# NEW JERSEY DIVISION OF INVESTMENT

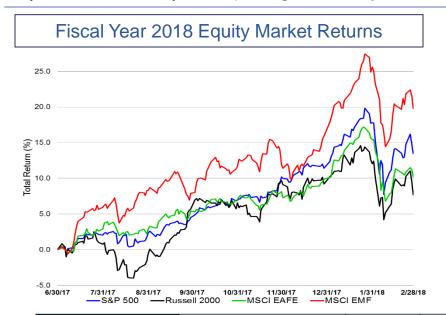
# **Director's Report**

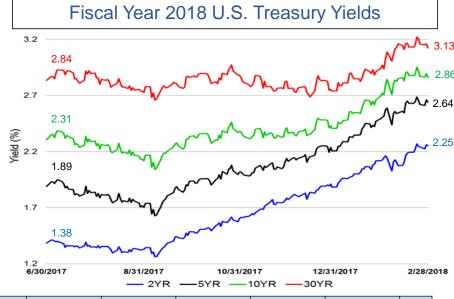
March 28, 2018

**State Investment Council Meeting** 

<sup>&</sup>quot;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."

#### Capital Markets Update (through February 28, 2018)





	February 28, 2018	MTD %	CYTD %	FYTD %	1 Yr %	3 Yrs %	5 Yrs %	10 Yrs %	
Domestic	S&P 500	-3.69	1.83	13.45	17.09	11.13	14.72	9.72	1
Equity	Russell 2000	-3.86	-1.35	7.71	10.51	8.54	12.18	9.73	2
International	MSCI EAFE	-4.51	0.28	10.17	20.13	5.65	7.06	2.82	3
Equity	MSCI EMF	-4.61	3.34	19.79	30.51	8.97	5.01	2.65	4
	Barclays Agg	-0.95	-2.09	-0.87	0.51	1.14	1.71	3.60	5
Bond	Barclays HY	-0.85	-0.26	2.19	4.18	5.19	5.33	8.30	6
	Barclays US Tips	-0.97	-1.82	0.28	-0.18	0.79	-0.11	2.81	7
Commodity	Bloomberg	-1.85	-0.03	6.71	0.46	-5.19	-8.38	-8.55	8
Real Estate	Bloomberg REIT	-6.99	-9.99	-6.81	-5.92	2.37	6.82	7.34	9
Hedge Funds	HFRI Composite Index	-1.78	0.56	5.44	6.95	3.79	4.51	3.41	10

Feb 8, 2018

to Mar 22, 2018

Dec 31, 2017

Mar 22, 2018

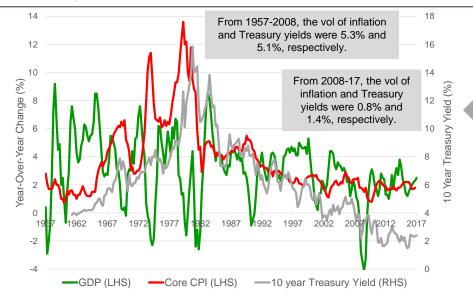
### Impact of Global Equity Correction Across the Capital Markets

					1		
	Dec 31, 2017 to	Jan 26, 2018 to	Feb 8, 2018 to	Dec 31, 2017 to		Dec 31, 2017 to	Jan 26, 2018 to
	Jan 26, 2018	Feb 8, 2018	Mar 22, 2018	Mar 22, 2018		Jan 26, 2018	Feb 8, 2018
Global Equities							
ACWI	7.32	-8.98	1.82	-0.54	Fixed Income		
ACWI Value	6.71	-8.91	0.19	-2.61	U.S. Aggregate Bond Index	-0.95	-1.01
ACWI Growth	7.91	-9.05	3.41	1.50	Treasuries	-1.15	-0.91
ACWI Large Cap	7.50	-9.08	1.68	-0.62	Intermediate Treasuries	-0.81	-0.36
ACWI Small Cap	5.62	-8.34	3.27	-0.02	Long Treasuries	-2.80	-3.64
US Equities					TIPS	-0.66	-1.27
Russell 3000	7.12	-9.92	3.13	-0.48	Credit	-0.77	-1.26
Russell 3000 Value	5.79	-9.99	1.73	-3.13	Intermediate Credit	-0.63	-0.52
Russell 3000 Growth	8.43	-9.85	4.46	2.12	Long Credit	-1.06	-2.92
Russell 1000 (Large Cap)	7.32	-10.00	2.92	-0.58	AAA Credit	-0.82	-0.61
Russell 2000 (Small Cap)	4.76	-8.93	5.65	0.80	AA Credit	-0.88	-1.05
Non-US Developed					A Credit	-1.05	-1.33
EAFE	6.54	-7.38	0.06	-1.26	BBB Credit	-0.49	-1.39
EAFE Value	7.14	-7.21	-1.33	-1.91	High Yield	0.89	-1.45
EAFE Growth	5.95	-7.54	1.45	-0.62	Commodities, Currencies, RE		
EAFE Large Cap	7.50	-9.08	1.68	-0.62	Bloomberg Commodities	2.99	-4.18
EAFE Small Cap	5.62	-8.34	3.27	-0.02	WTI Crude Oil	9.55	-7.48
Emerging Markets					Gold  Bloomberg REITs	3.40 -2.96	-2.76 -8.85
Emerging Markets	9.93	-8.61	3.10	3.58	Volatility (VIX)	0.36	201.99
EM Value	10.16	-7.60	1.37	3.18	US Dollar (Trade Weighted)	-3.52	1.48
EM Growth	9.70	-9.60	4.84	3.96	55 Donar (Trade Worgined)	-0.02	1.40
EM Large Cap	10.22	-8.71	3.11	3.75			
<u> </u>	-	-					
EM Small Cap	7.22	-7.56	1.62	0.72			

