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Grand Rapids Police and Fire Retirement

Quarterly Executive Summary

September 30, 2020

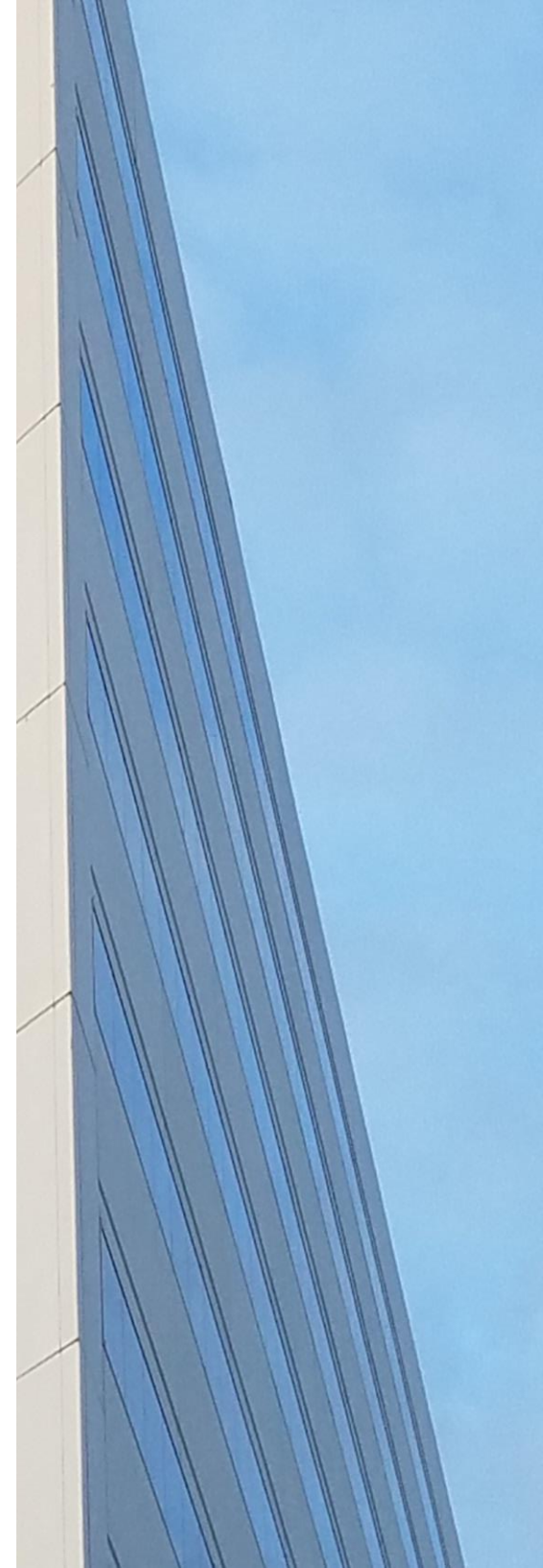
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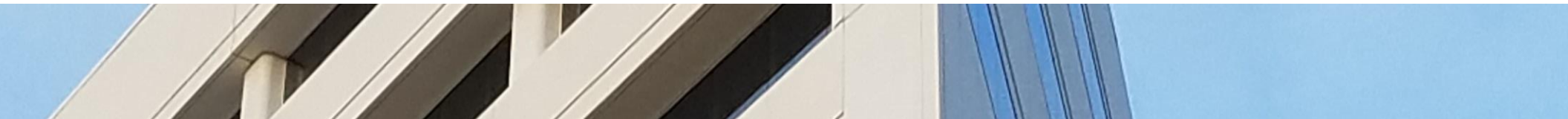
Capital Market Review

Tab 1

Investment Performance

Tab 2





CAPITAL MARKET REVIEW

QUARTERLY MARKET REVIEW

Asset Class Performance



ASSET CLASS RETURNS - BEST TO WORST						ANNUALIZED 5-YEAR AS OF 9/20
2015	2016	2017	2018	2019	2020 YTD	
REITs 4.2%	MLPs 18.3%	Emrg Mrkts 37.7%	T-Bills 1.9%	U.S. Equity 31.0%	U.S. TIPS 9.2%	U.S. Equity 13.8%
U.S. Equity 0.7%	High Yield 17.1%	Developed 25.6%	Core Bond 0.0%	REITs 25.8%	Core Bond 6.8%	Emrg Mrkts 9.4%
Core Bond 0.6%	U.S. Equity 13.4%	U.S. Equity 21.0%	U.S. TIPS -1.3%	Developed 22.7%	U.S. Equity 5.5%	High Yield 6.8%
T-Bills 0.1%	Commodities 11.8%	High Yield 7.5%	High Yield -2.1%	Emrg Mrkts 18.9%	T-Bills 0.7%	Developed 5.8%
Developed -0.4%	Emrg Mrkts 11.6%	REITs 4.2%	REITs -4.8%	High Yield 14.3%	High Yield 0.6%	U.S. TIPS 4.6%
U.S. TIPS -1.4%	REITs 7.2%	Core Bond 3.6%	U.S. Equity -5.3%	Core Bond 8.7%	Emrg Mrkts -0.9%	Core Bond 4.2%
High Yield -4.5%	U.S. TIPS 4.7%	U.S. TIPS 3.0%	Commodities -11.2%	U.S. TIPS 8.4%	Developed -6.7%	REITs 3.7%
Emrg Mrkts -14.6%	Core Bond 2.6%	Commodities 1.7%	MLPs -12.4%	Commodities 7.7%	Commodities -12.1%	T-Bills 1.2%
Commodities -24.7%	Developed 1.5%	T-Bills 0.8%	Developed -13.4%	MLPs 6.6%	REITs -16.7%	Commodities -3.1%
MLPs -32.6%	T-Bills 0.3%	MLPs -6.5%	Emrg Mrkts -14.2%	T-Bills 2.3%	Midstream -36.2%	Midstream -4.5%

Data Source: Bloomberg

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

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U.S. Equity

Economic news from the third quarter was mixed, with a focus on employment conditions remaining a key element of the recovery. Temporary job losses continue to fall while permanent losses rise. Both initial jobless claims and continuing claims are falling from highs reported last quarter.

Although the U.S. has experienced an overnight rate near zero before, this year is the first time that the bellwether 10-year Treasury has been below 1%. Interest rates have a natural floor, and as rates approach a bottom, yield (and price) changes can become asymmetrical. Rates either go up (and prices go down) or stay relatively steady. One consequence of this pattern is that fixed income returns tend to become less volatile.

Non-U.S. Equity

The U.K. suffered a contraction of nearly -20% during the quarter. The government's furlough program, supporting employees' wages, has kept the unemployment rate to just 4%. Euro zone manufacturing activity is on the rise, led by particular strength in Germany. The Chinese economy grew during the quarter after more than half of the country was shut down in February.

Fixed Income

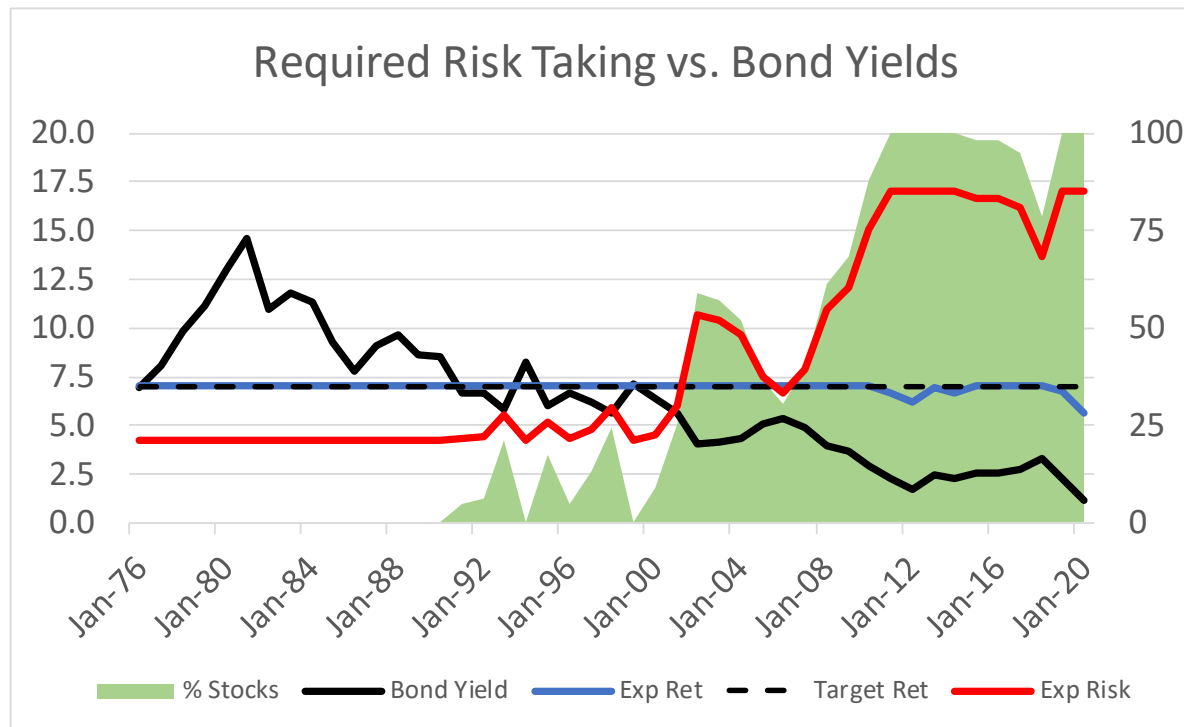
The 10-year Treasury yield ended the quarter at 0.69%, up just 3 basis points from June. The FOMC met three times during the quarter with no change to their overnight rate. In a meaningful step, the Committee addressed a revised policy that allows inflation to move above the 2% target before increasing interest rates.

September 2020 Asset Class Assumptions



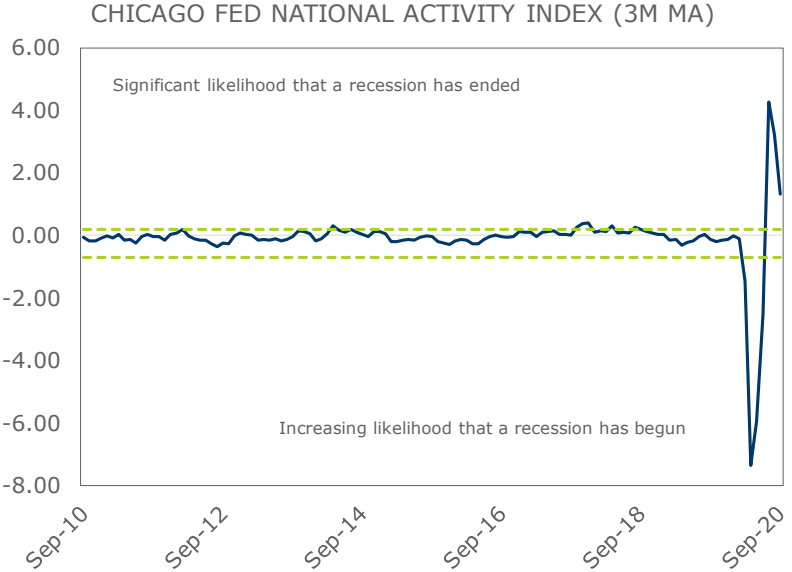
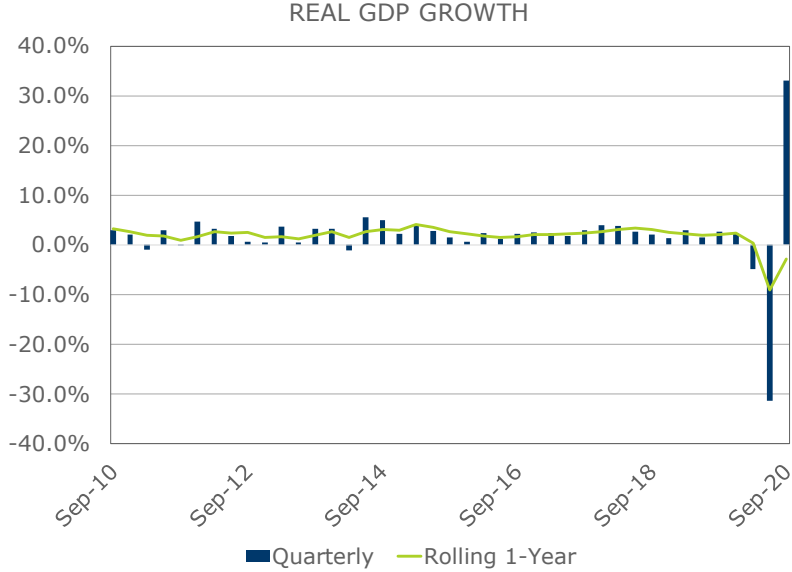
	EQUITY						FIXED INCOME						REAL ASSETS					
	US Stock	Dev ex-US Stock	Emg Stock	Global ex-US Stock	Global Stock	Private Equity	Cash	Core Bond	LT Core Bond	TIPS	High Yield	Dev ex-US Bond (Hdg)	Real Estate			Comdy	Real Assets	US CPI
													US RES	Global RES	Private RE			
COMPOUND RETURN (%)	5.50	6.00	6.00	6.25	5.95	7.45	0.55	1.05	1.75	0.40	3.45	0.25	5.20	5.40	6.65	2.35	5.35	1.80
ARITHMETIC RETURN (%)	6.85	7.50	9.00	7.90	7.30	10.85	0.55	1.15	2.15	0.60	3.95	0.35	6.55	6.55	7.55	3.40	5.70	1.80
EXPECTED RISK (%)	17.00	18.00	26.00	18.95	17.10	28.00	0.75	4.25	8.90	6.00	10.00	4.25	17.00	15.80	14.00	15.00	8.75	1.75
CASH YIELD (%)	1.75	2.50	2.25	2.45	2.05	0.00	0.55	1.85	2.70	1.15	6.80	1.10	3.85	3.85	2.50	0.55	2.05	0.00
GROWTH EXPOSURE	8.00	8.00	8.00	8.00	8.00	13.50	0.00	-0.90	-2.30	-3.00	4.00	-1.00	6.00	6.00	3.50	0.00	1.60	0.00
INFLATION EXPOSURE	-3.00	0.00	5.00	1.35	-1.10	-3.80	0.00	-2.50	-6.70	2.50	-1.00	-3.00	1.00	2.00	1.00	12.00	4.40	1.00
CORRELATIONS																		
US Stock	1.00																	
Dev ex-US Stock (USD)	0.81	1.00																
Emerging Mkt Stock	0.74	0.74	1.00															
Global ex-US Stock	0.83	0.96	0.87	1.00														
Global Stock	0.95	0.92	0.83	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									
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							
Dev ex-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	0.78	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 Assets	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

- Current low rate environment imposes significant challenges, through lower expected returns, and related pressure to take on greater levels of risk
- Exhibit below demonstrates how much risk taking is required within a stock/bond portfolio to meet a 7% return target – assuming the U.S. Stock and Core Bond assumptions on the previous slide
- Note that the current equity risk premium (of nearly 4.5%) is larger than the historical average (3.5%) – implying that the expected return line (in blue) would push lower at similar yield levels



QUARTERLY MARKET REVIEW

Economic Growth

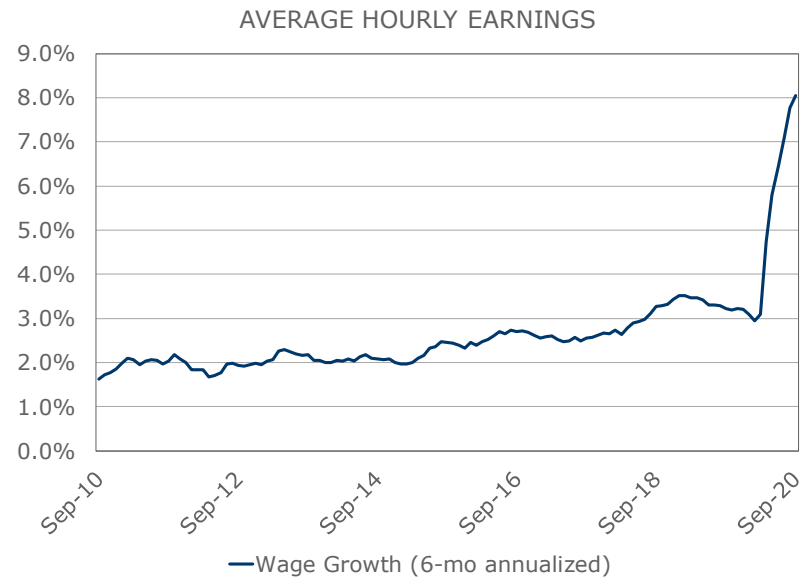
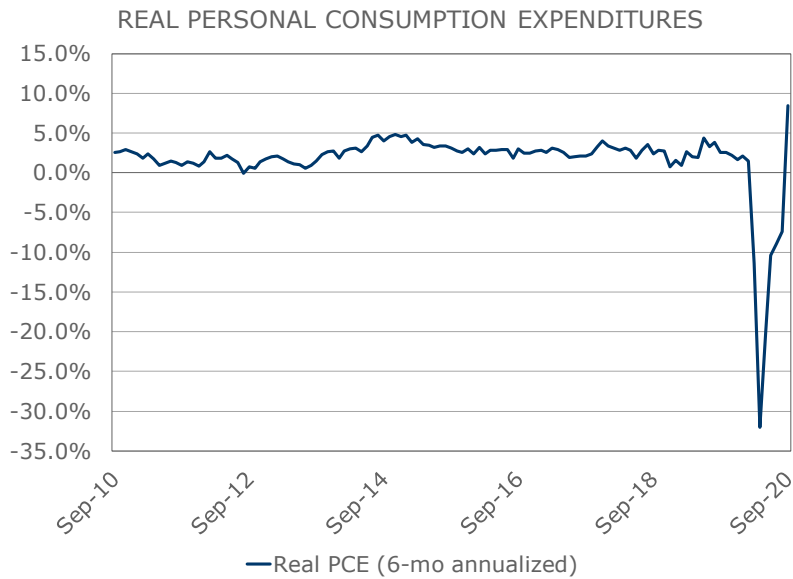
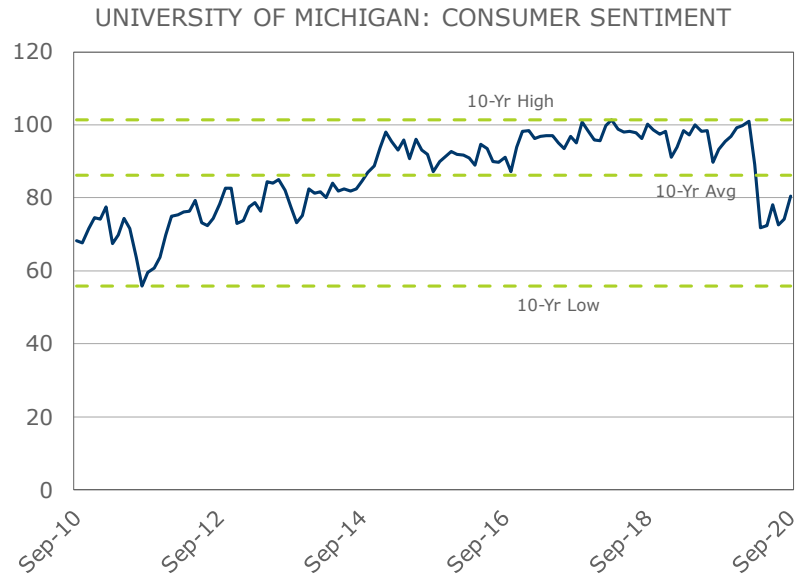


Data Source: Bloomberg

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QUARTERLY MARKET REVIEW

Consumer Activity



Data Source: Bloomberg

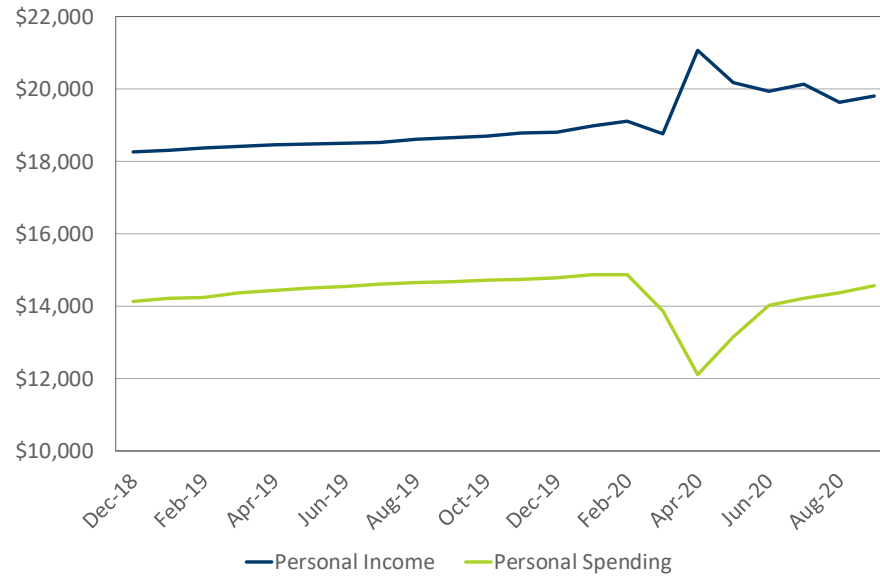
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QUARTERLY MARKET REVIEW

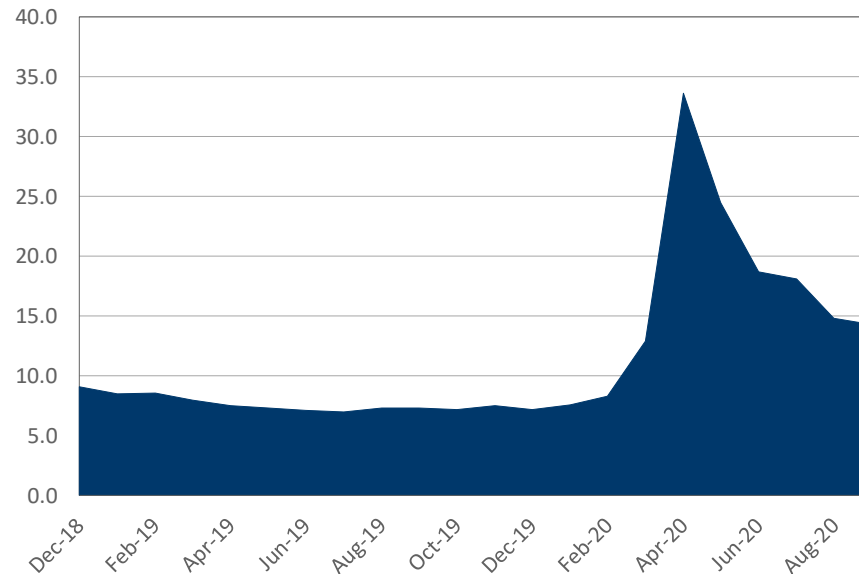
Impact of Fiscal Stimulus



INCOME VS. SPENDING (\$BIL)



PERSONAL SAVINGS RATE (%)

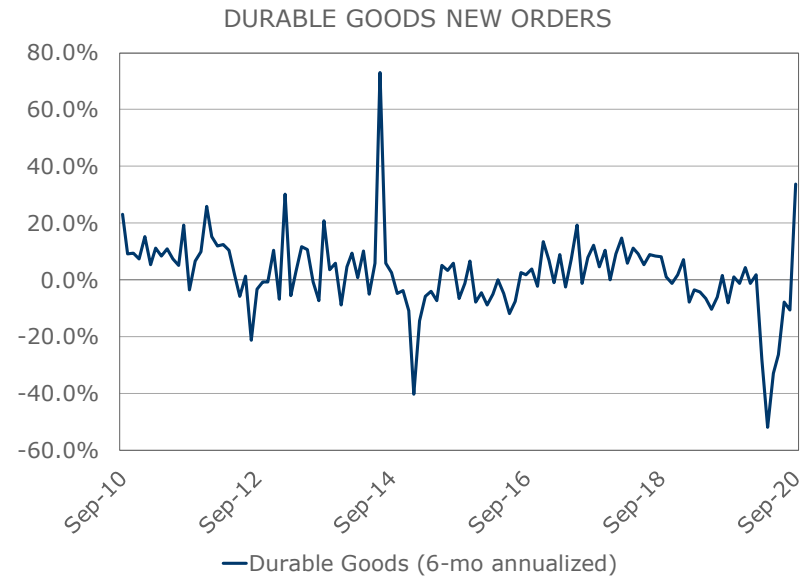
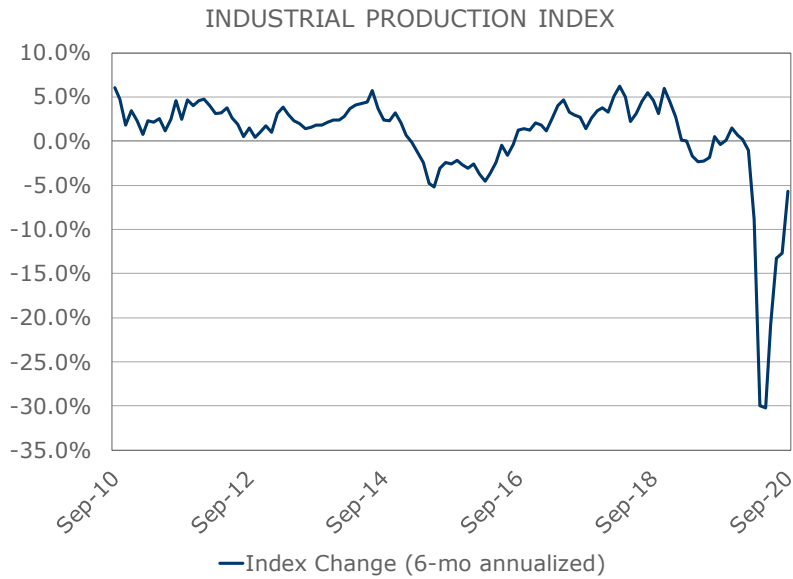
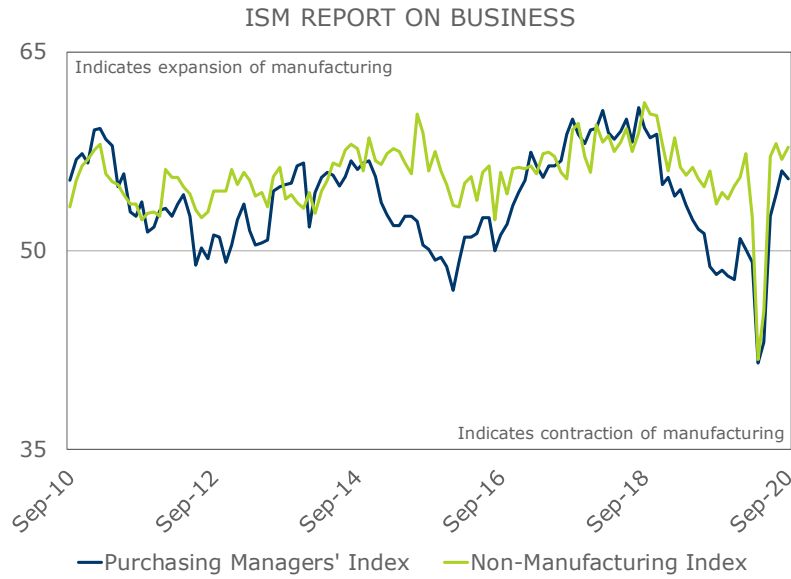


Data Source: Bloomberg

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QUARTERLY MARKET REVIEW

Business Activity

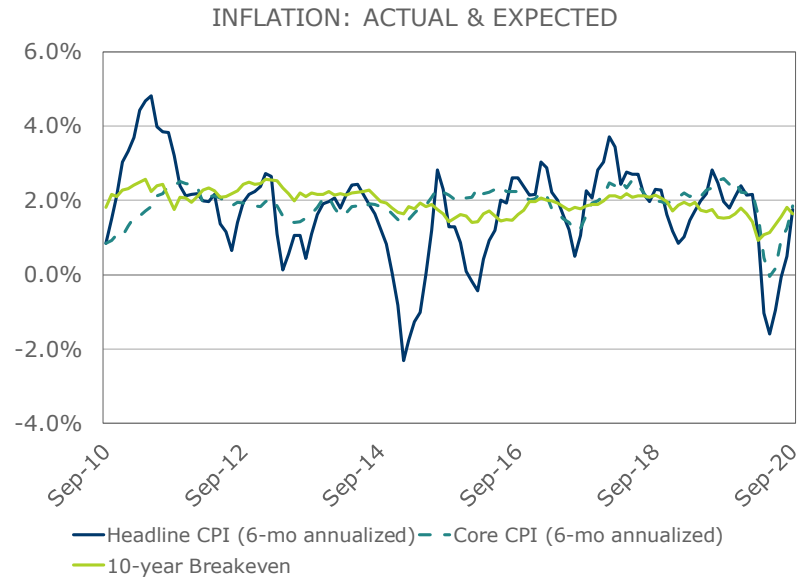


Data Source: Bloomberg

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QUARTERLY MARKET REVIEW

Inflation and Employment



Data Source: Bloomberg

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QUARTERLY MARKET REVIEW

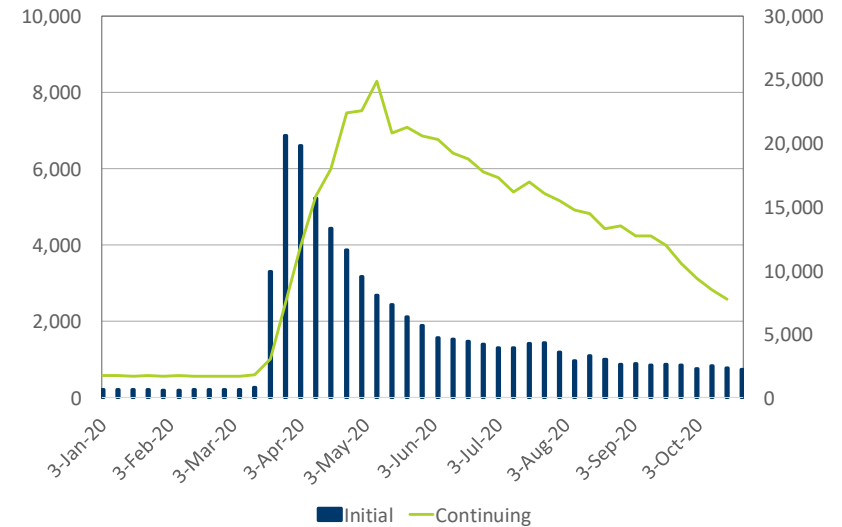
U.S. Employment



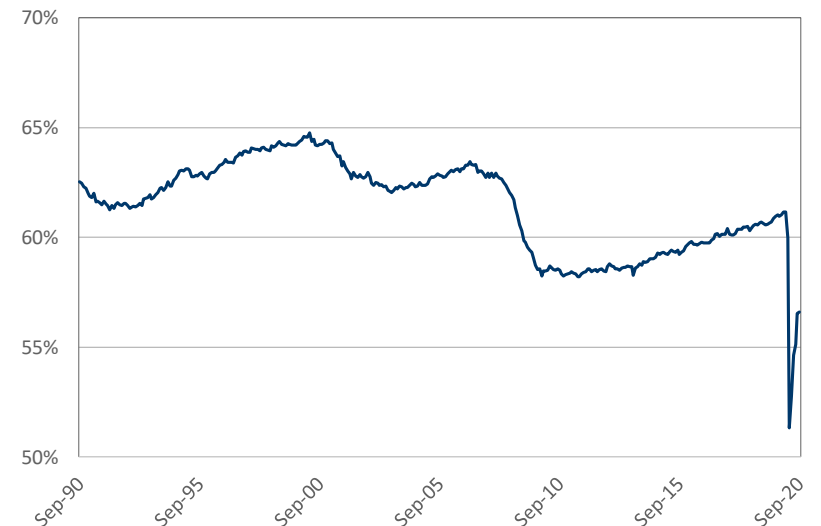
- Employment conditions have been volatile this year with massive gains and losses, as seen on the previous page
- Unemployment claims have been declining with continued claims currently at 8 million

- Employment as a percent of the civilian, non-institutional population dropped to nearly 50%
- The ratio has never been that low in the post-WWII history

UNEMPLOYMENT CLAIMS (000)



EMPLOYED PERSONS / CIVILIAN POPULATION



Data Source: Bloomberg

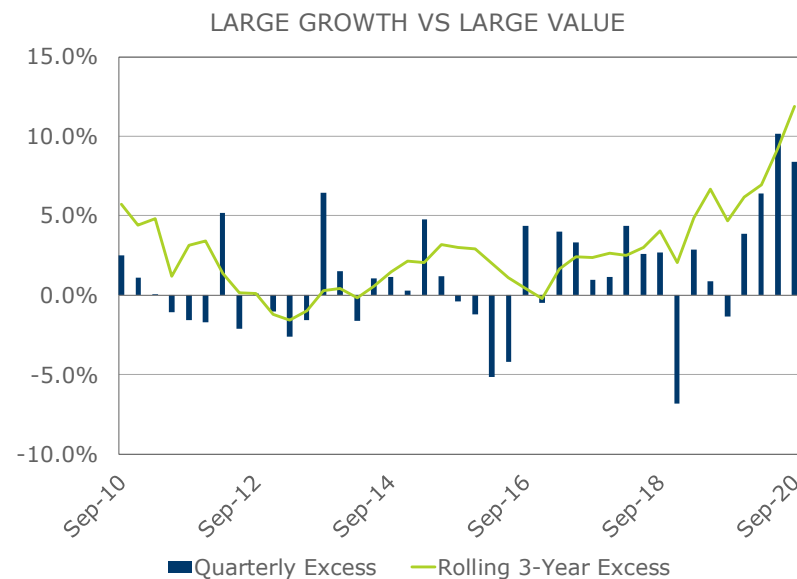
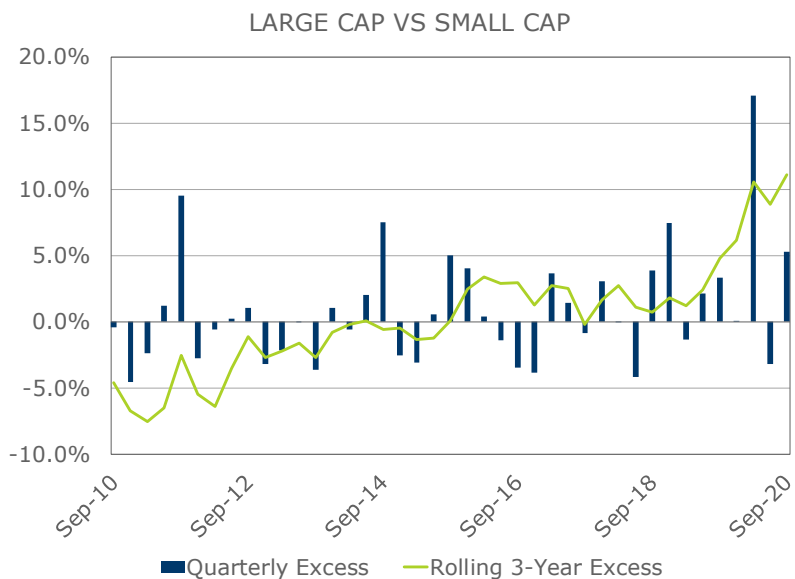
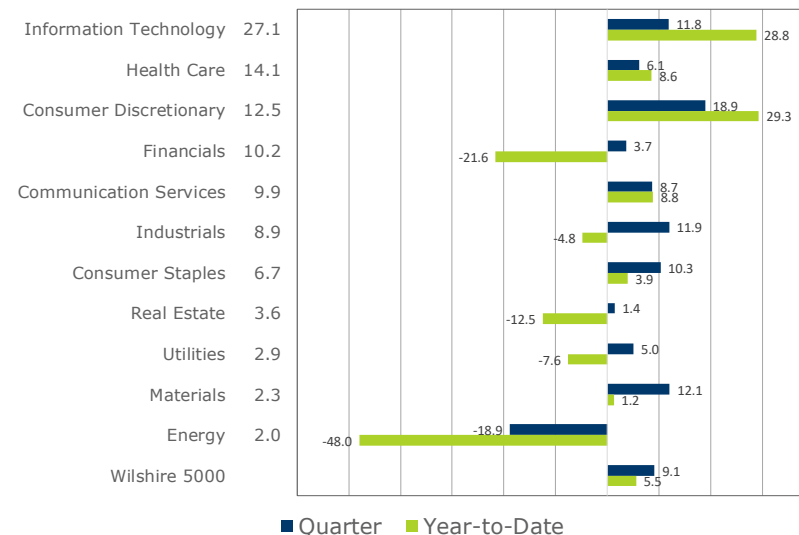
QUARTERLY MARKET REVIEW

