

December Market Environment



U.S. economy overview

- 3Q GDP grew 3.4% thanks to private domestic investment rising an impressive 12%
- The unemployment rate rose to 3.9% in December with 312K nonfarm jobs added
- CPI increased 2.2% over the trailing 12 months, with energy rising 3.1% and food prices growing 1.4%
- The Federal Government is partially shutdown as Trump and Democrats remain divided on border wall funding.
- 420,000 essential government employees are working without pay while another 380,000 are on unpaid leave

Fixed Income: Kicking off 2019 with moderate valuations

Yield curve still inverted at short end, tariff uncertainty a key concern

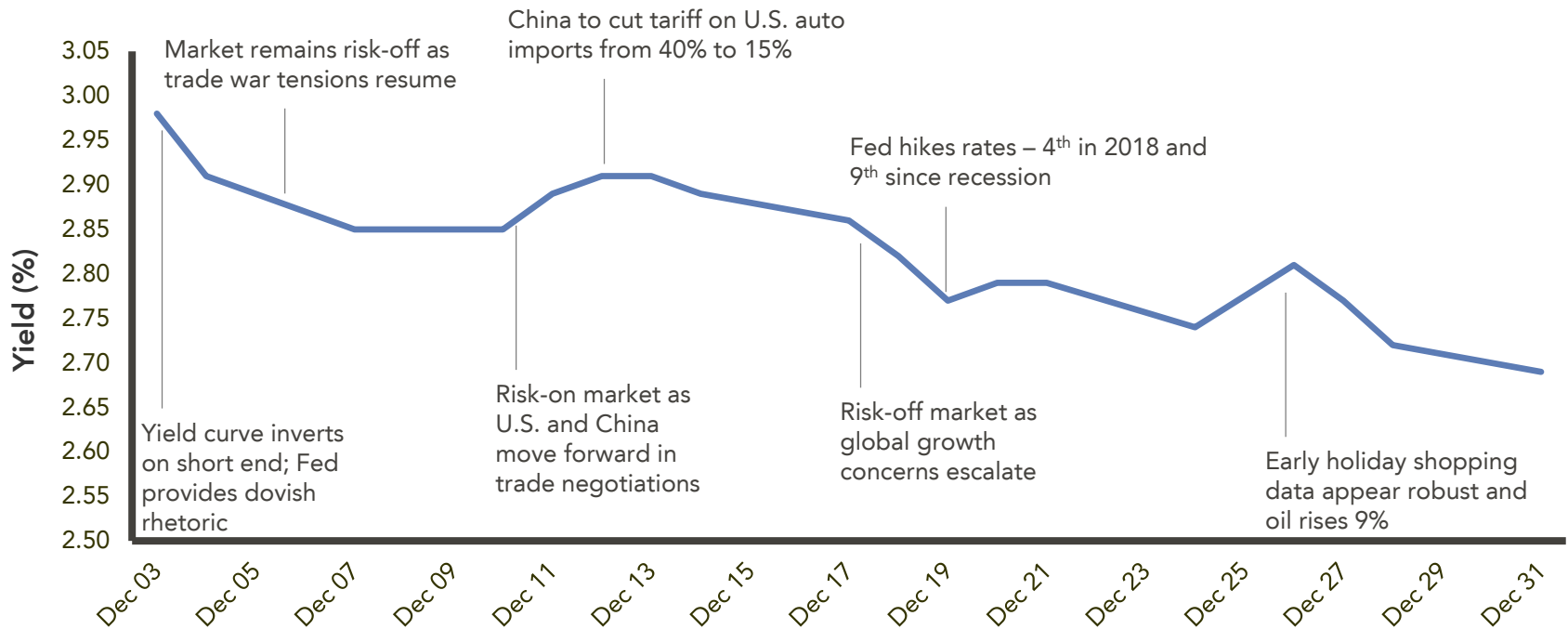
	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
Broad Market Indices							
Blm BC Aggregate	1.8	1.6	0.0	0.0	2.1	2.5	3.5
Intermediate Indices							
Blm BC Int. Gov./Credit	1.3	1.7	0.9	0.9	1.7	1.9	2.9
Government Only Indices							
Blm BC Long Gov.	5.4	4.2	-1.8	-1.8	2.6	5.9	4.1
Blm BC Int. Gov.	1.5	2.2	1.4	1.4	1.2	1.5	1.8
Blm BC 1-3 Year Gov.	0.8	1.3	1.6	1.6	1.0	0.8	1.0
Blm BC U.S. TIPS	0.5	-0.4	-1.3	-1.3	2.1	1.7	3.6
Credit Indices							
Blm BC U.S. Long Credit	2.5	-1.6	-6.8	-6.8	4.9	5.1	7.4
Blm BC High Yield	-2.1	-4.5	-2.1	-2.1	7.2	3.8	11.1
CS Leveraged Loan Index	-2.3	-3.1	1.1	1.1	5.0	3.3	8.3
Securitized Bond Indices							
Blm BC MBS	1.8	2.1	1.0	1.0	1.7	2.5	3.1
Blm BC ABS	0.8	1.2	1.8	1.8	1.8	1.7	4.6
Blm BC CMBS	1.5	1.7	1.0	1.0	2.7	2.6	7.5
Non-U.S. Indices							
Blm BC Global Aggregate Hedged	1.4	1.7	1.8	1.8	2.9	3.4	3.8
JPM EMBI Global Diversified	1.3	-1.3	-4.3	-4.3	5.2	4.8	8.2
JPM GBI-EM Global Diversified	1.3	2.9	3.2	3.2	7.1	6.5	7.6
Municipal Indices							
Blm BC Municipal	1.2	1.7	1.3	1.3	2.3	3.8	4.9
Blm BC HY Municipal	0.9	0.3	4.8	4.8	5.8	6.5	9.1

Source: Bloomberg Barclays, Credit Suisse, JPMorgan as of December 31, 2018

December: 10-year yield declines further

Yield declined from 3.01% to 2.69% during the month

10-Year Treasury Yield



Source: Federal Reserve as of December 31, 2018

Fixed income takeaways

Core Bonds

- Yield curve remains inverted on short end going into New Year
- Fed funds futures currently projecting zero hikes for 2019
- Duration continues to provide principal protection in market corrections

Bank Loans & High Yield

- Spreads showing moderate value after 4Q correction
- Some structural deterioration in U.S. credit as bank loan cov-lite and loan-only deals on rise
- Bank loan aggressive issuance high as acquisitions/LBOs and 2nd liens at 2007 levels
- High yield aggressive issuance is still low as acquisitions/LBOs shift towards bank loans
- Leverage, coverage, issuance and outstanding amounts remain moderate

Emerging Markets Debt

- Spreads showing moderate value after 4Q correction
- Rising global tariffs and escalating global slowdown may have been priced into widened spreads
- Primary fundamentals — current accounts, growth, leverage — remain favorable
- Despite sizeable maturities in next few years, most of issuers are Chinese/Middle Eastern with high reserves

Municipal Bonds

- Still attractive on a tax-equivalent basis
- Persistent net negative supply of municipals should continue to be tailwind
- Low gas prices favorable for transport bonds, declining enrollment a headwind for higher ed bonds, tax cuts leading to higher disposable income a tailwind for tobacco bonds

U.S. equities: Things were going well until...

