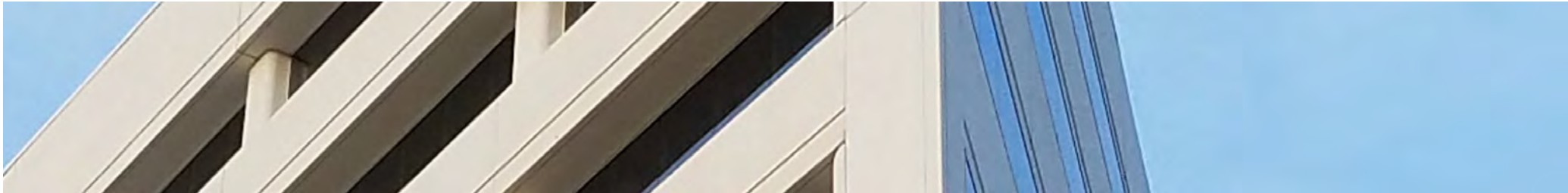




WILSHIRE ASSOCIATES

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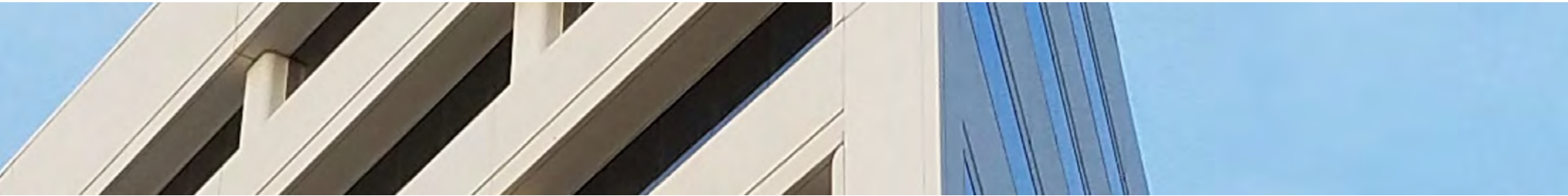
Retirement Board of Allegheny County

Quarterly Executive Summary

June 30, 2020

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Market Environment

MARKET COMMENTARY

U.S. Equity

The U.S. stock market was up 21.9% for the second quarter of 2020. Although parts of the country have begun to loosen Coronavirus-related restrictions, considerable uncertainty about 2020 economic growth prospects remain. According to a report by the Federal Reserve Bank of Philadelphia, expectations for real GDP growth this year are approximately -5% with an unemployment rate remaining above 10%.

A surprising employment report in May speaks well for an eventual recovery. Unemployment claims are beginning to point towards a bottom and perhaps the beginning of a recovery, albeit off extremely weak levels. Other signals are not as encouraging. The ratio of employed persons to the overall population stands at 52.8%, down nearly 10%-points from the beginning of the year. Taken together, it seems that robust fiscal stimulus programs, targeting both households and businesses, are working well.

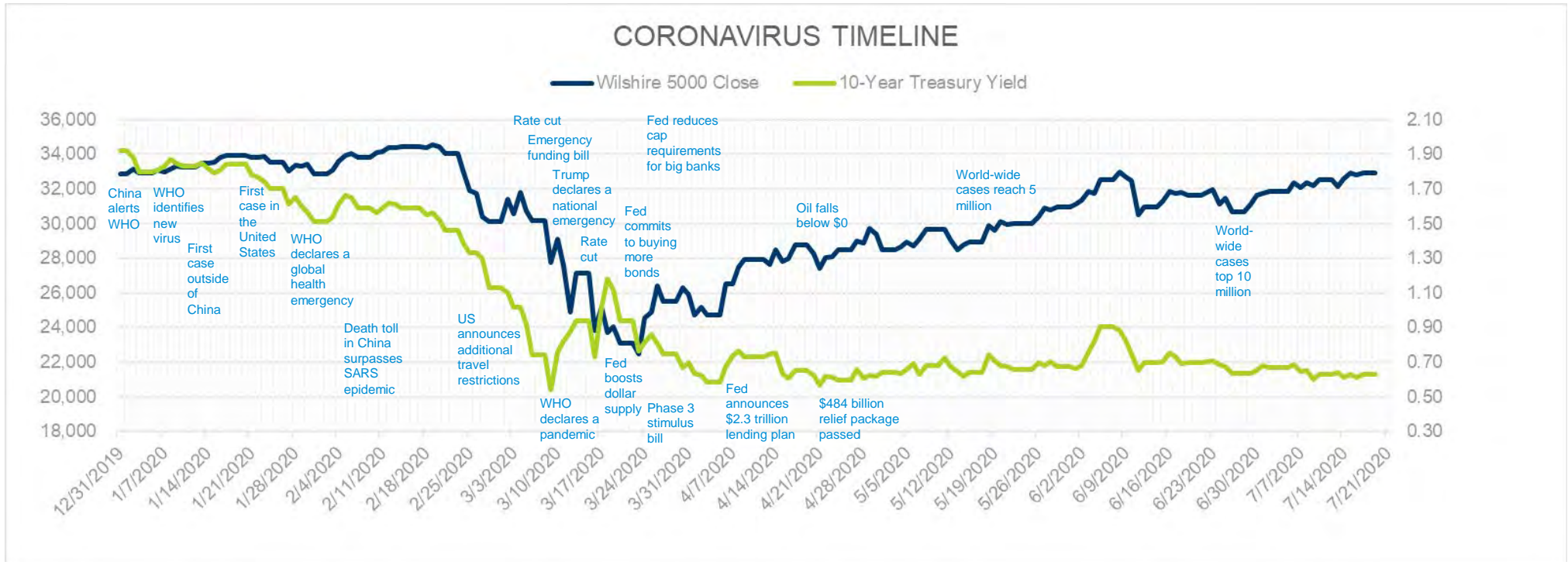
Non-U.S. Equity

Employment data in the U.K. shows that nearly a third of their workforce is on furlough with the government supporting a majority of those employees' wages. Inflation statistics in Germany indicate that service providers have been able to successfully raise prices to counter Coronavirus-related restrictions. China's economic recovery continues due, in part, to government support policies and the reopening of some overseas markets.

Fixed Income

The 10-year U.S. Treasury yield ended the quarter at 0.66%, down just 4 basis points from March. The FOMC met twice during the quarter, as scheduled, with no change to their overnight rate, which they expect will be near zero until at least 2022. Credit spreads tightened significantly during the quarter, as evidenced by the double-digit return within the high yield market.

CORONAVIRUS TIMELINE

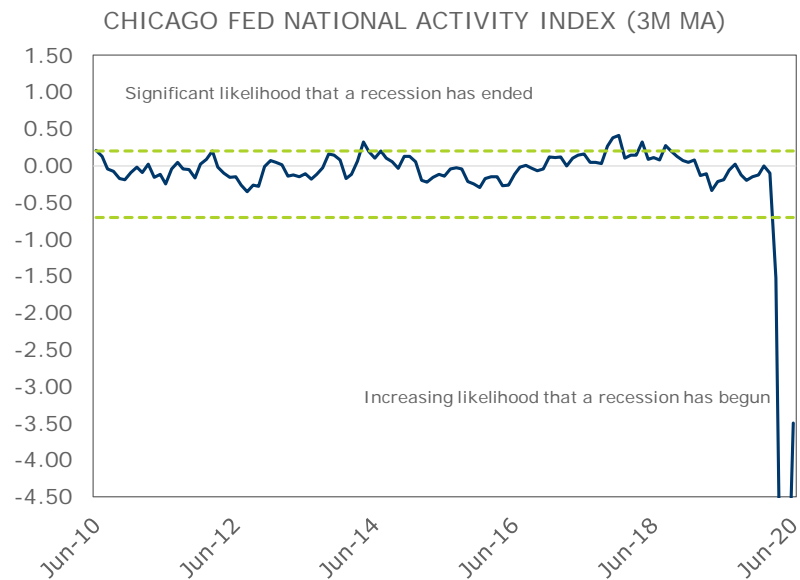
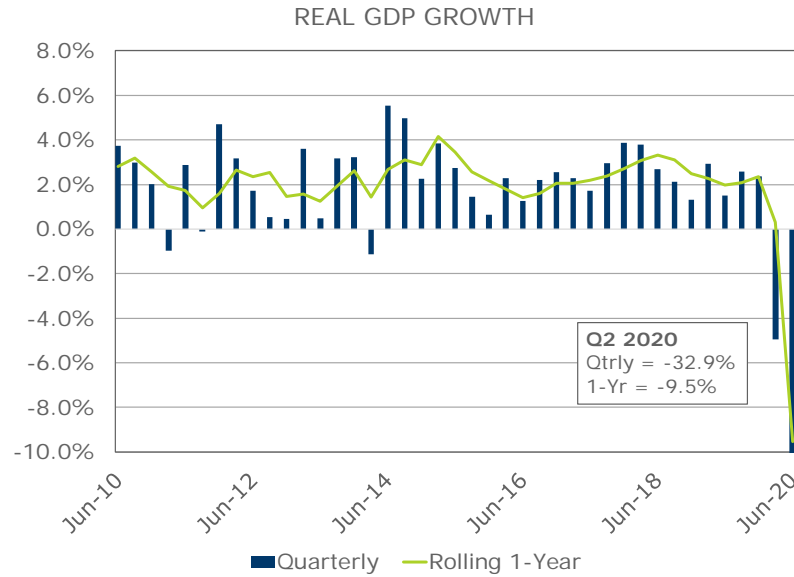


