIDITY	**5,085**	**6.60%**	**8.50%**	**-1.90%**	**-0.38%**	**0.14%**	**0.26%**	**0.66%**	**0.66%**	**0.80%**
INCOME										
Investment Grade Credit	7,371	9.57%	10.00%	-0.43%	-1.93%	-2.70%	-0.68%	-0.73%	2.14%	2.55%
Public High Yield	995	1.29%	2.50%	-1.21%	-0.19%	0.16%	2.78%	2.62%	5.60%	5.53%
Global Diversified Credit	4,478	5.81%	5.00%	0.81%	6.14%	0.16%	9.46%	2.62%	9.62%	5.53%
Credit-Oriented HFs	876	1.14%	1.00%	0.14%	4.96%	3.00%	6.88%	5.29%	5.22%	3.93%
Debt-Related PE	973	1.26%	2.00%	-0.74%	10.57%	1.10%	14.97%	6.93%	8.84%	8.37%
Debt Related Real Estate	415	0.54%	1.00%	-0.46%	5.70%	3.91%	8.29%	9.16%	4.45%	4.32%
TOTAL INCOME	**15,109**	**19.62%**	**21.50%**	**-1.88%**	**1.94%**	**-0.65%**	**4.07%**	**2.01%**	**4.99%**	**3.99%**
REAL RETURN										
Real Assets & Commodities	2,428	3.15%	2.50%	0.65%	11.09%	4.48%	12.70%	5.82%	4.89%	1.58%
Equity Related Real Estate	4,396	5.71%	6.25%	-0.54%	7.75%	3.85%	12.59%	7.11%	11.11%	9.00%
TOTAL REAL RETURN	**6,825**	**8.86%**	**8.75%**	**0.11%**	**8.91%**	**4.04%**	**12.64%**	**6.75%**	**9.03%**	**6.57%**
GLOBAL GROWTH										
US Equity	23,520	30.54%	30.00%	0.54%	1.79%	2.91%	12.78%	14.50%	9.97%	11.90%
Non-US Dev Market Eq	8,906	11.56%	11.50%	0.06%	-1.98%	-2.89%	8.19%	6.86%	5.20%	4.79%
Emerging Market Eq	5,029	6.53%	6.50%	0.03%	-8.19%	-6.89%	5.40%	7.99%	4.87%	5.74%
Buyouts/Venture Cap	7,737	10.05%	8.25%	1.80%	14.08%	8.50%	17.94%	20.42%	12.46%	12.28%
Equity-Oriented HFs	441	0.57%	0.00%	0.57%	0.20%	1.80%	1.34%	5.93%	1.44%	4.10%
TOTAL GLOBAL GROWTH	**45,632**	**59.26%**	**56.25%**	**3.01%**	**1.65%**	**1.51%**	**11.56%**	**13.14%**	**8.50%**	**9.67%**
OTHER										
OPPORTUNISTIC PE	432	0.56%			8.01%		11.83%		8.47%	
OTHER	259	0.33%								
TOTAL FUND[1]	**77,006**	**100.00%**			**2.31%**	**1.25%**	**9.06%**	**8.65%**	**6.90%**	**7.21%**

(1) Returns are net of all fees and unaudited. Pension Fund return excludes Police and Fire Mortgage Program. Sum of components may not equal totals due to rounding.

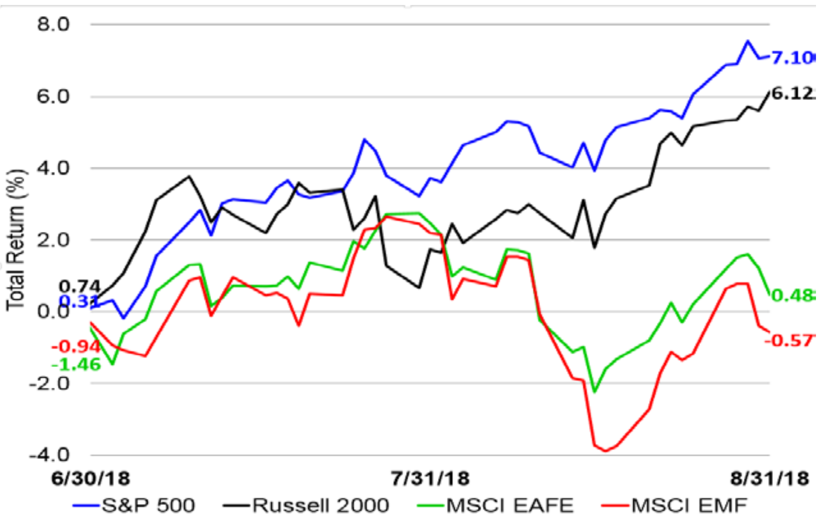
Asset Allocation and Net Returns[1] by Asset Class (August 31, 2018)

	ASSET ALLOCATION As of August 31, 2018				PERFORMANCE (for periods ending August 31, 2018)[1]							
					Calendar YTD		FYTD		Trailing Twelve Months		Trailing Three Years	
Asset Class	**Mkt Value**	**Actual (%)**	**Target (%)**	**Difference**	**NJ**	**Bench**	**NJ**	**Bench**	**NJ**	**Bench**	**NJ**	**Bench**
RISK MITIGATION												
RISK MITIGATION STRATEGIES	**3,662**	**4.73%**	**5.00%**	**-0.27%**	**3.36%**	**3.20%**	**0.08%**	**0.86%**	**4.34%**	**4.62%**	**1.95%**	**3.86%**
LIQUIDITY												
Cash Eqv & Short Term	2,862	3.70%	5.50%	-1.80%	1.51%	1.15%	0.47%	0.34%	2.10%	1.52%	1.44%	0.79%
U.S. Government	1,257	1.63%	3.00%	-1.37%	-0.98%	-0.74%	0.34%	0.34%	-1.96%	-1.54%	0.45%	0.94%
TOTAL LIQUIDITY	**4,119**	**5.32%**	**8.50%**	**-3.18%**	**0.07%**	**0.49%**	**0.46%**	**0.34%**	**0.03%**	**0.44%**	**0.81%**	**0.89%**
INCOME												
Investment Grade Credit	7,679	9.93%	10.00%	-0.07%	-0.85%	-1.69%	1.10%	1.05%	-1.04%	-1.17%	2.49%	2.90%
Public High Yield	1,008	1.30%	2.50%	-1.20%	1.50%	2.00%	1.70%	1.84%	3.23%	3.40%	6.79%	7.00%
Global Diversified Credit	4,427	5.72%	5.00%	0.72%	6.93%	2.00%	0.74%	1.84%	9.54%	3.40%	9.88%	7.00%
Credit-Oriented HFs	852	1.10%	1.00%	0.10%	5.88%	4.75%	0.88%	1.70%	7.08%	5.88%	5.62%	5.22%
Debt-Related PE	975	1.26%	2.00%	-0.74%	10.86%	2.26%	0.26%	1.14%	15.11%	5.46%	8.70%	8.05%
Debt Related Real Estate	401	0.52%	1.00%	-0.48%	5.19%	5.06%	-0.49%	1.10%	8.00%	6.68%	4.50%	4.69%
TOTAL INCOME	**15,342**	**19.83%**	**21.50%**	**-1.67%**	**2.87%**	**0.72%**	**0.92%**	**1.38%**	**3.93%**	**1.88%**	**5.37%**	**4.81%**
REAL RETURN												
Real Assets	2,429	3.14%	2.50%	0.64%	12.30%	4.48%	1.09%	0.00%	14.98%	5.82%	7.10%	1.58%
Equity Related Real Estate	4,378	5.66%	6.25%	-0.59%	8.45%	3.85%	0.65%	0.00%	12.57%	7.11%	11.60%	9.00%
TOTAL REAL RETURN	**6,807**	**8.80%**	**8.75%**	**0.05%**	**9.79%**	**4.04%**	**0.80%**	**0.00%**	**13.44%**	**6.75%**	**9.90%**	**6.84%**
GLOBAL GROWTH												
US Equity	25,053	32.39%	30.00%	2.39%	8.81%	10.10%	6.90%	6.99%	18.19%	20.06%	14.51%	16.12%
Non-US Dev Market Eq	8,921	11.53%	11.50%	0.03%	-1.21%	-2.38%	0.78%	0.53%	5.81%	4.36%	7.60%	7.09%
Emerging Market Eq	4,993	6.46%	6.50%	-0.04%	-8.83%	-7.51%	-0.70%	-0.67%	-2.97%	-1.05%	10.09%	11.45%
Buyouts/Venture Cap	7,549	9.76%	8.25%	1.51%	14.18%	8.50%	0.08%	0.00%	17.74%	20.42%	12.24%	12.28%
Equity-Oriented HFs	336	0.43%	0.00%	0.43%	2.26%	2.78%	2.05%	0.96%	3.48%	4.67%	1.57%	5.16%
TOTAL GLOBAL GROWTH	**46,853**	**60.57%**	**56.25%**	**4.32%**	**5.37%**	**5.18%**	**3.66%**	**3.63%**	**12.78%**	**14.21%**	**11.66%**	**12.94%**
OTHER												
OPPORTUNISTIC PE	425	0.55%			7.86%		-0.14%		11.76%		8.41%	
OTHER	144	0.19%										
TOTAL FUND[1]	**77,352**	**100.00%**			**4.80%**	**3.68%**	**2.43%**	**2.41%**	**9.77%**	**9.19%**	**8.85%**	**9.22%**

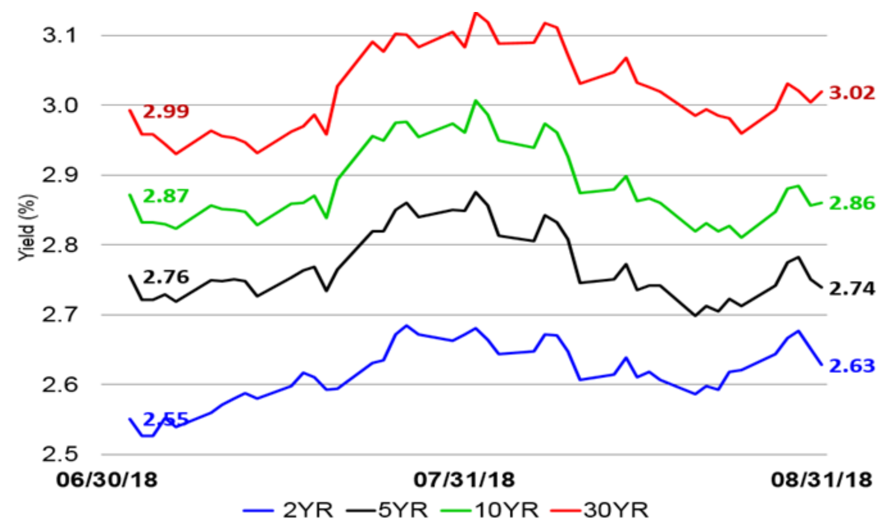
(1) Returns are net of all fees and unaudited. Pension Fund return excludes Police and Fire Mortgage Program.
Sum of components may not equal totals due to rounding.

Capital Markets Update (through August 31, 2018)

FYTD 2019 Equity Market Returns



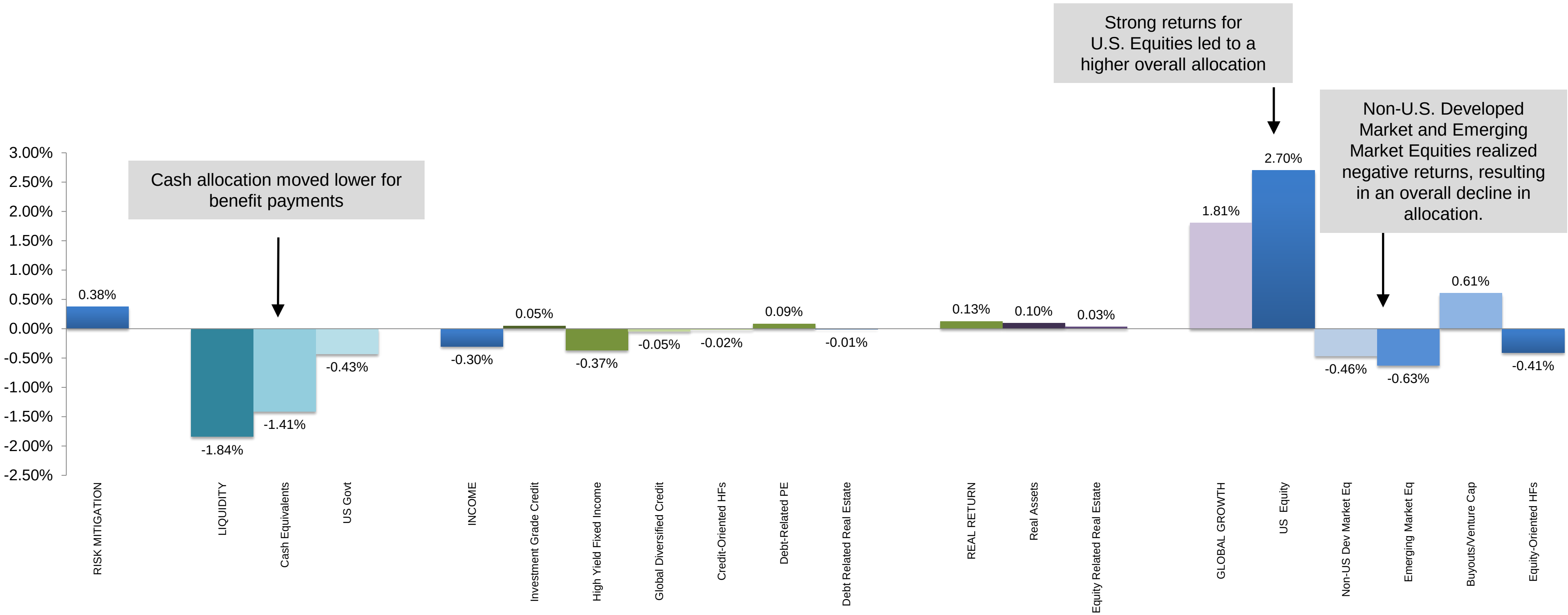
FYTD 2019 U.S. Treasury Yields



	August 31, 2018	MTD %	FYTD %	CYTD %	1 Yr %	3 Yrs %	5 Yrs %	10 Yrs %	
Domestic Equity	S&P 500	3.26	7.10	9.94	19.65	16.10	14.51	10.85	1
	Russell 2000	4.31	6.12	14.26	25.44	16.10	13.00	10.45	2
International Equity	MSCI EAFE	-1.93	0.48	-2.28	4.39	7.04	5.73	3.66	3
	MSCI EMF	-2.70	-0.57	-7.19	-0.68	11.42	5.04	3.45	4
Bond	Barclays Agg	0.64	0.67	-0.96	-1.05	1.76	2.49	3.70	5
	Barclays HY	0.74	1.84	2.00	3.40	7.00	5.63	8.50	6
	Barclays US Tips	0.72	0.24	0.21	0.83	2.20	1.88	3.03	7
Commodity	Bloomberg	-1.94	-4.20	-5.03	-1.09	-2.71	-8.48	-7.86	8
Real Estate	Bloomberg REIT	2.39	3.22	4.15	5.97	10.96	10.97	8.31	9
Hedge Funds	HFRI Composite Index	0.67	1.19	2.00	5.30	5.07	4.56	3.96	10