U.S. Equity Market



AS OF 9/30/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
WILSHIRE 5000 INDEX	9.1	5.5	15.1	11.7	13.8	13.5
WILSHIRE U.S. LARGE CAP	9.6	7.0	16.8	12.7	14.5	13.8
WILSHIRE U.S. SMALL CAP	4.0	-10.3	-2.3	1.5	7.5	10.2
WILSHIRE U.S. LARGE GROWTH	13.8	20.0	33.5	19.0	18.3	16.3
WILSHIRE U.S. LARGE VALUE	5.0	-5.5	1.2	6.4	10.4	11.3
WILSHIRE U.S. SMALL GROWTH	7.1	-0.1	10.0	6.8	10.7	12.0
WILSHIRE U.S. SMALL VALUE	1.0	-19.7	-13.2	-3.6	4.3	8.3
WILSHIRE REIT INDEX	1.3	-16.7	-17.7	0.4	3.7	8.0
MSCI USA MIN. VOL. INDEX	5.8	-1.1	1.9	10.6	12.5	13.4
FTSE RAFI U.S. 1000 INDEX	5.8	-8.1	-0.4	4.8	9.3	11.2

U.S. SECTOR WEIGHT AND RETURN (%)



Data Source: Bloomberg, Wilshire Atlas

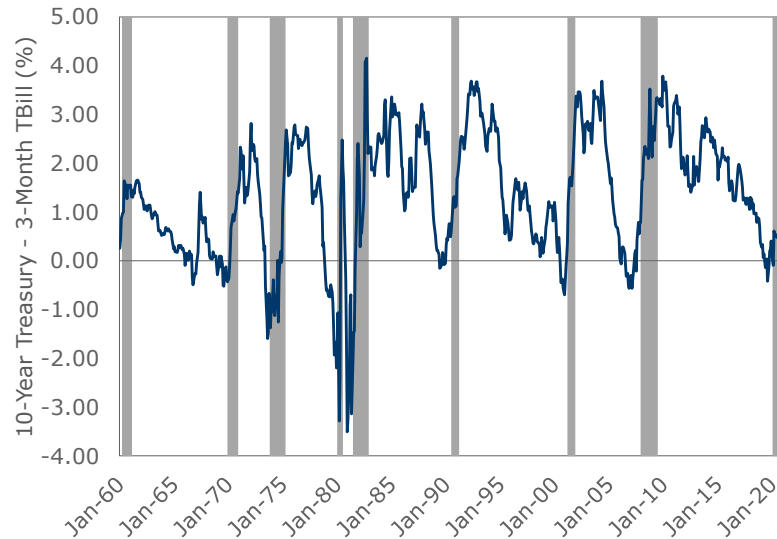
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QUARTERLY MARKET REVIEW

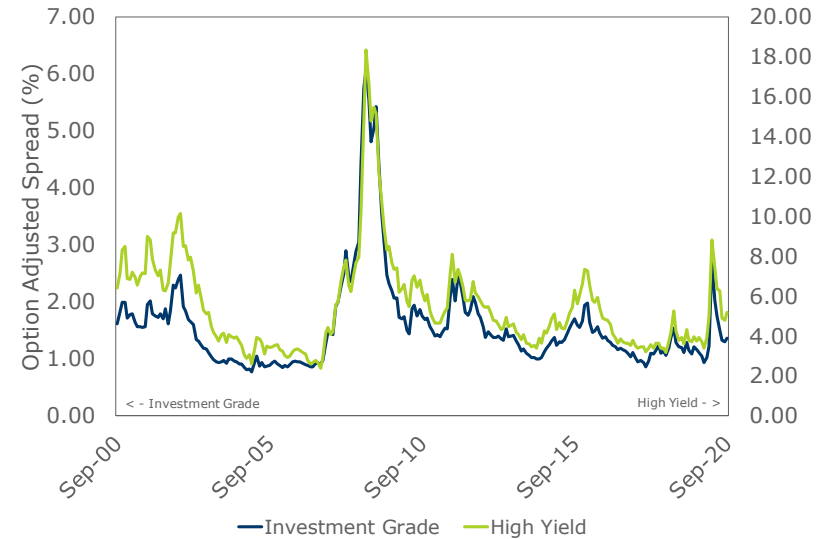
Risk Monitor



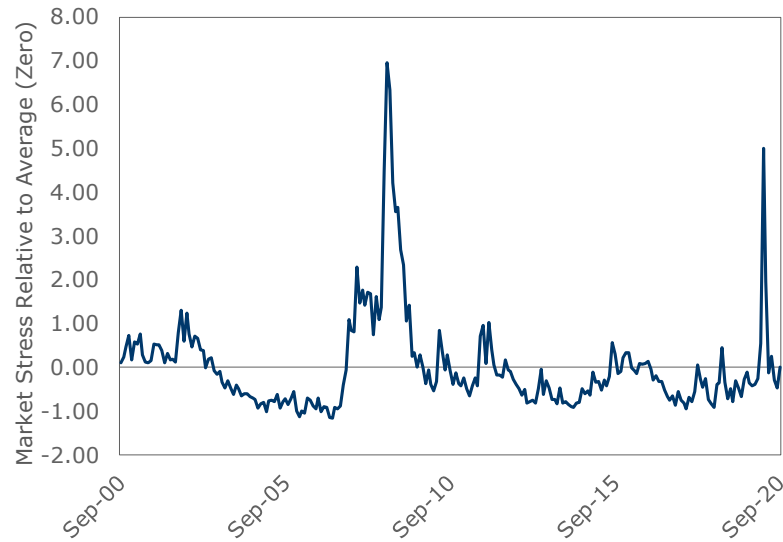
YIELD CURVE SLOPE VS RECESSIONS (IN GRAY)



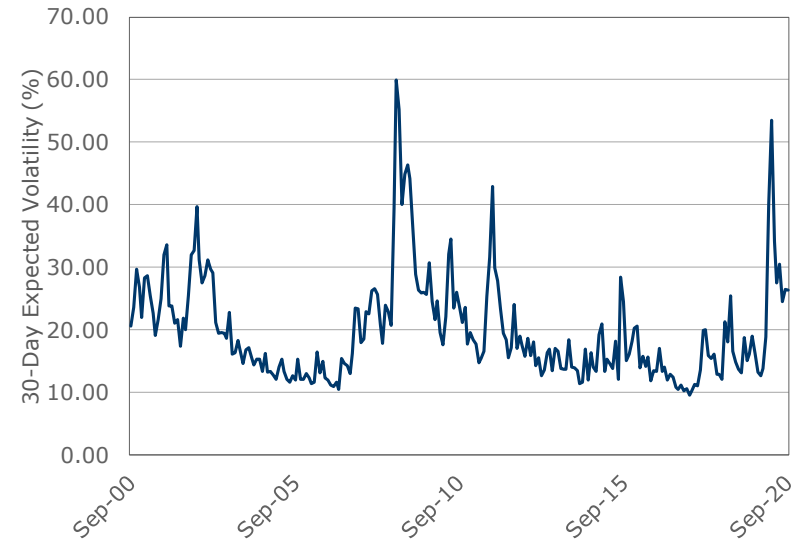
BLOOMBERG BARCLAYS CREDIT INDEXES



ST. LOUIS FED FINANCIAL STRESS INDEX



CBOE VOLATILITY INDEX

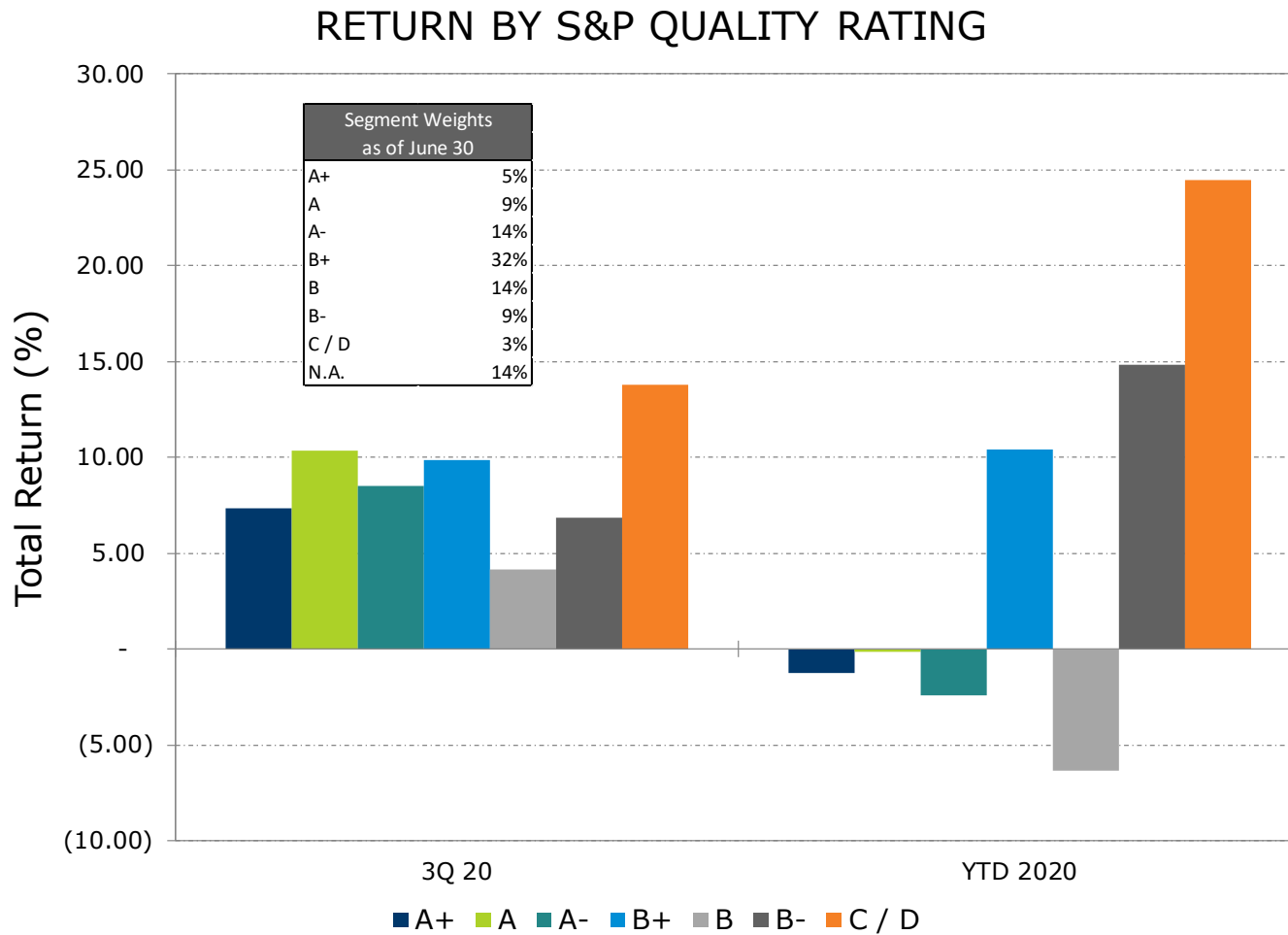


Data Source: Bloomberg

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Returns by Quality Segment

Although gains were broad based for the quarter, lower quality names lead for the year

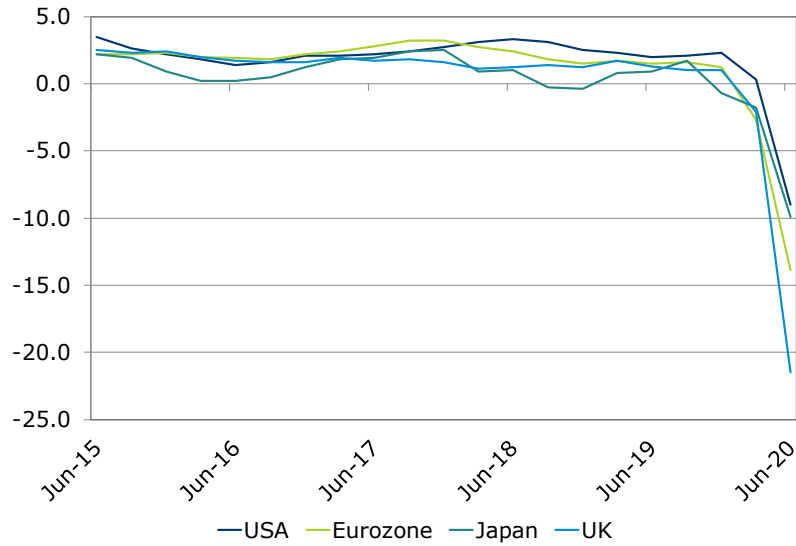


QUARTERLY MARKET REVIEW

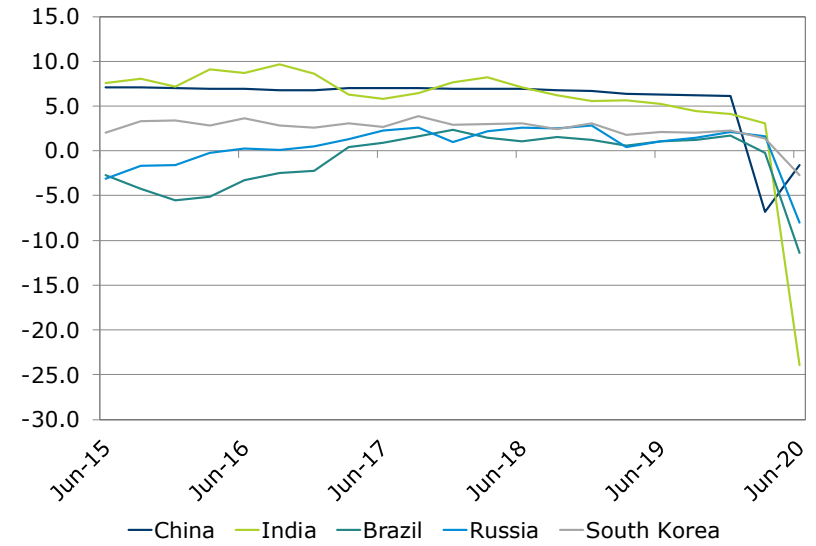
Non-U.S. Growth and Inflation



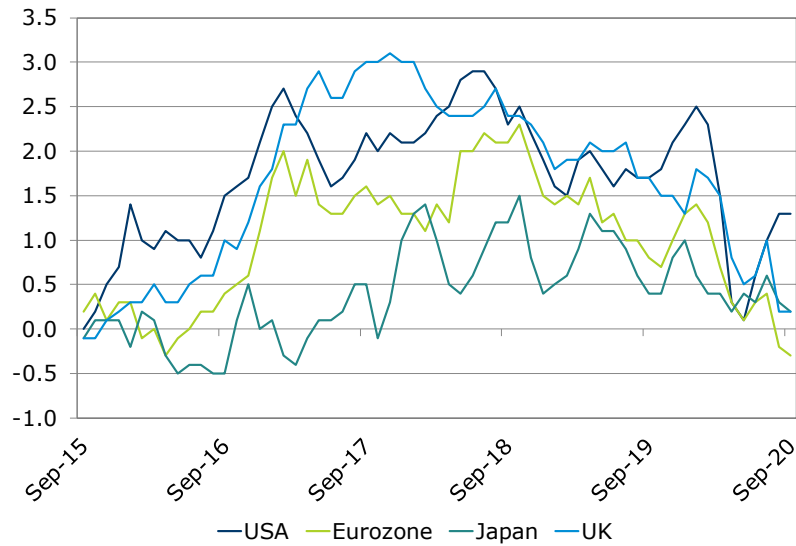
DEVELOPED MARKETS REAL GDP GROWTH YoY (%)



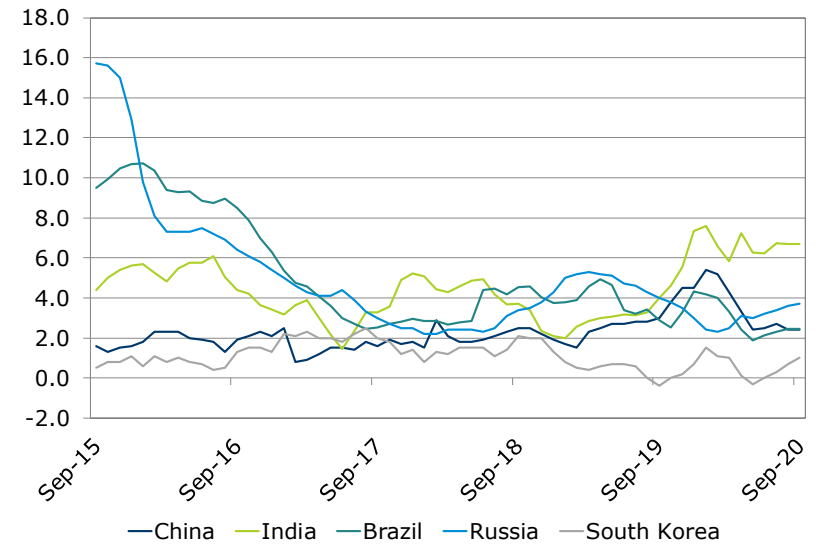
EMERGING MARKETS REAL GDP GROWTH YoY (%)



DEVELOPED MARKETS CPI GROWTH YoY (%)



EMERGING MARKETS CPI GROWTH YoY (%)



Data Source: Bloomberg

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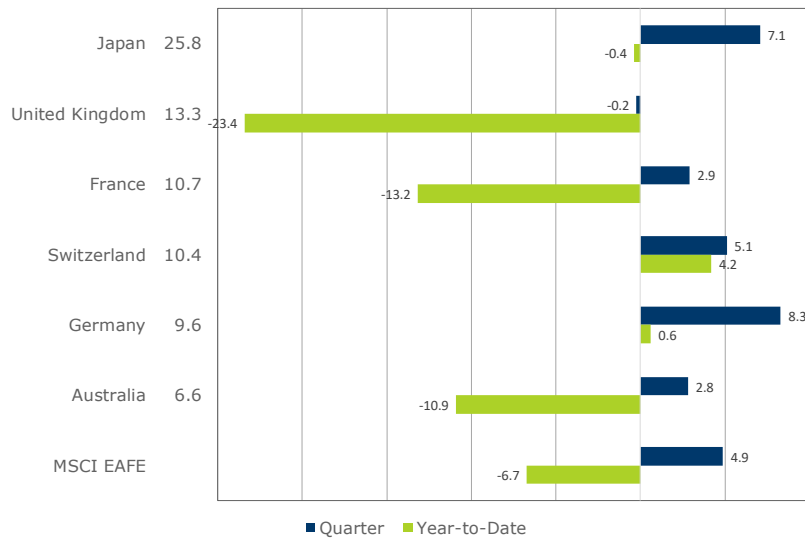
QUARTERLY MARKET REVIEW

Non-U.S. Equity Market

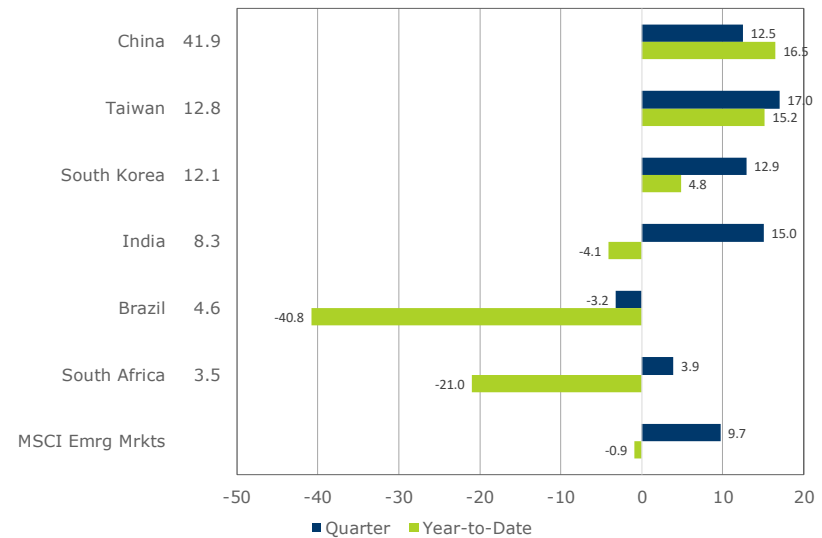


AS OF 9/30/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
MSCI ACWI EX-US (\$G)	6.4	-5.1	3.4	1.6	6.7	4.5
MSCI EAFE (\$G)	4.9	-6.7	0.9	1.1	5.8	5.1
MSCI EMERGING MARKETS (\$G)	9.7	-0.9	10.9	2.8	9.4	2.9
MSCI FRONTIER MARKETS (\$G)	4.4	-16.9	-11.2	-5.1	1.2	0.7
MSCI ACWI EX-US GROWTH (\$G)	10.2	7.5	17.9	7.7	10.6	6.8
MSCI ACWI EX-US VALUE (\$G)	3.1	-16.7	-9.5	-4.3	3.0	2.4
MSCI ACWI EX-US SMALL (\$G)	10.6	-3.3	7.4	1.3	7.2	5.7
MSCI ACWI MINIMUM VOLATILITY	4.9	-3.0	0.0	7.1	9.6	9.7
MSCI EAFE MINIMUM VOLATILITY	3.5	-6.9	-2.7	2.4	5.8	6.7
FTSE RAFI DEVELOPED EX-US	3.1	-15.0	-8.1	-3.7	3.3	2.9
MSCI EAFE LC (G)	1.3	-9.1	-4.3	1.0	5.3	6.8
MSCI EMERGING MARKETS LC (G)	8.8	2.9	12.8	5.2	10.0	6.0

DEVELOPED MARKETS WEIGHT AND RETURN (%)



EMERGING MARKETS WEIGHT AND RETURN (%)



Data Source: Bloomberg

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QUARTERLY MARKET REVIEW

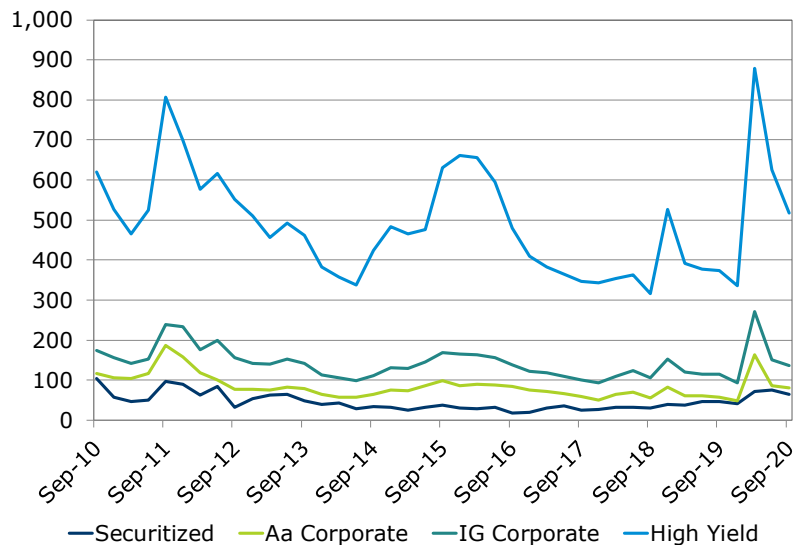
U.S. Fixed Income



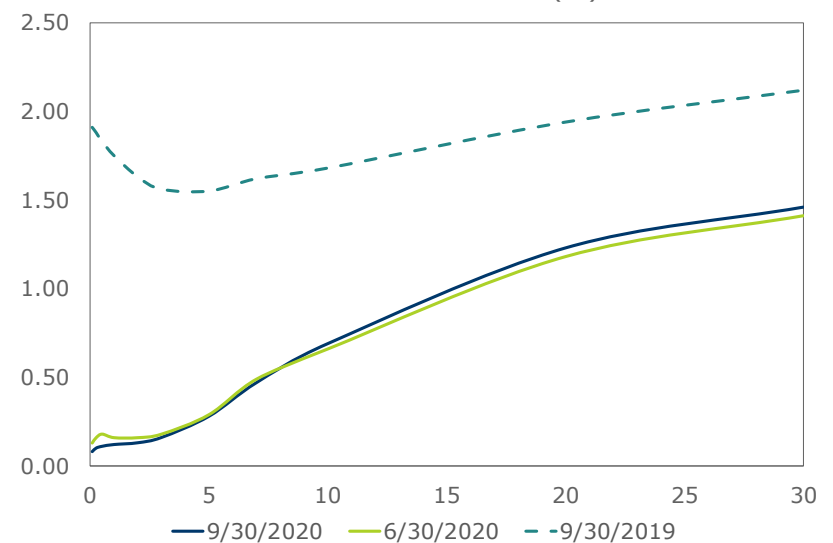
AS OF 9/30/2020	YTW	DUR.	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS AGGREGATE	1.2	6.1	0.6	6.8	7.0	5.2	4.2	3.6
BLOOMBERG BARCLAYS TREASURY	0.5	7.2	0.2	8.9	8.0	5.5	3.7	3.1
BLOOMBERG BARCLAYS GOV'T-REL.	1.1	6.0	1.1	5.0	5.2	4.8	4.1	3.3
BLOOMBERG BARCLAYS SECURITIZED	1.3	2.4	0.2	3.9	4.5	3.8	3.1	3.1
BLOOMBERG BARCLAYS CORPORATE	2.0	8.7	1.5	6.6	7.9	6.4	6.0	5.1
BLOOMBERG BARCLAYS LT G/C	2.3	16.8	1.2	14.2	12.9	10.2	8.8	7.4
BLOOMBERG BARCLAYS LT TREASURY	1.3	19.4	0.1	21.3	16.3	11.9	8.2	7.2
BLOOMBERG BARCLAYS LT GOV't-REL.	2.8	13.6	2.3	6.7	6.6	7.8	7.8	6.7
BLOOMBERG BARCLAYS LT CORP.	3.1	15.3	1.9	8.4	9.8	8.8	8.9	7.4
BLOOMBERG BARCLAYS U.S. TIPS *	0.6	7.9	3.0	9.2	10.1	5.8	4.6	3.6
BLOOMBERG BARCLAYS HIGH YIELD	5.8	3.7	4.6	0.6	3.3	4.2	6.8	6.5
TREASURY BILLS	0.1	0.3	0.0	0.7	1.2	1.7	1.2	0.7

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

FIXED INCOME OPTION ADJUSTED SPREAD (BPS)



TREASURY YIELD CURVE (%)



Data Source: Bloomberg

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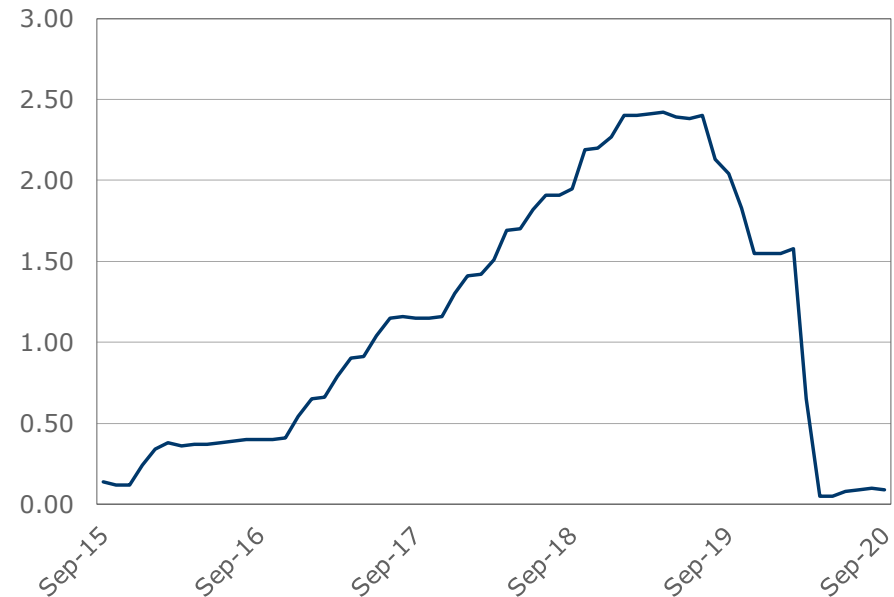
QUARTERLY MARKET REVIEW

Federal Reserve

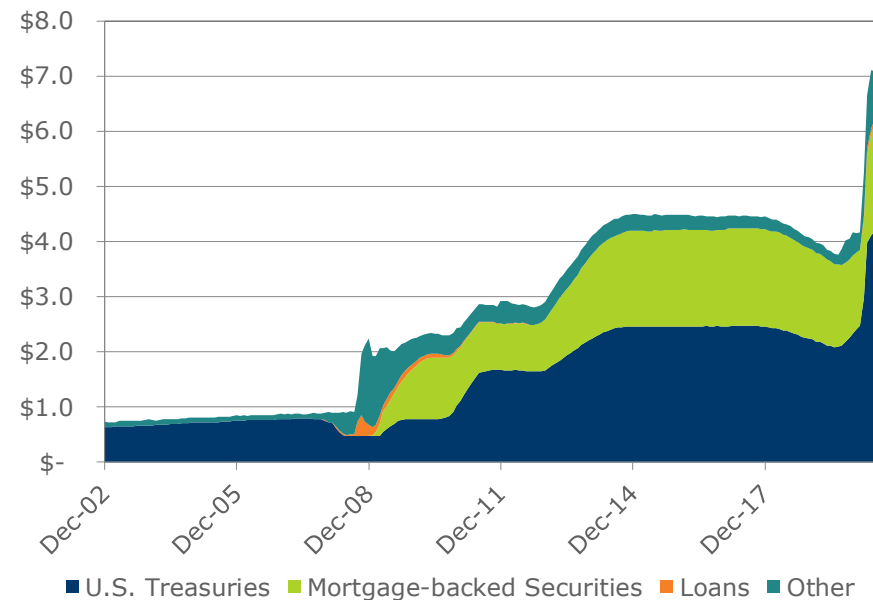


- Current expectation for the Fed-funds rate is to remain near zero through 2022
- Federal Reserve has added nearly \$3 trillion in assets to their balance sheet just this year
- Unlike after the GFC, the Fed is also buying corporate and municipal bonds in addition to Treasuries and MBS

FEDERAL FUNDS RATE (%)



FEDERAL RESERVE BALANCE SHEET (\$T)



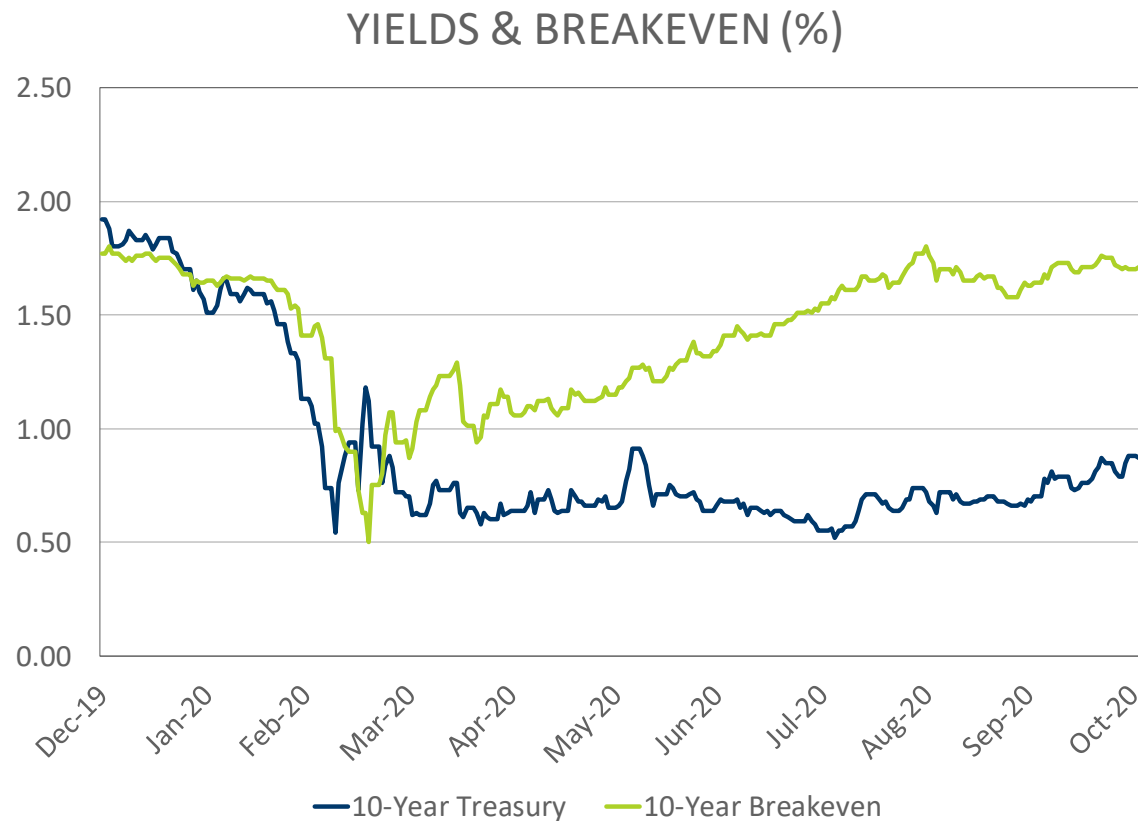
	Announced	Closed	Amount (bil)
QE1	11/25/2008	3/31/2010	\$1,403
QE2	11/3/2010	6/29/2012	\$568
QE3	9/13/2012	10/29/2014	\$1,674
QE4	3/23/2020		\$2,935

Data Source: Bloomberg

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Treasuries at Low Levels

- Treasury yields and breakeven inflation both dropped as the U.S. entered coronavirus-related lockdowns; breakeven inflation has since increased
- Nearly 100 basis point spread between the two implies that investing in a 10-year Treasury is currently expected to cost an investor, in real terms



Data Source: Bloomberg

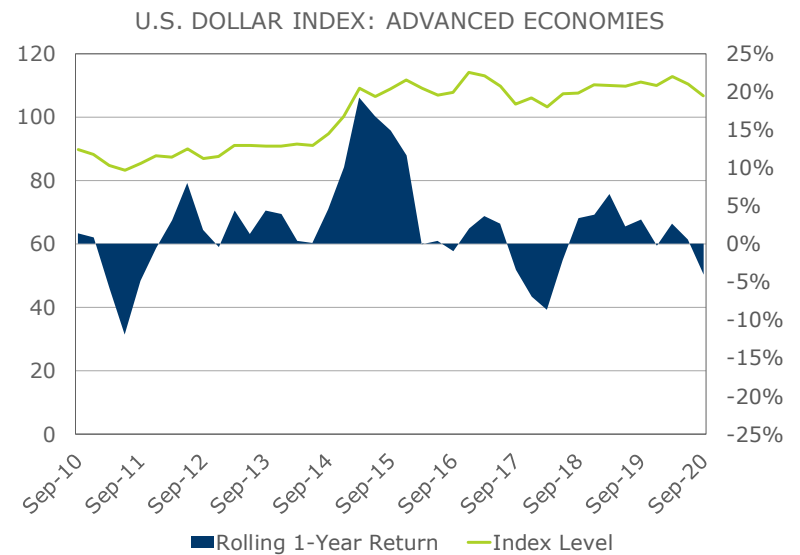
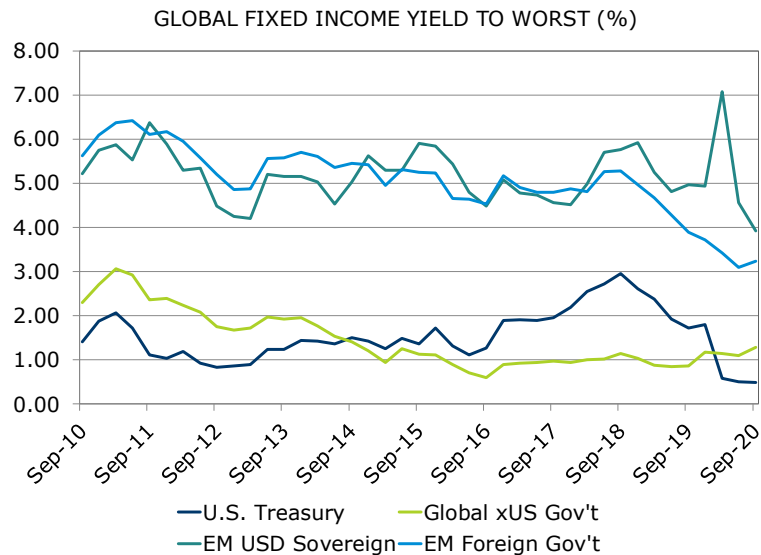
QUARTERLY MARKET REVIEW

