

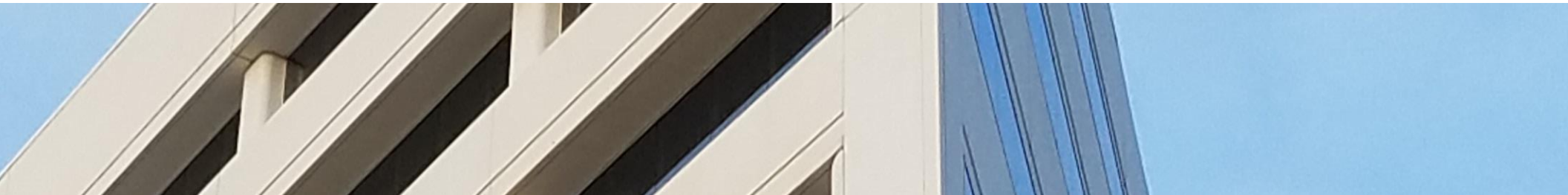


Prepared for



# WILSHIRE ASSOCIATES

Wilshire Consulting



Jacksonville Police & Fire Pension Fund  
Financial Investment & Advisory Committee (FIAC)

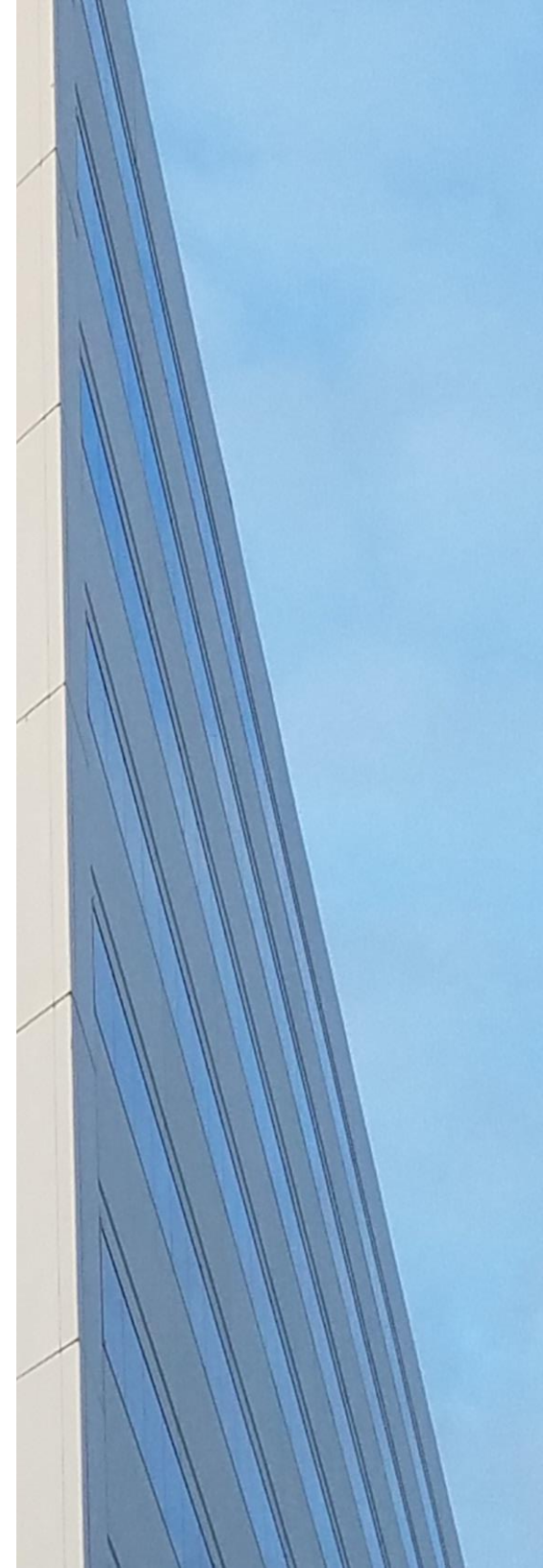
February 15, 2019

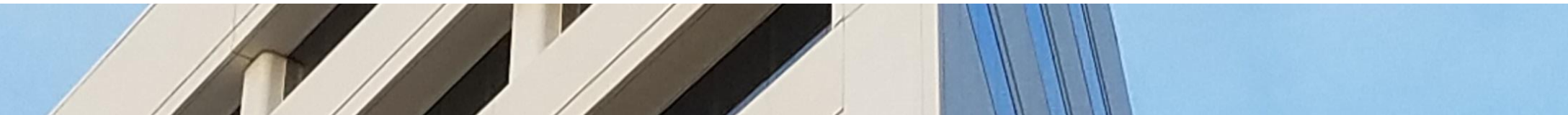
Wilshire Associates

# TABLE OF CONTENTS

Market Environment

Performance Update – January Flash Report





# CAPITAL MARKET REVIEW

# MARKET COMMENTARY

## U.S. Equity

The U.S. stock market was down -14.3% for the fourth quarter of 2018. This marks the worst quarter for U.S. equities since 2011 and the first down year since the credit crisis sell-off of 2008. Concerns of an economic slowdown weighed on stock prices as did fears that additional rate increases by the Federal Reserve could weaken future prospects for economic growth.

The yield curve ended 2018 with a very unusual shape – which will likely be a source of debate if it persists, largely focusing on the Fed’s December rate hike. Some fear that it could be enough to slow the economy and are therefore selling shorter-term bonds, pushing rates higher. Others highlight the fact that the Fed’s mandate focuses on both growth and inflation and that a 0.25% increase is not likely to stop the U.S. economy cold. Ultimately, the Fed makes their final decisions based on all available data and can decide to adjust their course of action.

## Non-U.S. Equity

Equity markets outside of the U.S. suffered during the quarter, although they generally outperformed U.S. equity. While the EU began the year in sound economic condition, growth declined steadily while gains in unemployment stalled and industrial production reversed course. While there were some positive signals on U.S.-China trade, investors will likely wait until a scheduled meeting in January before fully evaluating the current global trade environment.

## Fixed Income

The U.S. Treasury yield curve fell across most maturities with the 10-year Treasury yield at 2.69%, down 37 basis points. The Federal Open Market Committee increased its overnight rate by 25 basis points but adjusted downward their forecast for future rates. Credit spreads widened during the quarter within both the investment grade and high yield markets.

# ASSET CLASS PERFORMANCE

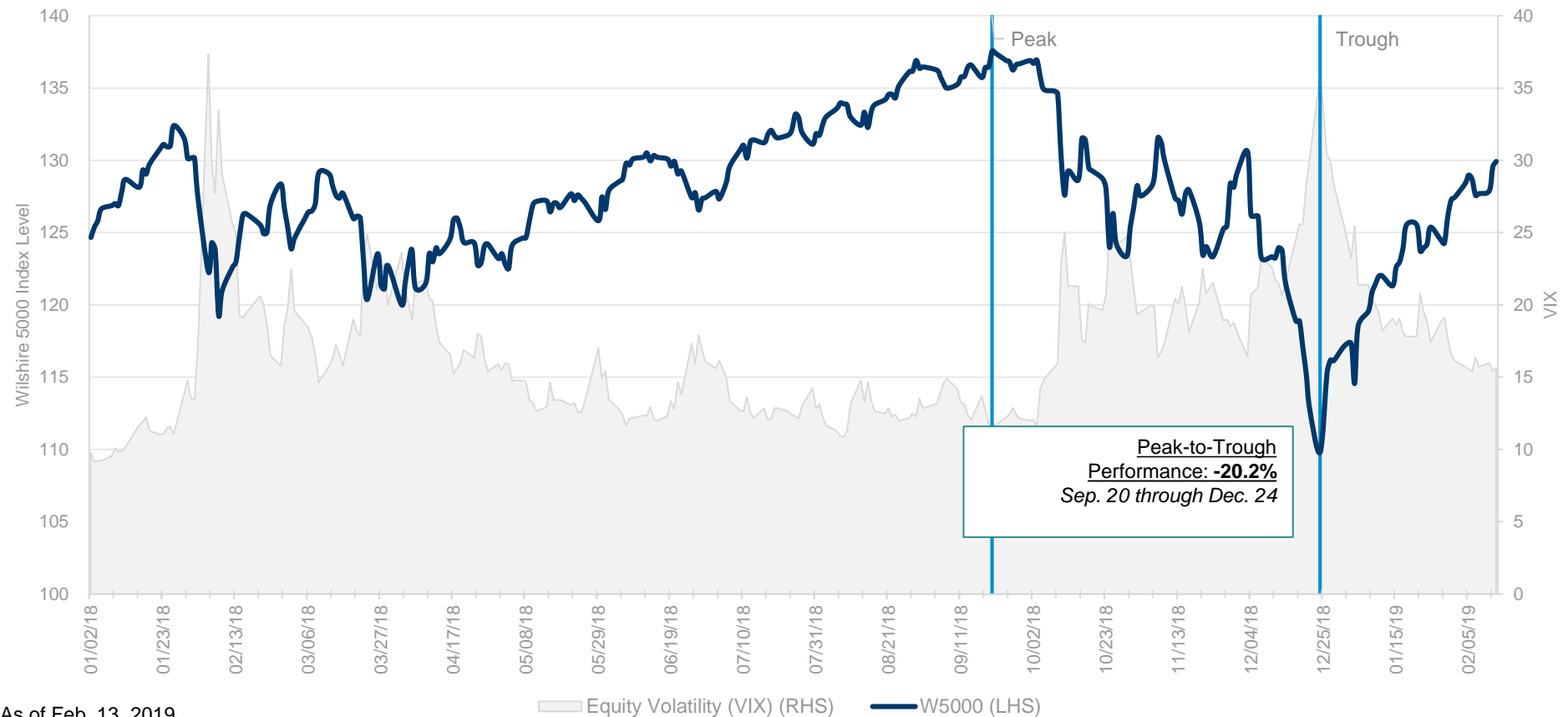
ASSET CLASS RETURNS - BEST TO WORST						ANNUALIZED 5-YEAR AS OF 12/2018
2013	2014	2015	2016	2017	2018 YTD	
U.S. Equity 33.1%	REITs 31.8%	REITs 4.2%	MLPs 18.3%	Emrg Mrkts 37.7%	T-Bills 1.9%	U.S. Equity 8.1%
MLPs 27.6%	U.S. Equity 12.7%	U.S. Equity 0.7%	High Yield 17.1%	Developed 25.6%	Core Bond 0.0%	REITs 7.9%
Developed 23.3%	Core Bond 6.0%	Core Bond 0.6%	U.S. Equity 13.4%	U.S. Equity 21.0%	U.S. TIPS -1.3%	High Yield 3.8%
High Yield 7.4%	MLPs 4.8%	T-Bills 0.1%	Commodities 11.8%	High Yield 7.5%	High Yield -2.1%	Core Bond 2.5%
REITs 1.9%	U.S. TIPS 3.6%	Developed -0.4%	Emrg Mrkts 11.6%	REITs 4.2%	REITs -4.8%	Emrg Mrkts 2.0%
T-Bills 0.1%	High Yield 2.5%	U.S. TIPS -1.4%	REITs 7.2%	Core Bond 3.6%	U.S. Equity -5.3%	U.S. TIPS 1.7%
Core Bond -2.0%	T-Bills 0.0%	High Yield -4.5%	U.S. TIPS 4.7%	U.S. TIPS 3.0%	Commodities -11.2%	Developed 1.0%
Emrg Mrkts -2.3%	Emrg Mrkts -1.8%	Emrg Mrkts -14.6%	Core Bond 2.6%	Commodities 1.7%	MLPs -12.4%	T-Bills 0.6%
U.S. TIPS -8.6%	Developed -4.5%	Commodities -24.7%	Developed 1.5%	T-Bills 0.8%	Developed -13.4%	MLPs -7.3%
Commodities -9.5%	Commodities -17.0%	MLPs -32.6%	T-Bills 0.3%	MLPs -6.5%	Emrg Mrkts -14.2%	Commodities -8.8%