Source: Bloomberg

Pension Fund Update: Change in Sector Allocation from April 30, 2018 – August 31, 2018



Risk Mitigation

Allocation to Risk Mitigation strategies remains below target.
(4.7% vs 5.0%)

Liquidity

Allocation to Liquidity declined over the four month period as the cash allocation moved lower to pay benefits. The allocation is below target.
(5.3% vs 8.5%)

Income

Allocation to Income is modestly below target. Within Income, underweight allocation to HY is offset by overweight allocation to GDC.
(19.8% vs 21.5%)

Real Return

Allocation to Real Return is in line with the targeted allocation, with an underweight to Real Estate offset by an overweight to Real Assets.
(8.8% vs 8.75%)

Global Growth

Global Growth remained overweight driven by strong performance for US Equity and Buyouts/VC, partly offset by negative returns in non-U.S. equities.
(60.6% vs 56.25%)

Strong U.S. Equity and Private Equity returns over the past four months led to an increased allocation to Global Growth for the period, partly offset by negative returns in non-U.S. Equities.

Update on the Emerging Markets Equity External Adviser Program

- **As part of the Division of Investment's (DOI) ongoing due diligence effort, DOI elected to restructure its Emerging Market Equity Adviser Program (EM Program)**
  - the number of active advisers was reduced from eight (8) to four (4)
    - four (4) investment adviser agreements (IAA) were extended for one year and four (4) IAAs were allowed to expire
  - Aon provided diligence and analysis throughout the entire process and concurs with DOI's plan of action

- **The EM Program restructuring does not impact the overall allocation to Emerging Market Equities**
  - the target allocation is 6.5% of the Total Fund (approximately $5 billion of the $77 billion Total Fund)
- **The EM Program also utilizes a passive strategy within the EM Program:**
  - the allocation to a passive strategy increased from ~28% to ~62% of the total EM Program
    - the increased allocation to a passive strategy will lead to a significant reduction in fees

- **The EM Program's new structure provides for a more balanced approach to investment style and risk utilizing four active advisers**
  - the determination was made that four advisers is more optimal for the EM program
    - the marginal benefit of diversification declines as the number of advisers increases
  - one growth, two value, and one core-style adviser were retained
    - the new mix of advisers provides a more balanced approach to style investing and shifts emphasis from top-down market exposure to bottom-up stock selection with respect to active risk
    - the new mix also provides for a more equitable distribution of style contribution to risk while decreasing the overall tracking error
  - the four retained advisers were selected based upon style, relative performance, and portfolio fit (as well as organizational, investment process, and performance reviews)
  - underperforming advisers that also provided less benefit from diversification (more highly correlated) were not retained

- **DOI anticipates commencing an RFP process for the EM Program during 2019**
  - DOI continues to believe emerging market equities are less efficient than developed market equities and, therefore, provide opportunities for active portfolio management
  - FY19 will determine any future changes to the EM Adviser structure and line-up

US Equity Portfolio Review and Outlook

FY18 U.S. Equity Portfolio Review and FY19 Key Investment Themes

- **Notwithstanding strong absolute returns, the U.S. Equity portfolio (+12.78%) underperformed its benchmark index**
    - strong absolute returns were driven by steady economic growth and catalyzed by the implementation of lower corporate tax rates as the U.S. equity market remains in the midst of a decade-long bull market spurred by low interest rates and modest economic growth; during FY18, corporate earnings growth accelerated as equity prices increased
    - the U.S. Equity portfolio has gradually adopted more of a value orientation in recent years as much of the market's gains have been concentrated in a relatively small number of growth names, stretching the valuation levels on some high-profile growth issues
    - growth outperformed value during FY18, impacting relative returns

- **Looking ahead into FY19, the portfolio is well positioned**
    - U.S. equity markets are facing potential headwinds from higher interest rates and rising inflation, along with the implementation of tariffs and its potential negative impact on global growth
    - in the meantime, fiscal reform in the U.S. continues to drive higher corporate capital spending and increased consumer spending
    - the U.S. Equity portfolio has an LTM P/E multiple of 18x versus 19.9x for the benchmark index
    - the U.S. Equity portfolio's expected earnings growth rate is higher than that of the benchmark index
    - the U.S. Equity portfolio remains well-diversified, with over 700 individual issues across all eleven industry sectors; no single issue accounts for more than 4% of the total U.S. Equity portfolio

During FY18, Cyclical Sectors Outperformed

			EPS Growth		Forward P/E	
	FY 18 Returns	Dividend Yield (as of 6/30/2018)	Last 3 Years (%)	Estimated 3-5 Years (%)	as of 6/30/2017	as of 6/30/2018
Information Technology	30.1%	1.1%	13.0%	14.3%	19.10	19.20
Consumer Discretionary	22.7%	1.2%	32.9%	19.2%	20.20	21.10
Energy	22.4%	2.5%	-11.2%	22.2%	26.80	18.70
Financials	10.0%	1.8%	13.1%	11.0%	15.00	12.90
Materials	10.0%	1.9%	4.6%	11.1%	18.60	15.40
Health Care	8.0%	1.6%	1.6%	11.6%	17.20	16.00
Industrials	6.9%	1.8%	7.9%	12.8%	19.00	17.00
Real Estate	5.3%	3.7%	8.5%	8.6%	37.10	36.80
Utilities	4.4%	3.4%	4.1%	6.7%	18.60	17.30
Telecommunication Services	1.7%	5.7%	40.4%	3.9%	13.00	10.50
Consumer Staples	-3.1%	2.9%	3.5%	9.1%	21.50	18.00

The best performing sectors of FY18 were the more cyclical sectors, including Information Technology, Consumer Discretionary, and Energy.

Source: Factset

U.S. Equity Portfolio Returns By Fiscal Year

(Total Return in %) Fiscal Year	New Jersey Division of Investment Domestic Equity Portfolio	S&P 1500 Benchmark	Relative outperformance (in basis points)
2006	10.47	9.22	125
2007	20.56	20.22	34
2008	-10.16	-12.72	256
2009	-23.86	-26.34	248
2010	16.43	15.57	86
2011	33.40	31.65	175
2012	3.54	4.63	-109
2013	21.89	21.13	76
2014	26.23	24.70	153
2015	7.48	7.31	17
2016	-1.58	3.64	-522
2017	19.80	18.09	171
2018	12.78	14.50	-172

Annualized Returns
(Periods Ending 6/30/18)

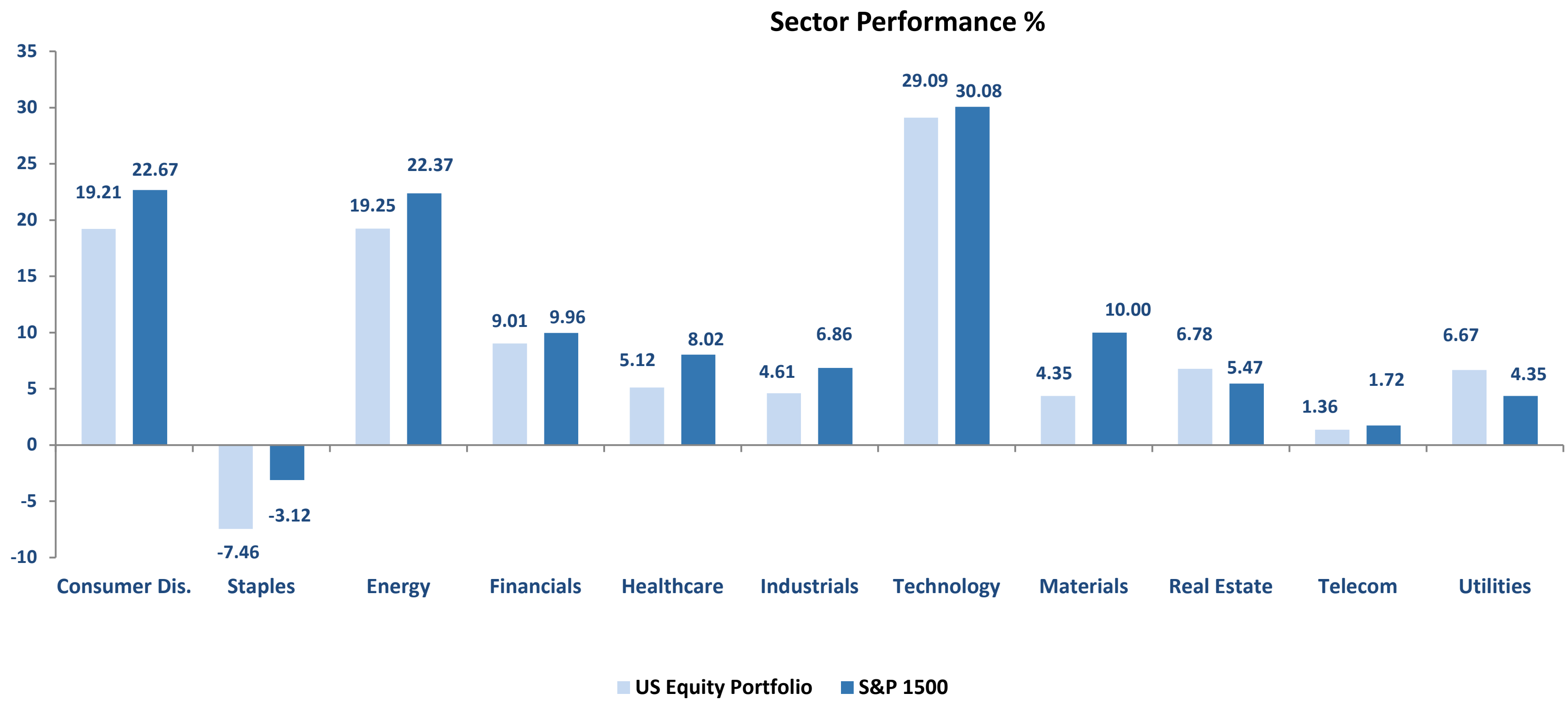
One Year	12.78	14.50	-172
Three Years	9.97	11.90	-193
Five Years	12.53	13.40	-87
Ten Years	10.41	10.29	12

The U.S. Equity portfolio has outperformed in seven of the last ten fiscal years, realizing outperformance of 12 basis points (annualized) over the same horizon.