Non-U.S. Fixed Income



AS OF 9/30/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
DEVELOPED MARKETS						
BLMBRG BRCLYS GLBL AGGREGATE xUS	4.1	4.8	5.5	3.1	3.6	1.3
BLMBRG BRCLYS GLBL AGGREGATE xUS *	0.7	3.0	1.8	4.9	4.3	4.1
BLMBRG BRCLYS GLOBAL INF LNKD xUS	3.9	6.0	5.4	3.8	3.8	3.5
BLMBRG BRCLYS GLOBAL INF LNKD xUS *	-0.3	6.4	0.9	6.4	6.3	5.9
EMERGING MARKETS (HARD CURRENCY)						
BLMBRG BRCLYS EM USD AGGREGATE	2.4	1.9	4.1	4.2	6.2	5.4
EMERGING MARKETS (FOREIGN CURRENCY)						
BLMBRG BRCLYS EM LOCAL CURR. GOV'T	1.8	-1.6	2.3	2.1	4.9	2.0
BLMBRG BRCLYS EM LOCAL CURR. GOV'T *	-0.6	2.3	2.8	4.5	4.1	3.3
CURRENCY RETURNS						
EURO vs. DOLLAR	4.3	4.5	7.5	-0.3	1.0	-1.5
YEN vs. DOLLAR	2.3	3.0	2.5	2.2	2.6	-2.3
POUND vs. DOLLAR	4.2	-2.5	5.1	-1.2	-3.1	-1.9

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



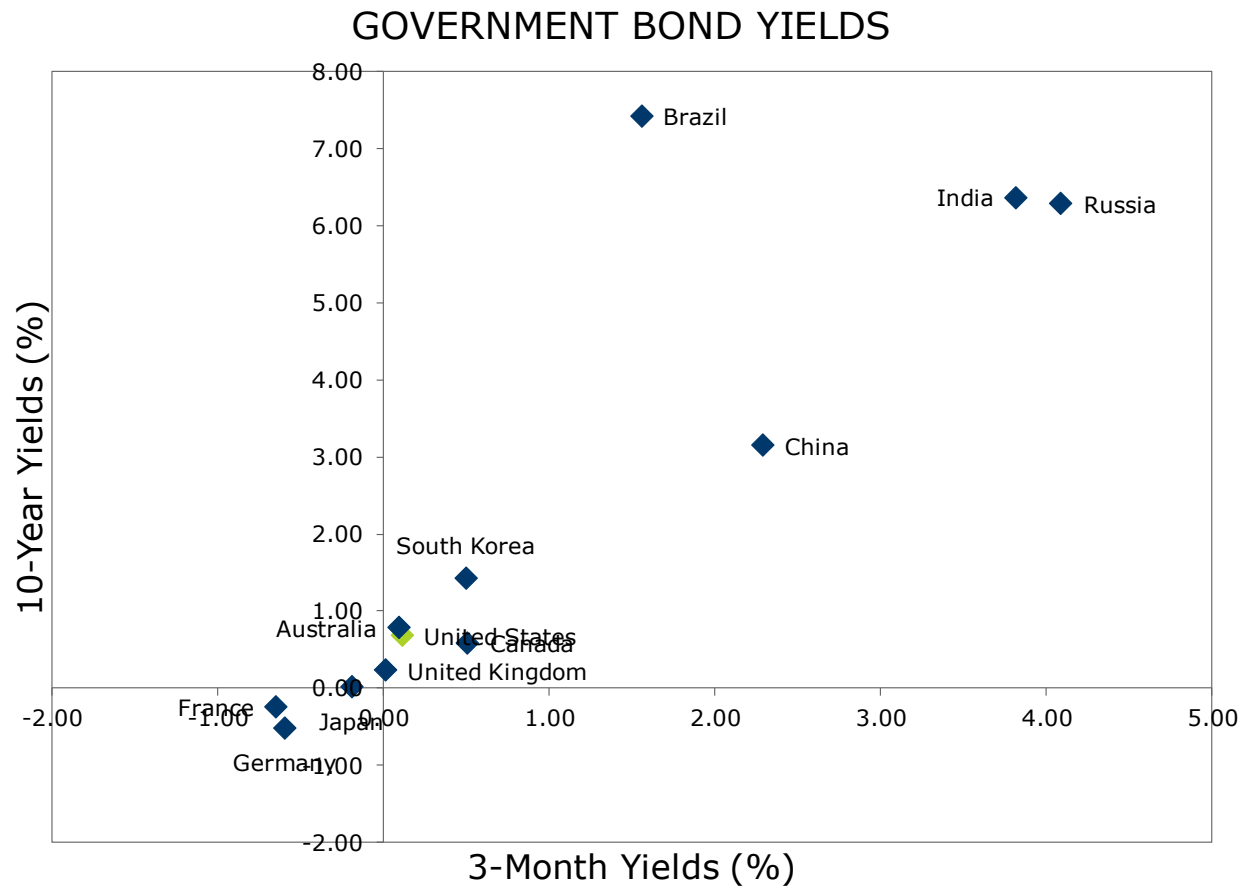
Data Source: Bloomberg

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QUARTERLY MARKET REVIEW

Global Interest Rates

Negative rates found in Germany and France; low but positive rates, and at similar levels, in the U.S. and Australia while the U.K. approaches zero

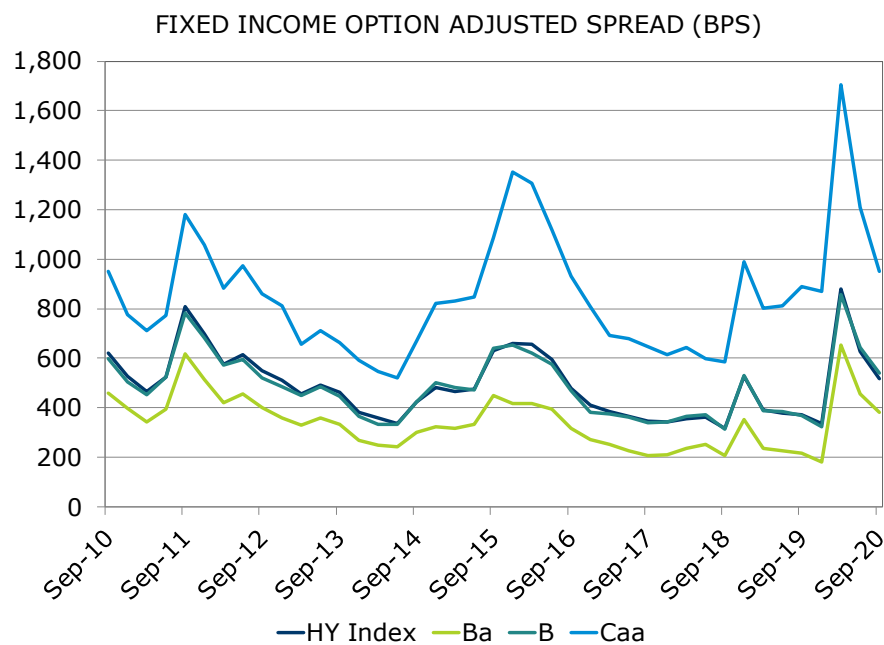


QUARTERLY MARKET REVIEW

High Yield Bond Market



AS OF 9/30/2020		YTW	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS HIGH YIELD		5.8	4.6	0.6	3.3	4.2	6.8	6.5
S&P LSTA LEVERAGE LOAN INDEX		4.9	3.5	-0.5	1.7	3.4	4.1	4.1
HIGH YIELD QUALITY DISTRIBUTION	WEIGHT							
Ba U.S. HIGH YIELD	54.6%	4.4	4.0	4.2	6.8	5.7	7.3	6.9
B U.S. HIGH YIELD	32.7%	6.0	4.5	-1.2	1.4	4.0	6.2	6.1
Caa U.S. HIGH YIELD	11.9%	10.1	7.3	-7.0	-3.5	-0.3	5.6	6.0
Ca to D U.S. HIGH YIELD	0.8%	23.9	6.7	-23.5	-29.1	-8.8	4.1	-5.8
Non-Rated U.S. HIGH YIELD	0.0%	0.0	0.0	-6.5	-4.7	-0.5	0.6	3.7



Data Source: Bloomberg

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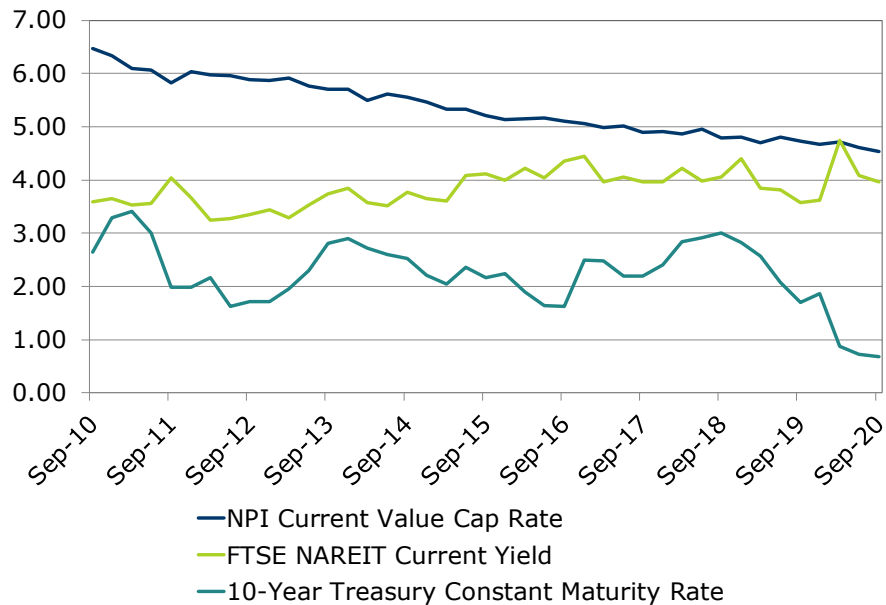
QUARTERLY MARKET REVIEW

Real Assets

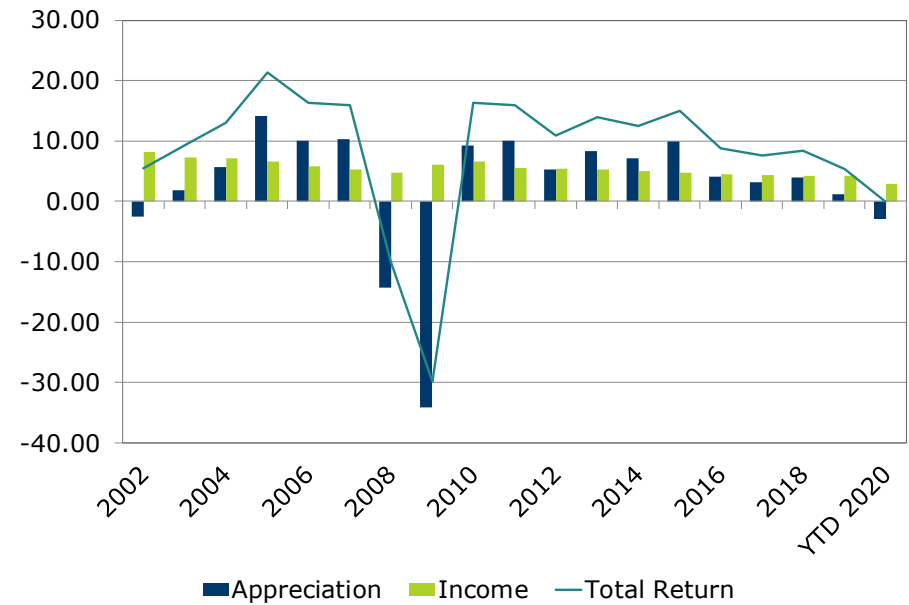


AS OF 9/30/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS U.S. TIPS	3.0	9.2	10.1	5.8	4.6	3.6
BLOOMBERG COMMODITY INDEX	9.1	-12.1	-8.2	-4.2	-3.1	-6.0
WILSHIRE GLOBAL RESI INDEX	1.3	-19.3	-18.3	-0.7	3.0	6.5
NCREIF ODCE FUND INDEX	0.5	-0.1	1.4	5.2	6.6	10.3
NCREIF TIMBERLAND INDEX	0.0	0.2	0.2	2.2	2.6	4.4
ALERIAN MIDSTREAM ENERGY	-9.4	-36.2	-34.8	-11.9	-4.5	n.a.

REAL ESTATE VALUATION (%)



NCREIF ODCE FUND INDEX RETURN (%)



Data Source: Bloomberg, National Council of Real Estate Investment Fiduciaries

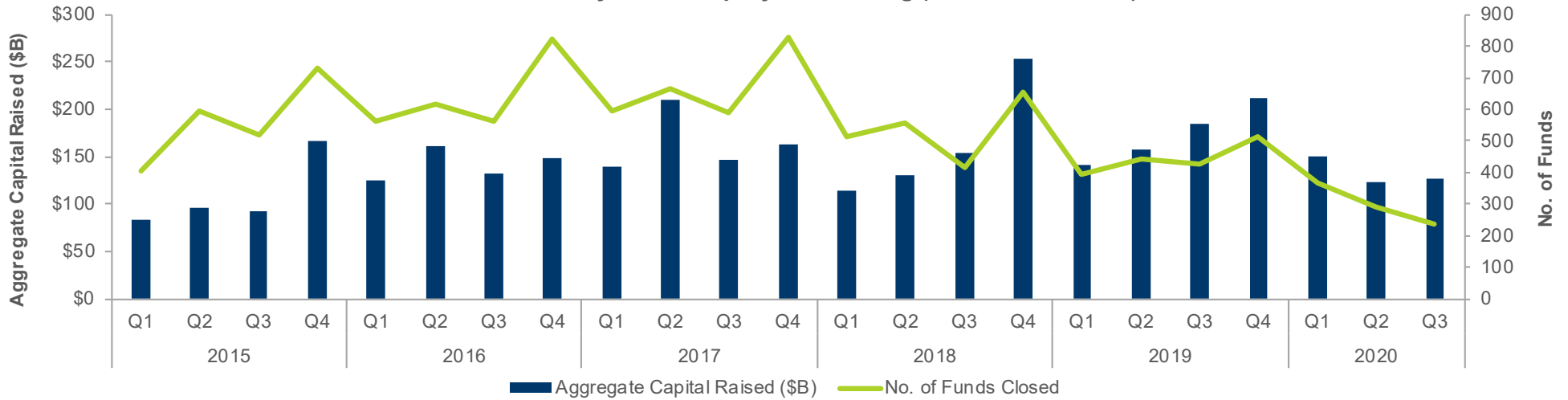
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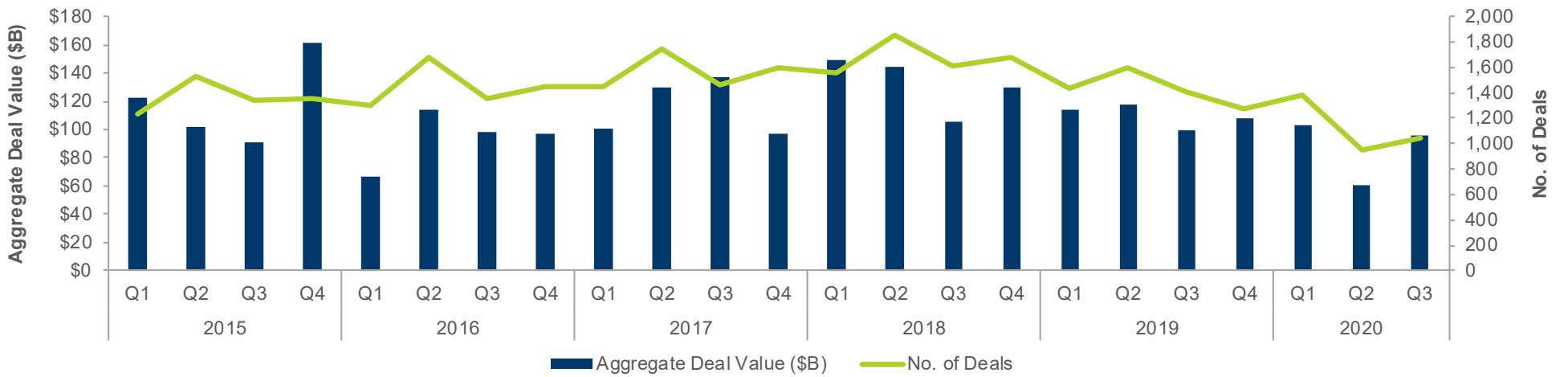
Appendix: Private Market Trends

Private Equity – Fundraising & Investment Activity

Global Quarterly Private Equity Fundraising (Q1 2015 - Q3 2020)



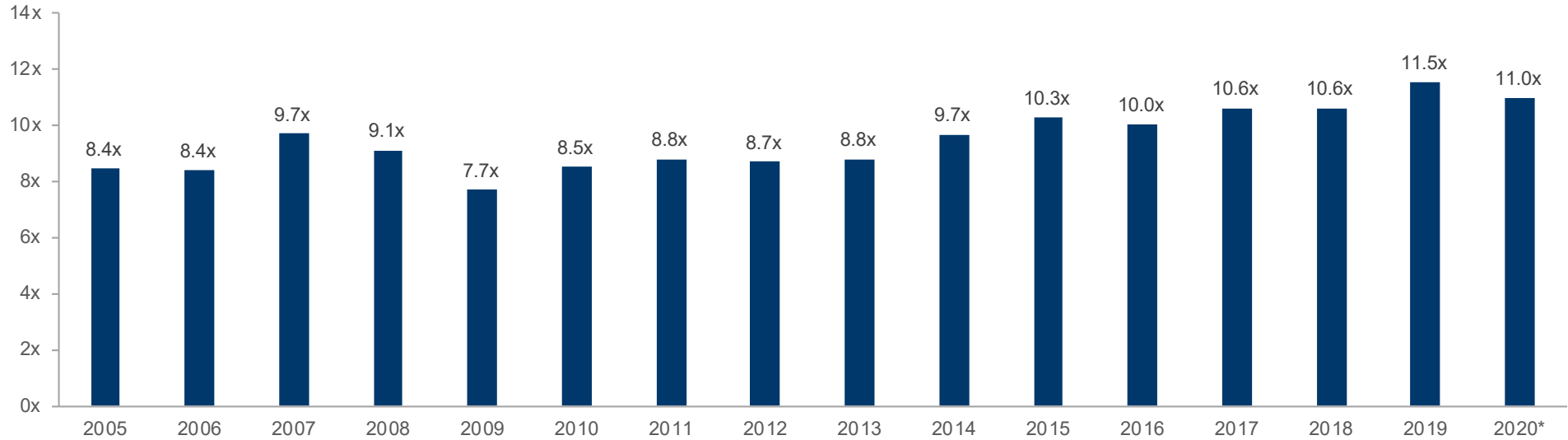
Global Quarterly Private Equity-Backed Buyout Deals (Q1 2015 - Q3 2020)



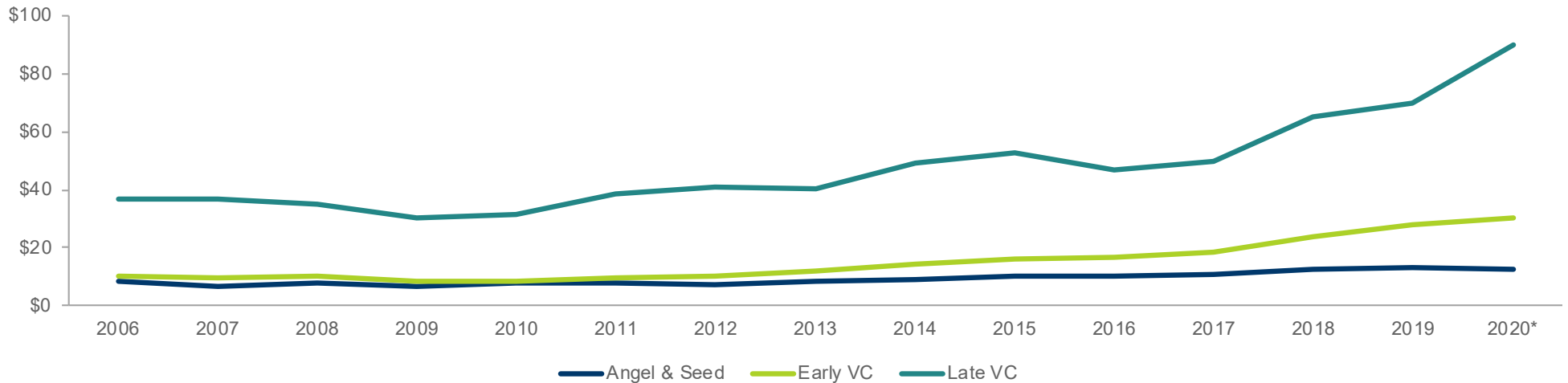
Source: Preqin, as of September 30, 2020.

Private Equity – Pricing & Valuations

LBO Purchase Price Multiples (2005 - Q3 2020)



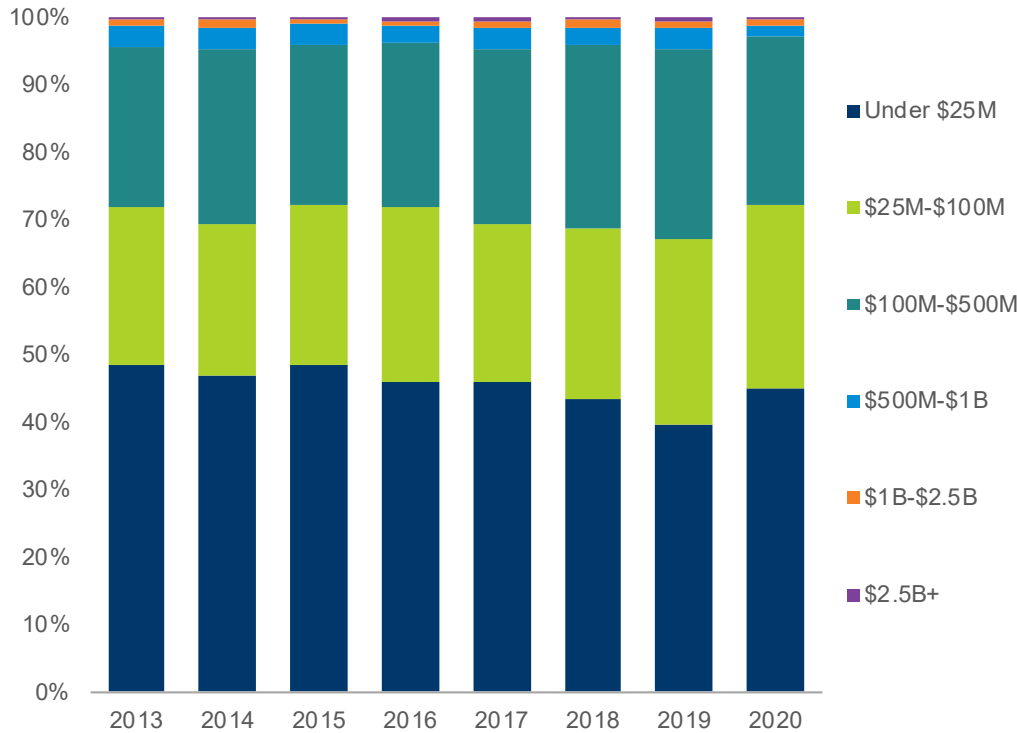
U.S. Median Pre-Value by Stage (\$M) (2006 – Q3 2020)



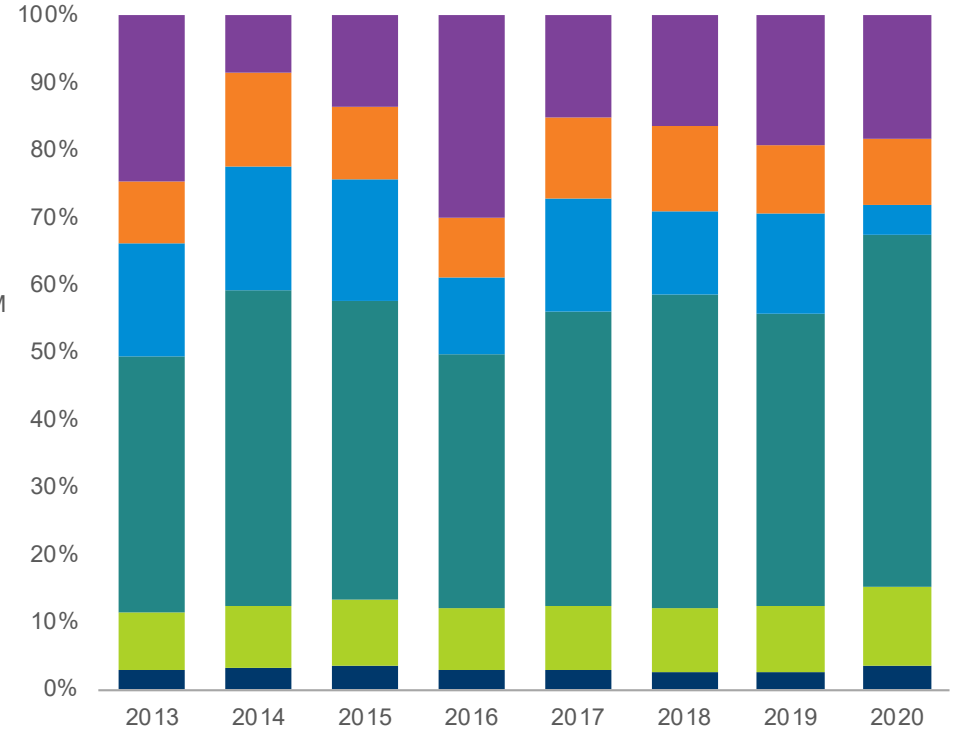
Source: S&P LBO; PitchBook, *as of September 30, 2020.

U.S. Investment Activity by Deal Size

Percentage of Deal Volume by Deal Size (by Count)*



Percentage of Deal Volume by Deal Size (by Dollars)*

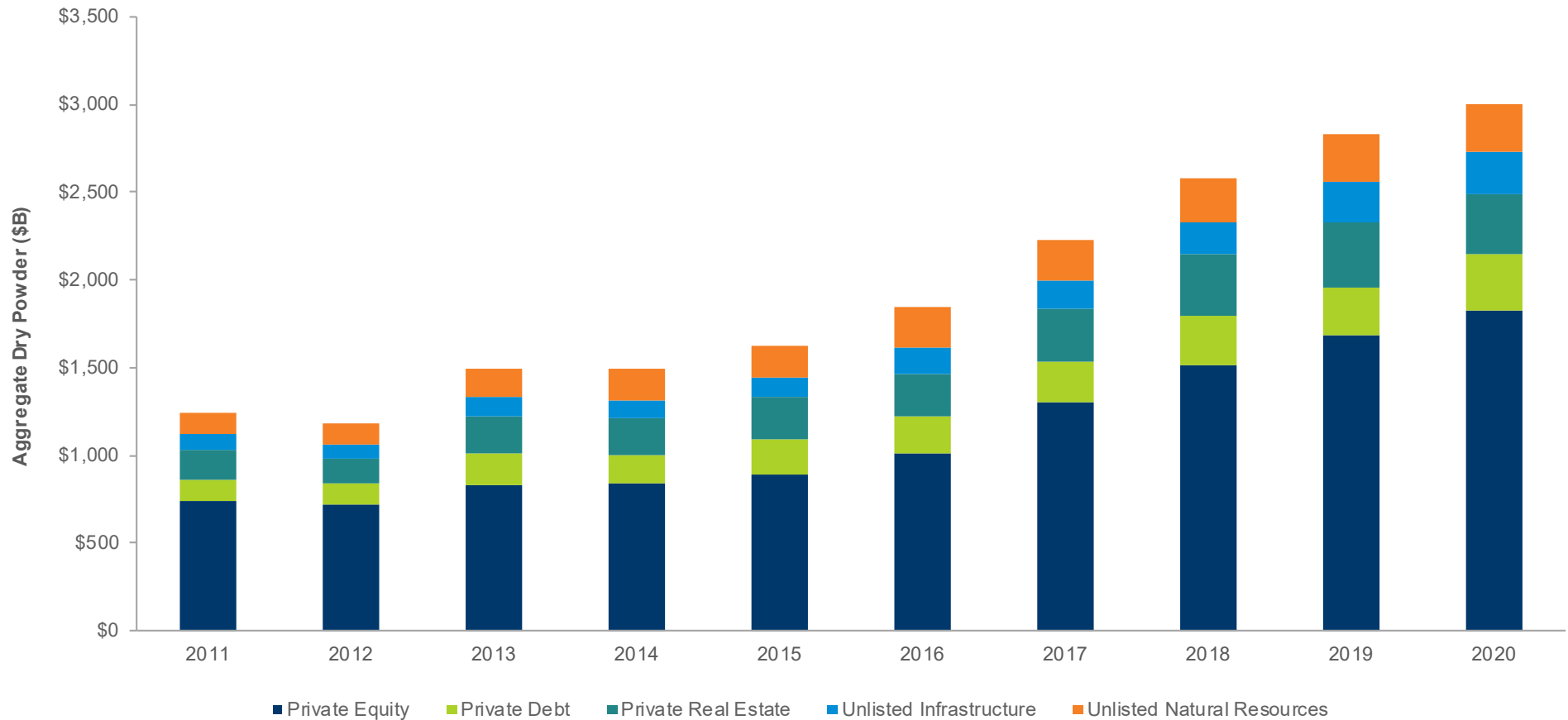


- Deal volume continues to be dominated by lower middle market deals with investment sizes below \$100 million through the third quarter of 2020
- However, deals with below \$100 million check sizes comprised only 15% of all deal volume by amount of capital invested in the third quarter of 2020

Source: PitchBook, *as of September 30, 2020.

Private Capital Dry Powder

Private Capital Dry Powder by Fund Type (2011 - October 2020)



- Global private capital dry powder continues to increase, topping \$2.9 trillion across all fund types
- Private equity comprises just over 60% of total dry power in the market as of October 2020

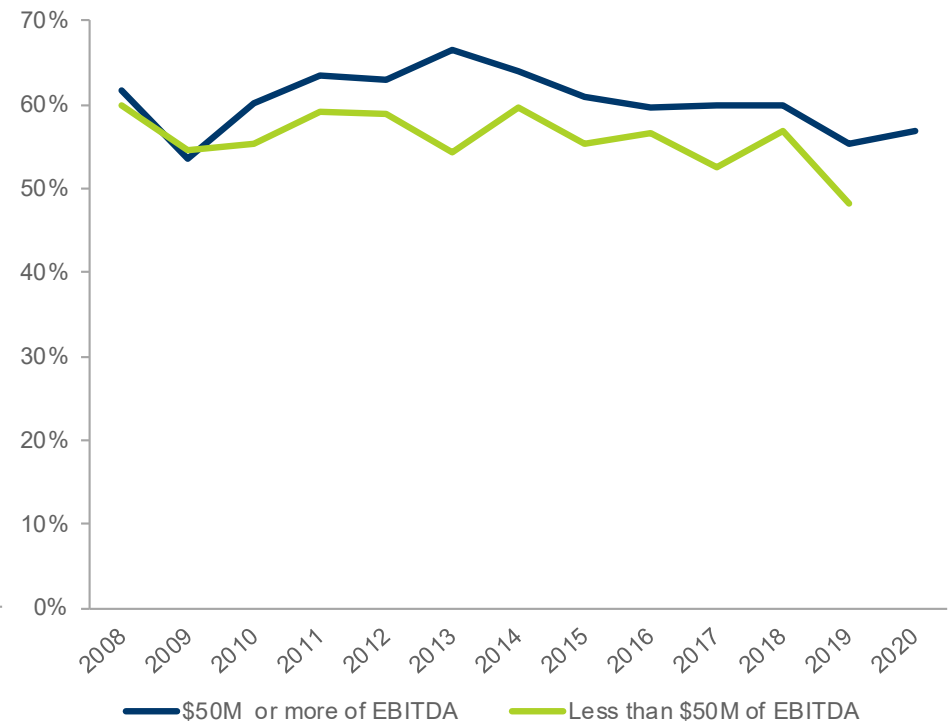
Source: Preqin, as of October 19, 2020.

Private Equity – U.S. Debt Markets

Total U.S. LBO Loan Volume (\$B) (2005 - Q3 2020)*



Percentage of Debt Used in LBOs (2008 - Q3 2020)*

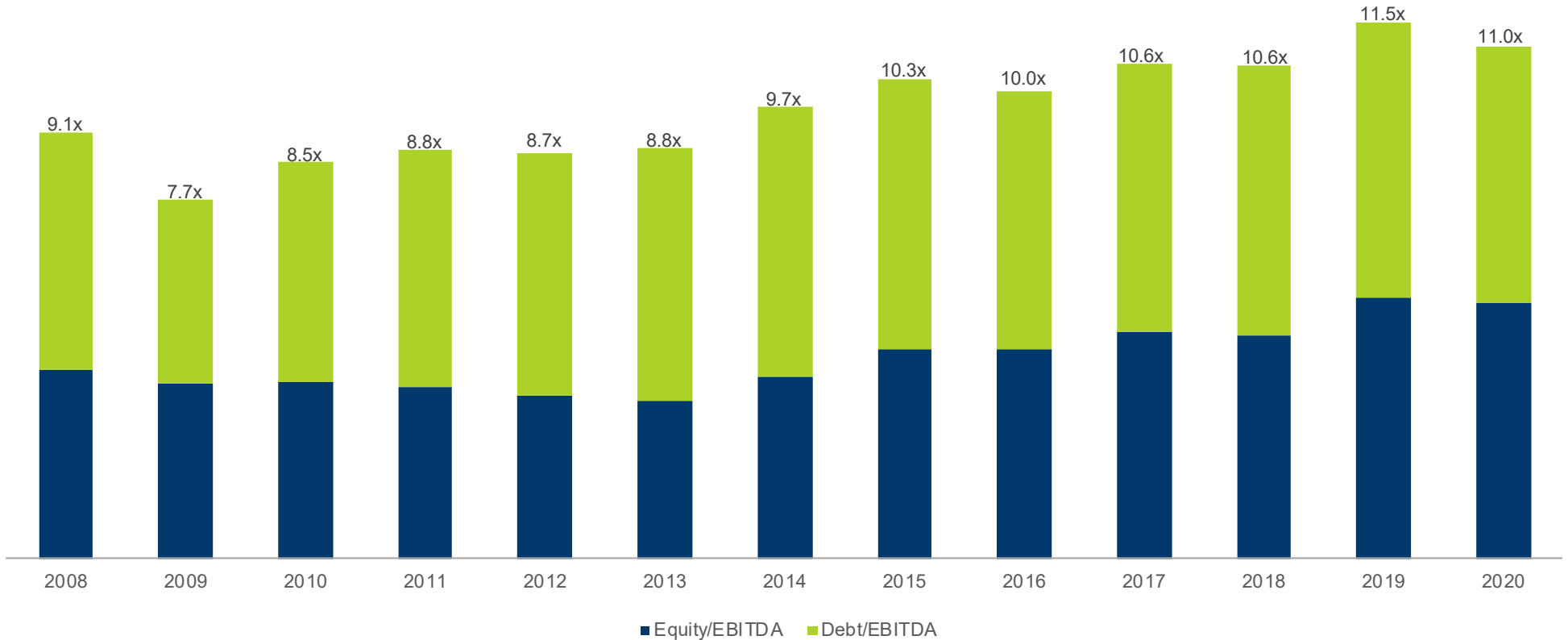


- 2020 has generated approximately \$51 billion in loan volume so far and is on pace to see a slight decrease in loan volume from 2019
- As debt multiples have decreased, the percentage of debt used to finance leveraged buyouts through the third quarter of 2020 has slightly increased from 2019 marks

Source: S&P LBO, *as of September 30, 2020. "Less than \$50M of EBITDA" data for 2020 not yet available.