Data sources: Wilshire Compass

Note: Developed asset class is developed equity markets ex-U.S., ex-Canada

# YEAREND ENVIRONMENT

Equity Market Performance & Volatility

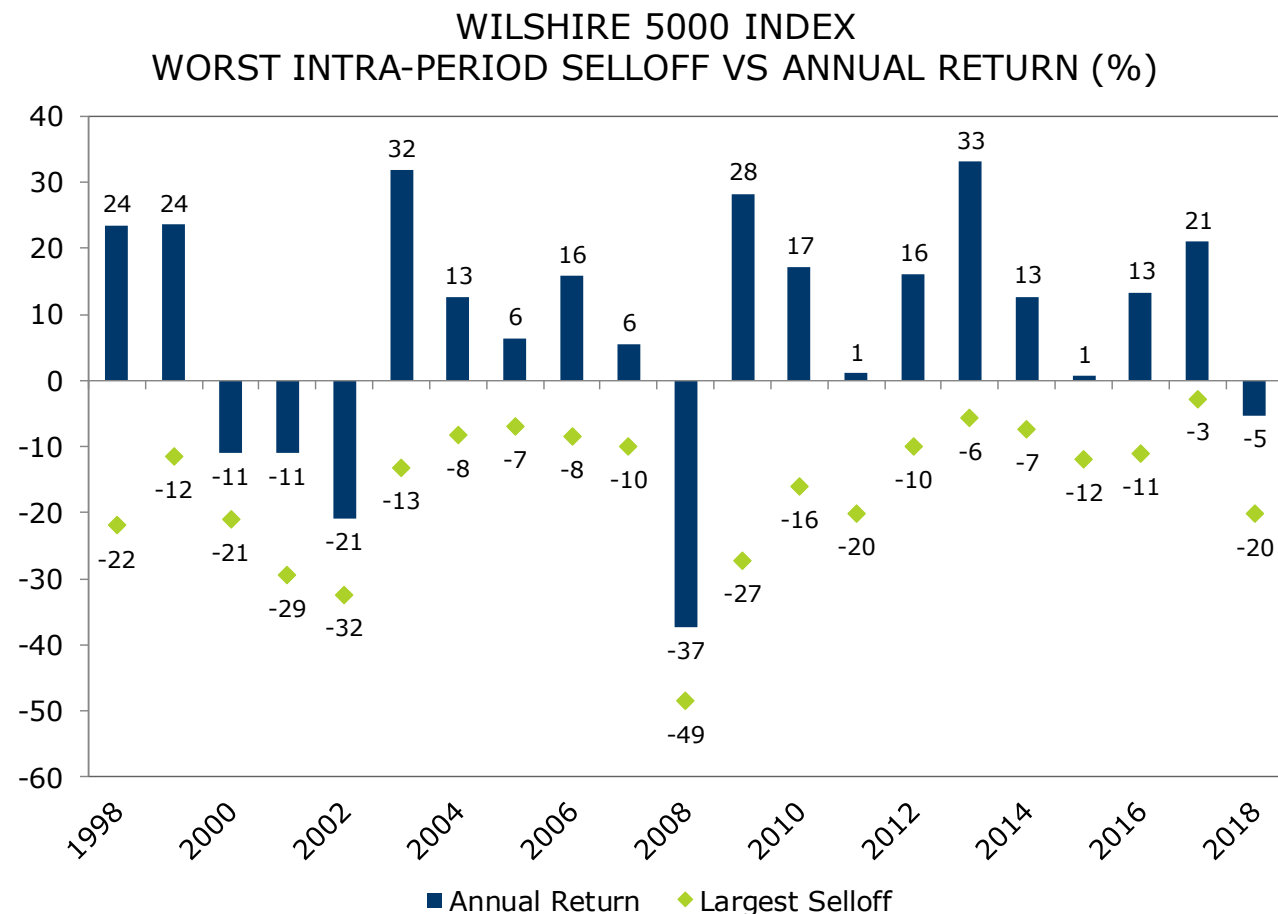


	1Q-18	2Q-18	3Q-18	4Q-18	2018 Calendar Year	2019 Calendar YTD	2019 Fiscal YTD	U.S. Equity Market Peak-Trough	Since U.S. Equity Market Bottom	Since Dec. 2018 Trustee Meeting
<b>U.S. Stocks</b>	-0.8	3.8	7.4	-14.3	-5.3	10.9	-4.9	-20.2	18.4	11.0
<b>Non-U.S. Stocks</b>	-1.2	-2.6	0.7	-11.5	-14.2	7.4	-4.9	-12.6	0.4	0.4
<b>Core Bonds</b>	-1.5	-0.2	0.0	1.6	0.0	0.9	2.6	1.6	1.2	1.1

Note: U.S. Stocks (Wilshire 5000 Total market Index), Non-U.S. Stocks (MSCI ACWI x-U.S.), Core Bonds (Bloomberg Barclays Aggregate).

# ANNUAL EQUITY RETURNS

- 2018 was the first down year for the Wilshire 5000 Index since the global financial crisis
- While it was the mildest negative return in two decades, the market briefly entered a technical bear market (-20%) in late December



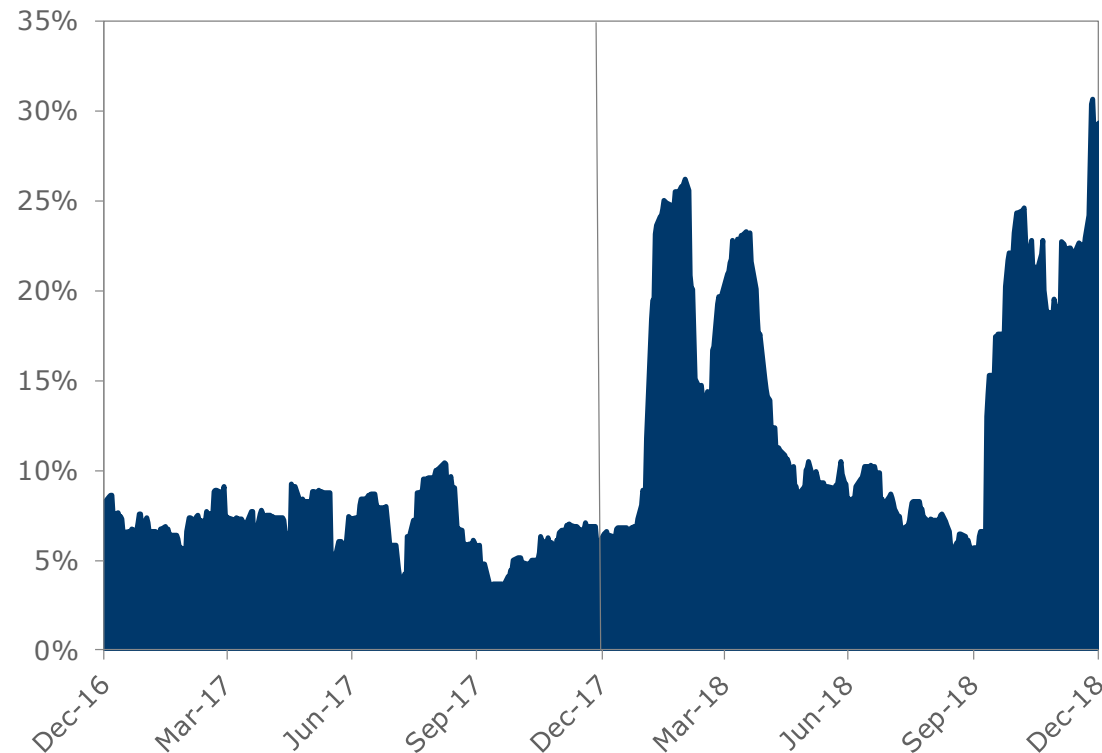
# EQUITY VOLATILITY

- Volatility returned to the equity markets after a tranquil 2017
- Investor concerns included monetary tightening, global trade and future economic growth

Since 1980	Year	Annual Volatility	Largest Drawdown	Number of Days Down:				Worst Down Day
				1%	2%	3%	4%	
Universe Statistics	Max Risk	40.56%	-48.54%	71	42	24	17	-17.23%
	Avg	15.48%	-13.97%	28.2	7.7	2.3	1.0	-4.00%
	Med	13.33%	-9.95%	23.0	4.0	1.0	0.0	-3.34%
	Min Risk	6.96%	-2.74%	3	0	0	0	-1.36%
2017	Level	6.96%	-2.75%	4	0	0	0	-1.85%
	Rank	1	2	2	1	1	1	7
2018	Level	16.86%	-20.18%	32	15	5	1	-4.02%
	Rank	29	31	25	33	32	27	27

The "Rank" statistics reflect ordinal rankings among 39 annual observations (i.e. ranks shown are X of 39)

