



# **Dallas Police & Fire Pension System**

## Investment Summary Quarter Ending March 31, 2016

June 9, 2016

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# NEPC Updates

### Highlights of First Quarter Happenings at NEPC

#### **NEPC Research**

#### **Recent White Papers**

- 2016 First Quarter Market Thoughts
- Market Chatter: Is it really All About China? (January 2016)
- Market Chatter: Monetary Policy Divergence and Developed Currency (April 2016)

#### **Upcoming Events**

- 'Opportunities for Future Investments' is the theme for NEPC's 21st Annual Investment Conference – May 10-11, 2016 at the Hynes Convention Center in Boston, MA. Keynote Speakers are:
  - Michael Cembalest, Chairman of Market and Investment Strategy, J.P. Morgan Asset Management
  - > Dr. Dambisa Moyo, Global Economist and Author

Register at www.NEPC.com

#### **NEPC Client Recognitions**

We are excited to announce that three of NEPC's clients were nominated for the 2016 "Chief Investment Officer of the Year" Investor Intelligence Award. The winners will be announced at Institutional Investor's annual Roundtable for Public Funds, taking place April 27-29, 2016 in Los Angeles, CA. We wish them luck!

- Arn Andrews, CIO, City of San Jose Department of Retirement Services
- Ryan Parham, CIO, Arizona Public Safety Personnel Retirement Systems
- Girard Miller, CIO, Orange County Employees Retirement System



#### NEPC Client Recognitions (continued)

A number of NEPC clients were named on TrustedInsight's list of <u>Top 30 Pension Fund Chief</u> <u>Investment Officers</u>. According to the January 2016 issue, "these 30 chief investment officers manage more than \$1.3 trillion in assets for millions of retirees in the United States. These professionals are at the forefront of an industry that's slow to evolve, under constant scrutiny and vital to the wellbeing of many average Americans. Nonetheless, they operate at the top of their field to prudently protect the benefits of their constituency." NEPC clients that made the list include:

- Scott Evans, CIO, New York Employees Retirement System -\$78.5B AUM
- David Villa, CIO, State of Wisconsin Investment Board -\$102B AUM
- Gary Dokes, CIO, Arizona State Retirement System \$31B AUM
- Michael Trotsky, Executive Director, CIO, Massachusetts PRIM Board - \$62B AUM
- Robert Beale, CIO, Louisiana State Employees' Retirement System - \$5.2B AUM
- Richard Shafer, CIO, Ohio Public Employees' Retirement System - \$91.5B AUM
- James Perry, CIO, Dallas Police and Fire Pension System -\$3B AUM
- William Coaker, CIO, San Francisco Employees Retirement System - \$20.3B AUM
- Bob Jacksha, CIO, New Mexico Education Retirement Fund -\$11B AUM
- Girard Miller, CIO, Orange County Employees Retirement System - \$12.1B AUM
- Sam Masoudi, CFA, CAIA, CIO, Wyoming Retirement System \$7.8B AUM



# Executive Summary



## • US economic expansion continues as Federal Reserve begins policy shift

- Economic conditions and health of US consumers remain supportive for growth
- US Corporate earnings quality has deteriorated under pressure from profit margin weakness and a relatively strong dollar

## Central Banks continue to dictate the global investment outlook

- Market expectations of Fed action extremely muted over next 36 months; a surprise Fed rate increase poses risk to both US equities and fixed income
- ECB and BoJ likely to maintain and expand accommodative monetary policies
- Easing in China is broadly stimulative in the near term but currency policy is unpredictable

# • Large currency adjustments across most emerging countries have provided a foundation to support improved capital market returns

- Continued political and economic reform is needed across EM to stimulate economic growth
- Chinese Yuan (RMB) depreciation has been incremental relative to other EM FX adjustments and fears of further adjustment remain a near-term concern

# • Embrace illiquidity in opportunistic credit and private credit strategies

- Stressed credit liquidity magnifies the scale of price movements in traditional credit assets
- Credit markets ability to absorb an exodus from crowded positions is challenged



# General Actions for Clients

- Prospects of low US core bond returns warrant a more positive tilt to US equity, especially following sell-offs
  - Macro policy remains supportive but corporate earnings quality is deteriorating
  - Lower returns expected but pockets of opportunity can be found in US equity and credit

# • Overweight non-US developed market equities

- Central bank support and dollar strength provide a positive economic backdrop
- Small-cap equities offer purest opportunity to benefit from local earnings recovery
- EAFE equity markets offer the potential for strong returns relative to US equities

# • Overweight emerging market small-cap and consumer focused strategies relative to broad equity mandates

- Valuations and long-term fundamentals suggest a strategic overweight
- China uncertainty, dollar pressure and idiosyncratic country risks temper excitement

# • Seek tactical fixed income strategies but preserve duration exposure

- US duration continues to have a role in a diversified and risk-aware portfolio
- TIPS offer an attractive duration profile with inflation expectations at secular lows
- Credit selection is critical as credit cycle matures and spreads contract in recent rally

# • Private market opportunities are the preferred access point as energy market distress continues to evolve

- Return opportunities of private strategies are compelling but suggest patience



# Index Performance Summary as of 3/31/2016

	2009	2010	2011	2012	2013	2014	2015	JAN	FEB	MAR	YTD
Barclays US Strips 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	6.9%	4.6%	-0.3%	11.4%
JPM GBI-EM Global Diversified	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	0.4%	1.4%	9.1%	11.0%
Barclays US Govt/Credit Long	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	2.1%	2.2%	2.8%	7.3%
Citi WGBI	2.6%	5.2%	6.4%	1.7%	-4.0%	-0.5%	-3.6%	1.4%	2.9%	2.7%	7.1%
Barclays US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	0.3%	1.7%	4.8%	6.8%
FTSE NAREIT Equity REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	-3.4%	-0.4%	10.1%	6.0%
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	-6.5%	-0.2%	13.2%	5.7%
JPM EMBI Global Diversified	29.8%	12.2%	7.4%	17.4%	-5.3%	7.4%	1.2%	-0.2%	1.9%	3.3%	5.0%
Barclays US Corporate HY	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	-1.6%	0.6%	4.4%	3.4%
Barclays US Agg Bond	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.6%	1.4%	0.7%	0.9%	3.0%
Barclays US Agg Interm	6.5%	6.2%	6.0%	3.6%	-1.0%	4.1%	1.2%	1.3%	0.5%	0.6%	2.3%
Barclays Municipal	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	1.2%	0.2%	0.3%	1.7%
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	-5.0%	-0.1%	6.8%	1.4%
Credit Suisse Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	-0.7%	-0.6%	2.6%	1.3%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	-5.4%	0.0%	7.0%	1.2%
Barclays US Govt/Credit 1-3 Yr	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	0.5%	0.1%	0.4%	1.0%
Bloomberg Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	-1.7%	-1.6%	3.8%	0.4%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	-8.0%	0.7%	8.3%	0.4%
MSCI ACWI	34.6%	12.7%	-7.4%	16.1%	22.8%	4.2%	-2.4%	-6.0%	-0.7%	7.4%	0.2%
Russell 2000	27.2%	26.9%	-4.2%	16.4%	38.8%	4.9%	-4.4%	-8.8%	0.0%	8.0%	-1.5%
Credit Suisse Hedge Fund	18.6%	11.0%	-2.5%	7.7%	9.7%	4.1%	-0.7%	-1.4%	-1.1%	N/A	-2.5%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	-7.2%	-1.8%	6.5%	-3.0%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	-11.1%	-0.5%	8.3%	-4.2%
									So	urce: Mornin	igstar Direc



# Returns for Key Indices Ranked in Order of Performance

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
MSCI EMERGING MARKETS 34.54	MSCI EMERGING MARKETS 32.17	MSCI EMERGING MARKETS 39.39	BC AGGREGATE 5.24	MSCI EMERGING MARKETS 78.51	RUSSELL 2000 GROWTH 29.09	BC AGGREGATE 7.84	MSCI EMERGING MARKETS 18.22	RUSSELL 2000 GROWTH 43.30	S&P 500 13.69	RUSSELL 1000 GROWTH 5.67
MSCI EAFE 13.54	MSCI EAFE 26.34	RUSSELL 1000 GROWTH 11.81	RUSSELL 2000 VALUE -28.92	RUSSELL 1000 GROWTH 37.21	RUSSELL 2000 26.85	RUSSELL 1000 GROWTH 2.64	RUSSELL 2000 VALUE 18.05	RUSSELL 2000 38.82	RUSSELL 1000 VALUE 13.45	S&P 500 1.38
RUSSELL 1000 VALUE 7.05	RUSSELL 1000 VALUE 22.25	MSCI EAFE 11.17	RUSSELL 2000 -33.79	RUSSELL 2000 GROWTH 34.47	RUSSELL 2000 VALUE 24.5	S&P 500 2.11	RUSSELL 1000 VALUE 17.51	RUSSELL 2000 VALUE 34.52	RUSSELL 1000 13.24	RUSSELL 1000 0.92
RUSSELL 1000 6.27	RUSSELL 2000 VALUE 23.48	RUSSELL 2000 GROWTH 7.06	RUSSELL 1000 VALUE -36.85	MSCI EAFE 31.78	MSCI EMERGING MARKETS 18.88	RUSSELL 1000 1.50	MSCI EAFE 17.32	RUSSELL 1000 GROWTH 33.48	RUSSELL 1000 GROWTH 13.05	BC AGGREGATE 0.55
RUSSELL 1000 GROWTH 5.26	RUSSELL 2000 18.37	BC AGGREGATE 6.97	S&P 500 -37.0	RUSSELL 1000 28.43	RUSSELL 1000 GROWTH 16.71	RUSSELL 1000 VALUE 0.39	RUSSELL 1000 16.42	RUSSELL 1000 33.11	BC AGGREGATE 5.97	MSCI EAFE -0.81
S&P 500 4.91	S&P 500 15.8	RUSSELL 1000 5.77	RUSSELL 1000 -37.6	RUSSELL 2000 27.16	RUSSELL 1000 16.10	RUSSELL 2000 GROWTH -2.91	RUSSELL 2000 16.35	RUSSELL 1000 VALUE 32.53	RUSSELL 2000 GROWTH 5.60	RUSSELL 2000 GROWTH -1.38
RUSSELL 2000 VALUE 4.71	RUSSELL 1000 15.46	S&P 500 5.49	RUSSELL 1000 GROWTH -38.44	S&P 500 26.46	RUSSELL 1000 VALUE 15.51	RUSSELL 2000 -4.18	S&P 500 16.00	S&P 500 32.39	RUSSELL 2000 4.89	RUSSELL 1000 VALUE -3.83
RUSSELL 2000 4.55	RUSSELL 2000 GROWTH 13.35	RUSSELL 1000 VALUE -0.17	RUSSELL 2000 GROWTH -38.54	RUSSELL 2000 VALUE 20.58	S&P 500 15.06	RUSSELL 2000 VALUE -5.50	RUSSELL 1000 GROWTH 15.26	MSCI EAFE 22.78	RUSSELL 2000 VALUE 4.22	RUSSELL 2000 -4.41
RUSSELL 2000 GROWTH 4.15	RUSSELL 1000 GROWTH 9.07	RUSSELL 2000 -1.56	MSCI EAFE -43.38	RUSSELL 1000 VALUE 19.69	MSCI EAFE 7.75	MSCI EAFE -12.14	RUSSELL 2000 GROWTH 14.59	BC AGGREGATE -2.02	MSCI EMERGING MARKETS -2.19	RUSSELL 2000 VALUE -7.46
BC AGGREGATE 2.43	BC AGGREGATE 4.33	RUSSELL 2000 VALUE -9.78	MSCI EMERGING MARKETS -53.33	BC AGGREGATE 5.93	BC AGGREGATE 6.54	MSCI EMERGING MARKETS -18.42	BC AGGREGATE 4.21	MSCI EMERGING MARKETS -2.60	MSCI EAFE -4.90	MSCI EMERGING MARKETS -14.93

QTD	1 Year	3 year	5 Year	10 Year
MSCI EMERGING MARKETS 5.71	RUSSELL 1000 GROWTH 2.52	RUSSELL 1000 GROWTH 13.61	RUSSELL 1000 GROWTH 12.38	RUSSELL 1000 GROWTH 8.28
BC AGGREGATE 3.03	BC AGGREGATE 1.96	S&P 500 11.82	S&P 500 11.58	RUSSELL 1000 7.06
RUSSELL 2000 VALUE 1.70	S&P 500 1.78	RUSSELL 1000 11.52	RUSSELL 1000 11.35	S&P 500 7.01
RUSSELL 1000 VALUE 1.64	RUSSELL 1000 0.50	RUSSELL 1000 VALUE 9.38	RUSSELL 1000 VALUE 10.25	RUSSELL 2000 GROWTH 6.00
S&P 500 1.35	RUSSELL 1000 VALUE -1.54	RUSSELL 2000 GROWTH 7.91	RUSSELL 2000 GROWTH 7.70	RUSSELL 1000 VALUE 5.72
RUSSELL 1000 1.17	RUSSELL 2000 VALUE -7.72	RUSSELL 2000 6.84	RUSSELL 2000 7.20	RUSSELL 2000 5.26
RUSSELL 1000 GROWTH 0.74	MSCI EAFE -8.27	RUSSELL 2000 VALUE 5.73	RUSSELL 2000 VALUE 6.67	BC AGGREGATE 4.90
RUSSELL 2000 -1.52	RUSSELL 2000 -9.76	BC AGGREGATE 2.50	BC AGGREGATE 3.78	RUSSELL 2000 VALUE 4.42
MSCI EAFE -3.01	RUSSELL 2000 GROWTH -11.85	00 MSCI EAFE MSCI EAFE 2.23		MSCI EMERGING MARKETS 3.02
RUSSELL 2000 GROWTH -4.68	MSCI EMERGING MARKETS -12.03	MSCI EMERGING MARKETS -4.50	MSCI EMERGING MARKETS -4.13	MSCI EAFE 1.80



# **Executive Summary**

## Plan Assets and Allocation

- As of March 31, 2016, DPFP's assets totaled \$2.71 billion, a decrease of approximately \$66.4 million during the quarter.
  - Net cash outflows of \$73.5 million during the quarter
  - Net investment gains of \$6.93 million during the quarter

#### • Performance

- DPFP posted a 0.2% return during the quarter, ranking in the 86<sup>th</sup> percentile of public funds.
  - 1-year annualized returns through March 31, 2016, were -6.6%, ranking in the 99<sup>th</sup> percentile.
  - 3-year annualized returns through March 31, 2016, were -2.4%, ranking in the 99<sup>th</sup> percentile.
  - 5-year annualized returns through March 31, 2016, were 0.4%, ranking in the 99<sup>th</sup> percentile.
  - 10-year annualized returns through March 31, 2016, were 2.0%, ranking in the 99<sup>th</sup> percentile.

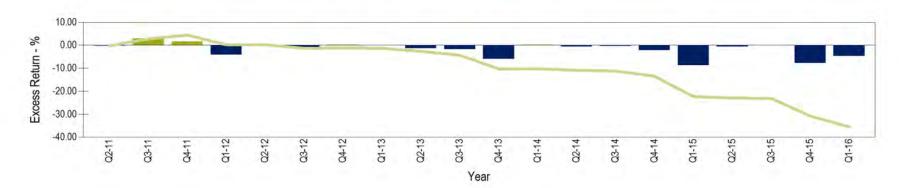


#### Dallas Police & Fire Pension

# Total Fund Performance Summary

	Market Value	3 Mo	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	7 Yrs	Rank	10 Yrs	Rank
DPFP	\$2,654,819,256	-1.7%	99	-8.5%	99	-3.1%	99	0.0%	99	4.4%	99	1.8%	99
Allocation Index		3.0%	1	4.5%	1	8.6%	1	7.3%	8	9.9%	50	5.3%	40
Policy Index		2.4%	2	5.4%	1	7.8%	1	7.4%	7	11.3%	17	6.1%	5
InvestorForce Public DB Net Median		1.2%		-1.5%		5.4%		5.8%		9.8%		5.1%	

**Quarterly and Cumulative Excess Performance** 



Actual vs Target Allocation (%)



Returns are net of fees



# Total Fund Perfromance Detail

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	7 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
DPFP	2,654,819,256	100.0	-1.7	99	-8.5	99	-3.1	99	0.0	99	4.4	99	1.8	99	6.1	Jun-96
Allocation Index			3.0	1	4.5	1	8.6	1	7.3	8	9.9	50	5.3	40	7.2	Jun-96
Policy Index			2.4	2	5.4	1	7.8	1	7.4	7	11.3	17	6.1	5		Jun-96
InvestorForce Public DB Net Median			1.2		-1.5		5.4		5.8		9.8		5.1		6.6	Jun-96
DPFP Ex Debt	2,858,270,769	107.7	-1.7	99	-8.1	99	-2.9	99	0.1	99	4.5	99	1.8	99	6.1	Jun-96
Allocation Index Ex Debt			2.8	1	4.3	1	8.6	1	7.2	9	9.8	50	5.3	40	7.1	Jun-96
DPFP Financial Composite	1,665,653,983	62.7	0.4	84	-6.5	99	2.2	99	3.7	96	11.0	24	4.3	84	4.9	Oct-05
InvestorForce Public DB Net Median			1.2		-1.5		5.4		5.8		9.8		5.1		5.4	Oct-05
Global Equity	443,478,737	16.7	-0.9	61	-5.6	65	6.0	61	5.7	65	13.2	55	4.2	62	4.5	Jul-06
MSCI ACWI Gross			0.4	44	-3.8	52	6.1	60	5.8	63	13.2	56	4.6	52	4.8	Jul-06
eA All Global Equity Net Median			-0.2		-3.7		6.7		6.7		13.5		4.7		4.9	Jul-06
Private Equity	380,843,309	14.3	-4.2		-2.8		-9.2		-2.2		0.3		1.1		2.0	Oct-05
Russell 3000 + 3%			1.7		2.7		14.5		14.3		20.6		10.1		10.5	Oct-05
Global Bonds	134,223,263	5.1	7.2		2.4		0.8		2.7						2.9	Dec-10
Barclays Global Aggregate			5.9		4.6		0.9		1.8		3.7		4.3		2.0	Dec-10
Hlgh Yield	157,023,336	5.9	2.9		-10.3		-1.2		3.2						4.3	Dec-10
Barclays Global High Yield			4.1		0.6		2.4		5.1		12.8		7.4		5.7	Dec-10
Bank Loans	50,529,116	1.9	0.6		-3.4											Dec-10
S&P/LSTA Leveraged Loan Index			1.5		-1.3		1.9		3.2		9.0		4.3		3.5	Dec-10
Private Credit	86,262,132	3.2	2.4												2.4	Jan-16
Barclays Global High Yield +2%			4.6												4.6	Jan-16
Total Asset Allocation	354,455,179	13.4	2.0	38	-6.9	99	1.0	96	3.8	86	6.9	92			2.8	Jul-07
Total Asset Allocation Policy Index			2.0	39												Jul-07
eA Global Balanced Net Median			1.4		-1.7		4.2		5.7		10.1		4.8		3.8	Jul-07
Natural Resources	285,859,684	10.8	0.2		4.4		7.4		6.1						4.4	Apr-15
Natural Resources Benchmark			9.1		15.6		13.9		9.8						15.6	Apr-15
Global Infrastructure Composite	204,521,625	7.7	-2.3		-5.1		0.2								1.4	Jul-12
Global Infrastructure Benchmark			8.7		13.7		8.4								8.1	Jul-12
Real Estate Composite	644,657,934	24.3	-7.3		-18.8		-14.4		-9.5		-7.9		-4.1		3.6	Mar-85
NCREIF Property Index			2.2		11.8		11.9		11.9		9.1		7.6		8.1	Mar-85
Cash Equivalents	57,577,543	2.2	0.7		1.4		2.3								1.4	Apr-15
91 Day T-Bills			0.1		0.1		0.1		0.1		0.1		1.0		0.1	Apr-15

Returns shown on report are time weighted.

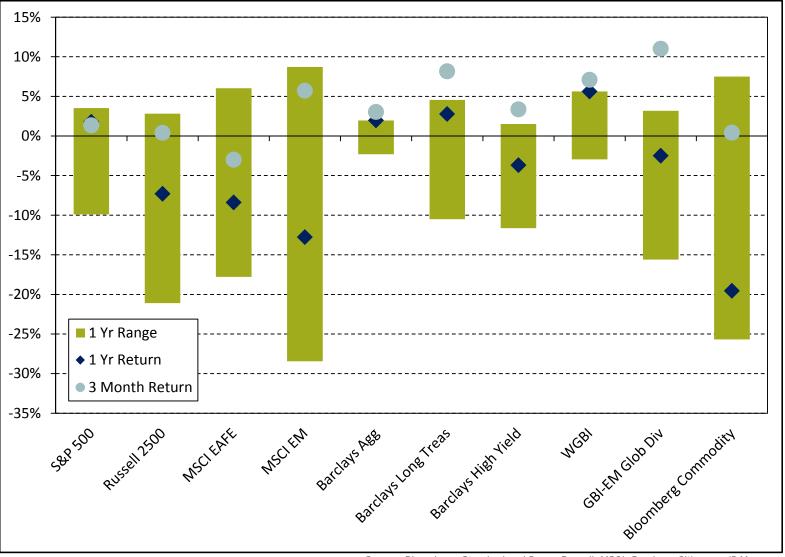
Financial Composite date is 10/1/2005 and excludes all funds that are lagged.



# Q1 2016 Market Update



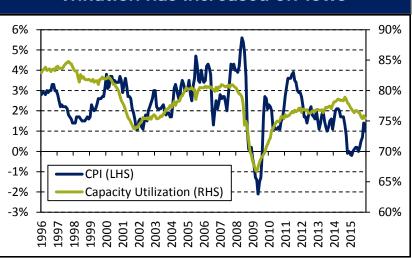
# Broad Market Performance Summary as of 3/31/2016



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



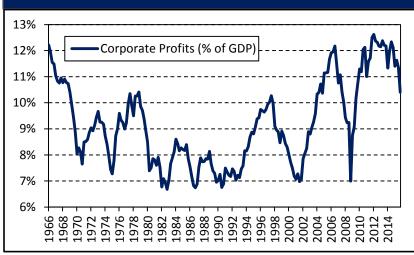
# US Economic Indicators



Inflation has increased off lows

Source: Bloomberg, Federal Reserve, Bureau of Labor Statistics

### Corporate profits lower off secular highs



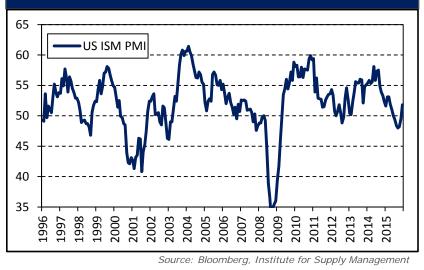
Source: Bloomberg, Bureau of Economic Analysis

# Unemployment steadily improving



Source: Bloomberg, Bureau of Labor Statistics

## Manufacturing trending higher after dip

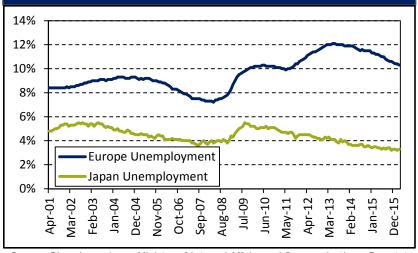




# International Economic Indicators

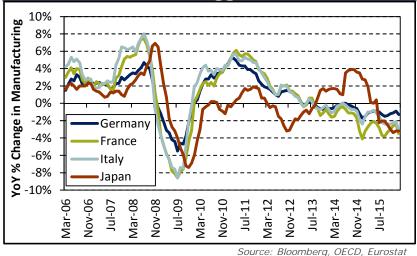


#### Europe employment recovery lagging

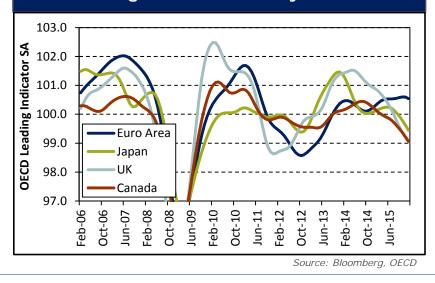


#### Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurosta

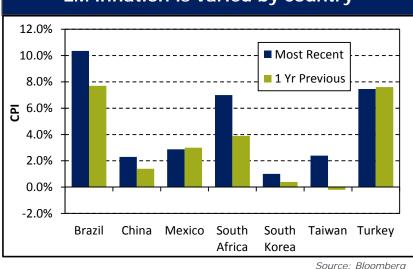




#### Leading indicators mostly neutral



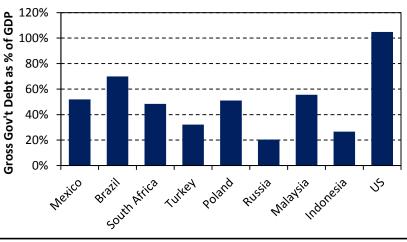
# Emerging Market Economic Indicators



Marginal improvement in account balance

#### EM inflation is varied by country

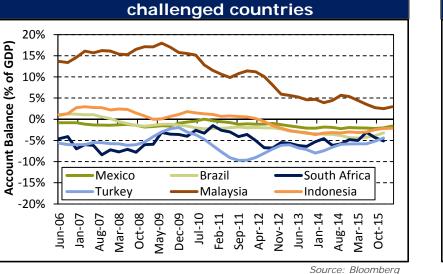


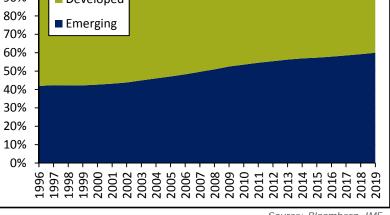


Source: Bloomberg, IMF



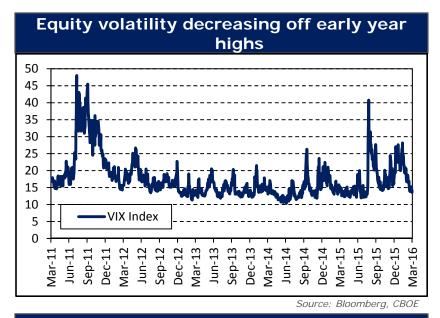






Source: Bloomberg, IMF

# Volatility

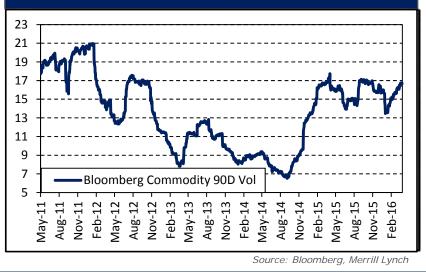




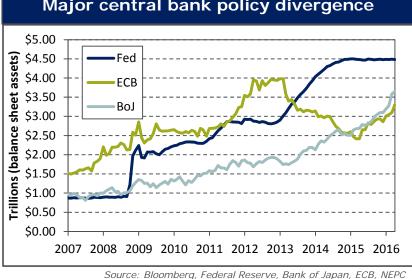
Source: Bloomberg, Deutsche Bank



## Commodity pricing volatility has increased



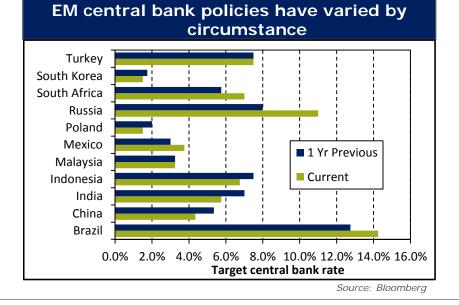
# **Central Banks**



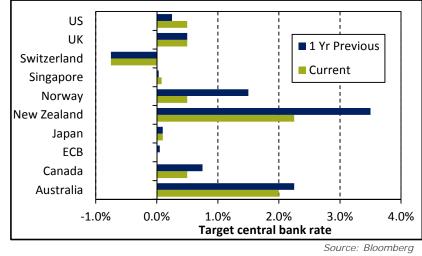
Major central bank policy divergence

Fed's ideal rate of policy firming above market expectations 4.5% 4.0% 3.5% 3.0% 2.5% 2.0% 1.5% • FOMC Participants 1.0% FOMC Median 0.5% Fed Funds Futures 0.0% -0.5% 2016 2017 2018 Long Term

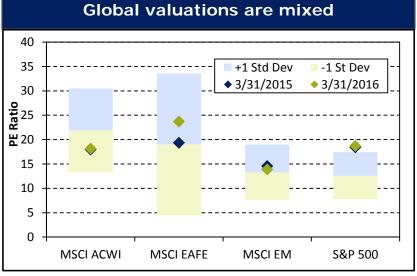
Source: Bloomberg, Federal Reserve, NEPC



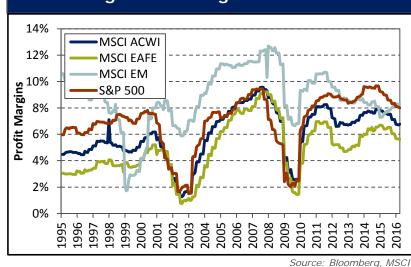
#### Many developed central banks have maintained low interest rates



# Global Equity

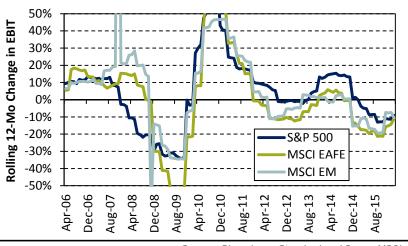


Source: Bloomberg, Standard and Poors, MSCI \*MSCI EAFE is ex UK Telecom



#### Margins declining outside of EM

#### Earnings growth trending lower



Source: Bloomberg, Standard and Poors, MSCI



## Global equity returns have been negative over one year



# **US Equity**

35

30

25

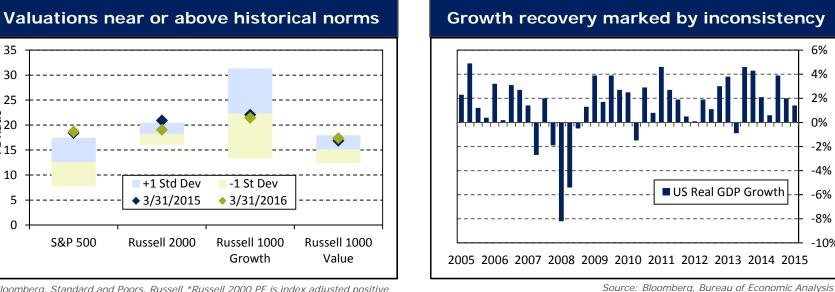
**DE Ratio** 15

10

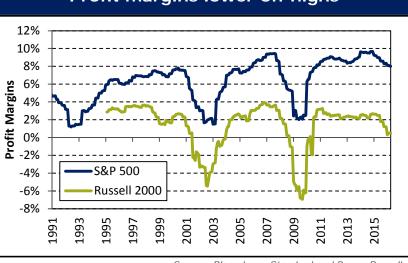
5

0

S&P 500



Source: Bloomberg, Standard and Poors, Russell \*Russell 2000 PE is index adjusted positive