Fixed Income				
U.S. Aggregate Bond Index	-0.95	-1.01	-0.03	-1.97
Treasuries	-1.15	-0.91	0.35	-1.71
Intermediate Treasuries	-0.81	-0.36	0.12	-1.05
Long Treasuries	-2.80	-3.64	1.48	-4.95
TIPS	-0.66	-1.27	0.56	-1.36
Credit	-0.77	-1.26	-0.76	-2.76
Intermediate Credit	-0.63	-0.52	-0.56	-1.70
Long Credit	-1.06	-2.92	-1.22	-5.12
AAA Credit	-0.82	-0.61	-0.08	-1.50
AA Credit	-0.88	-1.05	-0.23	-2.15
A Credit	-1.05	-1.33	-0.82	-3.17
BBB Credit	-0.49	-1.39	-0.98	-2.83
High Yield	0.89	-1.45	-0.28	-0.85
Commodities, Currencies, REITS, &	Vol			
Bloomberg Commodities	2.99	-4.18	0.11	-1.21
WTI Crude Oil	9.55	-7.48	6.27	7.72
Gold	3.40	-2.76	0.82	1.37
Bloomberg REITs	-2.96	-8.85	3.59	-8.37
Volatility (VIX)	0.36	201.99	-30.25	111.41
US Dollar (Trade Weighted)	-3.52	1.48	-0.79	-2.87

#### Equity Markets Have Benefitted From Low Interest Rates, Low Inflation, and Low Volatility

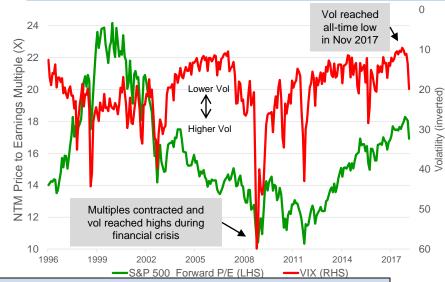
#### Growth, Inflation and Bond Yields Have Been Less Volatile



Strong equity market returns fueled by higher valuations coincided with declining volatility and low interest rates over the past decade. In November 2017, volatility (as measured by the VIX index) reached its lowest level on record. At the same time, the forward P/E of the S&P 500 reached its highest level since 2002.

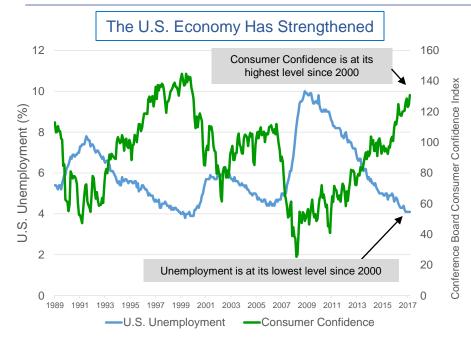
During the past ten years of an extended but somewhat muted recovery, economic growth, inflation, and Treasury yields have been lower and less volatile than historical norms. Highly accommodative monetary policy has left borrowing costs exceptionally low and stable, providing stimulus without stoking inflation in an economy operating below capacity.