Source: State Street

FY18 U.S. Equity Review: Returns By Sector

U.S. Equity Portfolio FY18 Sector Returns versus Benchmark

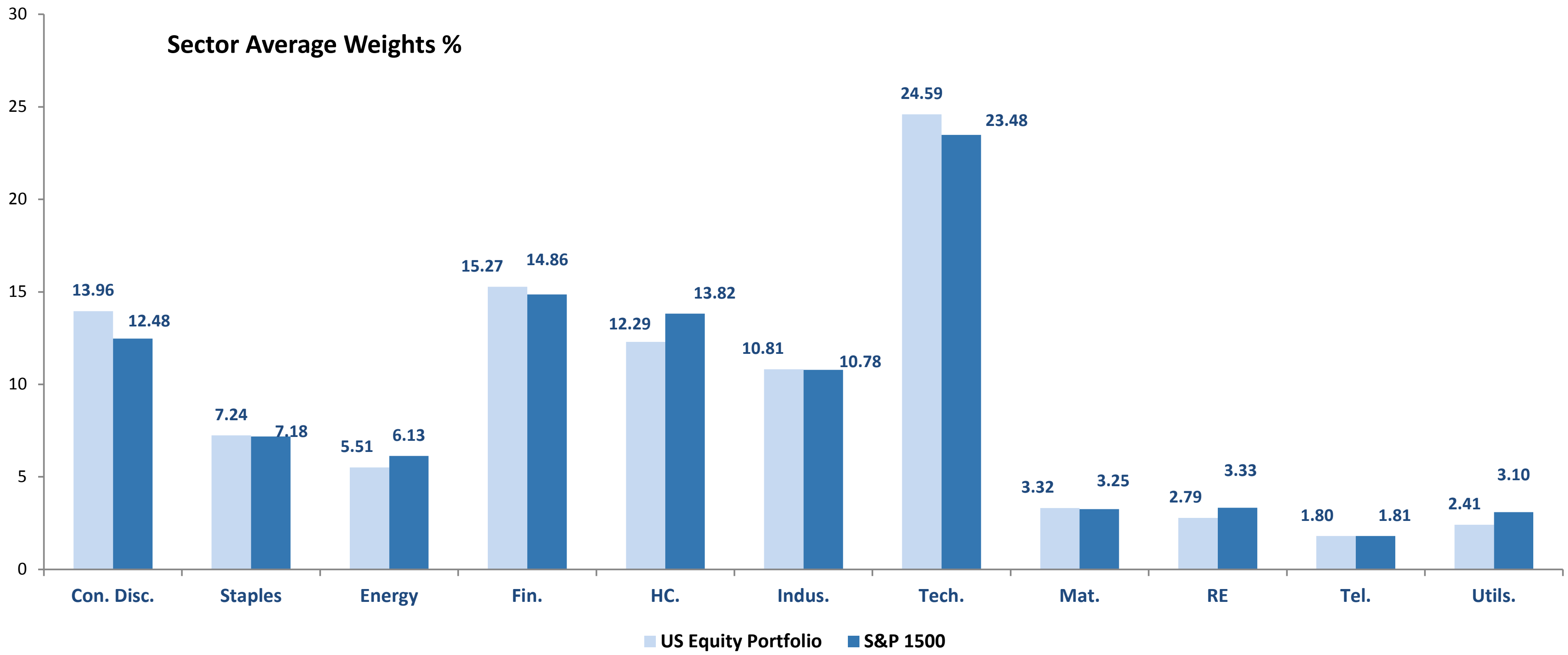


Domestic Equity Portfolio FY18 Return: 12.78%
S&P 1500 Benchmark FY18 Return: 14.50%

During FY18, the primary driver of relative returns was security selection.

Source: FactSet

FY18 U.S. Equity Review: Sector Allocation

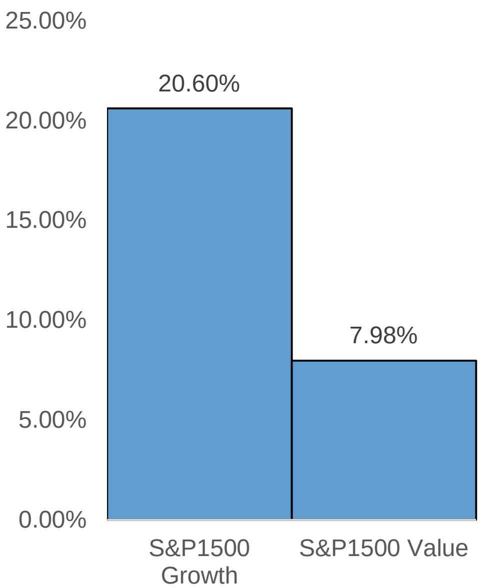


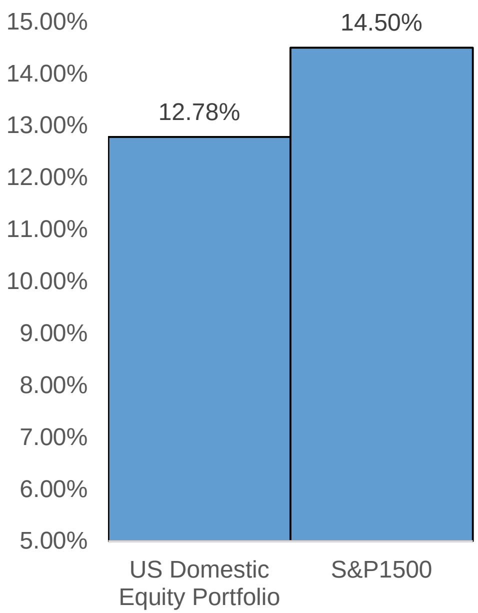
During FY18, sector allocation added value as the U.S. Equity portfolio was overweight some of the best performing sectors of the market.

Source: FactSet

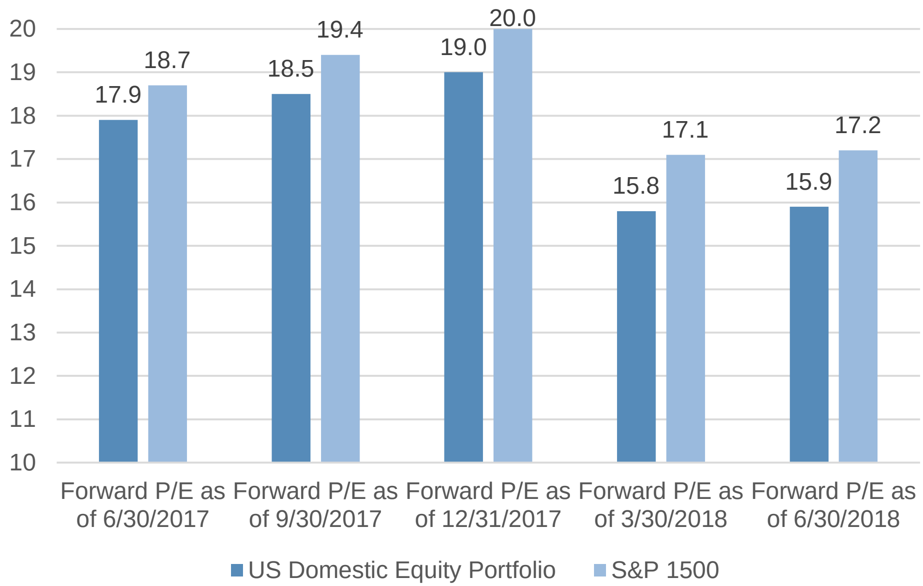
FY18 U.S. Equity Review: Value versus Growth

FY18 Returns





FY18 Forward P/Es



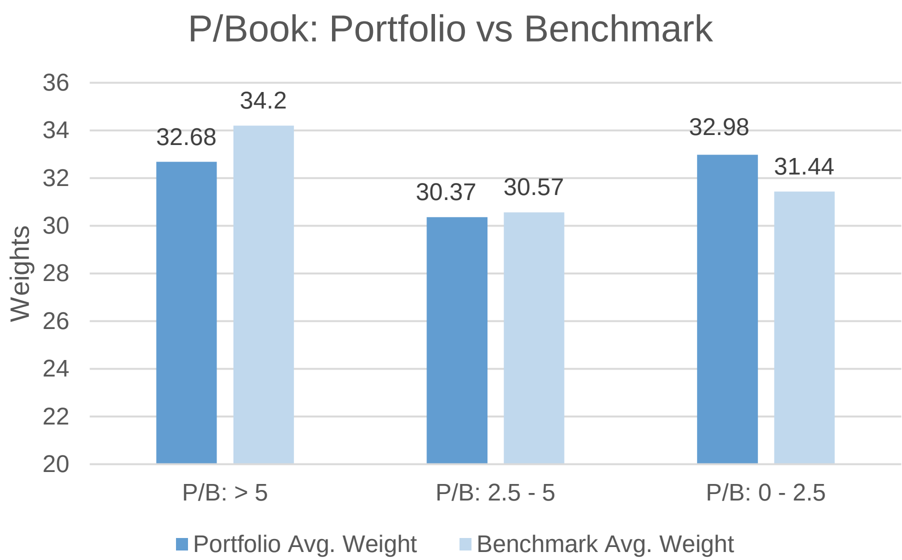
The S&P Growth Index significantly outperformed the S&P Value Index during FY18, (+20.60% versus 7.98%), led by stocks such as Amazon, Microsoft, and Netflix.

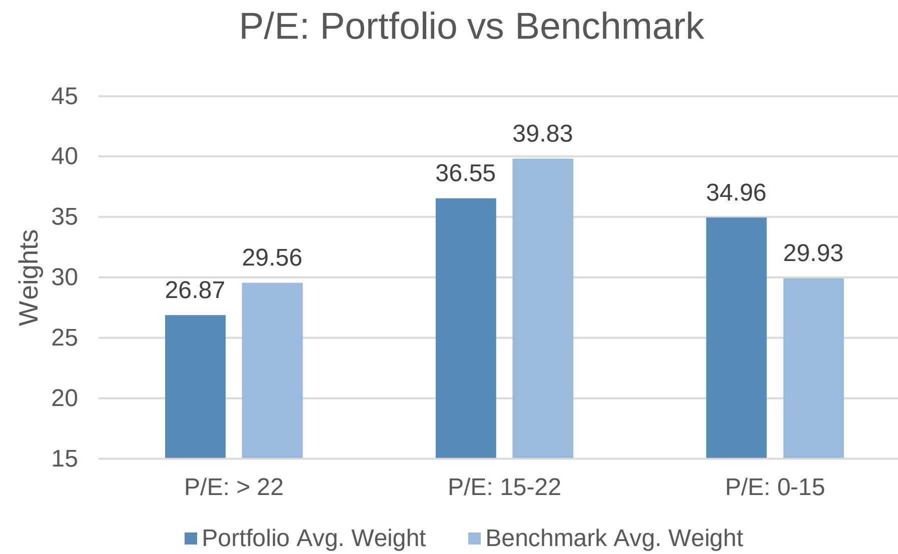
The U.S. Equity portfolio maintained a value orientation throughout FY18 while growth stocks outperformed value stocks.

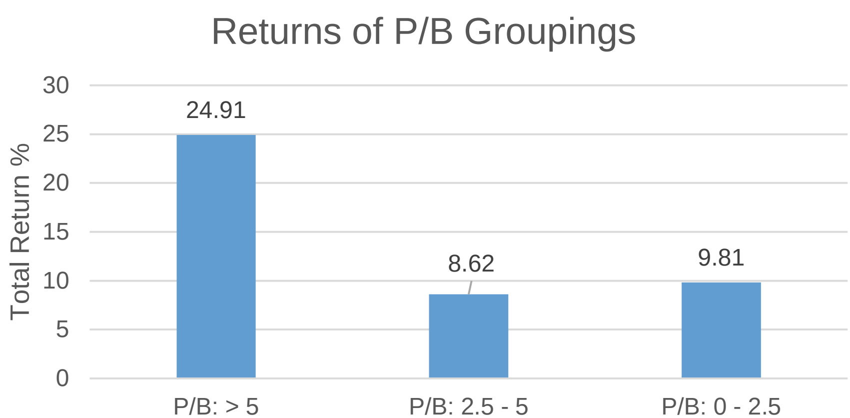
During FY18, the U.S. Equity portfolio emphasized value relative to growth.

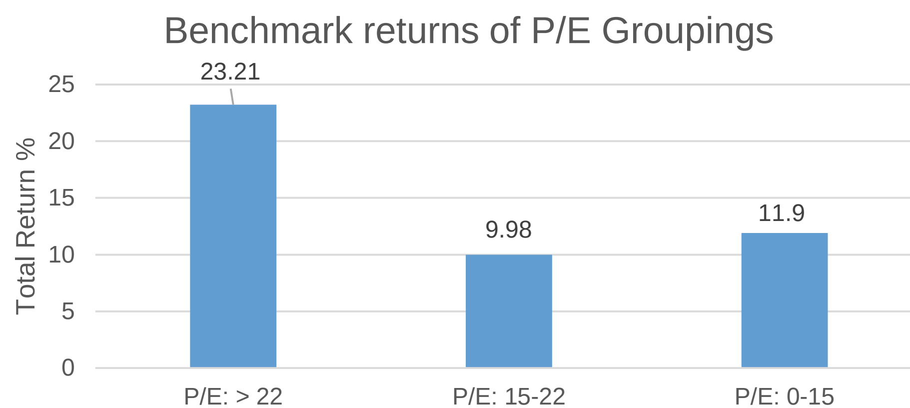
Source: FactSet

FY18 U.S. Equity Review: Value versus Growth









During FY18, the U.S. Equity portfolio emphasized a value approach to investing. The higher value structure of the U.S. Equity portfolio impacted returns during FY18, as growth stocks outperformed.

Source: FactSet

FY18 U.S. Equity Review: Security Selection

FY18 Contributors

Company	Average Portfolio Weight	Average Benchmark Weight	Benchmark Total Return	Relative Contribution
Amazon.com	2.98%	2.03%	75.60%	+ 58 bps
Microsoft	3.36%	2.69%	45.84%	+ 28 bps
Facebook	2.20%	3.50%	28.71%	+ 20 bps
Visa	2.94%	1.68%	42.18%	+ 15 bps
SVB Financial Group	0.30%	0.05%	64.26%	+ 14 bps

FY18 Detractors

Company	Average Portfolio Weight	Average Benchmark Weight	Benchmark Total Return	Relative Contribution
Netflix	0.16%	0.42%	161.98%	- 24 bps
Adobe Systems	0.13%	0.37%	72.38%	- 14 bps
DISH Network	0.24%	0.04%	-46.45%	- 13 bps
Boeing	0.34%	0.66%	73.36%	- 11 bps
MACOM	0.11%	0.00%	-58.69%	- 9 bps

The U.S. Equity portfolio remains well diversified, with more than 700 individual issues. While security selection adversely impacted returns, no single security had an outsized impact on returns.