Wilshire 5000 Index: 20-Day Rolling Risk





## Wilshire Consulting

# DECEMBER 2018 ASSET CLASS ASSUMPTIONS

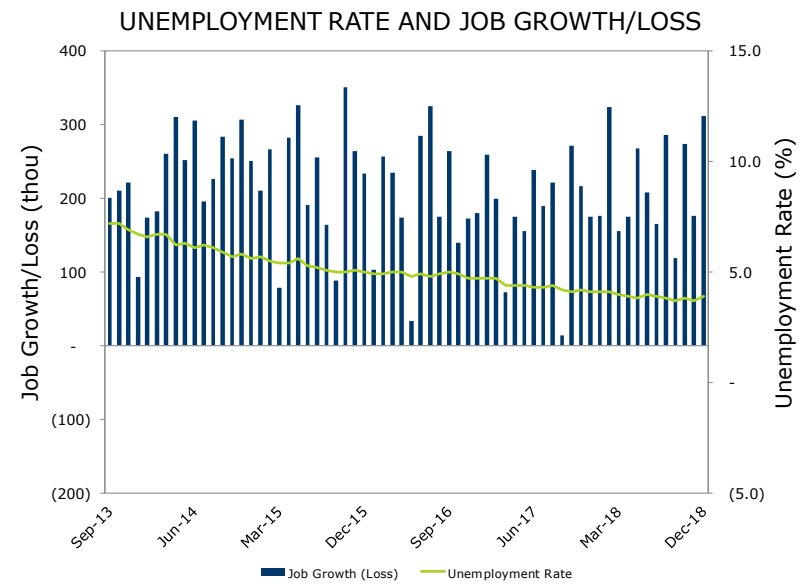
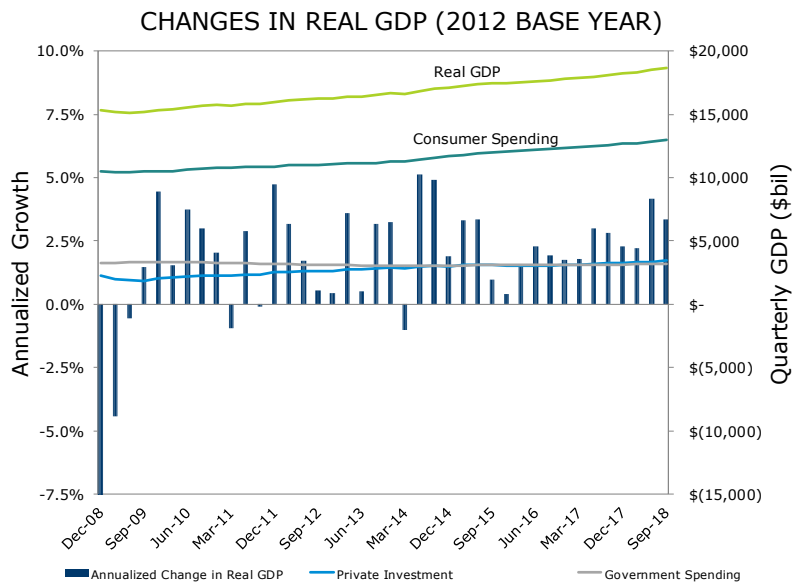
	EQUITY						FIXED INCOME						REAL ASSETS					
	US STOCK	DEV EX-US STOCK	EMG MRKT STOCK	GLOBAL		PRIVATE EQUITY	CASH	LT			NON-US BOND (HDG)	REAL ESTATE			CMDTY	REAL ASSETS	US CPI	
				EX-US STOCK	GLOBAL STOCK			CORE BOND	US TIPS	HIGH YIELD		US RES	GLOBAL RES	PRIVATE RE				
EXPECTED COMPOUND RETURN (%)	7.00	7.50	7.50	7.75	7.45	10.05	2.65	3.85	4.25	3.00	5.90	1.25	5.65	5.85	6.65	4.35	6.40	1.70
EXPECTED ARITHMETIC RETURN (%)	8.30	8.95	10.45	9.35	8.75	13.35	2.65	4.00	4.70	3.15	6.35	1.30	7.00	7.00	7.55	5.40	6.75	1.70
EXPECTED RISK (%)	17.00	18.00	26.00	18.80	17.05	28.00	1.25	5.15	9.85	6.00	10.00	3.50	17.00	15.80	14.00	15.00	8.75	1.75
CASH YIELD (%)	2.15	3.50	2.50	3.25	2.65	0.00	2.65	4.05	5.00	3.55	8.95	1.80	4.40	4.40	2.70	2.65	3.00	0.00
<b>CORRELATIONS</b>																		
US STOCK	1.00																	
DEV EX-US STOCK (USD)	0.81	1.00																
EMERGING MARKET STOCK	0.74	0.74	1.00															
GLOBAL EX-US STOCK	0.83	0.96	0.86	1.00														
GLOBAL STOCK	0.94	0.92	0.82	0.94	1.00													
PRIVATE EQUITY	0.74	0.64	0.62	0.67	0.74	1.00												
CASH EQUIVALENTS	-0.05	-0.09	-0.05	-0.08	-0.07	0.00	1.00											
CORE BOND	0.28	0.13	0.00	0.09	0.20	0.31	0.19	1.00										
LT CORE BOND	0.31	0.16	0.01	0.12	0.23	0.32	0.11	0.93	1.00									
US TIPS	-0.05	0.00	0.15	0.05	0.00	-0.03	0.20	0.60	0.47	1.00								
HIGH YIELD BOND	0.54	0.39	0.49	0.45	0.51	0.34	-0.10	0.25	0.32	0.05	1.00							
NON-US BOND (HDG)	0.16	0.25	-0.01	0.18	0.18	0.26	0.10	0.67	0.66	0.39	0.26	1.00						
US RE SECURITIES	0.59	0.47	0.44	0.49	0.56	0.50	-0.05	0.17	0.23	0.10	0.56	0.05	1.00					
GLOBAL RE SECURITIES	0.65	0.59	0.56	0.62	0.66	0.58	-0.05	0.17	0.22	0.11	0.62	0.03	0.94	1.00				
PRIVATE REAL ESTATE	0.54	0.44	0.44	0.47	0.52	0.51	-0.05	0.19	0.25	0.09	0.57	0.05	0.77	0.76	1.00			
COMMODITIES	0.25	0.34	0.39	0.38	0.32	0.27	0.00	-0.02	-0.02	0.25	0.29	-0.10	0.25	0.28	0.25	1.00		
REAL ASSET BASKET	0.42	0.43	0.50	0.48	0.47	0.43	0.01	0.24	0.25	0.41	0.53	0.06	0.65	0.69	0.69	0.59	1.00	
INFLATION (CPI)	-0.10	-0.15	-0.13	-0.15	-0.13	-0.10	0.10	-0.12	-0.12	0.15	-0.08	-0.08	0.05	0.03	0.05	0.44	0.26	1.00

# ECONOMIC REVIEW

AS OF DEC. 31, 2018 KEY ECONOMIC INDICATORS

CPI (ALL ITEMS)	MONTHLY CHANGE		CUMULATIVE CHANGE	
SEASONALLY ADJUSTED	Dec-18	-0.1	3-Mo.	0.3
	Nov-18	0.0	12-Mo.	1.9
	Oct-18	0.3	10-Yr. (Annual)	1.8
BREAKEVEN INFLATION	10-Yr.	1.7		
CONSUMER SENTIMENT	Dec-18	98.3		
U. OF MICHIGAN SURVEY	Nov-18	97.5		
	1-Yr. Ago	95.9	10-Yr. Avg	82.5
MANUFACTURING	Dec-18	54.1	CHANGE IN SECTOR	
INST. FOR SUPPLY MGMT	Nov-18	59.3	>50	Expansion
PURCHASING MNGRS' IDX	1-Yr. Avg.	58.8	<50	Contraction

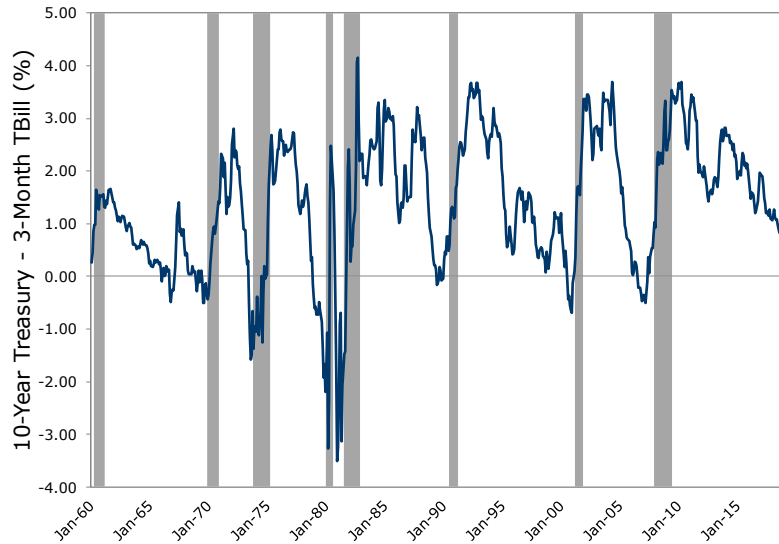
Note: Seasonally adjusted CPI data is utilized to better reflect short-term pricing activity.



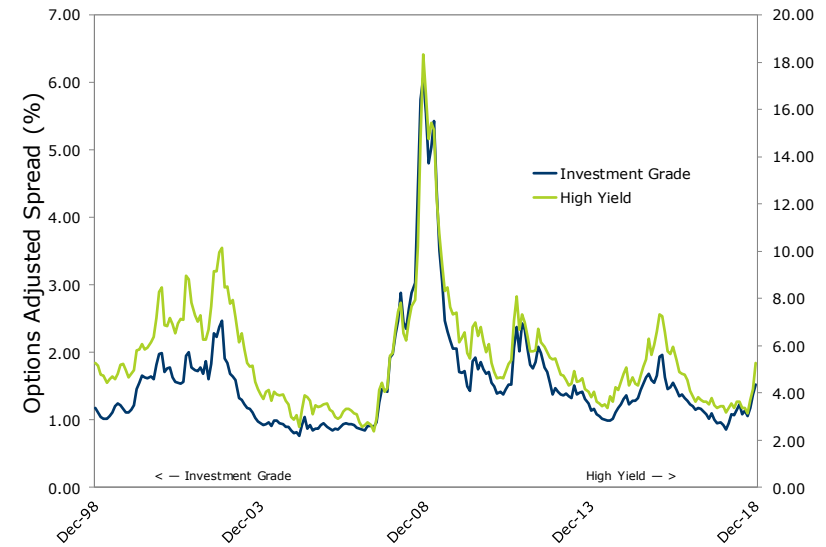
Data sources: Bureau of Labor Statistics, U.S. Treasury, University of Michigan, Institute for Supply Management, Bureau of Economic Analysis

# RISK MONITOR

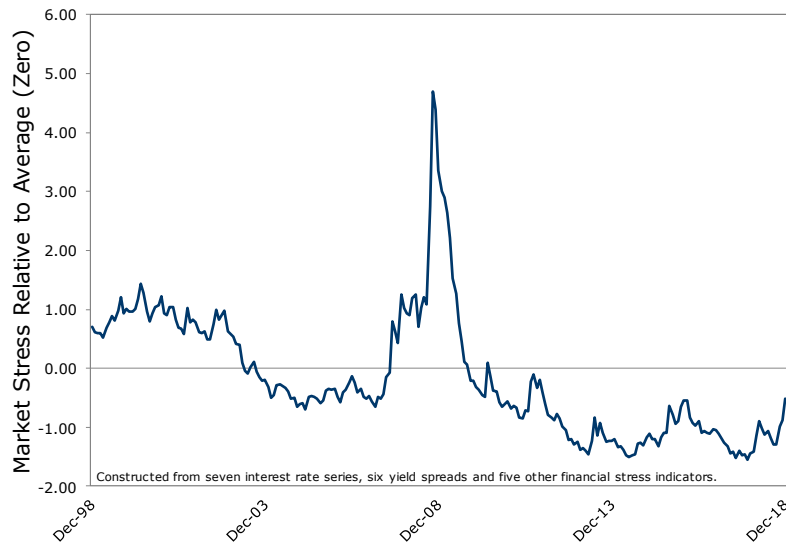
YIELD CURVE SLOPE VS RECESSIONS (IN GRAY)



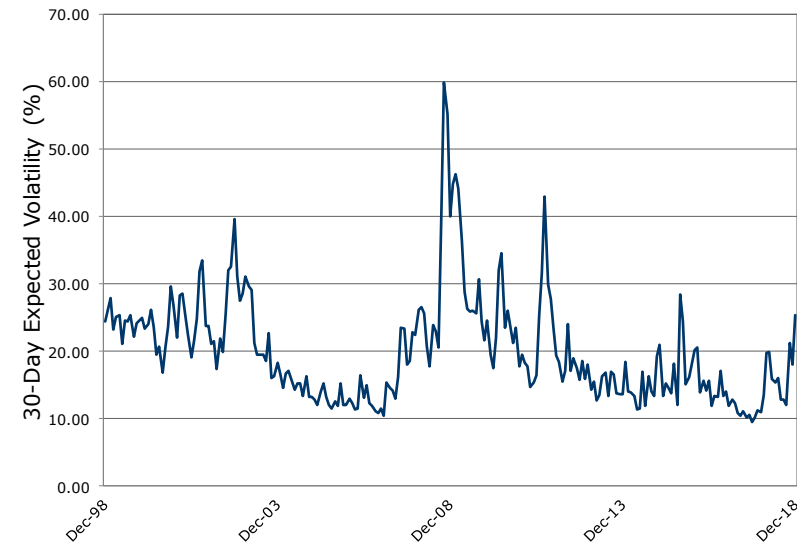
BLOOMBERG BARCLAYS CREDIT INDEXES



ST. LOUIS FED FINANCIAL STRESS INDEX



CBOE VOLATILITY INDEX



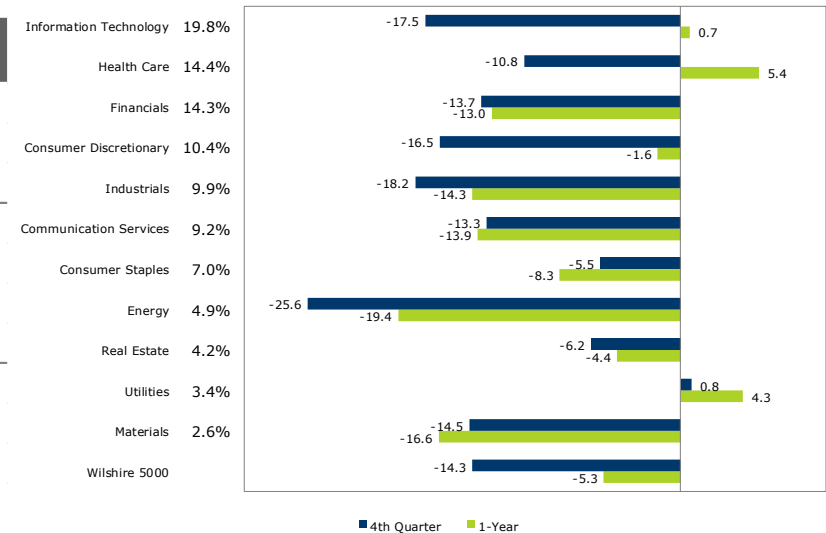
Data sources: Federal Reserve, Bloomberg Barclays