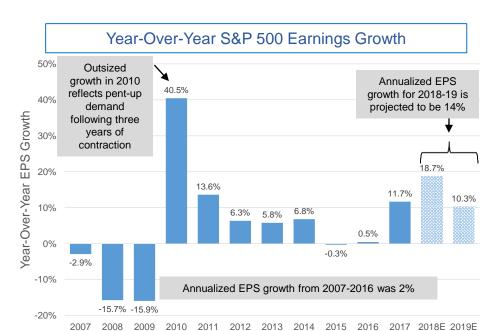
Equity market valuations expanded as volatility declined in a low interest rate environment characterized by extraordinary monetary policy

#### **Equity Market Fundamentals Are Favorable**



While higher equity multiples drove strong stock returns for much of the past decade, an acceleration of earnings growth in 2017 was the more recent catalyst. On the heels of 12% EPS growth this past year, earnings growth is expected to accelerate at an annualized rate of 14% in 2018 and 2019, supported by lower corporate tax rates. Notwithstanding strong earnings momentum, any escalation of global trade wars represents a key risk factor to Corporate America.

The U.S. labor market is operating above full employment, while inflation remains marginally below the Fed's targeted level. A tighter labor market and fiscal stimulus have pushed consumer confidence to its highest level of the past seventeen years. According to the Fed, the U.S. economy is projected to expand 2.7% in 2018, above its long-term potential, as tax reforms take hold and consumer spending increases.



The fundamental backdrop for the U.S. equity market is favorable, as the economy is expected to grow above potential and earnings are expected to accelerate

Source: Bloomberg and FactSet

#### Equity Market Valuations May Be Impacted By Less Accommodative Policy and Higher Volatility

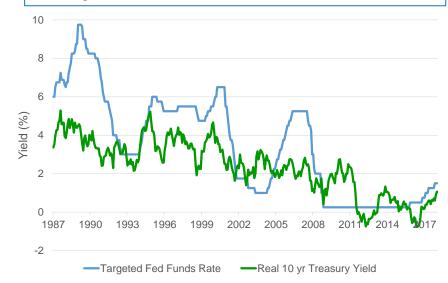


Following the two day meeting of the Federal Open Market Committee (FOMC) that concluded on March 21, the Federal Reserve increased its targeted Fed Funds rate to an upper bound of 1.75%, the fifth tightening since December 2015. The Fed's median

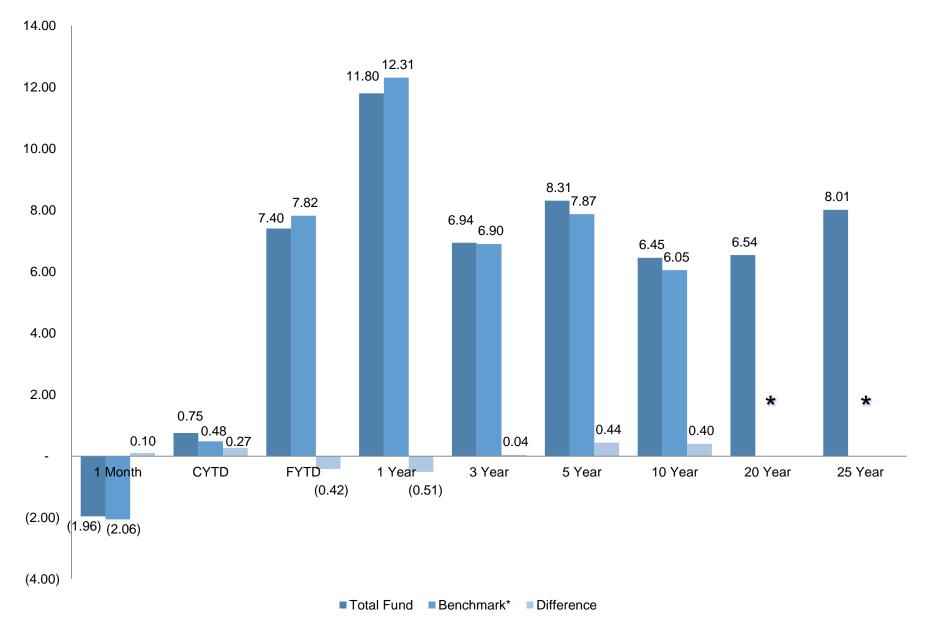
21, the Federal Reserve increased its targeted Fed Funds rate to an upper bound of 1.75%, the fifth tightening since December 2015. The Fed's median expectation for the targeted rate is above its neutral rate (3%) within the next two years, implying real yields will move higher as inflation stabilizes at a somewhat higher rate and bond prices decline further.

The sharp equity market correction (from Jan 26 to Feb 8) appears to have been precipitated by fears of rising inflationary pressures and exacerbated by a sharp increase in volatility, as well as higher Treasury rates. The subsequent equity rebound also coincided with a drop in volatility.