Private Equity – U.S. LBO Purchase Price Multiples

Purchase Price Multiples of U.S. LBO Transactions (2008 - Q3 2020)*

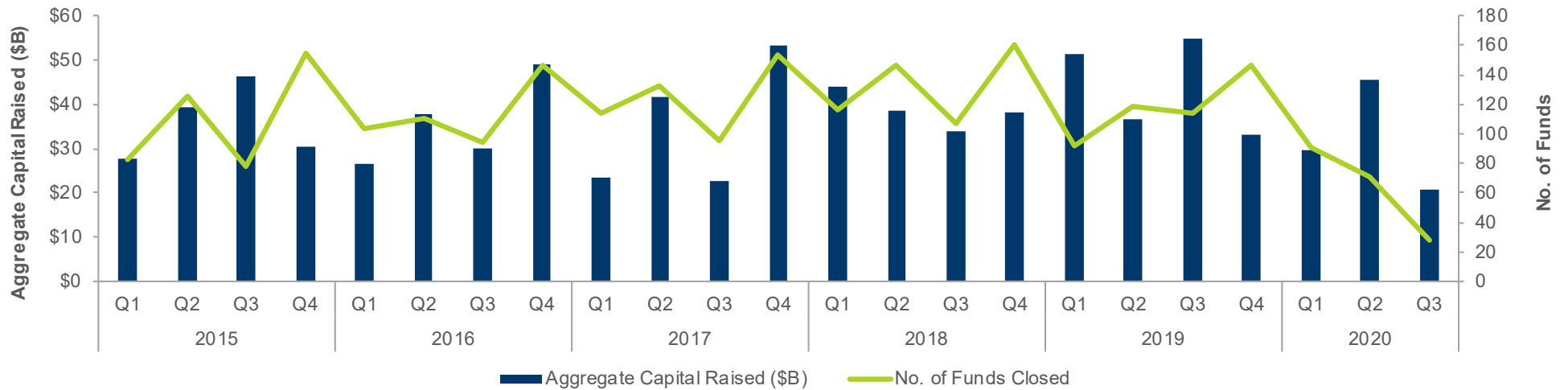


- Purchase price multiples for U.S. LBOs have slightly decreased through Q3 2020, relative to 2019 levels

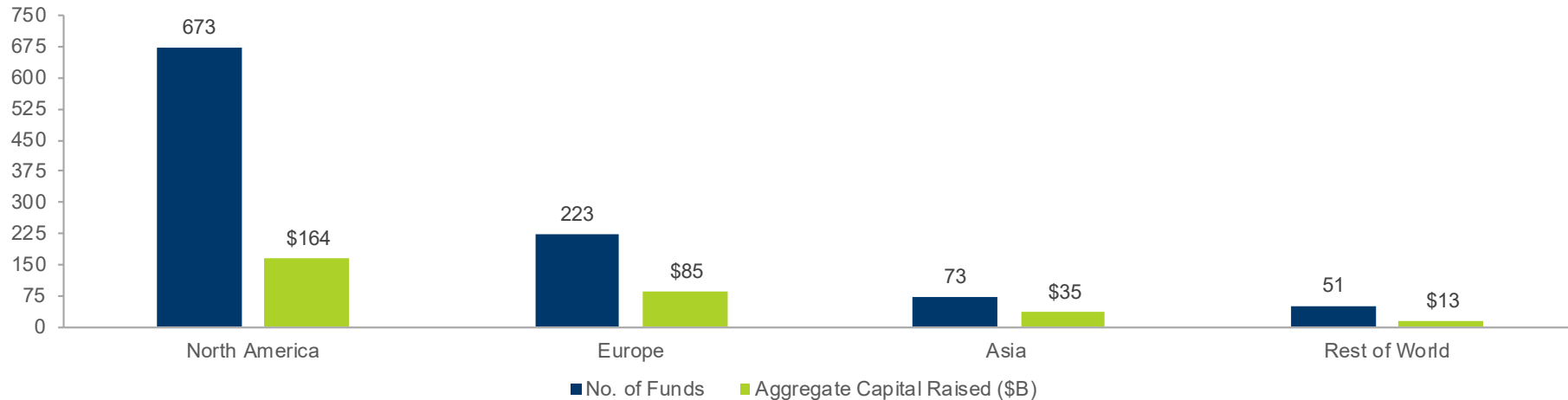
Source: S&P LBO, *as of September 30, 2020.

Private Real Estate – Fundraising Activity

Global Quarterly Closed-End Private Real Estate Fundraising (Q1 2015 - Q3 2020)



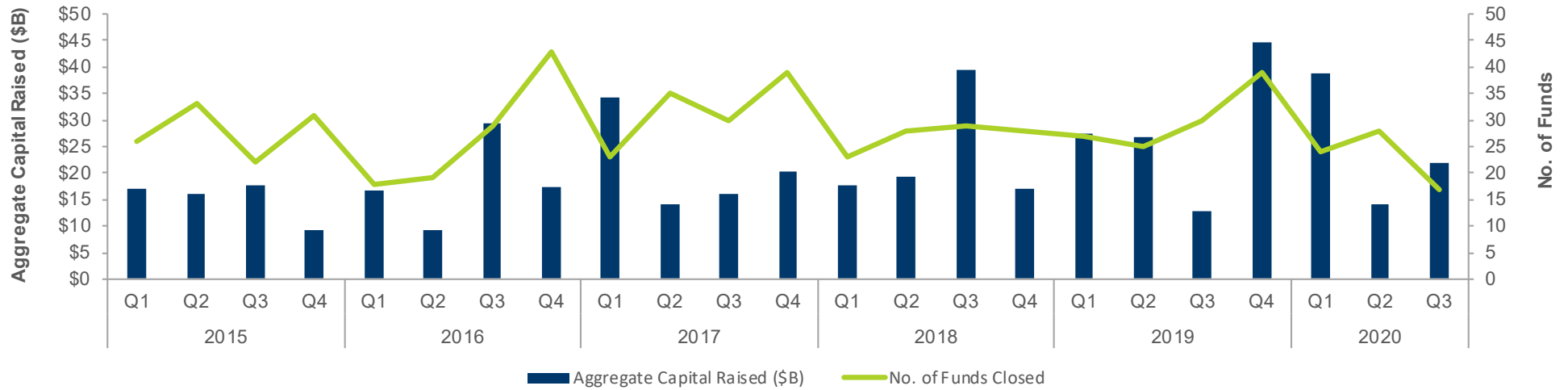
Closed-End Private Real Estate Funds Actively in Market in Q3 2020 by Primary Geographic Focus



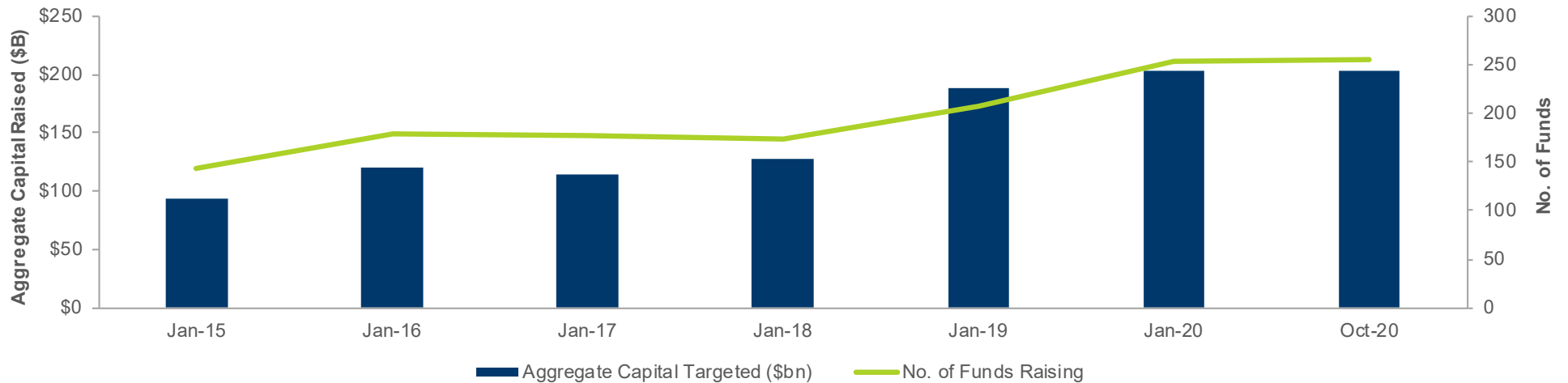
Source: Preqin as of September 30, 2020.

Unlisted Infrastructure – Fundraising & Investment Activity

Global Quarterly Unlisted Infrastructure Fundraising (Q1 2015 – Q3 2020)



Unlisted Infrastructure Funds in Market over Time (January 2015 - October 2020)



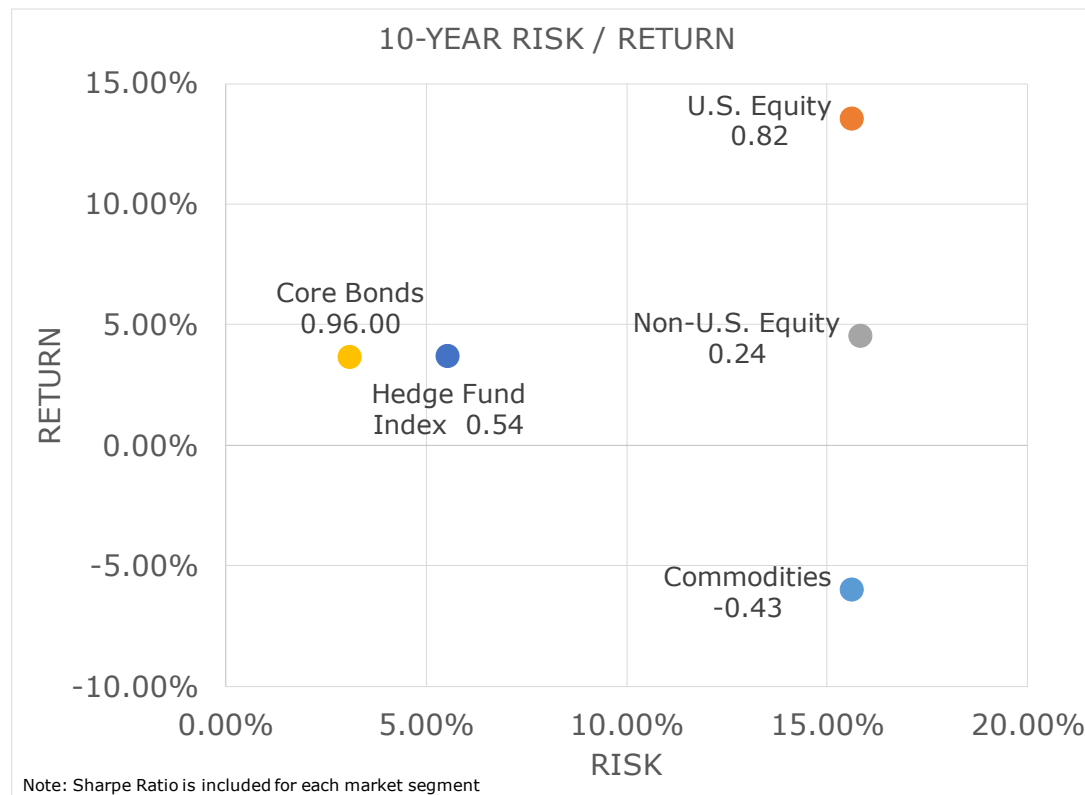
Source: Preqin as of September 30, 2020.

QUARTERLY MARKET REVIEW

Hedge Fund Performance



AS OF 9/30/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
DJ CS HEDGE FUND INDEX	3.4	0.0	2.4	2.7	2.8	3.6
EVENT DRIVEN	4.8	-3.1	-1.0	0.7	1.4	2.6
GLOBAL MACRO	4.6	0.5	1.3	4.1	3.4	3.9
LONG/SHORT EQUITY	2.7	0.2	5.3	3.5	3.6	4.9
MULTI-STRATEGY	3.4	0.5	1.8	2.3	3.6	5.6
WILSHIRE 5000	9.1	5.5	15.1	11.7	13.8	13.5
MSCI ACWI EX-US (\$G)	6.4	-5.1	3.4	1.6	6.7	4.5
BLOOMBERG BARCLAYS AGGREGATE	0.6	6.8	7.0	5.2	4.2	3.6
BLOOMBERG COMMODITY INDEX	9.1	-12.1	-8.2	-4.2	-3.1	-6.0



Data Source: Bloomberg

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Total Fund

Asset Allocation Compliance

Total Fund

Periods Ended As of September 30, 2020

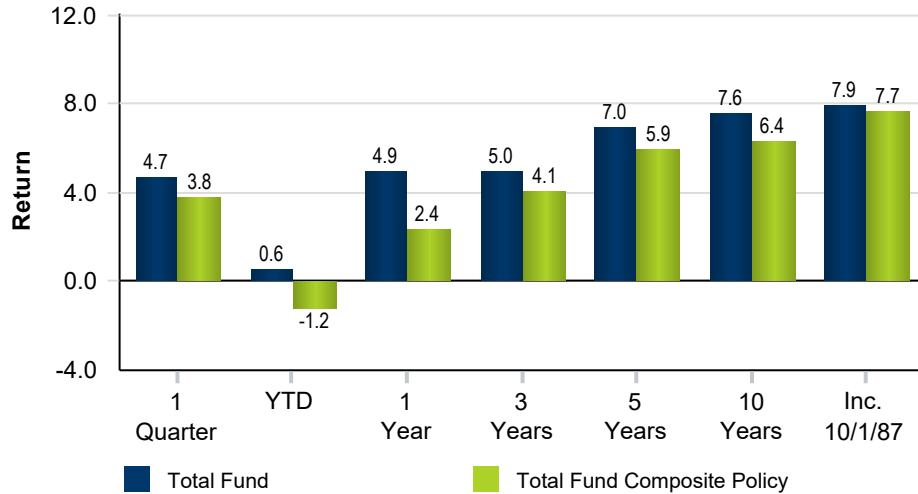
Asset Class	Current Allocation		Policy (%)	Difference to Target	
	(\$000)	(%)		(\$000)	(%)
Domestic Equity	81,457	18.7	17.8	4,136	0.9
International Equity	82,918	19.0	17.8	5,597	1.3
Global Low Volatility Equity	41,868	9.6	10.0	(1,693)	(0.4)
Private Equity	24,330	5.6	5.0	2,549	0.6
Private Credit	18,581	4.3	5.0	(3,200)	(0.7)
Total Growth Assets	249,154	57.2	55.5	7,390	1.7
Core Fixed Income	107,512	24.7	24.5	787	0.2
Cash & Equivalents	3,208	0.7	0.0	3,208	0.7
Total Safety Oriented Assets	110,720	25.4	24.5	3,995	0.9
U.S. TIPS	22,421	5.1	5.0	640	0.1
U.S. REITs	19,248	4.4	5.0	(2,533)	(0.6)
Midstream Energy Infrastructure	15,179	3.5	5.0	(6,602)	(1.5)
Commodities	18,889	4.3	5.0	(2,892)	(0.7)
Total Inflation Oriented Assets	75,737	17.4	20.0	(11,385)	(2.6)
Total Fund Assets	435,611	100.0	100.0	-	0.0

Composite Performance Summary

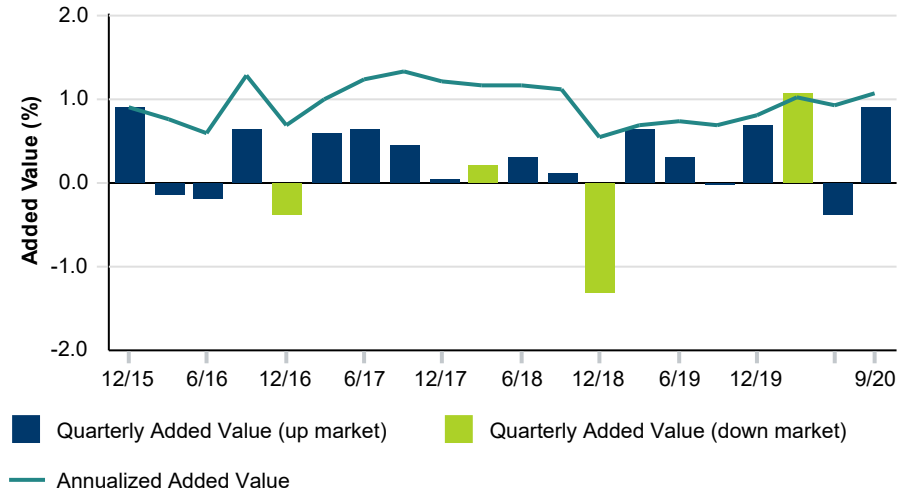
Total Fund

Periods Ended September 30, 2020

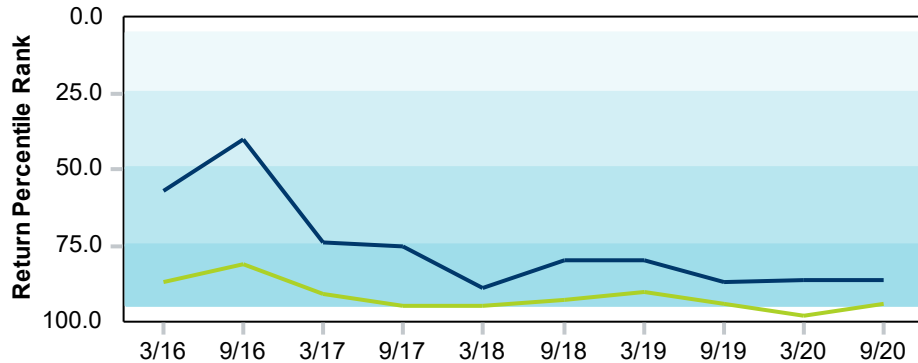
Comparative Performance



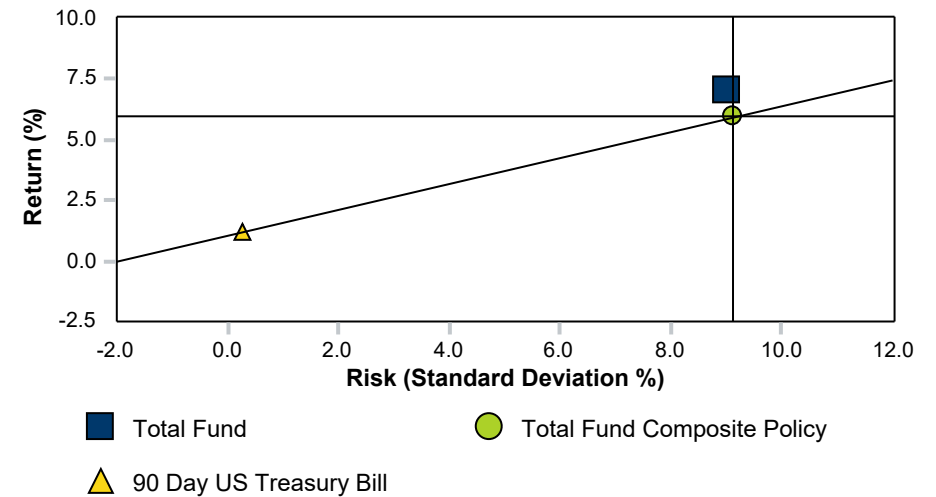
Added Value History



Rolling Percentile Rank: All Public Plans-Total Fund



Risk and Return 10/1/15 - 09/30/20

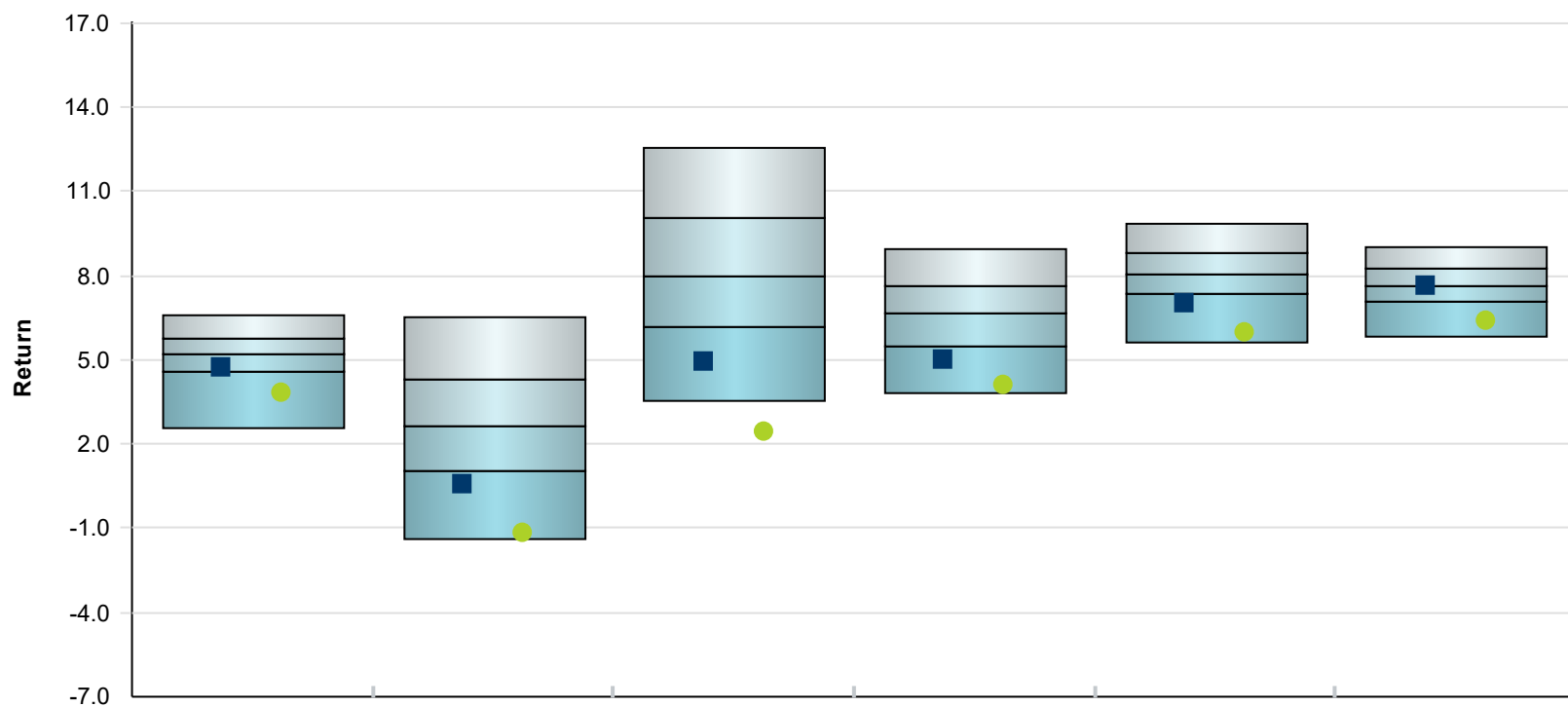


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Total Fund	10	0 (0%)	1 (10%)	3 (30%)	6 (60%)
Benchmark	10	0 (0%)	0 (0%)	0 (0%)	10 (100%)

Plan Sponsor Peer Group Analysis

Total Fund vs All Public Plans-Total Fund

Periods Ended September 30, 2020

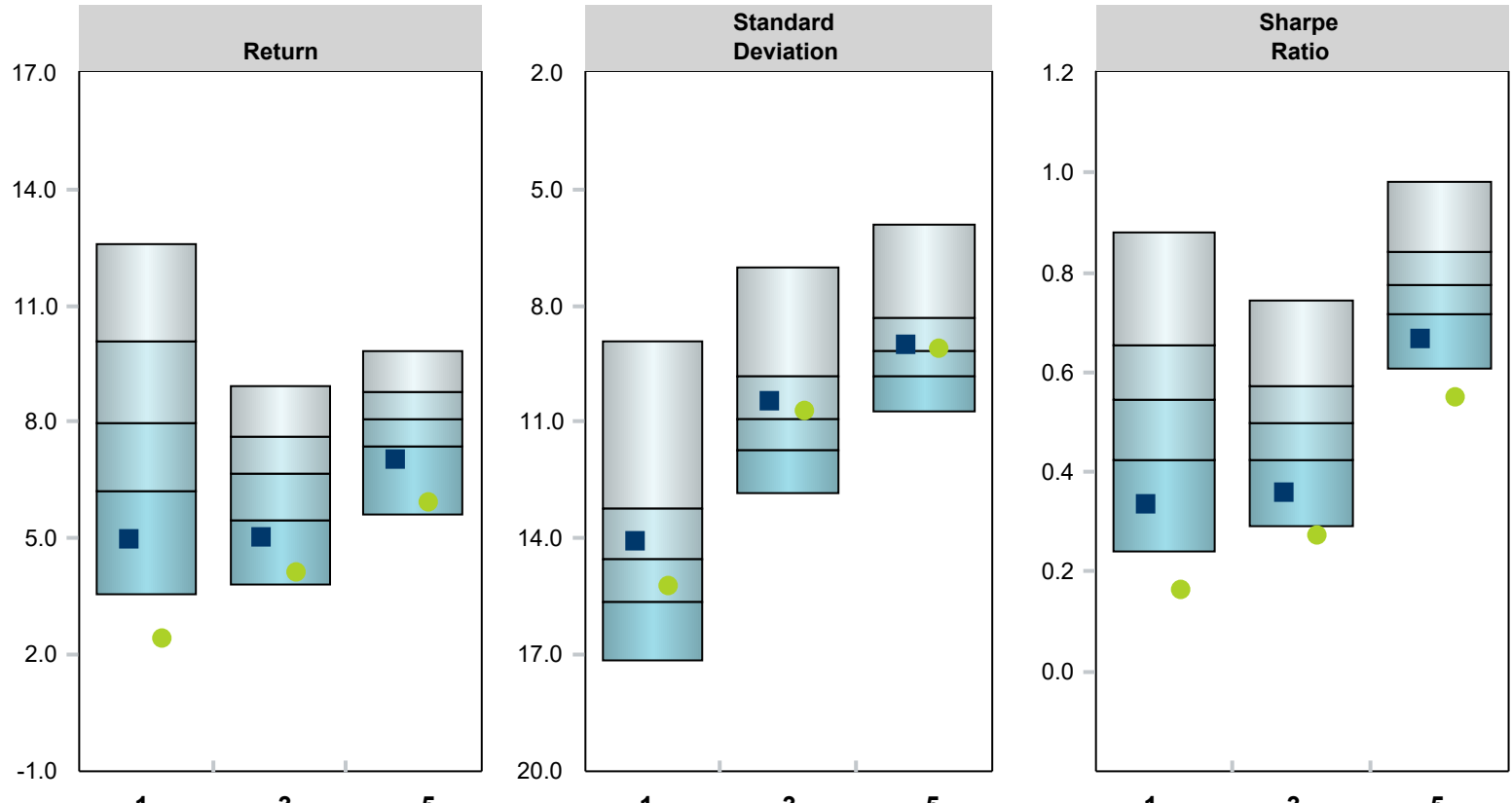


	QTD	YTD	1 Year	3 Years	5 Years	10 Years
■ Total Fund	4.71 (69)	0.59 (82)	4.95 (87)	5.03 (86)	7.01 (84)	7.63 (52)
● Total Fund Composite Policy	3.81 (90)	-1.19 (95)	2.42 (97)	4.13 (94)	5.94 (95)	6.37 (92)
5th Percentile	6.59	6.53	12.57	8.94	9.83	9.05
1st Quartile	5.77	4.32	10.08	7.61	8.78	8.28
Median	5.18	2.67	7.96	6.65	8.07	7.65
3rd Quartile	4.55	1.07	6.20	5.47	7.36	7.06
95th Percentile	2.54	-1.36	3.56	3.83	5.61	5.82
Population	557	555	552	534	499	402

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

Plan Sponsor Peer Group Analysis - Multi Statistics

Total Fund vs All Public Plans-Total Fund
 Periods Ended September 30, 2020



■ Total Fund	4.95 (87)	5.03 (86)	7.01 (84)
● Total Fund Composite Policy	2.42 (97)	4.13 (94)	5.94 (95)

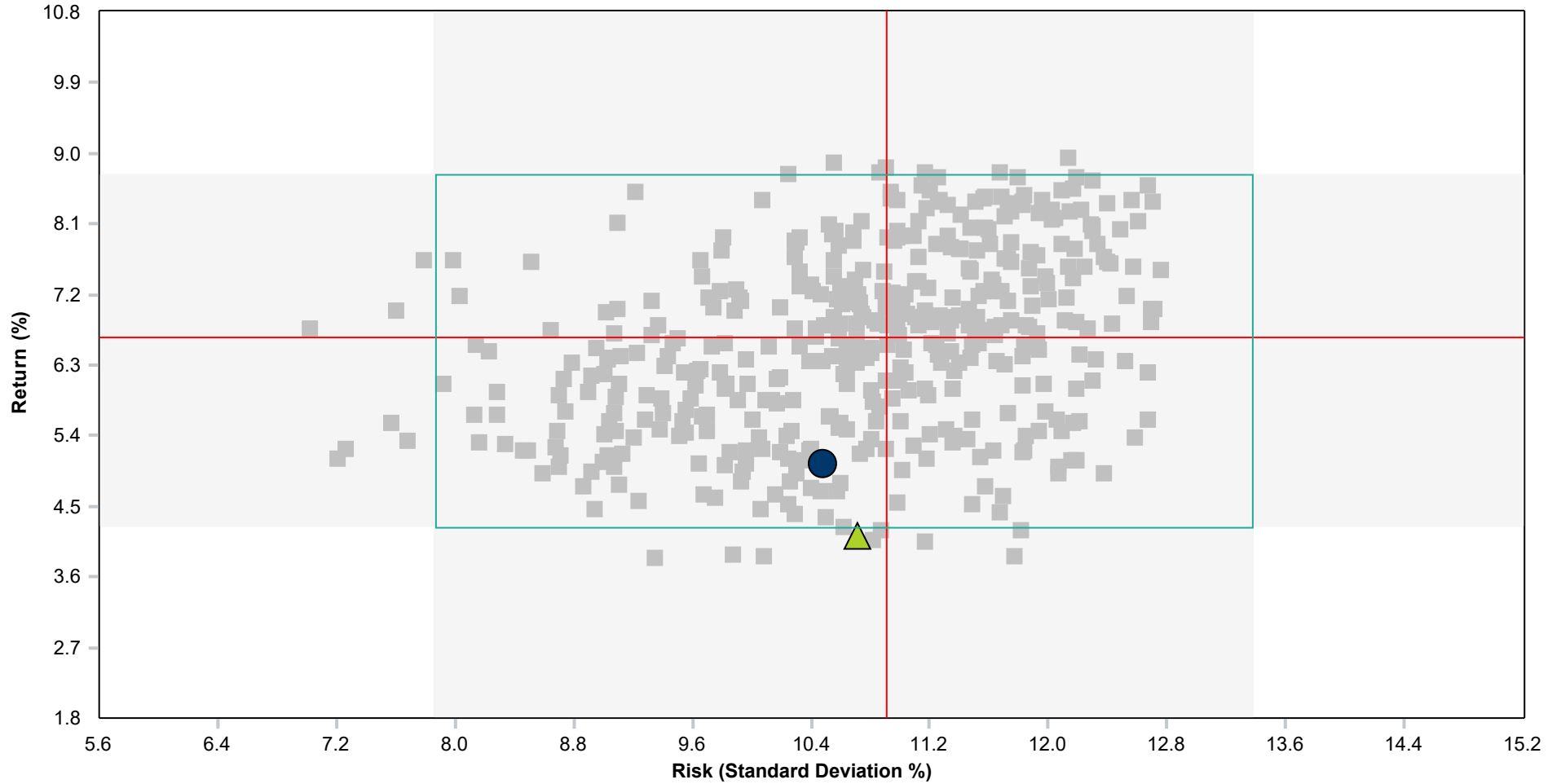
	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years
5th Percentile	12.57	8.94	9.83	8.90	7.02	5.93	0.88	0.74	0.98
1st Quartile	10.08	7.61	8.78	13.21	9.84	8.32	0.65	0.57	0.84
Median	7.96	6.65	8.07	14.55	10.91	9.16	0.54	0.50	0.77
3rd Quartile	6.20	5.47	7.36	15.61	11.71	9.83	0.43	0.42	0.72
95th Percentile	3.56	3.83	5.61	17.15	12.81	10.74	0.24	0.29	0.61

Parenteses contain percentile rankings.
 Calculation based on monthly periodicity.

Plan Sponsor Scattergram

Total Fund vs All Public Plans-Total Fund

Periods Ended October 1, 2017 To September 30, 2020



	Return	Standard Deviation
● Total Fund	5.03	10.48
▲ Total Fund Composite Policy	4.13	10.71
— Median	6.65	10.91

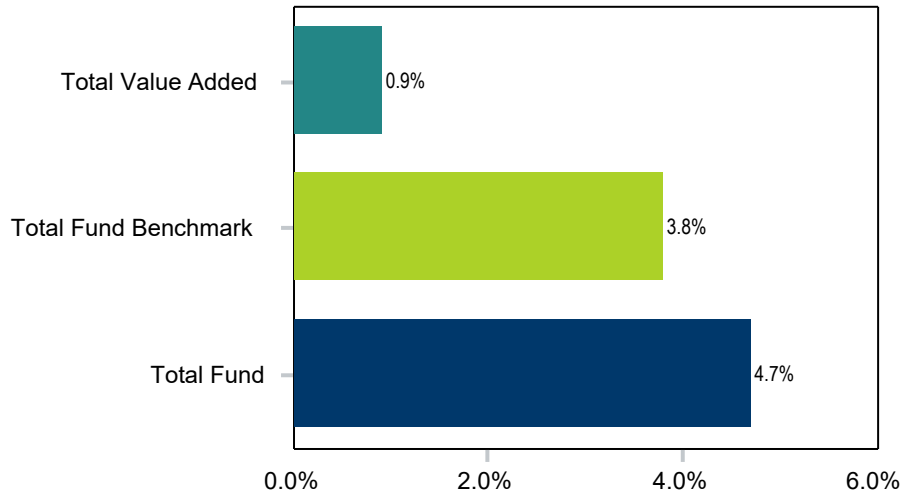
Calculation based on monthly periodicity.