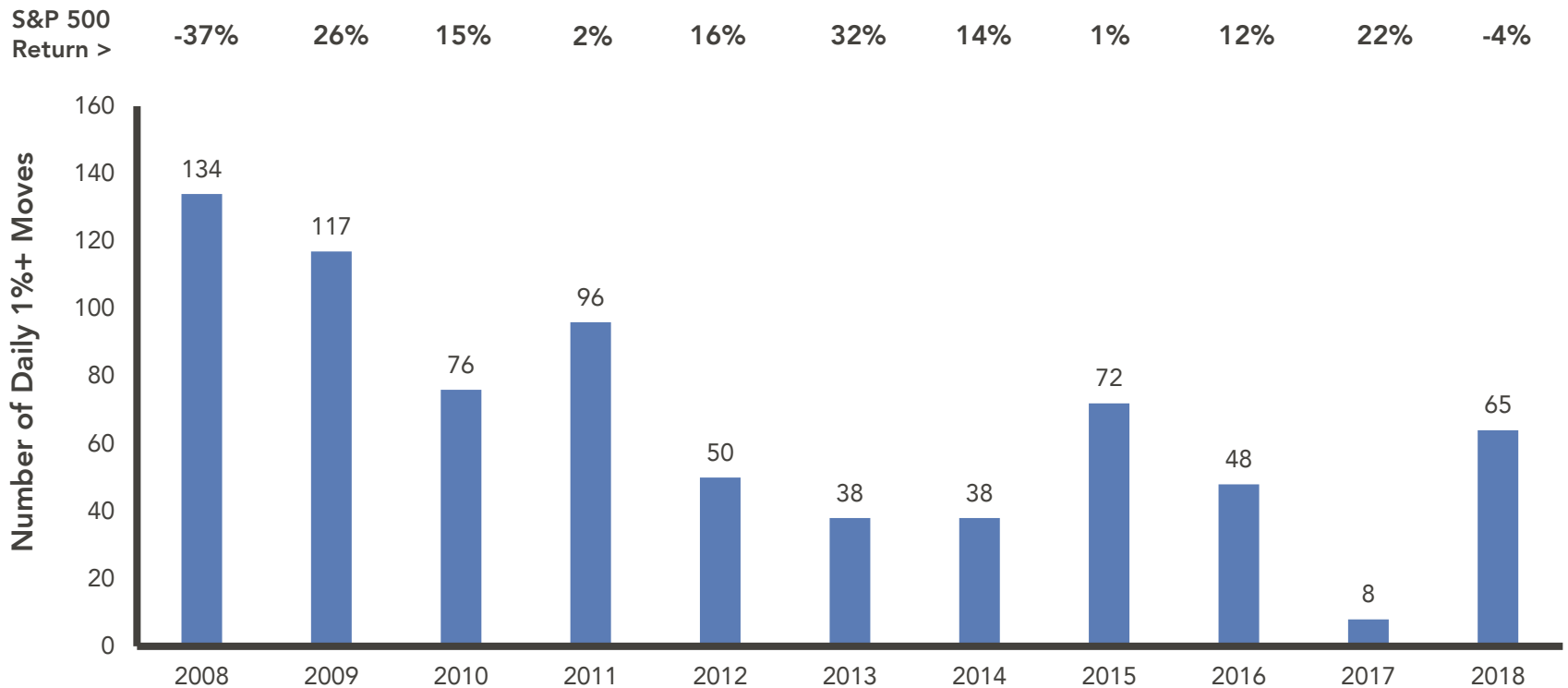
U.S. equity index returns

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
Broad Market Indices							
Dow Jones	-8.6	-11.3	-3.5	-3.5	12.9	9.7	13.2
Wilshire 5000	-9.3	-14.3	-5.3	-5.3	9.1	8.1	13.2
Russell 3000	-9.3	-14.3	-5.2	-5.2	9.0	7.9	13.2
Large-Cap Market Indices							
S&P 500	-9.0	-13.5	-4.4	-4.4	9.3	8.5	13.1
Russell 1000	-9.1	-13.8	-4.8	-4.8	9.1	8.2	13.3
Russell 1000 Value	-9.6	-11.7	-8.3	-8.3	7.0	5.9	11.2
Russell 1000 Growth	-8.6	-15.9	-1.5	-1.5	11.1	10.4	15.3
Mid-Cap Market Indices							
Russell MidCap	-9.9	-15.4	-9.1	-9.1	7.0	6.3	14.0
Russell MidCap Value	-10.5	-15.0	-12.3	-12.3	6.1	5.4	13.0
Russell MidCap Growth	-9.1	-16.0	-4.8	-4.8	8.6	7.4	15.1
Small-Cap Market Indices							
Russell 2000	-11.9	-20.2	-11.0	-11.0	7.4	4.4	12.0
Russell 2000 Value	-12.1	-18.7	-12.9	-12.9	7.4	3.6	10.4
Russell 2000 Growth	-11.7	-21.7	-9.3	-9.3	7.2	5.1	13.5

Source: Morningstar Direct as of December 31, 2018

Volatility normalizes in 2018

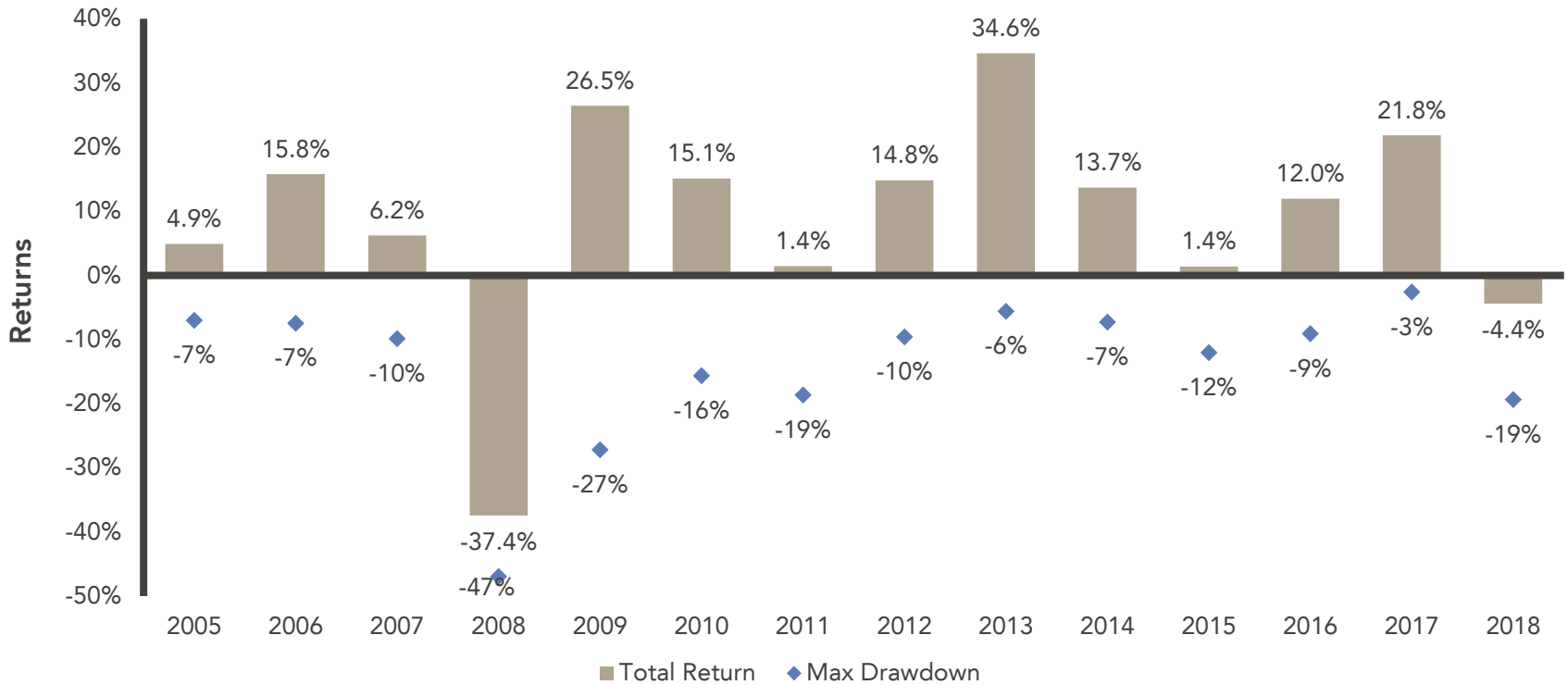
Most S&P 500 1%+ moves YTD since 2015



Source: Bloomberg as of December 31, 2018

Negative returns are normal

S&P 500 maximum market drawdown



Source: Bloomberg as of December 31, 2018

U.S. equity takeaways

- Expect continued market volatility around Fed policy and geopolitical tensions
- Earnings growth will decline in 2019 given fading fiscal stimulus, but economic fundamentals in the U.S. remain solid
- U.S. equity market valuations are attractive relative to history, but could face further pressure if Technology performance stagnates
- U.S. equity markets have priced in negative growth and not a slowing growth environment