# Wilshire Consulting

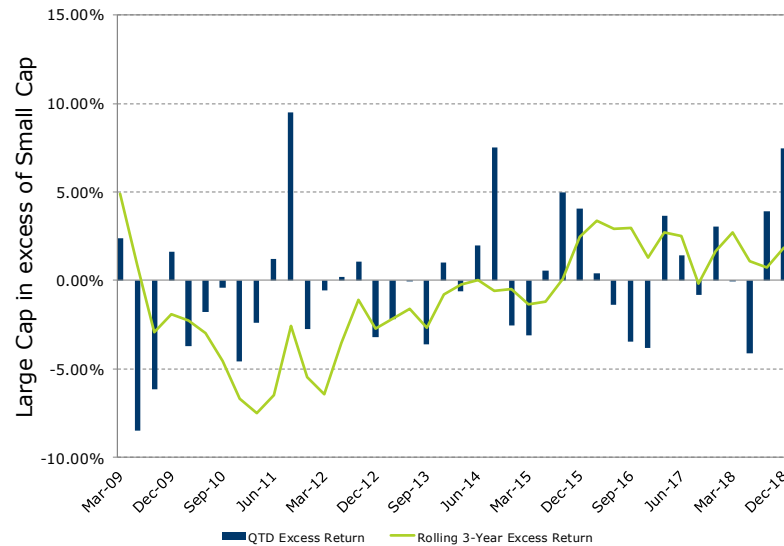
## U.S. EQUITY MARKET

AS OF DECEMBER 31, 2018	QTR	YTD	1 YR	3 YR	5 YR	10 YR
WILSHIRE 5000 INDEX	-14.3	-5.3	-5.3	9.1	8.1	13.2
WILSHIRE U.S. LARGE CAP	-13.7	-4.6	-4.6	9.3	8.5	13.1
WILSHIRE U.S. SMALL CAP	-19.7	-10.8	-10.8	7.4	4.7	13.9
WILSHIRE U.S. LARGE GROWTH	-16.8	-3.6	-3.6	10.3	9.6	14.6
WILSHIRE U.S. LARGE VALUE	-10.8	-5.9	-5.9	8.1	7.2	11.6
WILSHIRE U.S. SMALL GROWTH	-20.6	-9.7	-9.7	8.1	4.5	14.7
WILSHIRE U.S. SMALL VALUE	-18.7	-12.0	-12.0	6.5	4.7	12.9
WILSHIRE REIT INDEX	-6.9	-4.8	-4.8	2.1	7.9	12.2
MSCI USA MIN. VOL. INDEX	-7.7	0.9	0.9	9.5	9.8	12.6
FTSE RAFI U.S. 1000 INDEX	-13.8	-8.3	-8.3	7.9	6.6	14.1

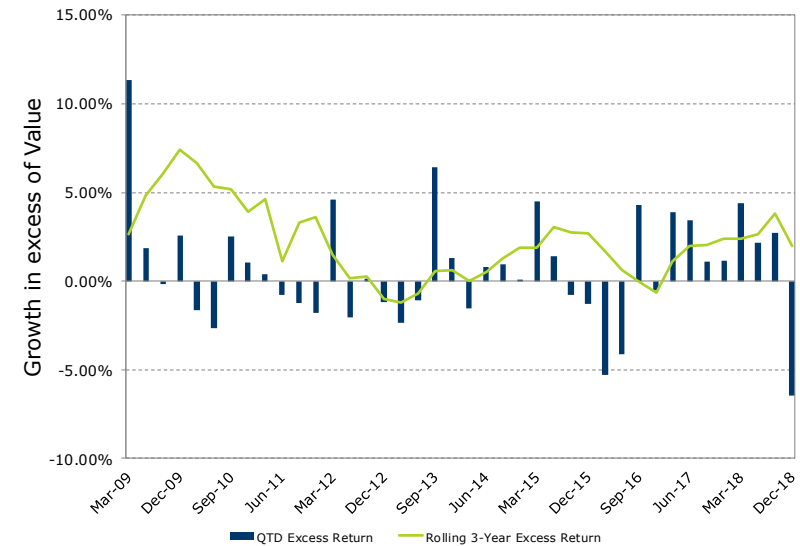
WILSHIRE 5000 SECTOR WEIGHT & RETURN (%)



LARGE CAP VS SMALL CAP



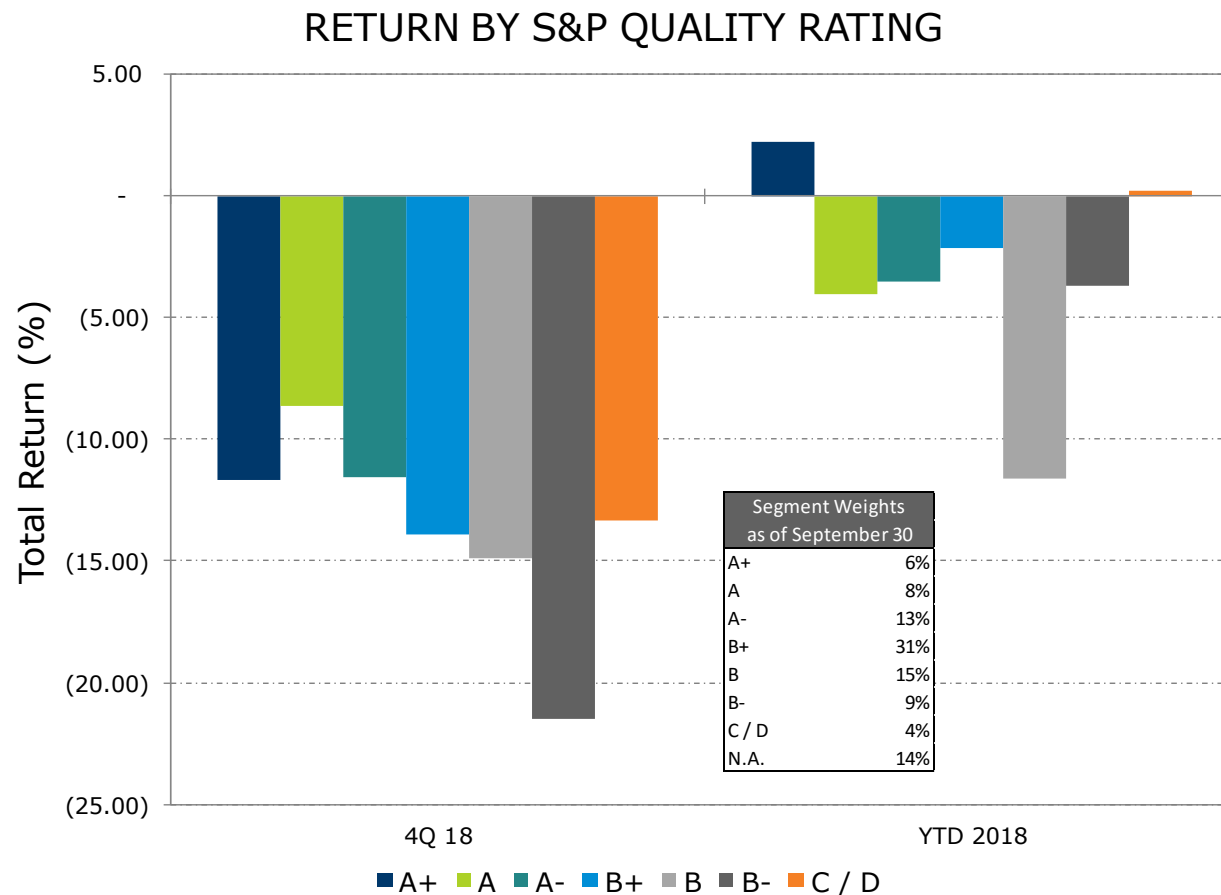
GROWTH VS VALUE



Data sources: Wilshire Compass, Wilshire Atlas

# RETURNS BY QUALITY SEGMENT

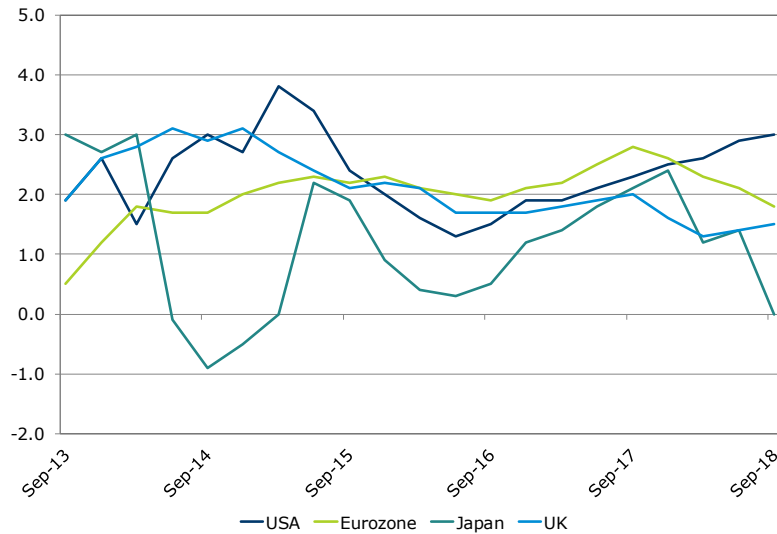
Highest quality names produced a positive return for the year but are among the lowest weight within the broad market



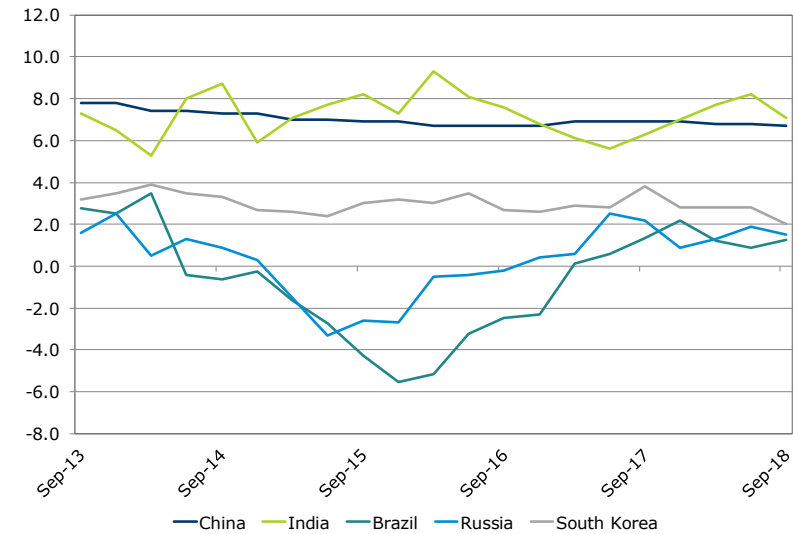
Data sources: Wilshire Atlas

# NON-U.S. GROWTH AND INFLATION

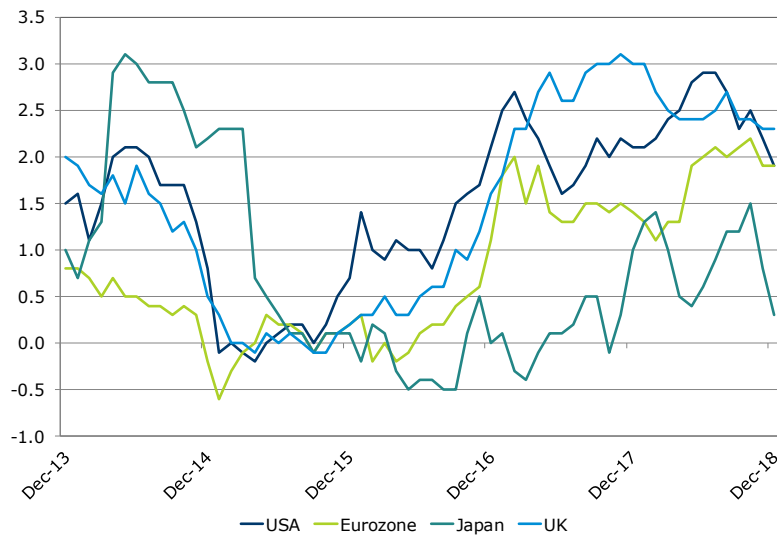
DEVELOPED MARKETS REAL GDP GROWTH YoY (%)