Total Fund Attribution

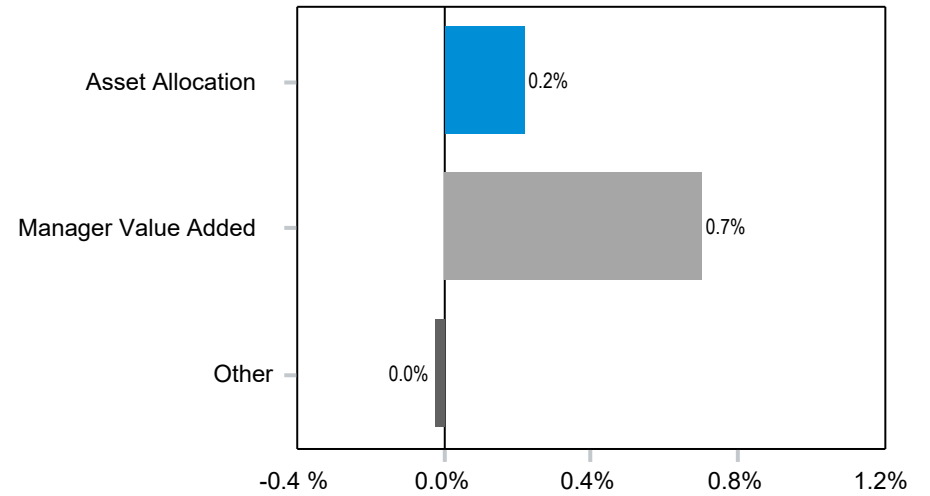
Total Fund

Periods Ended 1 Quarter Ending September 30, 2020

Total Fund Performance



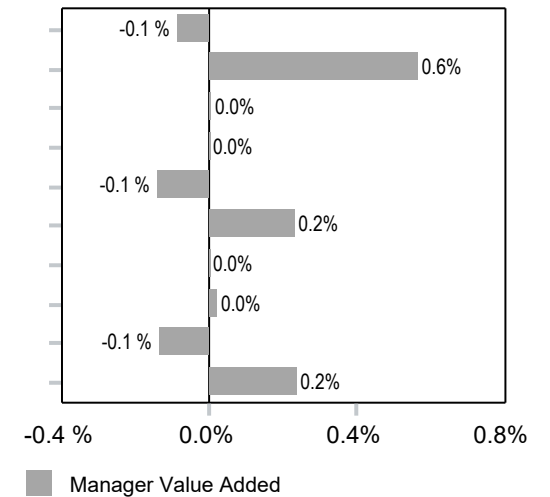
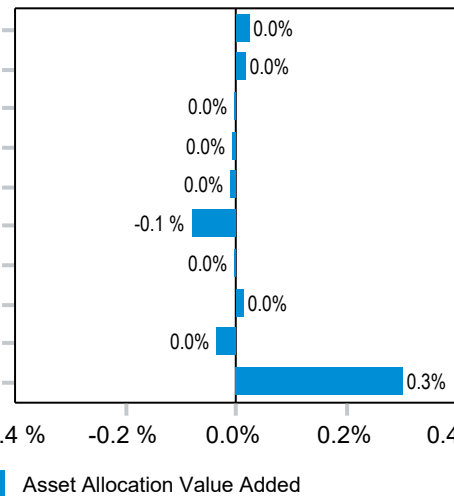
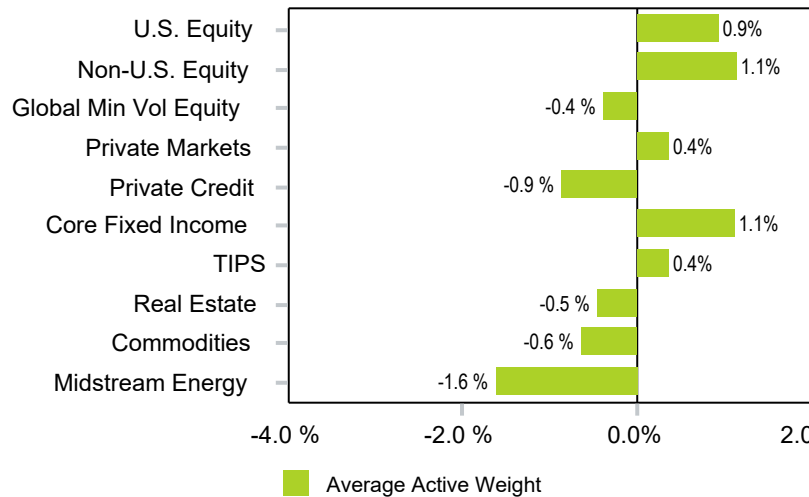
Total Value Added:0.9%



Total Asset Allocation:0.2%

Asset Allocation Value Added:0.2%

Total Manager Value Added:0.7%

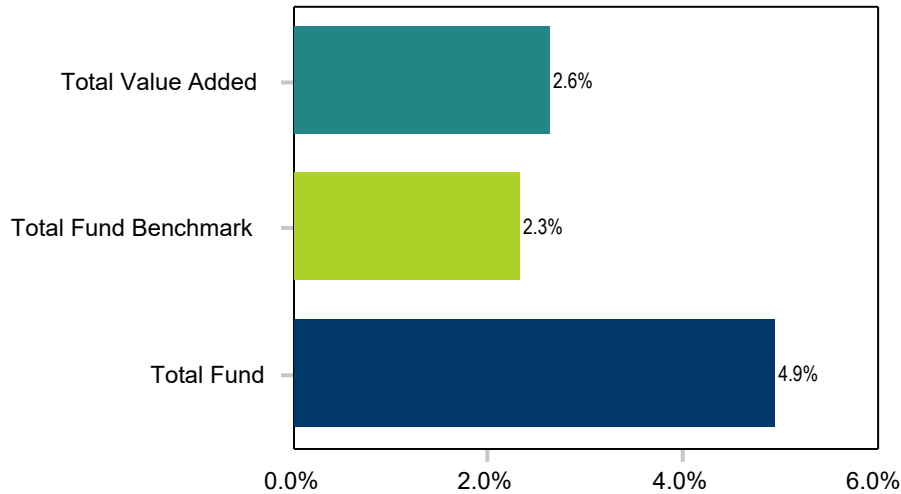


Total Fund Attribution

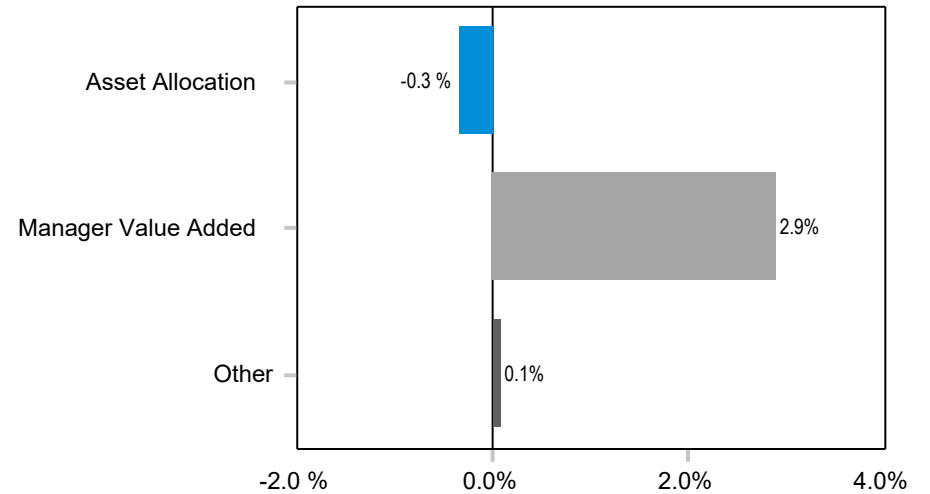
Total Fund

Periods Ended 1 Year Ending September 30, 2020

Total Fund Performance



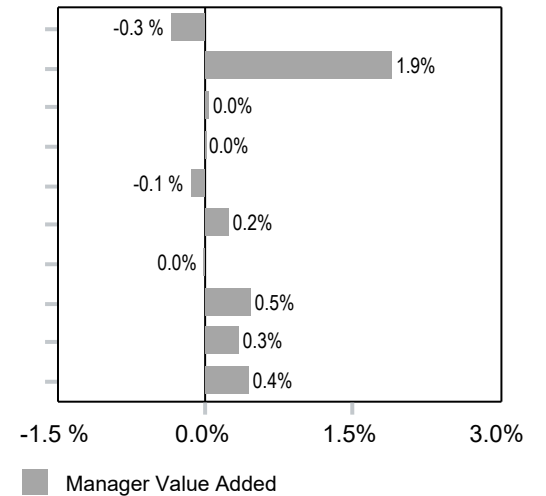
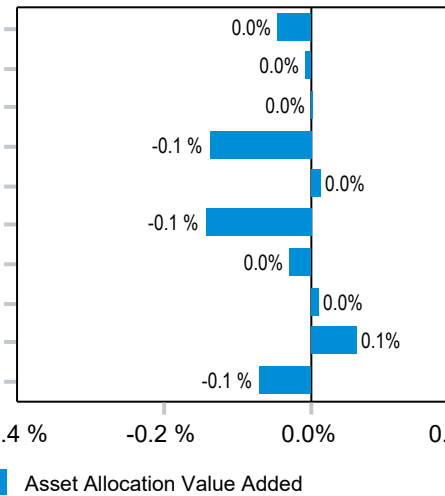
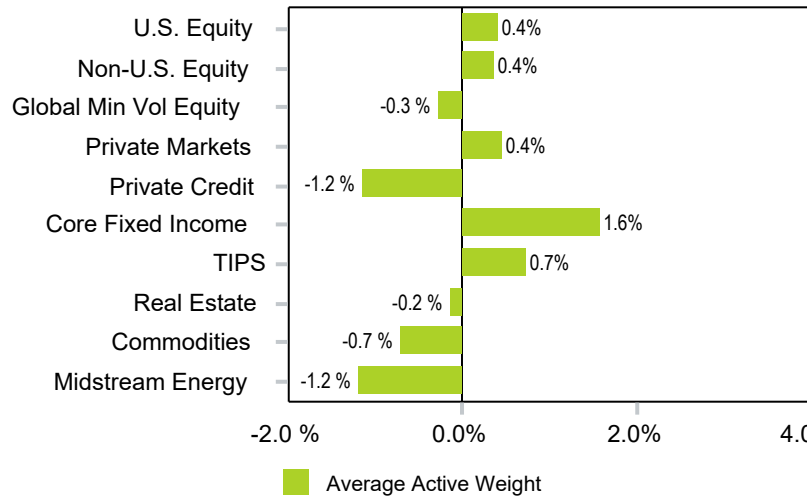
Total Value Added: 2.6%



Total Asset Allocation: -0.3%

Asset Allocation Value Added: -0.3%

Total Manager Value Added: 2.9%



Asset Allocation & Performance

Total Fund

Periods Ended September 30, 2020

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Fund	435,611,861	100.00	4.71	0.59	4.71	4.95	5.03	7.01	6.14	7.63	7.94	10/1/1987
Total Fund Composite Policy			3.81	-1.19	3.81	2.42	4.13	5.94	5.07	6.37	7.71	
Value Added			0.90	1.78	0.90	2.53	0.90	1.07	1.07	1.26	0.23	
U.S. Equity	81,456,541	18.70	8.69	3.09	8.69	12.89	10.66	13.53	12.01	13.55	9.66	10/1/1987
Wilshire 5000 Total Market TR Index			9.14	5.54	9.14	15.12	11.70	13.83	12.25	13.48	9.74	
Value Added			-0.45	-2.45	-0.45	-2.23	-1.04	-0.30	-0.24	0.07	-0.08	
Non-U.S. Equity	82,917,842	19.03	9.34	3.14	9.34	13.93	4.62	8.42	5.54	6.49	7.99	1/1/1990
International Equity Composite Policy			6.25	-5.44	6.25	3.00	1.16	6.23	3.18	4.00	4.35	
Value Added			3.09	8.58	3.09	10.93	3.46	2.19	2.36	2.49	3.64	
Global Low Volatility Equity	41,868,384	9.61	4.79	-3.23	4.79	-0.23					5.24	6/1/2019
MSCI ACWI Minimum Volatility Index (Net)			4.71	-3.50	4.71	-0.64					4.81	
Value Added			0.08	0.27	0.08	0.41					0.43	
Private Markets	24,329,794	5.59	8.44	7.38	8.44	7.84	14.82	13.32	12.91	10.00	9.49	5/1/2010
Private Markets Policy Index			8.44	7.38	8.44	7.84	14.82	13.32	12.91	10.00	9.49	
Value Added			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Private Credit	18,581,224	4.27	0.74	-4.87	0.74	-1.84					-0.32	9/1/2018
S&P/LSTA Leverage Loan Index			4.14	-0.66	4.14	1.06					2.33	
Value Added			-3.40	-4.21	-3.40	-2.90					-2.65	
Core Fixed Income	107,511,588	24.68	1.48	7.37	1.48	8.18	5.99	5.36	5.03	4.88	6.88	10/1/1987
Blmbg. Barc. U.S. Aggregate			0.62	6.79	0.62	6.98	5.24	4.18	3.97	3.64	6.43	
Value Added			0.86	0.58	0.86	1.20	0.75	1.18	1.06	1.24	0.45	
Total Real Assets Composite	75,738,061	17.39	0.52	-12.12	0.52	-11.30	-2.26	0.01			-1.98	4/1/2015
Real Assets Composite Policy			0.18	-11.17	0.18	-10.81	-1.84	0.24			-1.76	
Value Added			0.34	-0.95	0.34	-0.49	-0.42	-0.23			-0.22	

Asset Allocation & Performance

Total Fund

Periods Ended September 30, 2020

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
TIPS	22,421,293	5.15	3.05	8.98	3.05	9.72	5.60	4.51			3.60	5/1/2015
Blmbg. Barc. U.S. TIPS			3.03	9.22	3.03	10.08	5.79	4.61			3.68	
Value Added			0.02	-0.24	0.02	-0.36	-0.19	-0.10			-0.08	
Real Estate	19,248,350	4.42	1.27	-14.41	1.27	-14.57	-0.29	1.80	2.50	4.38	7.18	6/1/2009
Real Estate Policy Index			0.83	-21.36	0.83	-22.33	-3.10	1.00	1.93	4.22	7.28	
Value Added			0.44	6.95	0.44	7.76	2.81	0.80	0.57	0.16	-0.10	
Commodities	18,889,095	4.34	6.04	-4.84	6.04	-0.30	-0.05	0.54	-4.70		-5.98	2/1/2013
Bloomberg Commodity Index Total Return			9.07	-12.08	9.07	-8.20	-4.18	-3.09	-7.24		-8.00	
Value Added			-3.03	7.24	-3.03	7.90	4.13	3.63	2.54		2.02	
Midstream Energy Composite	15,179,324	3.48	-10.16	-39.34	-10.16	-40.04	-16.33	-8.77			-12.92	3/1/2015
Midstream Energy Policy Index			-16.26	-46.16	-16.26	-48.35	-21.66	-14.94			-19.47	
Value Added			6.10	6.82	6.10	8.31	5.33	6.17			6.55	

Historical Hybrid Composition

Grand Rapids General Retirement System

Periods Ended September 30, 2020

Policy Index	Weight (%)
Jan-1976	
Wilshire 5000 Total Market TR Index	55.00
Blmbg. Barc. U.S. Aggregate	40.00
MSCI EAFE Index (Net)	5.00
Jul-1998	
Wilshire 5000 Total Market TR Index	50.00
Blmbg. Barc. U.S. Aggregate	40.00
MSCI EAFE Index (Net)	10.00
Oct-2002	
Wilshire 5000 Total Market TR Index	50.00
Blmbg. Barc. U.S. Aggregate	35.00
MSCI EAFE Index (Net)	15.00
Apr-2006	
Wilshire 5000 Total Market TR Index	55.00
Blmbg. Barc. U.S. Aggregate	30.00
MSCI EAFE Index (Net)	15.00
Jul-2006	
Wilshire 5000 Total Market TR Index	55.00
Blmbg. Barc. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
Jul-2009	
Wilshire 5000 Total Market TR Index	50.00
Blmbg. Barc. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00

Policy Index	Weight (%)
Apr-2010	
Wilshire 5000 Total Market TR Index	50.00
Blmbg. Barc. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
May-2010	
Wilshire 5000 Total Market TR Index	45.00
Blmbg. Barc. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Markets	5.00
Jul-2010	
Wilshire 5000 Total Market TR Index	45.00
Blmbg. Barc. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Markets Policy Index	5.00
Jan-2013	
Wilshire 5000 Total Market TR Index	40.00
Blmbg. Barc. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Markets Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00

Historical Hybrid Composition

Grand Rapids General Retirement System

Periods Ended September 30, 2020

Policy Index	Weight (%)
Apr-2015	
Wilshire 5000 Total Market TR Index	22.50
Blmbg. Barc. U.S. Aggregate	25.00
MSCI AC World ex USA (Net)	22.50
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Markets Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00
S&P MLP Index	5.00
Blmbg. Barc. U.S. TIPS	10.00
Dec-2018	
Wilshire 5000 Total Market TR Index	22.50
Blmbg. Barc. U.S. Aggregate	25.00
MSCI AC World ex USA (Net)	22.50
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Markets Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00
S&P MLP Index	5.00
Blmbg. Barc. U.S. TIPS	10.00
Jul-2019	
Wilshire 5000 Total Market TR Index	17.75
Blmbg. Barc. U.S. Aggregate	24.50
MSCI AC World ex USA (Net)	17.75
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Markets Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00
Alerian MLP Index	5.00
Blmbg. Barc. U.S. TIPS	5.00
S&P LSTA Leverage Loan Index	5.00
MSCI ACWI Minimum Volatility Index (Net)	10.00

Policy Index	Weight (%)
Oct-2019	
Wilshire 5000 Total Market TR Index	17.75
MSCI AC World ex USA (Net)	17.75
MSCI ACWI Minimum Volatility Index (Net)	10.00
Private Markets Policy Index	5.00
S&P LSTA Leverage Loan Index	5.00
Blmbg. Barc. U.S. Aggregate	24.50
Blmbg. Barc. U.S. TIPS	5.00
Dow Jones U.S. Select REIT	5.00
Bloomberg Commodity Index Total Return	5.00
Alerian MLP Index	5.00



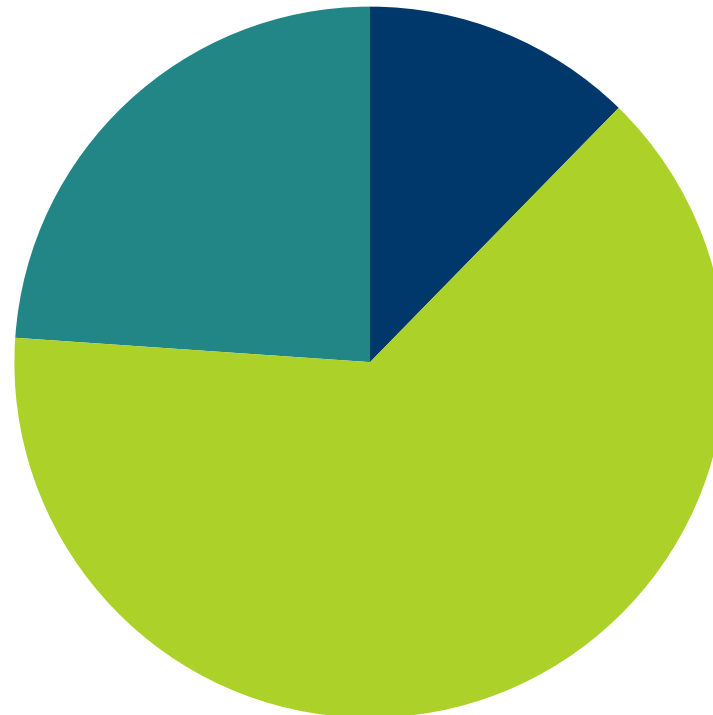
U.S. Equity Composite

Asset Allocation By Manager

U.S. Equity

Periods Ended September 30, 2020

Sep-2020 : 81,456,541



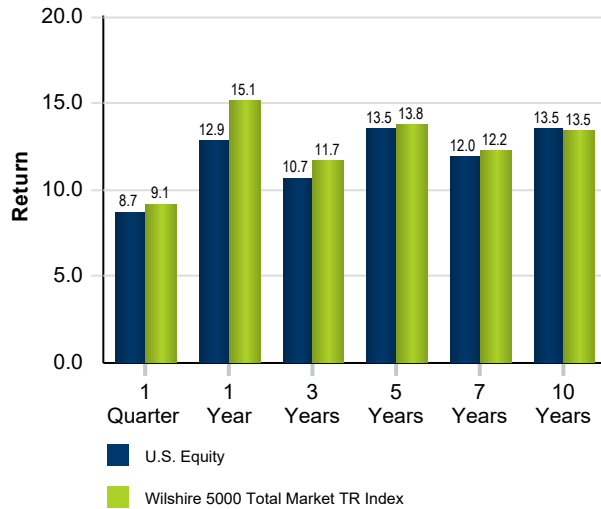
	Market Value \$	Allocation (%)
■ PIMCO Stock Plus	10,032,094	12.3
■ NTAM S&P 500	51,948,740	63.8
■ Wellington Small Cap	19,475,706	23.9

Performance Summary

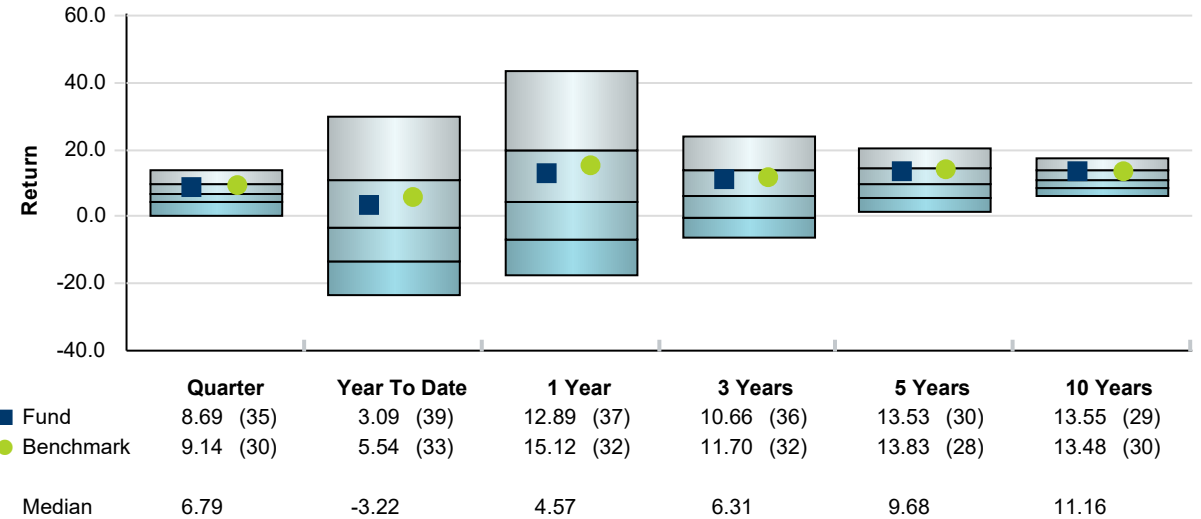
U.S. Equity

Periods Ended September 30, 2020

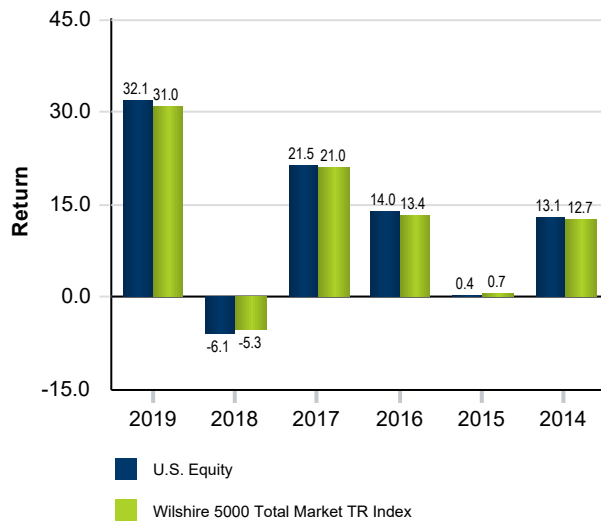
Comparative Performance



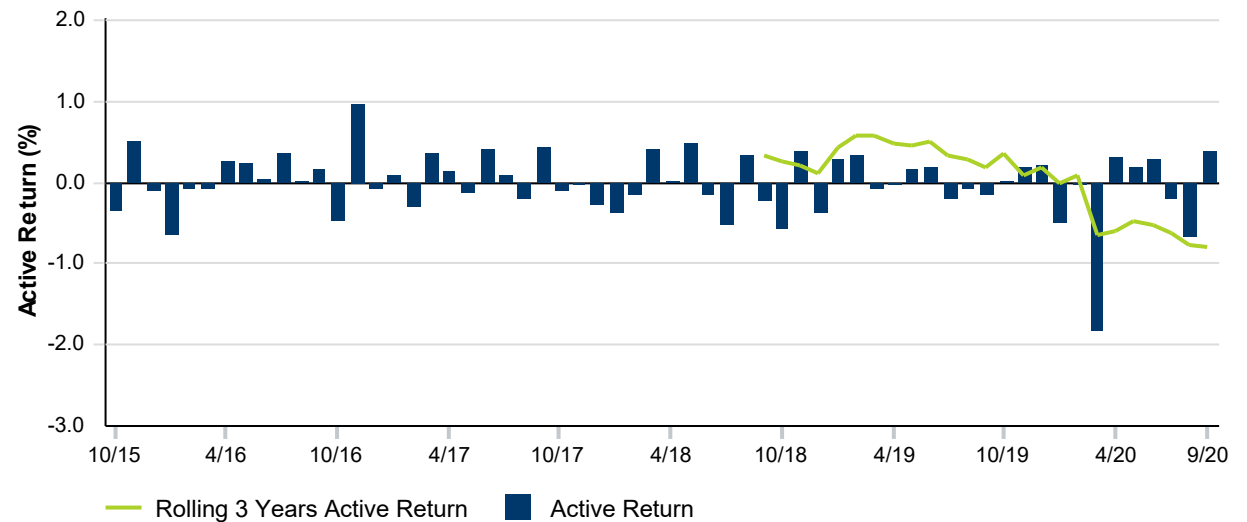
Peer Group Analysis: IM U.S. Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

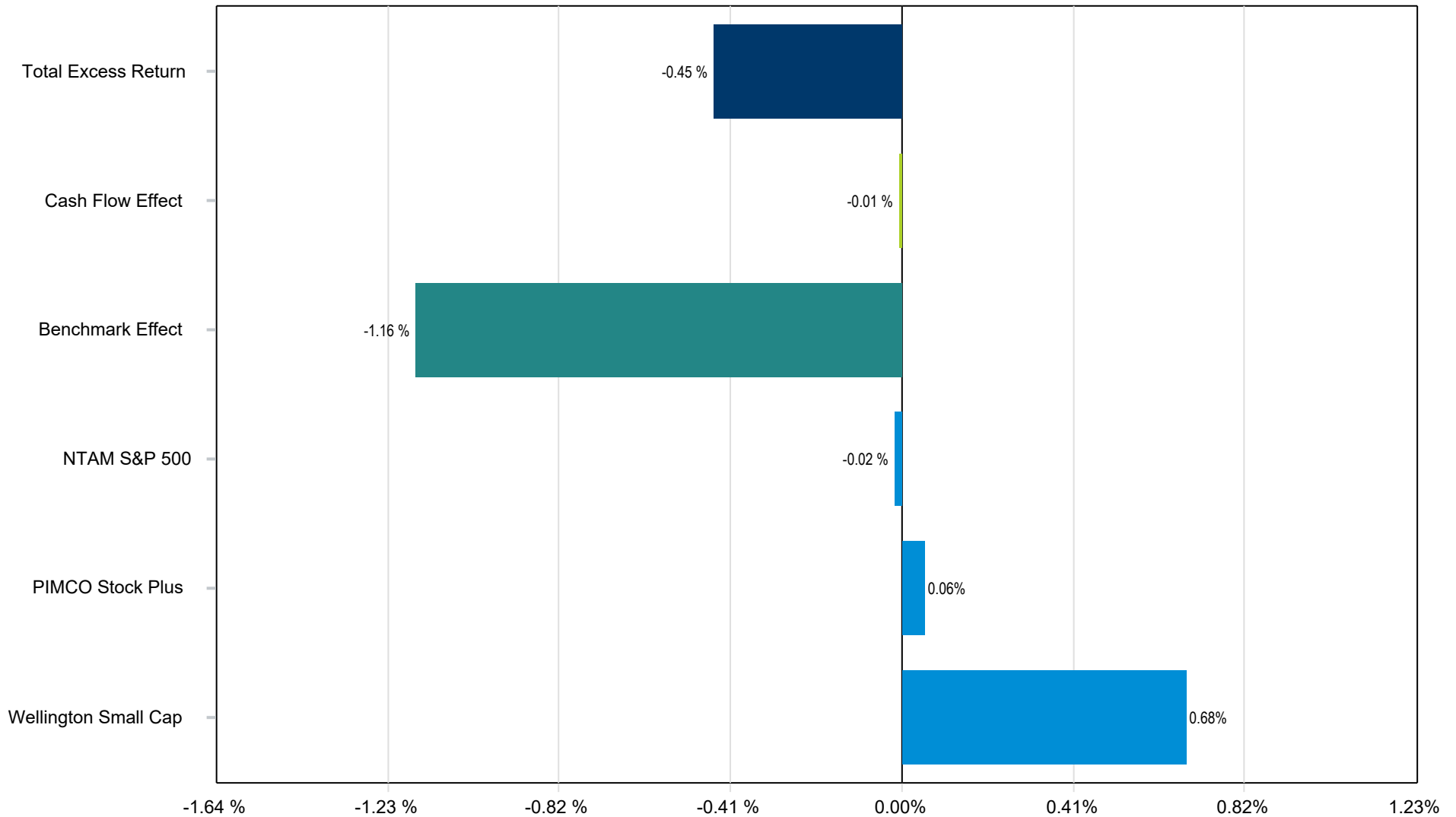


Asset Class Attribution

U.S. Equity

Periods Ended 1 Quarter Ending September 30, 2020

1 Quarter



Asset Allocation & Performance

U.S. Equity

Periods Ended September 30, 2020

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
U.S. Equity	81,456,541	100.00	8.69	3.09	8.69	12.89	10.66	13.53	12.01	13.55	9.66	10/1/1987
Wilshire 5000 Total Market TR Index			9.14	5.54	9.14	15.12	11.70	13.83	12.25	13.48	9.74	
Value Added			-0.45	-2.45	-0.45	-2.23	-1.04	-0.30	-0.24	0.07	-0.08	
NTAM S&P 500	51,948,740	63.77	8.90	5.60	8.90	15.17	12.30	14.16	12.70	13.76	8.30	4/1/1998
NTAM Policy			8.93	5.57	8.93	15.15	12.28	14.15	12.68	13.74	7.24	
Value Added			-0.03	0.03	-0.03	0.02	0.02	0.01	0.02	0.02	1.06	
PIMCO Stock Plus	10,032,094	12.32	9.39	6.19	9.39	15.99	12.56	14.59	12.86	14.48	6.57	6/1/2000
S&P 500			8.93	5.57	8.93	15.15	12.28	14.15	12.68	13.74	6.39	
Value Added			0.46	0.62	0.46	0.84	0.28	0.44	0.18	0.74	0.18	
Wellington Small Cap	19,475,706	23.91	7.75	-4.67	7.75	5.68	5.75	11.42	9.86	12.93	10.78	9/1/1999
Russell 2000 Index			4.93	-8.69	4.93	0.39	1.77	8.00	6.42	9.85	7.59	
Value Added			2.82	4.02	2.82	5.29	3.98	3.42	3.44	3.08	3.19	



Non-U.S. Equity Composite

Asset Allocation By Manager

Non-U.S. Equity

Periods Ended September 30, 2020

Sep-2020 : 82,917,842



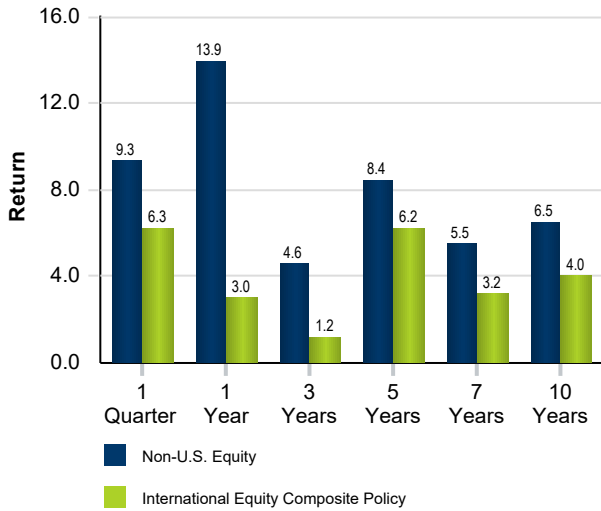
	Market Value \$	Allocation (%)
■ Harding Loevner	41,047,552	49.5
■ Neuberger Berman CIT	41,870,290	50.5

Performance Summary

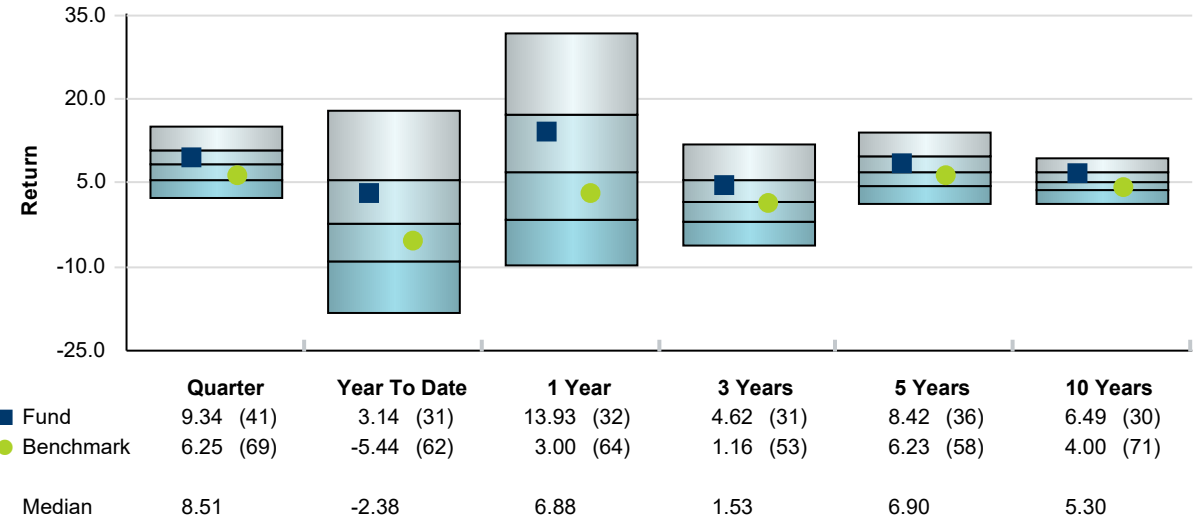
Non-U.S. Equity

Periods Ended September 30, 2020

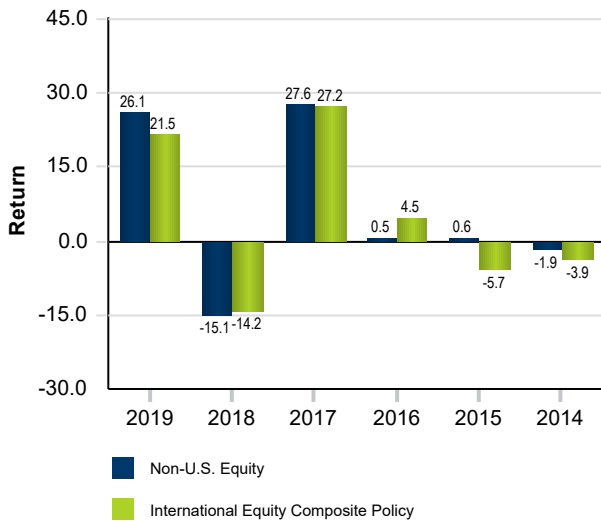
Comparative Performance



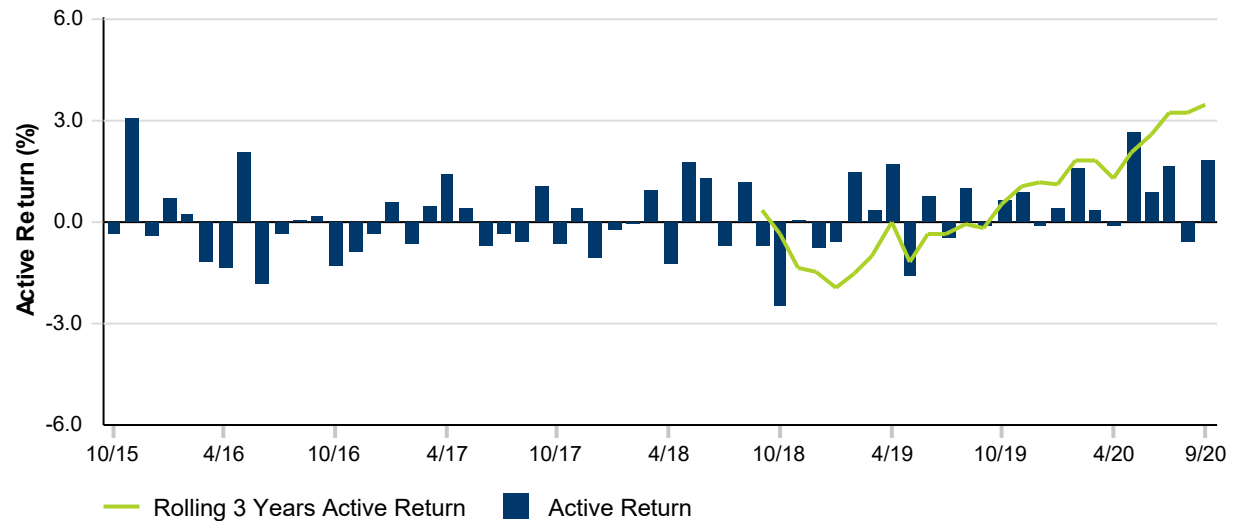
Peer Group Analysis: IM International Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