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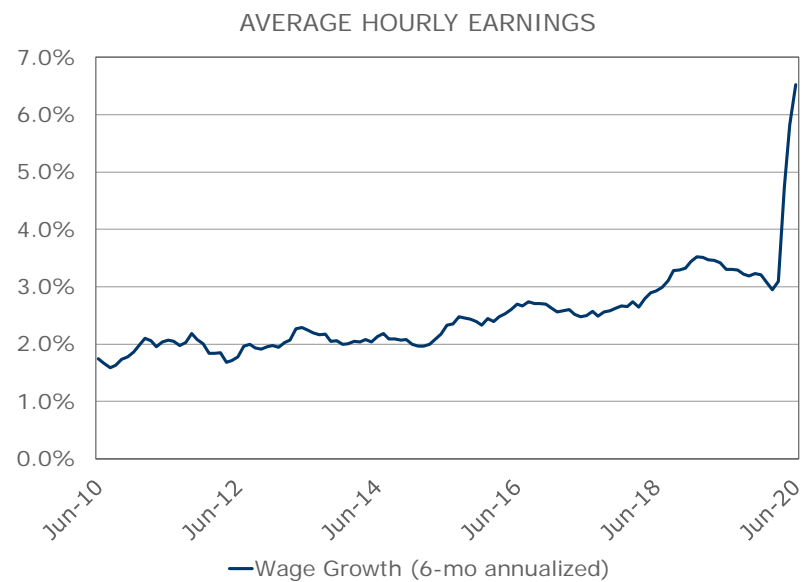
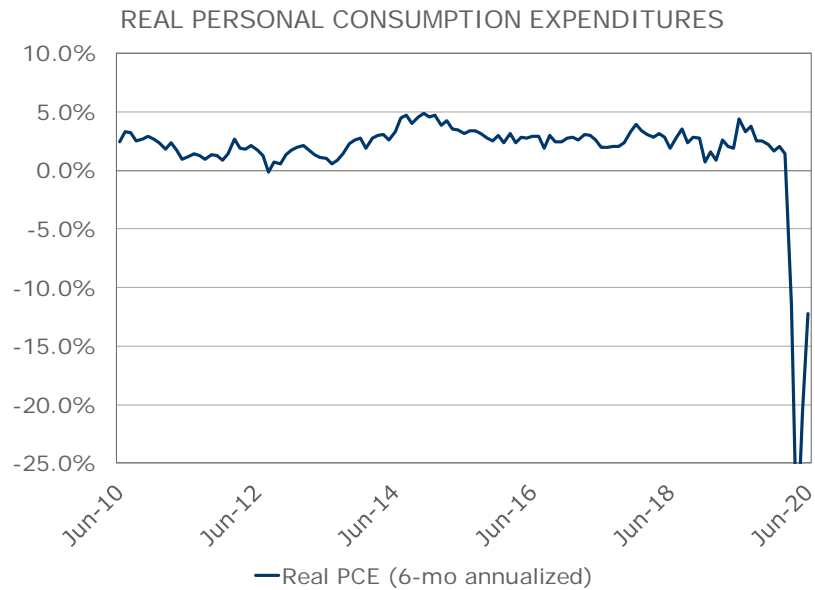
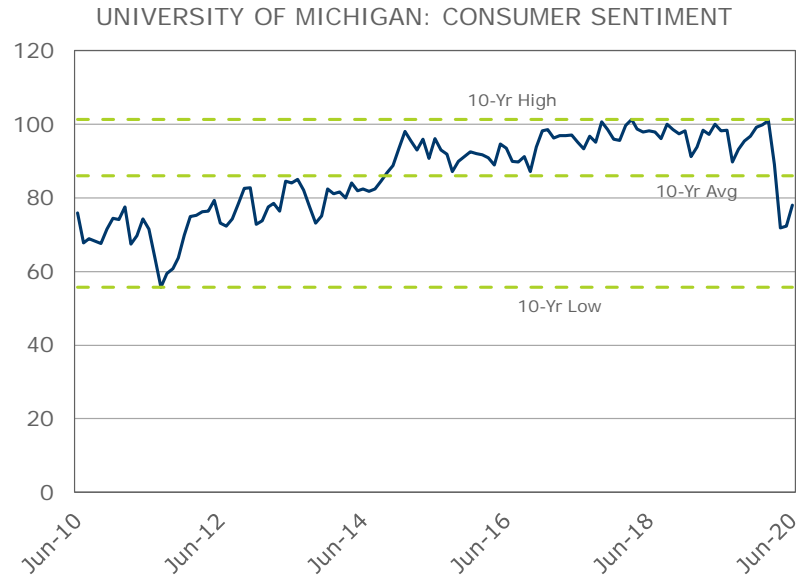
JUNE 2020 ASSET CLASS ASSUMPTIONS

	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			Cmnty	Real Assets	US CPI
		US RES	Global RES	Private RE	US RES	Global RES			Private RE									
COMPOUND RETURN (%)	6.00	6.50	6.50	6.75	6.45	8.15	0.75	1.25	2.10	0.30	4.00	0.40	5.10	5.30	6.80	2.25	5.45	1.50
ARITHMETIC RETURN (%)	7.30	7.95	9.45	8.35	7.80	11.50	0.75	1.40	2.55	0.50	4.50	0.45	6.45	6.45	7.70	3.30	5.80	1.50
EXPECTED RISK (%)	17.00	18.00	26.00	18.95	17.10	28.00	1.25	5.15	9.85	6.00	10.00	3.50	17.00	15.80	14.00	15.00	8.75	1.75
CASH YIELD (%)	2.00	3.00	2.50	2.85	2.40	0.00	0.75	1.85	2.65	1.15	7.00	1.10	4.00	4.00	2.60	0.75	2.25	0.00
GROWTH EXPOSURE	8.00	9.00	7.50	8.60	8.25	14.00	0.00	-0.90	-2.30	-3.00	4.00	-1.00	8.00	8.00	5.50	0.00	1.90	0.00
INFLATION EXPOSURE	0.00	3.00	12.00	5.45	2.40	1.00	0.00	-2.50	-6.70	2.50	1.00	-3.00	0.00	1.35	0.00	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