Source: FactSet

U.S. Equity Portfolio as of June 30, 2018

U.S. Equity Portfolio versus Benchmark – Key Metrics

	Dividend Yield	P/E	P/CF	P/Book
US Equity Portfolio	1.79%	18.0	11.7	2.7
S&P 1500 Benchmark	1.83%	19.9	13.2	3.0

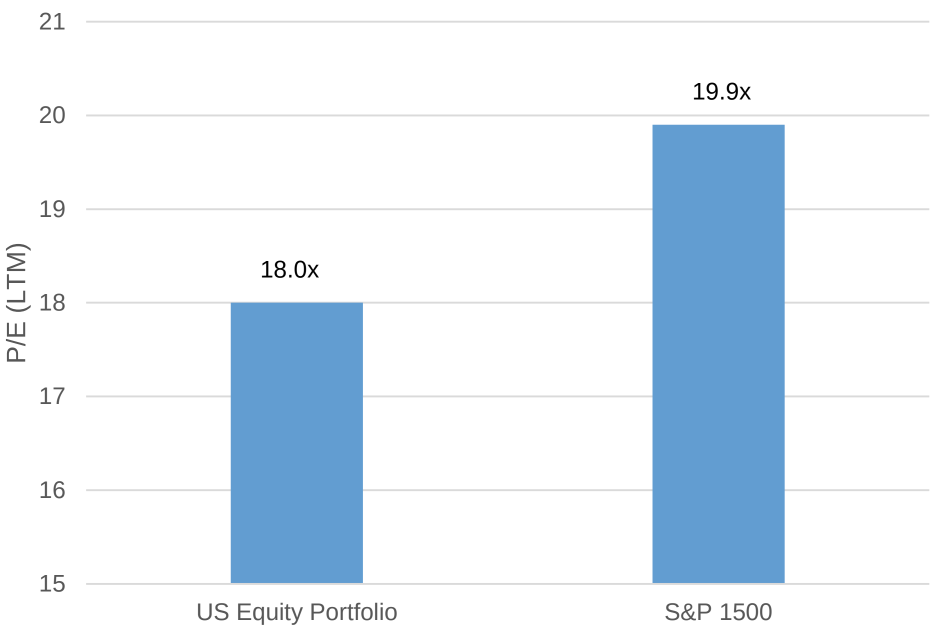
U.S. Equity Portfolio Top Holdings As Of 6/30/2018

Company	Portfolio Weight	S&P 1500 Weight	Overweight/ Underweight
Amazon.com	3.85%	2.67%	+ 118 bps
Microsoft	3.59%	2.96%	+ 63 bps
Apple	3.39%	3.55%	- 16 bps
Alphabet	2.98%	2.64%	+ 34 bps
Facebook	2.45%	1.82%	+ 63 bps
JPMorgan Chase	1.90%	1.39%	+ 51 bps
Exxon Mobil	1.57%	1.37%	+ 20 bps
Bank of America	1.52%	1.04%	+ 48 bps
Johnson & Johnson	1.52%	1.27%	+ 25 bps
Visa	1.32%	0.92%	+ 40 bps

Source: FactSet

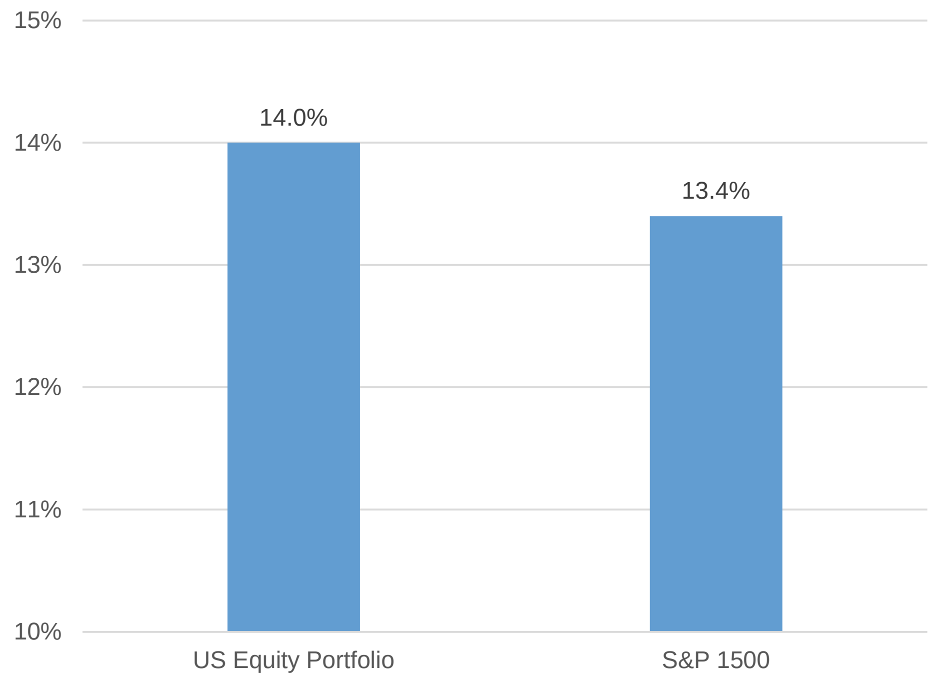
The U.S. Equity Portfolio is Poised to Perform Well

U.S. Equity P/E Ratio vs S&P 1500 Benchmark as of June 30, 2018



The P/E ratio of the US Portfolio is less than the P/E ratio of the benchmark index

Estimated 3-5 Year EPS Growth Rate



The estimated EPS growth rate of the portfolio is higher than the benchmark index

U.S. Equity portfolio has higher expected growth and a lower earnings multiple versus the benchmark index.

Source: FactSet

International Equity Portfolio Review and Outlook

FY18 International Equity Portfolio Review

- **The International Equity portfolio underperformed its benchmark index by 32 basis points during FY18**
  - the International Equity portfolio was adversely impacted by relative returns within the Emerging Markets (EM) portfolio, as the EM portfolio underperformed by 259 basis points
  - the Non-US Developed Markets (DM) portfolio added value, outperforming its benchmark index by 133 basis points, primarily driven by the portfolio's commitment to small cap equities

  ➢ ***During FY18, the International Equity portfolio modestly underperformed, driven largely by relative returns within the EM portfolio. The DM portfolio added value as small cap equities outperformed.***

- **Within the International Equity portfolio:**
  - the primary drivers of underperformance within the EM portfolio were country allocation and security selection, particularly within Brazil
  - strong relative returns within the DM portfolio were driven by favorable small cap security selection; the small cap portfolio outperformed its benchmark by 775 basis points

- **Notwithstanding the negative impact of tightening U.S. monetary policy on the emerging markets, we believe international equities offer attractive investment opportunities**
  - following recent underperformance versus U.S. equities, we are more constructive on international equity valuations
  - while a strengthening U.S. dollar led to negative returns for EM in the latter half of FY18, we believe fundamentals within EM broadly support higher valuations
  - geopolitical risk and global monetary policy uncertainty are among the primary concerns for international equities
  - longer-term, we believe our commitment to small cap will add value, as small cap stocks offer attractive risk-adjusted returns

International Equity Portfolio: Fiscal Year 2018 Performance Review

FY18 International Equity Returns By Asset Class

(Total Return in %)

Sector	9/30/2017 NJDOI	9/30/2017 Benchmark	12/31/2017 NJDOI	12/31/2017 Benchmark	3/31/2018 NJDOI	3/31/2018 Benchmark	6/30/2018 NJDOI	6/30/2018 Benchmark	Fiscal Year 2018 NJDOI	Fiscal Year 2018 Benchmark
International Developed Markets	5.76	5.55	4.35	4.26	-1.51	-2.11	-0.48	-0.79	8.19	6.86
International Emerging Markets	7.56	7.94	6.73	7.45	1.65	1.33	-9.68	-8.11	5.40	7.99
Total International Equity	6.30	6.43	5.23	5.42	-0.34	-0.86	-3.98	-3.47	**7.05**	**7.37**

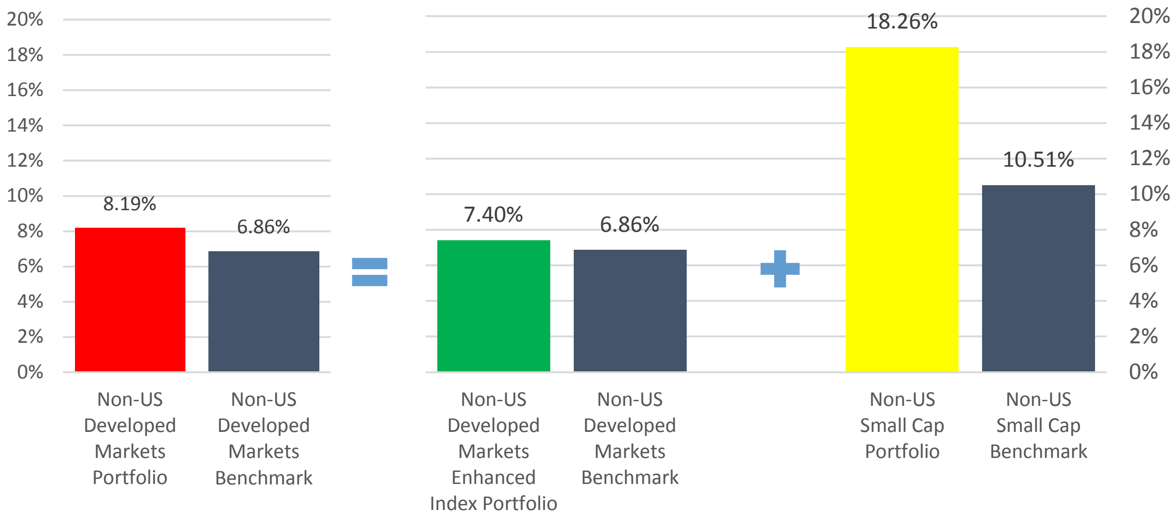
Quarter Ended: 9/30/2017, 12/31/2017, 3/31/2018, 6/30/2018

During FY18, the International Equity Portfolio underperformed its benchmark by 32 basis points (7.05% vs 7.37%), driven by disappointing relative returns in the EM Portfolio. Strong returns within the DM portfolio added value and are primarily attributable to our commitment to Small Cap equities.

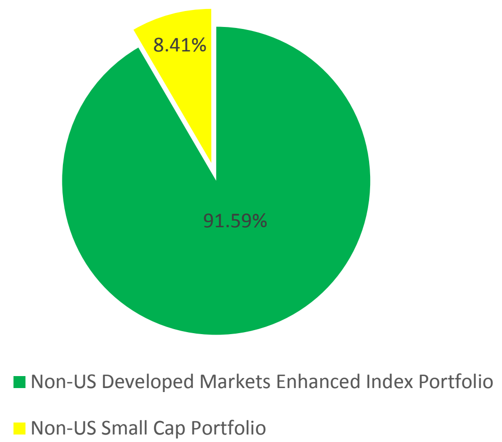
Source: State Street

FY 18 Review: Non U.S. Developed Markets (DM) Portfolio

FY18 Returns



Non-US DM Portfolio Allocation (%)
as of June 30, 2018

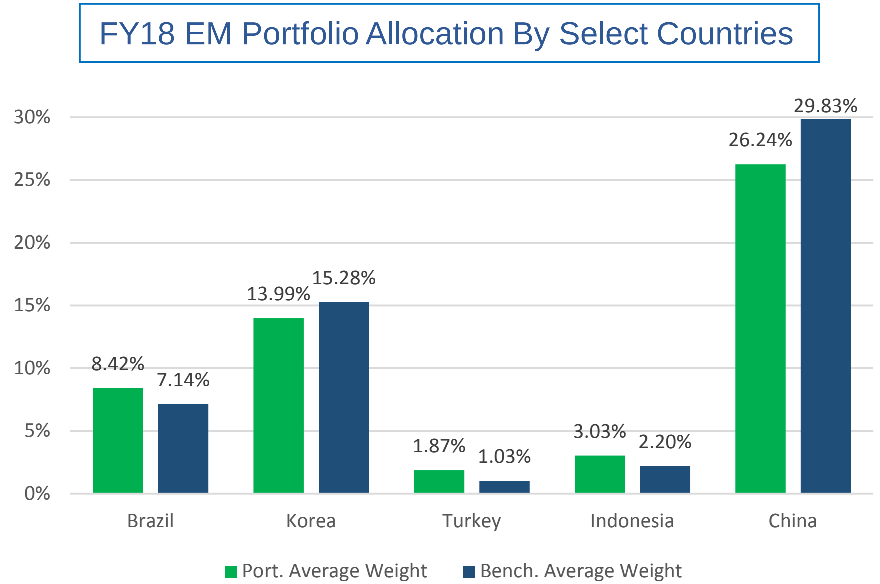


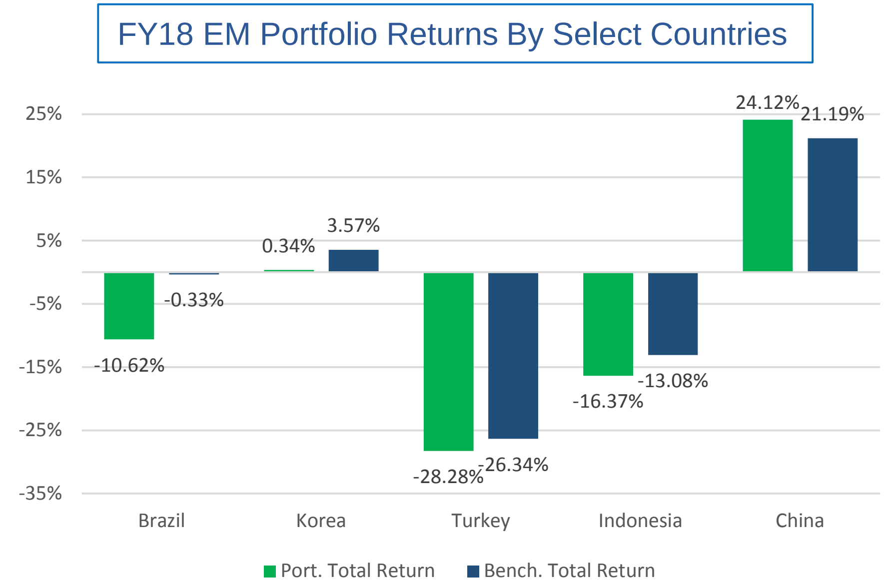
- During FY18, the Non-US Developed Markets Equity portfolio returned 8.19% versus 6.86% for the benchmark index, an outperformance of 1.33%.
- The Non-US Developed Markets Equity (DM) portfolio incorporates an enhanced index approach. The DM portfolio outperformed its benchmark index by 54 basis points (+7.40% versus +6.86%).
- The largest contributor to the overall performance of the DM portfolio was the out-of-benchmark allocation to Small Cap. The Small Cap portfolio outperformed its benchmark by 7.75% and contributed 79bps towards the DM portfolio's relative return. Strong security selection was the key driver of favorable relative returns within the Small Cap portfolio.