Non-U.S. equities: a tough year

All indices finished down double digits in 2018

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
MSCI ACWI ex. U.S.	-4.5	-11.5	-14.2	-14.2	4.5	0.7	6.6
MSCI EAFE	-4.9	-12.5	-13.8	-13.8	2.9	0.5	6.3
MSCI EAFE Local	-5.9	-12.2	-11.0	-11.0	2.6	3.8	7.5
MSCI Emerging Markets	-2.7	-7.5	-14.6	-14.6	9.3	1.7	8.0
MSCI EM Local	-2.5	-7.4	-10.1	-10.1	8.8	5.0	9.6
MSCI EAFE Small-Cap	-6.5	-16.1	-17.9	-17.9	3.7	3.1	10.5
MSCI EM Small-Cap	-1.6	-7.2	-18.6	-18.6	3.7	1.0	9.9
MSCI Frontier	-2.9	-4.3	-16.4	-16.4	4.2	0.7	4.8

Source: Bloomberg as of December 31, 2018

Volatility picks up across the globe in 2018

Number of days with price movements of at least 1%



Source: Bloomberg as of December 31, 2018

Non-U.S. equity takeaways

- Strong 2017 followed by a tough 2018
- Economic and earnings momentum have slowed considerably since 2017
- The geopolitical environment has led to increased levels of uncertainty, contributing to slowed momentum and sentiment
- Brexit is scheduled for March 29, 2019 and UK leadership is still in gridlock
- U.S./China tariff ceasefire expires March 1, 2019
- While momentum has slowed economic and earnings growth remains positive for now and valuations have come down considerably across the globe

Hedge fund December performance

Equity hedge feels the burn in 2018

	Month (%)	3-Month (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)
HFRX Global	-1.9	-5.6	-6.7	-6.7	0.4	-0.6	1.5
HFRX Hedged Equity	-4.2	-8.6	-9.4	-9.4	-0.1	-0.2	1.4
HFRI Composite	-2.0	-5.3	-4.1	-4.1	3.2	2.3	5.0
HFRI Fund of Funds	-1.2	-4.4	-3.5	-3.5	1.5	1.5	3.2
HFRI Convertible Arbitrage	-1.5	-4.3	-2.7	-2.7	3.7	2.9	8.8
HFRI Equity Hedge	-3.7	-8.3	-6.9	-6.9	3.6	2.3	5.7
HFRI Event-Driven	-1.9	-4.4	-1.7	-1.7	5.3	2.6	6.6
HFRI Macro	0.9	-1.4	-3.2	-3.2	0.0	0.8	1.1
HFRI Merger Arbitrage	-0.5	0.0	3.2	3.2	3.7	3.2	4.1
HFRI Relative Value	-0.9	-2.4	0.7	0.7	4.5	3.4	7.0

Source: Hedge Fund Research as of December 31, 2018

Hedge fund takeaways

- Hedge fund performance was negative across the board in December as global equities sold off
- Crowded U.S. hedge fund names a key driver to challenged 2018 performance
- Hedge funds rotated back towards North America in December while selling other regions
- Funds were net sellers of both Asia ex-Japan and Japan as sentiment hit recent lows

Source: Morgan Stanley Prime Brokerage

Real estate performance snapshot

Another positive quarter for real estate

	3Q18 (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)	10 Yr Risk (%)
NPI	1.7	5.3	7.2	7.8	9.6	6.4	5.7
Income	1.1	3.4	4.6	4.7	4.9	5.4	0.3
Appreciation	0.6	1.8	2.5	3.0	4.5	0.9	5.7
NFI-ODCE	2.1	6.5	8.7	8.8	10.7	5.6	8.5
Income	1.0	3.2	4.3	4.4	4.6	5.2	0.4
Appreciation	1.1	3.2	4.3	4.3	5.9	0.4	8.5
FTSE NAREIT All Eq. REITs	0.5	1.8	4.3	9.0	9.6	7.8	24.8
Property Type							
NPI Apartment	1.6	4.7	6.4	7.0	8.6	6.4	6.2
NPI Office	1.7	5.1	6.8	6.7	8.7	5.2	6.1
NPI Industrial	3.4	10.5	14.2	13.1	13.5	8.0	6.0
NPI Retail	0.6	2.6	3.9	7.0	9.6	7.6	4.8
NPI Hotel	3.2	6.3	7.3	6.4	8.5	4.0	6.5
Geographic Sectors							
NPI East	1.3	3.8	5.2	5.9	7.6	5.2	6.0
NPI Midwest	0.9	3.9	5.3	6.3	8.4	5.9	4.7
NPI South	1.7	5.5	7.4	7.6	10.0	7.0	5.1
NPI West	2.2	6.7	9.2	9.8	11.4	7.4	6.2

Sources: NCREIF, Bloomberg as of September 28, 2018

Real estate key themes and takeaways

- Further moderation of returns to the mid-to-high single digits
- Emphasis on income growth (NOI) over appreciation
- Fundamentals are healthy, but keep an eye on supply
- Potential real estate re-pricing as rates continue to rise

Private equity: outperformance continues

U.S. buyout returns remain stronger than international buyout returns

	QTR (%)	YTD (%)	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)	15 Year (%)
Cambridge Associates U.S. PE Index	5.4	8.3	18.6	12.5	14.0	10.8	14.1
U.S. Buyout Index	5.2	7.9	18.6	13.6	15.9	11.4	14.7
Ex-U.S. Buyout Index	1.8	4.3	17.2	14.5	13.1	7.3	14.3
Growth Equity Index	6.1	10.6	22.7	12.7	15.0	11.6	13.6
Cambridge Associates VC Index	5.6	10.2	17.2	7.4	16.0	10.2	10.3
U.S. VC Early Stage Index	6.8	11.1	19.4	7.6	17.4	10.6	10.1
U.S. VC Late & Expansion Stage Index	5.1	11.3	17.6	7.6	13.0	10.6	11.1
PE/VC Impact Investing	1.5	2.7	7.2	5.0	6.8	5.6	6.2
NASDAQ Composite Index	6.3	8.8	22.3	14.6	17.2	12.6	10.8
Russell 1000 Index	3.6	2.9	14.5	11.6	13.4	10.2	9.5
Russell 2000 Index	7.8	7.7	17.6	11.0	12.5	10.6	10.5
S&P 500 Index	3.4	2.7	14.4	11.9	13.4	10.2	9.3
Wilshire 5000 Total Market Index	3.8	3.0	14.7	11.9	13.4	10.2	9.7