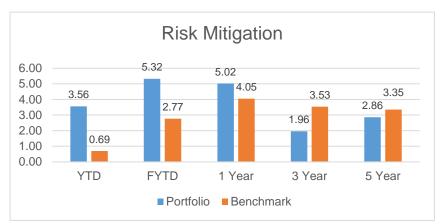


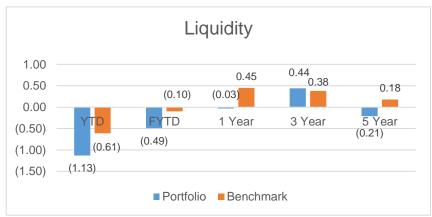
High equity multiples are less sustainable as monetary policy tightens, bond yields rise and inflationary pressures increase

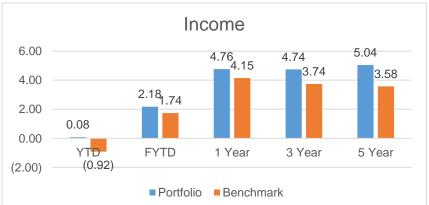


<sup>(1)</sup> Pension Fund return excludes Police and Fire Mortgage Program

<sup>\*</sup>Benchmark return not available for 20 and 25-Year period







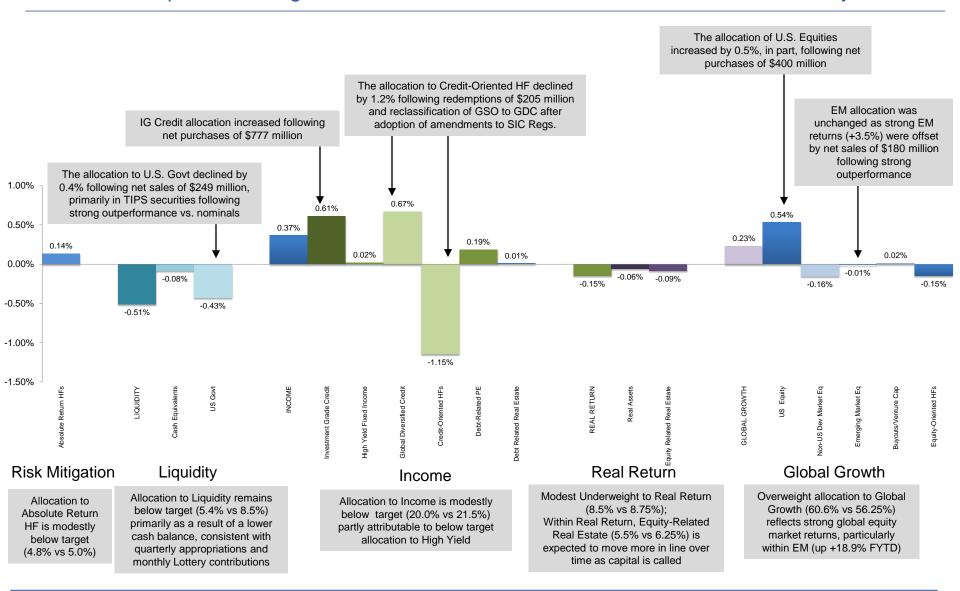




		ASSET ALLOCATION (1)					PERFORMANCE (for periods ending February 28, 2018) <sup>(2)</sup>						
		As of Februar	y 28, 2018		Calend	dar YTD		/TD		elve Months		hree Years	
Asset Class	Mkt Value	Actual (%)	Target (%)	Difference	NJ	Bench	NJ	Bench	NJ	Bench	NJ	Bench	Long Term CMA
RISK MITIGATION RISK MITIGATION STRATEGIES	3.650	4.76%	5.00%	-0.24%	3.56%	0.69%	5.32%	2.77%	5.02%	4.05%	1.96%	3.53%	
NOT MITTOR OTHER ESTA	3,030	4.7070	3.0070	-0.2-70	3.3070	0.0370	3.32 /0	2.77	3.02 /0	4.0370	1.5070	3.3370	
LIQUIDITY													
Cash Eqv & Short Term	1,941	2.53%	5.50%	-2.97%	0.35%	0.21%	1.13%	0.76%	1.46%	0.99%	1.20%	0.48%	1.00%
U.S. Government	2,218	2.89%	3.00%	-0.11%	-2.32%	-2.10%	-1.78%	-1.68%	-0.74%	-0.56%	-0.16%	0.08%	1.73%
TOTAL LIQUIDITY	4,159	5.42%	8.50%	-3.08%	-1.13%	-0.61%	-0.49%	-0.10%	-0.03%	0.45%	0.44%	0.38%	
INCORE													
INCOME Investment Grade Credit	7.445	9.71%	10.00%	-0.29%	-1.95%	-2.49%	-0.70%	-0.51%	0.82%	1.40%	1.84%	1.75%	3.54%
Public High Yield	1,301	1.70%	2.50%	-0.80%	0.02%	-0.26%	3.00%	2.19%	4.80%	4.18%	5.61%	5.19%	6.49%
Global Diversified Credit	4,454	5.81%	5.00%	0.81%	2.02%	-0.26%	5.21%	2.19%	10.33%	4.18%	9.45%	5.19%	6.80%
Credit-Oriented HFs	885	1.15%	1.00%	0.15%	3.54%	2.19%	5.44%	4.46%	6.33%	5.82%	5.74%	4.87%	6.38%
Debt-Related PE	890	1.16%	2.00%	-0.84%	2.24%	0.64%	6.32%	6.44%	11.24%	12.47%	9.17%	8.94%	9.29%
Debt-Related Real Estate	395	0.52%	1.00%	-0.48%	1.31%	1.37%	3.79%	6.49%	10.51%	11.88%	4.38%	4.82%	6.00%