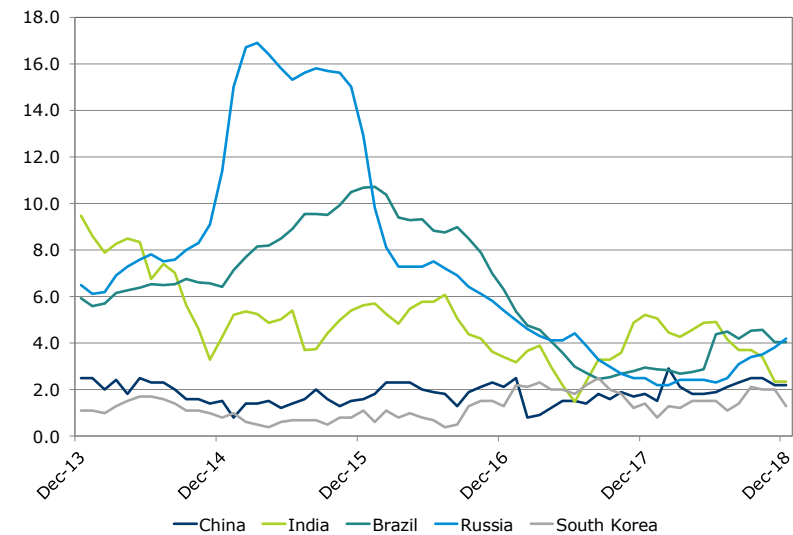
EMERGING MARKETS REAL GDP GROWTH YoY (%)



DEVELOPED MARKETS CPI GROWTH YoY (%)



EMERGING MARKETS CPI GROWTH YoY (%)

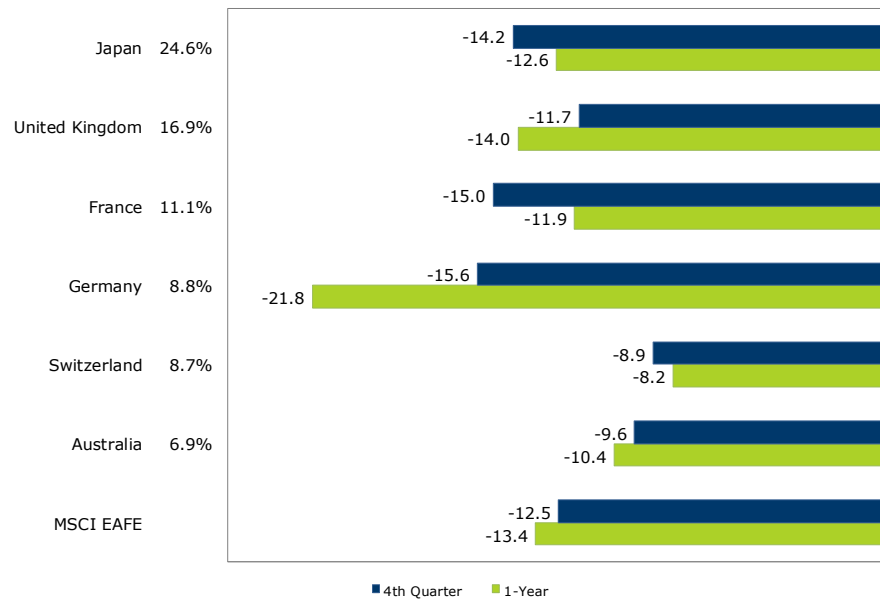


Data sources: Bloomberg

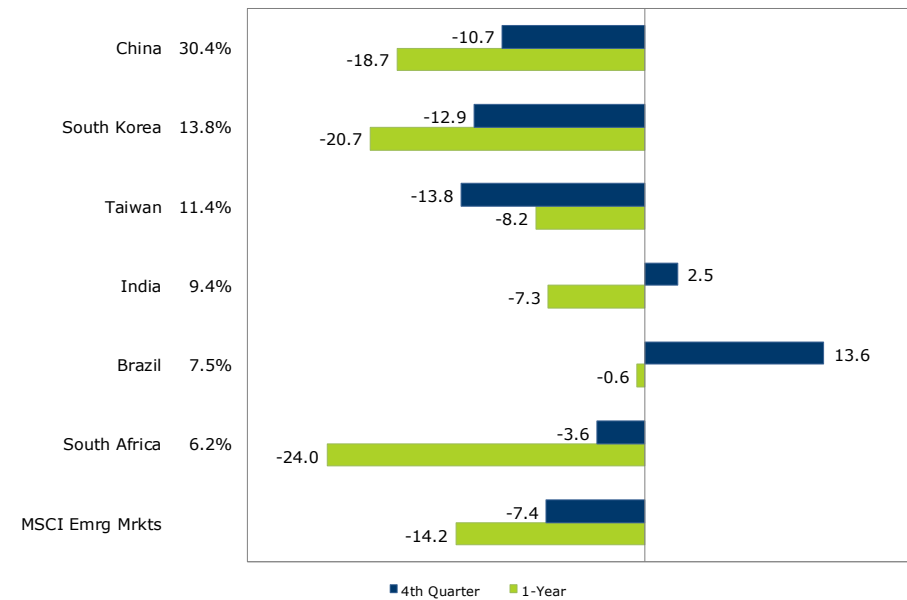
# NON-U.S. EQUITY MARKET

AS OF DECEMBER 31, 2018	QTR	YTD	1 YR	3 YR	5 YR	10 YR
MSCI ACWI EX-US (\$G)	-11.4	-13.8	-13.8	5.0	1.1	7.1
MSCI EAFE (\$G)	-12.5	-13.4	-13.4	3.4	1.0	6.8
MSCI EMERGING MARKETS (\$G)	-7.4	-14.2	-14.2	9.6	2.0	8.4
MSCI FRONTIER MARKETS (\$G)	-4.3	-16.2	-16.2	4.6	1.1	5.4
MSCI ACWI EX-US GROWTH (\$G)	-12.2	-14.1	-14.1	4.6	2.1	7.5
MSCI ACWI EX-US VALUE (\$G)	-10.6	-13.4	-13.4	5.4	0.2	6.6
MSCI ACWI EX-US SMALL (\$G)	-14.4	-17.9	-17.9	4.4	2.4	10.5
MSCI ACWI MINIMUM VOLATILITY	-6.5	-1.0	-1.0	8.3	7.9	10.5
MSCI EAFE MINIMUM VOLATILITY	-7.3	-5.2	-5.2	4.5	5.4	8.1
FTSE RAFI DEVELOPED EX-US	-12.8	-14.5	-14.5	4.9	0.9	7.3
MSCI EAFE LC (G)	-12.2	-10.5	-10.5	3.1	4.3	8.0

MSCI EAFE: LARGEST COUNTRIES & RETURN (USD)



MSCI EM: LARGEST COUNTRIES & RETURN (USD)

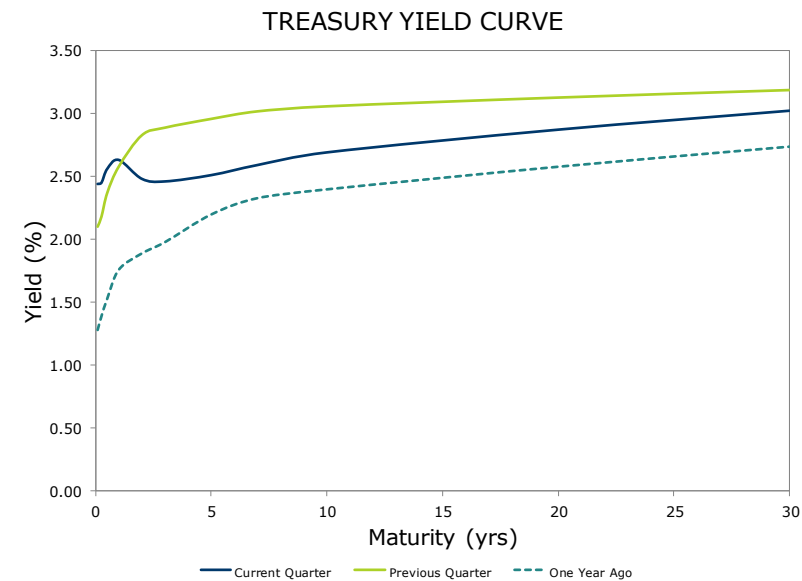
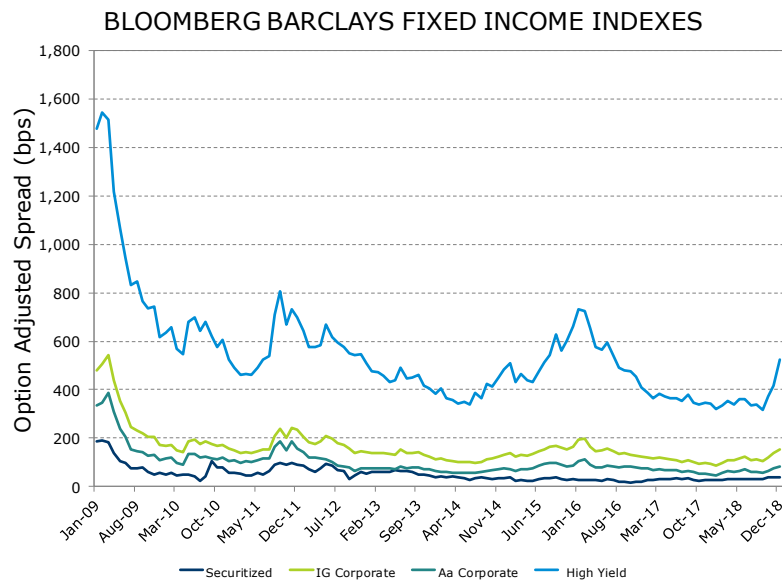