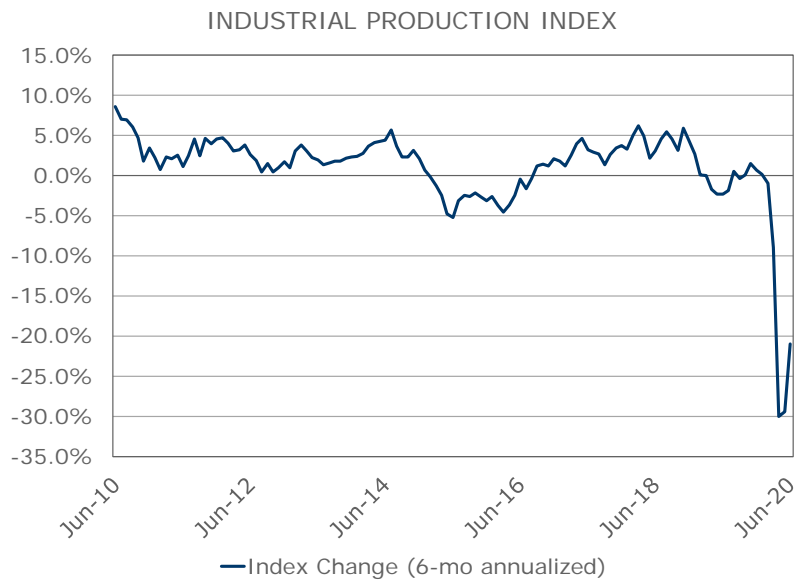
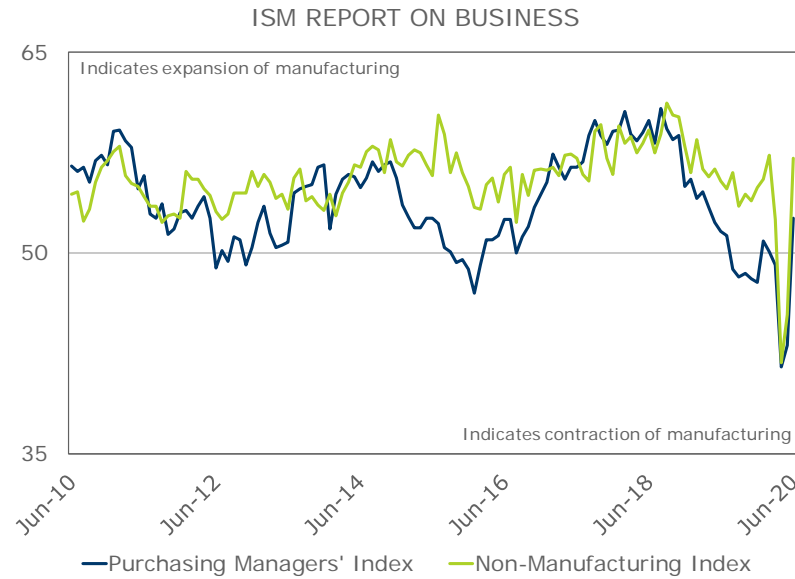
ECONOMIC GROWTH



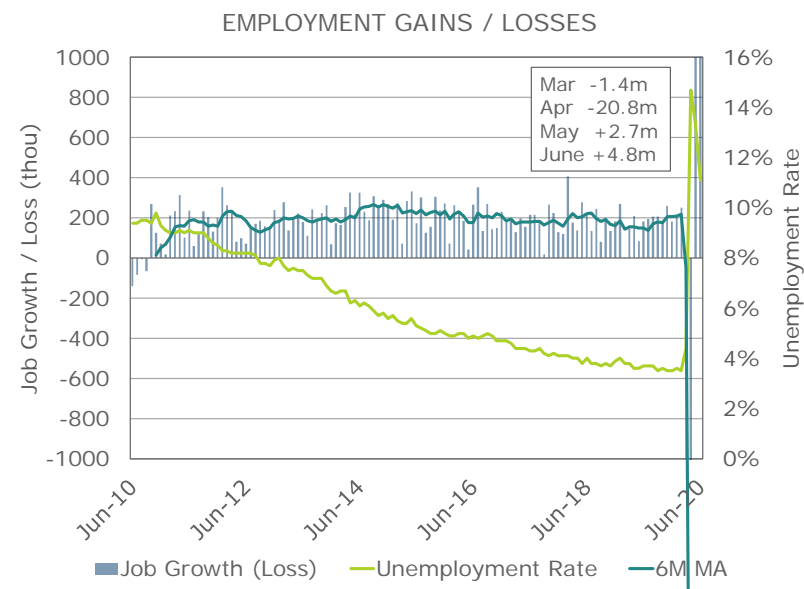
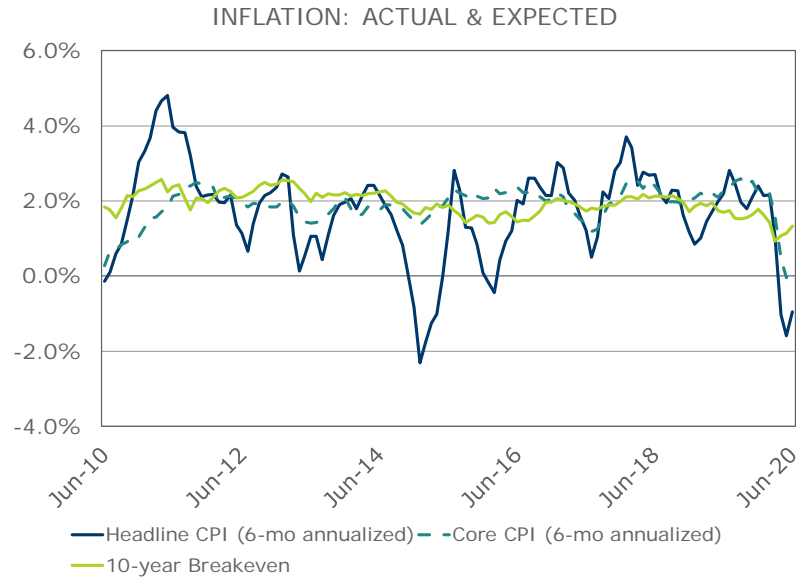
CONSUMER ACTIVITY



BUSINESS ACTIVITY



INFLATION AND EMPLOYMENT

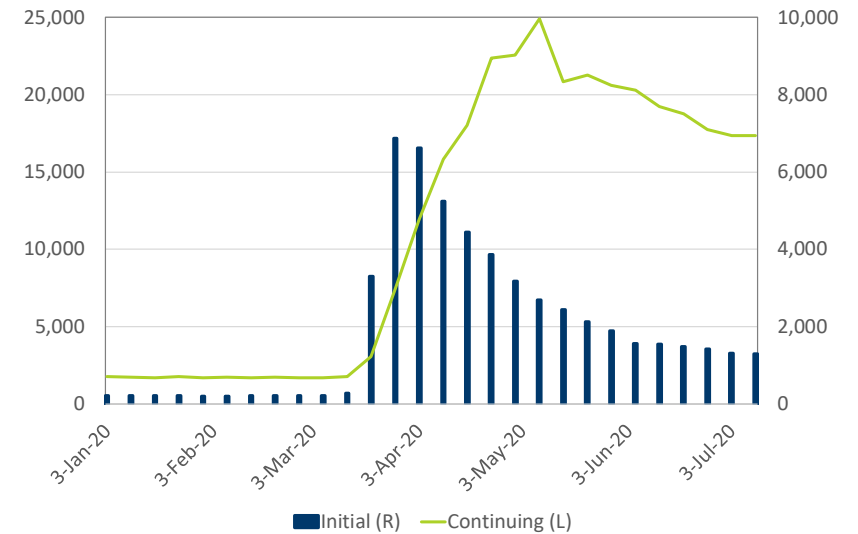


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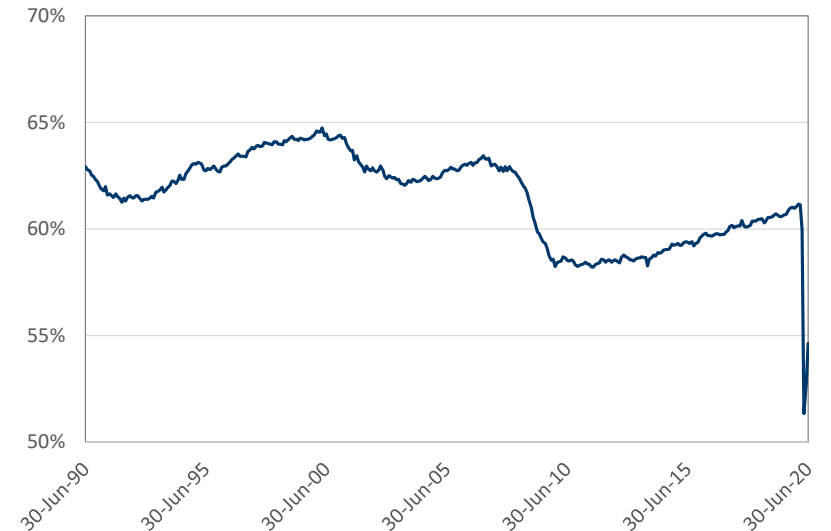
U.S. EMPLOYMENT

- 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 17 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 sources: Federal Reserve, Bloomberg