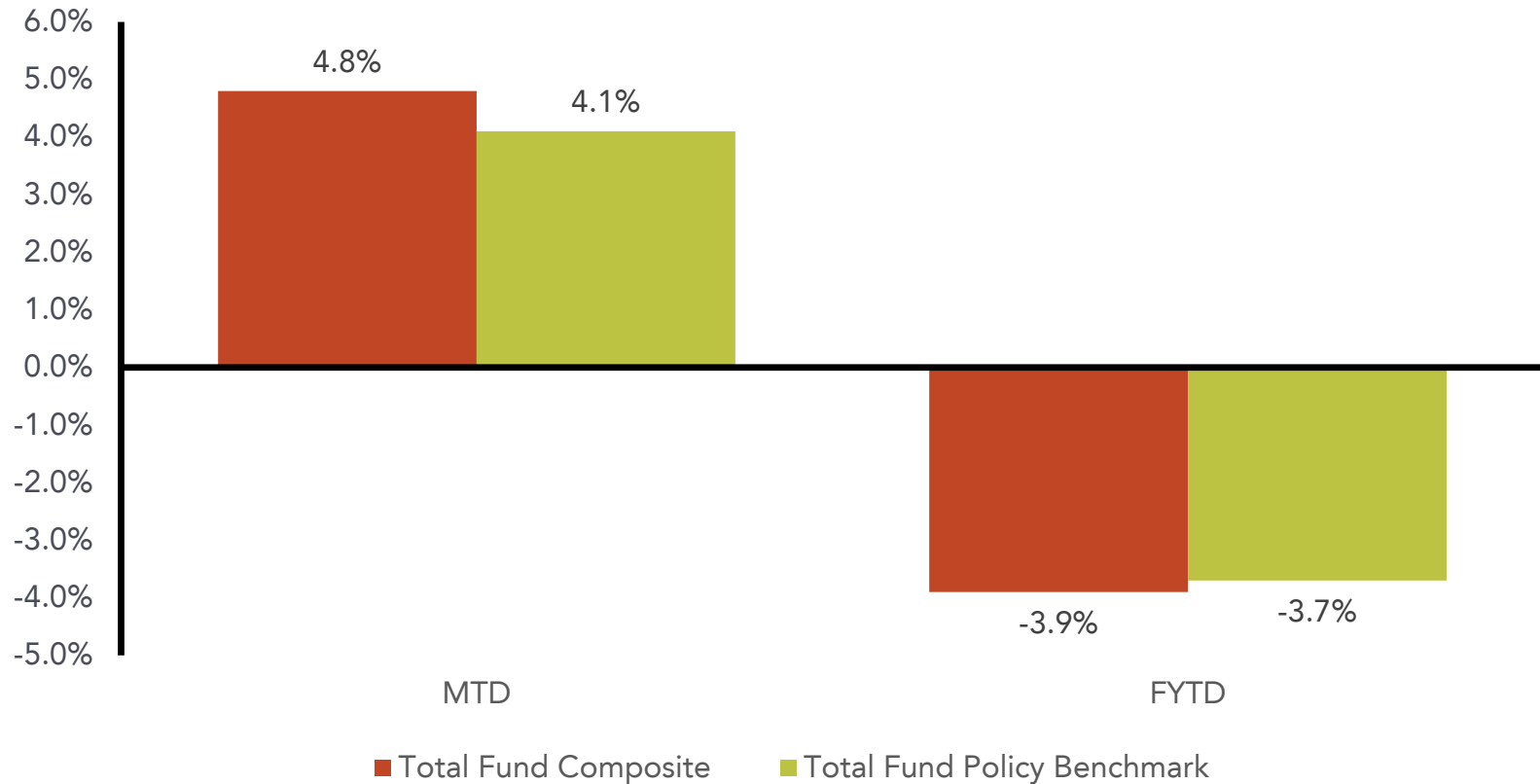
Source: Cambridge Associates as of June 30, 2018

Private equity takeaways

- Industry fundraising slowed relative to 2017, but demand remains high as investors seek to continue their private equity allocations
- Interest in high-quality managers continues to be robust, requiring quick decisions by investors, as 45% of funds are closing in 6 months with many funds just having a single close
- Significant dry powder is expected to be deployed over the next few years which will increase the level of competition for assets and likely support current valuations
- Private equity continues to provide a relatively attractive investment opportunity for institutional investors due to an expanding opportunity set, active ownership approach to creating value, and modestly lower valuation multiples vs. public comparables

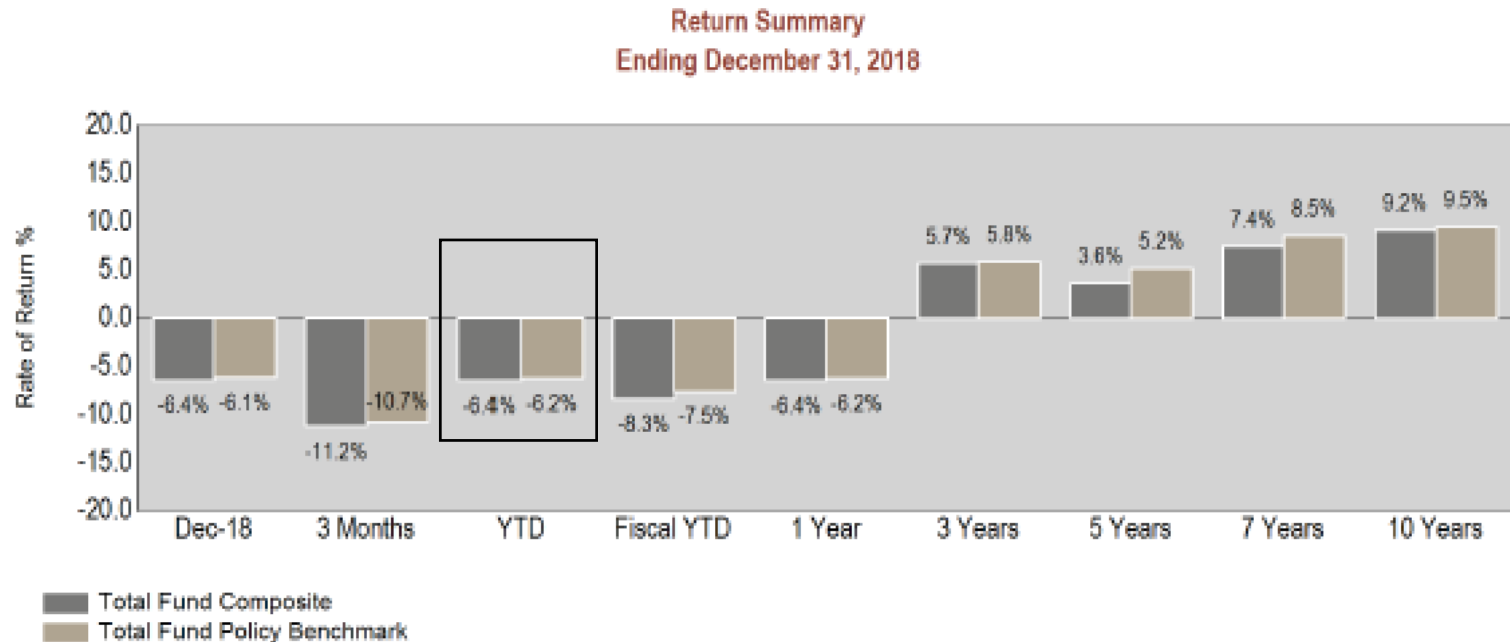
Performance Overview

MTD Annualized Performance (Net of Fees)



* MTD performance as of January 18, 2019

YTD Performance (Net of Fees)



- U.S. Large-Cap Equity, U.S. Mid-Cap Equity, U.S. Small-Cap Equity and Alternative composites added value to the Plan
- International Equity composite detracted from the benchmark
- Fixed Income composite matched from the benchmark

* Year-to-date performance as of December 31, 2018

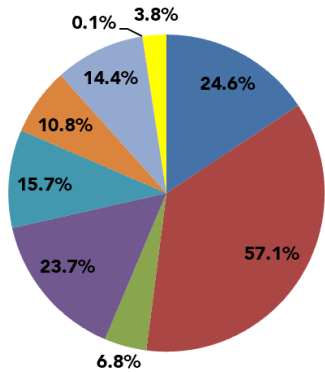
Manager Contribution – YTD Performance

Top Performers	Absolute Performance	Benchmark Performance	Strategy
Garcia Hamilton	+0.8%	0.0%	Fixed Income
LMCG Investments SCG	-5.3%	-9.3%	U.S. Equity
Ativo Capital	-13.6%	-14.2%	International Equity
International U.S. Real Estate	+9.1%	+5.8%	Real Estate
Bottom Performers	Absolute Performance	Benchmark Performance	Strategy
Mesirow	-0.6%	0.0%	Fixed Income
Johnston International Equity	-13.9%	-13.8%	International Equity

