NEW JERSEY DIVISION OF INVESTMENT

Director's Report

November 30, 2016
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."

Capital Markets Update (through October 31, 2016)

Fiscal Year 2016 Equity Market Returns



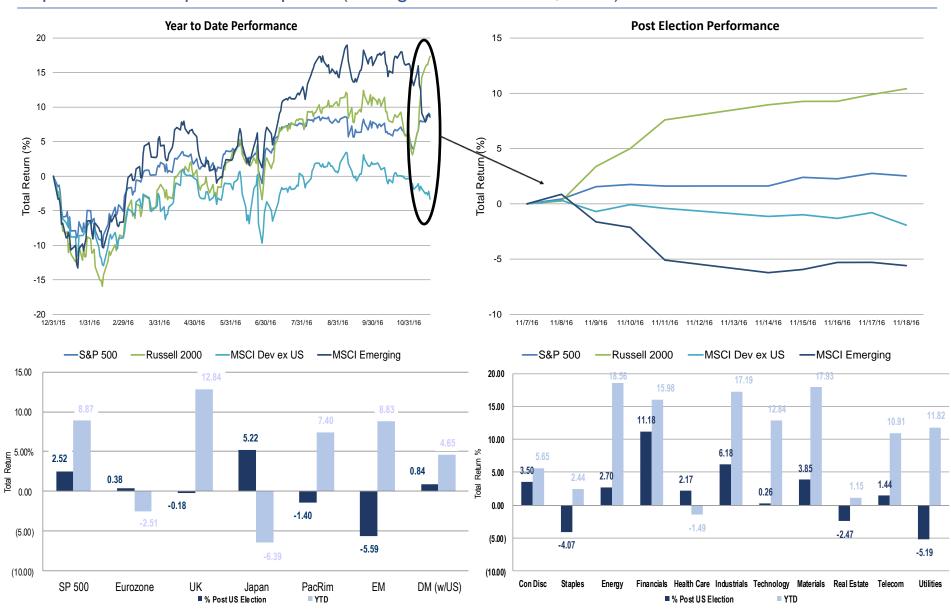
Fiscal Year 2016 U.S. Treasury Yields



	October 31, 2016	MTD %	FYTD %	CYTD %	1 Yr %	3 Yrs %	5 Yrs %	10 Yrs %	
Domestic	S&P 500	(1.82)	1.96	5.87	4.50	8.83	13.56	6.70	1
Equity	Russell 2000	(4.75)	3.86	6.15	4.10	4.12	11.52	5.94	2
International	MSCI EAFE	(2.05)	4.26	(0.35)	(3.23)	(1.31)	4.99	1.22	3
Equity	MSCI EMF	0.24	9.29	16.30	9.27	(2.05)	0.55	3.49	4
	Barclays Agg	(0.76)	(0.31)	4.99	4.37	3.48	2.90	4.64	5
Bond	Barclays HY	0.39	5.96	15.56	10.14	4.55	7.17	7.60	6
	Barclays US Tips	(0.40)	0.56	6.84	5.89	2.08	1.47	4.46	7
Commodity	Bloomberg	(0.52)	(4.44)	8.07	(2.89)	(12.15)	(10.70)	(6.53)	8
Real Estate	Bloomberg REIT	(4.85)	(5.81)	6.73	7.99	10.44	11.76	5.03	9
Hedge Funds	HFRI Composite Index*	2.97	2.34	3.57	2.54	2.44	3.75	3.53	10

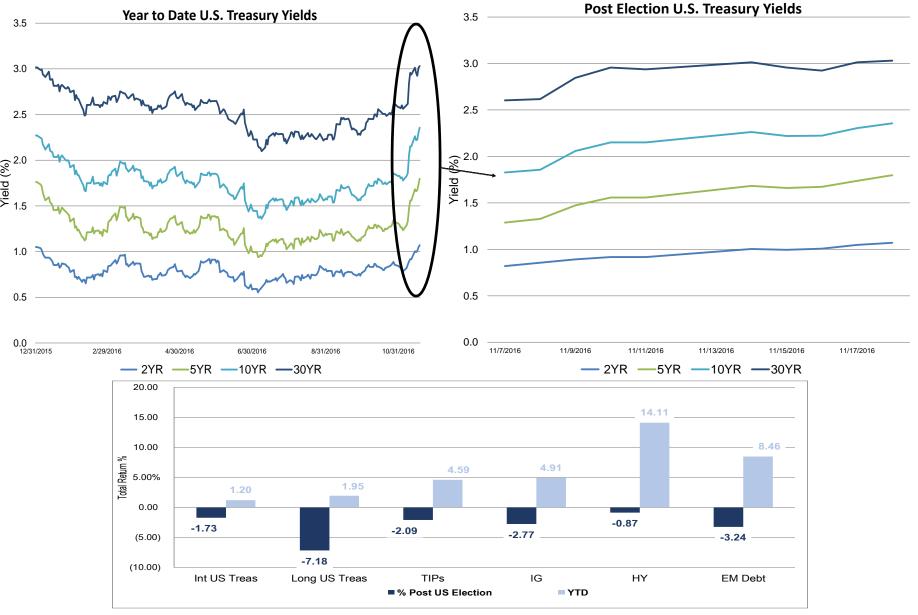
*1-month lag
Source: Bloomberg

Capital Markets Update – Equities (through November 18, 2016)