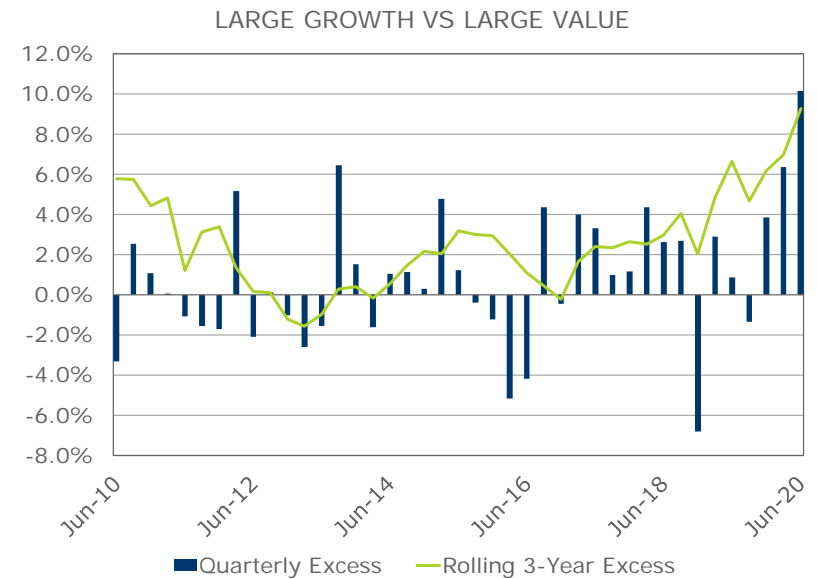
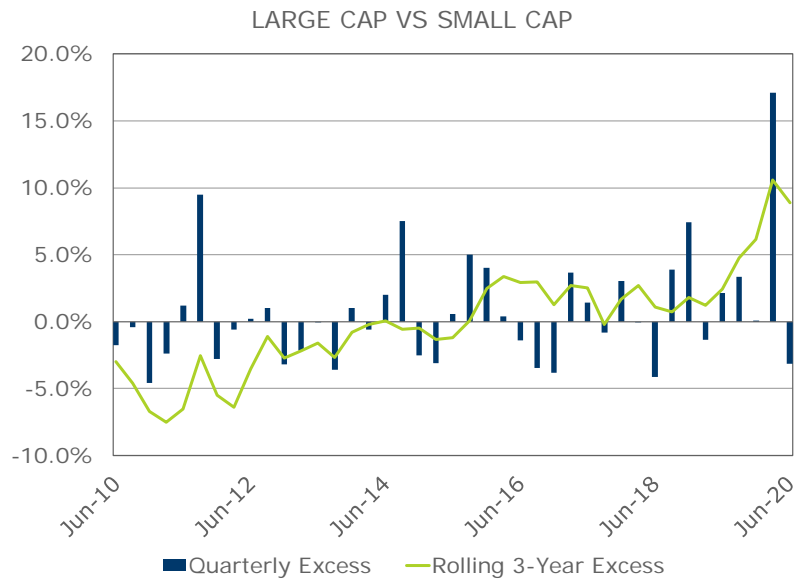
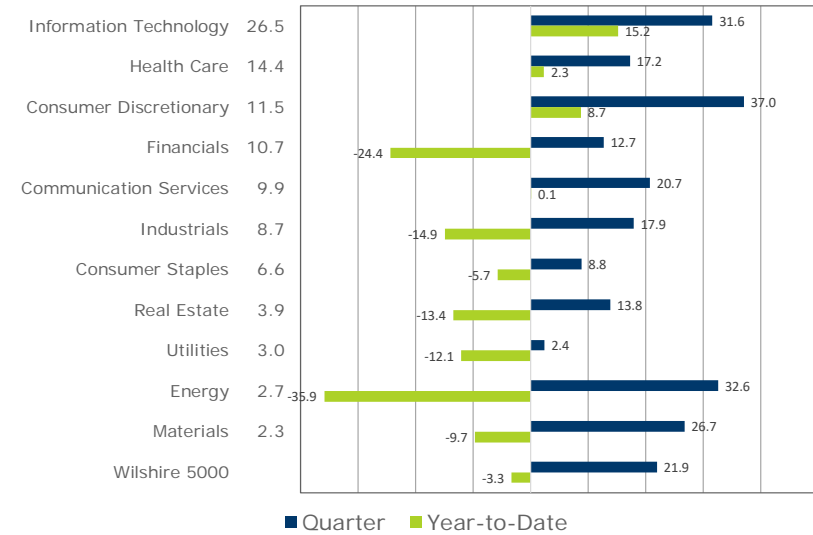
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U.S. EQUITY MARKET

AS OF 6/30/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
WILSHIRE 5000 INDEX	21.9	-3.3	6.8	10.1	10.3	13.7
WILSHIRE U.S. LARGE CAP	21.6	-2.3	8.2	11.0	10.9	14.0
WILSHIRE U.S. SMALL CAP	25.6	-13.8	-7.7	1.9	4.3	11.0
WILSHIRE U.S. LARGE GROWTH	27.3	5.5	18.3	15.9	13.7	16.2
WILSHIRE U.S. LARGE VALUE	15.6	-10.0	-1.5	6.1	7.9	11.8
WILSHIRE U.S. SMALL GROWTH	29.9	-6.7	0.0	6.6	6.2	12.6
WILSHIRE U.S. SMALL VALUE	21.3	-20.5	-14.9	-2.7	2.1	9.3
WILSHIRE REIT INDEX	10.6	-17.8	-12.3	0.2	4.0	9.2
MSCI USA MIN. VOL. INDEX	12.9	-6.5	0.5	9.8	11.0	14.0
FTSE RAFI U.S. 1000 INDEX	18.1	-13.1	-4.3	4.3	6.3	11.7

U.S. SECTOR WEIGHT AND RETURN (%)