The Non-US Developed Markets portfolio realized strong absolute and relative returns during FY18. The key driver of favorable returns was the commitment to small cap equities.

Source: FactSet and State Street

FY 18 Review: Emerging Markets (EM) Portfolio





- Strong performance in the emerging markets carried through the first half of FY18 with the EM benchmark index gaining nearly 16%. However, political, economic, and monetary headwinds resulted in a significant reversal during the second half of FY18, with the EM benchmark index retreating -6.89%. For the entire FY18, the benchmark index returned 7.99% and outperformed the EM portfolio return of 5.40%.
- The greatest negative impact on the FY18 returns was the overweight allocation to Brazil, combined with poor security selection within Industrials, Information Technology, and Materials.
- In addition to an adverse impact from security selection, an overweight allocation to Turkey - specifically Turkish financials - was a substantial detractor from performance.
- Security selection also impacted returns in South Korea, especially within Health Care, which offset the benefit of an underweight allocation to an underperforming country.
- An above market allocation to Indonesia and security selection within the region also detracted from relative returns, particularly within the Telecommunication sector.
- The EM portfolio's below benchmark allocation to China also impacted relative returns as China outperformed. Favorable security selection within China, particularly within Information Technology, benefitted EM Portfolio absolute and relative returns.

During FY18, country and security selection adversely impacted relative returns for the EM portfolio.

Source: FactSet and State Street

Fixed Income Portfolio Review and Outlook

FY18 Fixed Income Portfolio Review and FY19 Key Investment Themes

- **The Fixed Income portfolio outperformed its benchmark index by 172 basis points during FY18**
  - FY18 marked the eighth time in the past ten years that the Fixed Income portfolio has outperformed its benchmark
  - favorable relative returns were driven by strong outperformance in the Global Diversified Credit (GDC) portfolio
  - the High Yield (HY portfolio) realized favorable relative returns, driven largely by quality selection, while the Investment Grade Credit (IG) portfolio modestly outperformed its benchmark
  - within the U.S. Government portfolio, our commitment to TIPS added value, offset by yield curve strategies as we were underweight longer dated Treasuries in a flattening yield curve environment

  ➢ ***During FY18, the key driver of strong relative returns for the Fixed Income portfolio was the outperformance of the GDC portfolio. The High Yield and IG portfolios also added value through favorable security selection.***

- **Within the Fixed Income portfolio:**
  - strong performance within GDC was broad-based across differentiated private credit opportunities with lower correlation to the public fixed income markets
  - the key driver of the High Yield outperformance was a result of being overweight the single B rated subsector and underweight BB rated bonds; the portfolio also benefitted from positive security selection in the basic industry, consumer cyclical, energy, and transportation subsectors
  - the portfolio's allocation to out-of-benchmark TIPS added value as TIPS outperformed nominals by 231 basis points during FY18 (+1.66% versus -0.65%)

- **Notwithstanding higher rates versus a year ago, we believe yields will continue to rise**
  - the Federal Reserve has signaled its intention to continue to raise the targeted Fed Funds rate and to further reduce policy accommodation; a modestly below-benchmark duration profile appears warranted
  - while credit spreads have widened over the past year, they remain tight in an historical context
  - in a low interest rate environment characterized by a flat yield curve and narrow and less differentiated credit spreads, there may be fewer opportunities to add value; in this environment, we have reduced active sector, quality, and issuer risk relative to the benchmark index

The Fixed Income Portfolio Has Realized a Consistent Track Record of Outperformance

(Total Return in %)

Fiscal Year	New Jersey Division of Investment	Benchmark	Outperformance (in basis points)
2009	6.65	5.34	131
2010	16.73	16.49	24
2011	5.96	3.20	276
2012	15.87	16.50	-63
2013	1.70	0.87	83
2014	7.62	7.45	17
2015	1.76	0.52	124
2016	4.90	4.93	-3
2017	5.14	4.89	25
2018	2.26	0.54	172

Annualized Returns
(Periods Ending 6/30/17)

One Year	2.26	0.54	172
Three Years	4.09	3.43	66
Five Years	4.31	3.63	68
Ten Years	6.74	5.93	81

The Fixed Income portfolio has outperformed in eight of the last ten fiscal years, realizing outperformance of 81 basis points (annualized) over the same horizon. Based on an average portfolio value of $16 billion, the 84 basis points of outperformance over the past decade is equivalent to an additional $1.3 billion of value for the Fund.

Source: State Street

Fixed Income Portfolio: Fiscal Year 2018 Performance Review

FY18 Fixed Income Returns By Sector

(Total Return in %)

Sector	Quarter Ended 9/30/2017 NJDOI	9/30/2017 Benchmark	12/31/2017 NJDOI	12/31/2017 Benchmark	3/31/2018 NJDOI	3/31/2018 Benchmark	6/30/2018 NJDOI	6/30/2018 Benchmark	Fiscal Year 2018 NJDOI	Fiscal Year 2018 Benchmark
Short Term Cash Equivalents	0.33	0.26	0.86	0.28	0.34	0.35	0.40	0.45	1.94	1.36
U.S. Government	0.53	0.38	0.03	0.05	-1.34	-1.18	0.03	0.10	-0.77	-0.65
Investment Grade (IG)	1.00	1.12	0.27	0.90	-1.54	-2.11	-0.40	-0.61	-0.68	-0.73
High Yield (HY)	2.20	1.98	0.77	0.47	-0.55	-0.86	0.36	1.03	2.78	2.62
Global Diversified Credit (GDC)	1.03	1.20	2.49	1.07	3.02	0.05	3.20	0.01	10.09	2.35
Total Fixed Income	1.05	1.33	0.71	0.62	-0.24	-1.50	0.72	0.11	**2.26**	**0.54**

During FY18, the Fixed Income portfolio outperformed its benchmark by 172 basis points (+2.26% versus +0.54%). Strong relative returns for GDC and High Yield were the biggest contributors.

Source: State Street

The Global Diversified Credit Portfolio Realized Strong Returns

- **The Division's GDC strategy has capitalized on the regulatory regime that has driven secular changes in the lending markets**
  - as traditional lenders have receded, the Division identified idiosyncratic credit opportunities that include:
    - Middle-market, direct lending
    - Structured credit
    - Asset-based lending

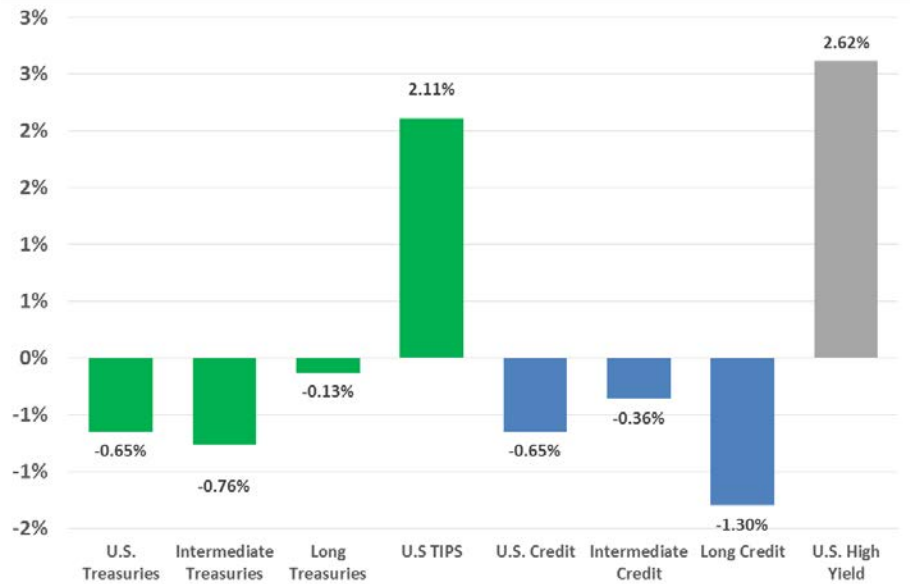
- **GDC has consistently taken advantage of dislocations in credit markets, differentiated underwriting, and an attractive premium due to complexity and illiquidity relative to the public markets to earn favorable risk-adjusted returns**
  - during FY18, the GDC portfolio returned +10.14%, outperforming its benchmark index by 779 basis points
  - since inception, the GDC portfolio had generated net returns of +11.21% IRR and 1.5x MOIC
  - returns are differentiated from the broader Fixed Income portfolio with spreads in excess of "on-the-run" credits as well as having lower correlation to the broader credit markets

- **The GDC portfolio is modestly above its target asset allocation as private credit appears more attractive versus public high yield**
  - Within the GDC portfolio, the Division has focused on partners with strong management teams experienced through multiple economic cycles, a culture of intensive credit due diligence, and a focus on downside protection, along with attractive economic terms that enhance net returns

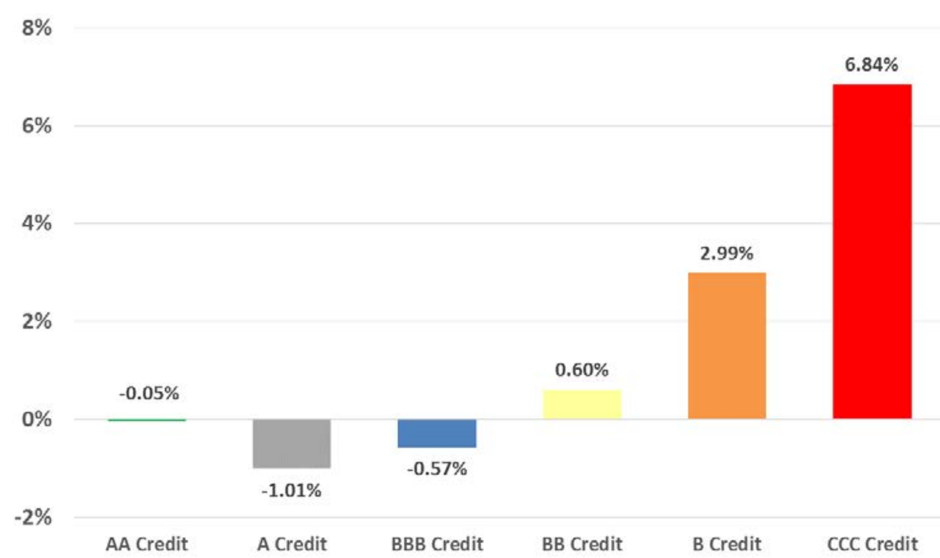
During FY 2018, the Fixed Income portfolio benefited from strong, absolute returns from GDC, which were broad based across private credit opportunities.

FY18 Fixed Income Review: Sector, Quality and Yield Curve Returns

FY18 Select Sector and Yield Curve Returns



FY18 Select Quality Returns



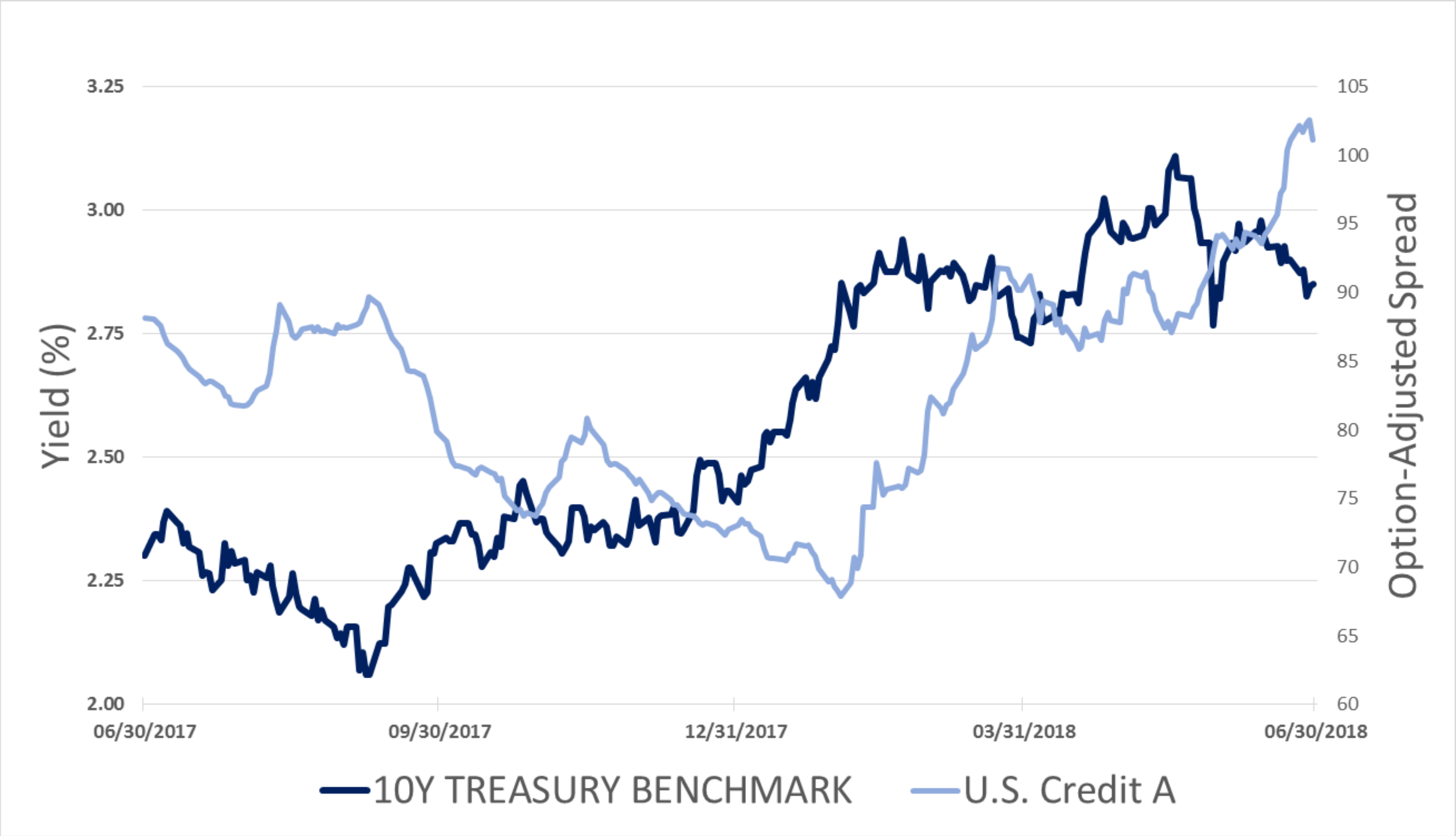
During FY18, most asset classes within fixed income realized negative returns, with high yield as a notable exception realizing modestly positive returns (+2.62%). Within the U.S. Government portfolio, our allocation to TIPS benefited the Fund as TIPS returned +2.11%