* Year-to-date performance as of December 31, 2018

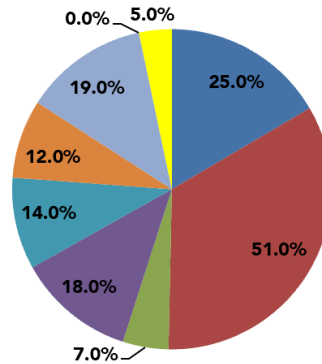
YTD Asset Allocation vs Target Allocation

Current Allocation

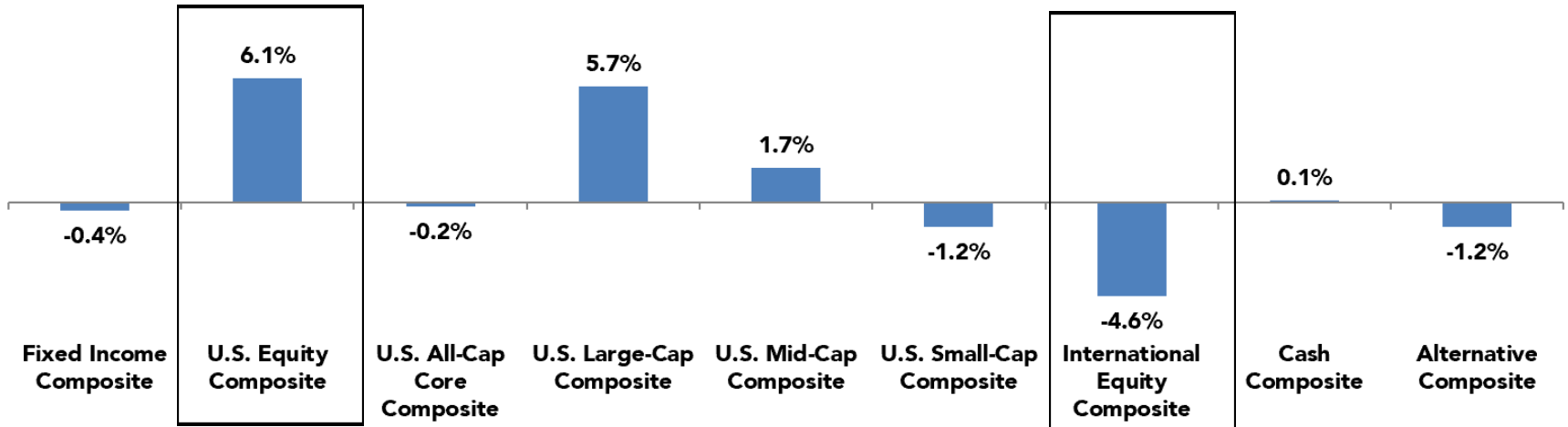


- Fixed Income Composite
- U.S. Equity Composite
- U.S. All-Cap Core Composite
- U.S. Large-Cap Composite
- U.S. Mid-Cap Composite
- U.S. Small-Cap Composite
- International Equity Composite
- Cash Composite
- Alternative Composite

Target Allocation



	Current Allocation	Target Allocation
Fixed Income Composite	\$158,830,240	\$161,141,197
U.S. Equity Composite	\$367,888,582	\$328,728,041
International Equity Composite	\$92,646,372	\$122,467,309
Cash Composite	\$479,533	\$0
Alternative Composite	\$24,720,059	\$32,228,239



* Year-to-date performance and allocation as of December 31, 2018

Purpose:

Guide institutional investment programs

Mission

Enable institutions to become more effective investment stewards

Vision

Leading investment consultant of risk-adjusted returns & client services

Principles

- ✓ Real-world experience
- ✓ Independent expertise
- ✓ Focused client service
- ✓ Careful research

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(Preliminary Subject to Change)



Pension Fund

City of Atlanta Firefighters

Pension Fund

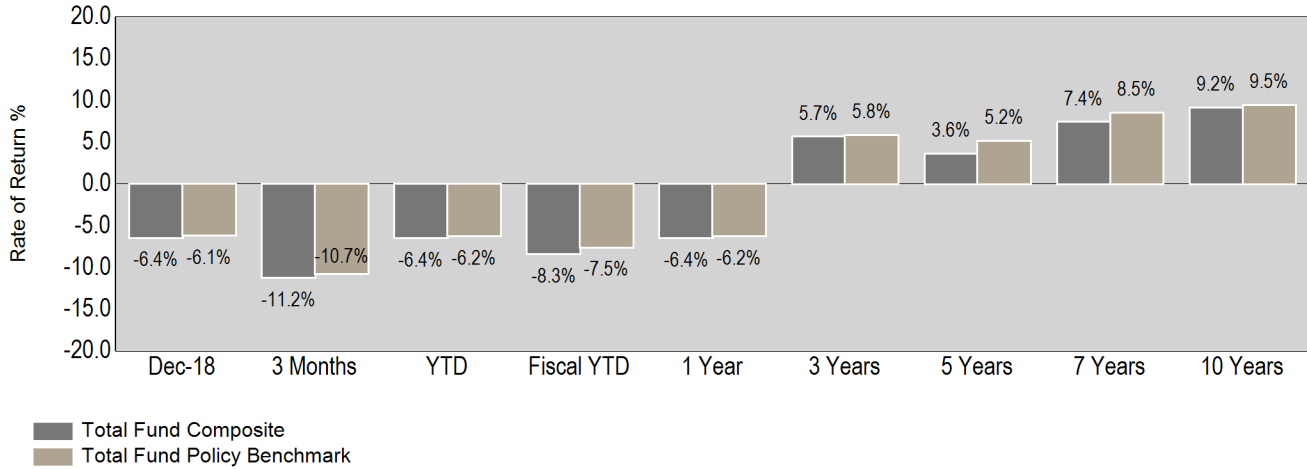
Executive Summary

December 31, 2018

Total Fund Composite

Market Value: \$644.6 Million and 100.0% of Fund

Return Summary Ending December 31, 2018



Return Summary YTD

	Total Return
Total Fund Composite	-6.4%
Fixed Income Composite	-0.2%
U.S. Equity Composite	-6.3%
International Equity Composite	-14.4%
Alternative Composite	6.5%

Asset Allocation vs. Target

	Current	Current	Policy	Difference	%
Fixed Income	\$158,830,240	24.6%	25.0%	-\$2,310,956	-0.4%
U.S. Equity	\$367,888,582	57.1%	51.0%	\$39,160,541	6.1%
Non-U.S. Equity	\$92,646,372	14.4%	19.0%	-\$29,820,937	-4.6%
Real Assets	\$5,515,893	0.9%	1.0%	-\$929,755	-0.1%
Private Equity	\$19,204,166	3.0%	4.0%	-\$6,578,425	-1.0%
Other	\$479,533	0.1%	0.0%	\$479,533	0.1%
Total	\$644,564,786	100.0%	100.0%		

Summary of Cash Flows

	Last Three Months	Year-To-Date	One Year
Beginning Market Value	\$725,316,015	\$698,926,552	\$698,926,552
Net Cash Flow	\$27,918	-\$11,094,421	-\$11,094,421
Net Investment Change	-\$80,779,147	-\$43,267,345	-\$43,267,345
Ending Market Value	\$644,564,786	\$644,564,786	\$644,564,786