#### Profit margins lower off highs

Source: Bloomberg, Standard and Poors, Russell

Source: Bloomberg, Standard and Poors, Russell



6% 4%

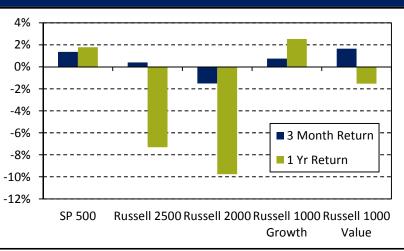
2%

0% -2% -4%

-6%

-8%

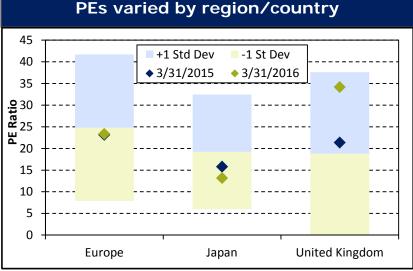
-10%



Trailing performance has been mixed

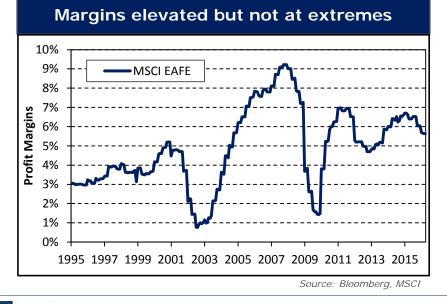
## Growth recovery marked by inconsistency

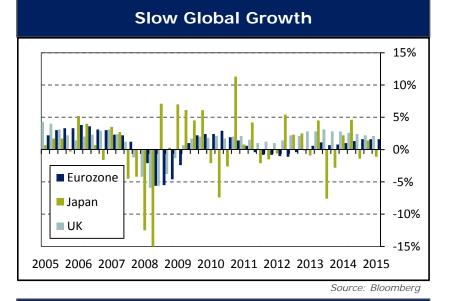
# International Equity



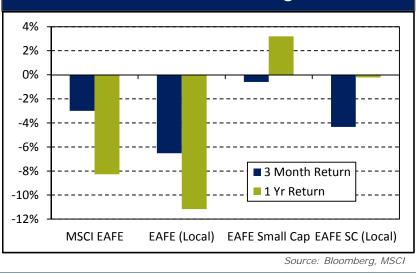
# PEs varied by region/country

Source: Bloomberg, MSCI, FTSE \*UK represented by FTSE 100 Index



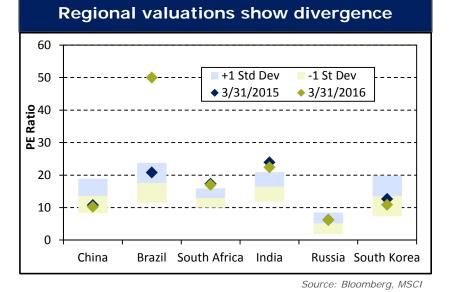


#### **Returns near flat or negative**

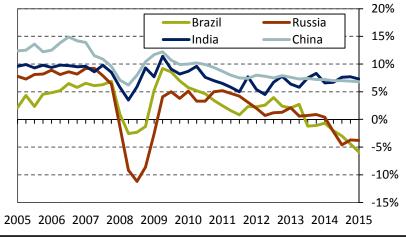




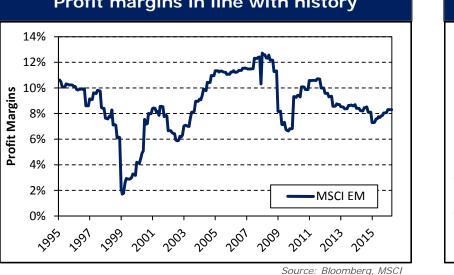
# Emerging Markets Equity



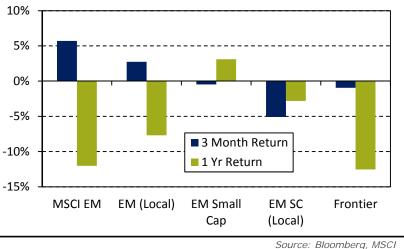
#### Slowing growth in major economies



Source: Bloomberg

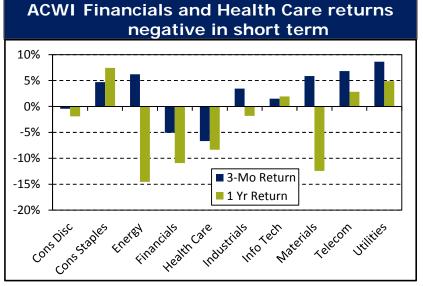


## Recent rally in EM but one year returns mostly negative

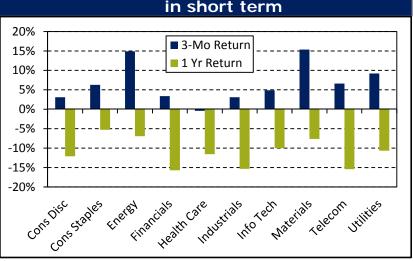


#### Profit margins in line with history

# Global Equity by Sector

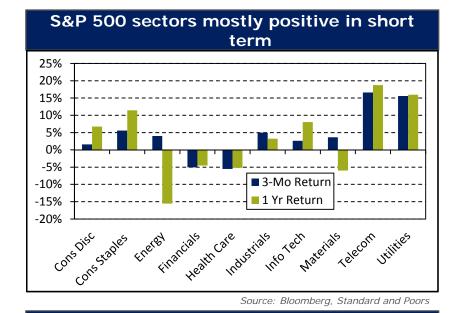


Source: Bloomberg, MSCI

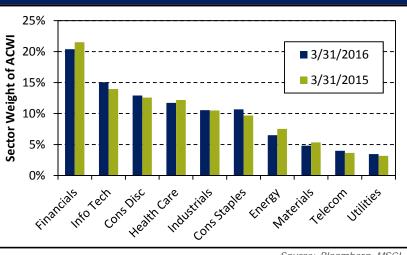




Source: Bloomberg, MSCI



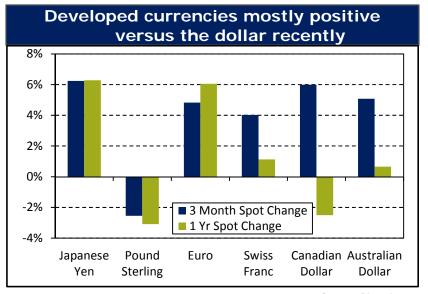
Global energy sector weight has fallen



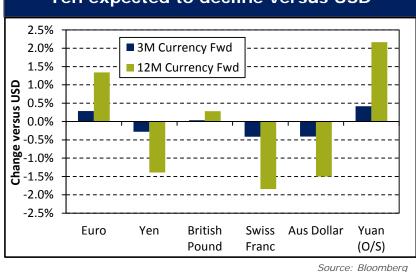
Source: Bloomberg, MSCI

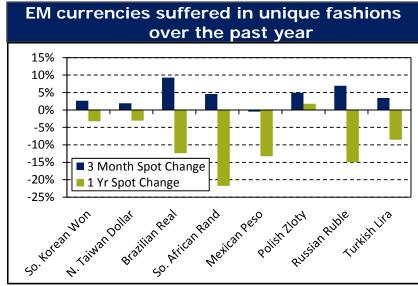


# Currencies

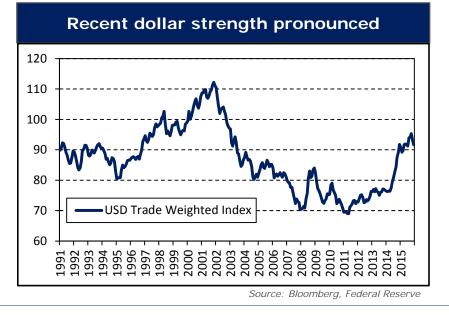


Source: Bloomberg





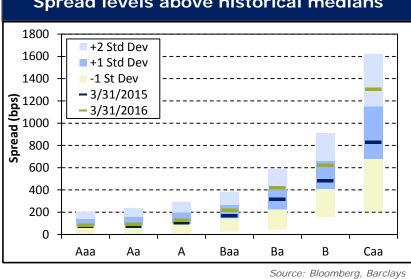
Source: Bloombera





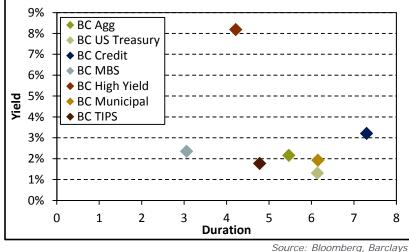
#### Yen expected to decline versus USD

# US Fixed Income

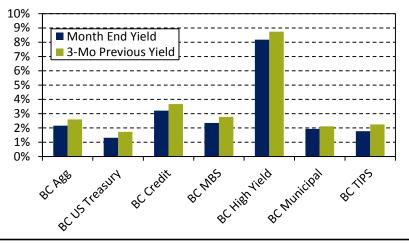


#### Spread levels above historical medians

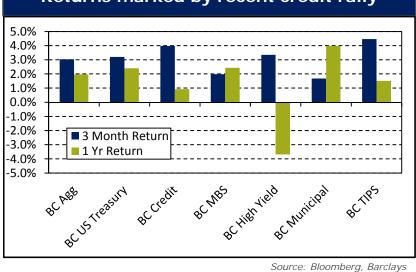




#### Yields have mostly declined

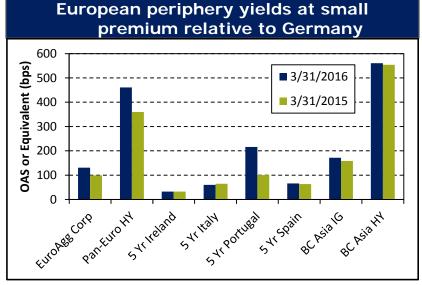


Source: Bloomberg, Barclays

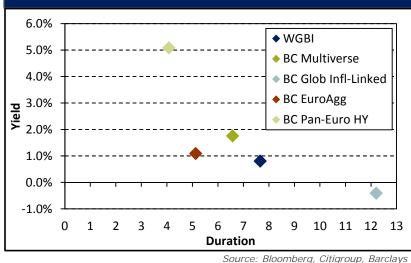


## Returns marked by recent credit rally

# International Developed Fixed Income

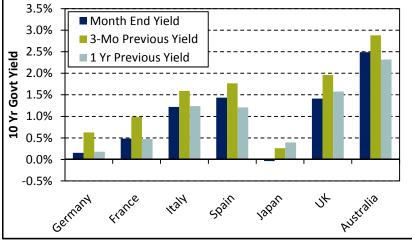


Source: Barclays, Bloomberg, \*European periphery spreads are over equivalent German Bund

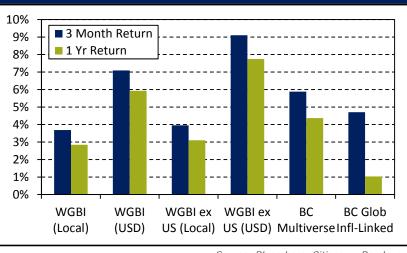


#### Low global yields relative to duration

## Global yields are at or near historic lows



Source: Bloomberg

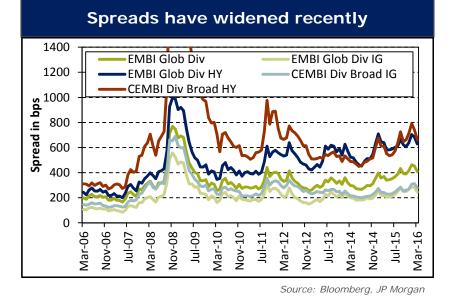


#### Global bonds positive in USD terms

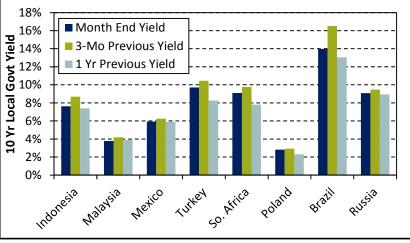
Source: Bloomberg, Citigroup, Barclays



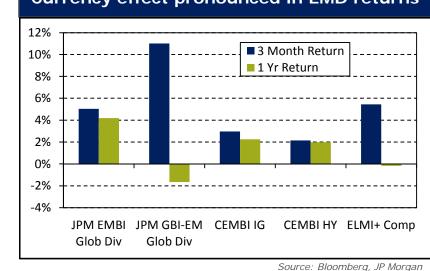
# Emerging Markets Fixed Income



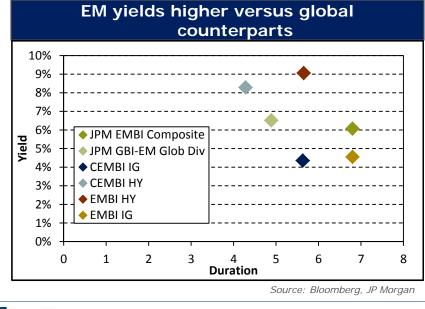
# Emerging market bond yield changes have varied directionally



Source: Bloomberg

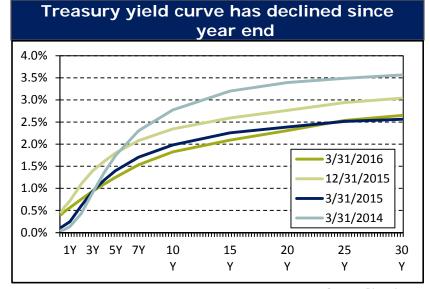


#### **Currency effect pronounced in EMD returns**

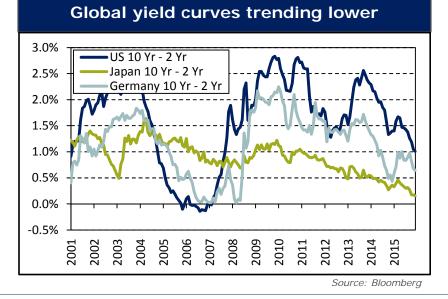


# NE NEPC, LLC

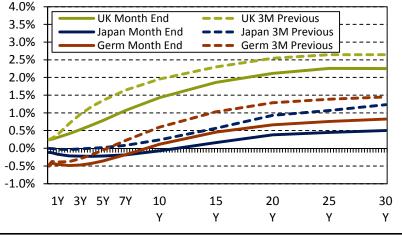
# Rates



Source: Bloomberg

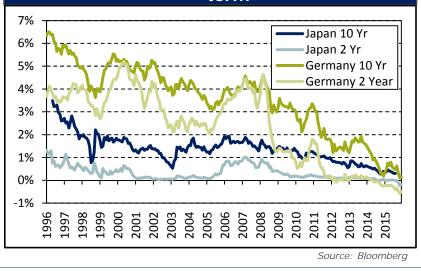


# Global yield curves have shifted downwards



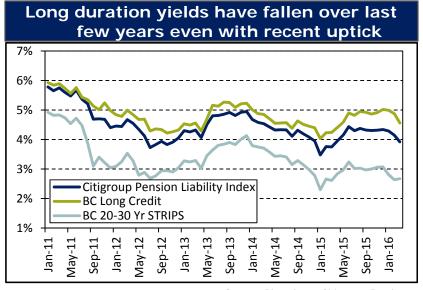
Source: Bloomberg

Global yields have trended lower over long term

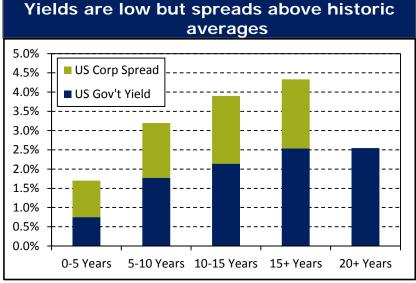




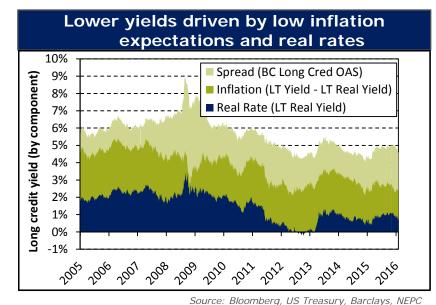
# Long Rates and Liability



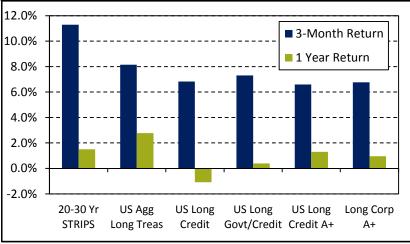
Source: Bloomberg, Citigroup, Barclays



Source: Bloomberg, BofA Merrill Lynch, Barclays \*No index for 20+ year corporate



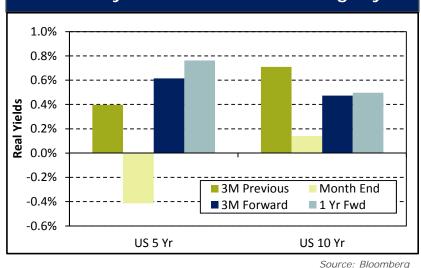
#### **Returns recently positive**



Source: Bloomberg, Barclays

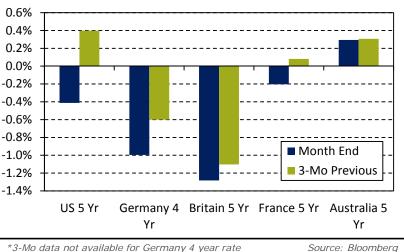


# Inflation and Real Rates



#### US real yields have decreased slightly

Global real yields mostly negative



recent uptick

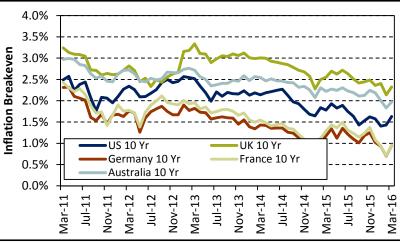
**Global inflation expectations have seen** 

Source: Bloombera



### US inflation expectations very low

Source: Bloomberg



Source: Bloomberg



# Inflation Sensitive Growth Assets

Alerian MLP

NAREIT US

2007

2006

2008

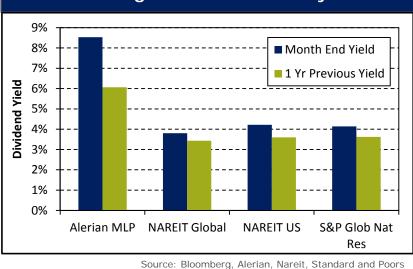
2009

2020

2011

NAREIT Global

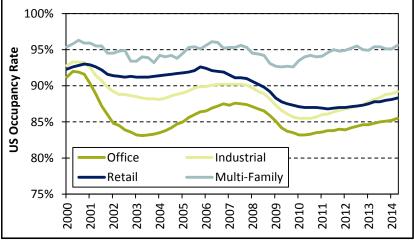
S&P Glob Nat Res



PE Ratios near or above averages

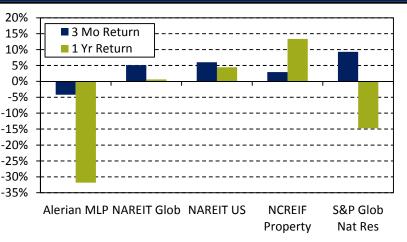
#### Yields higher relative to last year

Gradual recovery in occupancy rates



Source: Bloomberg, CB Richard Ellis

# Recent MLP selloff and energy pressure



2013

2014

2015

2012



Source: Bloomberg, Alerian, Nareit, Standard and Poors



30

25

20

10

5

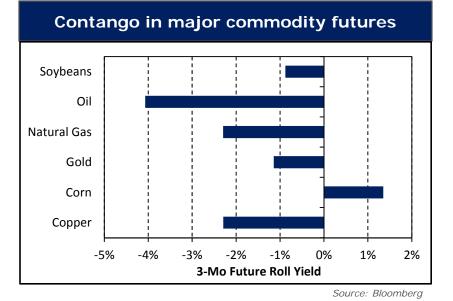
0

2005

PE Ratio

Source: Bloomberg, US Census Bureau

# Commodities



US fuel production closing gap with

consumption

Source: Bloomberg, US Department of Energy \*Crude oil and liquid fuels

Crude oil and liquid fuels

US Production

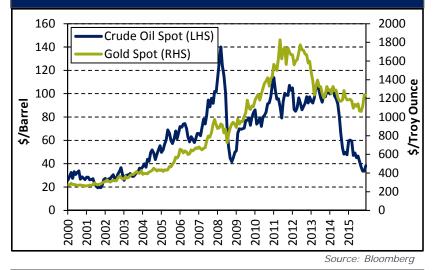
 $\hat{o}_{\Gamma}$ 

**US** Consumption

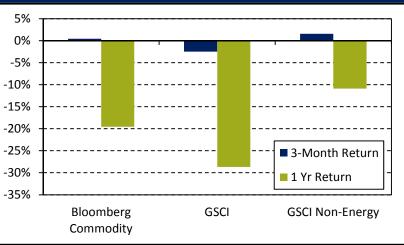
World Production (RHS)

World Consumption (RHS)

Precipitous fall in oil prices



Commodity indices negative over one year



Source: Bloomberg, Standard and Poors



NEPC, LLC

# Q1 2016 Performance & Asset Allocation

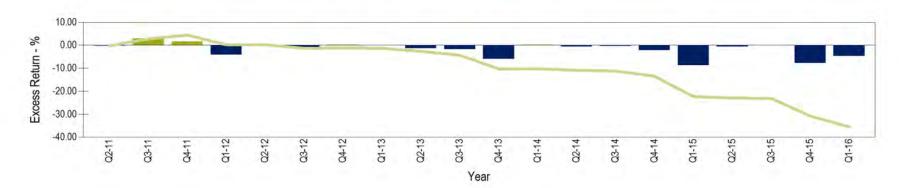


#### Dallas Police & Fire Pension

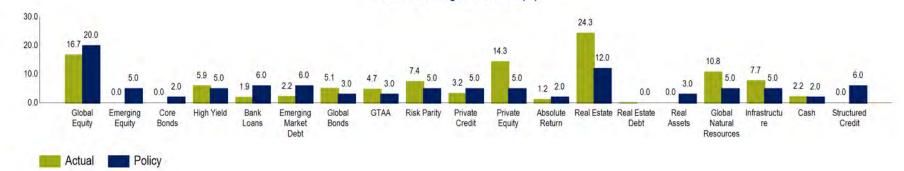
# Total Fund Performance Summary

	Market Value	3 Mo	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	7 Yrs	Rank	10 Yrs	Rank
DPFP	\$2,654,819,256	-1.7%	99	-8.5%	99	-3.1%	99	0.0%	99	4.4%	99	1.8%	99
Allocation Index		3.0%	1	4.5%	1	8.6%	1	7.3%	8	9.9%	50	5.3%	40
Policy Index		2.4%	2	5.4%	1	7.8%	1	7.4%	7	11.3%	17	6.1%	5
InvestorForce Public DB Net Median		1.2%		-1.5%		5.4%		5.8%		9.8%		5.1%	

**Quarterly and Cumulative Excess Performance** 

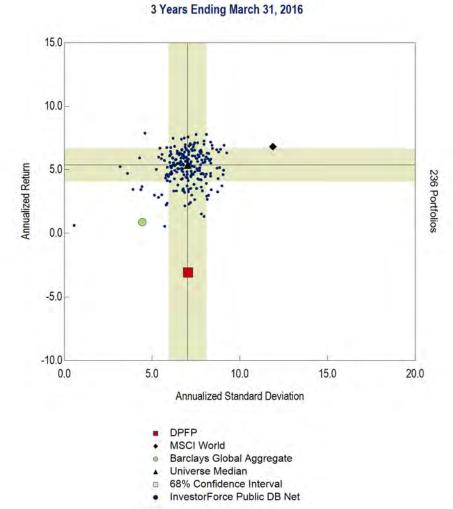


Actual vs Target Allocation (%)



Returns are net of fees





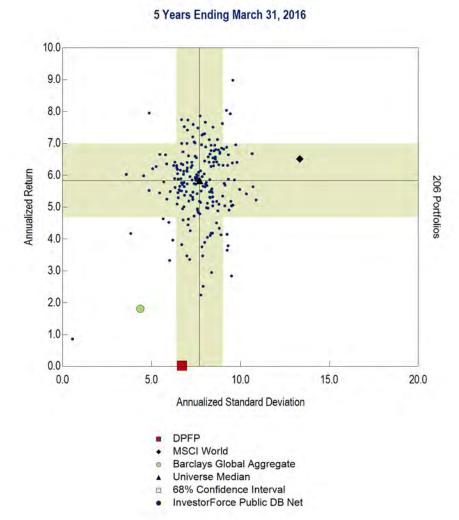
Returns are net of fee	s
------------------------	---



	3 Years Ending Marc	h 31, 2016			
	AnIzd Ret	Rank	Anlzd Std Dev	Rank	
DPFP	-3.05%	99	7.05%	52	
Allocation Index	8.63%	1	5.35%	5	
Policy Index	7.81%	1	3.99%	2	
MSCI World	6.82%	10	11.88%	99	
Barclays Global Aggregate	0.87%	99	4.43%	3	
InvestorForce Public DB Net Median	5.37%		7.02%		

#### 3 Years Ending March 31, 2016

	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
DPFP	-0.44	99	-0.42	99
Allocation Index	1.60	1	3.41	1
Policy Index	1.94	1	4.12	1
MSCI World	0.57	82	1.12	77
Barclays Global Aggregate	0.18	99	0.27	99
InvestorForce Public DB Net Median	0.77		1.45	



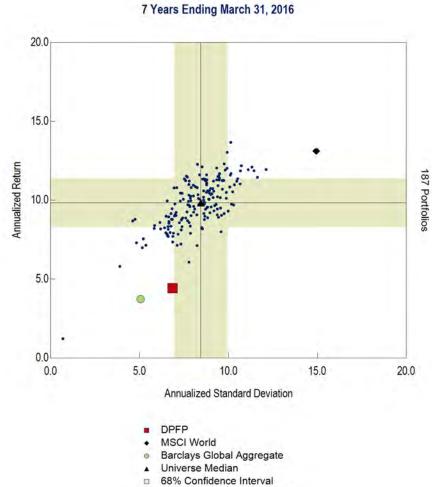
Returns are ne	t of fees
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	5 Years Ending Marc	h 31, 2016		
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
DPFP	0.02%	99	6.72%	21
Allocation Index	7.27%	8	7.09%	33
Policy Index	7.42%	7	6.13%	9
MSCI World	6.51%	25	13.33%	99
Barclays Global Aggregate	1.81%	99	4.36%	2
InvestorForce Public DB Net Median	5.83%		7.70%	

#### 5 Years Ending March 31, 2016

	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
DPFP	-0.01	99	-0.01	99
Allocation Index	1.02	9	1.20	48
Policy Index	1.20	3	1.52	14
MSCI World	0.48	94	0.75	92
Barclays Global Aggregate	0.40	98	0.63	98
InvestorForce Public DB Net Median	0.77		1.19	



#### InvestorForce Public DB Net

Returns are net of fees

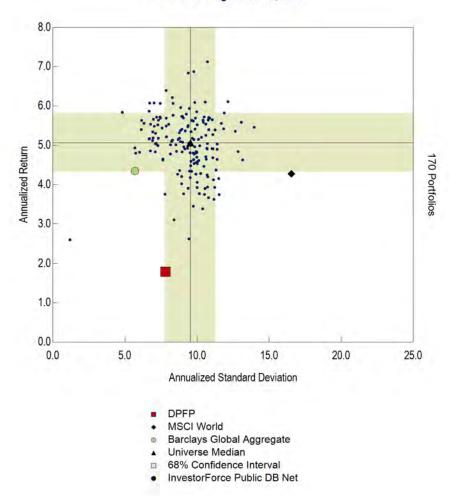


	7 Years Ending Marc	h 31, 2016		
	AnIzd Ret	Rank	Anlzd Std Dev	Rank
DPFP	4.41%	99	6.86%	17
Allocation Index	9.87%	50	7.80%	37
Policy Index	11.32%	17	7.66%	31
MSCI World	13.12%	1	14.94%	99
Barclays Global Aggregate	3.72%	99	5.06%	3
InvestorForce Public DB Net Median	9.84%		8.45%	

#### 7 Years Ending March 31, 2016

	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
DPFP	0.63	99	0.75	99
Allocation Index	1.26	33	1.76	77
Policy Index	1.47	7	2.28	19
MSCI World	0.87	99	1.49	96
Barclays Global Aggregate	0.72	99	1.01	99
InvestorForce Public DB Net Median	1.18		2.00	