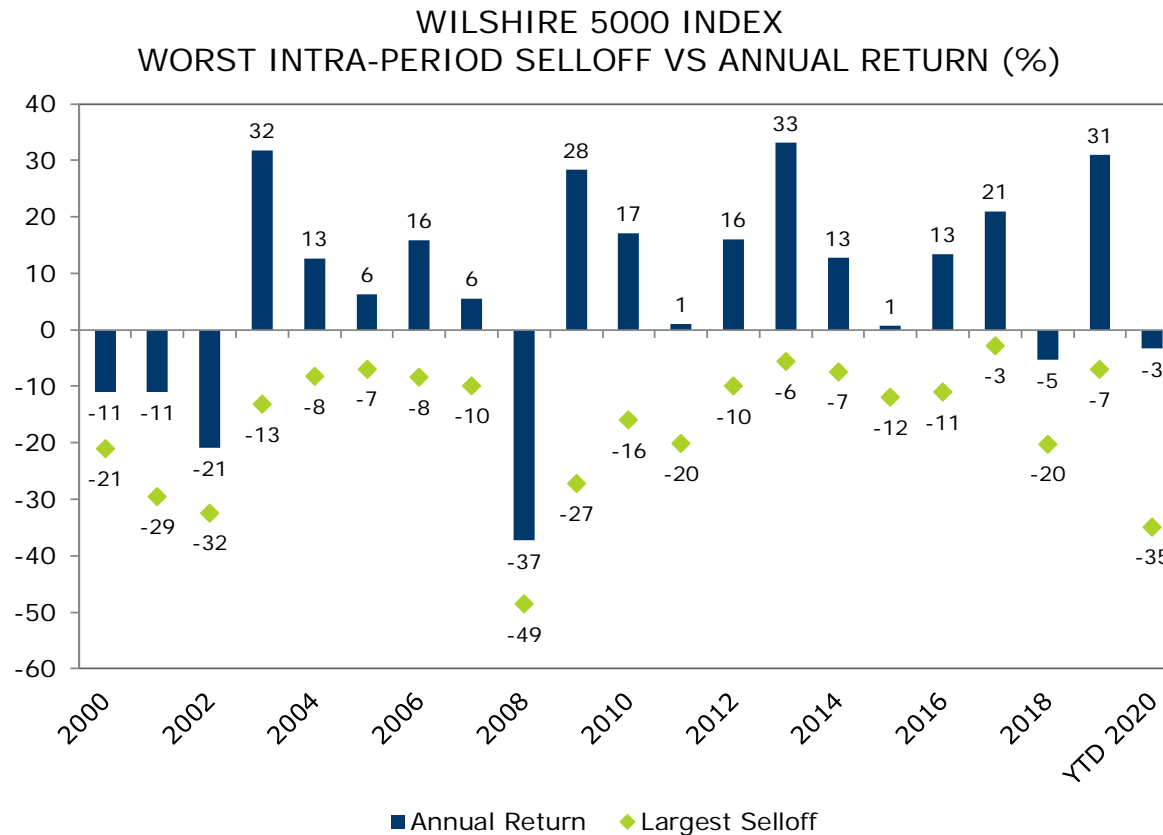


Data sources: Bloomberg, Wilshire Atlas

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ANNUAL RETURNS

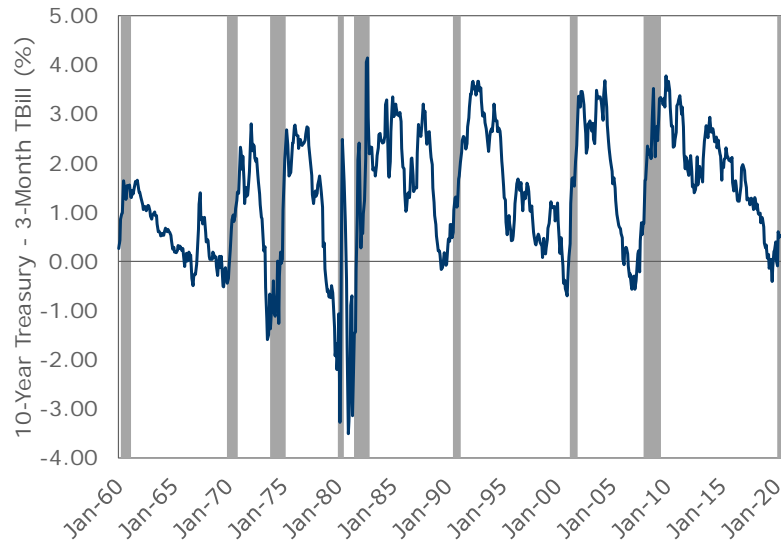
- Coronavirus sell-off began in late February and reached -35% in late March
- Q2 return of 21.9% was the strongest quarterly return in 21 years



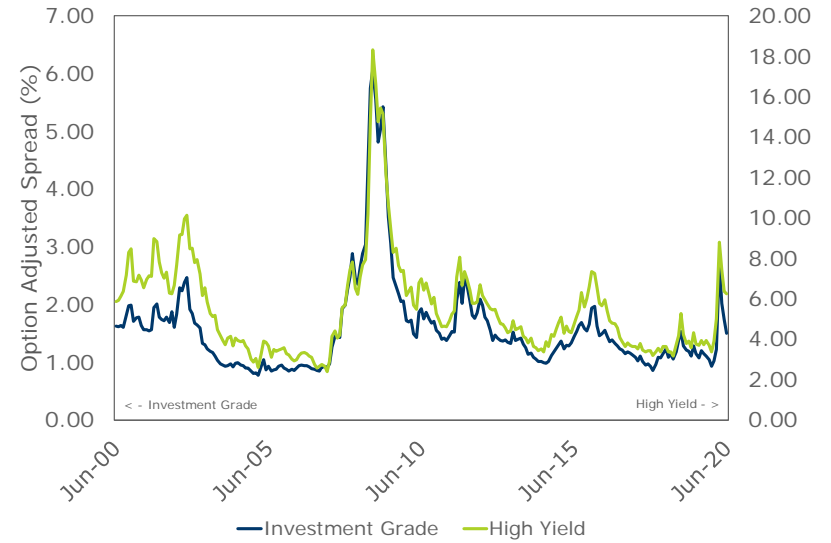
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RISK MONITOR

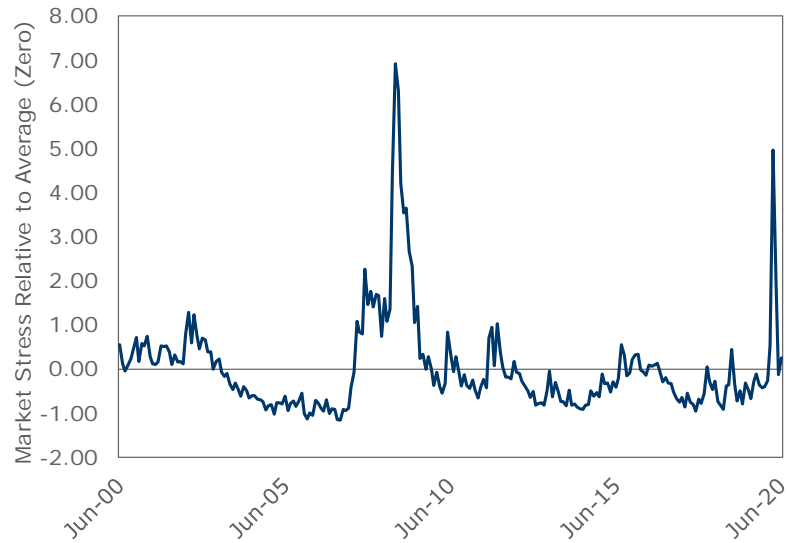
YIELD CURVE SLOPE VS RECESSIONS (IN GRAY)