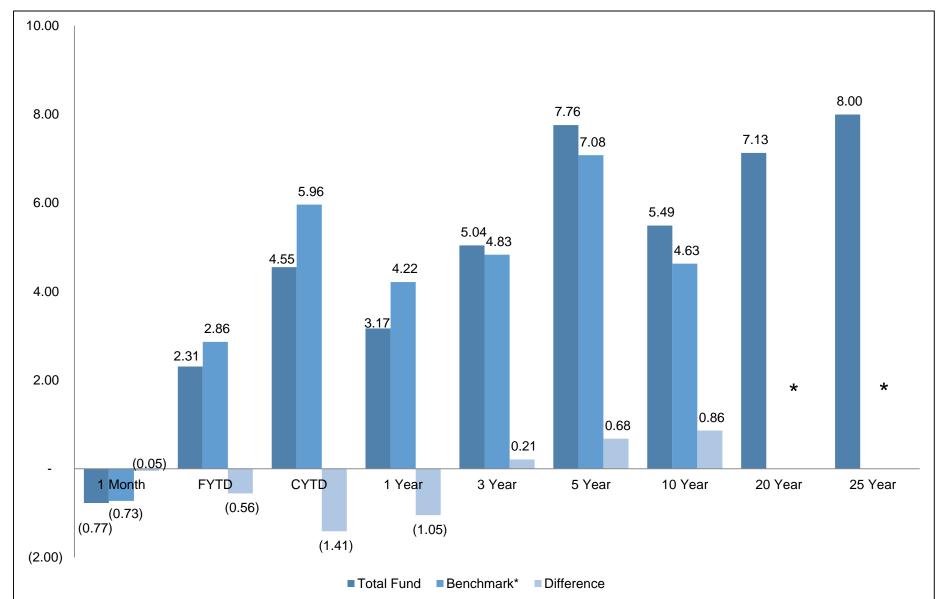
Source: Bloomberg

Capital Markets Update – Fixed Income (through November 18, 2016)



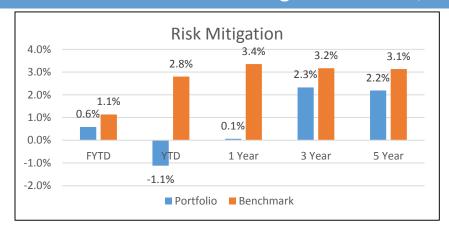
Source: Bloomberg

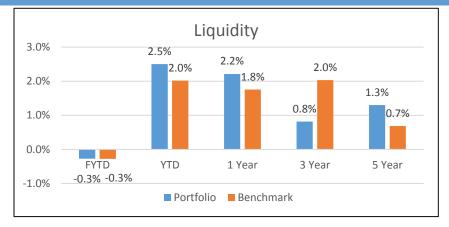
Total Fund⁽¹⁾ Performance for Periods Ended October 31, 2016

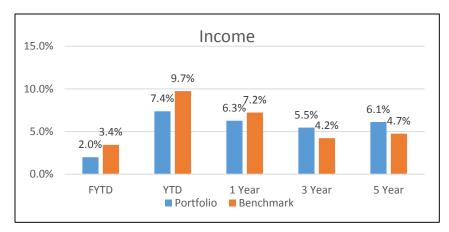


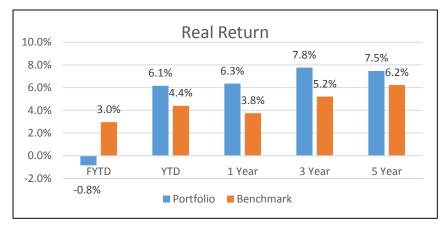
⁽¹⁾ Pension Fund return excludes Police and Fire Mortgage Program; Returns are unaudited