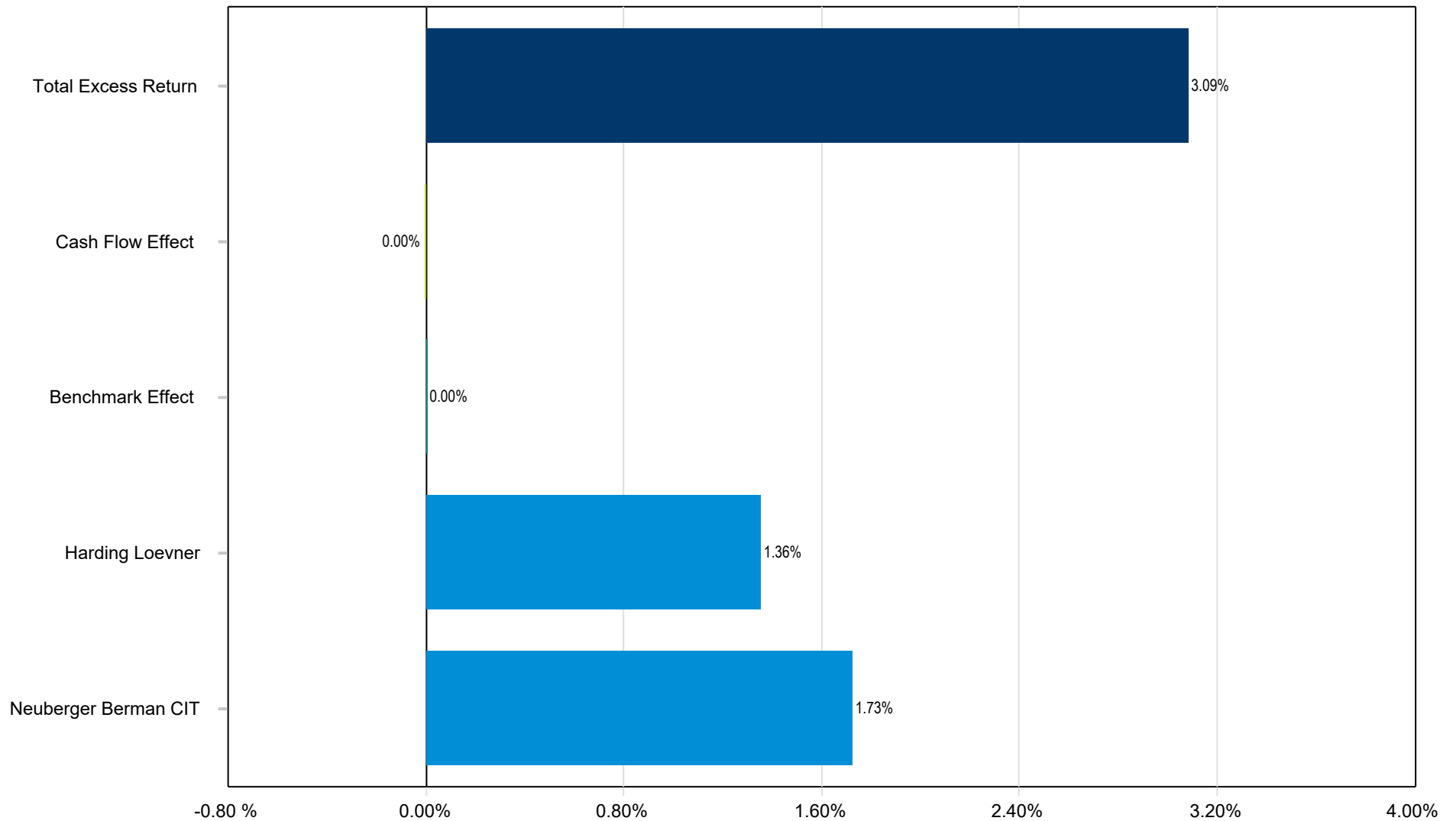


Asset Class Attribution

Non-U.S. Equity

Periods Ended 1 Quarter Ending September 30, 2020

1 Quarter



Asset Allocation & Performance

Non-U.S. Equity

Periods Ended September 30, 2020

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Non-U.S. Equity	82,917,842	100.00	9.34	3.14	9.34	13.93	4.62	8.42	5.54	6.49	7.99	1/1/1990
International Equity Composite Policy			6.25	-5.44	6.25	3.00	1.16	6.23	3.18	4.00	4.35	
Value Added			3.09	8.58	3.09	10.93	3.46	2.19	2.36	2.49	3.64	
Harding Loevner	41,047,552	49.50	8.94	4.95	8.94	15.39	4.72	9.43			6.15	4/1/2015
MSCI AC World ex USA (Net)			6.25	-5.44	6.25	3.00	1.16	6.23			3.28	
Value Added			2.69	10.39	2.69	12.39	3.56	3.20			2.87	
Neuberger Berman CIT	41,870,290	50.50	9.74	1.09	9.74	12.18					4.97	7/1/2018
MSCI AC World ex USA (Net)			6.25	-5.44	6.25	3.00					1.08	
Value Added			3.49	6.53	3.49	9.18					3.89	



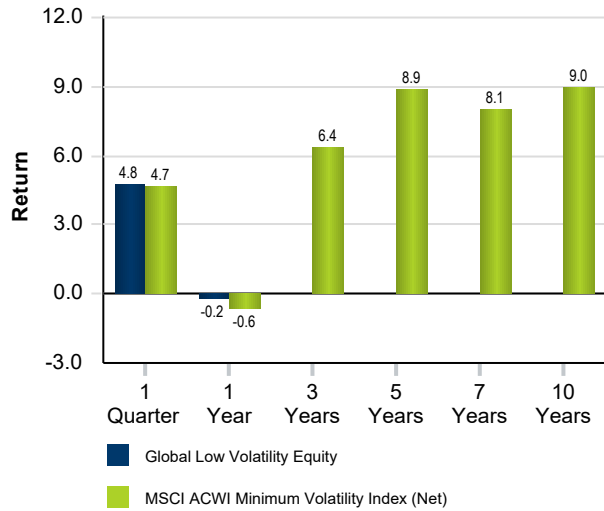
Global Equity Min Vol Composite

Performance Summary

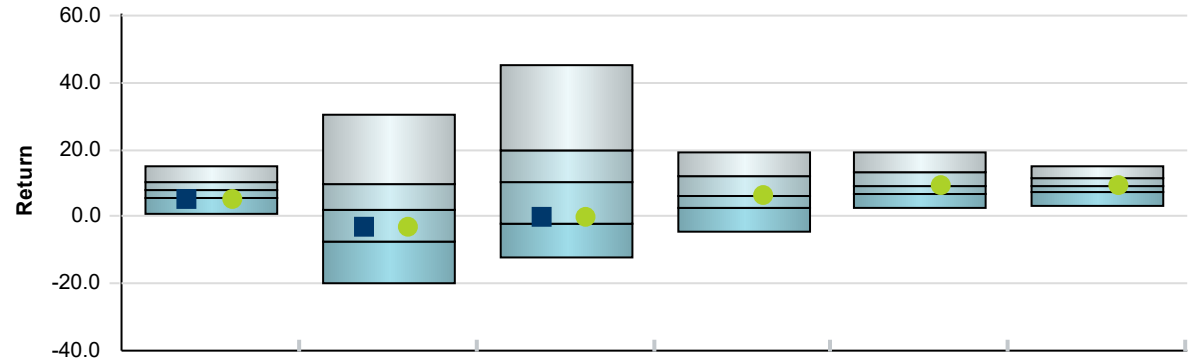
Global Low Volatility Equity

Periods Ended September 30, 2020

Comparative Performance

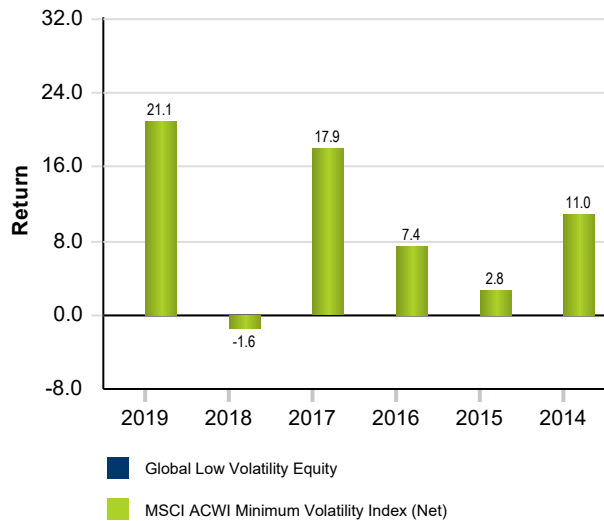


Peer Group Analysis: IM Global Equity (SA+CF)

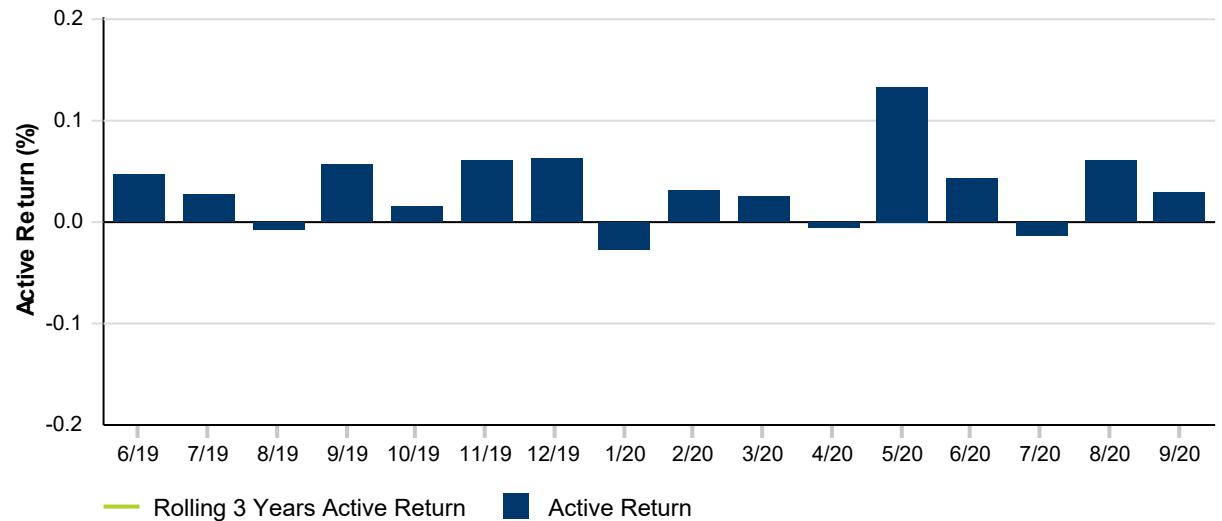


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
■ Fund	4.79 (79)	-3.23 (66)	-0.23 (73)	6.40 (50)	8.90 (55)	9.00 (51)
● Benchmark	4.71 (79)	-3.50 (67)	-0.64 (73)	6.40 (50)	8.90 (55)	9.00 (51)
Median	8.05	2.29	10.32	6.34	9.34	9.06

Comparative Performance



Rolling 3 Years Performance



Asset Allocation & Performance

Global Low Volatility Equity

Periods Ended September 30, 2020

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Global Low Volatility Equity	41,868,384	100.00	4.79	-3.23	4.79	-0.23					5.24	6/1/2019
MSCI ACWI Minimum Volatility Index (Net)			4.71	-3.50	4.71	-0.64					4.81	
Value Added			0.08	0.27	0.08	0.41					0.43	
BlackRock MSCI ACWI Min Vol	41,868,384	100.00	4.79	-3.23	4.79	-0.23					5.24	6/1/2019
MSCI ACWI Minimum Volatility Index (Net)			4.71	-3.50	4.71	-0.64					4.81	
Value Added			0.08	0.27	0.08	0.41					0.43	



Alternative Investments

Private Equity Composite Overview

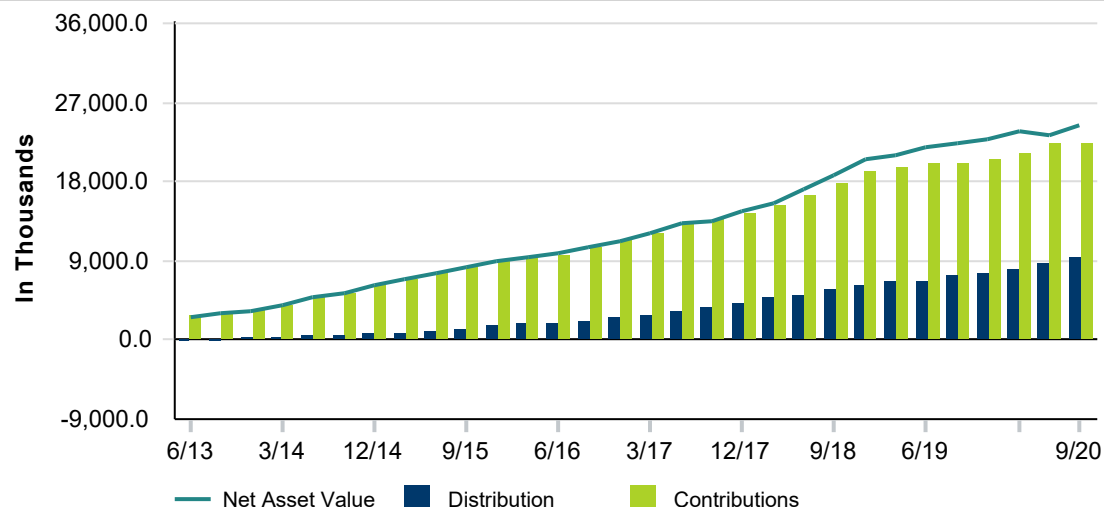
Private Markets

Periods Ended As of September 30, 2020

Cash Flow Summary

Capital Committed:	34,500,000
Capital Invested:	4,052,500
Total Contributions:	22,297,250
Remaining Capital Commitment:	12,571,505
Total Distributions:	9,485,326
Market Value:	24,329,794
Inception Date:	5/1/2010
Inception IRR:	12.2
TVPI:	1.5

Cash Flow Analysis



Private Equity Portfolio

Partnerships	Capital Committed \$	Total Contribution \$	Total Distribution \$	Market Value \$	IRR (%)	TVPI Multiple (%)
Adams Street 2010 Direct Fund	500,000	480,500	602,035	236,291	11.8	1.7
Adams Street 2010 EM Fund	500,000	449,000	207,746	561,319	10.1	1.7
Adams Street 2010 Non-US Fund	1,500,000	1,313,250	1,281,105	883,990	11.7	1.6
Adams Street 2010 US Fund	2,500,000	2,202,500	2,267,522	1,752,495	13.3	1.8
Adams Street 2013 Global Fund	5,000,000	4,090,000	1,373,177	5,137,417	11.5	1.6
Adams Street 2015 Global	6,500,000	4,732,000	1,100,888	6,104,455	19.9	1.5
Adams Street 2017 Global Fund	6,000,000	3,513,000	117,545	3,837,763	8.3	1.1
Aberdeen Global	5,000,000	4,950,000	2,535,308	5,185,846	10.1	1.6
Adams Street 2019 Global	7,000,000	567,000		630,218	20.0	1.1
Private Markets	34,500,000	22,297,250	9,485,326	24,329,794	12.2	1.5

Private Equity Composite Overview

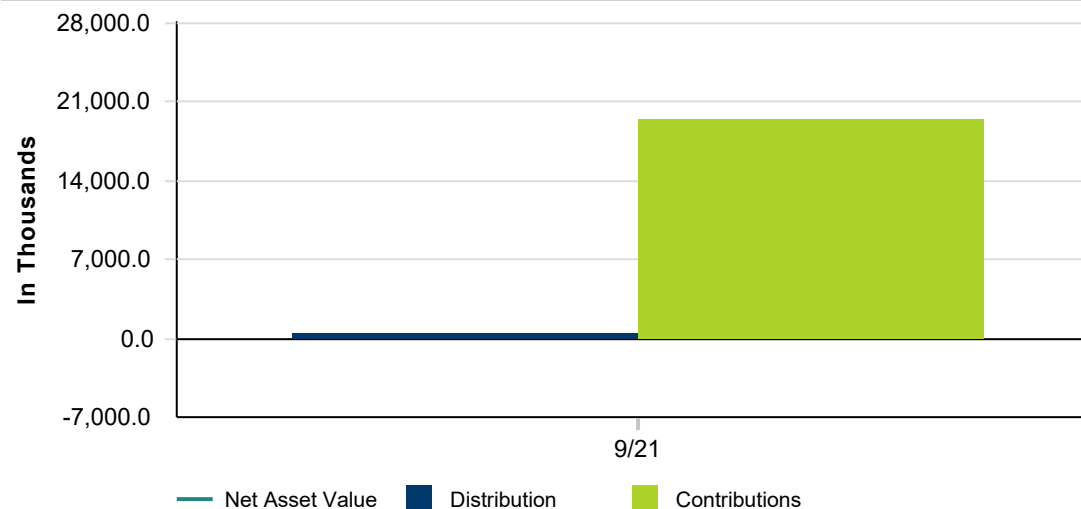
Private Credit

Periods Ended As of September 30, 2020

Cash Flow Summary

Capital Committed:	21,000,000
Capital Invested:	2,184,700
Total Contributions:	19,502,728
Remaining Capital Commitment:	1,497,272
Total Distributions:	536,200
Market Value:	18,581,224
Inception Date:	9/30/2018
Inception IRR:	-1.6
TVPI:	1.0

Cash Flow Analysis



Private Equity Portfolio

Partnerships	Capital Committed \$	Total Contribution \$	Total Distribution \$	Market Value \$	IRR (%)	TVPI Multiple (%)
50 South Capital Private Credit	7,000,000	5,502,728	536,200	4,543,332	-8.1	0.9
Grosvenor PC	14,000,000	14,000,000		14,037,892	0.2	1.0
Private Credit	21,000,000	19,502,728	536,200	18,581,224	-1.6	1.0



Core Fixed Composite

Asset Allocation By Manager

Core Fixed Income

Periods Ended September 30, 2020

Sep-2020 : 107,511,588



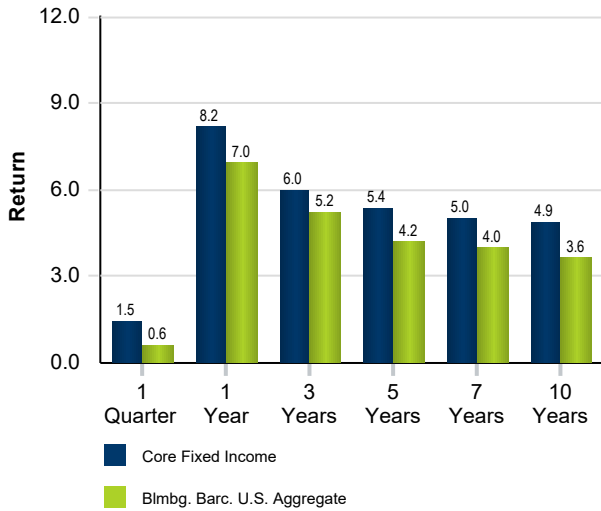
	Market Value \$	Allocation (%)
■ Baird Advisors	54,342,313	50.5
■ Western Asset Management	53,169,275	49.5

Performance Summary

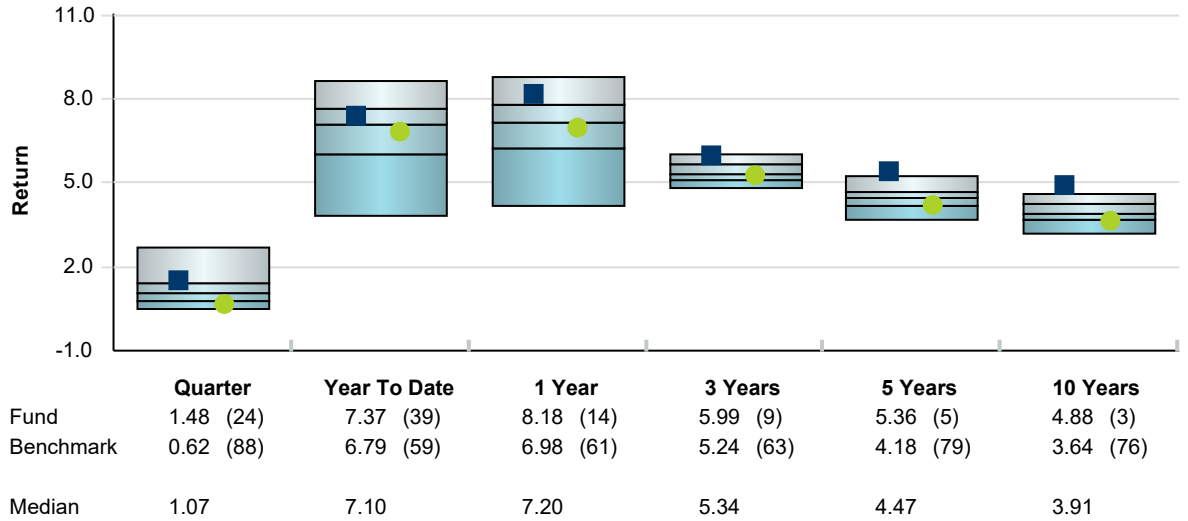
Core Fixed Income

Periods Ended September 30, 2020

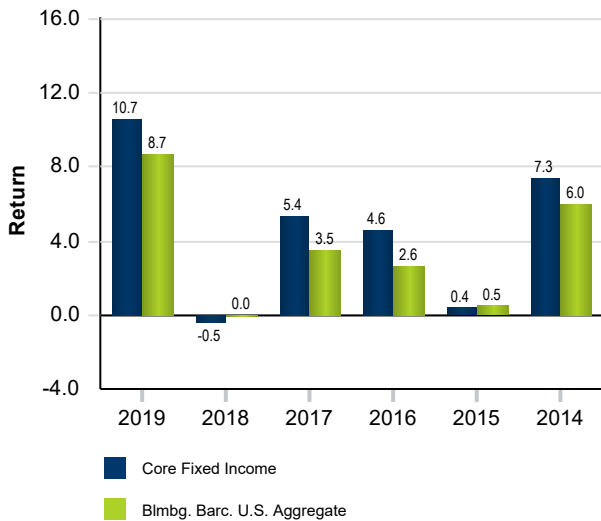
Comparative Performance



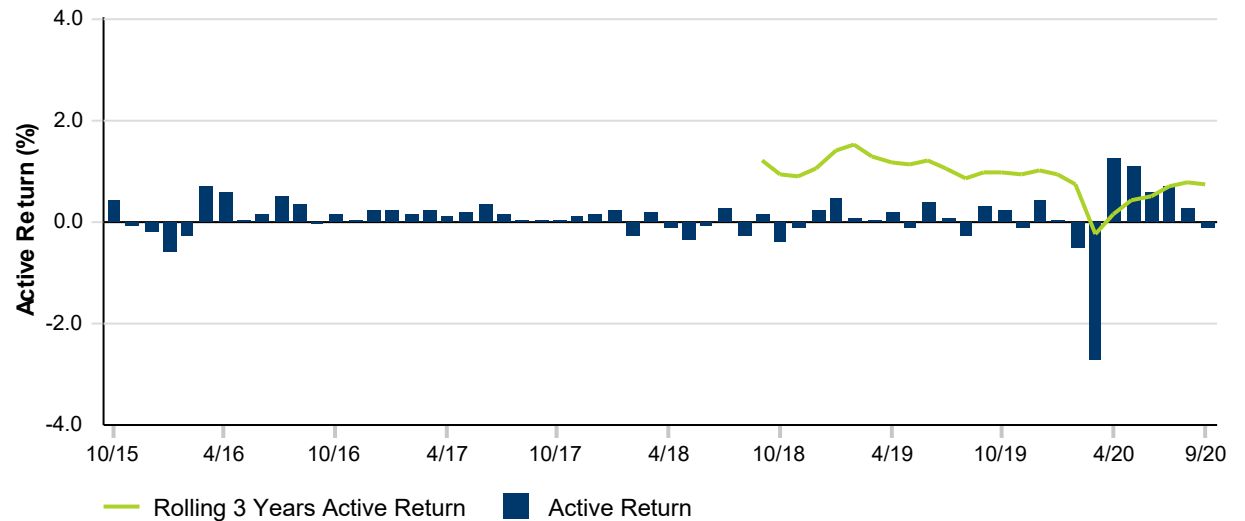
Peer Group Analysis: IM U.S. Broad Market Core Fixed Income (SA+CF)



Comparative Performance



Rolling 3 Years Performance

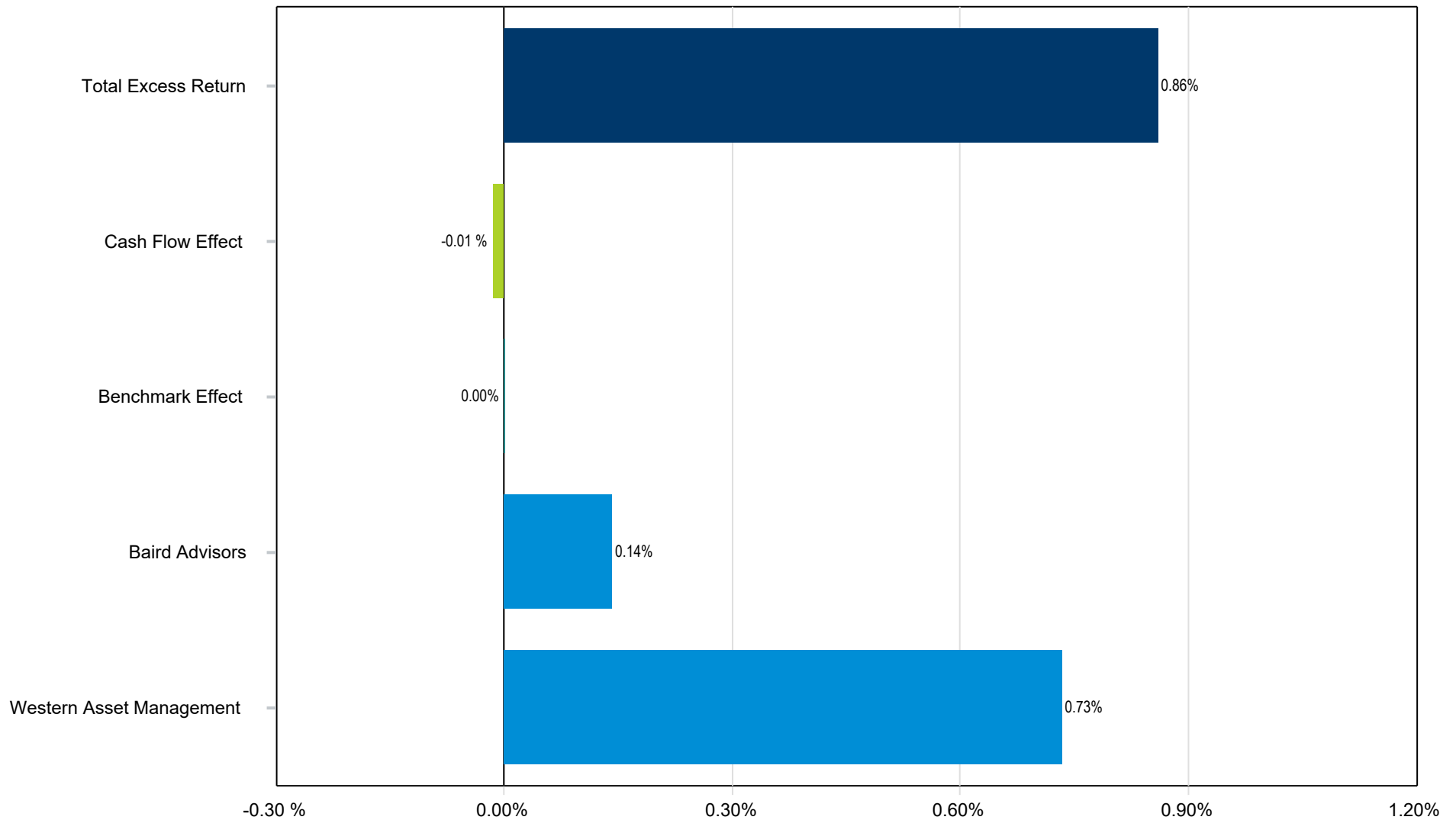


Asset Class Attribution

Core Fixed Income

Periods Ended 1 Quarter Ending September 30, 2020

1 Quarter



Asset Allocation & Performance

Core Fixed Income

Periods Ended September 30, 2020

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Core Fixed Income	107,511,588	100.00	1.48	7.37	1.48	8.18	5.99	5.36	5.03	4.88	6.88	10/1/1987
Blmbg. Barc. U.S. Aggregate			0.62	6.79	0.62	6.98	5.24	4.18	3.97	3.64	6.43	
Value Added			0.86	0.58	0.86	1.20	0.75	1.18	1.06	1.24	0.45	
Baird Advisors	54,342,313	50.55	0.90	7.53	0.90	7.71	5.76	4.80	4.58	4.35	4.70	12/1/2002
Blmbg. Barc. U.S. Aggregate			0.62	6.79	0.62	6.98	5.24	4.18	3.97	3.64	4.47	
Value Added			0.28	0.74	0.28	0.73	0.52	0.62	0.61	0.71	0.23	
Western Asset Management	53,169,275	49.45	2.04	7.16	2.04	8.58	6.15	5.87	5.44	5.34	5.48	1/1/2004
Blmbg. Barc. U.S. Aggregate			0.62	6.79	0.62	6.98	5.24	4.18	3.97	3.64	4.38	
Value Added			1.42	0.37	1.42	1.60	0.91	1.69	1.47	1.70	1.10	



Real Estate

Asset Allocation & Performance

Real Estate

Periods Ended September 30, 2020

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Real Estate	19,248,350	100.00	1.27	-14.41	1.27	-14.57	-0.29	1.80	2.50	4.38	7.18	6/1/2009
Real Estate Policy Index			0.83	-21.36	0.83	-22.33	-3.10	1.00	1.93	4.22	7.28	
Value Added			0.44	6.95	0.44	7.76	2.81	0.80	0.57	0.16	-0.10	
Centersquare	19,248,350	100.00	1.27	-14.41	1.27	-14.43					-14.43	10/1/2019
Dow Jones U.S. Select REIT			0.83	-21.36	0.83	-22.33					-22.33	
Value Added			0.44	6.95	0.44	7.90					7.90	



Commodities

Asset Allocation & Performance

Commodities

Periods Ended September 30, 2020

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Commodities	18,889,095	100.00	6.04	-4.84	6.04	-0.30	-0.05	0.54	-4.70		-5.98	2/1/2013
Bloomberg Commodity Index Total Return			9.07	-12.08	9.07	-8.20	-4.18	-3.09	-7.24		-8.00	
Value Added			-3.03	7.24	-3.03	7.90	4.13	3.63	2.54		2.02	
Wellington Commodities	18,889,095	100.00	6.04	-4.84	6.04	-0.30	-0.05	0.54	-4.70		-5.98	2/1/2013
Bloomberg Commodity Index Total Return			9.07	-12.08	9.07	-8.20	-4.18	-3.09	-7.24		-8.00	
Value Added			-3.03	7.24	-3.03	7.90	4.13	3.63	2.54		2.02	



Midstream Energy

Asset Allocation & Performance

Midstream Energy Composite

Periods Ended September 30, 2020

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Midstream Energy Composite	15,179,324	100.00	-10.16	-39.34	-10.16	-40.04	-16.33	-8.77			-12.92	3/1/2015
Midstream Energy Policy Index			-16.26	-46.16	-16.26	-48.35	-21.66	-14.94			-19.47	
Value Added			6.10	6.82	6.10	8.31	5.33	6.17			6.55	
Harvest MLP	15,179,324	100.00	-10.16	-39.34	-10.16	-40.04	-16.33	-8.77			-12.92	3/1/2015
Midstream Energy Policy Index			-16.26	-46.16	-16.26	-48.35	-21.66	-14.94			-19.47	
Value Added			6.10	6.82	6.10	8.31	5.33	6.17			6.55	



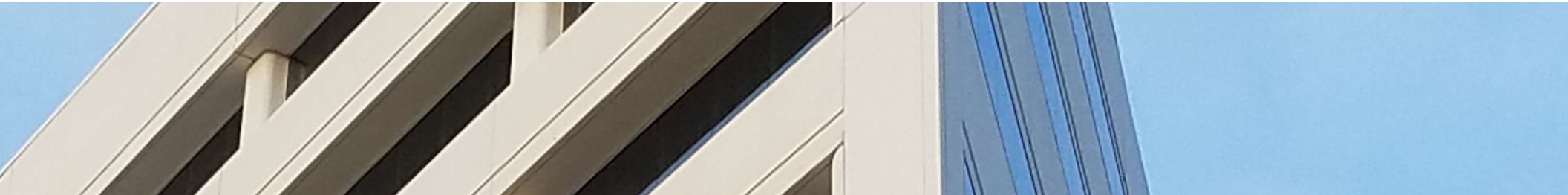
TIPS

Asset Allocation & Performance

TIPS

Periods Ended September 30, 2020

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
TIPS	22,421,293	100.00	3.05	8.98	3.05	9.72	5.60	4.51			3.60	5/1/2015
Blmbg. Barc. U.S. TIPS			3.03	9.22	3.03	10.08	5.79	4.61			3.68	
Value Added			0.02	-0.24	0.02	-0.36	-0.19	-0.10			-0.08	
Brown Brothers Harriman	22,421,293	100.00	3.05	8.98	3.05	9.72	5.60	4.51			3.60	5/1/2015
Blmbg. Barc. U.S. TIPS			3.03	9.22	3.03	10.08	5.79	4.61			3.68	
Value Added			0.02	-0.24	0.02	-0.36	-0.19	-0.10			-0.08	