#### 10 Years Ending March 31, 2016



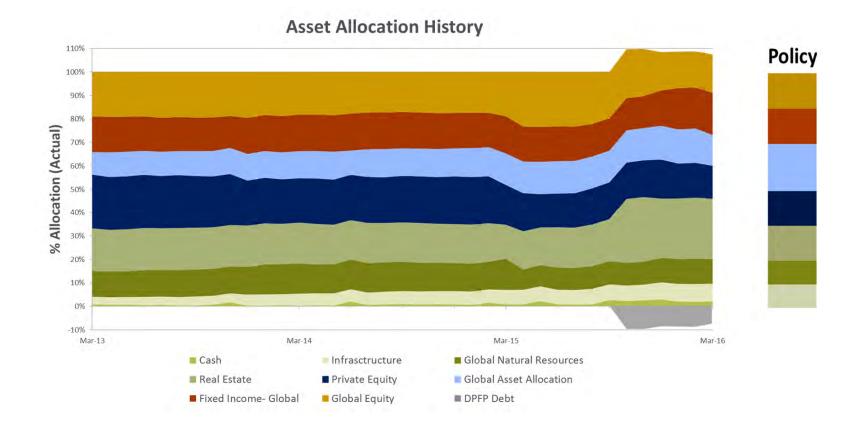
	10 Years Ending March 31, 2016												
	AnIzd Ret	Rank	Anlzd Std Dev	Rank									
DPFP	1.79%	99	7.80%	21									
Allocation Index	5.29%	40	8.70%	31									
Policy Index	6.08%	5	9.08%	41									
MSCI World	4.27%	85	16.56%	99									
Barclays Aggregate	4.90%	63	3.21%	1									
InvestorForce Public DB Net Median	5.07%		9.54%										

#### 10 Years Ending March 31, 2016

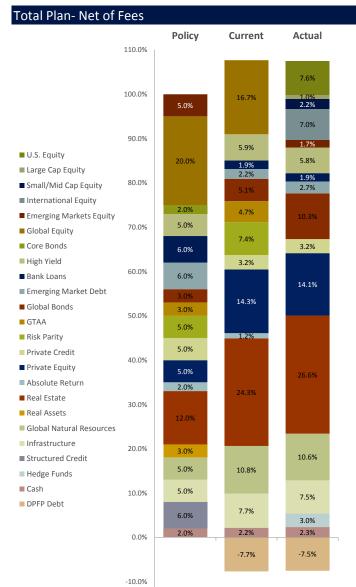
	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
DPFP	0.10	99	0.11	99
Allocation Index	0.49	32	0.58	41
Policy Index	0.56	25	0.62	33
MSCI World	0.20	99	0.25	99
Barclays Aggregate	1.21	1	2.13	1
InvestorForce Public DB Net Median	0.43		0.54	



## Total Fund Asset Allocation History







Asset Allocation vs. Target													
	Current	Policy	Current	Actual									
U.S. Equity				7.6%									
Large Cap Equity				1.0%									
Small/Mid Cap Equity				2.2%									
International Equity				7.0%									
Emerging Markets Equity		5.0%		1.7%									
Global Equity	\$443,478,737	20.0%	16.7%	0.0%									
Core Bonds		2.0%	0.0%	0.0%									
High Yield	\$157,023,336	5.0%	5.9%	5.8%									
Bank Loans	\$50,529,116	6.0%	1.9%	1.9%									
Emerging Market Debt	\$58,838,911	6.0%	2.2%	2.7%									
Global Bonds	\$134,223,263	3.0%	5.1%	10.3%									
GTAA	\$125,642,729	3.0%	4.7%	0.0%									
Risk Parity	\$197,589,957	5.0%	7.4%	0.0%									
Private Credit	\$86,262,132	5.0%	3.2%	3.2%									
Private Equity	\$380,843,309	5.0%	14.3%	14.1%									
Absolute Return	\$31,222,493	2.0%	1.2%	0.0%									
Real Estate	\$644,657,934	12.0%	24.3%	26.6%									
Real Assets		3.0%	0.0%	0.0%									
Global Natural Resources	\$285,864,673	5.0%	10.8%	10.6%									
Infrastructure	\$204,521,625	5.0%	7.7%	7.5%									
Structured Credit		6.0%	0.0%	0.0%									
Hedge Funds			0.0%	3.0%									
Cash	\$57,577,543	2.0%	2.2%	2.3%									
DPFP Debt	-\$203,451,513		-7.7%	-7.5%									
Total	\$2,654,824,246	100.0%	100.0%	100.0%									



-20.0%

DPFP

### Cash Flows 3 Months Ending March 31, 2016

Month Ending	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Net Investment Change	Ending Market Value
Jan-16	\$2,775,717,659.91	-\$1,248,515,219.32	\$1,218,364,967.75	-\$30,150,251.57	-\$37,540,962.96	\$2,707,732,700.53
Feb-16	\$2,707,732,700.53	-\$59,667,001.79	\$40,072,257.03	-\$19,594,744.76	-\$615,393.85	\$2,687,522,561.92
Mar-16	\$2,687,936,260.85	-\$141,294,354.28	\$117,579,847.99	-\$23,714,506.29	-\$9,402,498.43	\$2,654,819,256.13



## Dallas Police & Fire Pension

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	7 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
DPFP	2,654,819,256	100.0	-1.7	99	-8.5	99	-3.1	99	0.0	99	4.4	99	1.8	99	6.1	Jun-96
Allocation Index			3.0	1	4.5	1	8.6	1	7.3	8	9.9	50	5.3	40	7.2	Jun-96
Policy Index			2.4	2	5.4	1	7.8	1	7.4	7	11.3	17	6.1	5		Jun-96
InvestorForce Public DB Net Median			1.2		-1.5		5.4		5.8		9.8		5.1		6.6	Jun-96
DPFP Debt	-203,451,513	-7.7	0.5												1.0	Oct-15
DPFP Ex Debt	2,858,270,769	107.7	-1.7	99	-8.1	99	-2.9	99	0.1	99	4.5	99	1.8	99	6.1	Jun-96
Allocation Index Ex Debt			2.8	1	4.3	1	8.6	1	7.2	9	9.8	50	5.3	40	7.1	Jun-96
DPFP Financial Composite	1,665,653,983	62.7	0.4	84	-6.5	99	2.2	99	3.7	96	11.0	24	4.3	84	4.9	Oct-05
InvestorForce Public DB Net Median			1.2		-1.5		5.4		5.8		9.8		5.1		5.4	Oct-05
Total Equity	824,322,046	31.1	-2.5		-7.0		5.6		5.7						6.4	Dec-10
Total Equity Policy Index			1.5													Dec-10
Global Equity	443,478,737	16.7	-0.9	61	-5.6	65	6.0	61	5.7	65	13.2	55	4.2	62	4.5	Jul-06
MSCI ACWI Gross			0.4	44	-3.8	52	6.1	60	5.8	63	13.2	56	4.6	52	4.8	Jul-06
eA All Global Equity Net Median			-0.2		-3.7		6.7		6.7		13.5		4.7		4.9	Jul-06
Eagle Asset	51,768,252	1.9	0.3	46	-4.6	25	8.8	31	7.9	52	16.0	71	7.3	19	8.7	Feb-05
Russell 2000			-1.5	65	-9.8	70	6.8	61	7.2	63	16.4	65	5.3	69	6.8	Feb-05
eA US Small Cap Equity Net Median			-0.2		-7.2		7.6		8.0		17.3		6.0		7.5	Feb-05
Pyramis	114,286,611	4.3	-1.2	65	-5.1	62	6.6	52	5.8	63	12.8	59	4.3	61	7.8	Mar-02
MSCI ACWI			0.2	47	-4.3	55	5.5	68	5.2	72	12.6	62	4.1	65	6.0	Mar-02
eA All Global Equity Net Median			-0.2		-3.7		6.7		6.7		13.5		4.7		7.6	Mar-02
Walter Scott	84,679,456	3.2	2.0	33	2.0	14	6.4	57	7.5	35					8.0	Dec-09
MSCI ACWI			0.2	47	-4.3	55	5.5	68	5.2	72	12.6	62	4.1	65	7.2	Dec-09
eA All Global Equity Net Median			-0.2		-3.7		6.7		6.7		13.5		4.7		8.7	Dec-09
OFI	118,060,374	4.4	-6.4	98	-9.3	85	5.9	62	6.0	60	14.1	43			3.3	Oct-07
MSCI World			-0.3	52	-3.5	48	6.8	49	6.5	53	13.1	56	4.3	62	2.2	Oct-07
eA All Global Equity Net Median			-0.2		-3.7		6.7		6.7		13.5		4.7		2.8	Oct-07
RREEF Global REIT	22,764,103	0.9	5.3	32	2.2	25	6.6	60	9.4	37	14.2	99	3.6	99	12.9	Feb-99
FTSE EPRA/NAREIT Global			5.2	33	0.4	62	5.7	83	8.1	75	18.3	77	4.4	99	9.8	Feb-99
eA Global REIT Net Median			4.6		0.8		7.2		9.2		18.7		4.7			Feb-99
Mitchell Group	25,420,375	1.0	6.0	7	-19.9	99	-8.4	97	-6.0	96	5.8	95	3.9	70	9.0	Oct-01
Dow Jones Equal Wtd. Oil & Gas			0.2	46	-33.9	99	-15.9	99	-12.3	98	1.5	98	-6.0	99	3.3	Oct-01
eA All Global Equity Net Median			-0.2		-3.7		6.7		6.7		13.5		4.7		7.9	Oct-01

Net of fees returns shown on report are time weighted.



## DPFP

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	7 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
Allianz Global	16,079	0.0	-1.5	68	-8.8	84	1.8	89	0.4	92	6.1	95			3.0	Nov-08
FTSE ET50			0.0	49	-7.5	79	9.5	12	-0.3	93	6.0	95	1.0	93	4.1	Nov-08
eA All Global Equity Net Median			-0.2		-3.7		6.7		6.7		13.5		4.7		10.7	Nov-08
Sustainable Asset Management	26,483,488	1.0	3.5	22	2.6	12	8.9	18	6.9	47	13.6	50			10.7	Nov-08
MSCI World			-0.3	52	-3.5	48	6.8	49	6.5	53	13.1	56	4.3	62	9.9	Nov-08
eA All Global Equity Net Median			-0.2		-3.7		6.7		6.7		13.5		4.7		10.7	Nov-08
Private Equity	380,843,309	14.3	-4.2		-2.8		-9.2		-2.2		0.3		1.1		2.0	Oct-05
Russell 3000 + 3%			1.7		2.7		14.5		14.3		20.6		10.1		10.5	Oct-05
Total Fixed Income	486,876,758	18.3	4.1	39	-4.3	92	0.9	54	4.3	28	11.0	11	5.6	34	5.6	Jul-06
Total Fixed Income Policy Index			3.3	54												Jul-06
Global Fixed Income Allocation Index			4.7	33	1.0	38	2.6	22	4.8	16	9.7	19			6.4	Jul-06
eA All Global Fixed Inc Net Median			3.4		0.2		1.1		3.0		6.3		4.9		4.9	Jul-06
Public Fixed Income	400,614,626	15.1	4.5		-4.2		-0.6		2.7							
Global Bonds	134,223,263	5.1	7.2		2.4		0.8		2.7						2.9	Dec-10
Barclays Global Aggregate			5.9		4.6		0.9		1.8		3.7		4.3		2.0	Dec-10
Brandywine	91,489,731	3.4	7.6	8	0.0	55	0.4	67	3.9	39	8.3	31	6.3	18	5.2	Oct-04
Barclays Global Aggregate			5.9	18	4.6	5	0.9	54	1.8	72	3.7	89	4.3	76	3.9	Oct-04
eA All Global Fixed Inc Net Median			3.4		0.2		1.1		3.0		6.3		4.9		4.9	Oct-04
Mondrian	42,733,532	1.6	6.4	14	5.3	3	1.2	50	1.6	76	4.9	65	4.7	60	3.7	Oct-03
Barclays Global Aggregate			5.9	18	4.6	5	0.9	54	1.8	72	3.7	89	4.3	76	4.1	Oct-03
eA All Global Fixed Inc Net Median			3.4		0.2		1.1		3.0		6.3		4.9		5.0	Oct-03
HIgh Yield	157,023,336	5.9	2.9		-10.3		-1.2		3.2						4.3	Dec-10
Barclays Global High Yield			4.1		0.6		2.4		5.1		12.8		7.4		5.7	Dec-10
Loomis Sayles	112,986,454	4.3	2.4	79	-10.4	99	0.0	80	3.0	83	13.3	4	6.8	1	9.2	Oct-98
70% ML HIGH YIELD / 30% JPM EMBI PLUS			4.1	23	-1.1	36	2.1	47	5.2	35	11.4	41	6.9	1	7.9	Oct-98
eA Global High Yield Fixed Inc Net Median			2.9		-1.8		2.0		4.8		10.9		6.4		8.7	Oct-98
W.R. Huff High Yield	44,036,882	1.7	4.1	1	-9.5	98	-3.0	99	3.8	81	9.9	80	5.7	79	6.2	Jun-96
Citi High Yield Market Index			3.4	11	-4.7	72	1.2	70	4.5	54	11.8	21	6.6	36	6.7	Jun-96
eA US High Yield Fixed Inc Net Median			2.3		-3.2		1.9		4.6		10.9		6.3		6.6	Jun-96



## DPFP

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	7 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
Bank Loans	50,529,116	1.9	0.6		-3.4											Dec-10
S&P/LSTA Leveraged Loan Index			1.5		-1.3		1.9		3.2		9.0		4.3		3.5	Dec-10
Loomis Sayles Senior Rate and Fixed Income	50,529,116	1.9	0.6	86	-3.4	89									0.3	Jan-14
S&P/LSTA Leveraged Loan Index			1.5	79	-1.3	70	1.9	38	3.2	48	9.0	24	4.3	79	1.1	Jan-14
eA All Global Fixed Inc Net Median			3.4		0.2		1.1		3.0		6.3		4.9		1.3	Jan-14
Emerging Markets Debt	58,838,911	2.2	6.3		0.6		-3.1		0.9						1.7	Dec-10
50% JPM EMBI/50% JPM GBI-EM			8.1		1.4		-2.2		2.0						2.3	Dec-10
Ashmore AEMDF	41,229,780	1.6	4.3	82	2.5	22	-0.7	52	2.7	55	8.5	57	6.5	50	7.8	Feb-05
JP Morgan EMBI Global TR			5.2	52	4.4	5	2.4	11	6.0	9	9.4	45	7.1	37	7.4	Feb-05
eA All Emg Mkts Fixed Inc Net Median			5.4		0.8		-0.6		3.2		8.8		6.5		7.3	Feb-05
Ashmore AEMLCB	17,609,131	0.7	11.3	1	-3.4	89	-7.9	92	-2.7	90					-2.1	Mar-11
JP Morgan GBI EM Global Diversified TR USD			11.0	1	-1.6	69	-6.7	82	-2.0	82	4.9	88	5.0	90	-1.4	Mar-11
eA All Emg Mkts Fixed Inc Net Median			5.4		0.8		-0.6		3.2		8.8		6.5		3.5	Mar-11
Private Credit	86,262,132	3.2	2.4												2.4	Jan-16
Barclays Global High Yield +2%			4.6												4.6	Jan-16
Total Asset Allocation	354,455,179	13.4	2.0	38	-6.9	99	1.0	96	3.8	86	6.9	92			2.8	Jul-07
Total Asset Allocation Policy Index			2.0	39												Jul-07
eA Global Balanced Net Median			1.4		-1.7		4.2		5.7		10.1		4.8		3.8	Jul-07
Risk Parity	197,589,957	7.4	4.0		-7.3		-0.1		5.6							Jul-07
60% MSCI ACWI/40% Barclays Global Aggregate			2.6		-0.6		3.8		4.0							Jul-07
AQR	17,731,820	0.7	4.6	1	-7.8	99									0.6	Oct-13
CPI + 5% (Seasonally Adjusted)			1.2	57	5.9	1	5.8	8	6.3	23	6.7	92	6.8	1	5.7	Oct-13
eA Global Balanced Net Median			1.4		-1.7		4.2		5.7		10.1		4.8		3.8	Oct-13
Bridgewater All Weather	96,378,016	3.6	2.8	11	-9.8	85	-1.1	98	5.9	3	8.8	47			4.9	Sep-07
91 Day T-Bill + 6%			1.5	27	6.1	1	6.1	2	6.1	3	6.1	79	7.1	1	6.4	Sep-07
eA Global TAA Net Median			1.0		-4.6		2.1		3.2		8.2		4.2		3.1	Sep-07
Panagora Risk Parity	22,878,240	0.9	8.5	1	-4.7	96									6.1	Nov-13
CPI + 5% (Seasonally Adjusted)			1.2	57	5.9	1	5.8	8	6.3	23	6.7	92	6.8	1	5.7	Nov-13
eA Global Balanced Net Median			1.4		-1.7		4.2		5.7		10.1		4.8		2.9	Nov-13
Putnam	60,601,880	2.3	2.1	37	-5.5	99	0.0	99	2.9	91					5.2	Dec-09
CPI + 5% (Seasonally Adjusted)			1.2	57	5.9	1	5.8	8	6.3	23	6.7	92	6.8	1	6.5	Dec-09
eA Global Balanced Net Median			1.4		-1.7		4.2		5.7		10.1		4.8		6.7	Dec-09



## DPFP

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	7 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
GTAA	125,642,729	4.7	0.8		-3.3		2.0		4.7						4.7	Dec-10
60% MSCI ACWI/40% Barclays Global Aggregate			2.6		-0.6		3.8		4.0						4.5	Dec-10
GMO	125,642,729	4.7	0.8	59	-3.3	39	2.0	56	4.7	11	6.7	62			3.9	Sep-07
CPI + 5% (Seasonally Adjusted)			1.2	37	5.9	1	5.8	3	6.3	2	6.7	62	6.8	1	6.7	Sep-07
eA Global TAA Net Median			1.0		-4.6		2.1		3.2		8.2		4.2		3.1	Sep-07
Absolute Return/Global Macro	31,222,493	1.2	-8.0		-16.8		5.2									Dec-10
HFRX Absolute Return Index			-0.6		0.6		2.0		0.6		0.1		-0.2		0.7	Dec-10
Bridgewater Pure Alpha	31,222,493	1.2	-8.0	99	-16.8	99	5.2	5							4.9	Aug-11
91 Day T-Bill + 6%			1.5	27	6.1	1	6.1	2	6.1	3	6.1	79	7.1	1	6.1	Aug-11
eA Global TAA Net Median			1.0		-4.6		2.1		3.2		8.2		4.2		3.3	Aug-11
Total Real Assets	1,135,039,243	42.8	-4.6		-11.8		-9.6		-6.5						-6.2	Dec-10
Total Real Assets Policy Index			4.8													Dec-10
Natural Resources	285,859,684	10.8	0.2		4.4		7.4		6.1						4.4	Apr-15
Natural Resources Benchmark			9.1		15.6		13.9		9.8						15.6	Apr-15
Global Infrastructure Composite	204,521,625	7.7	-2.3		-5.1		0.2								1.4	Jul-12
Global Infrastructure Benchmark			8.7		13.7		8.4								8.1	Jul-12
Real Estate Composite	644,657,934	24.3	-7.3		-18.8		-14.4		-9.5		-7.9		-4.1		3.6	Mar-85
NCREIF Property Index			2.2		11.8		11.9		11.9		9.1		7.6		8.1	Mar-85
Cash Equivalents	57,577,543	2.2	0.7		1.4		2.3								1.4	Apr-15
91 Day T-Bills			0.1		0.1		0.1		0.1		0.1		1.0		0.1	Apr-15

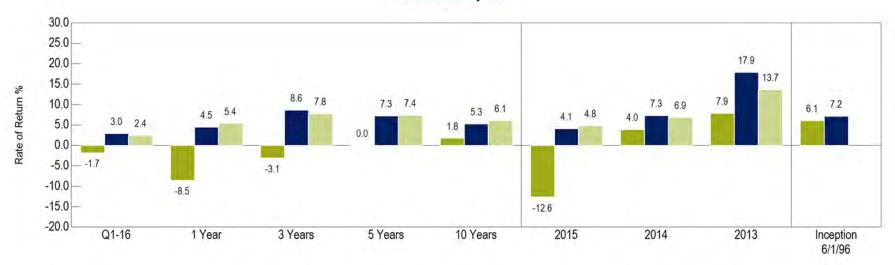


### Footnotes

- 1. Allianz Eco Trends was included in the Global Natural Resources composite from 11/1/2008 to 3/31/2015 and included in the Global Equity composite from 4/1/2015 to present.
- 2. Mitchell Group was included in the Global Natural Resources composite from 10/1/2001 to 3/31/2015 and included in the Global Equity composite from 4/1/2015 to present.
- 3. Sustainable Asset Management was included in the Global Natural Resources composite from 11/1/2008 to 3/31/2015 and included in the Global Equity composite from 4/1/2015 to present.
- 4. Hudson Clean Energy was included in the Global Natural Resources composite from 1/1/2010 to 3/31/2015 and included in the Private Markets composite from 4/1/2015 to 12/31/2015 and the Private Equity composite from 1/1/2016 to present.
- 5. **RREEF** was included in the Real Estate composite from 2/1/1999 to 12/31/2009 and included in the Global Equity composite from 1/1/2010 to present.
- 6. Highland Crusader was included in the Global Fixed Income composite from 7/1/2003 to 12/31/2015 and included in the Private Credit composite from 1/1/2016 to present.
- 7. Highland Capital Management was included in the Global Fixed Income composite from 1/1/2007 to 12/31/2015 and included in the Private Credit composite from 1/1/2016 to present.
- 8. Lone Star Fund VII, LP was included in the Global Fixed Income composite from 10/1/2011 to 3/31/2015 and included in the Private Markets composite from 4/1/2015 to 12/31/2015 and included in the Private Credit composite from 1/1/2016 to present.
- 9. Lone Star Fund VIII, LP was included in the Global Fixed Income composite from 10/1/2013 to 3/31/2015 and included in the Private Markets composite from 4/1/2015 to 12/31/2015 and included in the Private Credit composite from 1/1/2016 to present.
- **10.** Lone Star Fund IX, LP was included in the Global Fixed Income composite from 10/1/2014 to 3/31/2015 and included in the Private Markets composite from 4/1/2015 to 12/31/2015 and included in the Private Credit composite from 1/1/2016 to present.
- 11. Oaktree Fund IV & 2x Loan Fund was included in the Global Fixed Income composite from 1/1/2002 to 3/31/2015 and included in the Private Markets composite from 4/1/2015 to 12/31/2015 and included in the Private Credit composite from 1/1/2016 to present.
- 12. Ashmore Capital GSSF IV was included in the Private Markets composite from 10/1/2007 to 12/31/2015 and included in the Private Credit composite from 1/1/2016 to present.
- **13. Global Infrastructure composite** was included in the Private Markets composite history until 6/30/2012.
- 14. Private Equity composite includes Private Credit managers until 12/31/2015. From 01/01/2016 to present the Private Equity and Credit managers are now in separate composites.
- **15.** Certain managers in the Private Equity and Real Estate composites, the 12/31/15 audited financials have not been finalized. In this case the market value is based on estimated 12/31/15 values, provided by the manager, and adjusted for cash flows.



## Total Fund Return Summary



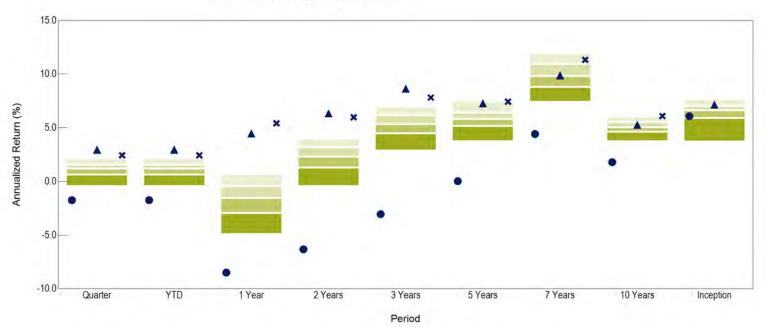
Return Summary Net

#### 30.0 25.0 17.9 20.0 13.7 15.0 Rate of Return % 8.6 7.8 8.5 7.3 7.4 7.3 6.9 6.5 7.2 10.0 5.3 6.1 4.5 5.4 4.1 4.8 4.4 3.0 2.4 5.0 2.2 0.5 0.0 -5.0 - -1.7 -2.7 -10.0 -8.2 -15.0 -12.3 -20.0 Q1-16 1 Year 3 Years 10 Years 2015 2014 2013 Inception 5 Years 6/1/96 DPFP Allocation Index Policy Index

#### **Return Summary Gross**



## Total Fund Return Summary vs. Peer Universe

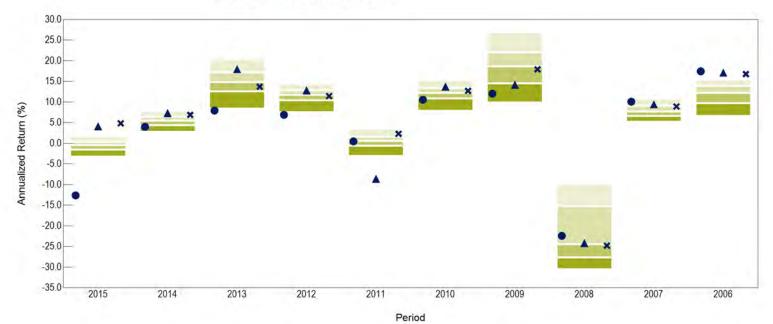


DPFP vs. InvestorForce Public DB Net

	Return (Ra	nk)																
5th Percentile	2.2		2.2		0.7		4.0		7.0		7.5		11.9		6.1		7.7	
25th Percentile	1.6		1.6		-0.4		3.2		6.2		6.4		11.0		5.6		7.0	
Median	1.2		1.2		-1.5		2.3		5.4		5.8		9.8		5.1		6.6	
75th Percentile	0.6		0.6		-2.9		1.3		4.5		5.2		8.8		4.6		5.9	
95th Percentile	-0.4		-0.4		-4.9		-0.4		2.9		3.8		7.4		3.8		3.7	
# of Portfolios	260		260		259		249		236		206		187		170		74	
DPFP	-1.7	(99)	-1.7	(99)	-8.5	(99)	-6.3	(99)	-3.1	(99)	0.0	(99)	4.4	(99)	1.8	(99)	6.1	(71)
Allocation Index	3.0	(1)	3.0	(1)	4.5	(1)	6.3	(1)	8.6	(1)	7.3	(8)	9.9	(50)	5.3	(40)	7.2	(19)
Policy Index	2.4	(2)	2.4	(2)	5.4	(1)	6.0	(1)	7.8	(1)	7.4	(7)	11.3	(17)	6.1	(5)		()



## Total Fund Return Summary vs. Peer Universe

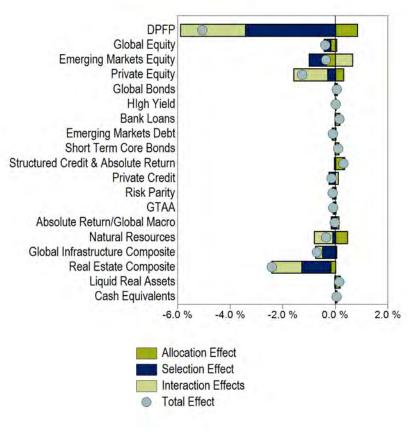


DPFP vs. InvestorForce Public DB Net

	Return (Ra	ank)																		
5th Percentile	1.7		7.7		20.4		14.3		3.6		15.3		26.8		-9.8		10.7		15.4	
25th Percentile	0.4		6.4		17.2		12.9		1.6		13.4		22.0		-15.2		9.1		14.0	
Median	-0.4		5.5		14.9		11.8		0.6		12.2		18.6		-24.4		7.8		12.3	
75th Percentile	-1.5		4.4		12.7		10.4		-0.5		10.9		14.5		-27.6		6.7		9.8	
95th Percentile	-3.2		2.7		8.4		7.6		-3.1		7.9		9.9		-30.5		5.2		6.6	
# of Portfolios	262		210		191		159		137		131		128		125		122		115	
DPFP	-12.6	(99)	4.0	(82)	7.9	(97)	6.9	(97)	0.5	(57)	10.5	(78)	12.0	(88)	-22.4	(41)	10.1	(12)	17.4	(1)
Allocation Index	4.1	(1)	7.3	(9)	17.9	(19)	12.8	(29)	-8.6	(99)	13.7	(21)	14.2	(78)	-24.2	(49)	9.4	(20)	17.1	(1)
Policy Index	4.8	(1)	6.9	(18)	13.7	(66)	11.4	(58)	2.3	(13)	12.7	(39)	17.9	(58)	-24.8	(51)	8.9	(30)	16.8	(1)

## Total Fund Attribution Analysis

Attribution Effects Relative to Allocation Index 3 Months Ending March 31, 2016



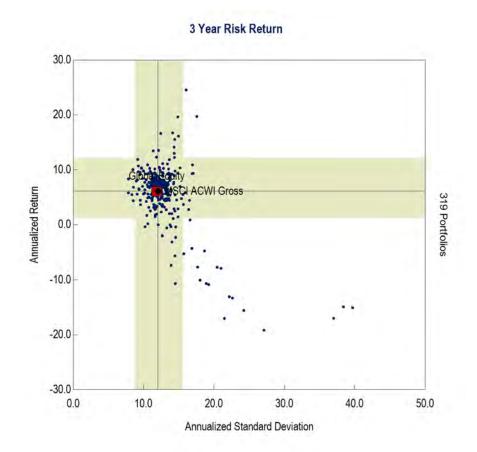
#### Attribution Summary 3 Months Ending March 31, 2016