TOTAL INCOME	15,370	20.04%	21.50%	-1.46%	0.08%	-0.92%	2.18%	1.75%	4.76%	4.15%	4.74%	3.74%	
REAL RETURN													
Real Assets	2,273	2.96%	2.50%	0.46%	-0.13%	0.00%	1.32%	1.31%	3.10%	11.72%	1.07%	-5.38%	9.56%
Equity-Related Real Estate	4.229	5.51%	6.25%	-0.74%	0.32%	0.00%	4.82%	3.14%	11.07%	6.70%	11.30%	9.84%	8.09%
TOTAL REAL RETURN	6,502	8.48%	8.75%	-0.74% - <b>0.27%</b>	0.16%	0.00%	3.59%	2.62%	8.30%	8.15%	7.70%	4.86%	0.0376
TOTAL REAL RETORN	0,302	8.46 /6	0.73/0	-0.27 /6	0.1076	0.00 /6	3.39 /6	2.02 /0	8.30 /6	0.13 /0	1.10/0	4.00 /6	
GLOBAL GROWTH													
US Equity	23,477	30.61%	30.00%	0.61%	0.84%	1.48%	11.73%	12.91%	14.80%	16.34%	9.56%	10.98%	6.80%
Non-US Dev Market Eq	9,624	12.55%	11.50%	1.05%	-0.07%	-0.35%	10.30%	9.65%	19.86%	18.85%	5.60%	5.31%	7.28%
Emerging Market Eq	5,669	7.39%	6.50%	0.89%	3.52%	3.28%	18.85%	19.78%	28.96%	30.90%	8.51%	9.16%	8.60%
Buyouts/Venture Cap	6,959	9.07%	8.25%	0.82%	1.12%	0.00%	4.54%	10.84%	13.29%	18.60%	13.06%	10.47%	10.08%
Equity-Oriented HFs	762	0.99%	0.00%	0.99%	3.09%	2.43%	4.26%	6.58%	11.25%	9.63%	4.17%	6.68%	7.79%
TOTAL GLOBAL GROWTH	46,491	60.63%	56.25%	4.38%	1.05%	1.19%	10.90%	12.76%	16.99%	18.92%	8.96%	9.59%	
OTHER													
OPPORTUNISTIC PE	365	0.48%			0.00%		3.53%		12.93%		8.94%		H
OTHER	149	0.46%	-		0.00%		3.33%		12.93%		0.94%		
TOTAL FUND <sup>(3)</sup>	76.686	100.00%			0.75%	0.48%	7.40%	7.82%	11.80%	12.31%	6.94%	6.90%	
TOTALTONE	1 0,000	10010070			011 0 70	011070	111070	110270	1110070	1210170	0.0 . 70	0.0070	
				S&P 500	1.8	33%	13.	45%	17.	09%	11.	.13%	
			R	ussell 2000	-1.3	35%	7.7	71%	10.	51%	8.8	54%	
				MSCI EAFE	0.2	28%	10.	17%	20.	13%	5.6	65%	
				MSCI EMF	EMF 3.34%		19.79%		30.51%		8.97%		
			В	arclays Agg	-2.09%		-0.87%		0.51%		1.14%		
				Barclays HY	-0.26% -0.03%		2.19% 6.71%		4.18% 0.46%			19%	
		Blo		mmodities								-5.19%	
			Bloo	mberg REIT		99%		81%		-5.92%		2.37%	
				HFRI	0.5	50%	5.3	39%	6.9	90%	3.7	77%	