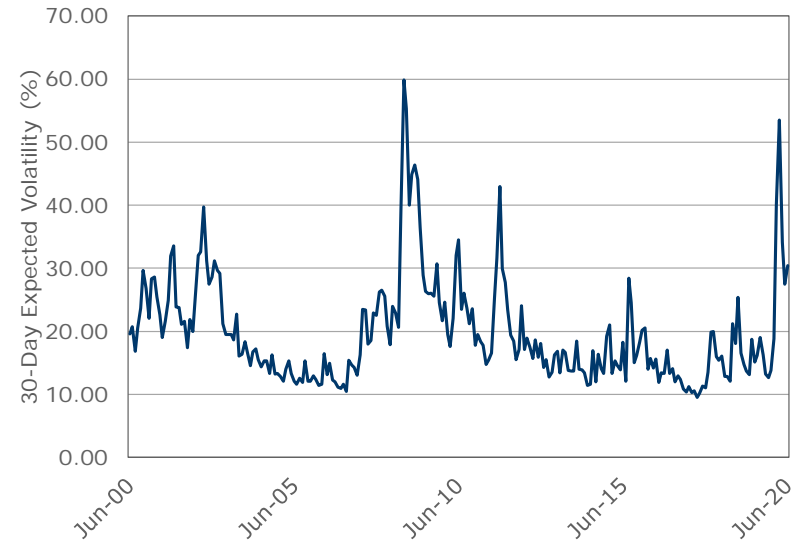
BLOOMBERG BARCLAYS CREDIT INDEXES



ST. LOUIS FED FINANCIAL STRESS INDEX



CBOE VOLATILITY INDEX

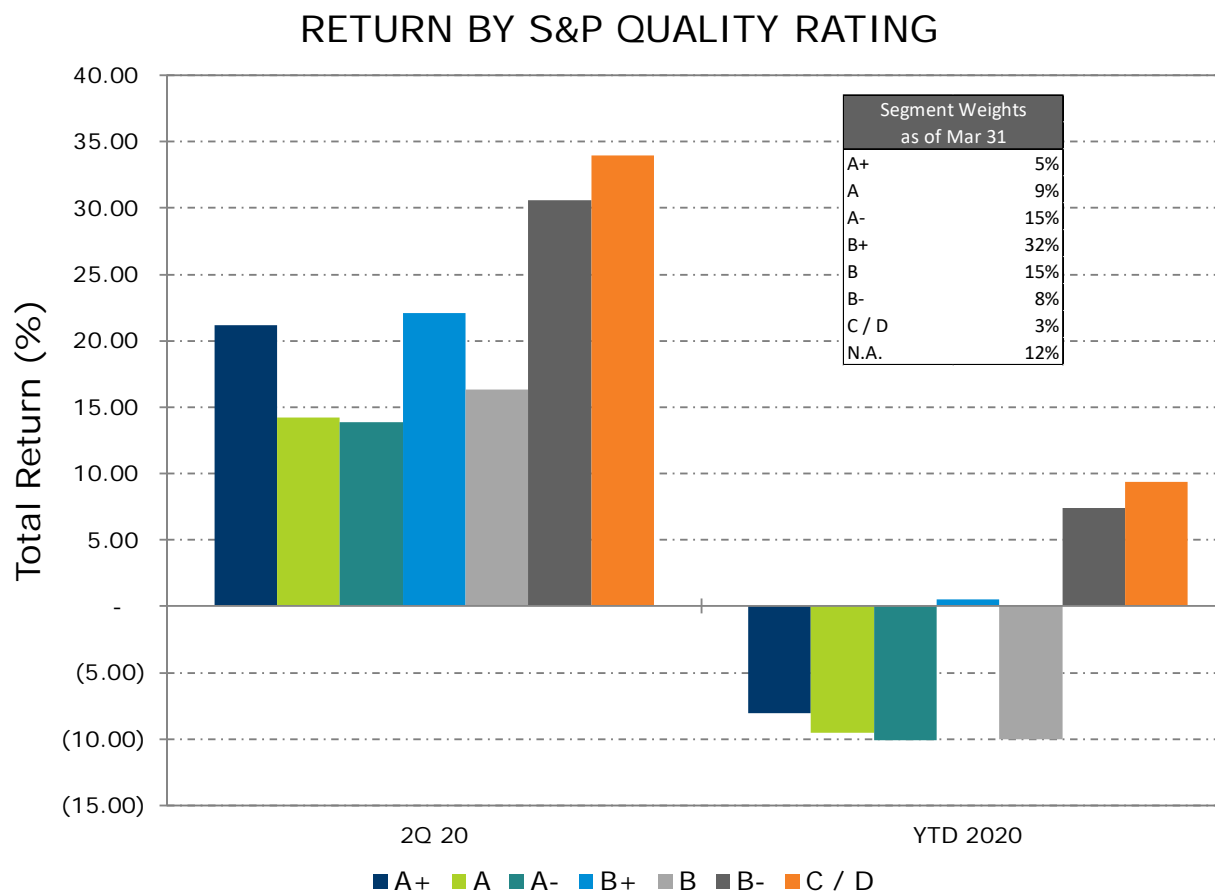


Data sources: Bloomberg

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RETURNS BY QUALITY SEGMENT

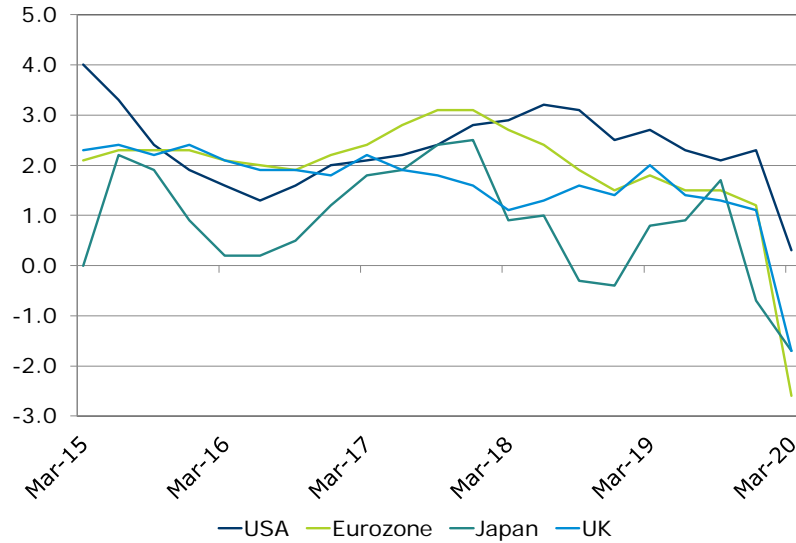
Lower quality names led the rebound and are up for the year



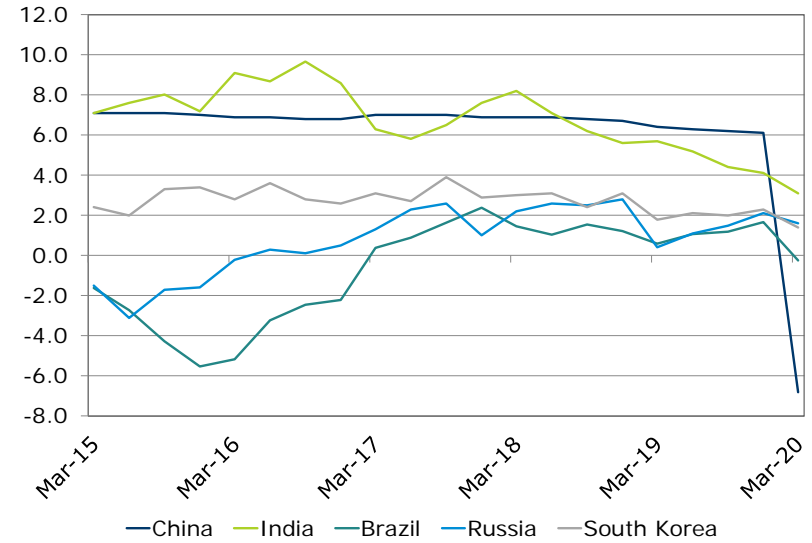
Data sources: Wilshire Atlas

NON-U.S. GROWTH AND INFLATION

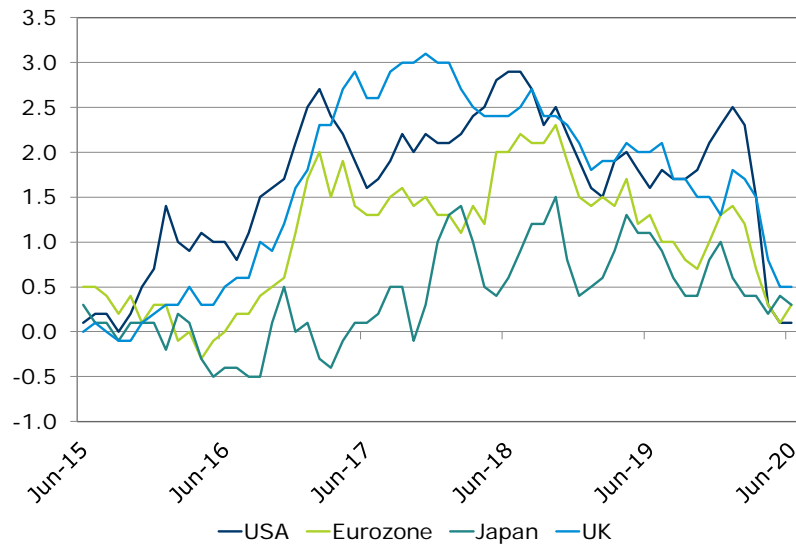
DEVELOPED MARKETS REAL GDP GROWTH YoY (%)



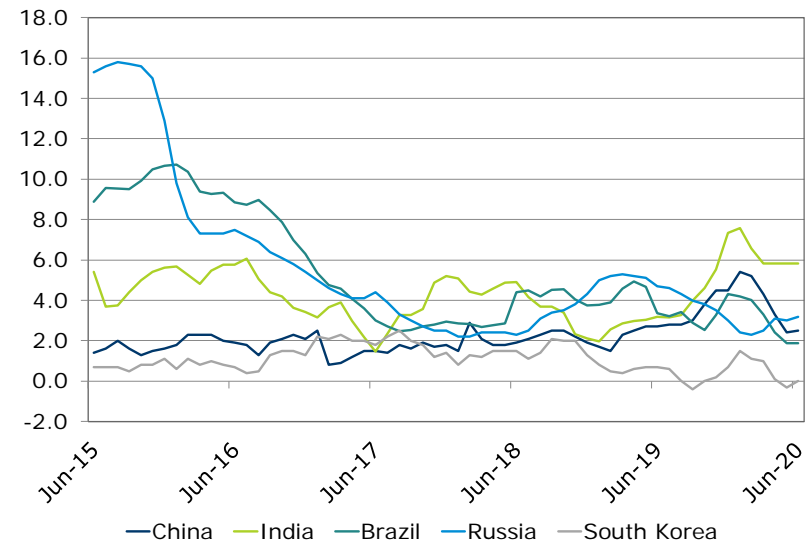
EMERGING MARKETS REAL GDP GROWTH YoY (%)



DEVELOPED MARKETS CPI GROWTH YoY (%)



EMERGING MARKETS CPI GROWTH YoY (%)