	•		ing maron	01, 2010			
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Ir Effect	nteraction Effects	Total Effects
Global Equity	-0.9%	0.4%	-1.3%	-0.2%	-0.1%	0.1%	-0.3%
Emerging Markets Equity	0.0%	5.8%	-5.8%	-0.6%	-0.4%	0.6%	-0.4%
Private Equity	-4.2%	1.7%	-5.9%	-0.3%	-0.2%	-0.5%	-1.0%
Global Bonds	7.2%	5.9%	1.3%	0.0%	0.0%	0.0%	0.1%
HIgh Yield	2.9%	4.1%	-1.3%	0.0%	0.0%	0.0%	0.0%
Bank Loans	0.6%	1.5%	-0.9%	0.0%	0.2%	0.0%	0.2%
Emerging Markets Debt	6.3%	8.1%	-1.8%	0.0%	-0.1%	0.0%	-0.1%
Short Term Core Bonds	0.0%	0.9%	-0.9%	0.0%	0.1%	0.0%	0.1%
Structured Credit & Absolute Return	0.0%	-0.7%	0.7%	0.0%	0.3%	0.0%	0.3%
Private Credit	2.4%	4.6%	-2.3%	-0.2%	0.0%	0.1%	-0.1%
Risk Parity	4.0%	2.6%	1.5%	-0.1%	0.0%	0.0%	-0.1%
GTAA	0.8%	2.6%	-1.8%	-0.1%	0.0%	0.0%	-0.1%
Absolute Return/Global Macro	-8.0%	-0.6%	-7.4%	-0.1%	0.1%	0.1%	0.0%
Natural Resources	0.2%	9.1%	-9.0%	-0.1%	0.5%	-0.8%	-0.4%
Global Infrastructure Composite	-2.3%	8.7%	-11.0%	-0.5%	0.0%	-0.3%	-0.7%
Real Estate Composite	-7.3%	2.2%	-9.5%	-1.1%	-0.3%	-1.1%	-2.5%
Liquid Real Assets	0.0%	1.2%	-1.2%	0.0%	0.2%	0.0%	0.2%
Cash Equivalents	0.7%	0.1%	0.6%	0.0%	-0.1%	0.0%	0.0%
Total	-1.7%	3.8%	-5.5%	-3.4%	0.4%	-1.8%	-4.9%











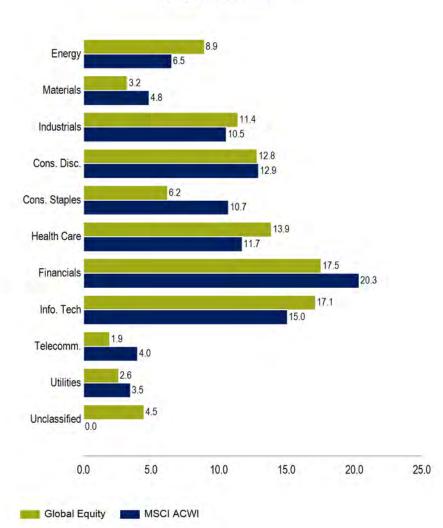




Characteristics		
	Portfolio	MSCI ACWI
Number of Holdings	844	2,482
Weighted Avg. Market Cap. (\$B)	60.5	87.3
Median Market Cap. (\$B)	10.4	8.3
Price To Earnings	23.6	20.2
Price To Book	4.2	3.2
Price To Sales	3.8	2.7
Return on Equity (%)	16.6	15.8
Yield (%)	2.1	2.6
Beta	1.0	1.0
R-Squared	1.0	1.0

#### Regional Allocation MSCI ACWI

Region Weighting	
North America ex U.S.	3.08
United States	53.24
Europe Ex U.K.	15.56
United Kingdom	6.29
Pacific Basin Ex Japan	5.03
Japan	7.54
Emerging Markets	8.93
Other	0.34



#### **Equity Sector Allocation**



### **Top Ten Holdings**

CASH - USD	2.5%
JP MORGAN PRIME MMF AGENCY SHARES - MONTHLY VARIABLE 12312049	1.9%
ALPHABET 'C'	1.2%
COLGATE-PALM.	1.1%
ADOBE SYSTEMS	1.1%
INDITEX	1.0%
LVMH	1.0%
KEYENCE	0.9%
WALT DISNEY	0.9%
ALPHABET 'A'	0.9%

### Equity Sector Attribution

			Attribution Effect	S	R	eturns	Secto	r Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1%	0.0%	0.1%	0.0%	5.4%	6.2%	8.1%	6.1%
Materials	-0.3%	-0.2%	-0.1%	0.0%	0.9%	5.8%	3.3%	4.6%
Industrials	0.0%	0.0%	0.0%	0.0%	3.8%	3.6%	10.6%	10.2%
Cons. Disc.	-0.1%	-0.1%	0.0%	0.0%	-0.9%	-0.4%	12.2%	13.1%
Cons. Staples	-0.3%	0.0%	-0.2%	-0.1%	4.6%	4.8%	6.0%	10.3%
Health Care	-0.2%	0.0%	-0.1%	0.0%	-7.0%	-6.5%	14.5%	12.6%
Financials	0.2%	0.2%	0.2%	-0.2%	-4.7%	-5.0%	18.1%	21.6%
Info. Tech	-0.4%	-0.4%	0.1%	0.0%	-0.8%	1.7%	17.0%	14.6%
Telecomm.	-0.3%	-0.2%	-0.1%	0.1%	2.1%	7.1%	1.8%	3.7%
Utilities	-0.2%	-0.2%	0.0%	0.0%	2.9%	8.8%	2.6%	3.2%
Cash	0.1%	0.0%	0.1%	0.0%	0.1%		5.9%	0.0%
Portfolio	-1.2%	= -0.9%	+ -0.1%	+ -0.2%	-0.8%	0.3%	100.0%	100.0%



### **Top Positive Contributors**

	Relative	
	Contribution %	Return %
LVMH	0.1%	9.0%
AMAZON.COM	0.1%	-12.2%
SGS 'N'	0.1%	14.9%
HSBC HDG. (ORD \$0.50)	0.1%	-18.5%
BANK OF AMERICA	0.1%	-19.4%
EQT	0.1%	29.1%
VALEANT PHARMS.INTL.	0.1%	-74.0%
TAIWAN SEMICON.SPN.ADR 1:5	0.1%	15.2%
COLGATE-PALM.	0.1%	6.7%
TOYOTA MOTOR	0.1%	-14.9%

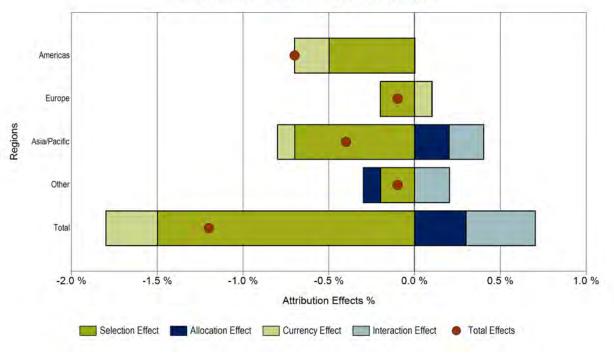
Top Negative Cont	ributors	
	Relative	
	Contribution %	Return %
SUNEDISON	-0.2%	-89.4%
CELLDEX THERAPEUTICS	-0.2%	-75.9%
MURATA MANUFACTURING	-0.1%	-16.7%
DAI-ICHI LIFE INSURANCE	-0.1%	-26.5%
CREDIT SUISSE GROUP N	-0.1%	-34.4%
DEUTSCHE BANK	-0.1%	-30.5%
AT&T	-0.1%	15.4%
CITIGROUP	-0.1%	-19.2%
BIOMARIN PHARM.	-0.1%	-21.3%
JD.COM 'A' ADR 1:2	-0.1%	-17.9%



	Country A	llocation		
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
Americas				
Brazil*	0.3%	0.5%	-4.1%	28.6%
Canada	1.2%	2.8%	11.5%	11.4%
Mexico*	0.2%	0.4%	5.6%	8.5%
United States	55.7%	52.6%	0.4%	1.0%
Total-Americas	57.4%	56.5%	0.6%	1.9%
Europe				
Austria	0.1%	0.1%	5.3%	-0.5%
Belgium	0.1%	0.5%	-3.3%	-2.4%
Denmark	0.7%	0.7%	-1.2%	-0.7%
Finland	0.1%	0.3%	2.0%	-2.6%
France	4.7%	3.4%	2.0%	0.1%
Germany	3.7%	3.2%	-4.4%	-2.4%
Ireland	0.1%	0.1%	-11.0%	-1.2%
Italy	0.7%	0.8%	-15.3%	-11.6%
Luxembourg	0.0%	0.0%	19.1%	0.3%
Netherlands	0.6%	1.1%	5.8%	3.0%
Norway	0.1%	0.2%	-0.8%	1.8%
Portugal	0.0%	0.1%	-1.3%	3.3%
Spain	1.5%	1.1%	-2.5%	-4.1%
Sweden	1.8%	1.0%	-2.4%	0.1%
Switzerland	3.9%	3.3%	-3.5%	-5.2%
United Kingdom	4.8%	6.6%	-4.0%	-2.6%
Total-Europe	22.8%	22.9%	-2.4%	-2.1%

Country Allocation Versus MSCI ACWI Gross - Quarter Ending March 31, 2016									
	Manager	Index	Manager	Index					
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)					
AsiaPacific									
Australia	1.2%	2.4%	4.3%	2.1%					
China*	0.5%	2.8%	-12.2%	-4.8%					
Hong Kong	1.9%	1.1%	-0.1%	-0.4%					
India*	0.3%	0.8%	-8.6%	-2.6%					
Japan	8.6%	8.1%	-8.0%	-6.5%					
Korea*	0.1%	1.5%	17.6%	4.9%					
Philippines*	0.1%	0.1%	14.6%	7.3%					
Singapore	0.6%	0.4%	2.0%	5.1%					
Taiwan*	0.4%	1.2%	15.2%	7.7%					
Thailand*	0.0%	0.2%	-7.6%	17.2%					
Total-AsiaPacific	13.7%	19.3%	-4.6%	-1.7%					
Other									
Israel	0.2%	0.3%	-14.1%	-9.2%					
Total-Other	0.2%	1.3%	-14.1%	8.0%					
Totals									
Developed	92.3%	90.2%	-0.9%	-0.2%					
Emerging*	1.8%	9.8%	-0.7%	5.5%					
Cash	5.9%		0.1%						

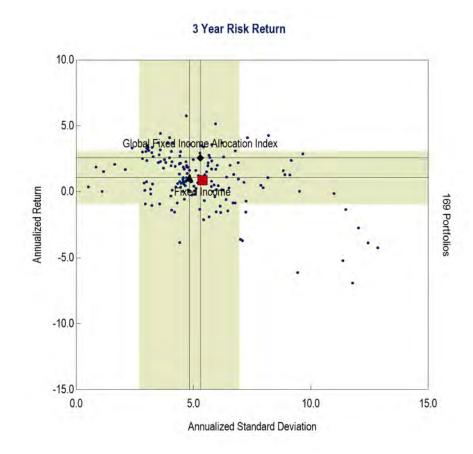




Global Equity Performance Attribution vs. MSCI ACWI Gross

		Returns and	Weights			Attri	bution Effects		
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
Totals									
Americas	0.6%	1.9%	57.4%	56.5%	-0.5%	0.0%	-0.2%	0.0%	-0.7%
Europe	-2.4%	-2.1%	22.8%	22.9%	-0.2%	0.0%	0.1%	0.0%	-0.1%
Asia/Pacific	-4.6%	-1.7%	13.7%	19.3%	-0.7%	0.2%	-0.1%	0.2%	-0.4%
Other	-14.1%	8.0%	0.2%	1.3%	-0.2%	-0.1%	0.0%	0.2%	-0.1%
Cash	0.1%		5.9%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
Total	-0.8%	0.3%	100.0%	100.0%	-1.5%	0.3%	-0.3%	0.4%	-1.2%
Totals									
Developed	-0.9%	-0.2%	92.3%	90.2%	-0.5%	0.0%	-0.1%	0.0%	-0.6%
Emerging*	-0.7%	5.5%	1.8%	9.8%	-0.4%	-0.3%	-0.3%	0.3%	-0.7%
Cash	0.1%		5.9%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%

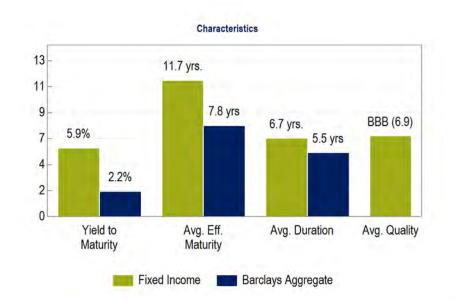




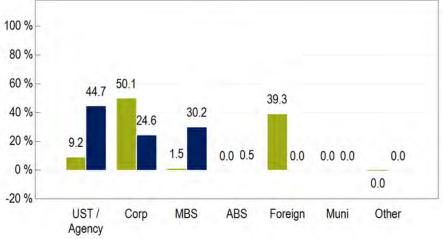
#### 3 Year Style Analysis











Sectors



## • Manager Role in Portfolio

 Eagle manages the domestic small cap portfolio within Global Equity bucket

## • Organizational Profile

- Eagle Asset Management was founded in 1976 and is a wholly owned subsidiary of Raymond James Financial, Inc. Eagle became a Registered Investment Advisor in 1984.
- Retail products form the core of their business

## Investment Strategy Commentary

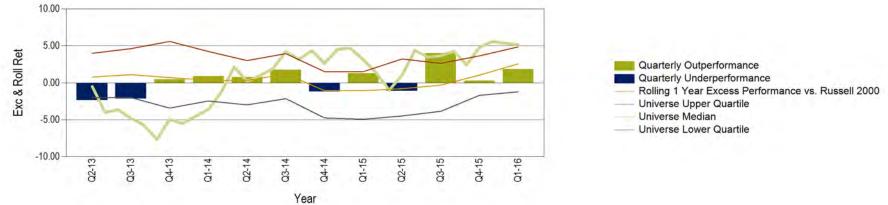
- Fundamental, bottom-up approach
- Seeks companies with sustainable competitive advantages
- Favors companies that have strong management, conservative accounting, low-cost relative production costs, and high barriers to entry



## Eagle Asset

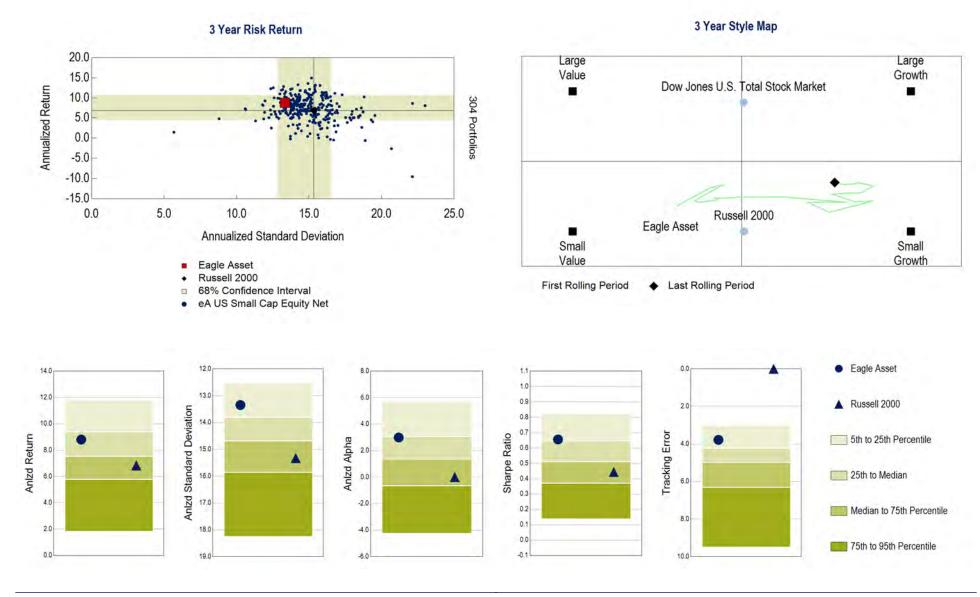


eA US Small Cap Equity Net Accounts





## Eagle Asset





## Eagle Asset

#### Characteristics

	Portfolio	Russell 2000
Number of Holdings	117	1,959
Weighted Avg. Market Cap. (\$B)	2.7	1.9
Median Market Cap. (\$B)	2.1	0.6
Price To Earnings	23.6	24.1
Price To Book	3.6	2.7
Price To Sales	3.1	2.8
Return on Equity (%)	14.2	10.6
Yield (%)	1.7	1.4
Beta		1.0
R-Squared		1.0

Equity	Sector	Attribution
--------	--------	-------------

			Attribution Effect	S	R	eturns	Secto	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.6%	0.6%	0.0%	0.0%	13.1%	-8.2%	2.5%	2.7%
Materials	-0.1%	-0.1%	0.0%	0.0%	1.5%	5.0%	4.3%	3.6%
Industrials	0.3%	0.3%	0.0%	0.0%	7.1%	4.5%	12.4%	12.2%
Cons. Disc.	0.3%	0.3%	0.0%	0.0%	4.2%	2.3%	14.4%	13.6%
Cons. Staples	0.2%	0.2%	0.0%	0.0%	9.1%	3.2%	3.5%	3.4%
Health Care	1.7%	1.6%	0.3%	-0.2%	-7.6%	-17.4%	14.2%	16.3%
Financials	0.0%	0.0%	0.0%	0.0%	0.4%	0.3%	25.6%	25.7%
Info. Tech	0.0%	0.0%	0.0%	0.0%	-1.5%	-1.7%	18.4%	17.9%
Telecomm.	-0.1%		-0.1%			5.9%	0.0%	0.9%
Utilities	-0.4%	0.0%	-0.4%	0.0%	11.4%	12.3%	1.0%	3.7%
Cash	0.1%	0.0%	0.1%	0.0%	0.1%		3.5%	0.0%
Portfolio	2.7%	= 2.9%	+ 0.0%	+ -0.2%	1.1%	-1.6%	100.0%	100.0%



# Eagle Asset

Top Positive	Contributors
--------------	--------------

	Relative	
	Contribution %	Return %
BURLINGTON STORES	0.3%	31.1%
VISTEON	0.3%	18.1%
WESCO INTL.	0.3%	25.2%
CYRUSONE	0.2%	23.0%
INTER PARFUMS	0.2%	30.4%
GEO GROUP	0.2%	22.9%
DELUXE	0.2%	15.2%
PATTERSON UTI ENERGY	0.2%	17.5%
BROADRIDGE FINL.SLTN.	0.2%	11.0%
SURGICAL CARE AFFILIATES	0.2%	16.3%

### **Top Negative Contributors**

	Relative	
	Contribution %	Return %
J2 GLOBAL	-0.4%	-24.9%
LOGMEIN	-0.3%	-24.8%
SAGENT PHARMACEUTICALS	-0.3%	-23.5%
QIAGEN (NAS)	-0.2%	-19.2%
NATUS MEDICAL	-0.2%	-20.0%
LIBERTY VENTURES 'A'	-0.2%	-13.3%
KORN FERRY INTERNATIONAL	-0.1%	-14.4%
INC RESEARCH HOLDINGS CL.A	-0.1%	-15.0%
MAIDEN HOLDINGS	-0.1%	-12.3%
ICU MEDICAL	-0.1%	-7.7%



### Manager Role in Portfolio

Represents the core international equity holding (Select Int'l Fund until 12/31/2009).
 Effective January 1, 2010, transitioned to a global core equity mandate (Select Global Fund).

### Organizational Profile

- Fidelity Management Trust Company (and now Pyramis) was established by Fidelity Investments (FMR Corp) in 1981 as a wholly-owned subsidiary to provide investment management services for institutional clients. Pyramis' organizational structure is closely linked with Fidelity Management & Research Company (FMRCo), the mutual fund division of Fidelity responsible for retail and institutional investment management. FMTC and FMRCo work side-by-side as one investment organization. Fidelity Investments is 100% employeeowned.
- It should be noted that there were a lot of senior management changes in late 2005, however, nothing that directly impacts this strategy.
- In May 2010, Fidelity announced that Ronald O'Hanley, former President & CEO of BNY Mellon Asset Management, would be joining the firm as President of its new Asset Management and Corporate Services division.
- In June 2011, Pyramis announced that Ravi Mantha, PM for the Select Emerging Markets portfolio since 2008, was leaving. John Chow, who currently manages US equities, will be joining the Select team.

### Investment Strategy Commentary

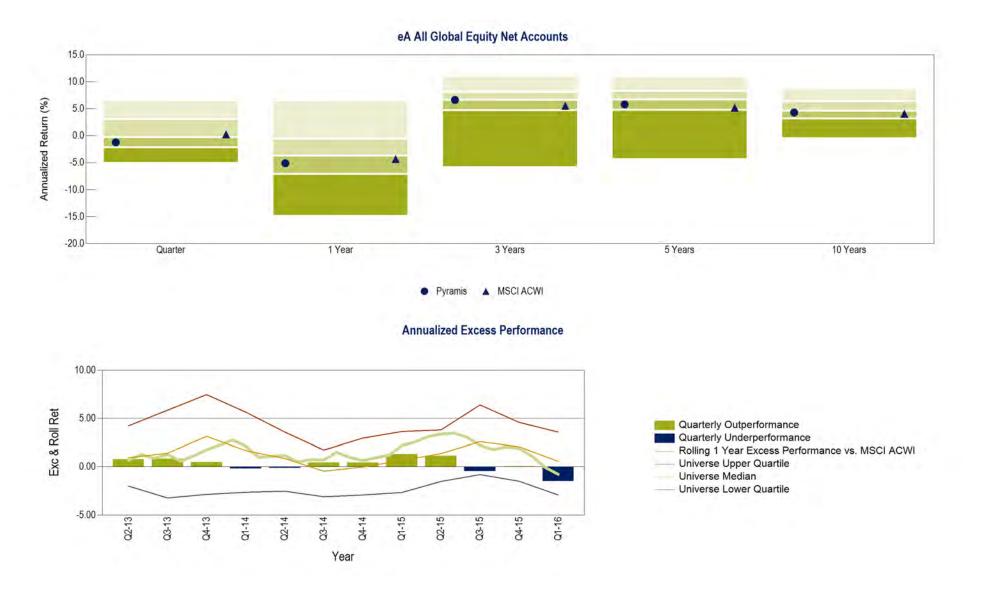
- Select International Fund (until 12/31/2009)
  - Core, bottom-up security selection combined with a quantitative, index-like country allocation strategy
  - Objective of the product is to add value through security selection, while closely matching the country allocation of the MSCI EAFE Index
- Select Global Fund as of January 1, 2010
  - Global core, active, fundamental bottom-up security selection, with quantitative risk controls. Portfolio is constructed in a modular fashion, combining seven regional sub-portfolios (US, Canada, Japan, UK, Europe ex-UK, Japan Pacific ex-Japan, and emerging markets).
  - The benchmark also changed to the MSCI ACWI from the MSCI EAFE as of Jan. 1, 2010.

### Due Diligence Notes

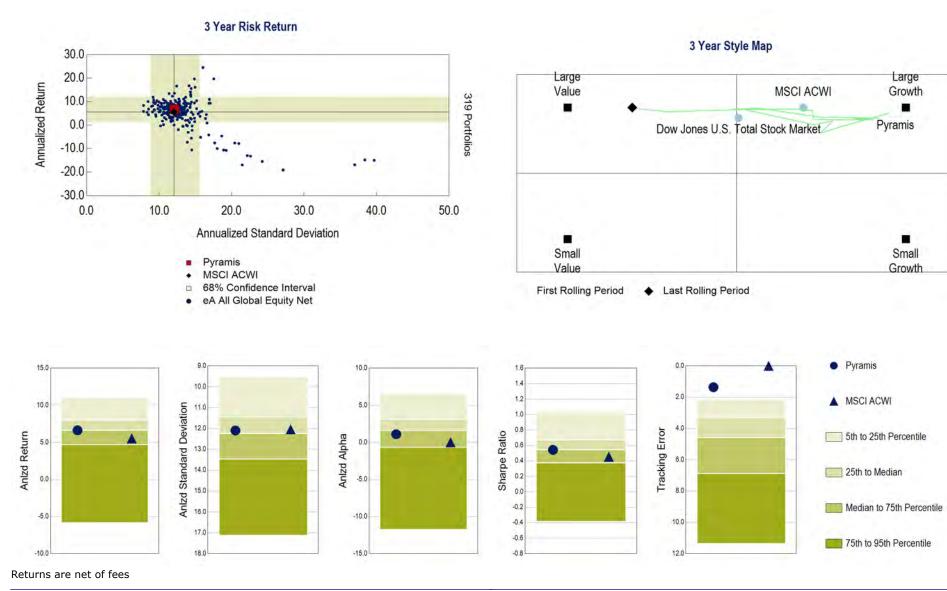
 On January 7, 2013, Pyramis announced that Pam R. Holding would be joining to take on the new role of Head of Portfolio Management. She will be leading the U.S., Global/International, and Alternatives equity portfolio management teams and responsible for strategy and process, risk oversight and execution of client investments at the portfolio level and will report to Chief Investment Officer, Young Chin.



## Pyramis









March 31, 2016

### Characteristics

	Portfolio	MSCI ACWI
Number of Holdings	418	2,482
Weighted Avg. Market Cap. (\$B)	85.1	87.3
Median Market Cap. (\$B)	19.8	8.3
Price To Earnings	23.5	20.2
Price To Book	3.9	3.2
Price To Sales	3.5	2.7
Return on Equity (%)	16.7	15.8
Yield (%)	2.4	2.6
Beta		1.0
R-Squared		1.0

### **Equity Sector Attribution**

			Attribution Effect	S	R	eturns	Secto	r Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.3%	-0.2%	-0.1%	0.0%	2.2%	6.2%	4.6%	6.1%
Materials	-0.3%	-0.3%	0.0%	0.0%	-1.8%	5.8%	4.3%	4.6%
Industrials	-0.2%	-0.1%	0.0%	-0.1%	1.8%	3.6%	8.6%	10.2%
Cons. Disc.	-0.1%	-0.1%	0.0%	0.0%	-1.0%	-0.4%	11.4%	13.1%
Cons. Staples	-0.2%	-0.1%	-0.1%	0.0%	3.9%	4.8%	9.2%	10.3%
Health Care	-0.2%	-0.2%	0.0%	0.0%	-8.0%	-6.5%	12.3%	12.6%
Financials	-0.1%	-0.2%	0.2%	-0.1%	-6.4%	-5.0%	17.8%	21.6%
Info. Tech	-0.3%	-0.2%	-0.1%	0.0%	0.1%	1.7%	11.5%	14.6%
Telecomm.	-0.2%	-0.2%	0.0%	0.0%	2.8%	7.1%	3.8%	3.7%
Utilities	-0.2%	0.0%	-0.1%	0.0%	7.7%	8.8%	1.9%	3.2%
Cash	0.2%	0.0%	0.2%	0.0%	0.1%		14.6%	0.0%
Portfolio	-1.8%	= -1.6%	+ 0.1%	+ -0.2%	-1.4%	0.3%	100.0%	100.0%

### **Top Positive Contributors**

### **Top Negative Contributors**

	Relative Contribution %	Return %
EATON	0.1%	21.4%
EDISON INTL.	0.1%	22.2%
XCEL ENERGY	0.1%	17.4%
DILLARDS 'A'	0.0%	29.3%
REYNOLDS AMERICAN	0.0%	9.9%
PVH	0.0%	34.6%
CMS ENERGY	0.0%	18.6%
COGENT COMMS.HOLDINGS	0.0%	13.6%
RANDGOLD RESOURCES	0.0%	51.0%
ROCHE HOLDING	0.0%	-7.6%

	Relative	
	Contribution %	Return %
MARATHON PETROLEUM	-0.1%	-27.6%
BIOMARIN PHARM.	-0.1%	-21.3%
ACTIVISION BLIZZARD	-0.1%	-11.9%
VERTEX PHARMS.	-0.1%	-36.8%
ALLERGAN	-0.1%	-14.2%
ENDO INTERNATIONAL	-0.1%	-54.0%
SERES THERAPEUTICS	-0.1%	-24.3%
TEVA PHARM.INDS.ADR 1:1	-0.1%	-18.0%
GLOBAL BLOOD THERP.	-0.1%	-50.9%
ALLIANCE DATA SYSTEMS	-0.1%	-20.5%



## Pyramis

### **Regional Attribution**

	Total Portfolio (%)	Asia Pacific Ex Jp (%)	Emerging Markets (%)	Europe ex UK (%)	Japan (%)	North America (%)	UK (%)
Portfolio Return	(1.2)	(2.4)	3.9	(3.0)	(7.6)	(0.3)	(3.7)
Benchmark Return	0.2	1.1	5.8	(2.6)	(6.5)	1.3	(2.3)
Active Return	(1.4)	(3.4)	(1.9)	(0.4)	(1.1)	(1.6)	(1.4)
Value Added from Regional Allocation	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	0.0	0.0
Value Added from Stock Selection	(1.4)	(3.4)	(1.9)	(0.4)	(1.1)	(1.6)	(1.4)
Residual Country Allocation	(0.1)	(0.9)	(0.5)	0.2	0.0	(0.0)	0.0
Residual Sector Allocation	(0.1)	0.5	0.1	(0.1)	0.3	(0.2)	0.2
Residual Stock Specific	(1.3)	(3.1)	(1.5)	(0.5)	(1.4)	(1.4)	(1.6)
Cash and Other Assets	0.0						

## **Contribution to Relative Return by Sector & Region**

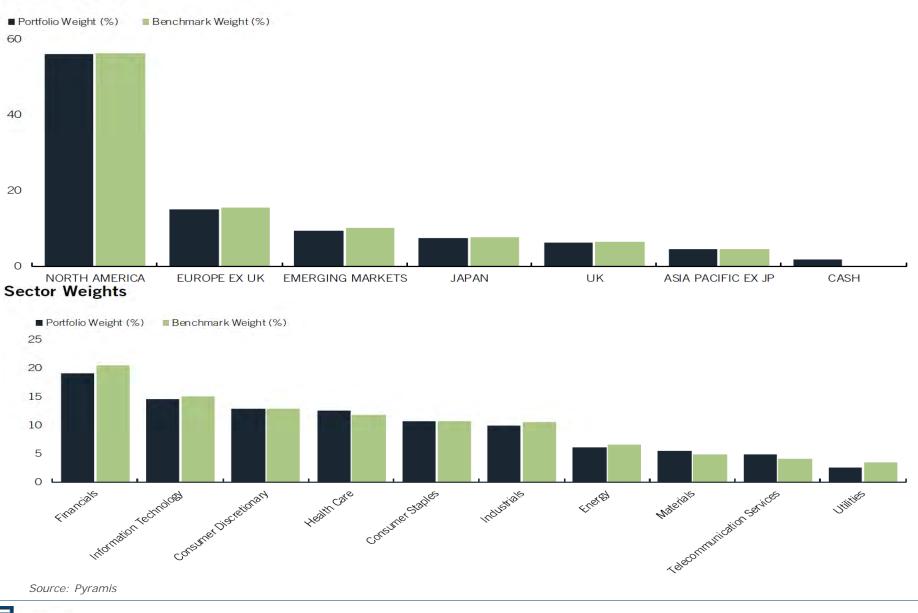
	Total Portfolio (%)	Asia Pacific Ex Jp (%)	Emerging Markets (%)	Europe ex UK (%)	Japan (%)	North America (%)	UK (%)
CONSUMER DISCRETIONARY	(0.0)	(0.0)	(0.1)	0.1	0.0	(0.0)	(0.1)
CONSUMER STAPLES	(0.0)	(0.0)	(0.0)	0.0	0.0	(0.0)	(0.0)
ENERGY	(0.2)	(0.0)	(0.0)	0.0	0.0	(0.3)	0.0
FINANCIALS	(0.1)	(0.0)	(0.1)	(0.1)	0.1	(0.0)	(0.0)
HEALTH CARE	(0.2)	(0.1)	(0.0)	0.0	(0.0)	(0.1)	(0.0)
INDUSTRIALS	(0.2)	(0.0)	(0.0)	(0.1)	(0.0)	(0.0)	(0.0)
INFORMATION TECHNOLOGY	(0.1)	(0.0)	0.0	(0.0)	(0.1)	(0.1)	0.0
MATERIALS	(0.3)	(0.0)	(0.0)	(0.0)	(0.0)	(0.2)	(0.0)
TELECOMMUNICATION SERVICES	(0.1)	0.0	(0.0)	(0.0)	(0.0)	(0.1)	0.0
UTILITIES	(0.1)	(0.0)	0.0	(0.0)	(0.0)	(0.0)	(0.0)
All Sectors	(1.4)	(0.2)	(0.2)	(0.1)	(0.1)	(0.9)	(0.1)
Cash and Other Assets	(0.0)						
Active Return	(1.4)						

Source: Pyramis



## Pyramis

### **Regional Weights**



### • Manager Role in Portfolio

- Global Equity All Cap Growth (added in Q4 2009)

### Organizational Profile

- Walter Scott was established in 1983 as an investment management firm specializing in equity investment across global mandates. In October, 2006, Walter Scott became a wholly owned subsidiary within The Mellon Financial Corporation (Mellon). Similar to Mellon's other investment management subsidiaries, Walter Scott operates autonomously in terms of business activities, investment research, portfolio management and investment administration. The investment decisions reflected within WS client portfolios reflect it independent investment research.
- In July of 2007, The Bank of New York Company, Inc. and Mellon Financial Corporation completed their merger with senior managers from both organizations heading business and support functions.