Total Fund Composite

Market Value: \$644.6 Million and 100.0% of Fund

Ending December 31, 2018

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		644,564,786	27,918	100.0	100.0	0
Fixed Income Composite		158,830,240	-44,543	24.6	25.0	-2,310,956
Garcia Hamilton	Core Fixed Income	52,031,199	-481	8.1		
Mesirow	Core Fixed Income	67,838,094	-239	10.5		
Colchester Global Investors	Non-U.S. Fixed Income	38,960,947	-43,823	6.0		
U.S. Equity Composite		367,888,582	-459	57.1	51.0	39,160,541
Northern Trust Russell 3000 Index Fund	All-Cap Core	43,828,194	0	6.8	7.0	-1,291,341
Large Cap Composite		152,826,256	0	23.7	18.0	36,804,594
BlackRock 1000 Index Fund	Large-Cap Core	152,826,256	0	23.7		
Mid Cap Composite		101,394,987	0	15.7	14.0	11,155,917
BlackRock Mid Cap Equity Index Fund	Mid-Cap Core	101,394,987	0	15.7		
Small Cap Composite		69,839,145	-459	10.8	12.0	-7,508,629
LMCG Investments SCG	Small-Cap Growth	21,795,086	-459	3.4		
Northern Trust Collective Russell 2000 Index	Small-Cap Core	48,044,059	0	7.5		
International Equity Composite		92,646,372	-639	14.4	19.0	-29,820,937
Ativo Capital	Non-U.S. Large-Cap Core	27,393,451	-639	4.2		
Johnston International Equity	Non-U.S. Large-Cap Core	37,831,193	0	5.9		
BlackRock MSCI EAFE Small Cap	Non-U.S. Small-Cap Core	11,994,572	0	1.9		
BlackRock Emerging Markets Free Fund	Emerging Markets	15,427,157	0	2.4		
Cash Composite		479,533	-96,441	0.1	0.0	479,533
Cash Account	Cash & Equivalents	370,170	-100,462	0.1		
Transition Account	Cash & Equivalents	109,363	4,021	0.0		
Alternative Composite		24,720,059	170,000	3.8	5.0	-7,508,181
Intercontinental U.S. Real Estate	Core Real Estate	5,515,893	0	0.9		
Consequent Alternative Partners II, L.P.	U.S. Private Equity FoF	15,199,229	0	2.4		
ICV Partners III, L.P.	LBO Private Equity	2,149,976	0	0.3		
Pharos Capital Partners III	LBO Private Equity	1,854,961	170,000	0.3		

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$644.6 Million and 100.0% of Fund

Ending December 31, 2018

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	-6.4%	-11.2%	-6.4%	-8.3%	-6.4%	4.2%	5.7%	3.6%	7.4%	9.2%	8.1%	Jan-88
<i>Total Fund Policy Benchmark</i>	-6.1%	-10.7%	-6.2%	-7.5%	-6.2%	4.0%	5.8%	5.2%	8.5%	9.5%	8.8%	Jan-88
Fixed Income Composite	1.7%	1.1%	-0.2%	0.8%	-0.2%	2.1%	2.4%	2.4%	2.0%	3.5%	5.8%	Jan-88
<i>Fixed Income Composite Custom Benchmark</i>	2.0%	1.7%	-0.2%	1.3%	-0.2%	2.1%	2.1%	2.4%	2.0%	3.4%	6.1%	Jan-88
Garcia Hamilton	1.0%	1.0%	0.8%	0.9%	0.8%	2.1%	--	--	--	--	2.1%	Dec-16
<i>BBgBarc US Aggregate TR</i>	1.8%	1.6%	0.0%	1.7%	0.0%	1.8%	2.1%	2.5%	2.1%	3.5%	1.8%	Dec-16
Mesirow	1.6%	1.1%	-0.6%	1.1%	-0.6%	1.4%	1.8%	2.3%	2.1%	--	2.9%	May-10
<i>BBgBarc US Aggregate TR</i>	1.8%	1.6%	0.0%	1.7%	0.0%	1.8%	2.1%	2.5%	2.1%	3.5%	2.9%	May-10
Colchester Global Investors	2.6%	1.2%	-0.9%	0.1%	-0.9%	3.5%	3.6%	--	--	--	3.6%	Jan-16
<i>FTSE WGBI TR</i>	2.4%	1.8%	-0.8%	0.1%	-0.8%	3.2%	2.7%	0.8%	0.2%	1.5%	2.7%	Jan-16
U.S. Equity Composite	-10.3%	-16.1%	-6.3%	-11.2%	-6.3%	5.5%	7.9%	4.6%	10.2%	12.8%	10.7%	Jan-88
<i>Russell 3000</i>	-9.3%	-14.3%	-5.2%	-8.2%	-5.2%	7.1%	9.0%	7.9%	12.5%	13.2%	10.2%	Jan-88
Northern Trust Russell 3000 Index Fund	-9.3%	-14.3%	--	-8.2%	--	--	--	--	--	--	-10.0%	Jan-18
<i>Russell 3000</i>	-9.3%	-14.3%	-5.2%	-8.2%	-5.2%	7.1%	9.0%	7.9%	12.5%	13.2%	-10.0%	Jan-18
Large Cap Composite	-9.1%	-13.8%	-4.7%	-7.4%	-4.7%	7.3%	8.5%	6.4%	11.1%	12.7%	10.3%	Jan-88
<i>Russell 1000</i>	-9.1%	-13.8%	-4.8%	-7.4%	-4.8%	7.6%	9.1%	8.2%	12.6%	13.3%	10.3%	Jan-88
BlackRock 1000 Index Fund	-9.1%	-13.8%	-4.8%	-7.4%	-4.8%	--	--	--	--	--	-4.8%	Dec-17
<i>Russell 1000</i>	-9.1%	-13.8%	-4.8%	-7.4%	-4.8%	7.6%	9.1%	8.2%	12.6%	13.3%	-4.8%	Dec-17
Mid Cap Composite	-11.3%	-17.3%	-6.6%	-14.1%	-6.6%	4.0%	7.6%	3.9%	10.3%	12.7%	7.3%	Jun-98
<i>S&P 400 MidCap</i>	-11.3%	-17.3%	-11.1%	-14.1%	-11.1%	1.7%	7.7%	6.0%	11.2%	13.7%	9.2%	Jun-98
<i>Russell MidCap</i>	-9.9%	-15.4%	-9.1%	-11.1%	-9.1%	3.8%	7.0%	6.3%	11.5%	14.0%	8.3%	Jun-98
BlackRock Mid Cap Equity Index Fund	-11.3%	-17.3%	-11.0%	-14.1%	-11.0%	--	--	--	--	--	-1.3%	Aug-17
<i>S&P 400 MidCap</i>	-11.3%	-17.3%	-11.1%	-14.1%	-11.1%	1.7%	7.7%	6.0%	11.2%	13.7%	-1.4%	Aug-17
Small Cap Composite	-12.2%	-20.2%	-9.2%	-16.4%	-9.2%	4.0%	6.2%	0.0%	8.1%	13.5%	9.8%	Oct-01
<i>Russell 2000</i>	-11.9%	-20.2%	-11.0%	-17.3%	-11.0%	1.0%	7.4%	4.4%	10.4%	12.0%	8.7%	Oct-01
LMCG Investments SCG	-12.8%	-20.3%	-5.3%	-14.6%	-5.3%	6.4%	2.5%	--	--	--	2.5%	Dec-15
<i>Russell 2000 Growth</i>	-11.7%	-21.7%	-9.3%	-17.3%	-9.3%	5.3%	7.2%	5.1%	11.3%	13.5%	7.2%	Dec-15
Northern Trust Collective Russell 2000 Index	-11.9%	-20.2%	-10.9%	-17.3%	-10.9%	--	--	--	--	--	0.0%	Feb-17
<i>Russell 2000</i>	-11.9%	-20.2%	-11.0%	-17.3%	-11.0%	1.0%	7.4%	4.4%	10.4%	12.0%	-0.2%	Feb-17

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$644.6 Million and 100.0% of Fund