^{*}Benchmark return not available for 20 and 25-Year period



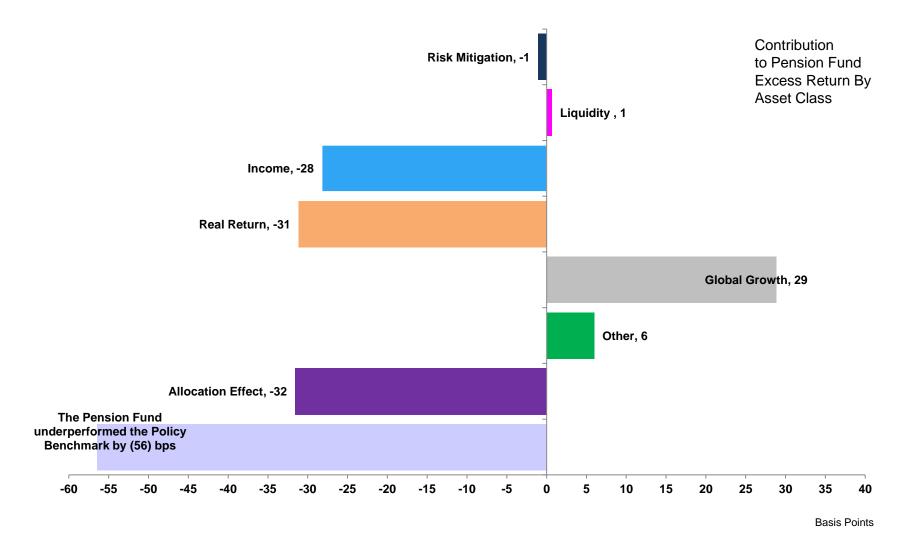








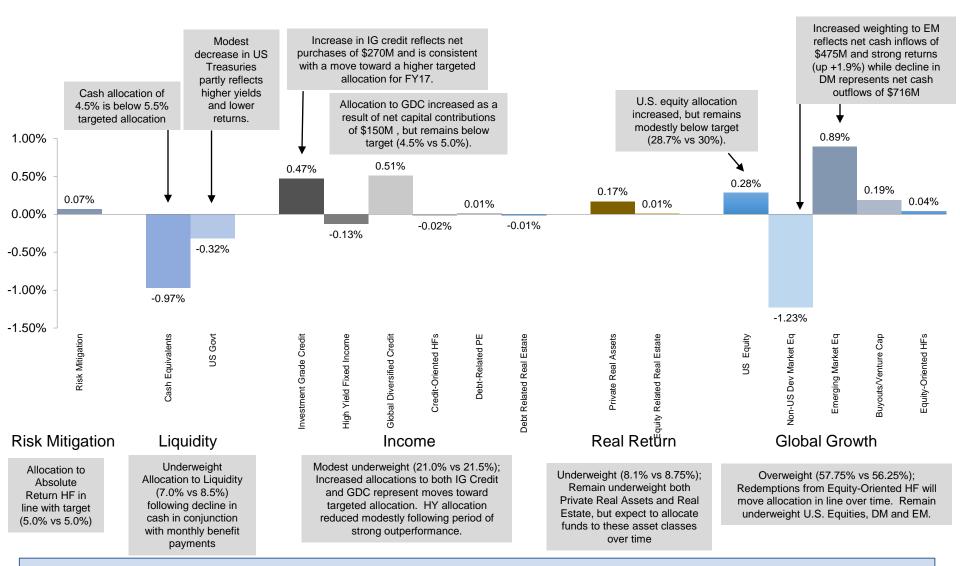
Total Fund Attribution vs. Benchmark FYTD through October 31st, 2016