### Investment Strategy Commentary

- Walter Scott's fundamental, bottoms-up approach combines detailed financial research with business and industry analysis. The primary focus is upon stock selection, finding companies capable of generating wealth internally at 20% per annum, and compounding at this rate into the future.
- Walter Scott will no own more than 5% of a company's market capitalization, although it may hold a greater proportion of its free float ,subject to their confidence level in the business' prospects. The final portfolio will be a low turnover growth portfolio that is concentrated in 40-60 names.

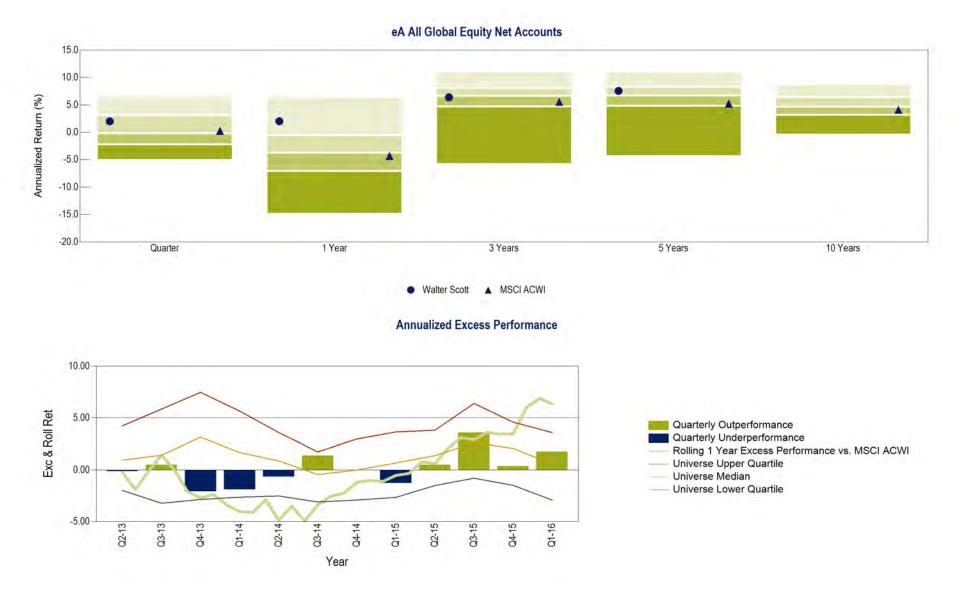
### • Due Diligence Notes

- On February 8, 2013, Walter Scott announced that Ian Clark stepped down as main board Executive Director. Mr. Clark still maintained his title of Founder and remained involved with the firm, although not in an active investment role. With Mr. Clark stepping down, the total board size moved from 11 to 10 individuals. There were no plans to replace him on the board, but thoughts were that they would do so over the next 12-18 months.
- Effective December 31, 2013, Mr. Clark formally ended his employment.
- Walter Scott has been planning for succession and the founders relinquished stock coverage and management of the research process a long time ago.
- On June 13, 2013, Dr. Kenneth Lyall passed away. Dr. Lyall held various roles throughout the development of Walter Scott & Partners Limited and more recently as our Chairman. Dr. Lyall joined the firm in its first year in 1983 and played a major role in the firm's growth from those early years. In an investment career with Walter Scott & Partners Limited spanning 30 years, Ken contributed heavily to its development and investment success.



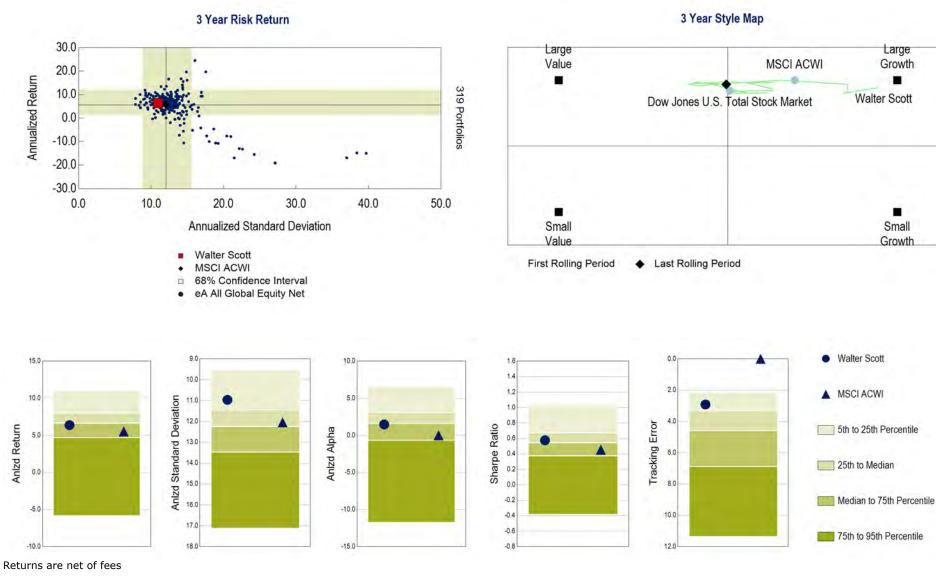
#### Dallas Police & Fire Pension

## Walter Scott



Returns are net of fees





Large

Growth

-

Small

Growth

74

#### Characteristics

	Portfolio	MSCI ACWI
Number of Holdings	53	2,482
Weighted Avg. Market Cap. (\$B)	90.7	87.3
Median Market Cap. (\$B)	48.8	8.3
Price To Earnings	24.6	20.2
Price To Book	5.8	3.2
Price To Sales	4.2	2.7
Return on Equity (%)	22.2	15.8
Yield (%)	2.1	2.6
Beta		1.0
R-Squared		1.0

### **Equity Sector Attribution**

			Attribution Effect	ts	R	eturns	Secto	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1%	0.1%	0.0%	0.0%	7.7%	6.2%	6.2%	6.1%
Materials	0.0%	-0.1%	0.1%	0.1%	4.5%	5.8%	5.8%	4.6%
Industrials	-0.2%	-0.2%	-0.1%	0.2%	4.3%	3.6%	6.2%	10.2%
Cons. Disc.	-0.2%	-0.3%	0.0%	0.1%	-1.8%	-0.4%	19.4%	13.1%
Cons. Staples	-0.2%	-0.1%	-0.1%	0.0%	4.5%	4.8%	7.9%	10.3%
Health Care	1.2%	0.8%	-0.5%	0.9%	1.0%	-6.5%	21.2%	12.6%
Financials	0.9%	1.6%	1.1%	-1.8%	5.8%	-5.0%	1.9%	21.6%
Info. Tech	0.8%	0.3%	0.2%	0.3%	3.9%	1.7%	24.1%	14.6%
Telecomm.	-0.3%	-0.2%	-0.1%	0.0%	-1.3%	7.1%	1.8%	3.7%
Utilities	-0.3%	-0.2%	0.0%	-0.1%	0.2%	8.8%	3.2%	3.2%
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		2.2%	0.0%
Portfolio	1.9%	= 1.8%	+ 0.5%	+ -0.4%	2.2%	0.3%	100.0%	100.0%



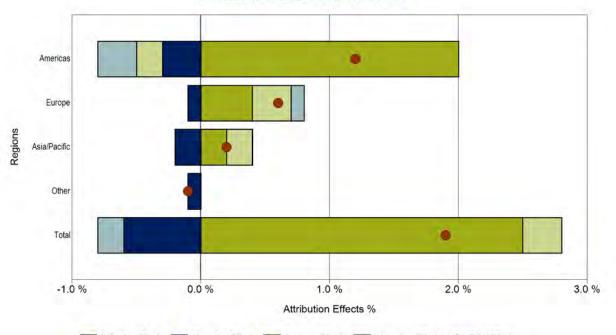
Top Positive Cont	ributors		Top Negative C	ontributors	
	Relative Contribution	Return %		Relative Contribution	Return %
	%			%	
STRYKER	0.3%	15.9%	DENSO	-0.3%	-15.7%
TAIWAN SEMICON.SPN.ADR 1:5	0.3%	15.2%	HONDA MOTOR	-0.2%	-14.9%
SGS 'N'	0.3%	14.9%	FANUC	-0.2%	-11.2%
TJX	0.2%	10.8%	NOVARTIS 'R'	-0.2%	-12.9%
INTUITIVE SURGICAL	0.2%	10.1%	GILEAD SCIENCES	-0.1%	-8.8%
PRAXAIR	0.2%	12.6%	HENNES & MAURITZ 'B'	-0.1%	-6.8%
AMPHENOL 'A'	0.2%	11.0%	ROCHE HOLDING	-0.1%	-7.6%
ORACLE	0.2%	12.5%	SHIN-ETSU CHEMICAL	-0.1%	-4.9%
CNOOC	0.2%	13.4%	HONG KONG AND CHINA GAS	-0.1%	-4.7%
LVMH	0.2%	9.0%	NOVO NORDISK 'B'	-0.1%	-5.0%



	<b>Country A</b> Manager Allocation (USD)	Index	Manager Return (USD)	Index Return (USD)
Americas				
Canada	1.3%	2.8%	9.7%	11.4%
United States	45.8%	52.6%	4.9%	1.0%
Total-Americas	47.1%	56.5%	5.0%	1.9%
Europe				
Denmark	2.1%	0.7%	-5.0%	-0.7%
France	5.7%	3.4%	4.6%	0.1%
Spain	2.3%	1.1%	-2.1%	-4.1%
Sweden	2.0%	1.0%	-6.8%	0.1%
Switzerland	10.6%	3.3%	-0.1%	-5.2%
United Kingdom	3.6%	6.6%	4.2%	-2.6%
Total-Europe	26.2%	22.9%	0.4%	-2.1%

Manager	Index	Manager Return (USD)	Index Return (USD)
		Retain (OOD)	Retain (OOD)
2.4%	2.4%	2.7%	2.1%
6.4%	1.1%	2.7%	-0.4%
11.8%	8.1%	-7.6%	-6.5%
1.9%	0.4%	5.8%	5.1%
2.0%	1.2%	15.2%	7.7%
24.5%	19.3%	-1.0%	-1.7%
95.7%	90.2%	2.0%	-0.2%
2.0%	9.8%	15.2%	5.5%
2.2%		0.1%	
	Manager Allocation (USD) 2.4% 6.4% 11.8% 1.9% 2.0% 24.5% 95.7% 2.0%	Allocation (USD) Allocation (USD) 2.4% 2.4% 6.4% 1.1% 11.8% 8.1% 1.9% 0.4% 2.0% 1.2% 95.7% 90.2% 2.0% 9.8%	Manager         Index         Manager           Allocation (USD)         Allocation (USD)         Return (USD)           2.4%         2.4%         2.7%           6.4%         1.1%         2.7%           11.8%         8.1%         -7.6%           1.9%         0.4%         5.8%           2.0%         1.2%         15.2%           95.7%         90.2%         2.0%           2.0%         9.8%         15.2%





Walter Scott Performance Attribution vs. MSCI ACWI

Selection Effect Allocation Effect Currency Effect Interaction Effect Total Effects

	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
Totals									
Americas	5.0%	1.9%	47.1%	56.5%	2.0%	-0.3%	-0.2%	-0.3%	1.2%
Europe	0.4%	-2.1%	26.2%	22.9%	0.4%	-0.1%	0.3%	0.1%	0.6%
Asia/Pacific	-1.0%	-1.7%	24.5%	19.3%	0.2%	-0.2%	0.2%	0.0%	0.2%
Other		8.0%	0.0%	1.3%		-0.1%	0.0%		-0.1%
Cash	0.1%		2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	2.2%	0.3%	100.0%	100.0%	2.5%	-0.6%	0.3%	-0.2%	1.9%
Totals									
Developed	2.0%	-0.2%	95.7%	90.2%	1.6%	0.0%	0.5%	0.1%	2.2%
Emerging*	15.2%	5.5%	2.0%	9.8%	1.2%	-0.3%	-0.3%	-1.0%	-0.3%
Cash	0.1%		2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



## Manager Role in Portfolio

- Represents global equity allocation

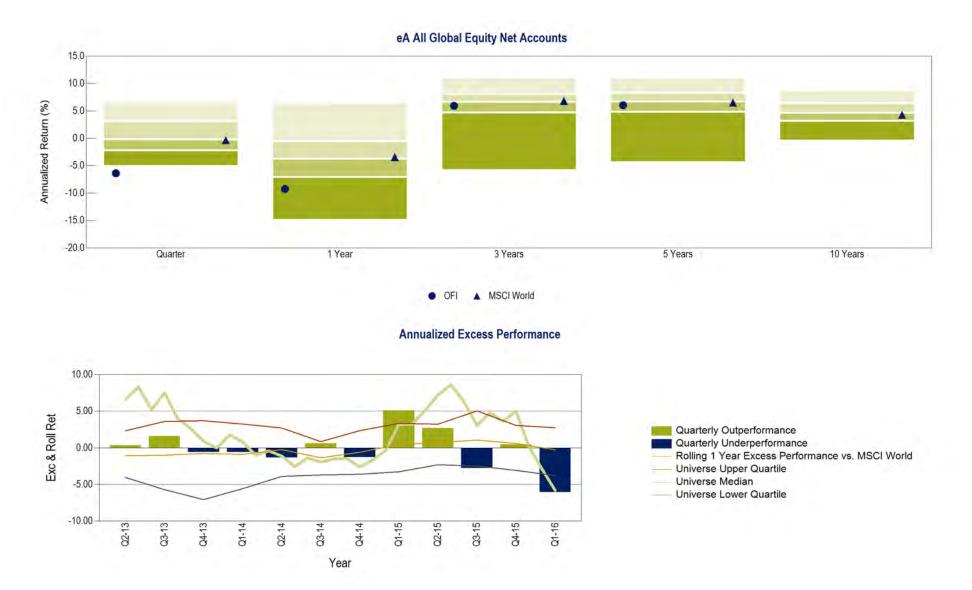
## Organizational Profile

OFI is a wholly owned subsidiary of Oppenheimer Funds, Inc. with primary
office locations in Boston, New York, Denver, and Bellefonte, PA.

## Investment Strategy Commentary

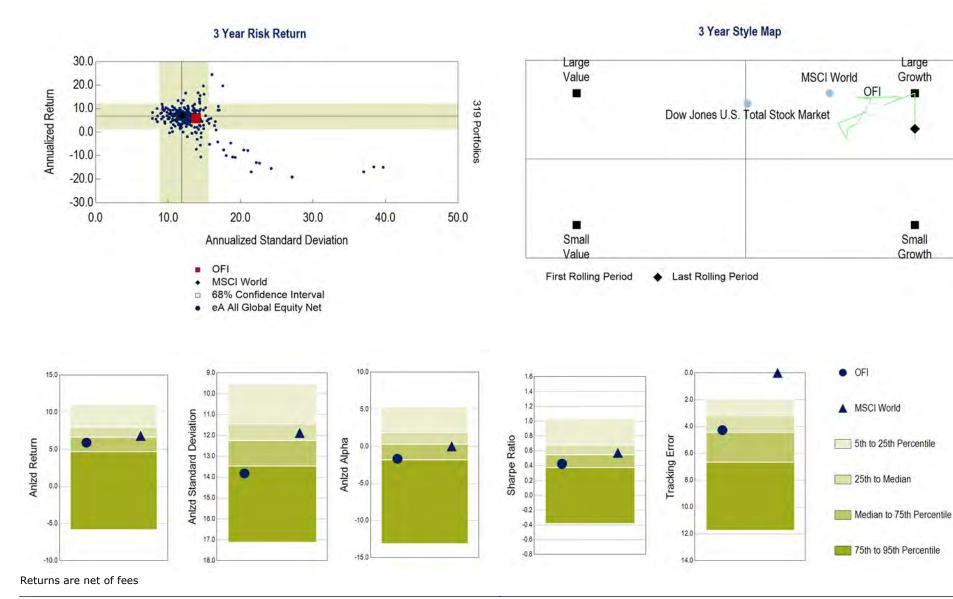
- Fundamental bottom-up stock picking, contrarian, and theme oriented (MANTRA) with a long term view of growth
- Themes are structural (i.e. new technologies, aging population, etc.) and of long-duration. Sub-themes and industries are constantly evolving.
- Position size based on level of conviction and performance potential, and the existing country and sector exposures.
- Largest positions reflect best ideas, and not index weight.





Returns are net of fees







March 31, 2016

Large

Growth

1

Small

Growth

OFI

MSCI World

#### Characteristics

	Portfolio	MSCI World
Number of Holdings	92	1,647
Weighted Avg. Market Cap. (\$B)	64.8	92.8
Median Market Cap. (\$B)	26.5	10.4
Price To Earnings	25.0	20.7
Price To Book	3.9	3.2
Price To Sales	3.7	2.7
Return on Equity (%)	16.0	15.6
Yield (%)	1.9	2.6
Beta		1.0
R-Squared		1.0

### Equity Sector Attribution

			Attribution Effect	S	R	eturns	Secto	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.3%	0.0%	-0.3%	0.0%	8.2%	5.0%	1.2%	6.0%
Materials	-0.3%	-0.3%	-0.1%	0.1%	0.0%	4.5%	0.8%	4.4%
Industrials	-0.2%	-0.4%	0.0%	0.1%	1.1%	3.6%	12.0%	10.7%
Cons. Disc.	-0.2%	-0.4%	0.0%	0.2%	-2.4%	-0.6%	13.5%	13.4%
Cons. Staples	-0.3%	0.2%	-0.2%	-0.2%	5.1%	4.7%	5.7%	10.6%
Health Care	-1.4%	-0.8%	-0.2%	-0.3%	-13.3%	-6.6%	17.7%	13.7%
Financials	-1.7%	-1.9%	0.1%	0.0%	-15.3%	-6.2%	19.7%	20.9%
Info. Tech	-1.0%	-0.9%	0.3%	-0.4%	-4.0%	1.3%	26.0%	13.7%
Telecomm.	-0.2%	-0.3%	-0.1%	0.2%	3.0%	7.1%	1.6%	3.4%
Utilities	-0.3%	-0.4%	-0.3%	0.3%	0.3%	8.8%	0.0%	3.2%
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		1.7%	0.0%
Portfolio	-6.0%	= -5.2%	+ -0.9%	+ 0.1%	-6.2%	-0.2%	100.0%	100.0%



#### **Top Positive Contributors**

### **Top Negative Contributors**

	Relative Contribution %	Return %
LVMH	0.2%	9.0%
INTUIT	0.1%	8.1%
COLGATE-PALM.	0.1%	6.7%
3M	0.1%	11.4%
UNITED PARCEL SER.'B'	0.1%	10.5%
FACEBOOK CLASS A	0.1%	9.0%
AETNA	0.1%	4.2%
UNILEVER (UK)	0.1%	5.9%
PAYPAL HOLDINGS	0.1%	6.6%
EMERSON ELECTRIC	0.1%	14.9%

	Relative	
	Contribution %	Return %
SUNEDISON	-0.7%	-89.4%
CELLDEX THERAPEUTICS	-0.6%	-75.9%
MURATA MANUFACTURING	-0.4%	-16.7%
CREDIT SUISSE GROUP N	-0.4%	-34.4%
DAI-ICHI LIFE INSURANCE	-0.4%	-26.5%
CITIGROUP	-0.3%	-19.2%
DEUTSCHE BANK	-0.3%	-30.5%
PRUDENTIAL	-0.2%	-14.8%
JD.COM 'A' ADR 1:2	-0.2%	-17.9%
BANCA MONTE DEI PASCHI	-0.2%	-57.2%

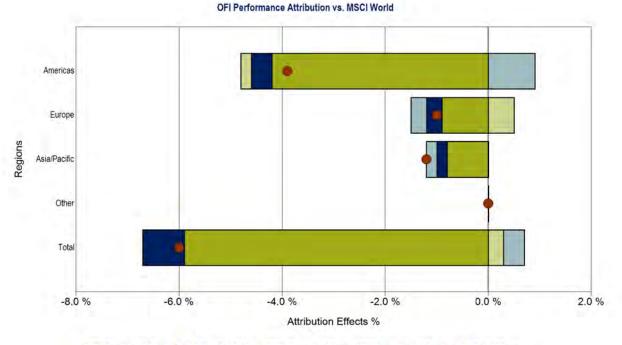


**Country Allocation** 

	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
Americas				
Brazil*	0.8%	0.0%	-10.6%	28.5%
Mexico*	0.6%	0.0%	4.3%	8.5%
United States	46.7%	58.4%	-5.7%	1.0%
Total-Americas	48.1%	61.5%	-5.7%	1.5%
Europe				
Denmark	0.3%	0.7%	20.2%	-0.7%
Finland	0.0%	0.3%	0.3%	-2.6%
France	7.2%	3.8%	1.4%	0.1%
Germany	9.8%	3.5%	-5.7%	-2.4%
Italy	1.6%	0.9%	-14.1%	-11.6%
Spain	3.3%	1.2%	-2.9%	-4.1%
Sweden	3.4%	1.1%	-2.1%	0.1%
Switzerland	3.3%	3.7%	-14.9%	-5.2%
United Kingdom	5.3%	7.4%	-8.7%	-2.6%
Total-Europe	34.1%	24.9%	-5.1%	-2.4%

Country Allocation							
Manager	Index	Manager	Index				
Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)				
1.8%	0.0%	-12.2%	-4.8%				
1.3%	0.0%	-8.6%	-2.5%				
13.0%	9.0%	-10.6%	-6.5%				
16.1%	13.4%	-10.6%	-3.7%				
93.9%	100.0%	-6.2%	-0.2%				
4.5%	0.0%	-8.8%					
1.7%		0.1%					
	Manager Allocation (USD) 1.8% 1.3% 13.0% 16.1% 93.9% 4.5%	Manager         Index           Allocation (USD)         Allocation (USD)           1.8%         0.0%           1.3%         0.0%           13.0%         9.0%           16.1%         13.4%           93.9%         100.0%           4.5%         0.0%	Manager         Index         Manager           Allocation (USD)         Allocation (USD)         Return (USD)           1.8%         0.0%         -12.2%           1.3%         0.0%         -8.6%           13.0%         9.0%         -10.6%           16.1%         13.4%         -10.6%           93.9%         100.0%         -6.2%           4.5%         0.0%         -8.8%				





🗾 Selection Effect 📰 Allocation Effect 🧾 Currency Effect 📰 Interaction Effect 🕚 Total Effects

	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
Totals									
Americas	-5.7%	1.5%	48.1%	61.5%	-4.2%	-0.4%	-0.2%	0.9%	-3.9%
Europe	-5.1%	-2.4%	34.1%	24.9%	-0.9%	-0.3%	0.5%	-0.3%	-1.0%
Asia/Pacific	-10.6%	-3.7%	16.1%	13.4%	-0.8%	-0.2%	0.0%	-0.2%	-1.2%
Other		-9.2%	0.0%	0.3%		0.0%	0.0%		0.0%
Cash	0.1%		1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	-6.2%	-0.2%	100.0%	100.0%	-5.9%	-0.8%	0.3%	0.4%	-6.0%
Totals									
Developed	-6.2%	-0.2%	93.9%	100.0%	-6.4%	0.0%	0.3%	0.4%	-5.7%
Emerging*	-8.8%		4.5%	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.3%
Cash	0.1%		1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



### • Manager Role in Portfolio

- Concentrated Energy sector portfolio within the Global Equity bucket
- Potential bear market and inflation hedge within the equity portfolio

### Organizational Profile

 Founded in 1989 and wholly-owned by its employees, this boutique investment firm is solely focused on publicly traded energy stocks

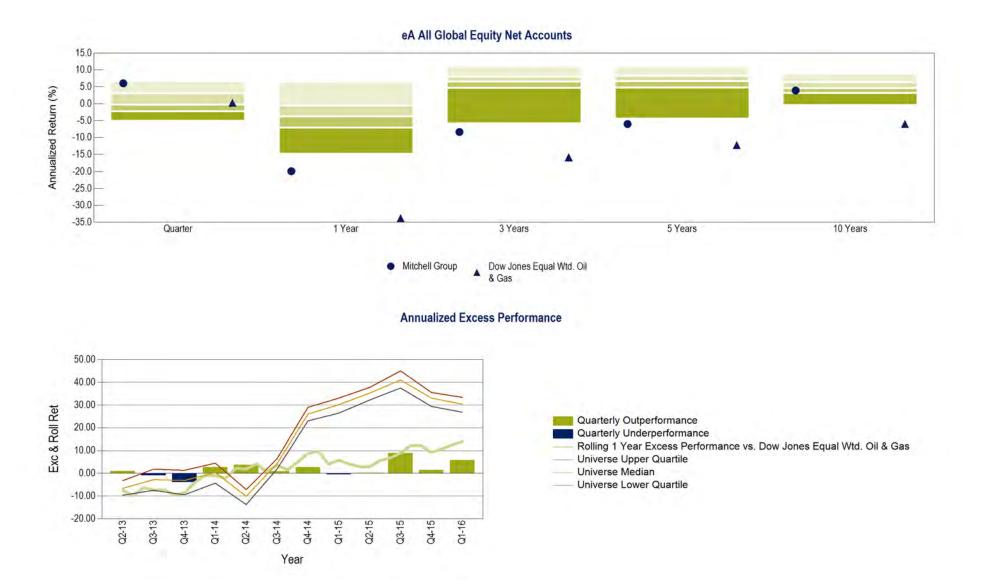
### Investment Strategy Commentary

- Combination top-down, bottom-up investment approach
  - Top down focus: supply/demand forecasting, evaluate and anticipate political developments both domestically and overseas
  - Bottom-up focus: detailed analysis of assets, cash flow, and financial strength



#### Dallas Police & Fire Pension

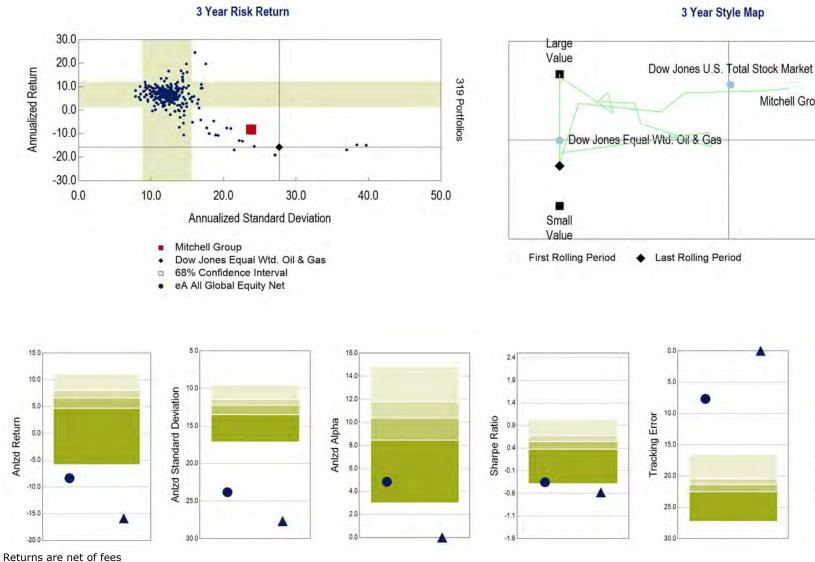
## Mitchell Group



#### Returns are net of fees



## Mitchell Group



3 Year Style Map

Mitchell Group



March 31, 2016

Large

Growth

Small

Growth

Mitchell Group

5th to 25th Percentile

Median to 75th Percentile

75th to 95th Percentile

25th to Median

& Gas

Dow Jones Equal Wtd. Oil

# Mitchell Group

#### Characteristics

	Portfolio	S&P 500 Energy
Number of Holdings	27	39
Weighted Avg. Market Cap. (\$B)	43.8	146.4
Median Market Cap. (\$B)	14.0	13.1
Price To Earnings	6.8	19.2
Price To Book	2.3	1.9
Price To Sales	2.9	2.0
Return on Equity (%)	1.2	6.6
Yield (%)	1.6	3.0
Beta		1.0
R-Squared		1.0

#### **Equity Sector Attribution**

		Attribution Effects			R	eturns	Sector Weights	
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	1.1%	1.2%	0.0%	-0.1%	5.0%	3.9%	94.7%	100.0%
Materials	0.0%						0.0%	0.0%
Industrials	0.0%						0.0%	0.0%
Cons. Disc.	0.0%						0.0%	0.0%
Cons. Staples	0.0%						0.0%	0.0%
Health Care	0.0%						0.0%	0.0%
Financials	0.0%						0.0%	0.0%
Info. Tech	0.0%						0.0%	0.0%
Telecomm.	0.0%						0.0%	0.0%
Utilities	0.0%						0.0%	0.0%
Cash	-0.2%	0.0%	-0.2%	0.0%	0.1%		5.3%	0.0%
Portfolio	0.9%	= 1.2%	+ -0.2%	+ -0.1%	4.8%	3.9%	100.0%	100.0%



# Mitchell Group

#### **Top Positive Contributors**

	Relative	
	Contribution %	Return %
EQT	0.9%	29.1%
RANGE RES.	0.8%	31.7%
CANADIAN NTRL.RES. (NYS)	0.7%	24.5%
PIONEER NTRL.RES.	0.4%	12.3%
CIMAREX EN.	0.4%	9.0%
PDC ENERGY	0.4%	11.4%
ROYAL DUTCH SHELL A ADR 1:2	0.4%	8.0%
HESS	0.3%	9.1%
APACHE	0.3%	10.6%
SOUTHWESTERN ENERGY	0.2%	13.5%

#### **Top Negative Contributors**

	Relative	
	Contribution %	Return %
EXXON MOBIL	-1.9%	8.2%
CHEVRON	-0.7%	7.4%
DEVON ENERGY	-0.5%	-13.4%
ENERGEN	-0.4%	-10.7%
MARATHON OIL	-0.3%	-10.9%
WEATHERFORD INTL.	-0.2%	-7.3%
SCHLUMBERGER	-0.2%	6.5%
NOBLE ENERGY	-0.2%	-4.3%
BAKER HUGHES	-0.1%	-4.7%
ANADARKO PETROLEUM	-0.1%	-4.0%



#### • Manager Role in Portfolio

- Concentrated eco/sustainability theme/sector portfolio within the Global Equity bucket

### Organizational Profile

- SAM USA is an SEC registered Investment Adviser fully dedicated to global, regional and thematic sustainable investing.
- SAM USA's parent company, SAM was founded in 1995 as an independent asset management company specializing in sustainability investments.
- In February 2007, Robeco Group acquired a 64% stake in SAM, with the remaining 36% held by SAM's management and employees. Since the alliance with Robeco, an employment participation plan has been created, leading to a 38% ownership of SAM by employees and management.
- On January 1, 2011, Michael Baldinger, former head of Global Clients & Marketing, replaced Sander Van Eijken as CEO, who stepped down in February of 2010. Neil Johnson was named the new head of Global Clients & Marketing.
- SAM is headquartered in New York, NY and has offices in Zurich, Switzerland, Sonoma, CA, and Boston, MA.