Data sources: Wilshire Compass

# U.S. FIXED INCOME

AS OF DECEMBER 31, 2018	YTM	DURATION	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS AGGREGATE	3.3	5.9	1.6	0.0	0.0	2.1	2.5	3.5
BLOOMBERG BARCLAYS TREASURY	2.6	6.1	2.6	0.9	0.9	1.4	2.0	2.1
BLOOMBERG BARCLAYS GOV'T-REL.	3.4	5.3	1.2	0.3	0.3	2.4	2.6	2.9
BLOOMBERG BARCLAYS SECURITIZED	3.4	4.7	2.0	1.0	1.0	1.8	2.5	3.4
BLOOMBERG BARCLAYS CORPORATE	4.2	7.1	-0.2	-2.5	-2.5	3.3	3.3	5.9
BLOOMBERG BARCLAYS LT G/C	4.1	15.0	0.8	-4.7	-4.7	4.0	5.4	5.9
BLOOMBERG BARCLAYS LT TREASURY	3.0	17.4	4.2	-1.8	-1.8	2.6	5.9	4.1
BLOOMBERG BARCLAYS LT GOV't-REL.	4.6	11.8	0.0	-3.2	-3.2	4.7	5.6	5.7
BLOOMBERG BARCLAYS LT CORP.	4.9	13.5	-1.8	-7.2	-7.2	4.9	5.0	7.6
BLOOMBERG BARCLAYS U.S. TIPS *	2.7	7.6	-0.4	-1.3	-1.3	2.1	1.7	3.6
BLOOMBERG BARCLAYS HIGH YIELD	8.0	4.0	-4.5	-2.1	-2.1	7.2	3.8	11.1
TREASURY BILLS	2.5	0.25	0.6	1.9	1.9	1.0	0.6	0.4

\* Yield and Duration statistics are for a proxy index based on similar maturity, the Bloomberg Barclays U.S. Treasury 7-10 Year Index

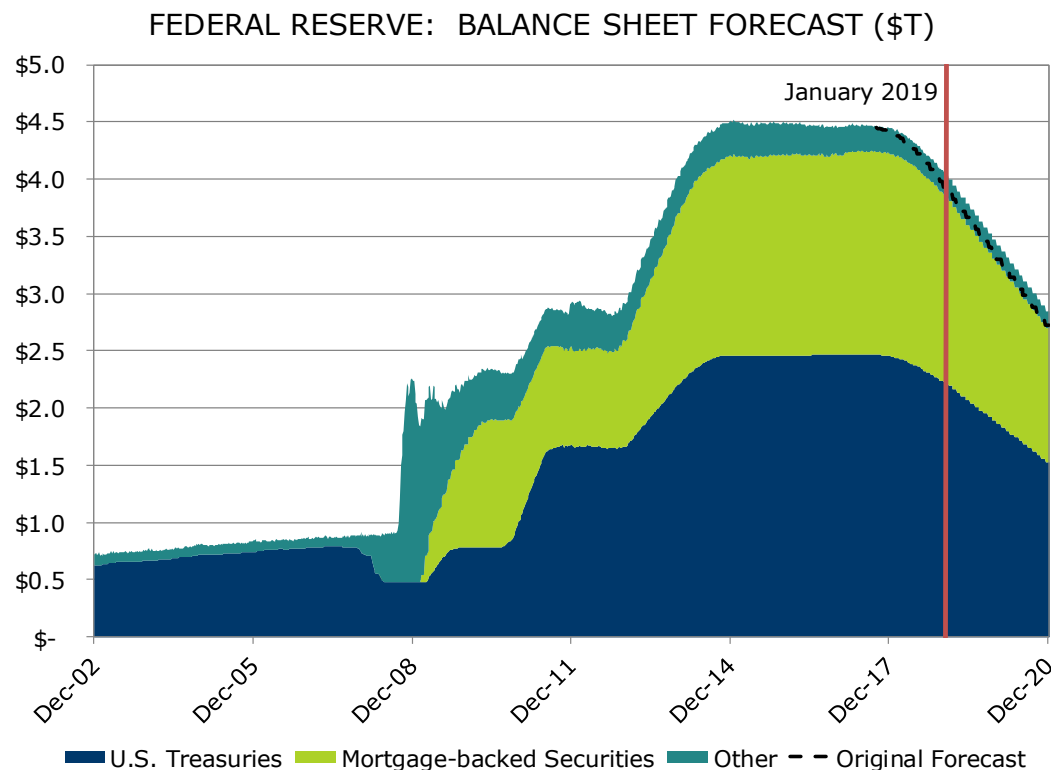


Data sources: Wilshire Compass, Bloomberg Barclays, U.S. Treasury



# FEDERAL RESERVE

- Federal Reserve began their balance sheet normalization program during October 2017; targeting \$10B in reductions per month while increasing to \$50B per month in Q4 2018
- Generally on pace with their initial plan, the Federal Reserve has reduced their total assets by \$406 billion through mid-January 2019

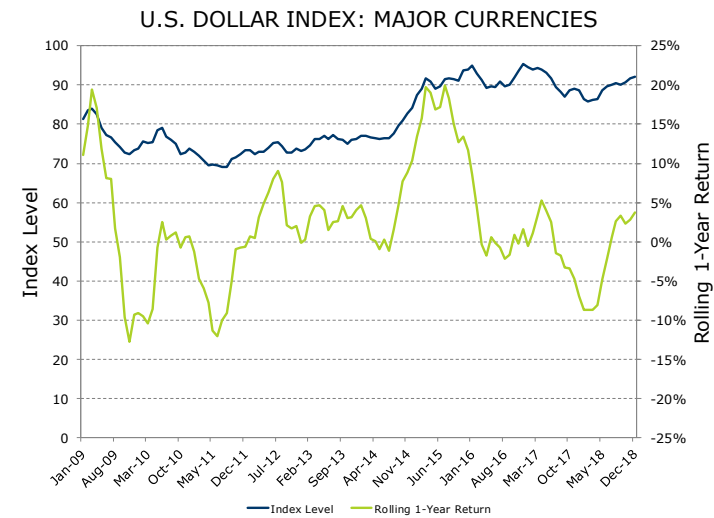
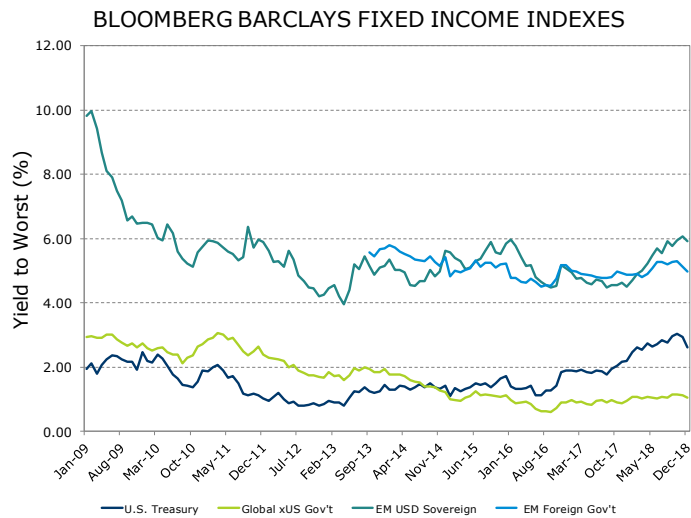


Data sources: Federal Reserve

# NON-U.S. FIXED INCOME

AS OF DECEMBER 31, 2018	QTR	YTD	1 YR	3 YR	5 YR	10 YR
<b>DEVELOPED MARKETS</b>						
BLMBRG BRCLYS GBL AGGREGATE xUS	0.9	-2.1	-2.1	3.2	0.0	1.7
BLMBRG BRCLYS GBL AGGREGATE xUS *	1.9	3.2	3.2	3.5	4.1	4.0
BLMBRG BRCLYS GLOBAL INF LNKD xUS	-1.1	-5.9	-5.9	3.1	1.0	3.8
BLMBRG BRCLYS GLOBAL INF LNKD xUS *	1.4	1.3	1.3	6.2	6.3	5.8
<b>EMERGING MARKETS (HARD CURRENCY)</b>						
BLMBRG BRCLYS EM USD AGGREGATE	-0.2	-2.5	-2.5	5.0	4.2	8.5
<b>EMERGING MARKETS (FOREIGN CURRENCY)</b>						
BLMBRG BRCLYS EM LOCAL CURR. GOVT	2.5	-3.4	-3.4	5.3	0.5	4.1
BLMBRG BRCLYS EM LOCAL CURR. GOVT *	2.6	2.7	2.7	3.2	2.9	3.2
<b>CURRENCY VS. DOLLAR</b>						
EURO vs. DOLLAR	-1.6	-4.8	-4.8	1.7	-3.7	-2.0
YEN vs. DOLLAR	3.5	2.7	2.7	3.1	-0.9	-1.9
POUND vs. DOLLAR	-2.3	-5.9	-5.9	-4.7	-5.1	-1.2

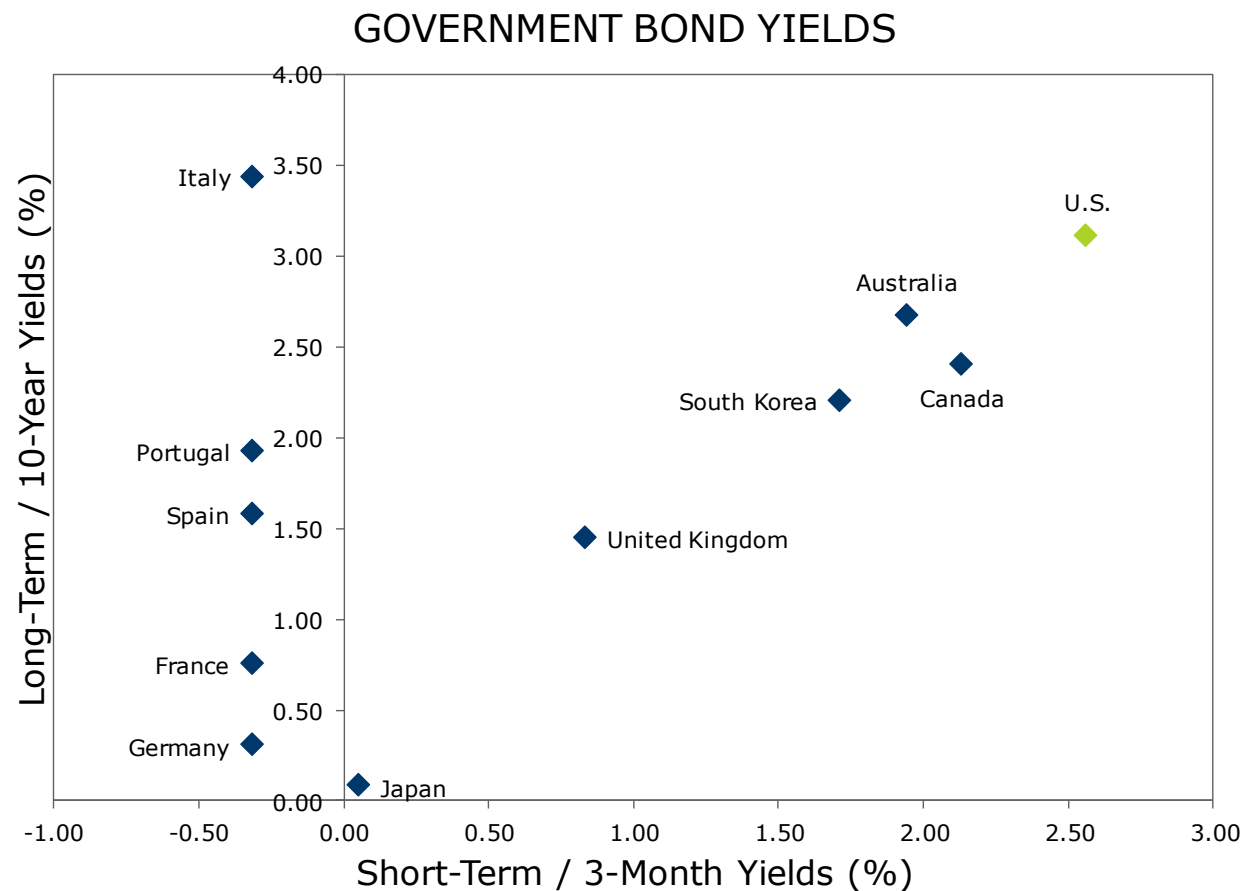
\* Returns are reported in terms of local market investors, which removes currency effects.