During FY18, there was a wide disparity of returns across the quality spectrum. The IG Credit portfolio's overweight allocation to AA rated securities added value as AA outperformed A and BBB rated corporates. Within the HY portfolio, quality selection also benefited the Fund as the portfolio was overweight B rated and underweight BB rated corporates.

Strong relative returns within Global Diversified Credit and High Yield was the key driver of outperformance within the Fixed Income portfolio. Our commitment to TIPS at the expense of nominal US Treasuries also contributed. Quality selection also added value in the IG and HY portfolios.

Source: Bloomberg

FY18 Ten Year U.S. Treasury Yield and A-Rated Credit Spreads

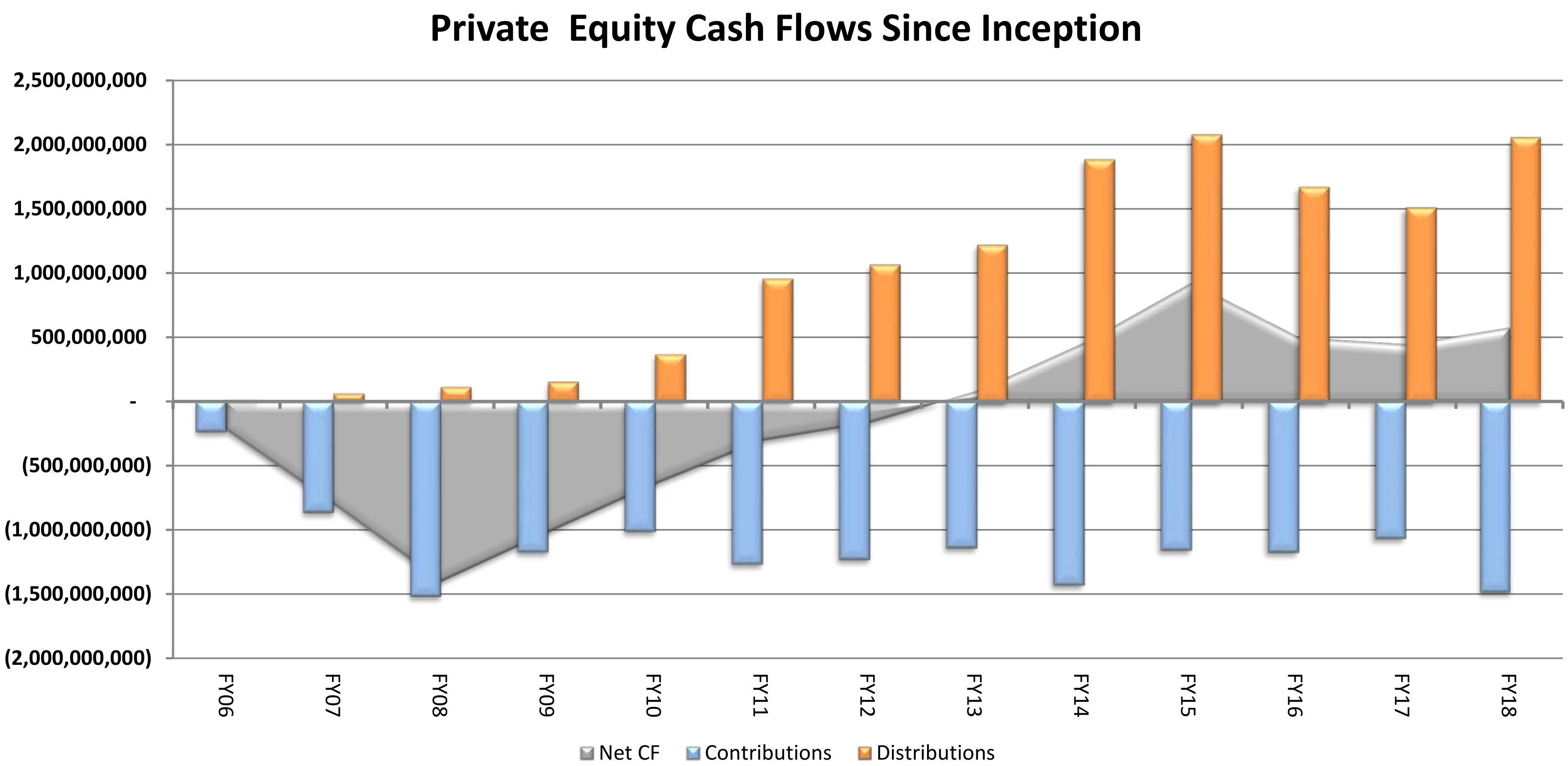


During FY18, both US Treasuries and Investment Grade Credit realized negative returns as yields rose and spreads widened. A more defensive posture emphasizing higher quality corporate bonds benefitted overall returns in this environment. Looking forward, low nominal yields, narrow credit spreads, a flat Treasury yield curve, and increasing inflationary pressures suggest a more limited opportunity set to add value via sector and quality selection.

Source: Barclays Capital

Private Equity Portfolio Cash Flows

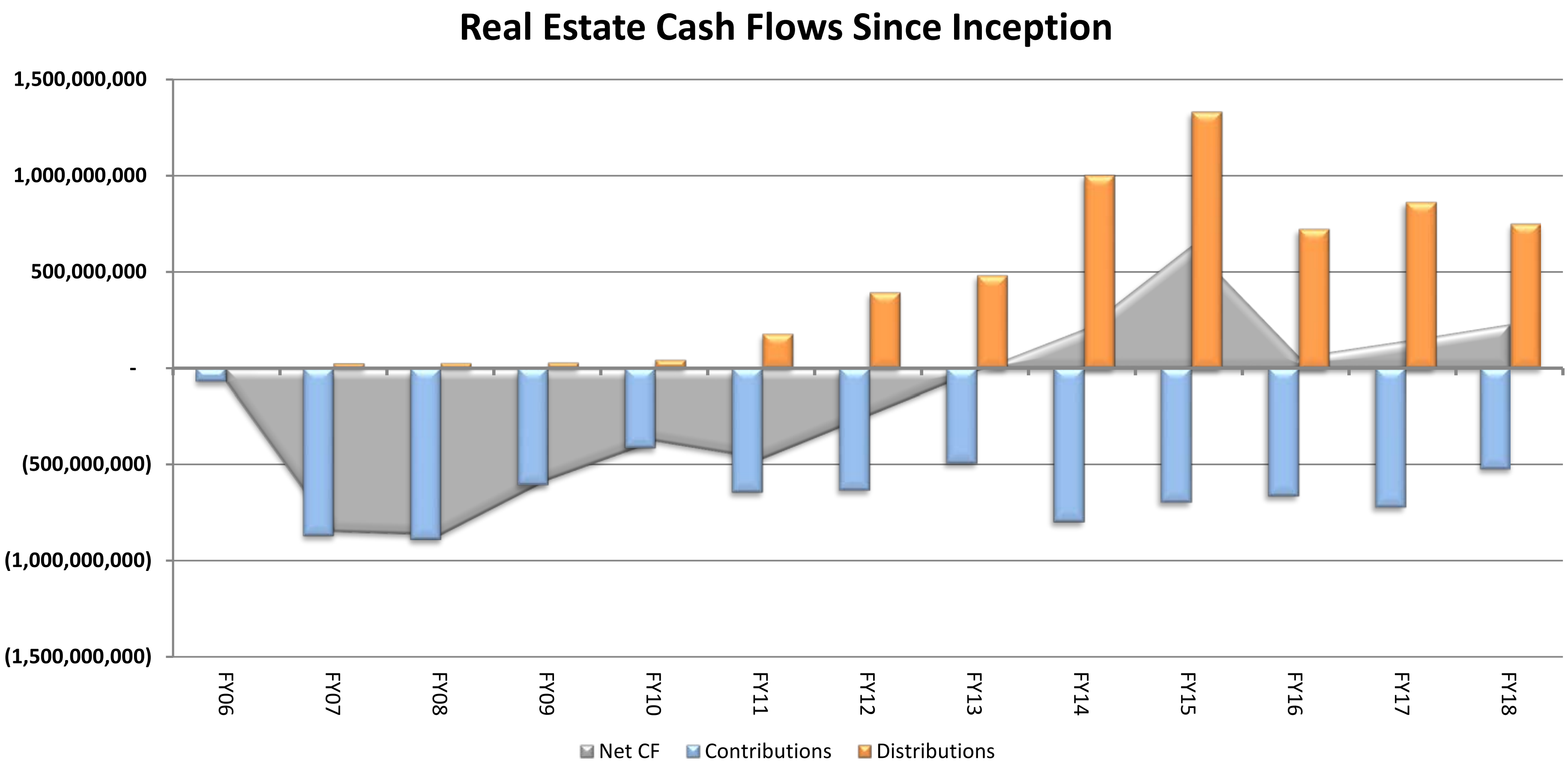
The Private Equity portfolio continues to generate significant distributions as the June 2018 quarter marked the 23rd consecutive quarter in which distributions exceeded $200 million. The portfolio also generated positive net cash flow for the 21st time in the last 23 quarters. For FY 2018, the portfolio was net cash flow positive by $573 million with distributions of $2.06 billion, the second highest in the history of the program. Since the start of fiscal year 2013, the portfolio is cash flow positive by $2.97 billion.



Source: State Street and Division of Investment

Real Estate Portfolio Cash Flows

During the June 2018 quarter, the Real Estate portfolio was cash flow positive by $98 million with contributions of $78 million and distributions of $176 million. For FY 2018, the portfolio had contributions of $523 million and distributions of $750 million for a positive net cash flow of $227 million, the most since FY 2015. Since the start of FY 2014, the portfolio is cash flow positive by $1.3 billion.



Source: State Street and Division of Investment

Council of Institutional Investors

Council of Institutional Investors®
The voice of corporate governance

- New Jersey Division of Investment recently rejoined the membership of the Council of Institutional Investors (CII).

- CII is a nonprofit, nonpartisan association focused on effective corporate governance, strong shareowner rights and vibrant, transparent and fair capital markets. CII promotes policies that enhance long-term value for U.S. institutional asset owners and their beneficiaries.

- Members include more than 125 public, union and corporate employee benefit plans, endowments, and foundations with over $3.5 trillion is assets.
    - the Division of Investment was one of the original 21 founding members of CII

- CII's member-approved, nonbinding policies set high-quality standards and market rules-based best practices.

- Benefits of becoming a general member:
    - remain up-to-date on governance trends and financial regulation in the form of newsletters, reports and online training
    - consultation and custom research support
    - semi-annual conferences
    - advocacy in the form of comment letters and in-person meetings with regulators and policymakers

State Investment Council Update

- There are currently nine (9) members of the State Investment Council

- Brady Middlesworth submitted his resignation, effective June 13, 2018
  - on July 9, 2018, the PFRS Board appointed Marty Barrett as his replacement

- Tom Byrne submitted his resignation, effective June 30, 2018
  - in accordance with Council By-Laws, Adam Liebtag is the Acting Chair

- Eight (8) Governor nominees are awaiting Senate confirmation
  - James Hanson is continuing to serve on the Council until his replacement is confirmed

- Remaining 2018 Council Meeting Dates
  - Thursday, October 25, 2018
  - Thursday, November 29, 2018

Legislative Updates

Senate Bill S5 was enacted as P.L. 2018, c. 55 on July 3rd. The bill, which takes effect on July 4, 2019, will result in a change in PFRS oversight from the SIC to the PFRS Board of Trustees. DOI is currently in discussion with the AG's office regarding implementation of the bill.

Senate Bill S374 passed the Senate in March and is currently being considered by the Assembly. The bill would encourage DOI to use qualified minority- and women-owned financial institutions to provide brokerage and investment management services.