### Investment Strategy Commentary

- A disciplined, well-structured process that strives for an optimal risk/return profile, highlighting stock selection as the predominant return source.
- The portfolio construction is bottom-up driven. Stocks are weighted within the portfolio according to the results of the DCF valuation and their expected upside potential.
- Portfolios are monitored and rebalanced on a continuous basis.
- Even theme portfolios have strong biases in terms of sectors or risk factors (small caps), so asset selection remains an important risk and performance source.
- Risk management is executed with quantitative risk models on a monthly basis.

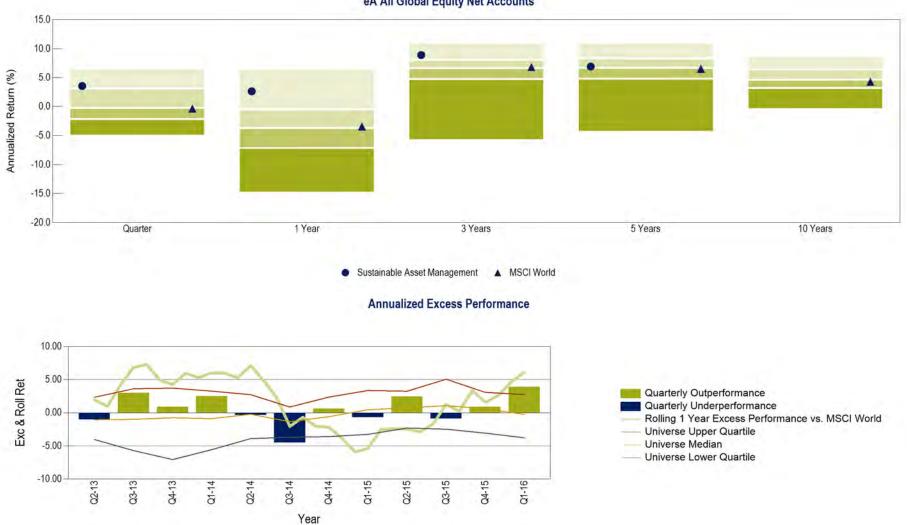
### • Due Diligence Notes

 On February 19, 2013, it was announced that ORIX Corporation, a publicly-traded, Tokyobased diversified financial services company, would be acquiring approximately 90.01% of Robeco from Rabobank. In this agreement, Rabobank will retain 9.99% of Robeco and will continue to maintain and expand Robeco's business platform.



#### Dallas Police & Fire Pension

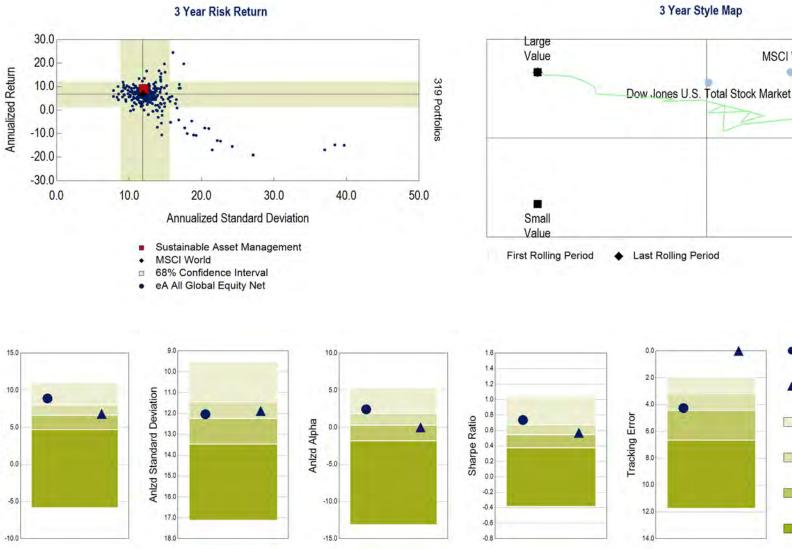
### Sustainable Asset Management



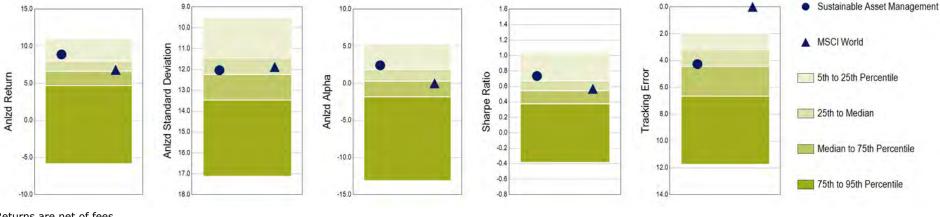
eA All Global Equity Net Accounts

Returns are net of fees





3 Year Style Map



Returns are net of fees



March 31, 2016

Large

Growth

Small

Growth

MSCI World

e

#### Characteristics

	Portfolio	MSCI World
Number of Holdings	89	1,647
Weighted Avg. Market Cap. (\$B)	13.1	92.8
Median Market Cap. (\$B)	4.6	10.4
Price To Earnings	25.0	20.7
Price To Book	3.2	3.2
Price To Sales	2.5	2.7
Return on Equity (%)	14.0	15.6
Yield (%)	2.0	2.6
Beta		1.0
R-Squared		1.0

### **Equity Sector Attribution**

		Attribution Effects			R	eturns	Secto	Sector Weights	
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	-0.5%	-2.9%	-0.3%	2.7%	-40.3%	5.0%	0.1%	6.0%	
Materials	-0.3%	-0.3%	0.0%	-0.1%	-2.0%	4.5%	5.6%	4.4%	
Industrials	3.3%	0.5%	1.0%	1.8%	7.3%	3.6%	42.2%	10.7%	
Cons. Disc.	0.1%	0.5%	0.0%	-0.5%	6.3%	-0.6%	2.7%	13.4%	
Cons. Staples	-0.7%	-1.1%	-0.5%	0.9%	-2.0%	4.7%	1.1%	10.6%	
Health Care	0.5%	0.7%	0.0%	-0.2%	-2.8%	-6.6%	12.9%	13.7%	
Financials	1.0%	4.7%	1.3%	-4.9%	16.6%	-6.2%	0.5%	20.9%	
Info. Tech	-0.2%	0.2%	-0.2%	-0.2%	2.9%	1.3%	4.6%	13.7%	
Telecomm.	-0.3%		-0.2%			7.1%	0.0%	3.4%	
Utilities	0.5%	-0.2%	2.1%	-1.3%	1.7%	8.8%	25.4%	3.2%	
Cash	0.1%	0.0%	0.1%	0.0%	0.1%		4.7%	0.0%	
Portfolio	3.6%	= 2.2%	+ 3.3%	+ -1.9%	3.4%	-0.2%	100.0%	100.0%	



#### **Top Positive Contributors**

	Relative Contribution %	Return %
XYLEM	0.5%	12.5%
SGS 'N'	0.3%	14.9%
AMERICAN WATER WORKS	0.3%	16.0%
CPAD.SANMT.DE MINASGR.ON	0.2%	34.7%
COWAY	0.2%	17.6%
WASTE MANAGEMENT	0.2%	11.3%
GEORG FISCHER 'R'	0.2%	22.4%
ELIS	0.2%	17.3%
CAL.WATER SER.	0.2%	15.7%
TRIMBLE NAVIGATION	0.2%	15.6%

#### **Top Negative Contributors**

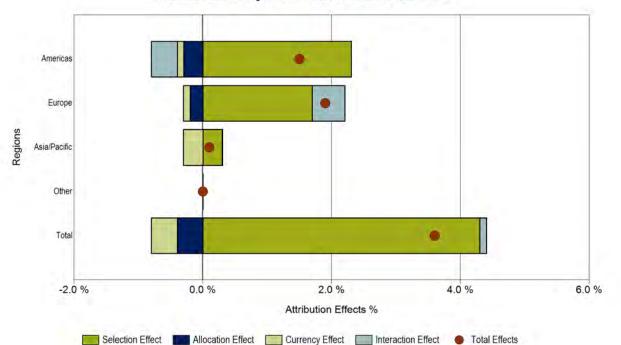
	Relative	
	Contribution %	Return %
GUANGDONG INVESTMENT	-0.2%	-10.7%
PERKINELMER	-0.2%	-7.5%
PENNON GROUP	-0.1%	-7.0%
CHINA EVERBRIGHT INTL.	-0.1%	-13.1%
AGILENT TECHS.	-0.1%	-4.7%
UNITED UTILITIES GROUP	-0.1%	-3.8%
KUBOTA	-0.1%	-12.9%
CALGON CARBON	-0.1%	-18.4%
EBARA	-0.1%	-12.0%
NOVOZYMES	-0.1%	-5.3%



Country Allocation								
	Manager	Index	Manager	Index				
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)				
Americas								
Brazil*	0.7%	0.0%	34.7%	28.5%				
Canada	0.6%	3.1%	-5.9%	11.4%				
Mexico*	0.4%	0.0%	14.2%	8.5%				
United States	48.7%	58.4%	4.8%	1.0%				
Total-Americas	50.4%	61.5%	5.1%	1.5%				
Europe								
Austria	1.0%	0.1%	12.4%	-0.5%				
Denmark	1.6%	0.7%	-5.3%	-0.7%				
Finland	1.0%	0.3%	9.7%	-2.6%				
France	8.9%	3.8%	2.2%	0.1%				
Germany	1.1%	3.5%	-2.0%	-2.4%				
Netherlands	0.0%	1.2%	-4.6%	3.0%				
Switzerland	4.6%	3.7%	14.4%	-5.2%				
United Kingdom	13.8%	7.4%	1.8%	-2.6%				
Total-Europe	32.0%	24.9%	3.7%	-2.4%				

Country Allocation								
	Manager	Index	Manager	Index				
	Allocation (USD) Allo	ocation (USD)	Return (USD)	Return (USD)				
AsiaPacific								
Australia	0.3%	2.6%	2.4%	2.1%				
Hong Kong	3.6%	1.2%	-11.4%	-0.3%				
Japan	5.2%	9.0%	-5.2%	-6.5%				
Korea*	1.3%	0.0%	17.6%	5.1%				
Philippines*	1.2%	0.0%	14.6%	7.0%				
Singapore	1.1%	0.5%	-10.1%	5.1%				
Thailand*	0.2%	0.0%	-7.6%	16.9%				
Total-AsiaPacific	12.9%	13.4%	-3.1%	-3.7%				
Totals								
Developed	91.5%	100.0%	2.9%	-0.2%				
Emerging*	3.8%	0.0%	17.9%					
Cash	4.7%		0.1%					





Sustainable Asset Management Performance Attribution vs. MSCI World

	Returns and Weights					Attribution Effects				
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total	
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects	
Totals										
Americas	5.1%	1.5%	50.4%	61.5%	2.3%	-0.3%	-0.1%	-0.4%	1.5%	
Europe	3.7%	-2.4%	32.0%	24.9%	1.7%	-0.2%	-0.1%	0.5%	1.9%	
Asia/Pacific	-3.1%	-3.7%	12.9%	13.4%	0.3%	0.0%	-0.3%	0.0%	0.1%	
Other		-9.2%	0.0%	0.3%		0.0%	0.0%		0.0%	
Cash	0.1%		4.7%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	
Total	3.4%	-0.2%	100.0%	100.0%	4.3%	-0.4%	-0.4%	0.1%	3.6%	
Totals										
Developed	2.9%	-0.2%	91.5%	100.0%	3.7%	0.0%	-0.6%	-0.3%	2.8%	
Emerging*	17.9%		3.8%	0.0%	0.0%	0.0%	0.2%	0.6%	0.7%	
Cash	0.1%		4.7%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	



### Ashmore AEMDF

## Manager Role in Portfolio

Represents the external emerging market debt portion of the global fixed income allocation

## Organizational Profile

- Established in 1992 with a management buyout in 1998/1999
- Ashmore Group plc, the parent company of Ashmore Investment Management Limited ("AIML" or "Ashmore"), was listed on the London Stock Exchange in October 2006.
- Specialist in emerging market investing

## Investment Strategy Commentary

- Ashmore combines top down thematic approaches with issue-by-issue security selection.
- Process is overseen by an investment committee which meets weekly to approve all strategies and transactions.
- Strong emphasis on risk management in portfolio construction and ongoing monitoring.



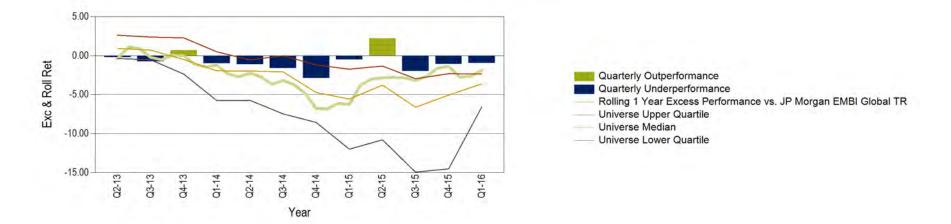
#### Dallas Police & Fire Pension

### Ashmore AEMDF



eA All Emg Mkts Fixed Inc Net Accounts

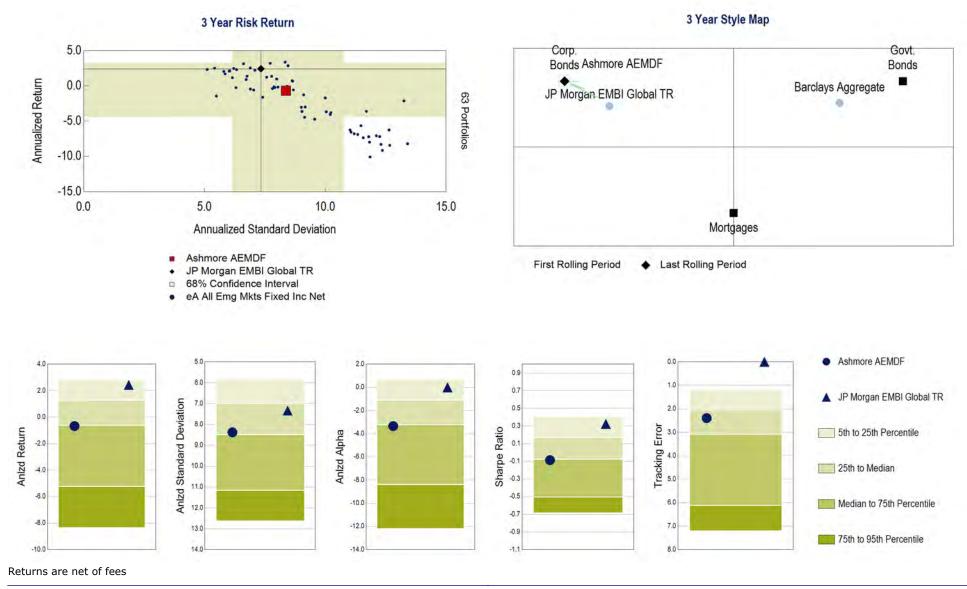
#### Annualized Excess Performance



Returns are net of fees



### Ashmore AEMDF



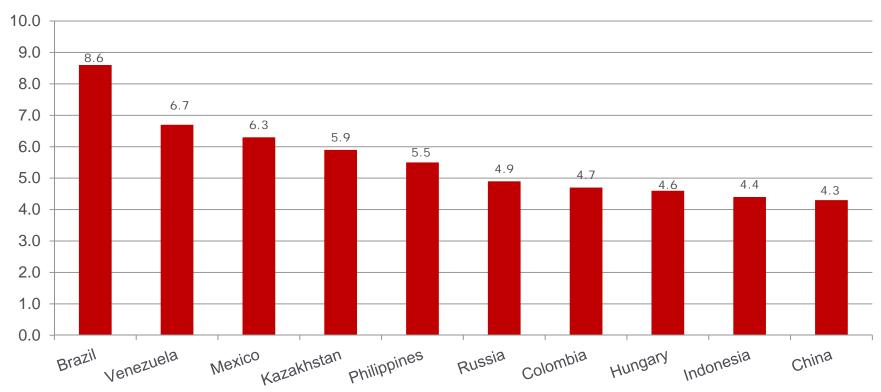


Characteristics	Ashmore AEMDF
Average Modified Duration	7.3
Average Life (years)	12.8
Yield	8.6
Sharpe Ratio	-0.2
Information Ratio	-0.7
Beta	1.2



### Ashmore AEMDF

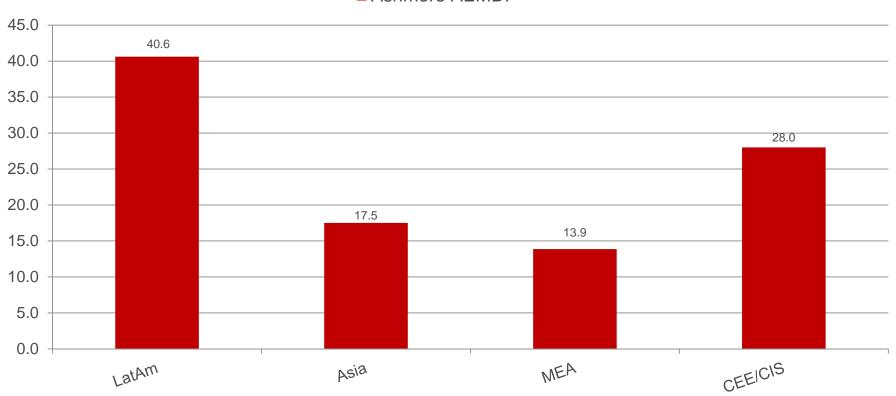
# **Largest Country Positions**



#### Ashmore AEMDF



# **Exposure by Region**



Ashmore AEMDF



# **Exposure by Theme**

120 96.8 100 80 60 40 17.1 20 4.6 2.3 2.2 0 Corporate Debt External Debt Local Currency Alternatives Cash

Ashmore AEMDF



### Ashmore AEMLCB

## Manager Role in Portfolio

Represents the local emerging market debt portion of the global fixed income allocation

## Organizational Profile

- Established in 1992 with a management buyout in 1998/1999
- Ashmore Group plc, the parent company of Ashmore Investment Management Limited ("AIML" or "Ashmore"), was listed on the London Stock Exchange in October 2006.
- Specialist in emerging market investing

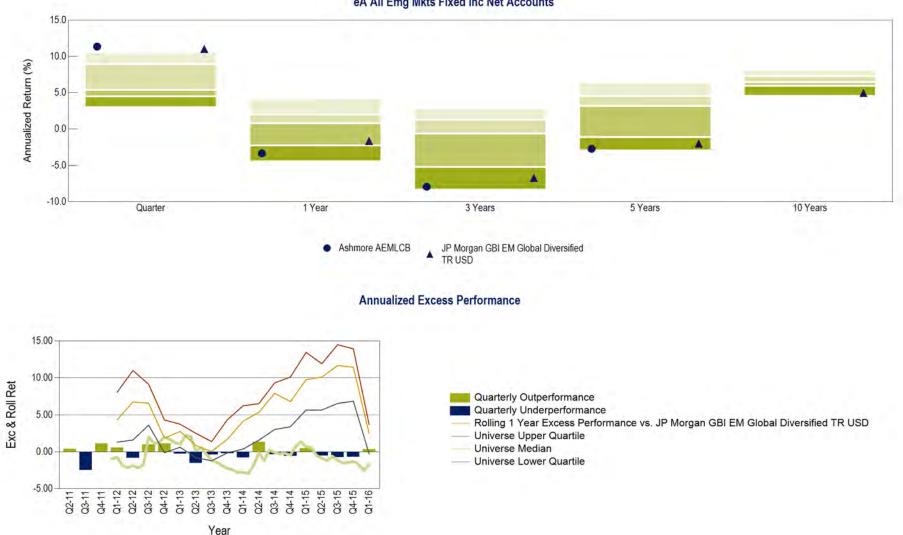
### Investment Strategy Commentary

- Ashmore combines top down thematic approaches with issue-by-issue security selection.
- Process is overseen by an investment committee which meets weekly to approve all strategies and transactions.
- Strong emphasis on risk management in portfolio construction and ongoing monitoring.



#### **Dallas Police & Fire Pension**

### Ashmore AEMLCB

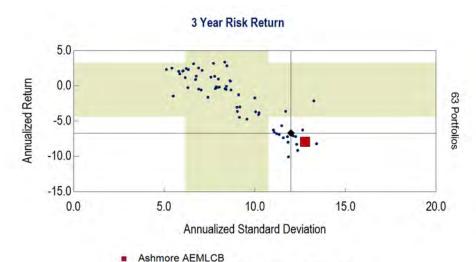


eA All Emg Mkts Fixed Inc Net Accounts

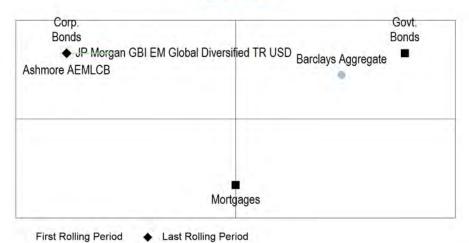
Returns are net of fees



## Ashmore AEMLCB

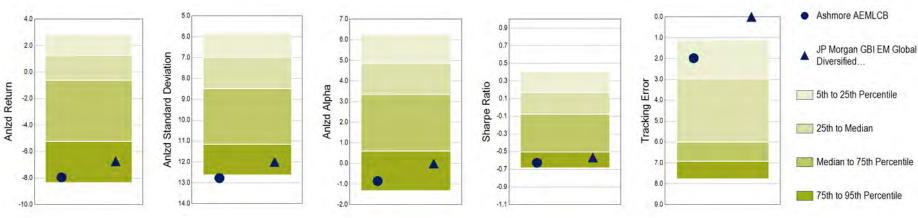


#### 3 Year Style Map



JP Morgan GBI EM Global Diversified TR USD

- SP Morgan GBI EM Global Diversitied 1
   68% Confidence Interval
- eA All Emg Mkts Fixed Inc Net



Returns are net of fees



March 31, 2016

Ashmore AEMLCB

## Top 10 exposures by country

Top 10 exp	posures b	y currency
------------	-----------	------------

Brazil			11.9	
Poland			11.9	
Mexico			10.9	
South Africa			10.3	
Indonesia			10.2	
Malaysia			9.8	
Thailand		8	.9	
Turkey		8.	7	
Colombia		7.3		
Hungary		5.6		
Other (9)			12.0	
	0%	5%	10%	15%

Brazilian Real			11.98	
Polish Zloty			11.90	
Mexican Peso		·	10.88	
Indonesian Rupiah		9	.95	
Malaysian Ringgit		9	.90	
South African Rand		9.	32	
Thai Baht		8.9	)3	
Turkish Lira		7.45		
Colombian Peso		7.35		
Hungarian Forint		5.58		
Other (12)		6.76		
	0%	5%	10%	15%



## Ashmore AEMLCB

Credit rating of debt instruments	Fund
AAA	0.0%
AA	0.2%
A	24.4%
BBB	59.0%
BB	15.4%
В	0.0%
<b< td=""><td>0.0%</td></b<>	0.0%
Not rated	1.0%

Top 10 holdings	Fund
Brazil Bltn 0% 01/01/2019	3.5%
Brazil Ntnf 10% 01/01/2025 - Lc	3.1%
Colombia Tes 10% 24/07/2024	2.2%
Rep Of South Africa 7% 28/02/2031 R213	2.0%
Mexico Bonos 8% 07/12/2023 (M20)	2.0%
Rep Of South Africa 10.5% 21/12/2026 R186	1.9%
Colombia Tes 6% 28/04/28	1.8%
Turkey Govt Bond 8.5% 10/07/2019	1.8%
Poland Govt 5.75% 23/09/2022	1.8%
Indonesia Govt 9% 15/03/2029 Fr71	1.7%
Total	21.7%
Total number of holdings	118

Source: Ashmore, March 2016

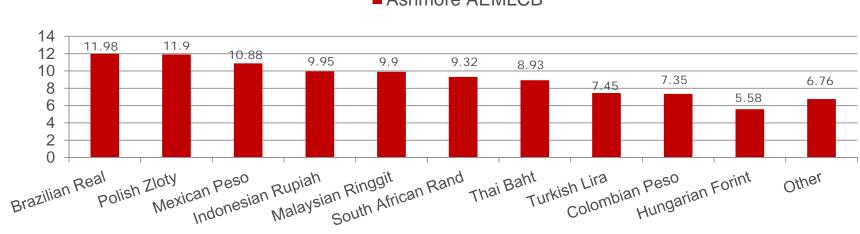


Characteristics	Ashmore AEMLCB
Average Modified Duration	5.4
Average Life (years)	6.8
Yield to Maturity	5.9

Source: Ashmore, March 2016



### Ashmore AEMLCB

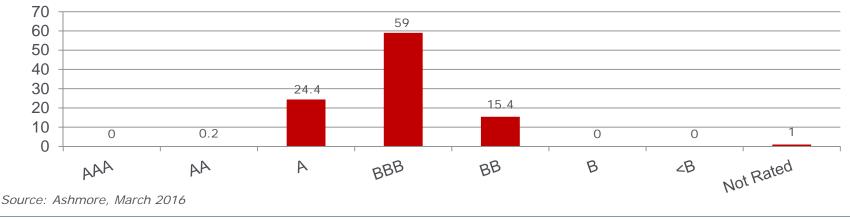


Ashmore AEMLCB

Credit Rating of Debt Instruments (% of NAV)

Top 10 Currency Exposures (% of NAV)

Ashmore AEMLCB





### Ashmore AEMLCB

**Exposure by Region** 

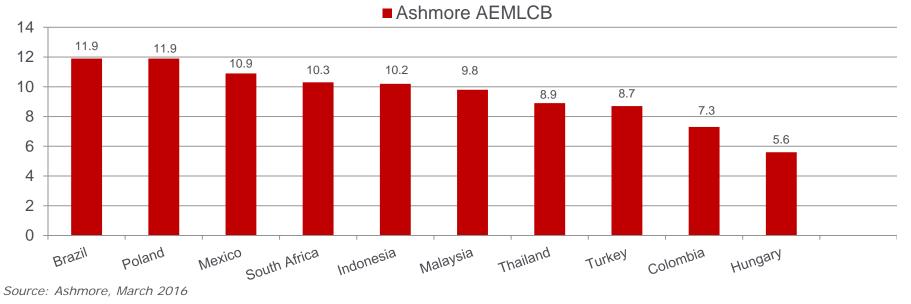
#### Ashmore AEMLCB 40 33.3 29.6 30 20



34.2



## Top 10 Country Exposures (% of NAV)





### Brandywine

## Manager Role in Portfolio

- One of two global fixed income managers

## Organizational Profile

 Brandywine Asset Management, LLC is a wholly-owned, independent subsidiary of Legg Mason, Inc. Prior to October 2001, they were Brandywine Asset Management, Inc. Of note, their senior investment professionals have non-competes with Legg Mason, Inc. for up to 6 years.