Ending December 31, 2018

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
International Equity Composite	-4.3%	-11.7%	-14.4%	-12.9%	-14.4%	6.0%	3.6%	1.3%	5.6%	--	5.2%	Jul-10
<i>International Equity Composite Custom Benchmark</i>	<i>-4.5%</i>	<i>-11.5%</i>	<i>-14.2%</i>	<i>-10.8%</i>	<i>-14.2%</i>	<i>4.5%</i>	<i>4.5%</i>	<i>1.1%</i>	<i>5.7%</i>	<i>--</i>	<i>5.6%</i>	<i>Jul-10</i>
Ativo Capital	-4.7%	-12.2%	-13.6%	-11.6%	-13.6%	2.3%	0.3%	--	--	--	0.3%	Jan-16
<i>MSCI ACWI ex USA</i>	<i>-4.5%</i>	<i>-11.5%</i>	<i>-14.2%</i>	<i>-10.8%</i>	<i>-14.2%</i>	<i>4.5%</i>	<i>4.5%</i>	<i>0.7%</i>	<i>4.8%</i>	<i>6.6%</i>	<i>4.5%</i>	<i>Jan-16</i>
Johnston International Equity	-3.9%	-11.6%	-13.9%	-14.4%	-13.9%	8.8%	6.2%	3.7%	7.2%	--	6.3%	Jul-10
<i>MSCI EAFE</i>	<i>-4.9%</i>	<i>-12.5%</i>	<i>-13.8%</i>	<i>-11.4%</i>	<i>-13.8%</i>	<i>3.8%</i>	<i>2.9%</i>	<i>0.5%</i>	<i>5.8%</i>	<i>6.3%</i>	<i>5.8%</i>	<i>Jul-10</i>
BlackRock MSCI EAFE Small Cap	-6.4%	-16.0%	-17.5%	-16.6%	-17.5%	--	--	--	--	--	-17.5%	Dec-17
<i>MSCI EAFE Small Cap</i>	<i>-6.4%</i>	<i>-16.0%</i>	<i>-17.9%</i>	<i>-16.8%</i>	<i>-17.9%</i>	<i>4.5%</i>	<i>3.7%</i>	<i>3.1%</i>	<i>8.8%</i>	<i>10.5%</i>	<i>-17.9%</i>	<i>Dec-17</i>
BlackRock Emerging Markets Free Fund	-2.7%	-7.5%	-14.6%	-8.5%	-14.6%	--	--	--	--	--	-14.6%	Dec-17
<i>MSCI Emerging Markets</i>	<i>-2.7%</i>	<i>-7.5%</i>	<i>-14.6%</i>	<i>-8.5%</i>	<i>-14.6%</i>	<i>8.3%</i>	<i>9.2%</i>	<i>1.6%</i>	<i>3.2%</i>	<i>8.0%</i>	<i>-14.6%</i>	<i>Dec-17</i>
Alternative Composite	0.3%	0.3%	6.5%	1.5%	6.5%	7.1%	6.2%	4.9%	--	--	6.1%	Dec-12
Intercontinental U.S. Real Estate	1.5%	1.3%	9.1%	3.6%	9.1%	8.4%	9.6%	--	--	--	10.9%	Aug-14
<i>NFI</i>	<i>0.0%</i>	<i>0.0%</i>	<i>5.8%</i>	<i>1.9%</i>	<i>5.8%</i>	<i>6.2%</i>	<i>6.7%</i>	<i>9.1%</i>	<i>9.7%</i>	<i>5.9%</i>	<i>8.8%</i>	<i>Aug-14</i>

Investment Manager

Calendar Performance (Net of Fees)

Market Value: \$644.6 Million and 100.0% of Fund

Calendar Year

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Total Fund Composite	-6.4%	16.1%	8.6%	-2.5%	3.8%	22.4%	13.0%	2.4%	17.1%	21.3%	-21.4%
<i>Total Fund Policy Benchmark</i>	-6.2%	15.2%	9.7%	-0.2%	8.7%	21.9%	13.1%	1.0%	17.3%	18.0%	-18.2%
<i>InvestorForce Public DB > \$250mm Net Rank</i>	--	33	14	88	81	1	34	13	1	41	7
Fixed Income Composite	-0.2%	4.4%	2.9%	0.4%	4.4%	-1.9%	4.2%	6.0%	5.9%	9.8%	1.5%
<i>Fixed Income Composite Custom Benchmark</i>	-0.2%	4.4%	2.2%	0.8%	5.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%
<i>InvestorForce Public DB Total Fix Inc Net Rank</i>	--	60	64	40	34	69	74	52	76	70	35
Garcia Hamilton	0.8%	3.5%	--	--	--	--	--	--	--	--	--
<i>BBgBarc US Aggregate TR</i>	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%
<i>eV US Core Fixed Inc Net Rank</i>	--	71	--	--	--	--	--	--	--	--	--
Mesirow	-0.6%	3.4%	2.8%	-0.1%	6.4%	-2.3%	5.5%	7.2%	--	--	--
<i>BBgBarc US Aggregate TR</i>	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%
<i>eV US Core Fixed Inc Net Rank</i>	--	78	65	86	22	82	60	53	--	--	--
Colchester Global Investors	-0.9%	8.2%	3.8%	--	--	--	--	--	--	--	--
<i>FTSE WGBI TR</i>	-0.8%	7.5%	1.6%	-3.6%	-0.5%	-4.0%	1.6%	6.4%	5.2%	2.6%	10.9%
<i>eV Global Government Fixed Inc Net Rank</i>	--	30	23	--	--	--	--	--	--	--	--
U.S. Equity Composite	-6.3%	18.9%	12.7%	-4.9%	5.1%	34.8%	16.8%	2.7%	24.2%	32.6%	-35.0%
<i>Russell 3000</i>	-5.2%	21.1%	12.7%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%	28.3%	-37.3%
<i>InvestorForce Public DB US Eq Net Rank</i>	--	79	50	97	98	36	21	9	1	18	13
Northern Trust Russell 3000 Index Fund	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000</i>	-5.2%	21.1%	12.7%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%	28.3%	-37.3%
<i>eV US All Cap Core Equity Net Rank</i>	--	--	--	--	--	--	--	--	--	--	--
Large Cap Composite	-4.7%	20.7%	11.1%	-0.3%	7.2%	32.0%	16.1%	2.2%	17.2%	31.4%	-33.3%
<i>Russell 1000</i>	-4.8%	21.7%	12.1%	0.9%	13.2%	33.1%	16.4%	1.5%	16.1%	28.4%	-37.6%
<i>eV US Large Cap Core Equity Net Rank</i>	--	59	26	58	96	49	29	26	8	18	37
BlackRock 1000 Index Fund	-4.8%	--	--	--	--	--	--	--	--	--	--
<i>Russell 1000</i>	-4.8%	21.7%	12.1%	0.9%	13.2%	33.1%	16.4%	1.5%	16.1%	28.4%	-37.6%
<i>eV US Large Cap Core Equity Net Rank</i>	--	--	--	--	--	--	--	--	--	--	--

Investment Manager

Calendar Performance (Net of Fees)