Senate Bill S396 was enacted as P.L. 2018, c. 57 on July 3rd. The bill, which took effect immediately, forbids SIC members from voting on transactions involving investments where the member has a conflict of interest. Conflicts include situations where (i) the member or his or her spouse is or was employed by the entity, or (ii) the member or his or her spouse has a direct investment exceeding $5,000 in the entity. It is unclear how this prohibition affects SIC members, given that the SIC does not vote on specific investments.

Senate Bill S1208 and Senate Bill S1914 were conditionally vetoed by Governor Murphy on July 23rd. If enacted by the Legislature, the revised bills would preclude DOI from investing pension fund assets in (i) businesses whose affiliates avoid their Superfund obligations through bankruptcy filings and (ii) entities engaged in mortgage foreclosures during the foreclosure moratorium imposed after Hurricane Maria. The bills would require DOI to take appropriate action regarding investments already in the pension fund portfolio. The Legislature has not yet acted on the vetoed legislation.

Noteworthy Developments within the Division of Investment

- Staffing – Director Chris McDonough resigned effective July 27, 2018. Deputy Director Corey Amon is now serving as Acting Director. The DOI is currently ten FTEs below its approved level and is working toward filling, including:
  - Head of Alternative Investment Program
  - Corporate Governance Officer
  - Deputy Compliance Officer
  - Performance Analyst
  - Head of Fixed Income
  - Senior Private Credit Analyst
  - Cash Management Fund

- Cash Flows – The Pension Fund received a quarterly contribution of $377 million on June 28th. Since the last SIC meeting, the Pension Fund received the following Lottery contributions:

Date	Lottery Contribution (in $ millions)
June 7th	$80
July 9th	$77
August 7th	$86
September 27th	$80

- The Division of Investment is working on the following Requests for Proposals (RFP):

  Proxy Research and Voting, Class Action Monitoring Services and Optional Proxy Guideline Review RFP:
  The RFP package remains with the Division of Purchase and Property for final approval.

  Replacement Investment Systems Platform (RISP) RFP:
  The Division received approval from the Office of Information Technology (OIT) and the Office of Management and Budget (OMB) to proceed with the RISP RFP. The Division will submit the RFP draft to the Division of Purchase and Property to advertise and procure.

  Securities Lending RFP:
  The DOI has received five bids and the Committee is reviewing.

  ESG Scoring RFP:
  The Division is currently developing the requirements and statement of work to advertise an RFP for these services.

Notification: Secondary Sale – Lubert-Adler Real Estate Fund VI-B, L.P.

- In January 2011, the Division made a $100 million commitment to invest in Lubert-Adler Real Estate Fund VI-B, L.P. ("Fund"). To date, the Fund has made 89 investments, of which 16 remain in the Fund. These remaining investments are either in development or are otherwise not expected to be stabilized and sold in the near term. The Fund is currently scheduled to terminate on December 18, 2018, following a two-year extension from the original termination date. The manager will need investor approval to extend the Fund in order to stabilize the residual assets.

- The Fund is providing investors with an opportunity to liquidate their remaining investments via a secondary sale prior to termination of the Fund. The manager engaged Evercore as an agent to identify a buyer through an auction process. The current NAV of the Division's investment is approximately $20 million. It is anticipated that the manager will provide a formal offer to investors in late September or early October. Investors will have 20-30 days to make an election to sell and execute any necessary legal documents.

- Since the time of its initial investment, the Fund has achieved a net IRR of 20.5%, a net Multiple of 1.80X and a DPI of 158%. Based on the Division's analysis, supported by the Division's real estate consultant, a 3-5 year period may be necessary to fully liquidate the Fund, and the Fund has the ability to recall some distributions during that period to stabilize residual investments. The Division sees little upside from the residual investments going forward. It also believes that participation in the secondary sale would facilitate an efficient exit and would avoid the payment of further fees and expenses over an indeterminate period of time. For this reason, the Division intends to pursue this secondary sale.

The Director is notifying the SIC of its intent to pursue this secondary sale in accordance with the Alternative Investment Sale Procedures.

Notification: Modification – Owl Rock Capital Holdings LLC

Background: In September 2016, the Division committed $400 million to Owl Rock Capital Corporation (the "Fund"). The Fund is a private business development corporation ("BDC"), sponsored by Owl Rock Capital Partners LP ("Owl Rock") and its affiliates, that engages in direct lending to US middle-market companies. Owl Rock's US middle-market lending business is conducted through Owl Rock Capital Holdings LLC ("Holdings") and its subsidiaries. As part of its investment in the Fund, the Division received an equity investment in Holdings that provided a profit share in the ongoing economics of Owl Rock's middle-market lending business in the U.S.

Modification: Owl Rock intends to create a new entity ("Newco") having a profit share in all Owl Rock businesses. Newco will be structured with an earnout feature for the Owl Rock professionals based on the combined business achieving certain milestones. Holdings investors are being asked to approve the transaction and are being given two options:

1. Cash out: Receive cash consideration for its existing interest in Holdings and forgo any further profit share.
   - Under this option, the Division would receive $17.5 million.
2. Reinvest: Contribute its interest in Holdings to Newco and commit to its share of the earnout payment.
   - The Division would have ongoing profit share in current and future Owl Rock businesses.
   - The Division would be responsible for funding its proportionate share of the earnout (approximately $7.5 million) after certain cash flow milestones are achieved.

The Division intends to elect the Reinvest option. The Division believes Owl Rock is well positioned to capitalize on the current market opportunity for lending products and as such the profit share on all current and future business is attractive.

Impact on New Jersey: The reinvestment of its equity interest in Holdings to Newco provides the Division with an ongoing profit share in current and future Owl Rock businesses. The Division expects the value of distributions received to exceed its obligation to pay an earnout.

The Director is notifying the SIC of this modification in accordance with the Alternative Investment Modification Procedures.

Notification: Modification – NJ/HV Resource Opportunities, L.P.

Background: In March 2015, the Division committed $150 million to NJ/HV Resource Opportunities, L.P. (the "Fund"), a co-investment vehicle managed by HiTecVision. The Fund made an initial investment into Offshore Merchant Partners Asset Yield, L.P. fund (the "Investment "), a closed-end vehicle originally created to provide financing to offshore oil and gas assets.

Modification: The manager of the Investment, Offshore Merchant Partners (the "Manager"), proposed to create a new credit investment company named OMP SICAV (the "New Company") to allow the Manager to raise both debt and equity capital through the public markets, thereby expanding the Manager's ability to provide financing to additional offshore oil and gas assets. In conjunction with the expanded source of capital, the Manager will broaden its investment mandate to also include financing for maritime shipping.

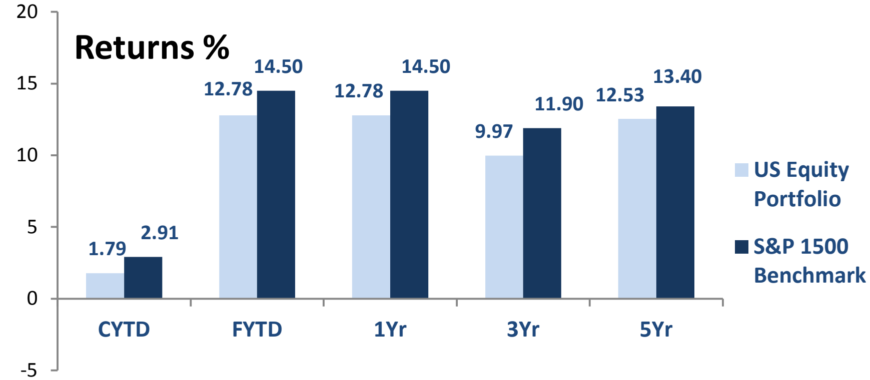
Limited Partners in the Investment (including the Fund) were given the option to convert their respective interests from a limited partnership interest in the Investment to an equity shareholder interest in the New Company. The Fund, with the Division's consent, exercised this option.

Impact on New Jersey: The Division believes converting the Investment from a limited partnership interest to an equity interest improves the Fund's risk-adjusted return and cash flow profile. Expanding the investment mandate to include financing for maritime shipping also provides greater diversification for the Fund. Finally, converting the Investment ensures that the Fund is fully aligned with HiTecVision.

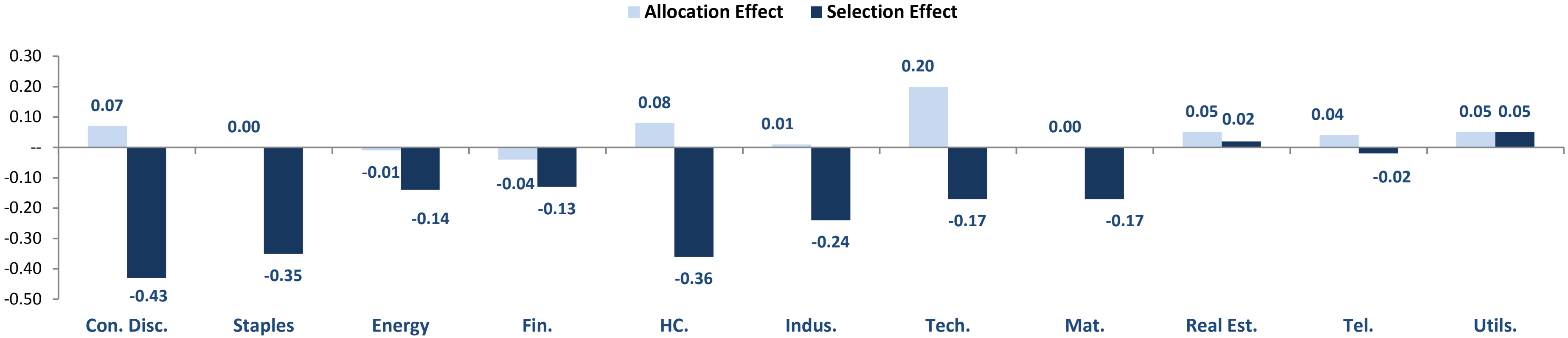
The Director is notifying the SIC of this modification in accordance with the Alternative Investment Modification Procedures.

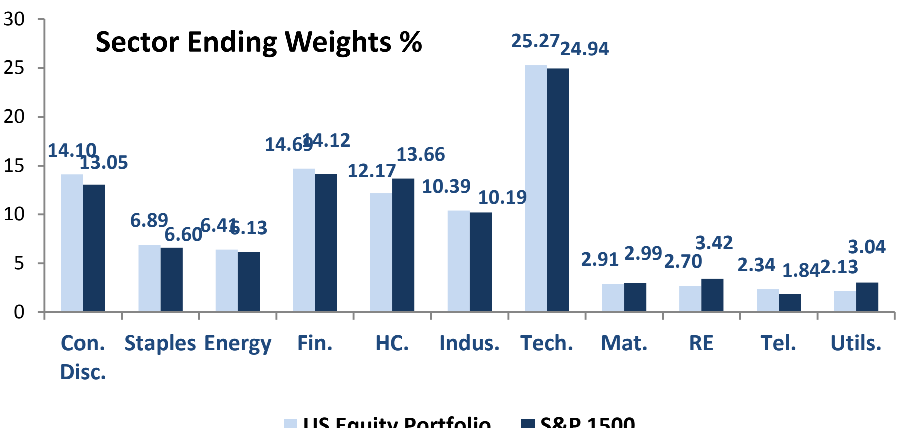
Performance Appendix

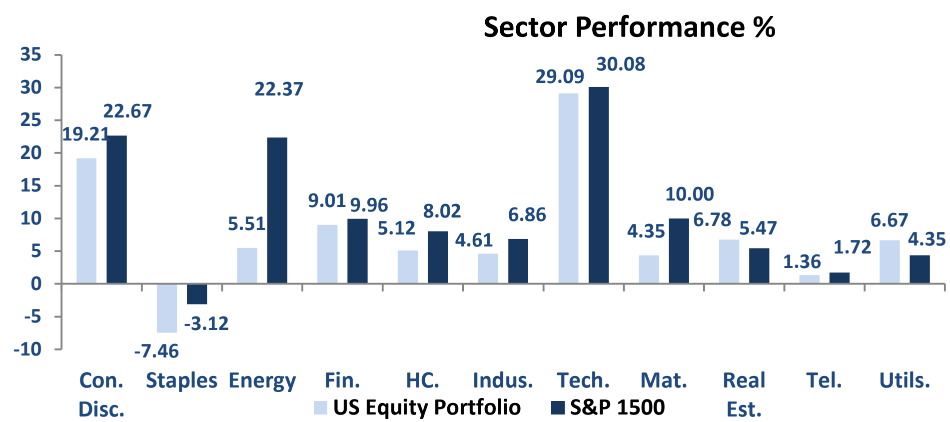
During FY18, the U.S. equity portfolio gained 12.78%, while the S&P 1500 benchmark gained 14.50% over the same horizon. Domestic equity markets remained volatile as investors grappled with the threat of a potential trade war's impact on global economic growth, while U.S. earnings growth remains robust. First quarter earnings increased 25% year-over-year, with the recent tax change adding approximately 7 percentage points to earnings growth. Small cap stocks outperformed large cap stocks by 503 basis points during the first half of calendar year 2018, reversing their second half 2017 underperformance of 223 basis points. Information technology was the best performing sector, increasing 30.08% during FY18, followed by consumer discretionary's return of 22.67%, and energy's return of 22.37%. Consumer staples, telecommunication services, and utilities were the laggards.