		ASSET ALLOCATION (1)				PERFORMANCE (for periods ending October 31, 2016) ⁽²⁾							
	As of October 31, 2016			FYTD		Calendar YTD Trailing Twelve Months			Trailing Three Years				
Asset Class	Mkt Value	Actual (%)	Target (%)	Difference	NJ	Bench	NJ	Bench	NJ	Bench	NJ	Bench	Long Term CM/
RISK MITIGATION													
Absolute Return HFs	3.319	4.70%	5.00%	-0.30%	0.59%	1.14%	-1.12%	2.80%	0.07%	3.35%	2.33%	3.17%	4.57%
Risk Mitigation Hedging	211	0.30%	0.00%	0.30%	0.0070				0.0.70	0.0070			
TOTAL RISK MITIGATION	3,529	5.00%	5.00%	0.00%	0.59%	1.14%	-1.12%	2.80%	0.07%	3.35%	2.33%	3.17%	
LIQUIDITY													
Cash Eqv	2.669	3.78%	5.50%	-1.72%	0.37%	0.12%	1.13%	0.27%	1.36%	0.31%	1.04%	0.13%	0.25%
Short Term	530	0.75%	0.00%	0.75%	0.24%	0.12%	0.49%	0.27%	0.52%	0.31%	110 170	011070	0.20,0
TIPS	538	0.76%	0.00%	0.76%	0.51%	-0.68%	5.87%	5.83%	5.05%	4.84%	1.22%	2.71%	1.98%
US Treasuries	1,233	1.74%	3.00%	-1.26%	-2.17%	-1.38%	2.96%	3.92%	2.28%	3.32%	1.66%	3.47%	1.43%
TOTAL LIQUIDITY	4,969	7.03%	8.50%	-1.47%	-0.27%	-0.28%	2.50%	2.02%	2.21%	1.76%	0.82%	2.03%	11.1070
INCOME													
Investment Grade Credit	6.512	9.22%	10.00%	-0.78%	0.12%	0.19%	6.90%	7.74%	5.70%	6.68%	4.70%	4.12%	3.01%
Public High Yield	1,612	2.28%	2.50%	-0.78%	5.33%	5.96%	13.97%	15.56%	9.26%	10.14%	5.01%	4.55%	4.36%
Global Diversified Credit	3,205	4.54%	5.00%	-0.22%	4.68%	5.96%	9.41%	15.56%	9.72%	10.14%	9.22%	4.55%	6.46%
Credit-Oriented HFs	2,383	3.37%	1.00%	2.37%	3.02%	5.32%	5.40%	6.53%	4.65%	5.18%	3.95%	2.02%	8.38%
Debt-Related PE				-1.05%			2.07%				7.83%	7.63%	9.09%
	673	0.95%	2.00%		-0.29%	9.47%		12.47%	1.98%	8.16%			
Debt Related Real Estate TOTAL INCOME	445	0.63%	1.00%	-0.37%	-3.45%	4.05%	-3.51%	3.35%	-2.03%	3.32%	6.01%	8.85%	6.10%
TOTAL INCOME	14,830	20.99%	21.50%	-0.51%	2.00%	3.43%	7.38%	9.74%	6.28%	7.23%	5.47%	4.22%	
REAL RETURN													
Commodities	360	0.51%	0.00%	0.51%	-4.10%	-4.33%	6.94%	8.34%	-0.23%	-2.62%			4.30%
Private Real Assets	1,624	2.30%	2.50%	-0.20%	0.64%	7.16%	2.09%	-4.56%	1.47%	-12.94%			8.74%
Equity Related Real Estate	3,717	5.26%	6.25%	-0.99%	-1.15%	1.91%	7.55%	7.12%	9.10%	10.80%	14.11%	11.97%	8.60%
TOTAL REAL RETURN	5,701	8.07%	8.75%	-0.68%	-0.84%	2.95%	6.15%	4.40%	6.34%	3.75%	7.76%	5.20%	
GLOBAL GROWTH													
US Equity	20,252	28.67%	30.00%	-1.33%	2.82%	1.93%	4.60%	6.21%	2.39%	4.69%	7.36%	8.60%	6.76%
Non-US Dev Market Eq	7,523	10.65%	11.50%	-0.85%	3.69%	4.27%	0.52%	0.98%	-2.43%	-2.35%	-1.02%	-1.36%	7.00%
Emerging Market Eq	4,276	6.05%	6.50%	-0.45%	9.16%	9.32%	18.20%	16.23%	11.41%	9.40%	-1.99%	-1.75%	8.40%
Buyouts/Venture Cap	6,546	9.27%	8.25%	1.02%	1.10%	0.00%	5.88%	0.72%	6.57%	-0.75%	16.72%	9.79%	10.12%
Equity-Oriented HFs	2,206	3.12%	0.00%	3.12%	5.58%	4.80%	-2.37%	3.51%	-0.99%	8.05%	2.54%	4.53%	8.04%
TOTAL GLOBAL GROWTH	40,804	57.75%	56.25%	1.50%	3.43%	3.12%	4.55%	5.32%	2.55%	3.27%	5.45%	5.23%	0.0 170
OTHER													
OPPORTUNISTIC PE	346	0.49%			-0.05%		0.72%		-0.88%				
OTHER	471	0.67%			0.0070		0.7270		0.0070				
TOTAL FUND ⁽³⁾	70,650	100.00%			2.31%	2.86%	4.55%	5.96%	3.17%	4.22%	5.04%	4.83%	
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			D	S&P 500 ussell 2000	1.96% 3.86%		5.87% 6.15%		4.50% 4.10%		8.83% 4.12%		
					_	4.26%		-0.35%					
				MSCI EAFE	_				-3.23%		-1.31%		
				MSCI EMF			16.30% 4.99%		9.27% 4.37%		-2.05% 3.48%		
			В	arclays Agg									
		Barclays HY		Barclays HY	5.96%		15.56%		10.14%		4.55%		
		Bloc	omberg Co	mmodities	-4.44% -5.81%		8.07% 6.73%		-2.89% 7.99%		-12.15% 10.44%		
		5.00		mberg REIT									
			ыоо	_									
				HFRI	2.3	34%	3.5	57%	2.5	4%	2.4	4%	