<sup>&</sup>lt;sup>1</sup> Current assets are based on preliminary values and do not include receivables of \$38 million primarily related to Real Estate secondary sale <sup>2</sup> Unaudited and based on preliminary market values <sup>3</sup> Total Fund Performance excludes Police & Fire Mortgage Program

#### Pension Fund Update: Change in Sector Allocation from December 31, 2017 – February 28, 2018



Shifts in sector allocation reflect strong equity returns, a rebalancing of the fixed-income portfolio, and an increased allocation to GDC

#### Noteworthy Developments

<u>Assumed Rate of Return:</u> On March 1, Acting State Treasurer Elizabeth Maher Muoio set the statutory assumed rate of return for the retirement systems at 7.50% for the Fiscal Year 2019 employer contribution to be reflected in the 7/1/17 statutory actuarial valuation report. For the 7/1/19 and 7/1/20 valuations which determine contribution requirements for Fiscal Years 2021 and 2022, the rate will be 7.30%. For Fiscal Year 2023, the rate will be 7.00%.

<u>Cash flows:</u> Lottery transferred \$83 million and \$73 million to Common Pension Fund L for the January and February payments, respectively. FYTD, \$643 million has been transferred to Common Pension Fund L. Local employers were billed \$1.877 billion for the FY18 pension payment. Through February 28<sup>th</sup>, \$24.5 million had been received, in line with prior fiscal years for this point in the year.

<u>Staffing:</u> Due to various retirements and departures, the Division is now six employees below its approved FTE. The alternative investment team in particular is currently under resourced and the Division Director has taken on the responsibility for managing the team day to day. The Division is working with Human Resources and the Treasurer's Office to address near and long-term staffing needs.

#### Puerto Rico Mortgage Foreclosure Update

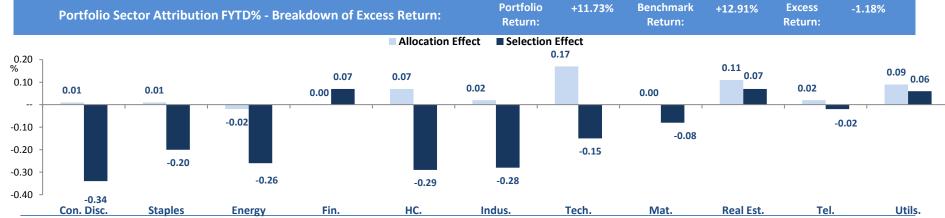
- On February 15, 2018, following a resolution approved by the State Investment Council (SIC) at its February 1, 2018 meeting, Chairman Byrne sent letters to Blackstone and TPG requesting they establish an open dialogue with Private Equity Stakeholder Project regarding business practices of each organization and/or their respective portfolio companies as it relates to their activity with regard to mortgage foreclosures in Puerto Rico.
- Both Blackstone and TPG promptly responded in writing providing detailed information regarding their involvement with mortgages in Puerto Rico. As a direct result of Chairman Byrne's letter, TPG agreed to an additional in person meeting in early March with the Private Equity Stakeholders Group, whom they had been interacting and sharing information with since October.
- On March 1, 2018, DOI spoke with Rev. Dr. Joshua Rodriguez, Chairman of the NJ Commission on Puerto Rico Relief. DOI shared with Rev. Rodriguez the actions of the SIC and DOI to date and both parties agreed to share information moving forward on this matter.
- On March 1, 2018, the Federal Housing Administration (FHA) announced it was extending the foreclosure moratorium for FHA-insured homeowners for an additional 60 days to May 18, 2018.
- The FHA originally informed Blackstone the moratorium does not apply to reverse mortgages.
  However, after Blackstone sent a letter to the FHA requesting that it reconsider, the agency
  announced the moratorium would apply to reverse mortgages. Blackstone also requested the
  moratorium be extended for one year.
- The extension does not apply to the loans owned by TPG as they are not HUD insured. However, TPG worked with the consortium of investors with whom it owns the loans with to extend their moratorium until May 31st.
- On March 8, 2018, TPG forwarded a letter to Chairman Byrne summarizing the productive meeting it had with the Private Equity Stakeholders Group.