Market Value: \$644.6 Million and 100.0% of Fund

	Calendar Year										
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Mid Cap Composite	-6.6%	15.7%	15.3%	-9.1%	7.1%	40.1%	17.0%	0.3%	21.0%	37.5%	-39.2%
S&P 400 MidCap	-11.1%	16.2%	20.7%	-2.2%	9.8%	33.5%	17.9%	-1.7%	26.6%	37.4%	-36.2%
Russell MidCap	-9.1%	18.5%	13.8%	-2.4%	13.2%	34.8%	17.3%	-1.5%	25.5%	40.5%	-41.5%
eV US Mid Cap Core Equity Net Rank	--	74	30	94	66	15	32	25	67	19	57
BlackRock Mid Cap Equity Index Fund	-11.0%	--	--	--	--	--	--	--	--	--	--
S&P 400 MidCap	-11.1%	16.2%	20.7%	-2.2%	9.8%	33.5%	17.9%	-1.7%	26.6%	37.4%	-36.2%
eV US Mid Cap Core Equity Net Rank	--	--	--	--	--	--	--	--	--	--	--
Small Cap Composite	-9.2%	19.1%	10.9%	-13.6%	-3.4%	43.6%	19.8%	5.7%	50.7%	29.9%	-34.2%
Russell 2000	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%	-4.2%	26.9%	27.2%	-33.8%
eV US Small Cap Core Equity Net Rank	--	17	93	99	97	21	11	8	1	41	43
LMCG Investments SCG	-5.3%	19.4%	-4.8%	--	--	--	--	--	--	--	--
Russell 2000 Growth	-9.3%	22.2%	11.3%	-1.4%	5.6%	43.3%	14.6%	-2.9%	29.1%	34.5%	-38.5%
eV US Small Cap Growth Equity Net Rank	--	74	99	--	--	--	--	--	--	--	--
Northern Trust Collective Russell 2000 Index	-10.9%	--	--	--	--	--	--	--	--	--	--
Russell 2000	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%	-4.2%	26.9%	27.2%	-33.8%
eV US Small Cap Core Equity Net Rank	--	--	--	--	--	--	--	--	--	--	--

Investment Manager

Calendar Performance (Net of Fees)

Market Value: \$644.6 Million and 100.0% of Fund

	Calendar Year										
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
International Equity Composite	-14.4%	31.4%	-1.1%	-1.2%	-2.7%	18.5%	15.6%	-8.4%	--	--	--
<i>International Equity Composite Custom Benchmark</i>	-14.2%	27.2%	4.5%	-3.3%	-4.4%	19.0%	17.1%	-12.9%	--	--	--
<i>InvestorForce Public DB Dev Mkt ex-US Eq Net Rank</i>	--	11	84	37	19	82	99	1	--	--	--
Ativo Capital	-13.6%	21.2%	-3.6%	--	--	--	--	--	--	--	--
<i>MSCI ACWI ex USA</i>	-14.2%	27.2%	4.5%	-5.7%	-3.9%	15.3%	16.8%	-13.7%	11.2%	41.4%	-45.5%
<i>eV ACWI ex-US Large Cap Equity Net Rank</i>	--	95	89	--	--	--	--	--	--	--	--
Johnston International Equity	-13.9%	37.5%	1.2%	-0.3%	0.4%	17.3%	15.6%	-8.4%	--	--	--
<i>MSCI EAFE</i>	-13.8%	25.0%	1.0%	-0.8%	-4.9%	22.8%	17.3%	-12.1%	7.8%	31.8%	-43.4%
<i>eV EAFE Large Cap Core Net Rank</i>	--	1	29	50	5	91	92	9	--	--	--
BlackRock MSCI EAFE Small Cap	-17.5%	--	--	--	--	--	--	--	--	--	--
<i>MSCI EAFE Small Cap</i>	-17.9%	33.0%	2.2%	9.6%	-4.9%	29.3%	20.0%	-15.9%	22.0%	46.8%	-47.0%
<i>eV EAFE Small Cap Equity Net Rank</i>	--	--	--	--	--	--	--	--	--	--	--
BlackRock Emerging Markets Free Fund	-14.6%	--	--	--	--	--	--	--	--	--	--
<i>MSCI Emerging Markets</i>	-14.6%	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%	-18.4%	18.9%	78.5%	-53.3%
<i>eV Emg Mkts Large Cap Equity Net Rank</i>	--	--	--	--	--	--	--	--	--	--	--
Alternative Composite	6.5%	7.7%	4.6%	4.4%	1.6%	4.8%	--	--	--	--	--
<i>InvestorForce Public DB Alts Net Rank</i>	--	43	74	47	86	92	--	--	--	--	--
Intercontinental U.S. Real Estate	9.1%	7.7%	12.1%	12.7%	--	--	--	--	--	--	--
<i>NFI</i>	5.8%	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%

Annualized Performance

Asset Class	Fund Company	Vintage Yr.	Perf. as of:	Net IRR	Rank as of:	Preqin Rank
Fund of Funds	Consequent Alternative Partners II, L.P.	2012	9/30/2018	3.0%	--	--
Direct	ICV Partners III, L.P.	2013	9/30/2018	6.1%	3/31/2018	3rd
Direct	Pharos Capital Partners III	2013	9/30/2018	9.3%	12/31/2017	2nd
Total Private Equity						

Since Inception Cash Flows

Asset Class	Fund Company	Commitment	Capital Calls	Distributions	Ending Value	¹ Cash Multiple
Fund of Funds	Consequent Alternative Partners II, L.P.	\$15,000,000	\$13,060,368	\$0	\$15,199,229	1.2
Direct	ICV Partners III, L.P.	\$2,000,000	\$2,154,270	\$523,114	\$2,149,976	1.2
Direct	Pharos Capital Partners III	\$2,000,000	\$1,470,000	\$161,260	\$1,684,961	1.3
Total Private Equity		\$19,000,000	\$16,684,638	\$684,374	\$19,034,166	1.2

¹ Calculated as the sum of the distributions and ending value divided by the amount of all capital calls.

Total Fund Composite

Fee Schedule

Market Value: \$644.6 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio &	Industry
			Estimated Annual Fee ¹	Average ²
Non-U.S. Large-Cap Core	Ativo Capital	0.65% on the first \$100 million 0.55% on the balance	0.65% \$178,057	0.70%
Large-Cap Core	BlackRock 1000 Index Fund	0.02% on the balance	0.02% \$30,565	0.04%
Mid-Cap Core	BlackRock Mid Cap Equity Index Fund	0.025% on the balance	0.03% \$25,349	0.06%
Non-U.S. Fixed Income	Colchester Global Investors	0.475% on the first \$100 million 0.40% on the first \$100 million 0.30% on the balance	0.48% \$185,064	0.36%
Core Fixed Income	Garcia Hamilton	0.25% on the first \$50 million 0.11% on the next \$50 million 0.06% on the balance	0.24% \$127,234	0.26%
All-Cap Core	Northern Trust Russell 3000 Index Fund	0.02% on the balance	0.02% \$8,766	0.07%
U.S. Private Equity FoF	Consequent Alternative Partners II, L.P.	1.00% on Committed Capital	0.99% \$150,000	1.23%
LBO Private Equity	ICV Partners III, L.P.	2.00% on Committed Capital Plus 20.0% Carried Interest, over an 8% Hurdle	1.86% \$40,000	1.16%
Core Real Estate	Intercontinental U.S. Real Estate	1.10% on the first \$25 million 1.00% on the next \$25 million 0.85% on the next \$50 million 0.75% on the balance	1.10% \$60,675	1.01%
Non-U.S. Large-Cap Core	Johnston International Equity	0.75% on the first \$25 million 0.60% on the next \$50 million 0.50% on the balance	0.70% \$264,487	0.70%
Small-Cap Growth	LMCG Investments SCG	0.75% on the balance	0.75% \$163,463	0.95%
Core Fixed Income	Mesirow	0.35% on the first \$10 million 0.25% on the next \$50 million 0.20% on the next \$150 million 0.15% on the next \$300 million 0.125% on the next \$500 million 0.10% on the balance	0.26% \$175,676	0.26%
Small-Cap Core	Northern Trust Collective Russell 2000 Index	0.04% on the balance	0.04% \$19,218	0.07%
LBO Private Equity	Pharos Capital Partners III	2.00% on Committed Capital	2.16% \$40,000	1.82%
Emerging Markets	BlackRock Emerging Markets Free Fund	0.10% on the balance	0.10% \$15,427	0.25%
Non-U.S. Small-Cap Core	BlackRock MSCI EAFE Small Cap	0.07% on the balance	0.07% \$8,396	0.12%
Total Investment Management Fees			0.23% \$1,492,378	0.26%

¹ Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

² Source: 2016 Marquette Associates Investment Management Fee Study.