¹ Current assets are based on preliminary values and do not include receivables of \$299 million primarily related to Real Estate secondary sale ² Unaudited and based on preliminary market values ³ Total Fund Performance excludes Police & Fire Mortgage Program

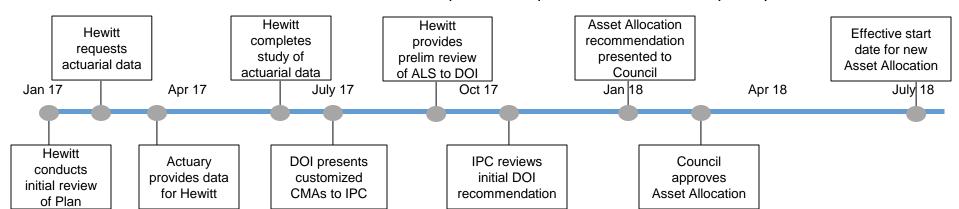
Pension Fund Update: Change in Sector Allocation from September 1, 2016 – October 31, 2016



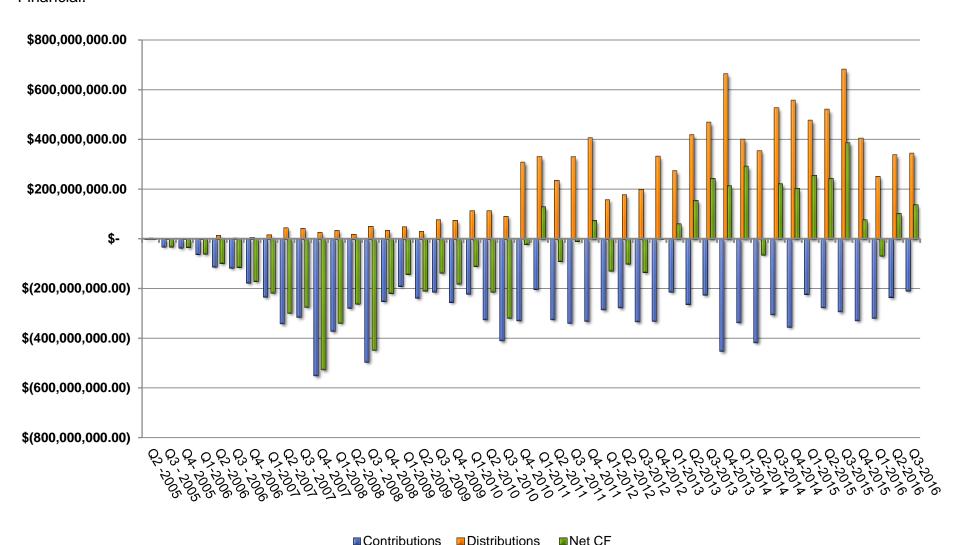
Changes in sector allocations remain modest and reflect adjustments towards targeted asset allocations as well as relative performance of various asset classes

Update on Division Initiatives

- As part of a Governance Documentation Review, the Division is currently evaluating the twelve policy documents that have been adopted by the Council
 - an Investment Policy Statement and proposed changes to existing governing documents are being drafted and reviewed by the internal team
 - upon completion of the entire review process that includes feedback from the Division's outside consultants and the Office of the Attorney General, the Division intends to present its recommendations to the SIC
 - recommendations will aim to update policies for changing circumstances and market conditions, to consolidate documents, and/or to eliminate duplication
- Following Aon Hewitt's review of the asset allocation process to the IPC, the Division has taken steps to adopt the consultant's recommendations in accordance with best practices
 - going forward, the Division intends to conduct a comprehensive asset-liability study every three years and to provide a formal asset allocation review to the Council on an annual basis
 - an asset-liability study provides for an asset allocation that is informed by the liability profile of the Plan
 - a three year cycle allows time for adopted changes to be implemented and better aligns the process for setting long-term investment strategy with the long-term nature of the Plan's obligations
 - the current targeted asset allocation that was approved by the Council in August 2016 will remain in place for FY18 to allow for sufficient time to complete a comprehensive asset-liability study