Portfolio Sector Attribution FYTD% - Breakdown of Excess Return:	Portfolio Return:	+12.78%	Benchmark Return:	+14.50%	Excess Return:	-1.72%

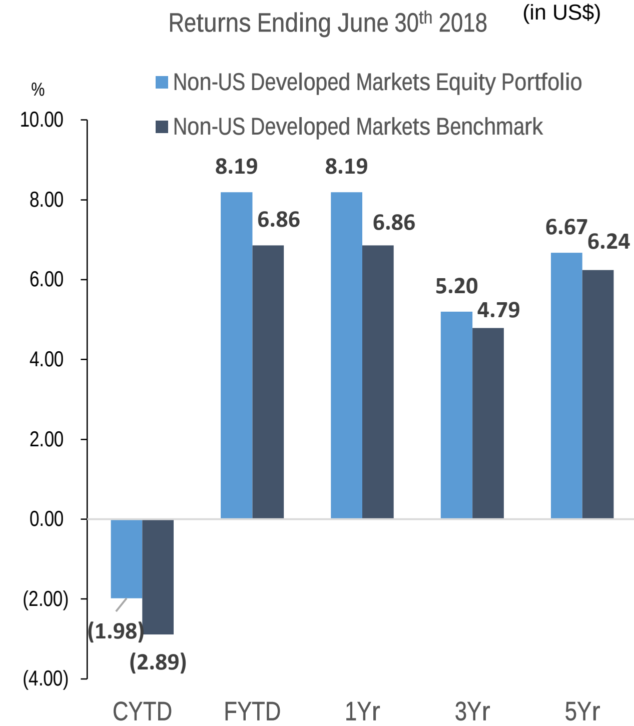




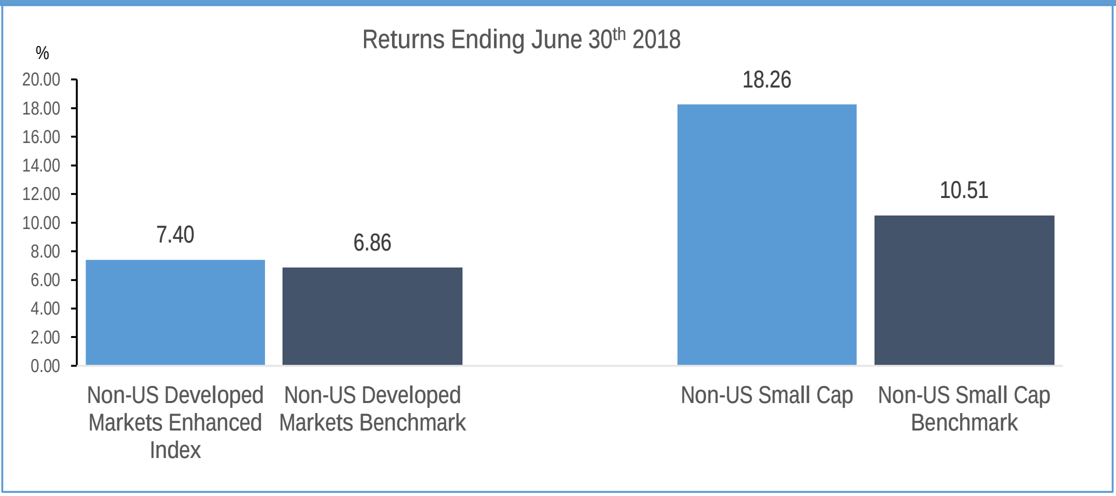


Source: State Street and FactSet

- For FY18, the Non-US Developed Markets (DM) Equity Portfolio outperformed the Benchmark (+8.19% versus +6.86%) in an investment environment that experienced periods of sharp rises in volatility and dislocation across financial markets. Within the Portfolio, our commitment to Small Cap equities was the key driver of outperformance.
- During the first-half of the fiscal year, the international equity markets benefitted from a rising cyclical upswing in the global economy, underpinned by largely accommodative monetary policy and a general decline in political risk, particularly in Europe and Japan. The risk-on sentiment resulted in a 10.09% total return for the MSCI EAFE + Canada index (a Developed ex US markets proxy) for this period ending December 2017. In contrast, the second-half of the fiscal year - which began in January 2018 – has been characterized by a slowing of economic growth for the international markets, an unexpected rise in European political risk, and the growing threat of global trade conflict. The subsequent periods of uncertainty and negative investor sentiment adversely impacted the MSCI EAFE + Canada index, which fell -2.77% in total return during this six-month period ending June 30th 2018.
- For the entire fiscal year, the key driver of the 1.33% Portfolio excess return was the out-of-benchmark allocation to, and strong security selection within, Small Cap. The Small Cap component proved resilient through the market turbulence that took hold during the period, returning 18.26% which outperformed both its respective benchmark return of 10.51% and the Portfolio Benchmark return of 6.86%. For the Non-US Developed Markets enhanced index component of the Portfolio, performance was a 7.40% versus 6.86% for its benchmark.



Non-US Developed Markets Equity Portfolio FYTD Attribution As of June 30th 2018



Source: State Street and FactSet

During FY18, the EM portfolio showed positive returns yet underperformed the benchmark index by 259 basis points (5.40% vs 7.99%). Political, economic and monetary headwinds impacted most constituent countries, resulting in a challenging investment environment.

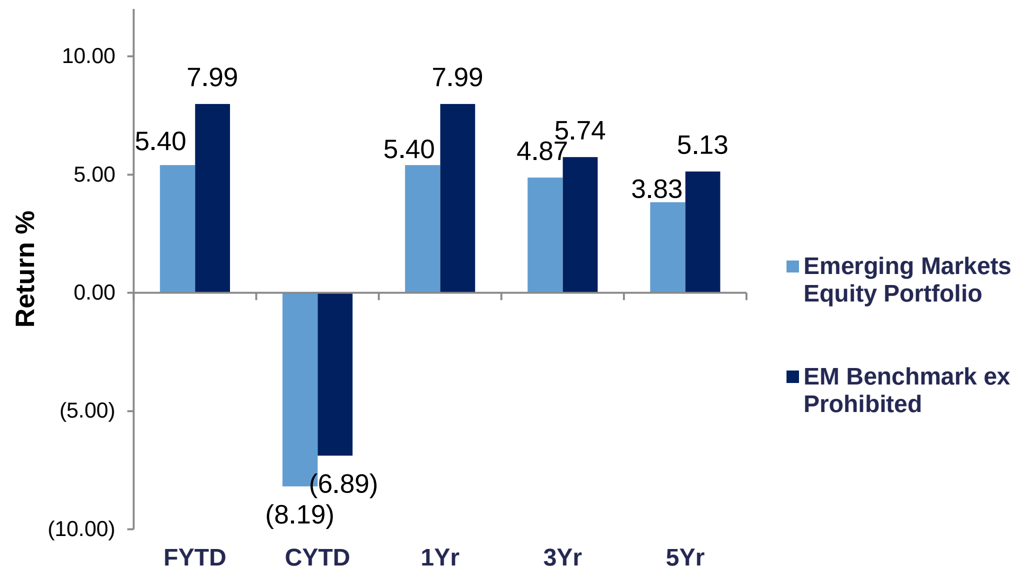
During the first half of FY18, Emerging Markets Equities (EM) returned 15.98%, outpacing both US Equities and Non-US Developed Equities. However, in the second half of FY18, EM experienced a significant reversal, declining -6.89%, underperforming both asset classes.

The key driver of relative returns was poor security section and the portfolio's above benchmark allocation to Brazil (+1.28%) as the portfolio country return lagged (-10.62%) the benchmark country return (+0.33%).

The portfolio's relative overweight (0.84%) and poor security selection (-28.28% vs -26.34%) in Turkey also adversely impacted returns.

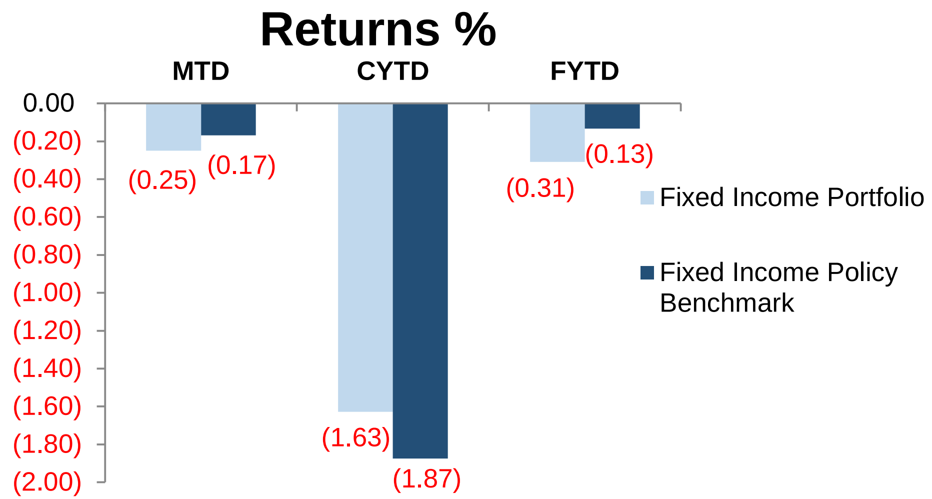
Although China (+24.12%) was the portfolio's largest underweight (-3.59%), security selection within China (+29.83%) largely offset the negative allocation impact.

Returns Ending June 30th 2018 (in US$)

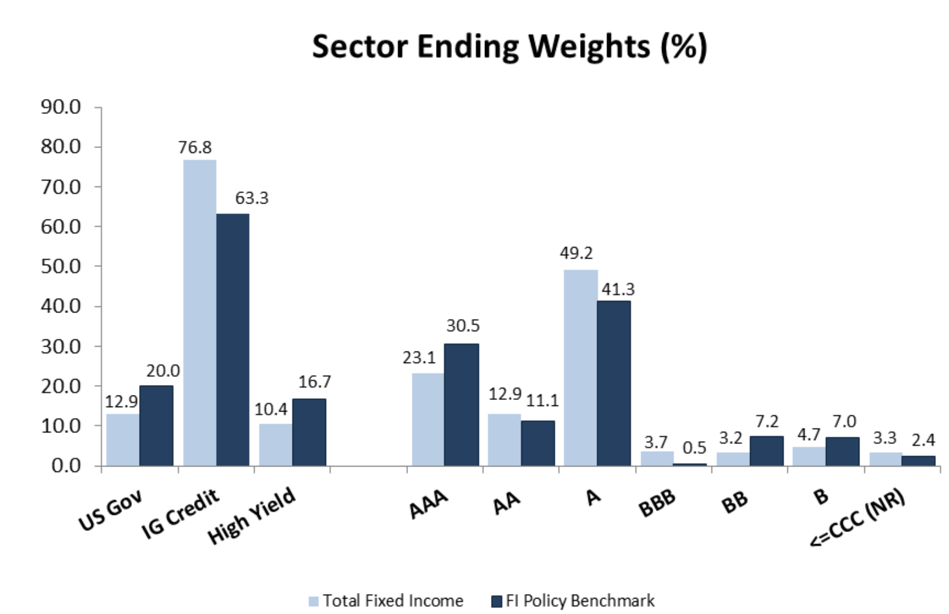


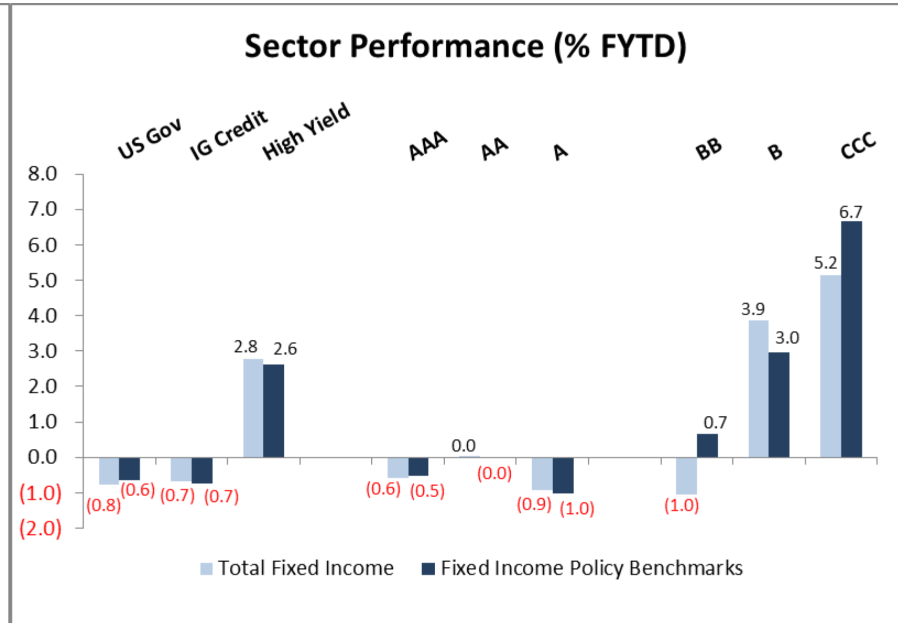
Source: State Street and FactSet

During FY18, the publicly traded U.S. Fixed Income portfolio returned -0.31% versus the benchmark return of -0.13%. Relative returns were negatively impacted by an underweight allocation to High Yield and a small bias toward long duration US Treasuries. During FY18, the Bloomberg Barclays High Yield, U.S. Credit (A or better) and U.S. Treasuries indices returned +2.62%, -0.73% and -0.65%, respectively. With the Treasury curve flattening and credit spreads widening, long duration high quality credits have outperformed. Within the US Government portfolio, a modest allocation to TIPS, which have outperformed Treasuries, helped offset underperformance versus the nominal Treasury benchmark. The High Yield Portfolio outperformed its benchmark as quality selection was the main driver of positive relative returns.



Portfolio Sector Attribution – Weights and Performance





Source: State Street and FactSet