## Investment Strategy Commentary

- Brandywine attempts to invest in bonds with the highest real yield, manage currencies to protect principle and increase returns, avoid index-like weights, limit risk and patiently rotate countries
- Secular trends drive bond markets and opportunities exist to add value by identifying trends which capitalize on the dynamics of liquidity cycles and business cycles in each country
- Currency valuations that Brandywine considers extreme are hedged



## Brandywine

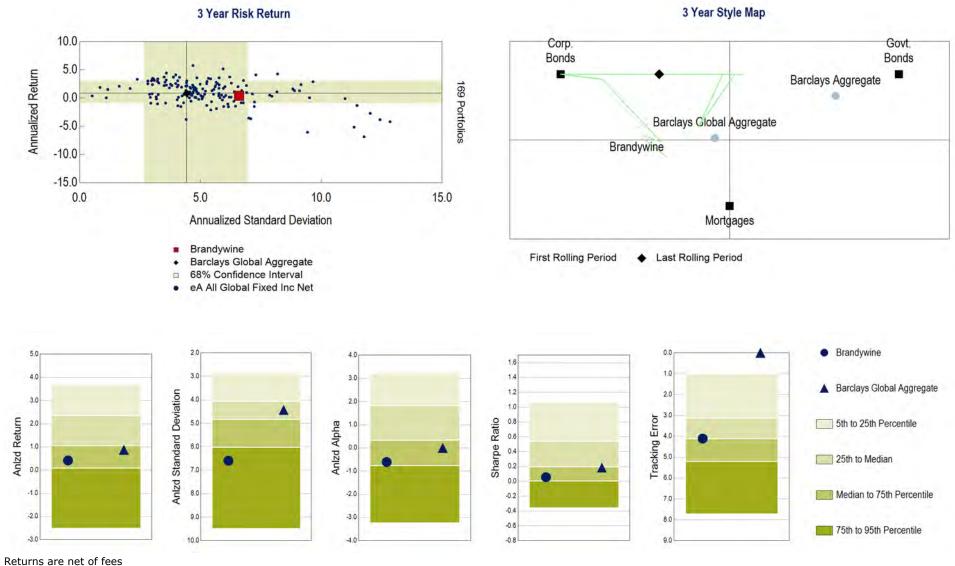


eA All Global Fixed Inc Net Accounts

Returns are net of fees



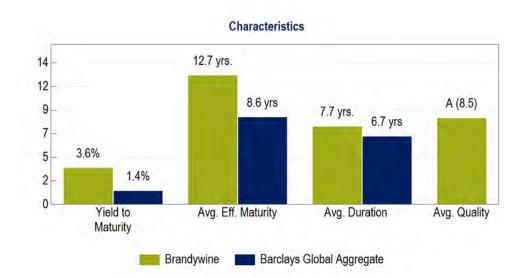
## Brandywine





March 31, 2016

## Brandywine



#### **Quality Ratings**





Sectors

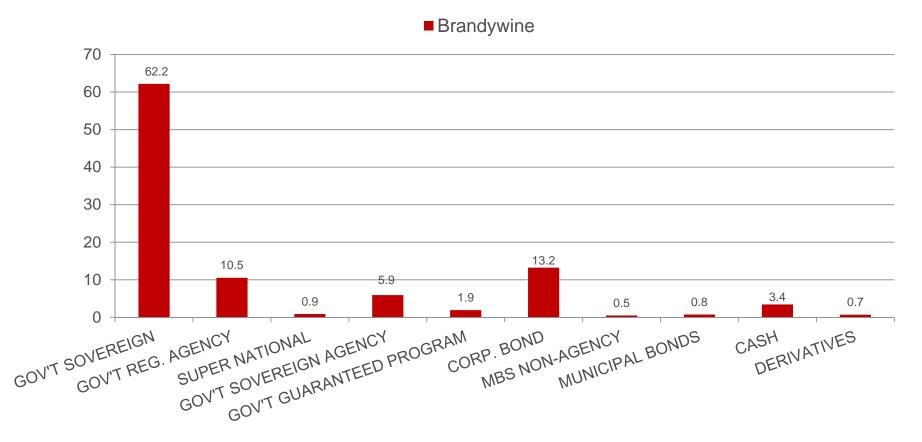


Characteristics	Brandywine
Average Coupon	4.1
Average Maturity	12.9
Modified Duration	7.4
Number of Issues	52
Yield to Maturity	3.5

Source: Brandywine, March 2016

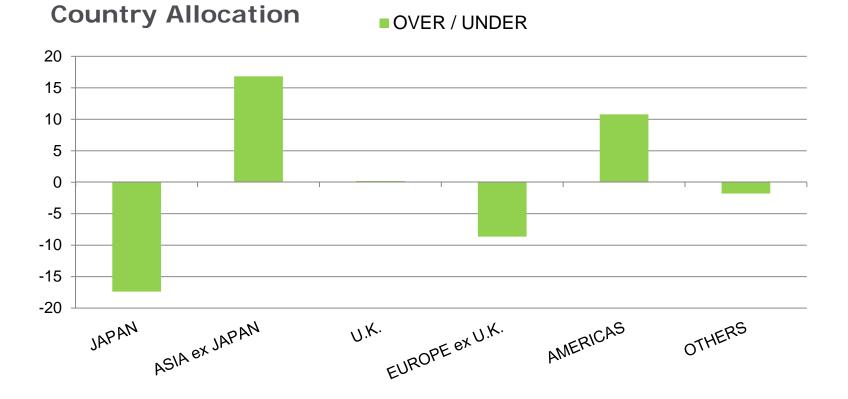


## **Sector Allocation**



Source: Brandywine, March 2016





Source: Brandywine, March 2016



#### Mondrian

## Manager Role in Portfolio

- Along with Brandywine, represents the global fixed income portion of the portfolio
- 20% is managed as a U.S. only piece by Delaware

## Organizational Profile

 Mondrian Investment Partners Limited is controlled by members of Mondrian's management. Formerly known as Delaware International Advisors Ltd., Mondrian was purchased from Lincoln Financial Group in September 2004 by senior members of its management, together with private equity funds affiliated with Hellman and Friedman LLC. Mondrian is 57% owned by its senior employees.

## Investment Strategy Commentary

- Allocations to global bond markets are made on the basis of their real return potential in U.S. dollars
- Mondrian uses medium-to-long term global inflation analysis to determine expected real returns
- Currency management in global fixed income is seen as an integral part of a portfolio's total return. Mondrian believes that the best long term measure of a currency's value is provided by purchasing power parity.



## Mondrian

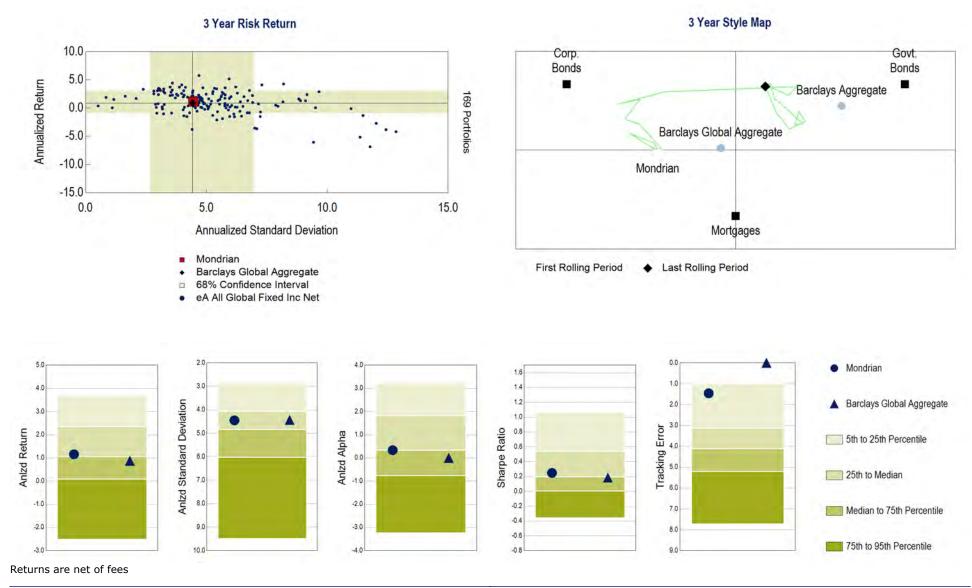


eA All Global Fixed Inc Net Accounts

Returns are net of fees



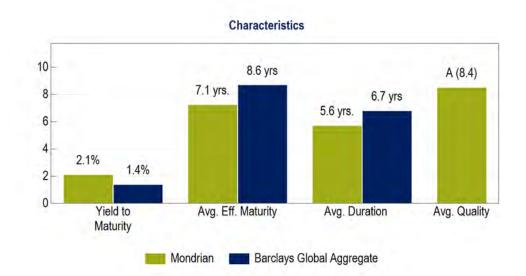
## Mondrian





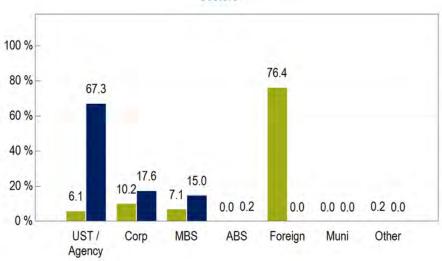
March 31, 2016

## Mondrian



#### **Quality Ratings**





Sectors

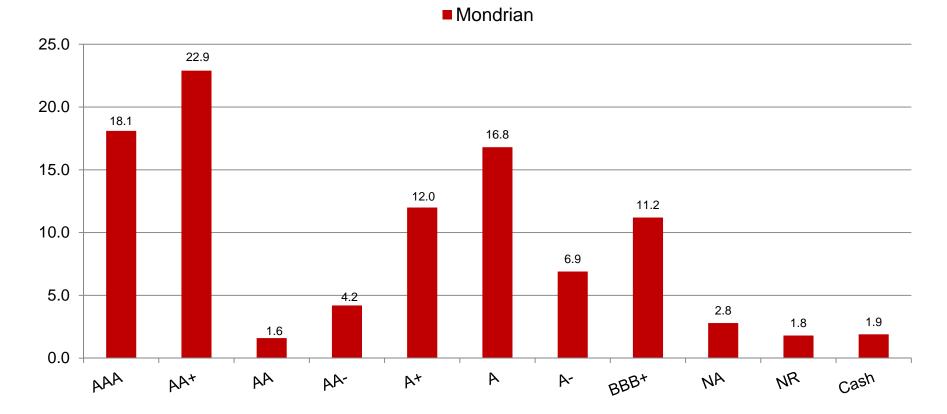


Characteristics	Mondrian
Average Yield	2.1
Average Maturity	6.8
Modified Duration	5.6
Number of Issues	81
Average Quality	AA-

Source: Mondrian, March 2016



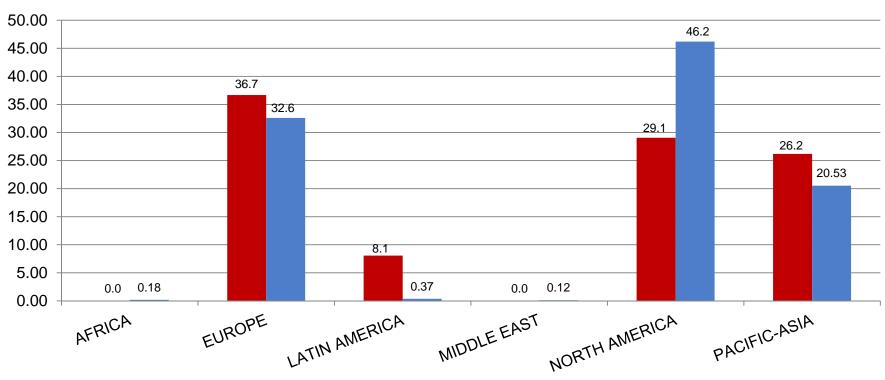
## **Credit Distribution**



Source: Mondrian, March 2016



## **Country Allocation**



Mondrian BC Global

Source: Mondrian, March 2016



## Loomis Sayles

# Manager Role in Portfolio

Global opportunistic fixed income manager operating in public securities markets

# Organizational Profile

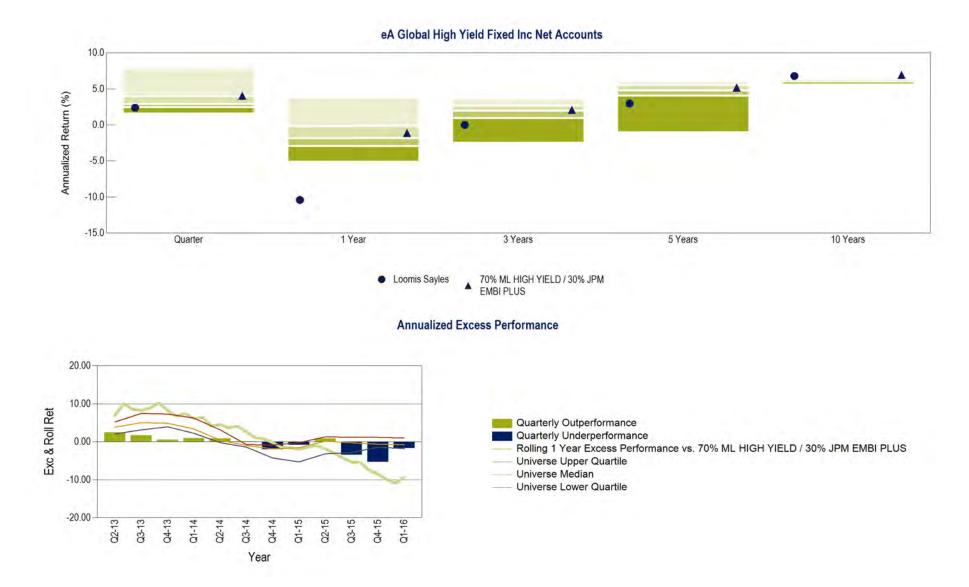
- Originally founded in 1926, Loomis Sayles is now a wholly-owned subsidiary of CDC IXIS Asset Management
- Loomis is highly regarded for its credit research skills

# Investment Strategy Commentary

- Bottom-up selection with top-down "awareness"
- Bond Policy Committee provides top-down, macro view of market conditions
- Investment professionals from research, portfolio management and trading collaborate for bottom-up selection in eleven specific sectors



## Loomis Sayles



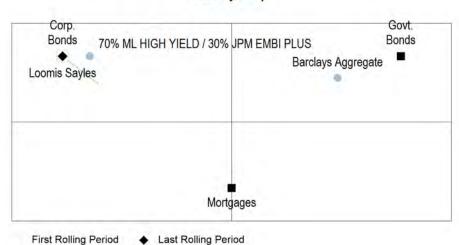
Returns are net of fees



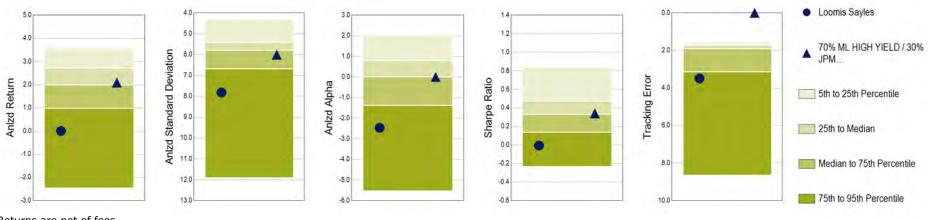
## Loomis Sayles



- Loomis Sayles
  70% ML HIGH YIELD / 30% JPM EMBI PLUS
- 68% Confidence Interval
- eA Global High Yield Fixed Inc Net



3 Year Style Map



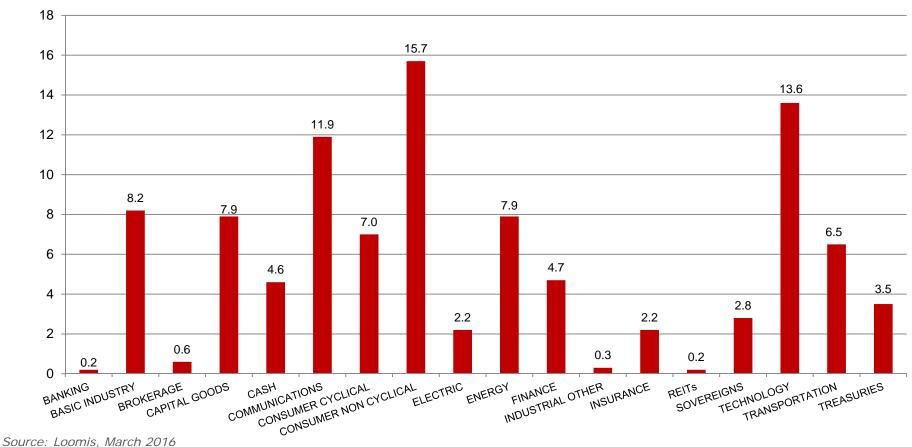


Characteristics	Loomis
Average Maturity (Yrs)	7.8
Duration(Yrs)	4.9
Average Quality	B2
Yield to Maturity(%)	9.3

Source: Loomis March 2016



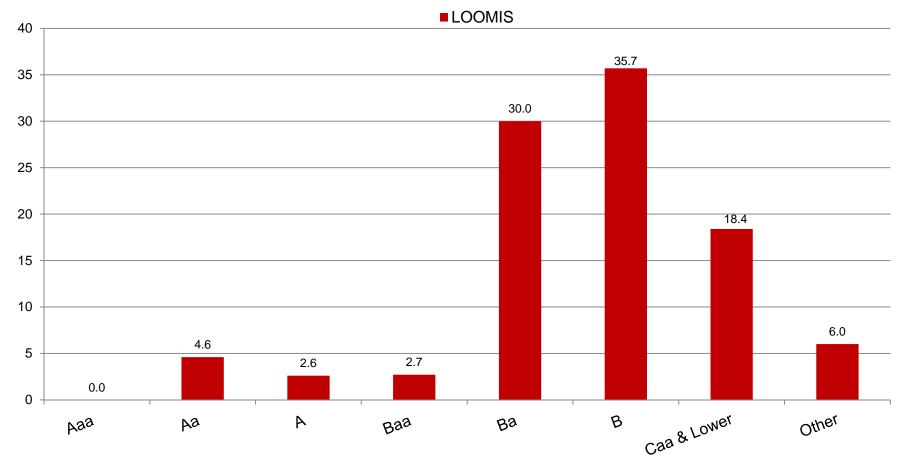
## **Sector Allocation**



LOOMIS



## **Quality Allocation**



Source: Loomis, March 2016



March 31,2016

### Loomis Sayles Senior Floating Rate and Fixed Income

#### • Manager Role in Portfolio

- Bank Loan manager within the Global Fixed Income bucket
- Seeks to provide a high level of current income by using a value driven, opportunistic approach and macro-guided portfolio construction
- Provides some protection in a rising rate environment

### Organizational Profile

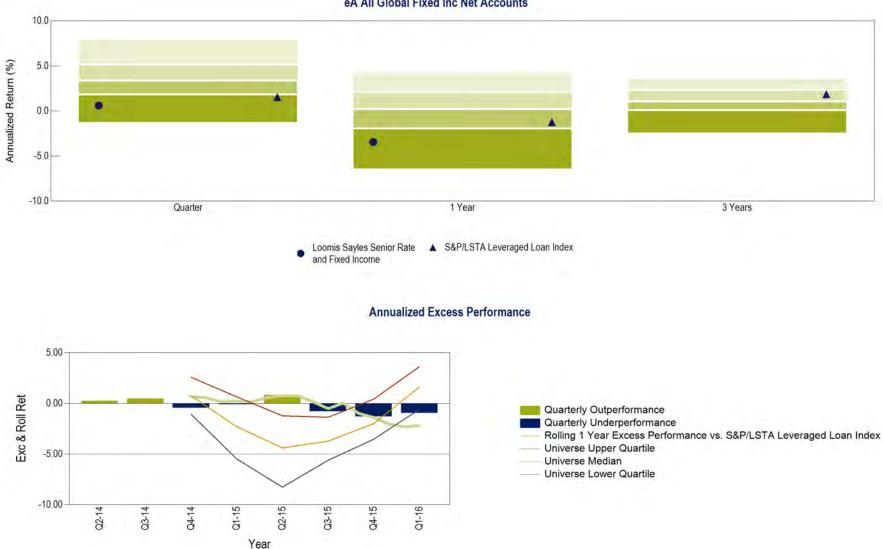
- Originally founded in 1926, Loomis Sayles is now a wholly-owned subsidiary of Natixis Global Asset Management
- Loomis is highly regarded for its credit research skills

### Investment Strategy Commentary

- Allocations to out of benchmark securities for offensive and defensive purposes
- Must invest at least 65% in floating rate loans
- May invest up to 35% of assets in other fixed income securities
- May invest up to 20% of assets in non- US issuers, including 10% in emerging market debt securities
- May use leverage through borrowing up to 33.33% of the Fund's total assets after such borrowing



## Loomis Sayles Senior Rate and Fixed Income

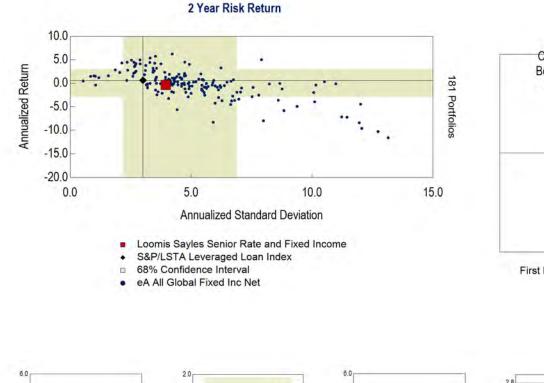


eA All Global Fixed Inc Net Accounts

Returns are net of fees



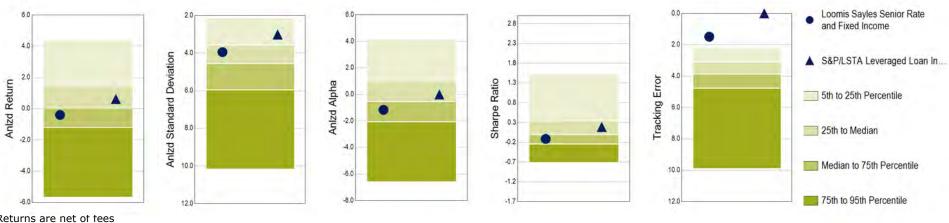
## Loomis Sayles Senior Rate and Fixed Income



Corp. Govt. Bonds Bonds Barclays Aggregate S&P/LSTA Leveraged Loan Index Loomis Sayles Senior Rate and Fixed Income Mortgages

2 Year Style Map

First Rolling Period ♦ Last Rolling Period



Returns are net of fees



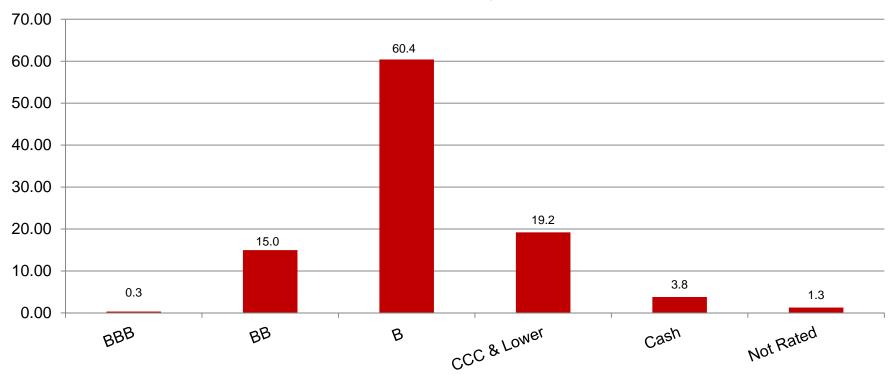
March 31, 2016

Characteristics	Loomis Sayles
Current Yield	7.0
Stated Maturity	4.8
Duration	0.4
Number of Issues	206
Average Quality	В

Source: Loomis Sayles, March 2016



## **Credit Distribution**

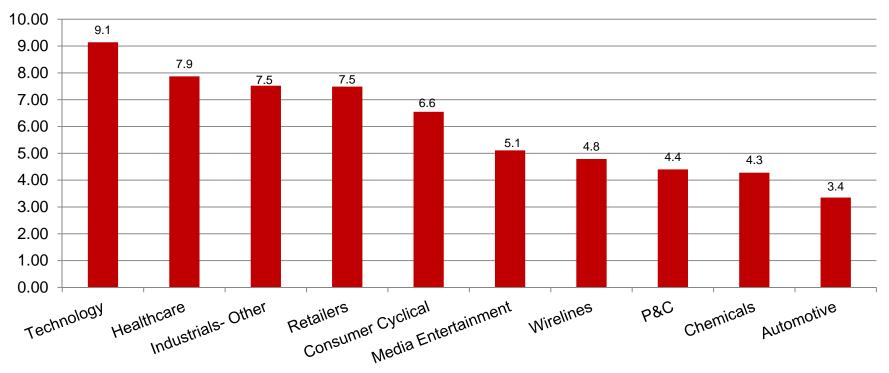


#### Loomis Sayles Senior Floating Rate and Fixed Income

Source: Loomis Sayles, March 2016



## **Sector Distribution**



#### Loomis Sayles Senior Floating Rate and Fixed Income

Source: Loomis Sayles, March 2016



### Highland Capital Management, LP

## Manager Role in Portfolio

 Bank loan strategy within the private global opportunistic fixed income allocation

## Organizational Profile

- Established in 1990 as a standalone investment division of Protective Life Insurance Company. In 1997, the founders purchased Protective's interest.
- Specialists in leveraged loans and high yield

### Investment Strategy Commentary

- Top-down/bottom up investment approach
  - Management develops macro and sector views and seeks to implement the views on an individual investment basis

### Funded investment in the Highland Credit Strategy during Q4 2006

### Notable Occurrences

 In 4Q 2008, the Dallas Police and Fire Pension System provided Highland Credit Opportunities CDO Fund, L.P. with a cash infusion through purchase of senior secured notes



### Manager Role in Portfolio

 Invests in financially stressed and distressed companies. Part of the Private Debt strategy.

## Organizational Profile

- Established in 1990 as a standalone investment division of Protective Life Insurance Company. In 1997, the founders purchased Protective's interest.
- Specialists in leveraged loans and high yield

### Investment Strategy Commentary

- Seeks to maximize value through influence or control of the corporate workout and restructuring process.
- Investment positions are generally monetized within 12 to 24 months of initial investment.

### Notable Occurrences

- The fund unwound on November 15, 2008
- A working group has been formulated and will work with a mediator to come to a final conclusion.



### W.R. Huff

## Manager Role in Portfolio

 Represents the U.S. only high yield fixed income allocation; however, 10% of the allocation is invested in Huff's global fund.

## Organizational Profile

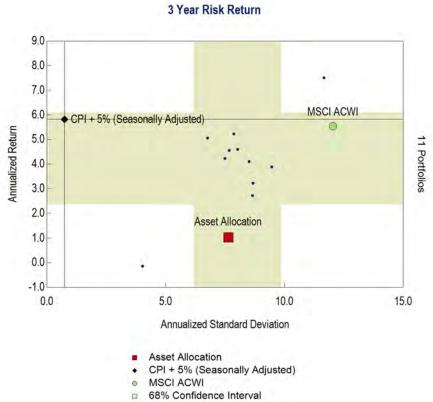
 W.R. Huff Asset Management Co. was founded in 1984 and is a Delaware limited partnership. The two general partners are William R. Huff and Donna B. Charlton. There are no other affiliates of the partnership.

## Investment Strategy Commentary

- Huff employs a concentrated, bottom-up process
- Relies on in-depth fundamental credit research (analysts are not allowed to see sell side research)
- The Portfolio Managers are responsible for the relative value and pricing decisions
- Concentrate on eight industries, which together comprise about 45% of the high yield market



## Asset Allocation



#### eA Global Balanced Net

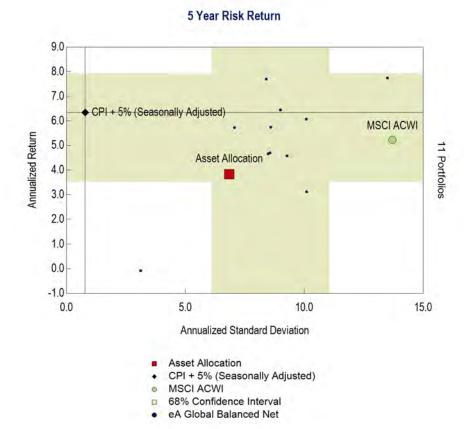


3 Year Style Analysis

Returns are net of fees



## Global Asset Allocation Composite



### 5 Year Style Analysis



Returns are net of fees



# Bridgewater

## Organizational Profile

- Bridgewater Associates began offering investment services in 1975, initially providing money management and consulting services in the global credit and currency markets to corporations in the management of income statement and balance sheet exposures. Bridgewater registered with the SEC as an investment advisor in 1990 and has been managing assets for institutional investors ever since.
- Bridgewater is headquartered in Westport, Connecticut and has approximately \$72 billion in assets under management. Bridgewater is and has always been 100% employee (current and former) owned.

# Investment Strategy Commentary

- The framework for constructing the All Weather Strategy is to diversify based on exposure to expectations of inflation and growth and to allocate risk (not capital) equally across these four economic environments (high and low growth, high and low inflation.)
- Allocations are based on Bridgewater's understanding of the relationship between asset classes and economic environments. This is quite different from traditional portfolio construction which utilizes mean-variance optimization.
- The strategy invests in a diversified set of asset classes with the objective of balancing risk equally across the possibility of rising or falling economic growth as well as rising or falling inflation. Asset classes in the All Weather strategy include equities, credit spreads, commodities, nominal and inflation-linked bonds, and emerging market debt spreads.
- Asset class exposures are continually adjusted to optimize performance (leverage and deleveraging asset classes).
- Forecasted to have similar returns to a split 60% equity and 40% fixed income portfolio.