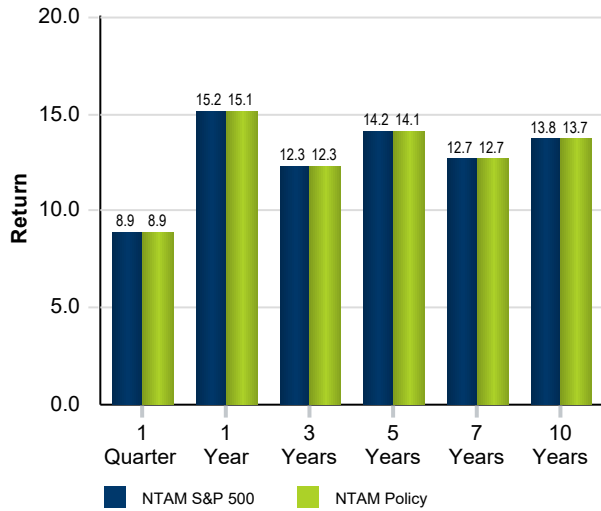
Appendix

Performance Summary

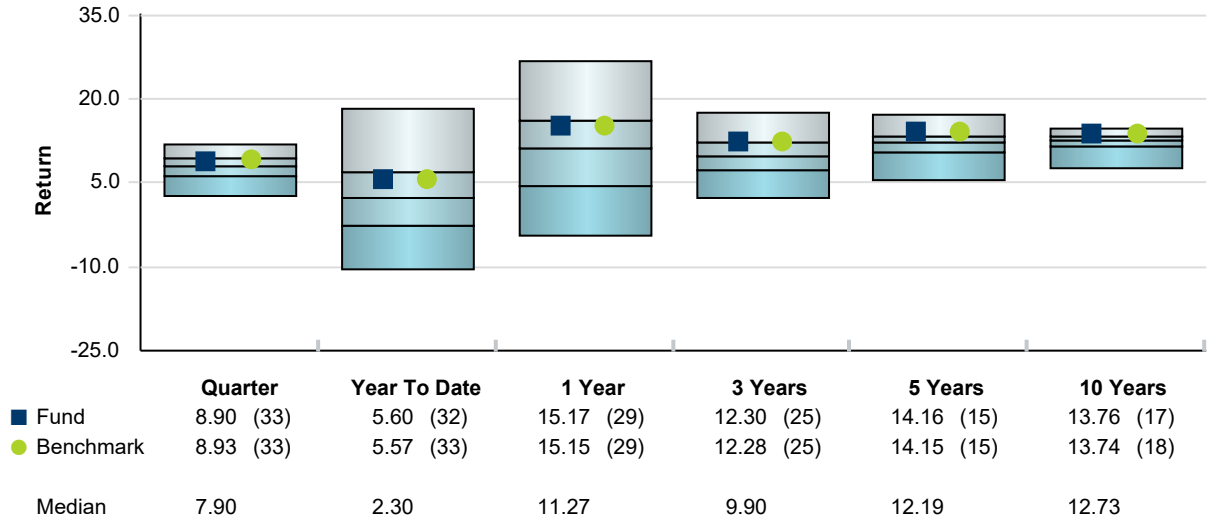
NTAM S&P 500

Periods Ended September 30, 2020

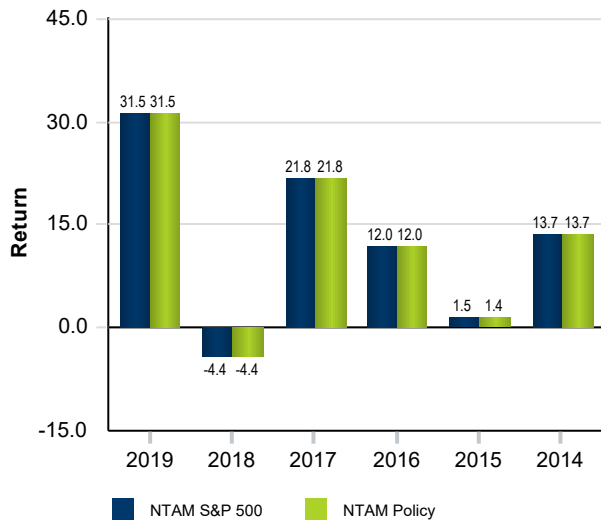
Comparative Performance



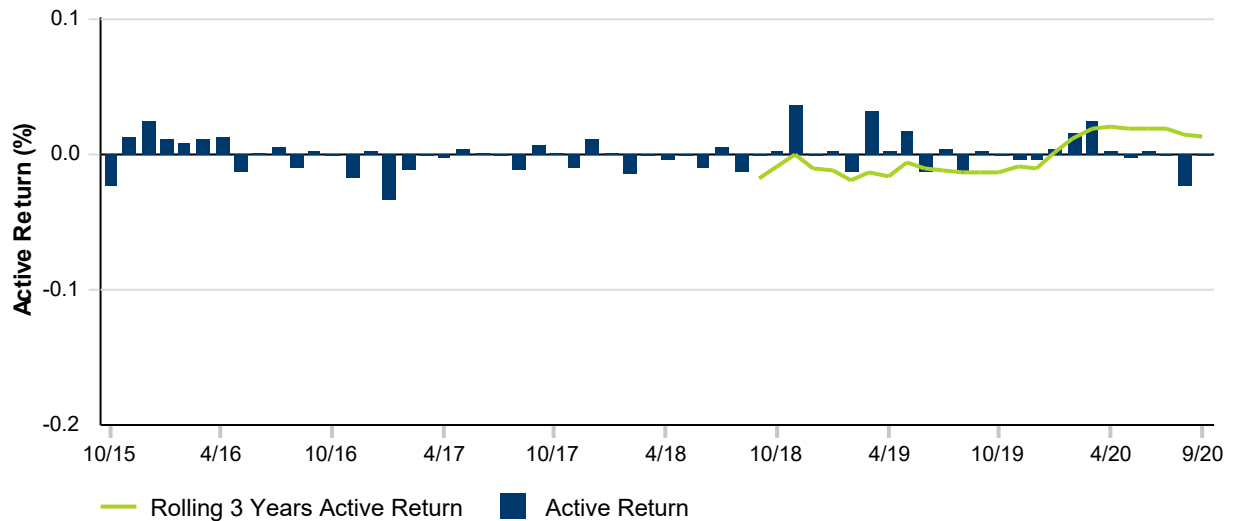
Peer Group Analysis: IM U.S. Large Cap Core Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

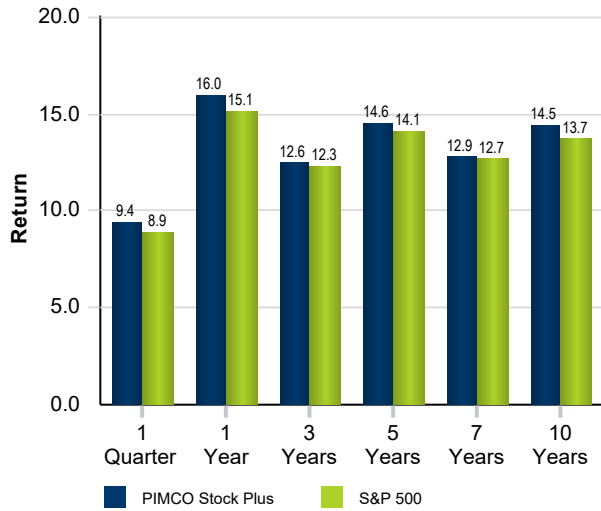


Performance Summary

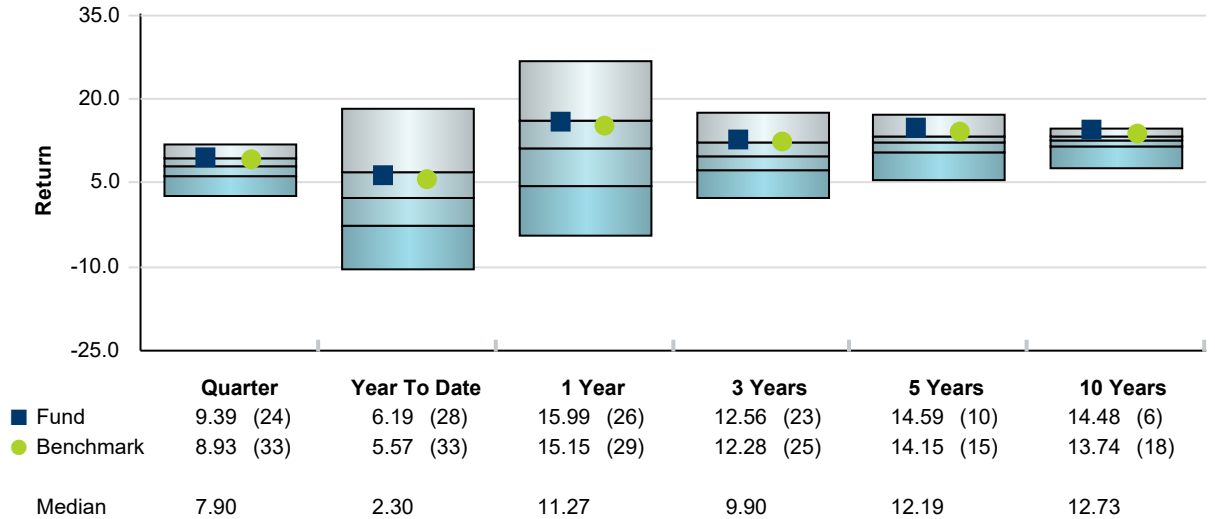
PIMCO Stock Plus

Periods Ended September 30, 2020

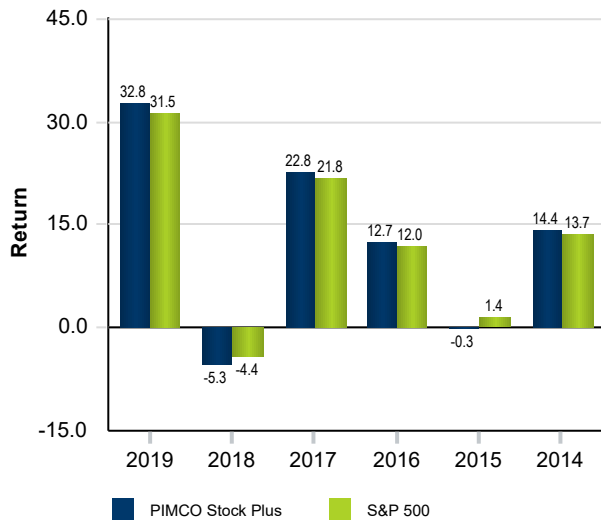
Comparative Performance



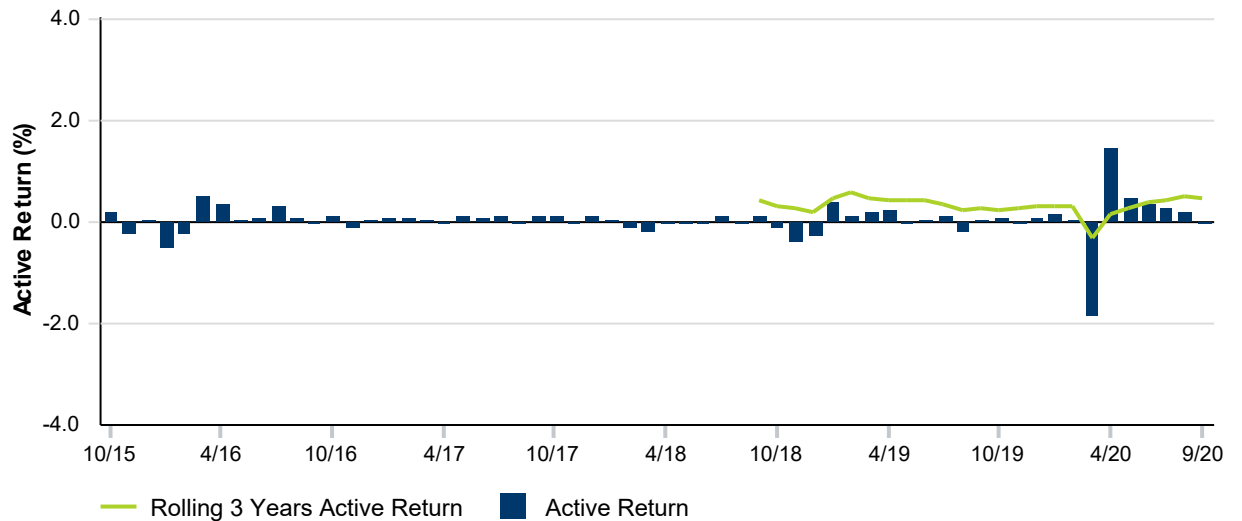
Peer Group Analysis: IM U.S. Large Cap Core Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

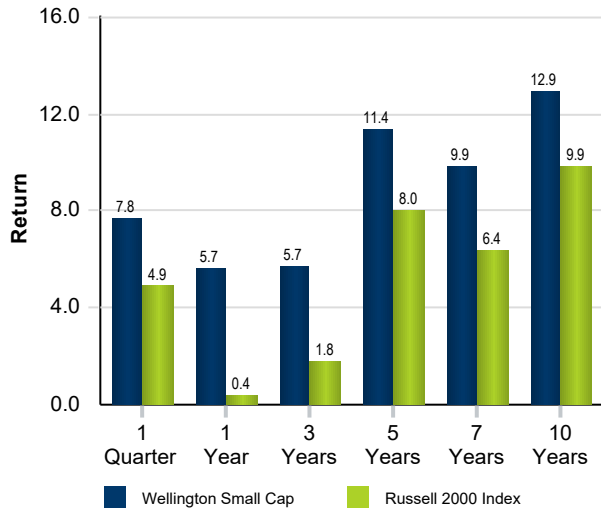


Performance Summary

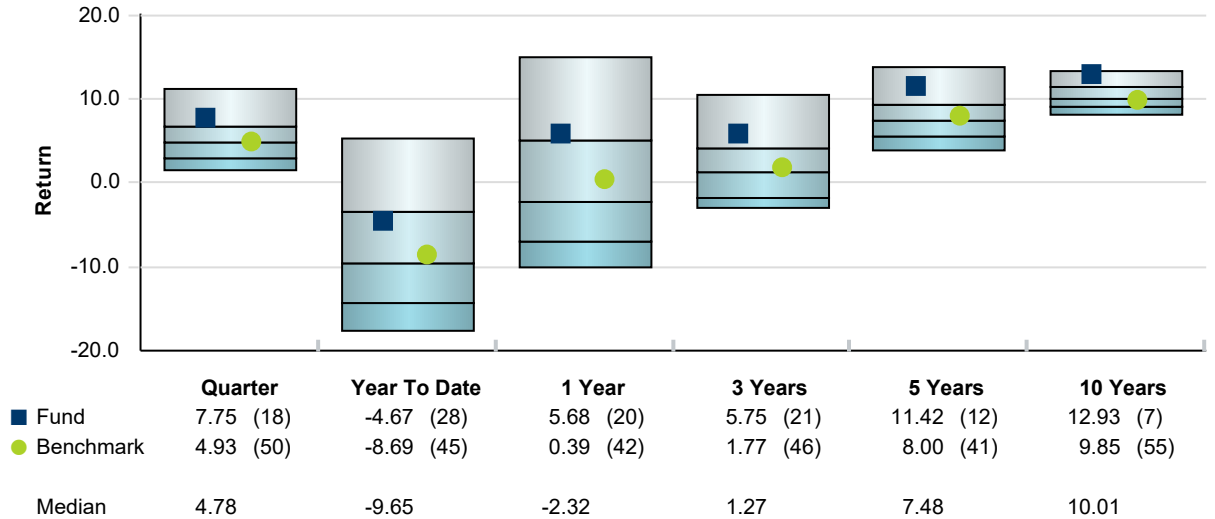
Wellington Small Cap

Periods Ended September 30, 2020

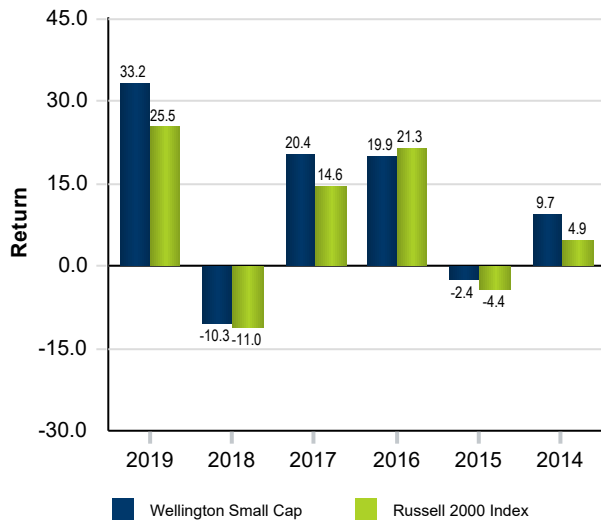
Comparative Performance



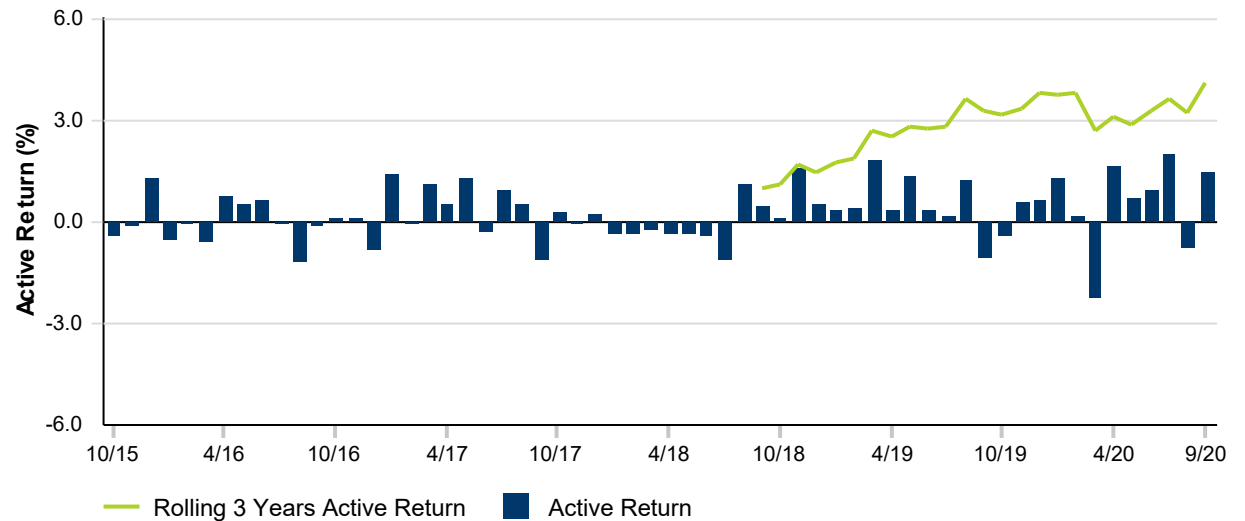
Peer Group Analysis: IM U.S. Small Cap Core Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

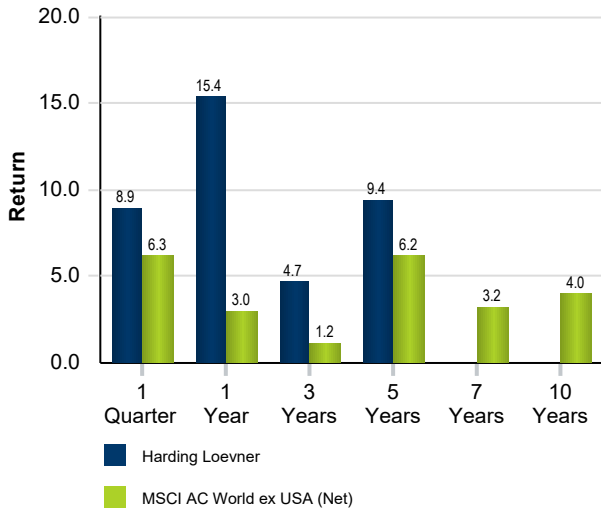


Performance Summary

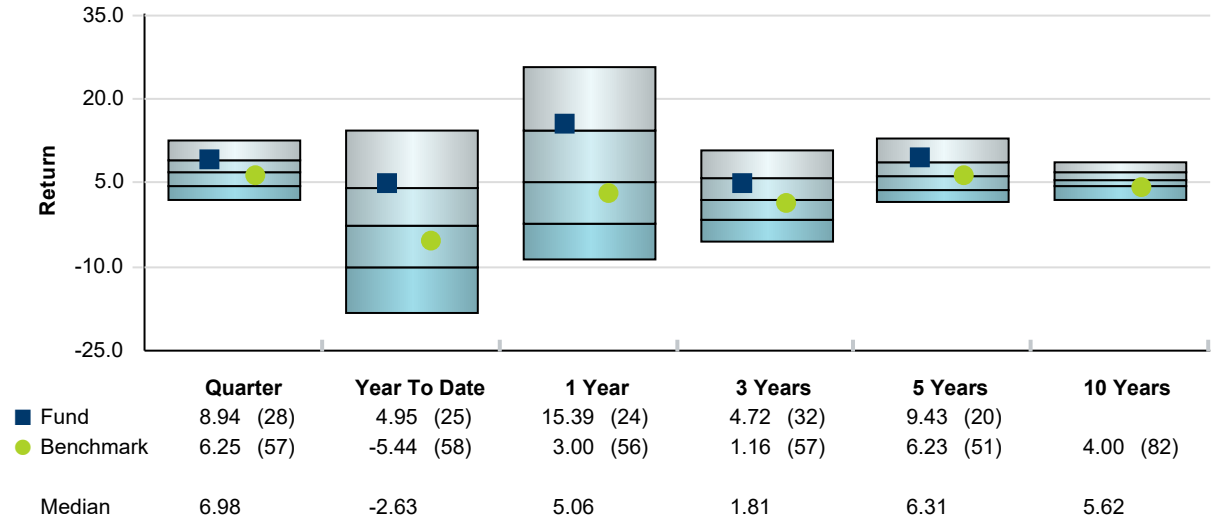
Harding Loevner

Periods Ended September 30, 2020

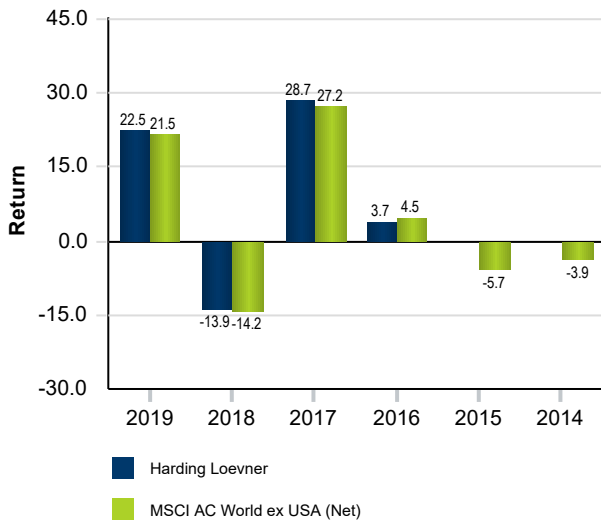
Comparative Performance



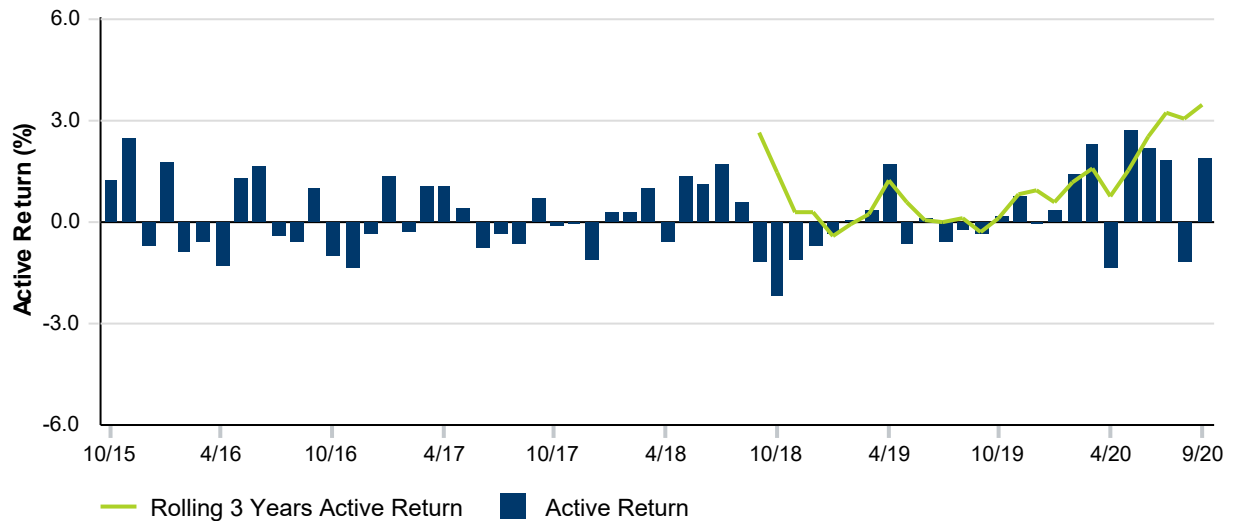
Peer Group Analysis: IM International Large Cap Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

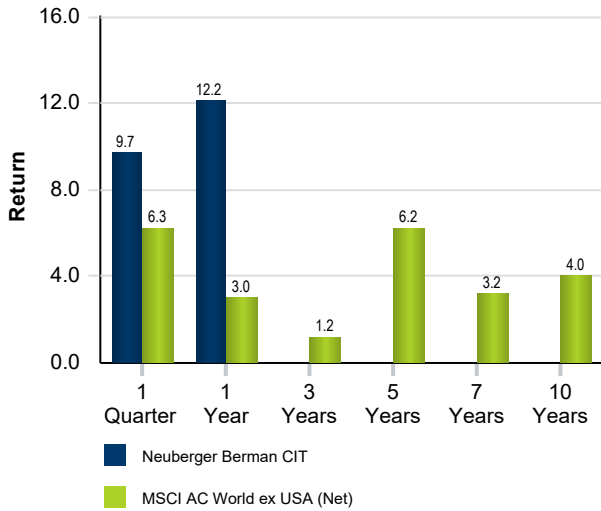


Performance Summary

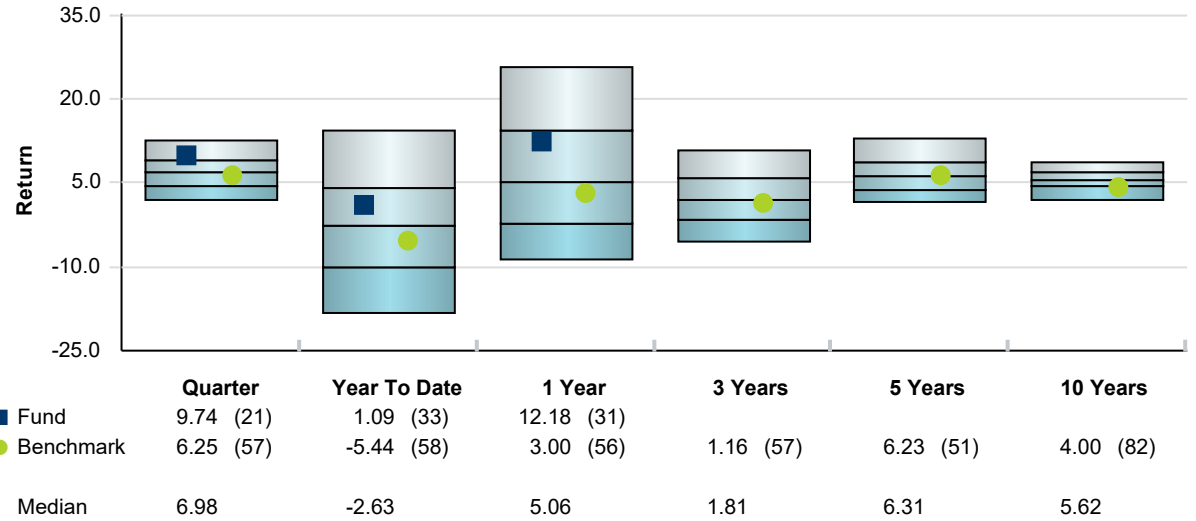
Neuberger Berman CIT

Periods Ended September 30, 2020

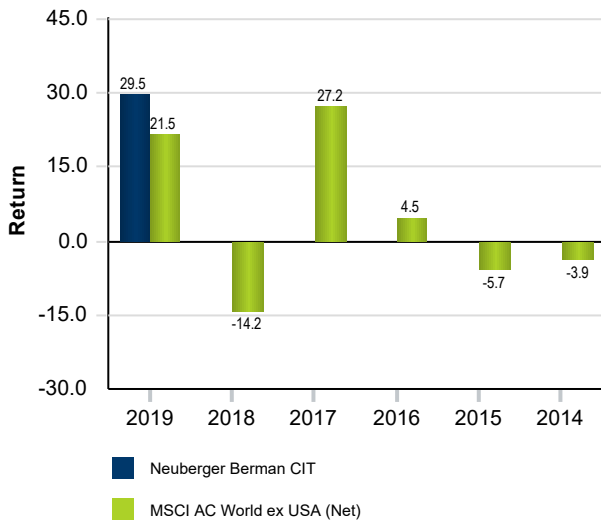
Comparative Performance



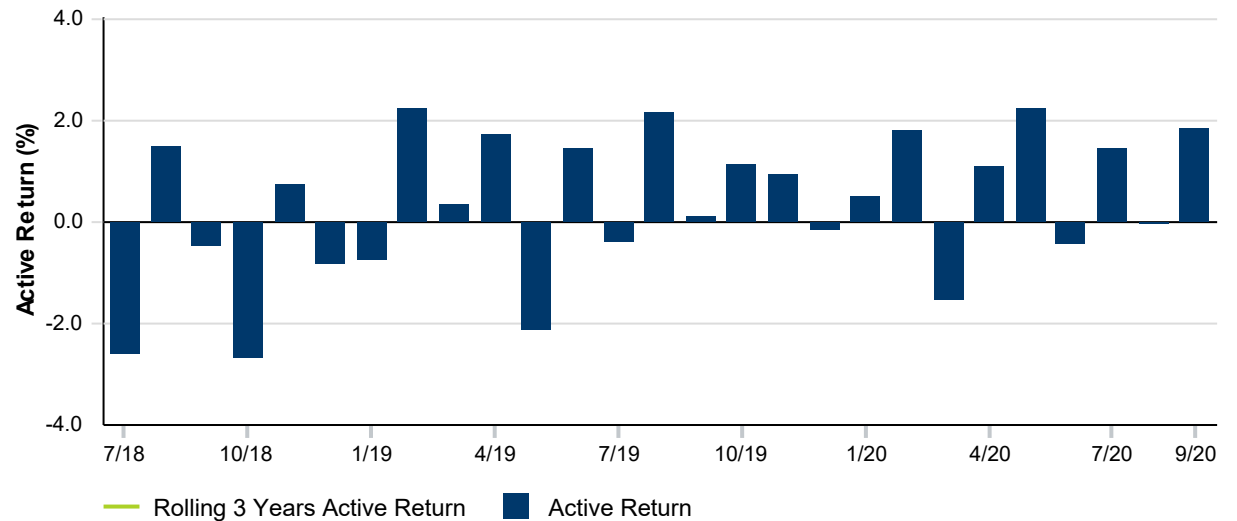
Peer Group Analysis: IM International Large Cap Equity (SA+CF)



Comparative Performance



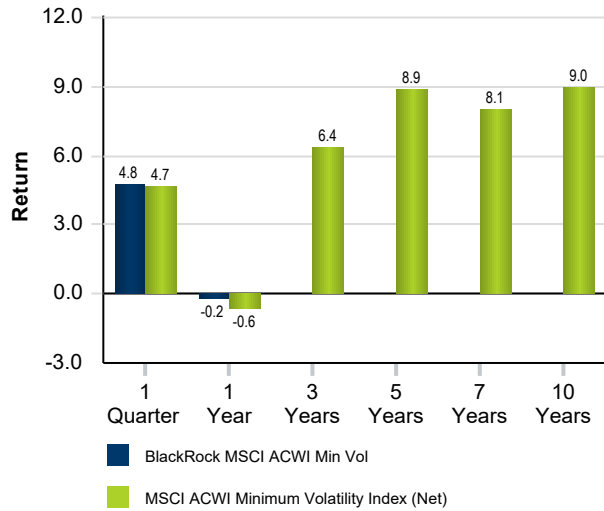
Rolling 3 Years Performance



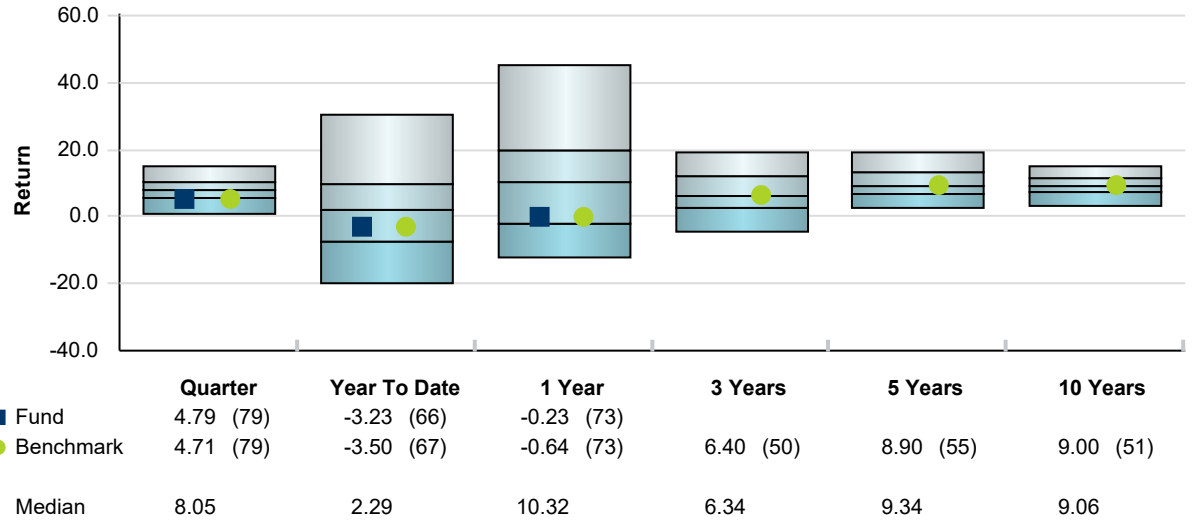
Performance Summary

BlackRock MSCI ACWI Min Vol
 Periods Ended September 30, 2020

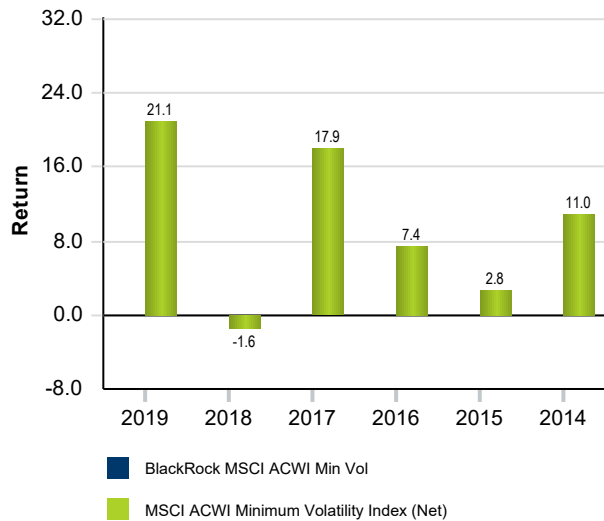
Comparative Performance



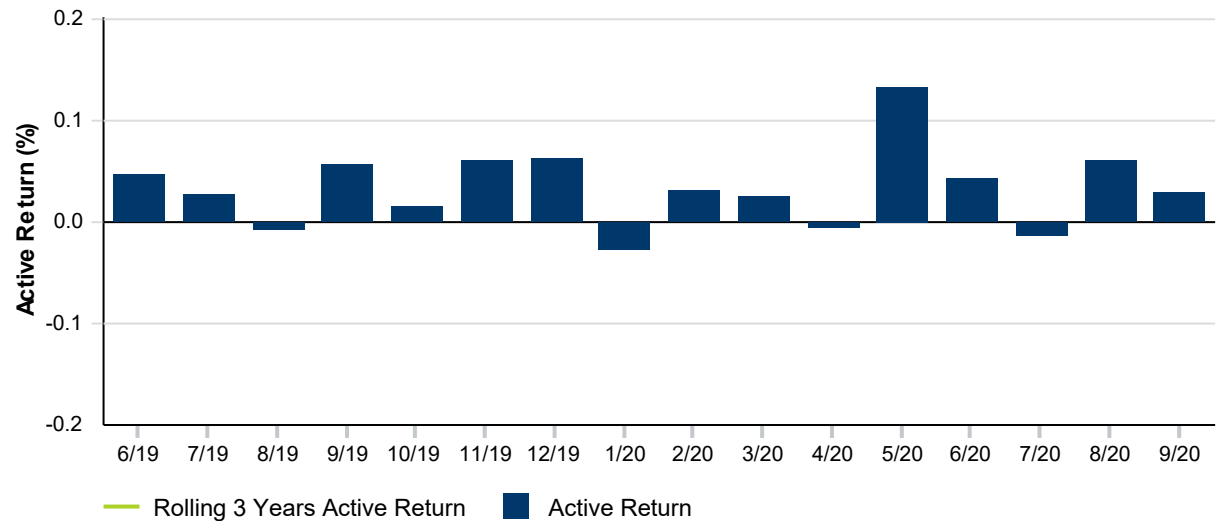
Peer Group Analysis: IM Global Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