# Performance Appendix

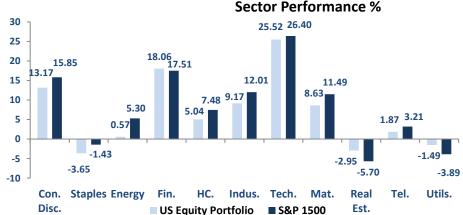
#### U.S. Equity Portfolio – As of February 28, 2018

During the fiscal 2018 year-to-date time period, the U.S. equity portfolio gained 11.73% and the S&P 1500 benchmark gained 12.91%. Volatility increased dramatically as higher inflation expectations drove 10-year Treasury yields to a multi-year high of 2.95% in February. This led to an equity market correction of 10% after hitting an all-time high on January 26. However, the U.S. earnings backdrop remains robust, with synchronized global growth driving a fourth quarter earnings per share increase of 15% year-over-year, its 6th consecutive quarter of positive earnings growth. Information technology was the best performing sector, increasing 26.40% fiscal year-to-date, followed by financials' return of 17.51%, and consumer discretionary's 14.79%. Real estate, utilities, and consumer staples were the laggards. Positive attribution from being overweight Technology and underweight Real Estate, Utilities, and Healthcare was offset by stock selection.







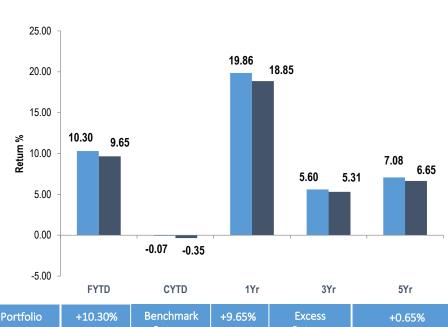


Source: State Street, Factset

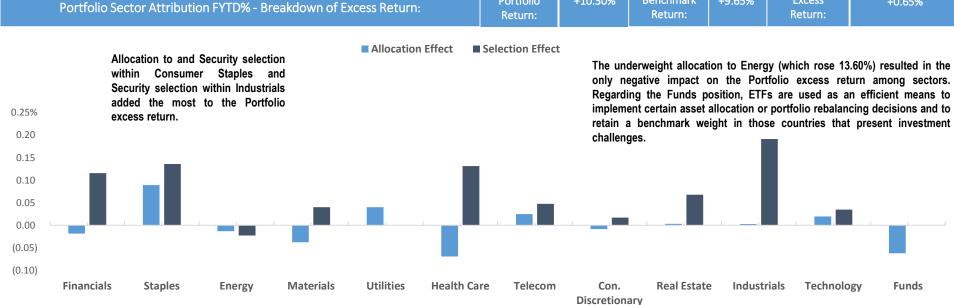
For the fiscal year through February 28<sup>th</sup>, the Non-US Developed Markets Equity Portfolio returned 10.30% versus the benchmark return of 9.65%. In late January, concerns over the prospects of rising inflation and interest rates in the US spilled over into the global markets experiencing a sharp, but brief correction of -9% that ended in early February. Although this event appeared to have little effect on a strengthening global economy, the International Developed Markets have struggled to recoup the losses incurred. Notably, Europe ex UK and Japan have only regained 1.71% and 3.56% respectively from close to -10% declines. Despite data confirming the ongoing economic recovery within Europe, the performance of the market appeared to be reflecting an uncertainty over the impact of a strengthening euro; in the past year, a weak US dollar caused the euro to gain 15% in relative value. For Japan, mixed economic data and a yen that had strengthened by 7% versus the US dollar since November may have caused the negative correlation between market performance and the currency to reassert itself.

The Portfolio's out-of-benchmark allocation to International Small Cap continued to be the largest contributor to performance with a total return of 18.87% vs. 14.78% for total Non-US Developed Equity. From a sector perspective, adding the greatest value to relative returns was allocation and security selection in Consumer Staples and security selection within Industrials. Detracting the most from Portfolio performance was an underweight allocation to Energy, which rose 13.60% as oil prices continue to rise unsteadily from their summer lows.

Source: State Street, Factset, Bloomberg, MSCI.



■ Non-US Developed Markets Equity Portfolio
■ NJDI Index on EAFE + Canada

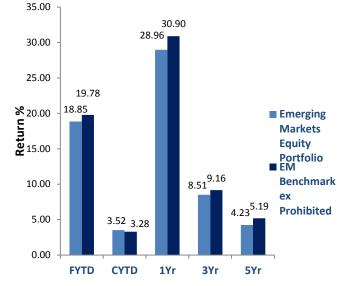


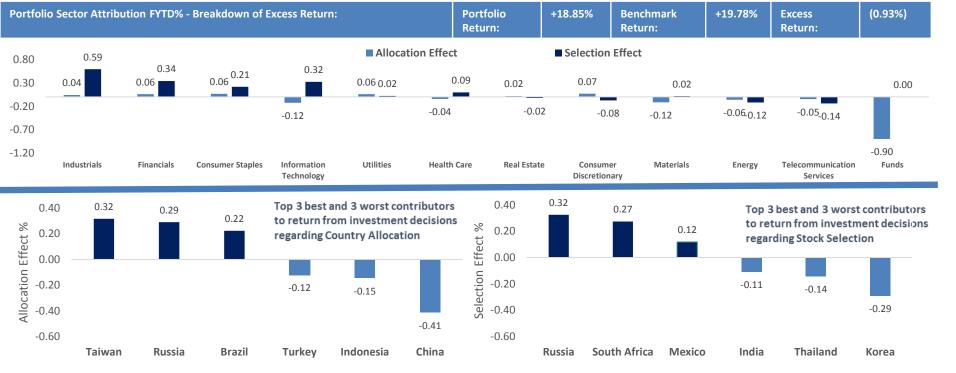
## Emerging Markets Equity Portfolio – As of February 28, 2018