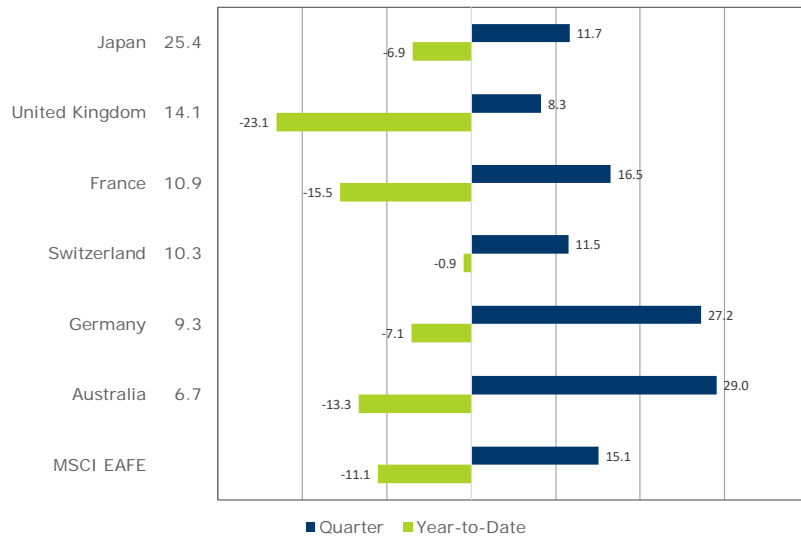
Data sources: Bloomberg

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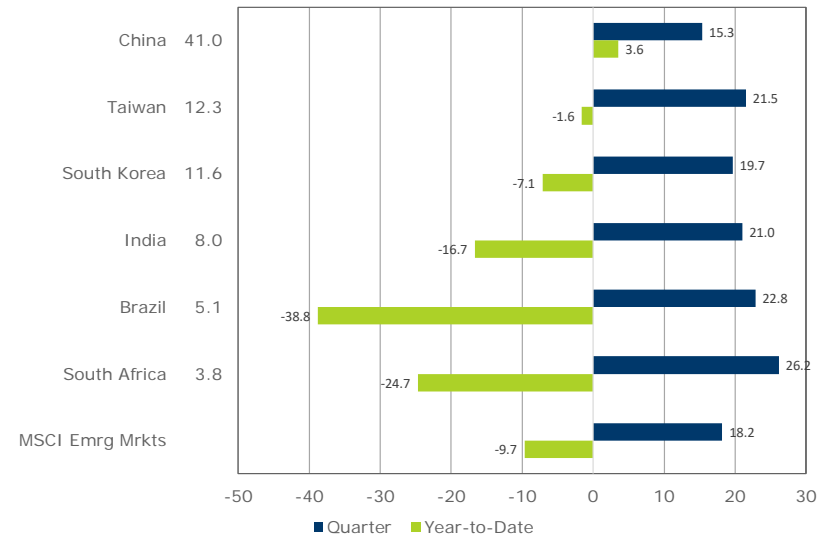
NON-U.S. EQUITY MARKET

AS OF 6/30/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
MSCI ACWI EX-US (\$G)	16.3	-10.8	-4.4	1.6	2.7	5.5
MSCI EAFE (\$G)	15.1	-11.1	-4.7	1.3	2.5	6.2
MSCI EMERGING MARKETS (\$G)	18.2	-9.7	-3.0	2.3	3.2	3.6
MSCI FRONTIER MARKETS (\$G)	16.2	-20.4	-20.7	-4.5	-2.4	1.9
MSCI ACWI EX-US GROWTH (\$G)	19.2	-2.4	6.1	6.4	6.0	7.4
MSCI ACWI EX-US VALUE (\$G)	13.7	-19.2	-14.4	-3.4	-0.4	3.6
MSCI ACWI EX-US SMALL (\$G)	23.0	-12.6	-4.0	0.2	2.9	6.4
MSCI ACWI MINIMUM VOLATILITY	9.9	-7.5	-1.9	6.4	7.6	10.4
MSCI EAFE MINIMUM VOLATILITY	7.5	-10.0	-5.1	2.2	4.0	7.6
FTSE RAFI DEVELOPED EX-US	13.8	-17.6	-12.1	-2.7	0.1	4.2
MSCI EAFE LC (G)	12.8	-10.3	-3.8	1.7	3.1	7.4
MSCI EMERGING MARKETS LC (G)	16.8	-5.4	1.7	4.9	5.5	6.4

DEVELOPED MARKETS WEIGHT AND RETURN (%)



EMERGING MARKETS WEIGHT AND RETURN (%)



Data sources: Bloomberg

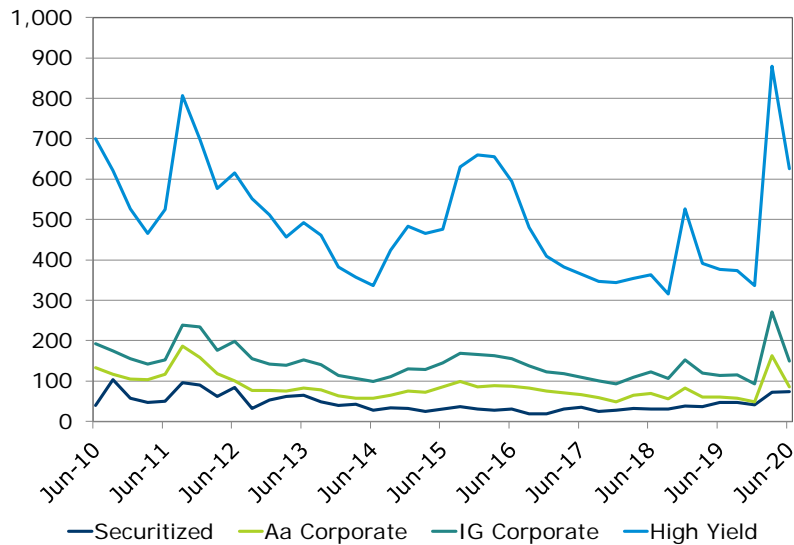
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U.S. FIXED INCOME

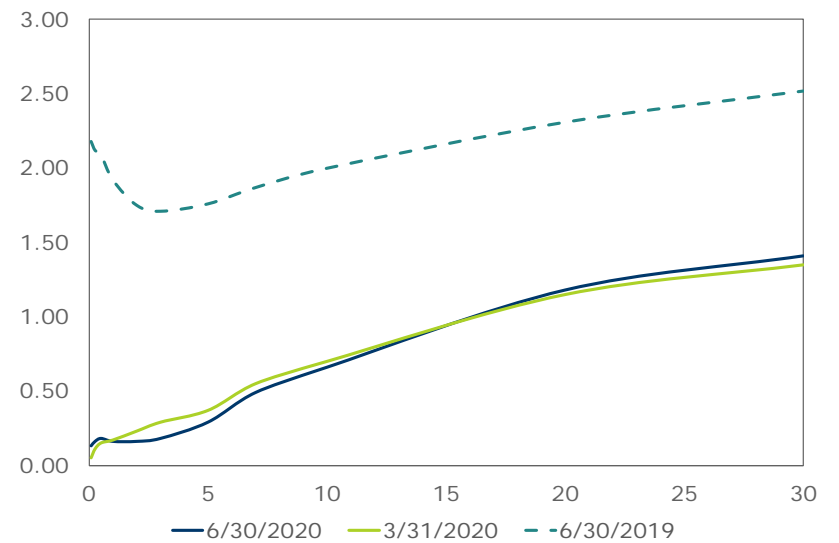
AS OF 6/30/2020	YTW	DUR.	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS AGGREGATE	1.3	6.0	2.9	6.1	8.7	5.3	4.3	3.8
BLOOMBERG BARCLAYS TREASURY	0.5	7.2	0.5	8.7	10.4	5.6	4.1	3.4
BLOOMBERG BARCLAYS GOV'T-REL.	1.3	6.0	3.4	3.9	6.6	4.8	3.9	3.5
BLOOMBERG BARCLAYS SECURITIZED	1.4	2.3	0.9	3.6	5.7	4.0	3.3	3.2
BLOOMBERG BARCLAYS CORPORATE	2.1	8.5	9.0	5.0	9.5	6.3	5.8	5.5
BLOOMBERG BARCLAYS LT G/C	2.4	16.8	6.2	12.8	18.9	10.3	9.0	7.8
BLOOMBERG BARCLAYS LT TREASURY	1.3	19.4	0.2	21.2	25.4	12.0	9.3	7.7
BLOOMBERG BARCLAYS LT GOV't-REL.	2.9	13.5	8.2	4.3	10.0	8.0	7.1	7.2
BLOOMBERG BARCLAYS LT CORP.	3.2	15.2	11.4	6.3	13.8	8.8	8.8	7.8
BLOOMBERG BARCLAYS U.S. TIPS *	0.6	7.8	4.2	6.0	8.3	5.0	3.7	3.5
BLOOMBERG BARCLAYS HIGH YIELD	6.9	3.9	10.2	-3.8	0.0	3.3	4.8	6.7
TREASURY BILLS	0.1	0.3	0.0	0.7	1.7	1.8	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 sources: Bloomberg