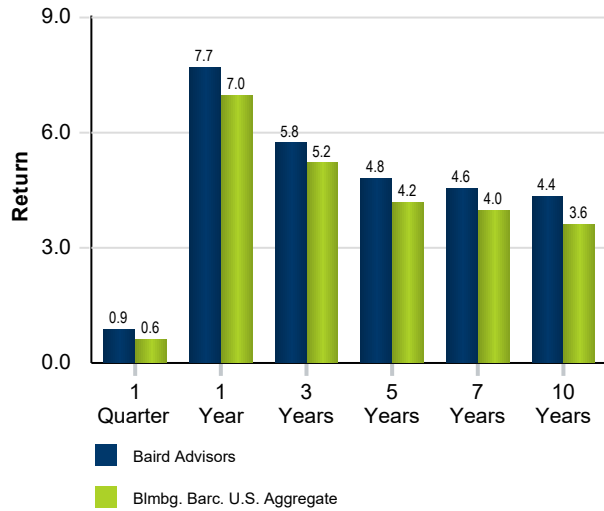


Performance Summary

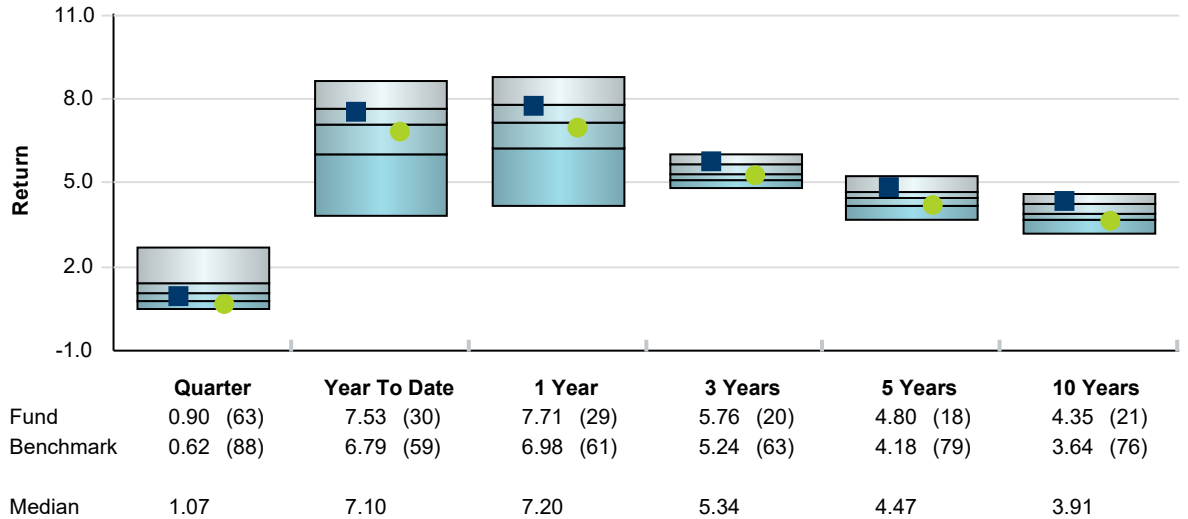
Baird Advisors

Periods Ended September 30, 2020

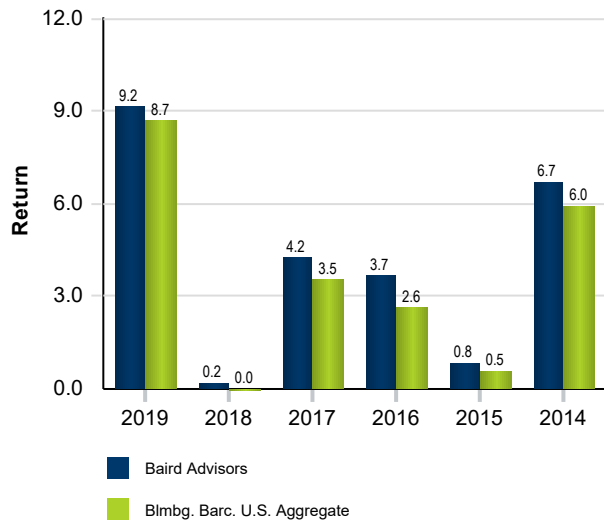
Comparative Performance



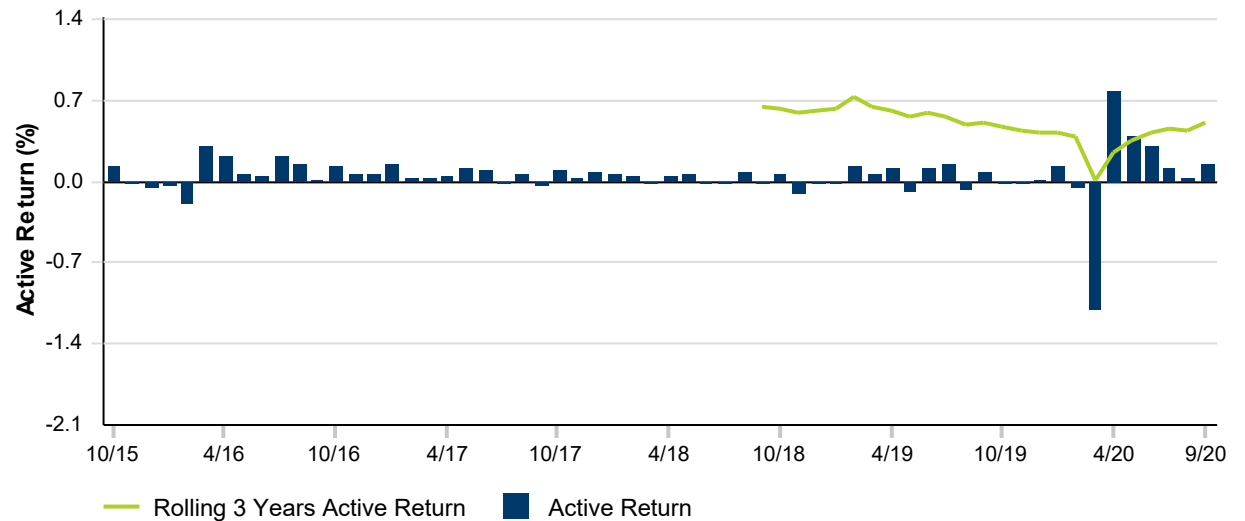
Peer Group Analysis: IM U.S. Broad Market Core Fixed Income (SA+CF)



Comparative Performance



Rolling 3 Years Performance

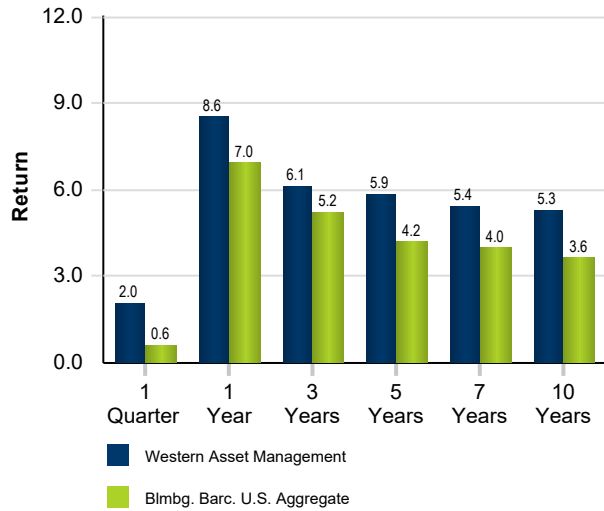


Performance Summary

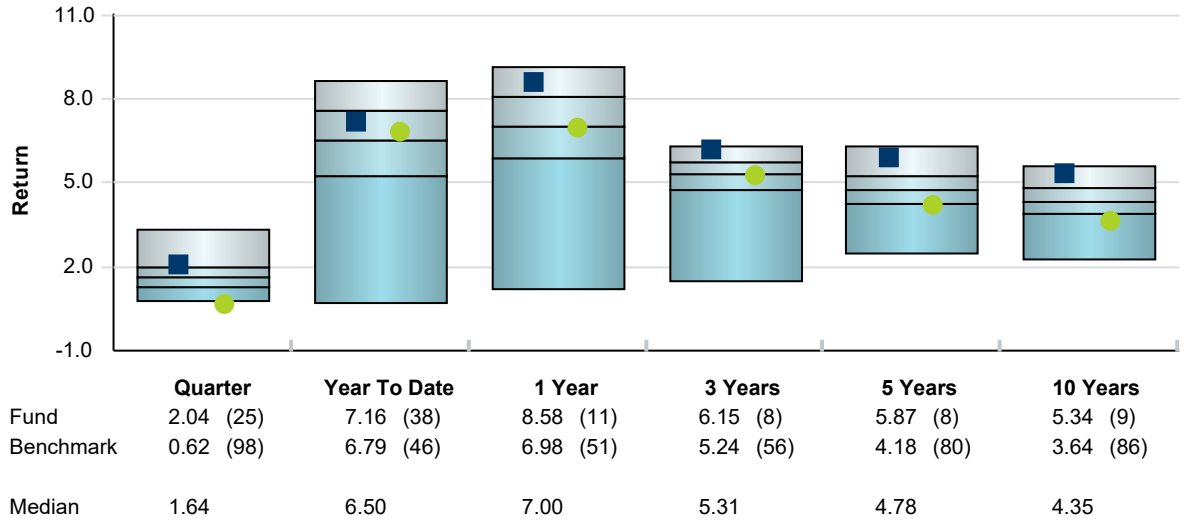
Western Asset Management

Periods Ended September 30, 2020

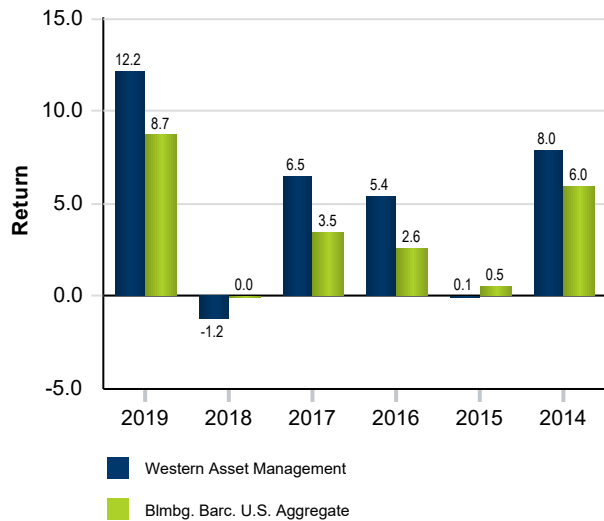
Comparative Performance



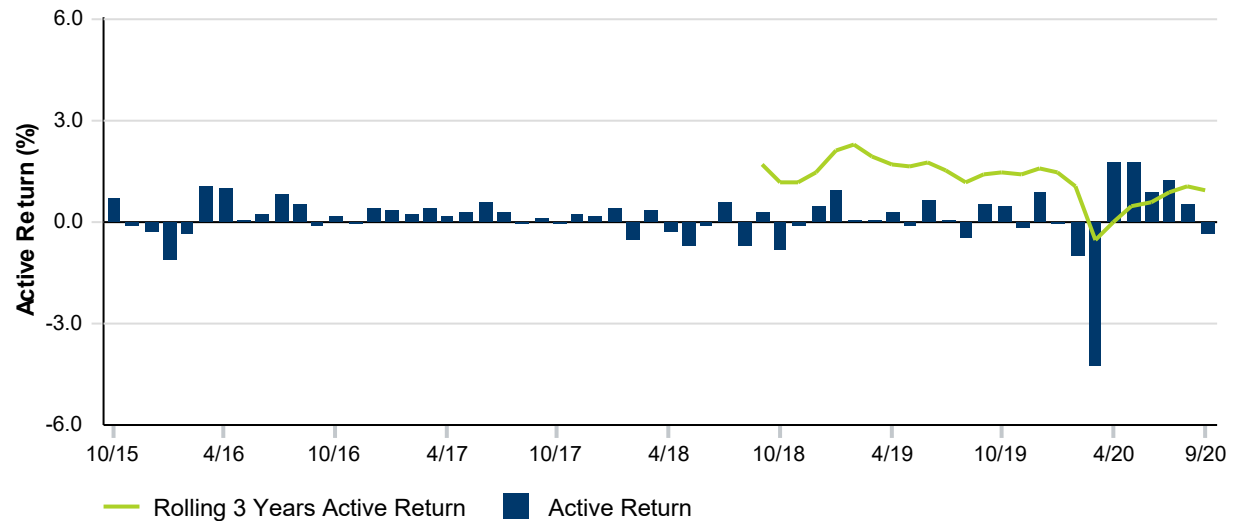
Peer Group Analysis: IM U.S. Broad Market Core+ Fixed Income (SA+CF)



Comparative Performance



Rolling 3 Years Performance

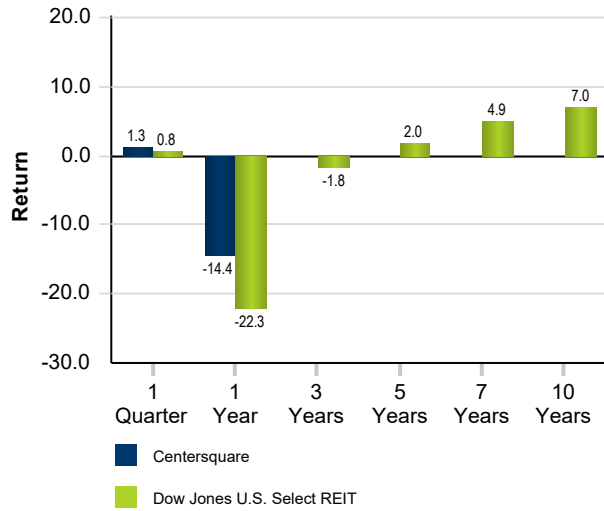


Performance Summary

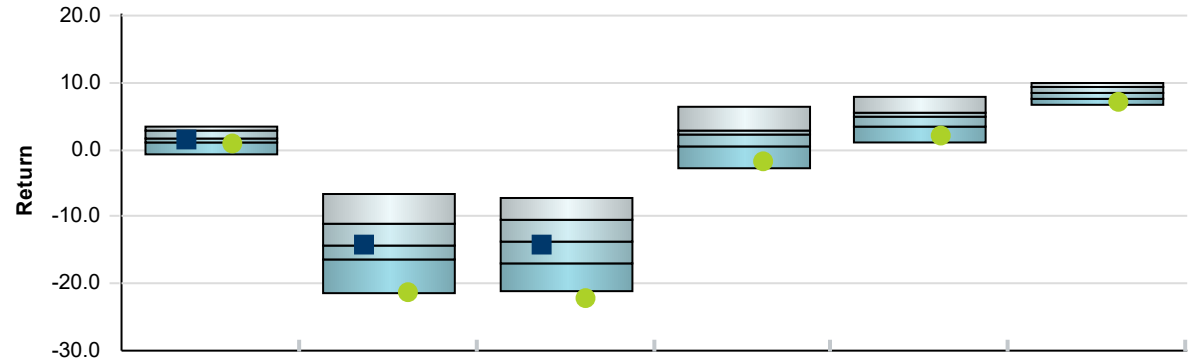
Centersquare

Periods Ended September 30, 2020

Comparative Performance

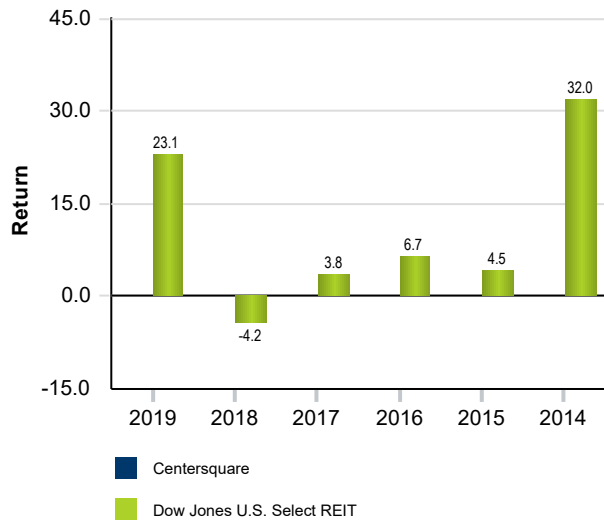


Peer Group Analysis: IM U.S. REIT (SA+CF)

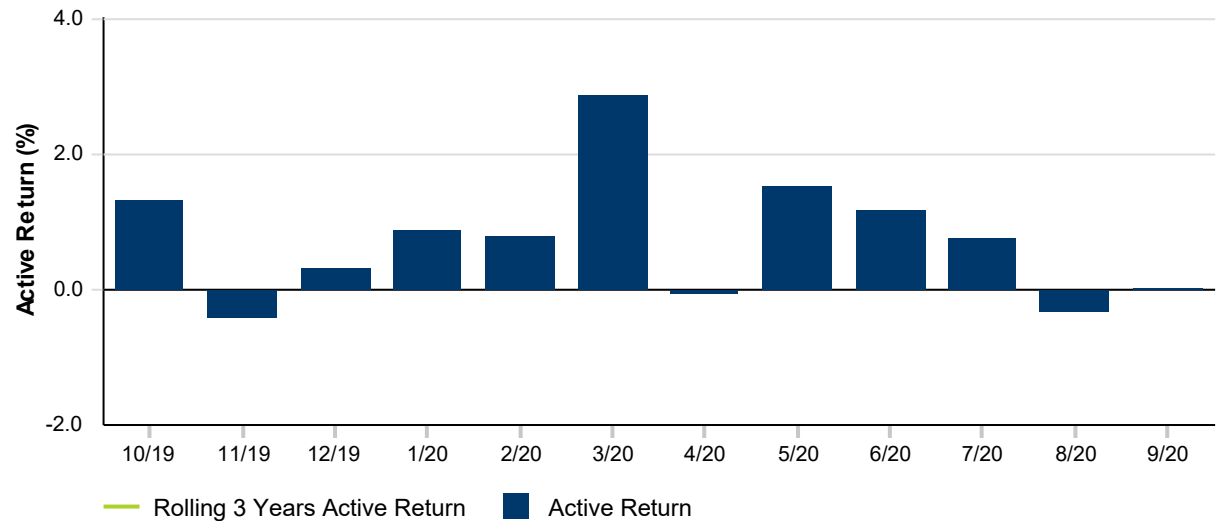


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
Fund	1.27 (70)	-14.41 (54)	-14.43 (59)			
Benchmark	0.83 (79)	-21.36 (92)	-22.33 (97)	-1.85 (94)	1.99 (92)	7.03 (87)
Median	1.64	-14.22	-13.78	2.16	4.97	8.57

Comparative Performance



Rolling 3 Years Performance

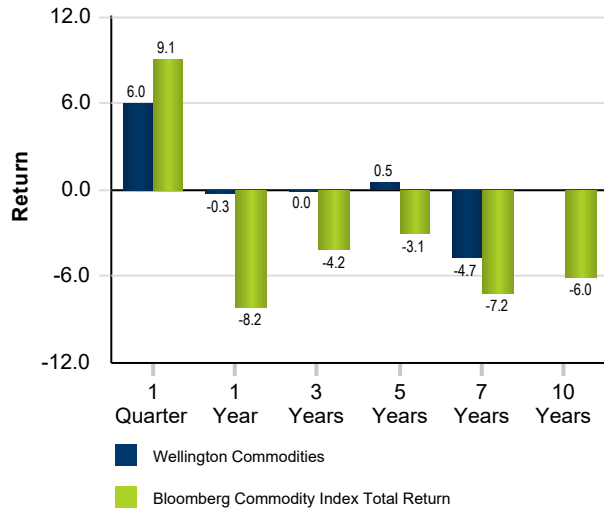


Performance Summary

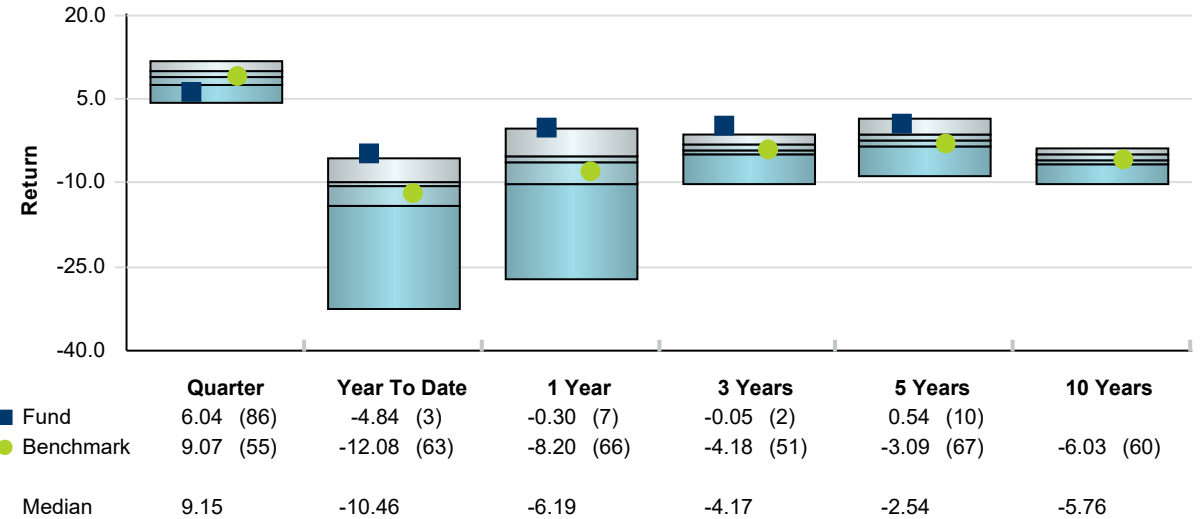
Wellington Commodities

Periods Ended September 30, 2020

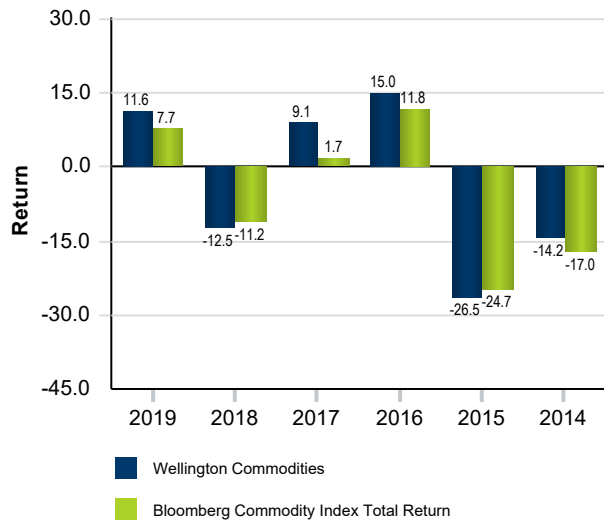
Comparative Performance



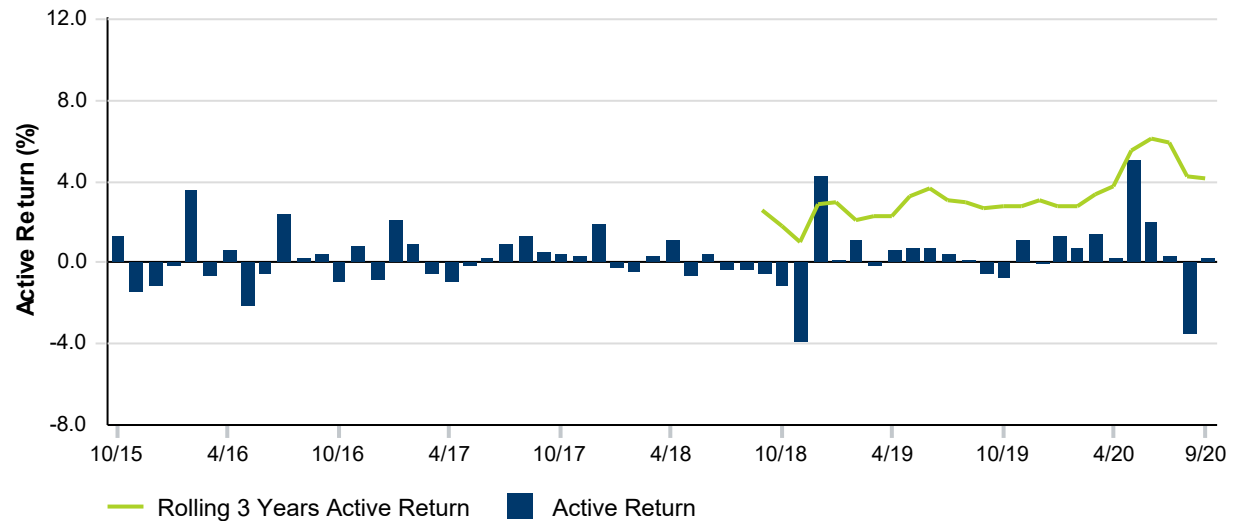
Peer Group Analysis: Commodities Broad Basket



Comparative Performance



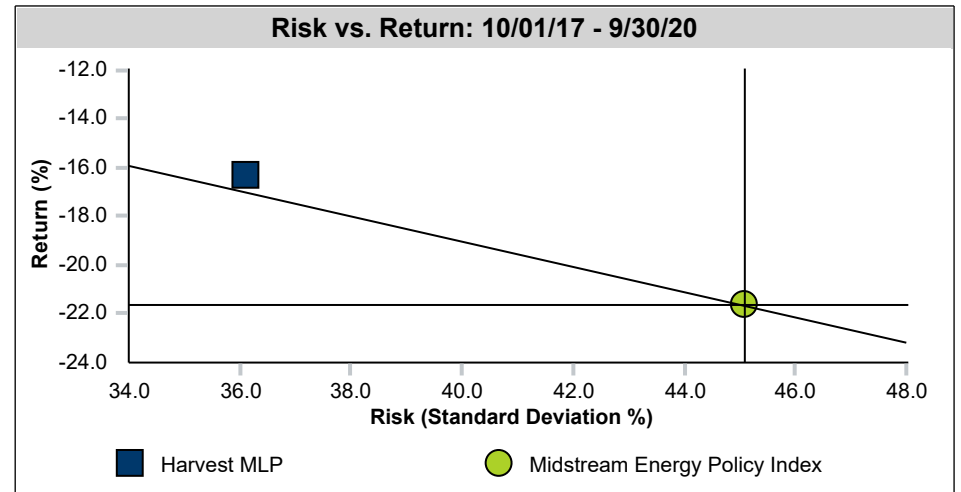
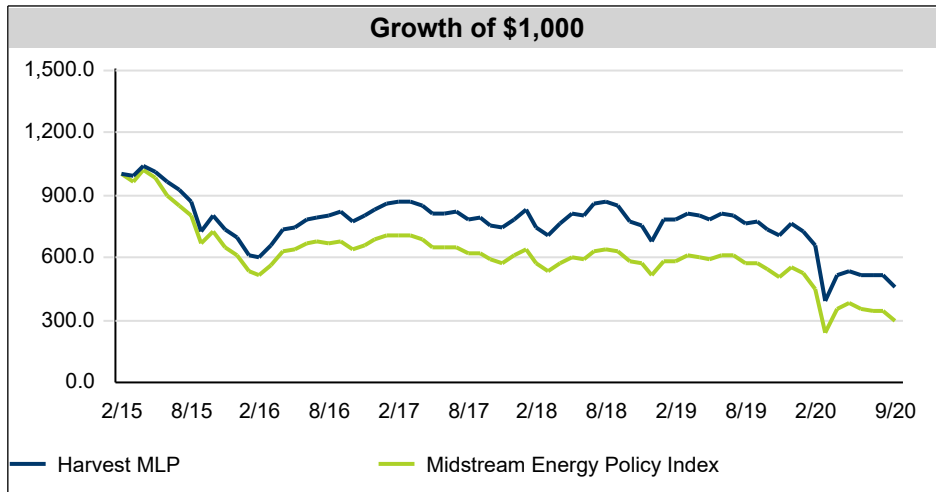
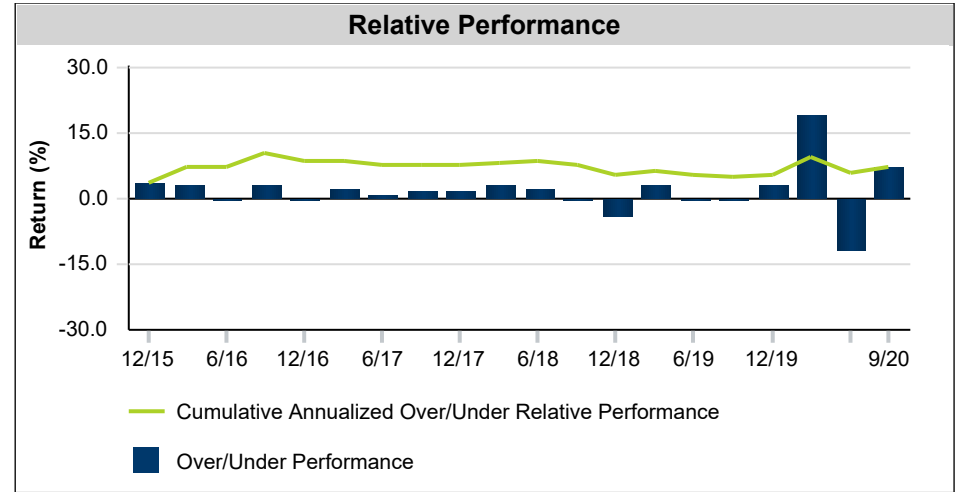
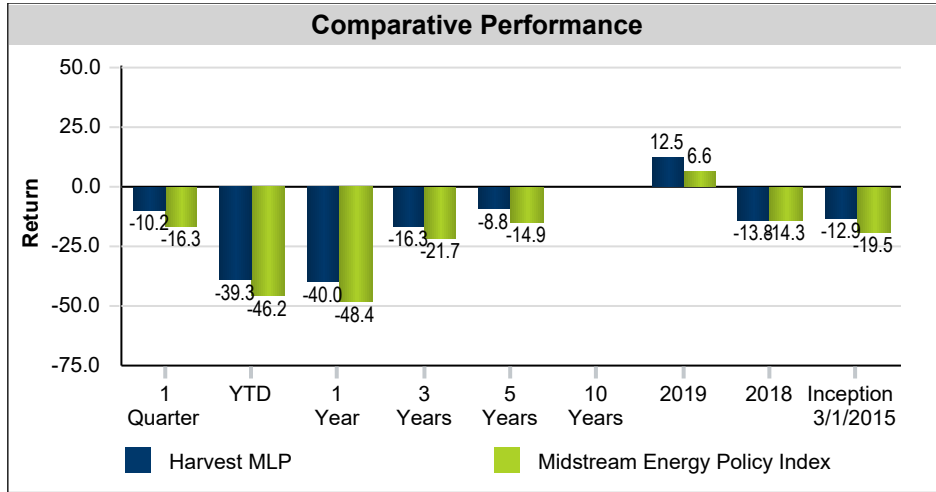
Rolling 3 Years Performance



Manager Summary

Harvest MLP

Periods Ended September 30, 2020



Historical Statistics: 10/01/17 - 9/30/20

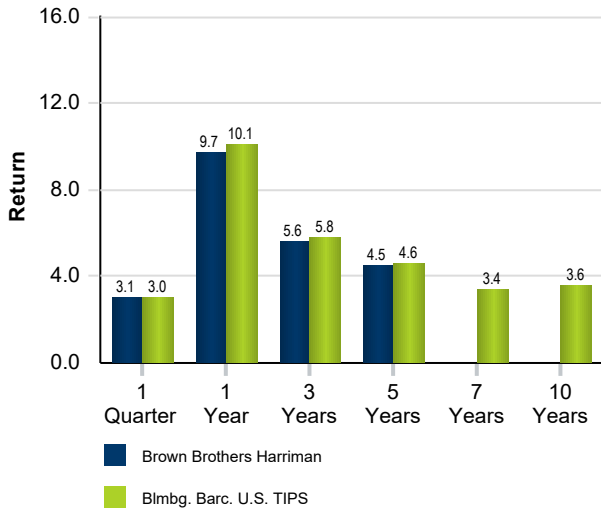
	<u>Alpha</u>	<u>Tracking Error</u>	<u>Information Ratio</u>	<u>Beta</u>	<u>Standard Deviation</u>	<u>Sharpe Ratio</u>	<u>Maximum Drawdown</u>	<u>Up Capture</u>	<u>Down Capture</u>
Fund	-0.03	12.48	0.15	0.81	39.66	-0.24	-54.57	85.46	84.31
Benchmark	0.00	0.00		1.00	48.04	-0.24	-62.27	100.00	100.00

Performance Summary

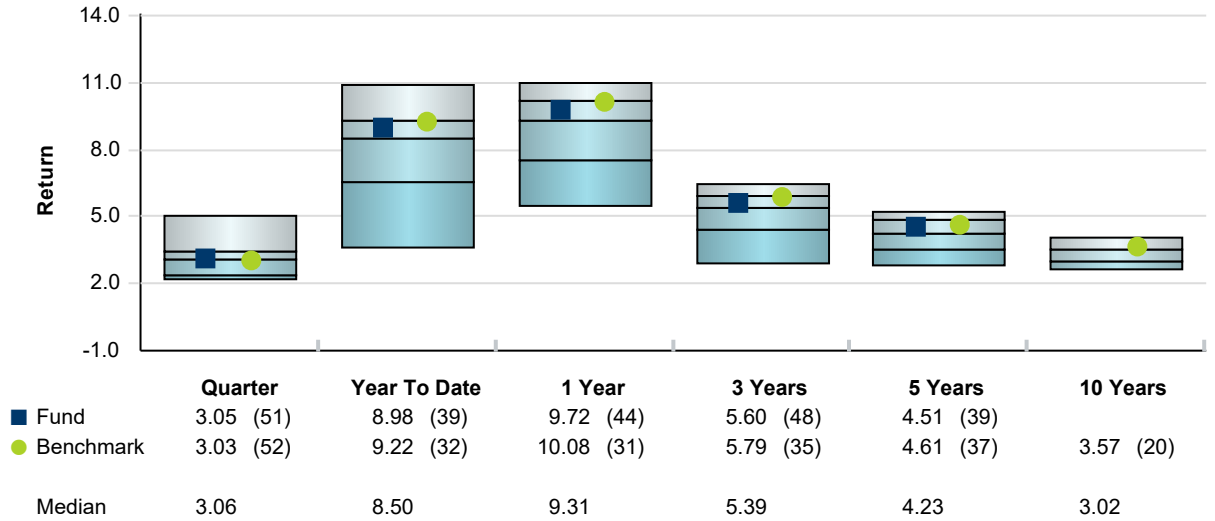
Brown Brothers Harriman

Periods Ended September 30, 2020

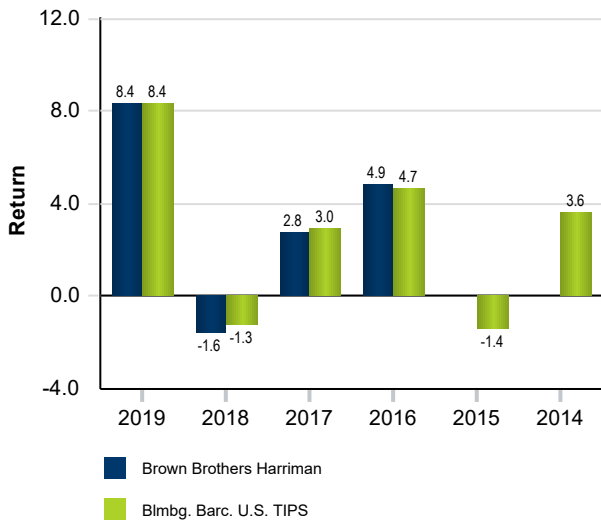
Comparative Performance



Peer Group Analysis: IM U.S. TIPS (SA+CF)



Comparative Performance



Rolling 3 Years Performance