Data sources: Wilshire Compass, Bloomberg Barclays, Federal Reserve Bank of St. Louis

# GLOBAL INTEREST RATES

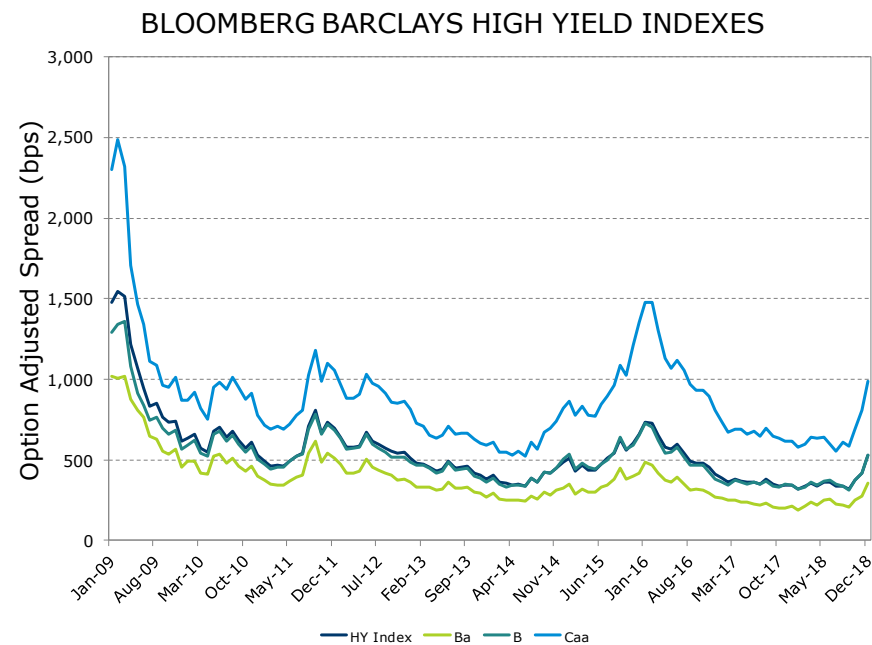
Negative short-term rates remain in Europe; Long rates jumped in Italy during the quarter



Data sources: Organization for Economic Co-operation and Development

# HIGH YIELD BOND MARKET

AS OF DECEMBER 31, 2018		QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS HIGH YIELD		-4.5	-2.1	-2.1	7.2	3.8	11.1
CREDIT SUISSE LEVERAGED LOAN		-3.1	1.1	1.1	5.0	3.3	8.3
<b>HIGH YIELD QUALITY DISTRIBUTION</b>	<b>WEIGHT</b>						
Ba U.S. HIGH YIELD	46.1%	-2.9	-2.4	-2.4	5.7	4.3	10.2
B U.S. HIGH YIELD	39.7%	-4.4	-1.3	-1.3	6.8	3.3	9.7
Caa U.S. HIGH YIELD	13.3%	-9.3	-3.8	-3.8	11.7	3.9	13.9
Ca to D U.S. HIGH YIELD	0.6%	-24.1	-1.3	-1.3	27.2	-11.2	7.4
Non-Rated U.S. HIGH YIELD	0.2%	-1.7	1.2	1.2	5.3	-0.5	6.9



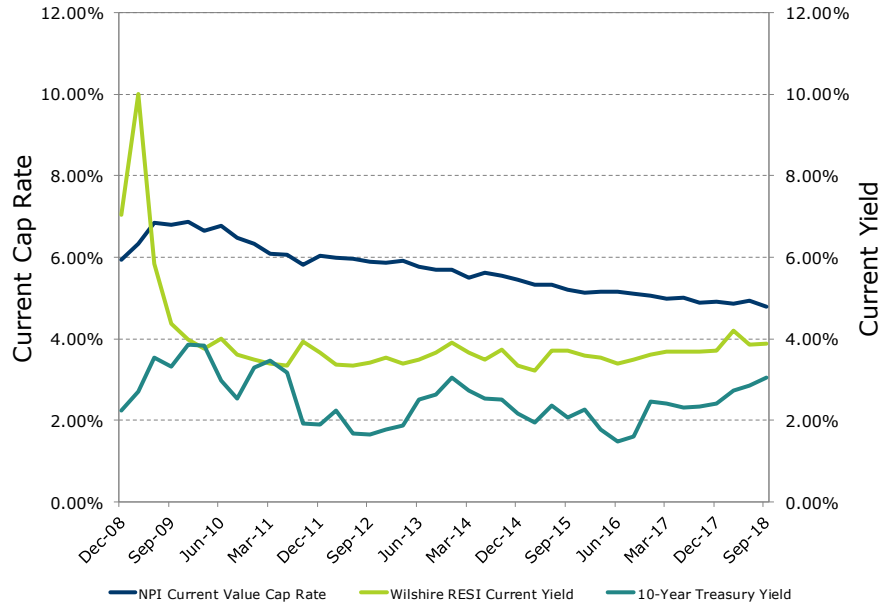
Data sources: Wilshire Compass, Bloomberg Barclays

# Wilshire Consulting

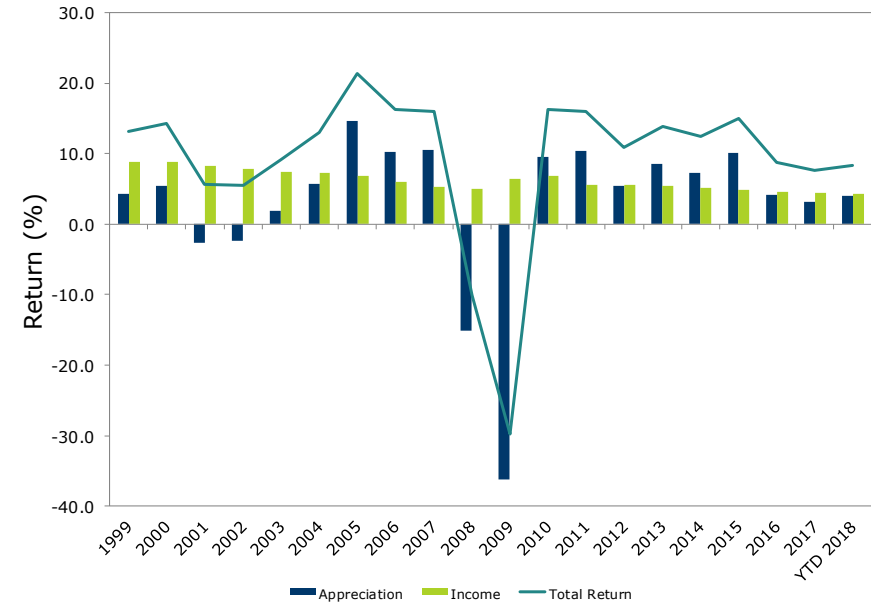
## REAL ASSETS

AS OF DECEMBER 31, 2018	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS U.S. TIPS	-0.4	-1.3	-1.3	2.1	1.7	3.6
BLOOMBERG COMMODITY INDEX	-9.4	-11.2	-11.2	0.3	-8.8	-3.8
WILSHIRE GLOBAL RESI INDEX	-6.1	-5.4	-5.4	3.3	6.1	11.6
NCREIF ODCE FUND INDEX	1.8	8.3	8.3	8.2	10.4	7.0
NCREIF TIMBERLAND INDEX	1.0	3.4	3.4	3.2	5.0	3.8
ALERIAN MLP INDEX (OIL & GAS)	-17.3	-12.4	-12.4	-1.1	-7.3	9.6

### REAL ESTATE VALUATION



### NCREIF ODCE FUND INDEX RETURN



Data sources: Wilshire Compass, National Council of Real Estate Investment Fiduciaries

Wilshire Consulting

# 37<sup>th</sup> ANNUAL CLIENT CONFERENCE

Sunday, March 24th – Tuesday, March 26th in Napa, CA

## **Focus on Research – Driven by client interaction and the latest thinking in the industry**

Each year, Wilshire hosts an educational conference for clients on important issues and topical ideas.

Investment topics for 2019 include:

- Market & Economic Outlook
- Economic Regimes and the Late Cycle
- International Equity
- Hedge Funds
- Liquidity
- Outsourced CIO
- ESG / SRI
- Defined Contribution Plans
- Private Markets: State of the World
- Active, Passive, and Alternative Beta
- Infrastructure
- Private Credit
- Diverse Managers and New Opportunities within Private Markets

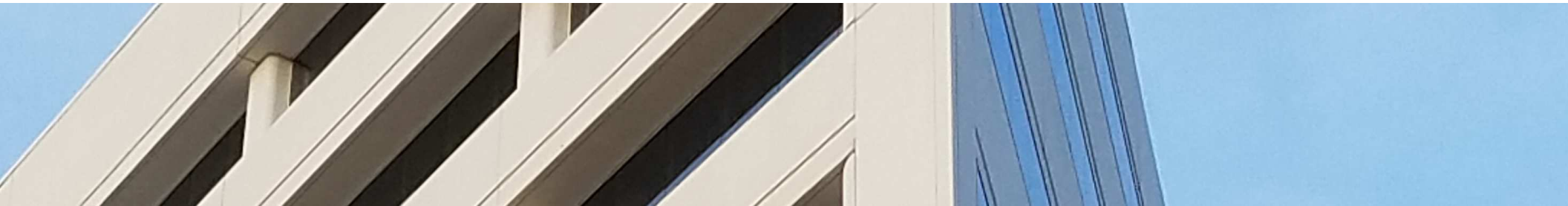
The Estate Yountville  
Napa Valley California





# WILSHIRE ASSOCIATES

Wilshire Consulting



## Jacksonville Police & Fire Pension Fund

Monthly Performance Summary

*January 31, 2019*

# MONTHLY SUMMARY

## Investment Performance and Market Values

For Periods Ending January 31, 2019

	Net of Fee Returns								Market Value		
	Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	Inception Date	\$	Percent
<b>NT S&amp;P 500</b>	8.01	8.01	-6.55	-2.31	14.01	10.97	15.00	5.99	12/31/98	221,156,872	10.97
Standard & Poor's 500	8.01	8.01	-6.59	-2.31	14.02	10.96	15.00	6.00	12/31/98		
Value Added	0.00	0.00	0.04	-0.00	-0.01	0.01	-0.00	-0.01	12/31/98		
<b>Large Core Composite</b>	8.01	8.01	-6.55	-2.31	13.45	10.59	14.56	6.86	5/31/07	221,156,872	10.97
Standard & Poor's 500	8.01	8.01	-6.59	-2.31	14.02	10.96	15.00	7.26	5/31/07		
Value Added	0.00	0.00	0.04	0.00	-0.58	-0.37	-0.44	-0.40	5/31/07		
<b>Eagle Capital Mgmt</b>	10.17	10.17	-5.28	-4.11	14.36	10.48		12.23	3/31/11	212,982,604	10.56
Russell 1000 Value	7.78	7.78	-4.85	-4.81	11.62	8.33		10.02	3/31/11		
Value Added	2.39	2.39	-0.43	0.70	2.74	2.15		2.21	3/31/11		
<b>GAMCO</b>										8,465	0.00
<b>Large Value Composite</b>	10.17	10.17	-5.28	-4.11	15.19	9.86	13.54	5.76	5/31/07	212,991,069	10.56
Russell 1000 Value	7.78	7.78	-4.85	-4.81	11.62	8.33	13.39	5.18	5/31/07		
Value Added	2.39	2.39	-0.43	0.70	3.58	1.53	0.15	0.58	5/31/07		
<b>Loomis Sayles &amp; Co.</b>	8.99	8.99	-3.78	-1.47				10.72	8/31/17	114,308,807	5.67
Russell 1000 Growth	8.99	8.99	-8.33	0.24				11.91	8/31/17		
Value Added	0.00	0.00	4.55	-1.71				-1.19	8/31/17		
<b>Sawgrass Asset Mgmt</b>	5.12	5.12	-5.83	3.04	13.42	10.95		11.33	10/31/13	118,401,246	5.87
Russell 1000 Growth	8.99	8.99	-8.33	0.24	16.60	12.97		12.90	10/31/13		
Value Added	-3.87	-3.87	2.49	2.80	-3.18	-2.03		-1.57	10/31/13		