After a strong return of 8.33% during the month of January, the MSCI Emerging Markets Index fell in February, marking a correction to the longest bull market in Emerging Markets not interrupted by a significant drawdown. Emerging market equities were not immune from wider market volatility and recorded a return of -4.61% during the month of February, with US dollar strength a headwind.

The Emerging Market Equity Portfolio returned -4.41% in February, bringing the FYTD return to 18.85% versus the benchmark return of 19.78%. The portfolio's underweight allocation to Taiwan continued to positively impact performance as Information Technology underperformed the index in February. An overweight exposure to Russia, as well as strong stock selection, contributed to performance as Russian equities rose sharply, driven by strengthening crude oil prices and a 25 basis point cut by the Russian Central Bank. Brazil's overweight remained a positive contributor given improving economic data, higher crude oil prices, and a 25 basis point cut by the Brazilian Central Bank. China remains the largest detractor from performance FYTD, largely a result of being underweight Technology names which led the 2017 equity rally, although the underweight was a positive contributor in February as the Technology sector underperformed the benchmark. Korea most negatively impacted performance in terms of stock selection, especially in Healthcare and Consumer Discretionary, as some underweight positions in those sectors rallied.

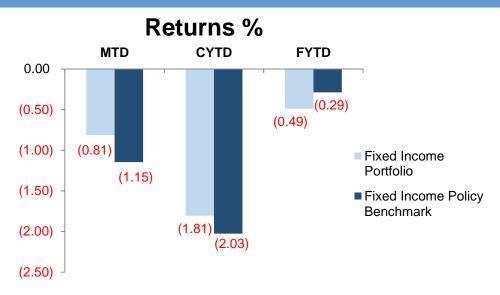
Strong stock selection in Industrials, Financials, Information Technology, and Consumer Staples aided performance. Poor stock selection in Telecommunication Services detracted the most from performance. An underweight in Consumer Discretionary helped performance the most in terms of allocation, while the underweight to Information Technology hurt performance during a rally that favored high-growth stocks in this sector.



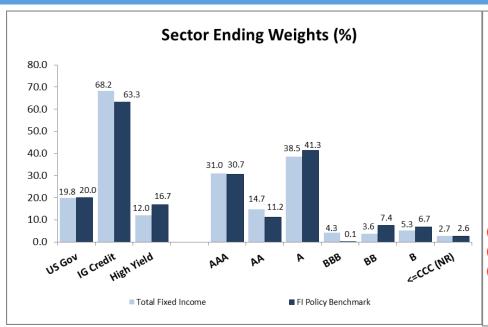


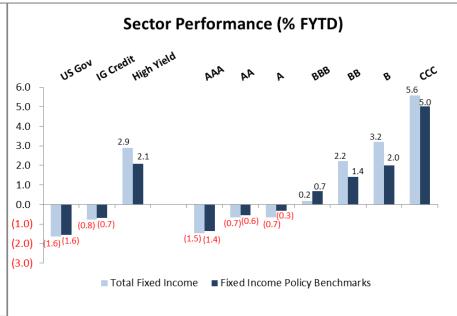
Source: State Street, Factset

For FY18 year-to-date performance, the US Fixed-Income portfolio returned -0.49% versus the benchmark return of -0.29%. Relative returns were negatively impacted by an underweight allocation to High Yield and a bias toward high quality short-dated securities within Investment Grade Credit. Through February 28th, the Barclays High Yield, Custom IG Credit and US Government Benchmarks returned 2.19%, -0.51% and -1.68%, respectively. With the Treasury curve flattening and credit spreads tightening, long-dated lower quality securities have outperformed since the start of the fiscal year. Within the US Government portfolio, a modest allocation to TIPS, which have outperformed Treasuries, has helped offset underperformance versus the nominal Treasury benchmark. The High Yield Portfolio has outperformed its benchmark by 81 basis points fiscal year-todate as quality selection has been the main driver of positive relative returns.



#### Portfolio Sector Attribution – Weights and Performance





Source: State Street and FactSet