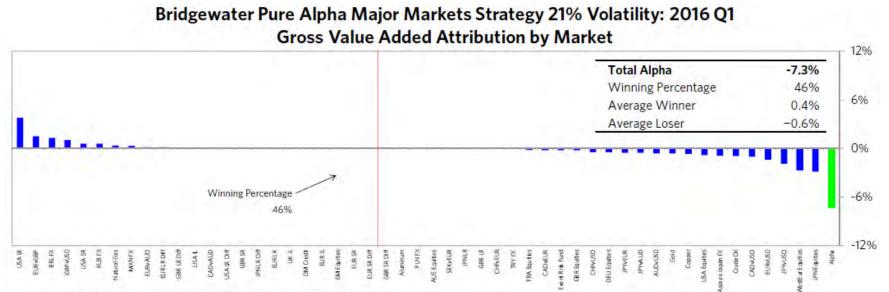
## Portfolio Positioning

- Overlay allocation to Pure Alpha started in third quarter of 2011.



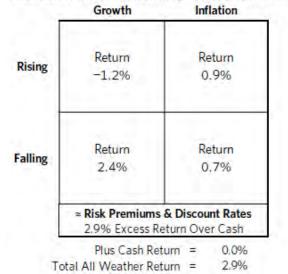
### Dallas Police & Fire Pension

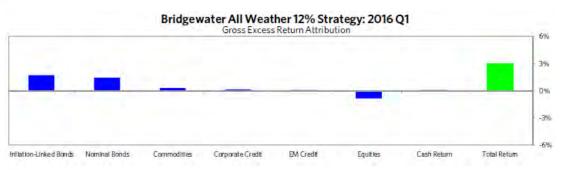
## **Bridgewater**



Bridgewater All Weather 12% Strategy: 2016 Q1

Gross Excess Return Attribution by Economic Environment





Source: Bridgewater



# Bridgewater All Weather Fund

# All Weather Fund LLC

Exposure Report March 31, 2016

	Exposure as a % of Portfolio Value
Nominal Bon <u>ds</u>	
Australia	7.3%
Canada	0.0%
Euroland	0.0%
United Kingdom	7.6%
United States	33.5%
Western Europe ex Euroland	0.0%
Total Nominal Bonds	48.4%
Corporate Credit	13.5%
Inflation-Indexed Bonds	
Australia	1.6%
Canada	2.6%
Euroland	11.5%
Sweden	1.0%
United Kingdom	8.5%
United States	23.1%
Total Inflation-Indexed Bonds	48.3%
Emerging Market Credit	
Argentina	0.6%
Brazil	1.5%
Indonesia	1.5%
Mexico	1.3%
Peru	0.8%
Philippines	0.7%
Russia	1.5%
South Africa	0.7%
Turkey	1.7%
Venezuela	0.2%
Total Emerging Market Credit	10.6%

Source:	Bridgewater
0000.00.	



NEPC	LLC	

Equities	
Australia	3.0%
Canada	2.0%
Emerging Markets	5.0%
France	1.6%
Germany	4.4%
Hong Kong	1.1%
Japan	2.8%
United Kingdom	3.5%
United States	12.9%
Western Europe	3.5%
Total Equities	39.8%

Total Commodities	20.3%
Zinc	0.7%
Wheat	0.3%
Sugar	0.5%
Soybeans	0.4%
Soybean Oil	0.2%
Soybean Meal	0.2%
Silver	0.1%
Oil and Petroleum Products	4.3%
Nickel	0.6%
Natural Gas	0.9%
Live Cattle	0.5%
Lean Hogs	0.4%
Gold	6.9%
Cotton	0.2%
Corn	0.4%
Copper	1.8%
Coffee	0.3%
Aluminum	1.7%
Commodities	

# GMO

# • Manager Role in Portfolio

- GMO manages a portion of the Global Asset Allocation mandate

# Organizational Profile

- GMO was founded in 1977 as a private investment firm to serve institutional clients
- Initial products were designed around the firm's value-oriented discipline until GMO's quantitative division was launched in 1982, providing a way to augment existing strategies and disciplines.
- GMO has a wide range of products across global asset classes, and are known for their contrarian, often bearish view of the marketplace.

# Investment Strategy Commentary

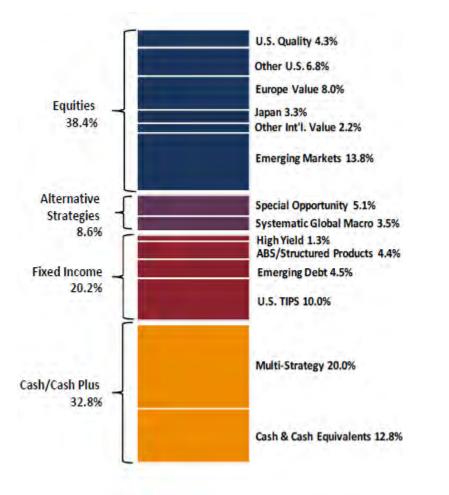
- Real return Global Balanced Asset Allocation (until 11/30/2010)
  - Portfolio construction based on seven year asset class forecasts developed by GMO quantitative team led by Jeremy Grantham and Ben Inker
  - Product seeks to add 2-3% above customized blended benchmark (60% MSCI World, 20% BC Aggregate, 20% Cash)
  - In addition to asset classes such as global multi-cap equities, global bonds, emerging markets equities and debt, a GMO fund of GMO hedge funds is used for additional diversification and risk control.
- Global Allocation Absolute Return (GAAR as of 12/2010)
  - Generate relatively strong real returns over a market cycle, by allocating to a potentially wide range of asset classes (including but not limited to Int'l Small Cap, Emerging Market equities, REITs, TIPS, GMO funds, etc.) with regard to a traditional benchmark.
  - Absolute volatility should be in the same general range as traditional balanced portfolios, although the pattern of returns may be quite different.

# Due Diligence Notes

- GMO has historically offered equity strategies through both its Global Equity and Asset Allocation teams. These two groups will be combining their individual product offerings into a single set of unified strategies. The unified strategies will be managed with the objective of generating high total returns by investing in equities, and focusing less on managing risk relative to a benchmark. The Global Equity Team will continue with day-to-day portfolio management and the Asset Allocation Team will be responsible for the asset class forecasts and high-level investment oversight.
- Effective immediatley on January 30, 2013, Marc Seidner left the firm PIMCO and will be joining GMO in March to head their Fixed Income team. Mr. Seidner joined PIMCO in 2009 from Harvard and is a well-respected investor. PIMCO expressed that this was a difficult loss for them.

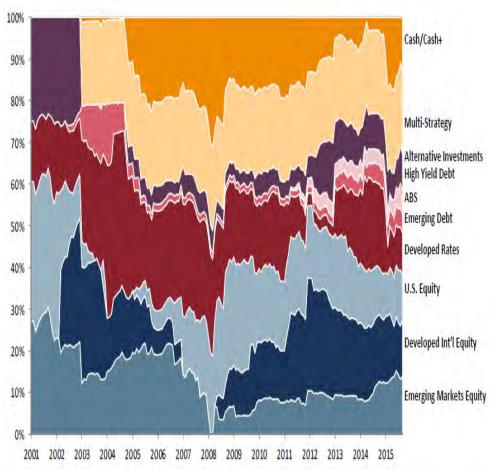


# Dallas Police & Fire Pension GMO (Global Allocation Absolute Return)



### Asset Allocation

### **Historical Allocation**



### Source: GMO



# PanAgora Risk Parity Multi-Asset Plus

# Manager Role in Portfolio

- Provides investment solutions using sophisticated quantitative techniques that incorporate fundamental insights and vast amounts of market information. Applies risk balance across and within asset classes.
- The Risk Parity Multi-Asset Plus Fund seeks generally to deliver absolute return with a target 8% absolute volatility.

# Organizational Profile

- Founded in 1989, PanAgora (Greek for *across marketplace*) Asset Management is a provider of investment solutions spanning most major asset classes and risk ranges.
- PanAgora's investment strategies are highly systematic in nature. Most investment team members are engaged in original research using fundamental intuition, market intelligence, modern finance and scientific methods.

# Investment Strategy Commentary

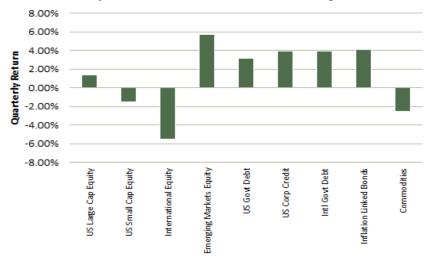
 Diversified Risk approach may be applied in a multi-asset class portfolio that has exposure to equities, bonds, commodities and other inflation-hedging instruments, as well as within certain stand-alone asset classes. By applying risk balance across and within asset classes, and by using proprietary techniques like Dynamic Risk Allocation, PanAgora's Diversified Risk products seek to achieve higher risk-adjusted returns, with lower volatility and draw-downs than more traditional approaches.



### Dallas Police & Fire Pension

# PanAgora Risk Parity Multi-Asset Plus

### Benchmark performance, three months ending March 31, 2016

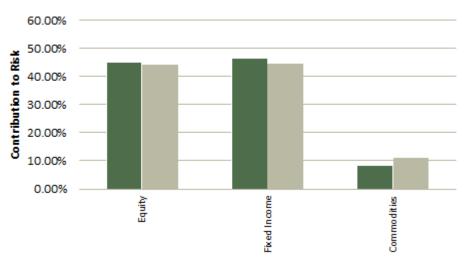


### Risk Allocation vs. Strategic Target as of January 1, 2016



### Risk Allocation vs. Strategic Target as of January 1, 2016

Risk Target Strategic Risk Target



Source: PanAgora, March 2016



# AQR Global Risk Premium Enhanced Liquidity

# Manager Role in Portfolio

- The AQR Global Risk Premium Enhanced Liquidity Fund (GRP EL) uses a risk budgeting approach, commonly termed "risk parity", to combine a large number of liquid, global risk premia into a well-diversified portfolio, which provides higher risk-adjusted expected returns than traditional beta exposures.
- GRP EL is structured to be better diversified than a traditional portfolio and expectations are to outperform traditional portfolios in the long-term.

# Organizational Profile

- Founded in 1988, AQR is a global provider of investment management services, including alternative investments and broad spectrum of long-only funds
- Investment philosophy and approach grounded in empirical finance research

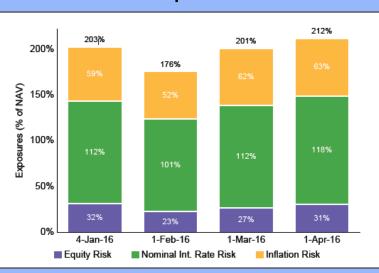
# Investment Strategy Commentary

- The GRP EL seeks to achieve an attractive risk-adjusted return by constructing a highly diversified portfolio with equal risk contributions from three main risk groups: equity risk, nominal interest rate risk and inflation risk. Underlying these 3 groups are 7 different asset class exposures.
- The exposures in the portfolio can be sized to target a particular volatility level, using leverage. At 10% volatility, the portfolio's long-term target is comparable to the historical volatility of a traditional 60/40 stock/bond portfolio.



# Dallas Police & Fire Pension

# AQR Global Risk Premium



## Estimated Exposure Over Time

# Estimated Exposure Breakdown

	Long Exposure (% of NAV
Equity Risk	
Global Developed Equities	22%
Global Emerging Equities	6%
U.S. Mid Cap Equities	2%
U.S. Small Cap Equities	1%
Total Equity Risk	31%
Nominal Interest Rate Risk	
Global Developed Bonds	118%
Total Nominal Interest Rate Risk	118%
nflation Risk	
Commodities - Production Weighted	8%
Commodities - Volatility Weighted	17%
Global Inflation-Linked Bonds	37%
Total Inflation Risk	63%
Total Fund Exposures	212%
ce: AQR, March 2016	



### Inflation Risk Commodities - Production Weighted 11% Commodities - Volatility Weighted 11% Global Inflation-Linked Bonds 11% 33% 33% 33% 33% 33% 33% 33% 33%

**Risk Allocation** 

# **Returns Analysis**

	Month-to-Date Return (Mar 01 - Mar 31, 2016)	Quarter-to-Date Return (Jan 01 - Mar 31, 2016)	Year-to-Date Return (Jan 01 - Mar 31, 2016
Equity Risk			
Global Developed Equities	1.1%	-0.6%	-0.6%
Global Emerging Equities	0.5%	-0.1%	-0.1%
U.S. Mid Cap Equities	0.1%	0.0%	0.0%
U.S. Small Cap Equities	0.1%	0.0%	0.0%
Total Equity Risk	1.8%	-0.6%	-0.6%
Nominal Interest Rate Risk			
Global Developed Bonds	-0.2%	3.7%	3.7%
Total Nominal Interest Rate Risk	-0.2%	3.7%	3.7%
Inflation Risk			
Commodities - Production Weighted	0.4%	-0.1%	-0.1%
Commodities - Volatility Weighted	0.6%	0.6%	0.6%
Global Inflation-Linked Bonds	0.4%	1.1%	1.1%
Total Inflation Risk	1.4%	1.6%	1.6%
Total Fund	2.9%	4.7%	4.7%

## Putnam

## Manager Role in Portfolio

- Global Asset Allocation Mandate (added in Q4 2009)

## Organizational Profile

- Putnam was founded in 1937 with the creation of one of the first balanced mutual funds, consisting of both stocks and bonds. This fund exists to this day and remains one of the most popular offerings in their product lineup.
- In 1970, the firm was acquired by Marsh & McLennan Companies, Inc., a diversified firm offering insurance and reinsurance broking, consulting, and investment management services.
- On August 3, 2007, the sale of Putnam Investments by Marsh and McLennan Companies (MMC) to Great-West Lifeco Inc., a subsidiary of Power Financial Corporation, was completed. Great-West Lifeco Inc. is a financial services holding company with interests in the life insurance, health insurance, retirement savings, investment management and reinsurance businesses.

### Investment Strategy Commentary

- Putnam Total Return's objective is to meet investors' needs for absolute return in different economic environments, including those in which stocks and bonds struggle.
- Seeks to achieve positive absolute return through the combination of a strategic beta portfolio and diversified alpha portfolio.
- The beta portfolio has been designed to provide high current yield, protect against inflation, limit downside risk and to balance the risk contribution from asset classes.
- The alpha portfolio seeks to add 100-250 basis points of excess return, with volatility of approximately 200 basis points, at the fund level by individual teams.

### Due Diligence Notes

– Jeff Knight, Head of Asset Allocation and the lead Portfolio Manager for Putnam's Total Return strategy, tendered his resignation on January 29th. Jeff's resignation was unexpected and is a significant loss for Putnam. As Head of Asset Allocation, Jeff oversaw approximately \$10 billion in multi-asset mandates including risk parity, asset allocation strategies and balanced funds. The reason for Jeff's departure is unclear. The 4 senior portfolio managers of the Total Return Fund will remain at Putnam and have been promoted to co-heads of the Asset Allocation Group. The four senior PMs are Robert Kea, James Fetch, Robert Schoen, and Jason Vaillancourt. As part of their retention, 4 PMs have been given increases in compensation, bonuses, and equity stakes. After this announcement NEPC put Putnam's Total Return strategy on Client Review.



# Putnam

# Risk weight summary as of March 31 2016

	Risk factor weight (%)
Common factor risk	
Equity	54.61
Equity Rates	2.02
Credit	22.36
Inflation	21.02

Source: Putnam, March 2016



# Putnam

# Portfolio weight summary

# 31 March 2016

Asset Class	Physical Weight	Derivative Exposure	Total Current Weight	Index Proxy
U.S. Equity	18.78%	-3.26%	15.52%	Russell 3000 Index
Non-U.S. Equity	10.21%	1.28%	11.49%	MSCI EAFE Index
Emerging-Market Equity	0.00%	4.88%	4.88%	MSCI Emerging Markets Index
U.S. High-Yield Bond	11.62%	-4.20%	7.42%	JP Morgan High Yield Developed Index
Emerging-Market Bond	0.00%	4.97%	4.97%	JPM EM Global Bond Index
U.S. Investment-Grade Bond	11.83%	-4.46%	7.38%	Barclays Aggregate Bond Index
Non-U.S. Government Bond	0.00%	24.83%	24.83%	Citi WGBI ex US Index
U.S. TIPS	0.00%	29.59%	29.59%	Barclays TIPS Index
Commodities	0.00%	10.77%	10.77%	GSCI Index
REITs	3.42%	0.00%	3.42%	MSCI REIT Index
Cash	44.13%	-64.40%	-20.26%	3 month U.S. Treasury Bill

data as of 03/31/2016

Source: Putnam, March 2016



Investment Options	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
<b>Bridgewater Associates, LP</b> Bridgewater Pure Alpha Trading Company, Ltd.	Other: Jon Rubinstein Joining as a Co- CEO 3/2016	No Action

NEPC Due Diligence Status Key		
No Action	Informational items have surfaced; no action is recommended.	
Watch	Issues have surfaced to be concerned over; manager can participate in future searches, but current and prospective clients must be made aware of the issues.	
Hold	Serious issues have surfaced to be concerned over; manager cannot be in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.	
Client Review	Very serious issues have surfaced with a manager; manager cannot be in future searches unless a client specifically requests. Current clients must be advised to review the manager.	
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.	



Investment Option	Commentary	NEPC Rating
LP Bridgewater Pure Alpha	In March, NEPC was notified that Jon Rubenstein is now Co-CEO alongside Eileen Murray. In addition, Greg Jensen, who holds the position of both Co-CEO and Co-CIO, will shift to focus exclusively on the investment side of the business. Mr. Jensen will remain Co-CIO along with Bob Prince and Ray Dalio. NEPC recommends No Action.	Preferred Closed

NEPC Due Diligence Rating Key	
Preferred	A high conviction investment product. Product has a clear and economically-grounded investment thesis, and is managed by an investment team that is sufficiently resourced and incented to execute on the thesis.
Preferred Conditional	A strategy that meets the definition of Preferred as described above, but may only be suitable for certain clients due to unique characteristics of the strategy, e.g. higher risk attributes such as concentration, transparency, etc.
Neutral	A satisfactory investment product. No major flaws, but may be lacking a compelling investment thesis, or NEPC's conviction regarding the investment team's ability to execute on the thesis may be less than that of Preferred products.
Not Recommended	Serious issues have been identified with an investment manager or product. This rating is similar to the Client Review or Terminate rating for client-owned products.
Not Rated	Due diligence has not been completed on the product or manager.







# Glossary of Investment Terminology – Risk Statistics

Alpha - Measures the relationship between the fund performance and the performance of another fund or benchmark index and equals the excess return while the other fund or benchmark index is zero.

Alpha Jensen - The average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM), given the portfolio's beta and the average market return. Also known as the abnormal return or the risk adjusted excess return.

Annualized Excess Return over Benchmark - Annualized fund return minus the annualized benchmark return for the calculated return.

Annualized Return - A statistical technique whereby returns covering periods greater than one year are converted to cover a 12 month time span.

**Beta** - Measures the volatility or systematic risk and is equal to the change in the fund's performance in relation to the change in the assigned index's performance.

Information Ratio - A measure of the risk adjusted return of a financial security, asset, or portfolio.

#### Formula:

(Annualized Return of Portfolio - Annualized Return of Benchmark)/Annualized Standard Deviation(Period Portfolio Return – Period Benchmark Return). To annualize standard deviation, multiply the deviation by the square root of the number of periods per year where monthly returns per year equals 12 and quarterly returns is four periods per year.

**R-Squared** – Represents the percentage of a fund's movements that can be explained by movements in an index. R-Squared values range from 0 to 100. An R-Squared of 100 denotes that all movements of a fund are completely explained by movements in the index.

Sharpe Ratio - A measure of the excess return or risk premium per unit of risk in an investment asset or trading strategy.

**Sortino Ratio** - A method to differentiate between good and bad volatility in the Sharpe Ratio. The differentiation of up and down volatility allows the calculation to provide a risk adjusted measure of a security or fund's performance without upward price change penalties.

#### Formula:

Calculation Average (X-Y)/Downside Deviation (X-Y) \* 2 Where X=Return Series X Y = Return Series Y which is the risk free return (91 day T-bills) **Standard Deviation** - The standard deviation is a statistical term that describes the distribution of results. It is a commonly used measure of volatility of returns of a portfolio, asset class, or security. The higher the standard deviation the more volatile the returns are.

#### Formula:

(Annualized Return of Portfolio – Annualized Return of Risk Free) / Annualized Standard Deviation (Portfolio Returns)

**Tracking Error** - Tracking error, also known as residual risk, is a measure of the degree to which a portfolio tracks its benchmark. It is also a measure of consistency of excess returns. Tracking error is computed as the annualized standard deviation of the difference between a portfolio's return and that of its benchmark.

#### Formula:

Tracking Error = Standard Deviation (X-Y) \*  $\sqrt{(\# of periods per year)}$ Where X = periods portfolio return and Y = the period's benchmark return For monthly returns, the periods per year = 12 For quarterly returns, the periods per year = 4

**Treynor Ratio** - A risk-adjusted measure of return based on systematic risk. Similar to the Sharpe ratio with the difference being the Treynor ratio uses beta as the measurement of volatility.

#### Formula:

(Portfolio Average Return - Average Return of Risk-Free Rate)/Portfolio Beta

**Up/Down Capture Ratio** - A measure of what percentage of a market's returns is "captured" by a portfolio. For example, if the market declines 10% over some period, and the manager declines only 9%, then his or her capture ratio is 90%. In down markets, it is advantageous for a manager to have as low a capture ratio as possible. For up markets, the higher the capture ratio the better. Looking at capture ratios can provide insight into how a manager achieves excess returns. A value manager might typically have a lower capture ratio in both up and down markets, achieving excess returns by protecting on the downside, whereas a growth manager might fall more than the overall market in down markets, but achieve above-market returns in a rising market.

UpsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Period Benchmark Return is > = 0

DownsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Benchmark <0



# Glossary of Investment Terminology

**# Of Portfolios/Observations1** – The total number of data points that make up a specified universe

Allocation Index<sup>3</sup> - The allocation index measures the value added (or subtracted) to each portfolio by active management. It is calculated monthly: The portfolio asset allocation to each category from the prior month-end is multiplied by a specified market index.

Asset Allocation Effect<sup>2</sup> - Measures an investment manager's ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark and underweighted in a sector that underperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that underperforms the benchmark and under weighted in a sector that outperforms the benchmark.

**Agency Bonds (Agencies)**<sup>3</sup> - The full faith and credit of the United States government is normally not pledged to payment of principal and interest on the majority of government agencies issuing these bonds, with maturities of up to ten years. Their yields, therefore, are normally higher than government and their marketability is good, thereby qualifying them as a low risk-high liquidity type of investment. They are eligible as security for advances to the member banks by the Federal Reserve, which attests to their standing.

Asset Backed Securities (ABS)<sup>3</sup> - Bonds which are similar to mortgagebacked securities but are collateralized by assets other than mortgages; commonly backed by credit card receivables, auto loans, or other types of consumer financing.

Attribution<sup>3</sup> - Attribution is an analytical technique that allows us to evaluate the performance of the portfolio relative to the benchmark. A proper attribution tells us where value was added or subtracted as a result of the manager's decisions. Average Effective Maturity<sup>4</sup> - For a single bond, it is a measure of maturity that takes into account the possibility that a bond might be called back to the issuer.

For a portfolio of bonds, average effective maturity is the weighted average of the maturities of the underlying bonds. The measure is computed by weighing each bond's maturity by its market value with respect to the portfolio and the likelihood of any of the bonds being called. In a pool of mortgages, this would also account for the likelihood of prepayments on the mortgages.

**Batting Average**<sup>1</sup> - A measurement representing an investment manager's ability to meet or beat an index.

Formula: Divide the number of days (or months, quarters, etc.) in which the manager beats or matches the index by the total number of days (or months, quarters, etc.) in the period of question and multiply that factor by 100.

**Brinson Fachler (BF) Attribution**<sup>1</sup> - The BF methodology is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance. The main advantage of the BF methodology is that rather than using the overall return of the benchmark, it goes a level deeper than BHB and measures whether the benchmark sector, country, etc. outperformed/or underperformed the overall benchmark.

**Brinson Hood Beebower (BHB) Attribution**<sup>1</sup> - The BHB methodology shows that excess return must be equal to the sum of all other factors (i.e., allocation effect, selection effect, interaction effect, etc.). The advantage to using the BHB methodology is that it is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance.

**Corporate Bond (Corp)** <sup>4</sup> - A debt security issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds.

**Correlation**<sup>1</sup> - A range of statistical relationships between two or more random variables or observed data values. A correlation is a single number that describes the degree of relationship between variables.

Data Source: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgeco.net

# Glossary of Investment Terminology

Coupon<sup>4</sup> – The interest rate stated on a bond when it is issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate."

**Currency Effect**<sup>1</sup> - Is the effect that changes in currency exchange rates over time affect excess performance.

**Derivative Instrument**<sup>3</sup> - A financial obligation that derives its precise value from the value of one or more other instruments (or assets) at the same point of time. For example, the relationship between the value of an S&P 500 futures contract (the derivative instrument in this case) is determined by the value of the S&P 500 Index and the value of a U.S. Treasury bill that matures at the expiration of the futures contract.

**Downside Deviation**<sup>1</sup> - Equals the standard deviation of negative return or the measure of downside risk focusing on the standard deviation of negative returns.

#### Formula:

Annualized Standard Deviation (Fund Return - Average Fund Return) where average fund return is greater than individual fund returns, monthly or quarterly.

**Duration**<sup>3</sup> - Duration is a measure of interest rate risk. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates. A bond's duration is inversely related to interest rates and directly related to time to maturity.

Equity/Debt/Cash Ratio<sup>1</sup> – The percentage of an investment or portfolio that is in Equity, Debt, and/or Cash (i.e. A 7/89/4 ratio represents an investment that is made up of 7% Equity, 89% Debt, and 4% Cash).

**Foreign Bond<sup>3</sup>** - A bond that is issued in a domestic market by a foreign entity, in the domestic market's currency. A foreign bond is most often issued by a foreign firm to raise capital in a domestic market that would be most interested in purchasing the firm's debt. For foreign firms doing a large amount of business in the domestic market, issuing foreign bonds is a common practice.

Hard Hurdle<sup>5</sup> – is a hurdle rate that once beaten allows a fund manager to charge a performance fee on only the funds above the specified hurdle rate.

**High-Water Mark**<sup>4</sup> - The highest peak in value that an investment fund/ account has reached. This term is often used in the context of fund manager compensation, which is performance based. Some performance-based fees only get paid when fund performance exceeds the high-water mark. The high-water mark ensures that the manager does not get paid large sums for poor performance.

Hurdle Rate<sup>4</sup> - The minimum rate of return on an investment required, in order for a manager to collect incentive fees from the investor, which is usually tied to a benchmark.

**Interaction Effects<sup>2</sup>** - The interaction effect measures the combined impact of an investment manager's selection and allocation decisions within a sector. For example, if an investment manager had superior selection and over weighted that particular sector, the interaction effect is positive. If an investment manager had superior selection, but underweighted that sector, the interaction effect is negative. In this case, the investment manager did not take advantage of the superior selection by allocating more assets to that sector. Since many investment managers consider the interaction effect to be part of the selection or the allocation, it is often combined with the either effect.

Median<sup>3</sup> - The value (rate of return, market sensitivity, etc.) that exceeds onehalf of the values in the population and that is exceeded by one-half of the values. The median has a percentile rank of 50.

**Modified Duration**<sup>3</sup> - The percentage change in the price of a fixed income security that results from a change in yield.

Mortgage Backed Securities (MBS)<sup>3</sup> - Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

Municipal Bond (Muni) <sup>4</sup> - A debt security issued by a state, municipality or county to finance its capital expenditures.

**Net Investment Change**<sup>1</sup> – Is the change in an investment after accounting for all Net Cash Flows.

**Performance Fee<sup>4</sup>** - A payment made to a fund manager for generating positive returns. The performance fee is generally calculated as a percentage of investment profits, often both realized and unrealized.

Data Source: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgeco.net



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**Policy Index<sup>3</sup>** - A custom benchmark designed to indicate the returns that a passive investor would earn by consistently following the asset allocation targets set forth in this investment policy statement.

**Price to Book (P/B)**<sup>4</sup> - A ratio used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter's book value per share, also known as the "price-equity ratio".

**Price to Earnings (P/E)**<sup>3</sup> - The weighted equity P/E is based on current price and trailing 12 months earnings per share (EPS).

**Price to Sales (P/S)^4** - A ratio for valuing a stock relative to its own past performance, other companies, or the market itself. Price to sales is calculated by dividing a stock's current price by its revenue per share for the trailing 12 months.

**Return on Equity (ROE)**<sup>4</sup> - The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Selection (or Manager) Effect<sup>2</sup> - Measures the investment manager's ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager's allocation to the sector. The weight of the sector in the portfolio determines the size of the effect—the larger the sector, the larger the effect is, positive or negative.

**Soft Hurdle rate**<sup>5</sup> – is a hurdle rate that once beaten allows a fund manager to charge a performance fee based on the entire annualized return.

**Tiered Fee<sup>1</sup>** – A fee structure that is paid to fund managers based on the size of the investment (i.e. 1.00% fee on the first \$10M invested, 0.90% on the next \$10M, and 0.80% on the remaining balance).

**Total Effects**<sup>2</sup> - The active management (total) effect is the sum of the selection, allocation, and interaction effects. It is also the difference between the total portfolio return and the total benchmark return. You can use the active management effect to determine the amount the investment manager has added to a portfolio's return.

**Total Return**<sup>1</sup> - The actual rate of return of an investment over a specified time period. Total return includes interest, capital gains, dividends, and distributions realized over a defined time period.

Universe<sup>3</sup> - The list of all assets eligible for inclusion in a portfolio.

Upside Deviation<sup>1</sup> – Standard Deviation of Positive Returns

Weighted Avg. Market Cap.<sup>4</sup> - A stock market index weighted by the market capitalization of each stock in the index. In such a weighting scheme, larger companies account for a greater portion of the index. Most indexes are constructed in this manner, with the best example being the S&P 500.

Yield (%)<sup>3</sup> - The current yield of a security is the current indicated annual dividend rate divided by current price.

Yield to Maturity<sup>3</sup> -The discount rate that equates the present value of cash flows, both principal and interest, to market price.

Data Source: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgeco.net

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