# MONTHLY SUMMARY

## Investment Performance and Market Values

For Periods Ending January 31, 2019

	Net of Fee Returns									Market Value	
	Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	Inception Date	\$	Percent
<b>Brown Inv Advisory</b>										13,181	0.00
<b>Large Growth Composite</b>	6.99	6.99	-4.83	0.74	13.10	10.31	13.62	7.91	5/31/07	232,723,234	11.54
Russell 1000 Growth	8.99	8.99	-8.33	0.24	16.60	12.97	16.86	9.35	5/31/07		
Value Added	-2.00	-2.00	3.49	0.50	-3.49	-2.66	-3.24	-1.43	5/31/07		
<b>Large Cap Composite</b>	8.35	8.35	-5.52	-1.91	13.78	10.13	13.91	7.05	5/31/07	666,871,176	33.08
Russell 1000	8.38	8.38	-6.60	-2.17	14.14	10.68	15.17	7.31	5/31/07		
Value Added	-0.03	-0.03	1.08	0.27	-0.36	-0.55	-1.26	-0.26	5/31/07		
<b>Pinnacle</b>	13.22	13.22	-8.47	-4.48	13.94	7.79		18.32	2/28/09	73,144,186	3.63
Russell 2500 Growth	11.91	11.91	-10.56	-1.37	16.21	9.02		18.01	2/28/09		
Value Added	1.31	1.31	2.09	-3.11	-2.27	-1.23		0.31	2/28/09		
<b>Wedge Capital Mgmt</b>	12.19	12.19	-8.67	-6.61				5.29	8/31/16	79,700,784	3.95
Russell 2000 Value	10.94	10.94	-9.77	-4.51				7.78	8/31/16		
Value Added	1.25	1.25	1.10	-2.11				-2.49	8/31/16		
<b>Small/Mid Cap Composite</b>	12.68	12.68	-8.57	-5.51	14.02	6.48	15.69	6.68	5/31/07	152,844,971	7.58
Russell 2500	11.51	11.51	-9.10	-2.61	14.42	7.96	15.48	7.08	5/31/07		
Value Added	1.17	1.17	0.53	-2.90	-0.39	-1.48	0.22	-0.41	5/31/07		
<b>US Equity Composite</b>	9.15	9.15	-6.11	-2.61	14.05	9.15	14.31	10.05	12/31/87	819,716,146	40.66
Russell 3000	8.58	8.58	-6.95	-2.26	14.19	10.41	15.12	10.45	12/31/87		
Value Added	0.57	0.57	0.84	-0.35	-0.15	-1.26	-0.81	-0.39	12/31/87		

# MONTHLY SUMMARY

## Investment Performance and Market Values

For Periods Ending January 31, 2019

	Net of Fee Returns								Market Value		
	Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	Inception Date	\$	Percent
<b>NT EAFE Index</b>										17,055,705	0.85
<b>Baillie Gifford</b>	10.61	10.61	-10.59	-16.69	14.46	5.27		6.26	2/28/11	110,501,681	5.48
MSCI EAFE Growth (N)	6.45	6.45	-7.74	-11.32	7.38	3.84		4.36	2/28/11		
Value Added	4.16	4.16	-2.85	-5.37	7.08	1.43		1.90	2/28/11		
<b>Silchester</b>	6.70	6.70	-4.98	-12.25	9.84	5.24		6.35	8/31/13	145,557,371	7.22
MSCI EAFE Value (N)	6.69	6.69	-5.79	-13.73	8.07	1.42		3.19	8/31/13		
Value Added	0.01	0.01	0.81	1.48	1.76	3.82		3.15	8/31/13		
<b>Developed Large Composite</b>	8.13	8.13	-7.67	-14.25	11.04	4.66		5.77	8/31/09	273,114,756	13.55
MSCI EAFE Index (N)	6.57	6.57	-6.79	-12.51	7.74	2.66		5.00	8/31/09		
Value Added	1.56	1.56	-0.88	-1.74	3.30	2.00		0.77	8/31/09		
<b>Acadian Emerging Mkts</b>	9.01	9.01	-1.04	-17.99	13.93	4.20		3.02	12/31/13	118,732,176	5.89
MSCI Emerging Mkts (N)	8.77	8.77	0.64	-14.23	14.89	4.77		3.31	12/31/13		
Value Added	0.24	0.24	-1.68	-3.75	-0.96	-0.57		-0.30	12/31/13		
<b>Emerging Markets Composite</b>	9.01	9.01	-1.04	-17.99	13.89	4.58		3.74	9/30/09	118,732,176	5.89
MSCI Emerging Mkts (N)	8.77	8.77	0.64	-14.23	14.89	4.77		3.91	9/30/09		
Value Added	0.24	0.24	-1.68	-3.75	-1.00	-0.19		-0.17	9/30/09		

# MONTHLY SUMMARY

## Investment Performance and Market Values

For Periods Ending January 31, 2019

	Net of Fee Returns									Market Value	
	Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	Inception Date	\$	Percent
<b>Non-US Equity Composite</b>	8.40	8.40	-5.68	-15.14	11.73	4.52	8.01	4.84	1/31/99	391,846,932	19.43
MSCI ACWI ex US (N)	7.56	7.56	-4.77	-12.58	9.59	3.11	7.86	3.75	1/31/99		
Value Added	0.84	0.84	-0.91	-2.56	2.15	1.41	0.15	1.09	1/31/99		
<b>Equity Composite</b>	8.93	8.93	-5.96	-7.01	13.21	7.53	12.18	5.22	5/31/07	1,211,563,078	
<b>NT Aggregate Bond</b>	1.05	1.05	2.70	2.26	1.96	2.45		2.03	1/31/13	1,861,016	0.09
Bloomberg Aggregate	1.06	1.06	2.71	2.25	1.95	2.44		2.05	1/31/13		
Value Added	-0.01	-0.01	-0.02	0.00	0.01	0.01		-0.02	1/31/13		
<b>Thompson Siegel</b>	1.42	1.42	1.81	1.83	2.78	2.87	4.30	5.90	7/31/91	86,931,619	4.31
Bloomberg Aggregate	1.06	1.06	2.71	2.25	1.95	2.44	3.70	5.67	7/31/91		
Value Added	0.36	0.36	-0.90	-0.42	0.83	0.44	0.61	0.23	7/31/91		
<b>Core Fixed Composite</b>	1.42	1.42	1.84	1.84	2.45	2.73	3.79	3.71	11/30/07	88,792,635	4.40
Bloomberg Aggregate	1.06	1.06	2.71	2.25	1.95	2.44	3.68	3.71	11/30/07		
Value Added	0.35	0.35	-0.88	-0.41	0.50	0.29	0.11	0.01	11/30/07		
<b>Loomis Sayles &amp; Co.</b>	1.60	1.60	1.71	1.28				3.10	1/31/17	133,614,770	6.63
Bloomberg Universal	1.38	1.38	2.56	2.10				2.41	1/31/17		
Value Added	0.22	0.22	-0.85	-0.82				0.69	1/31/17		

# MONTHLY SUMMARY

## Investment Performance and Market Values

For Periods Ending January 31, 2019

	Net of Fee Returns									Market Value	
	Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	Inception Date	\$	Percent
<b>Neuberger Berman</b>	2.12	2.12	2.31	1.63				2.73	12/31/16	191,876,064	9.52
Bloomberg Universal	1.38	1.38	2.56	2.10				2.49	12/31/16		
Value Added	0.74	0.74	-0.25	-0.48				0.24	12/31/16		
<b>Core Plus Fixed Composite</b>	1.90	1.90	2.07	1.49				3.08	11/30/16	325,490,835	16.14
Bloomberg Universal	1.38	1.38	2.56	2.10				2.53	11/30/16		
Value Added	0.52	0.52	-0.50	-0.62				0.55	11/30/16		
<b>Fixed Income Composite</b>	1.80	1.80	2.04	1.57	3.01	2.82	3.80	6.11	12/31/87	414,283,469	20.55
Policy Index	1.31	1.31	2.59	2.13	2.11	2.53	3.73	6.19	12/31/87		
Value Added	0.49	0.49	-0.56	-0.56	0.91	0.29	0.07	-0.08	12/31/87		
<b>JP Morgan</b>	0.26	0.26	2.09	7.30	7.15	9.01	6.63	7.59	3/31/05	171,182,793	8.49
NCREIF ODCE NOF	0.00	0.00	1.52	7.36	7.27	9.41	6.01	6.67	3/31/05		
Value Added	0.26	0.26	0.57	-0.07	-0.12	-0.40	0.63	0.93	3/31/05		
<b>Principal Global</b>	0.28	0.28	1.57	7.74	8.52	10.44		10.80	3/31/13	54,572,592	2.71
NCREIF ODCE NOF	0.00	0.00	1.52	7.36	7.27	9.41		9.83	3/31/13		
Value Added	0.28	0.28	0.05	0.37	1.25	1.03		0.97	3/31/13		
<b>Real Estate Composite</b>	0.27	0.27	1.96	7.40	7.48	9.35	7.48	8.54	3/31/05	225,755,385	11.20
NCREIF ODCE NOF	0.00	0.00	1.52	7.36	7.27	9.41	6.01	6.67	3/31/05		
Value Added	0.27	0.27	0.44	0.04	0.21	-0.06	1.47	1.87	3/31/05		

# MONTHLY SUMMARY

## Investment Performance and Market Values

For Periods Ending January 31, 2019

	Net of Fee Returns								Market Value		
	Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	Inception Date	\$	Percent
<b>Harvest MLP</b>	15.39	15.39	-8.94	-6.06	8.46	-2.19		6.05	2/28/11	39,375,348	1.95
S&P MLP Index	13.16	13.16	-6.99	-5.46	9.54	-4.40		2.05	2/28/11		
Value Added	2.24	2.24	-1.95	-0.60	-1.08	2.21		4.00	2/28/11		
<b>Tortoise MLP</b>	13.77	13.77	-4.83	-5.49	8.29	-1.96		5.90	2/28/11	40,737,202	2.02
S&P MLP Index	13.16	13.16	-6.99	-5.46	9.54	-4.40		2.05	2/28/11		
Value Added	0.62	0.62	2.16	-0.03	-1.26	2.43		3.86	2/28/11		
<b>MLP Composite</b>	14.56	14.56	-6.89	-5.75	8.29	-2.09		5.96	2/28/11	80,112,549	3.97
S&P MLP Index	13.16	13.16	-6.99	-5.46	9.54	-4.40		2.05	2/28/11		
Value Added	1.41	1.41	0.09	-0.29	-1.25	2.31		3.91	2/28/11		
<b>Alternatives Composite</b>	3.65	3.65	-0.50	0.14	10.50	-0.89		6.78	2/28/11	305,867,935	
<b>Cash Composite</b>	0.25	0.25	0.89	2.15	1.62	1.30	0.72	7.65	11/30/98	84,479,405	4.19
FTSE 3 Month T-Bill	0.20	0.20	0.77	1.96	1.05	0.64	0.37	1.83	11/30/98		
Value Added	0.05	0.05	0.12	0.19	0.57	0.66	0.35	5.82	11/30/98		
<b>Total Fund Composite</b>	6.13	6.13	-3.51	-3.71	10.05	6.23	9.38	7.87	3/31/89	2,016,193,886	100.00
Policy Index	5.84	5.84	-3.13	-1.86	9.81	6.46	9.60	8.09	3/31/89		
Value Added	0.29	0.29	-0.38	-1.85	0.24	-0.24	-0.22	-0.22	3/31/89		