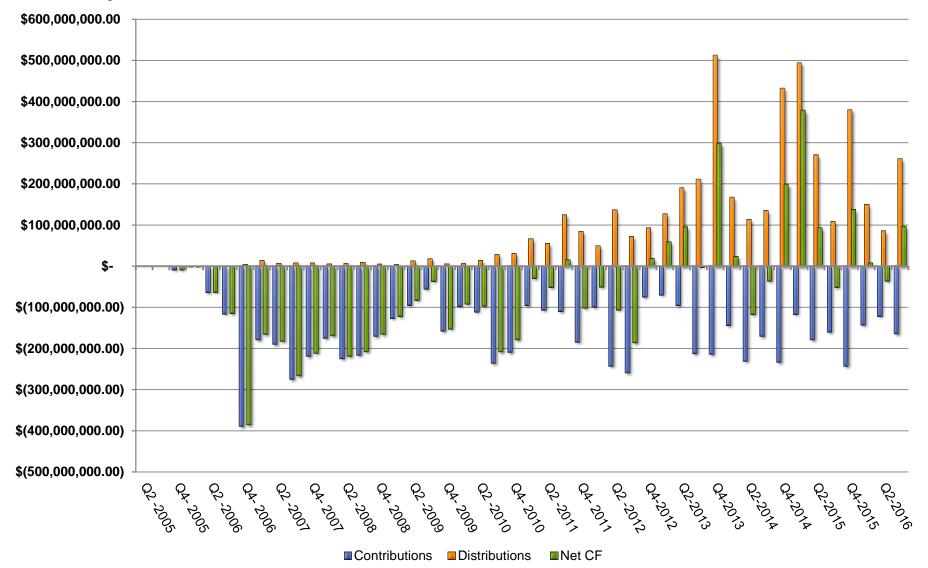


The Private Equity portfolio continues to generate significant distributions as net cash flow in the third quarter of 2016 was positive for the 14th time in the last 16 quarters. Since the beginning of 2013, the portfolio is cash flow positive by \$2.5 billion. During 3Q16 there was a continuation of the trend of slowing capital call activity from funds while distributions picked up relative to the first two quarters of the year. Among the most active funds in terms of distributions were Carlyle VI, Blackstone TOP, and Anacap Financial.



Real Estate Portfolio Cash Flows

During the second quarter the Real Estate portfolio had \$164 million of contributions and \$261 million of distributions. While capital call activity has been fairly consistent over the last several quarters as DOI seeks to grow the overall Real Estate allocation, distributions have been more volatile. For the quarter, TGM and Blackstone Asia were most active in calling capital while the largest distributions came from Northwood IV and Blackstone Asia.



Transfer of General Partner for Real Estate Fund of Funds

The Division entered into a manager relationship with GM Asset Management (GMAM) in 2008

- Two partnerships were structured to target distinct core plus and opportunistic strategies
- Both entities operate as fund of funds, with 7 underlying commingled funds and separate accounts across the two partnerships
- Investment periods ended in 2012 with both partnerships scheduled to terminate in 2018
 - All but one of the underlying investments are currently in or nearing liquidation phase

NJDOI/GMAM Account (as of 09/31/2016)	NJDOI Commitment	NJDOI Contribution	Distributions	NAV	IRR	Multiple	DPI
Core Plus RE Investment	\$ 81,500,000	\$ 70,518,106	\$ 94,019,484	\$ 22,554,068	14.90%	1.65x	1.33
Opp. RE Investment	25,000,000	16,761,212	19,176,348	10,367,398	15.15%	1.76x	1.14
Total	\$ 106,500,000	\$ 87,279,318	\$ 113,195,832	\$ 32,921,466	14.95%	1.67x	1.29

GMAM is exiting third-party management in wake of GM's corporate reorganization

• GMAM notified the Division of its intent to dissolve both partnerships and "put" the underlying positions to the Division

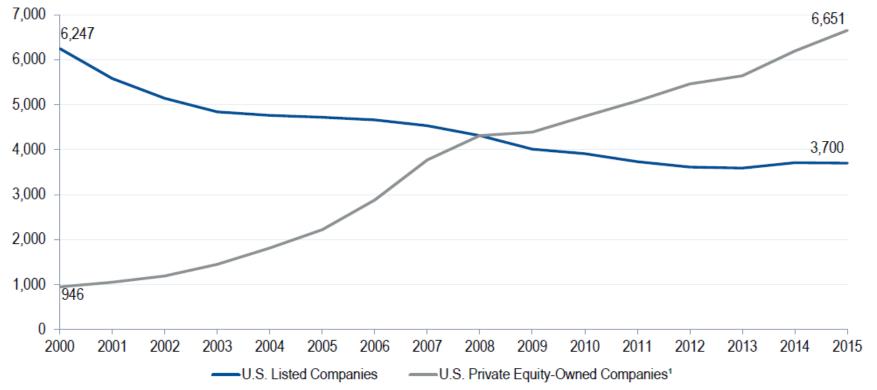
The Division to transfer the GP responsibility to BlackRock

- The Division determined the most efficient solution was to transfer responsibility for the vehicles to BlackRock Private Equity Partners
- The target date for the transfer is the first quarter of 2017
- The Division negotiated a favorable management fee with BlackRock of 45bp, consistent with recent re-up with BlackRock PE program
 - Estimated to reduce management fees by \$232,270 the first year

Purpose of Notification: The Division is notifying the SIC of these transactions under its Modification Procedures.

Shrinking Universe of Publicly Listed U.S. Companies

The number of publicly traded U.S. companies has shrunk dramatically over the past 15 years, caused by a reduction in the pace of new listings combined with a significant number of delistings. Mergers between listed companies has been the primary driver in delistings. At the same time, the number of U.S. companies majority owned by private equity investors has increased by over 700% as acceptance of the asset class has grown among institutional investors.



Source: Neuberger Berman

Source: World Federation of Exchanges, Pitchbook, Bloomberg, NBER, Political Calculations: Doidge, Karolyi and Stulz (1975-2012), Wilshire Associates (2013-2015).

1. Represents all U.S.-based companies that are currently under majority ownership by a private equity sponsor, includes only companies over \$100 million.

The Future?



Proud to be one of America's 8 companies

What's the Difference?



VS.





VS.





VS.

NORDSTROM



VS.





VS





VS.



Private Company Public Company

Private Company Public Company



VS.



B S WHOLESALE CLUB

VS.



(NASDAQ:COST)



VS.

NORDSTROM (NASDAQ:JWN)

J.CREW

VS.



(NYSE:GPS)



VS.



(NYSE:WWE)



VS.



(NYSE:PLNT)

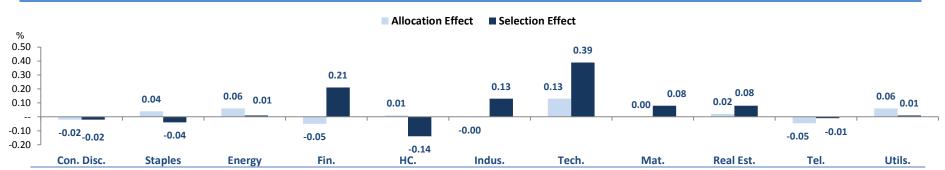
Performance Appendix

U.S. Equity Portfolio – As of October 31st 2016

The 2.82% return for the US equities portfolio outpaced the S&P 1500 return by 89 basis points during the fiscal 2017 year-to-date time period. Equity markets sold off modestly in October on political uncertainty of the U.S. elections, rise in global bond yields to levels above pre-Brexit levels, and the prospect of higher rates as the Fed inched closer to raising rates. The broad equity market hit all-time highs on August 15th following a sharp rally after weakness in late June caused by Brexit-related concerns. Small capitalization stocks faltered with the Russell 2000 Index falling 4.81% in October as valuations became stretched following its return of 32.57% from the February 11 lows through September 30. Also of note was the addition of an eleventh GICS sector, real estate, to the benchmark, which now represents 3.63% of the S&P 1500 benchmark. Among sectors, consumer discretionary and technology were the biggest gainers while telecom services, real estate, healthcare, and utilities were the laggards. Stock selection for the fund was strongest among technology and financial securities. Selection in healthcare lagged the benchmark.

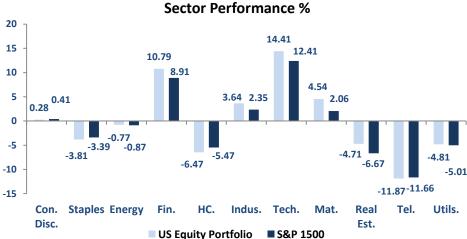
Portfolio Sector Attribution FYTD% - Breakdown of Excess Return:



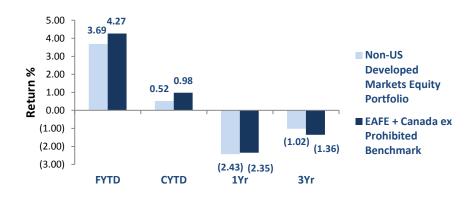


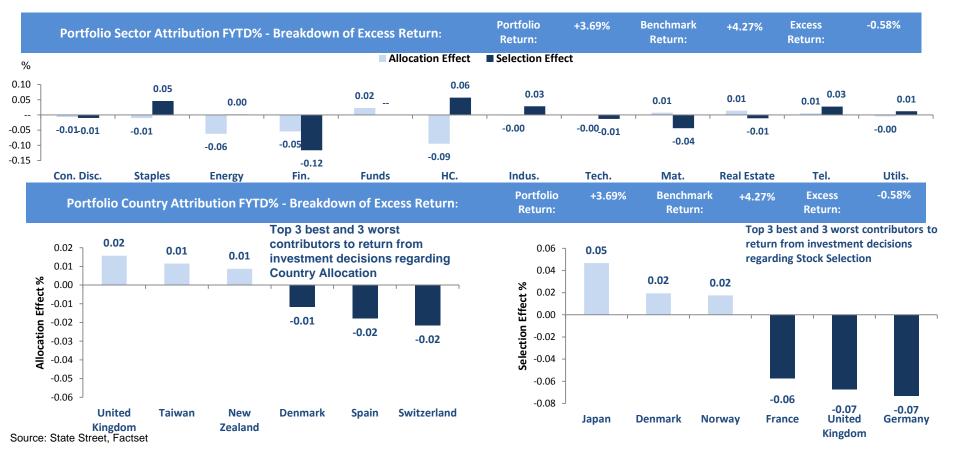


Source: State Street, Factset



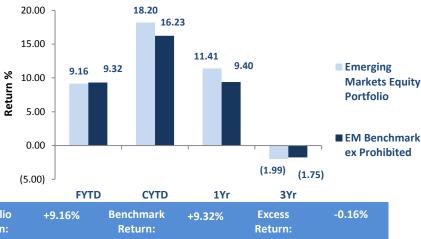
For the fiscal year through October 31st, the Non-US Developed Markets Equity Portfolio returned 3.69% versus the Benchmark return of 4.27%. In July, the MSCI EAFE Index dipped sharply after the Brexit vote, but recovered to advance up by 4.4% at the end of August. In September, the MSCI EAFE Index advanced by 1.2%; however, the index declined by -2.0%. Poor stock selection in France, the United Kingdom, and Germany in the DM portfolio were main drivers of underperformance as was the underweight to and poor stock selection in the Financials sector of the portfolio. Strong stock selection in Japan was positive for performance. In terms of sectors, strong stock selection in Telecommunication Services, Consumer Staples, and Industrials contributed positively to performance, while the overweight to Health Care detracted from performance.





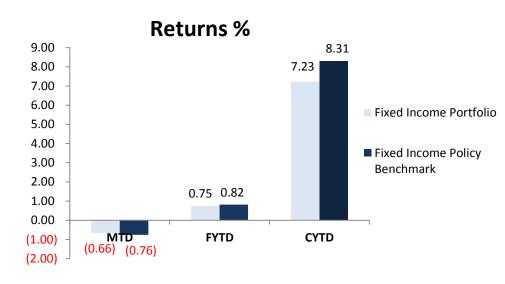
For the fiscal year through October 31st, the Emerging Markets Equity portfolio returned 9.16% versus the Custom Benchmark return of 9.32%. Over the four months starting in July, the MSCI EM Index outperformed the MSCI DM Index by 5%. In September, the index advanced by 1.3% as China benefitted from favorable economic indicators. In October, the index advanced by 0.2% as Chinese equities dipped amid asset bubble and credit growth worries, while Brazil rallied over strong prospects for raw materials exports and optimism over new political leadership. Favorable country and security selection in China, South Africa, and Korea add value. In term of sectors, strong stock selection in Financials, Consumer Staples, and Consumer Discretionary also contributed positively to performance.

Source: State Street,

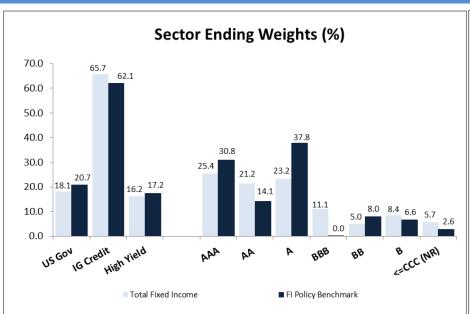


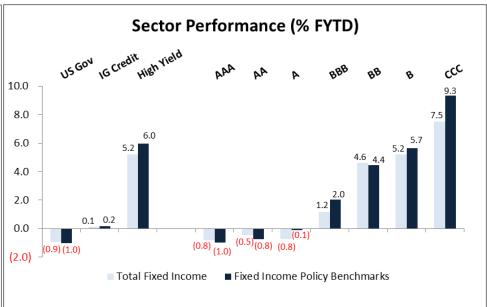


For fiscal year-to-date performance, the US Fixed Income portfolio returned 0.75% versus the benchmark return of 0.82%. The portfolio's commitment to TIPS as TIPS outperformed nominal Treasuries added value, offset by a below benchmark allocation to higher risk securities, both across asset classes and within IG Credit specifically. Through October 31st, the Bloomberg Barclays High Yield Index and BBB-rated securities within the Bloomberg Barclays US Credit Index returned 5.96% and 1.22%, respectively. The portfolio's defensive positioning to these sectors impacted returns as credit spreads tightened, while a moderately short duration profile proved favorable as rates began to rise. Fiscal-year-to-date, TIPS have outperformed nominal Treasuries by approximately 194 basis points.



Portfolio Sector Attribution – Weights and Performance





Source: State Street and FactSet