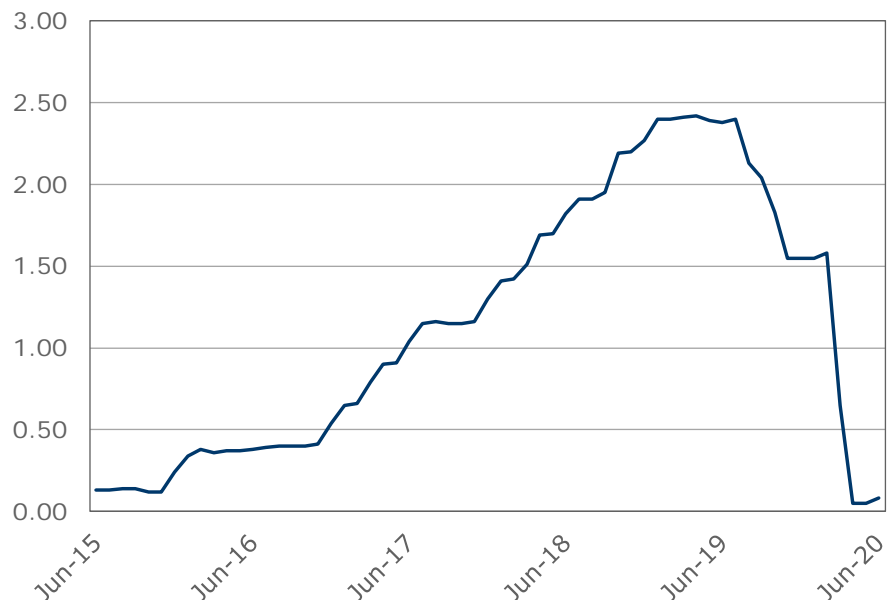
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FEDERAL RESERVE

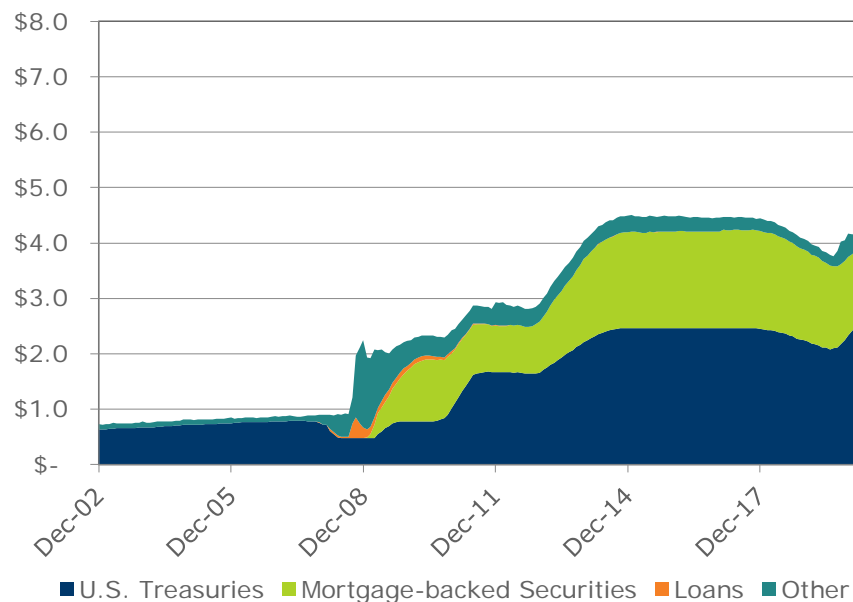
- Current expectation for the Fed-funds rate is to remain near zero through 2022
- Federal Reserve has added nearly \$3 trillion in assets to their balance sheet just this year
- Unlike after the GFC, the Fed is also buying corporate and municipal bonds in addition to Treasuries and MBS

FEDERAL FUNDS RATE (%)



FEDERAL RESERVE BALANCE SHEET (\$T)

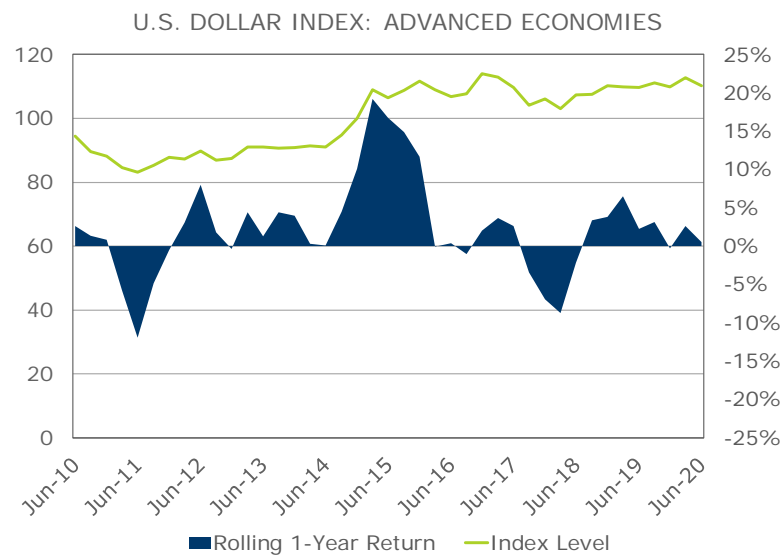
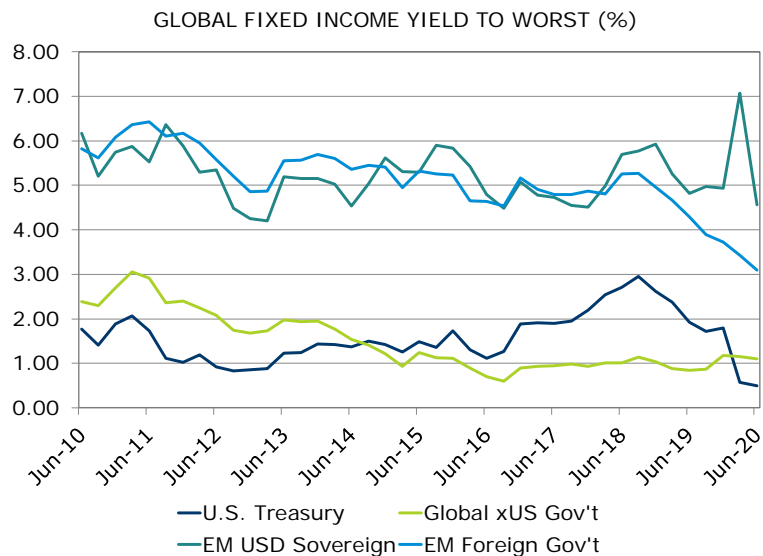
	Announced	Closed	Amount (bil)
QE1	11/25/2008	3/31/2010	\$1,403
QE2	11/3/2010	6/29/2012	\$568
QE3	9/13/2012	10/29/2014	\$1,674
QE4	3/23/2020		\$2,924



NON-U.S. FIXED INCOME

AS OF 6/30/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
DEVELOPED MARKETS						
BLMBRG BRCLYS GLBL AGGREGATE xUS	3.4	0.6	0.7	2.5	2.9	2.0
BLMBRG BRCLYS GLBL AGGREGATE xUS *	1.8	2.3	4.0	4.9	4.5	4.2
BLMBRG BRCLYS GLOBAL INF LNKD xUS	8.3	2.0	3.4	3.5	2.8	4.2
BLMBRG BRCLYS GLOBAL INF LNKD xUS *	7.4	6.7	7.3	6.5	6.6	6.3
EMERGING MARKETS (HARD CURRENCY)						
BLMBRG BRCLYS EM USD AGGREGATE	10.0	-0.4	3.0	4.2	5.2	6.0
EMERGING MARKETS (FOREIGN CURRENCY)						
BLMBRG BRCLYS EM LOCAL CURR. GOV'T	4.5	-3.4	-0.1	2.4	2.8	2.9
BLMBRG BRCLYS EM LOCAL CURR. GOV'T *	2.2	2.9	6.3	5.0	4.2	3.6
EURO vs. DOLLAR	1.8	0.2	-1.2	-0.6	0.2	-0.9
YEN vs. DOLLAR	-0.4	0.6	-0.1	1.4	2.6	-2.0
POUND vs. DOLLAR	-0.2	-6.5	-2.3	-1.6	-4.6	-1.8

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

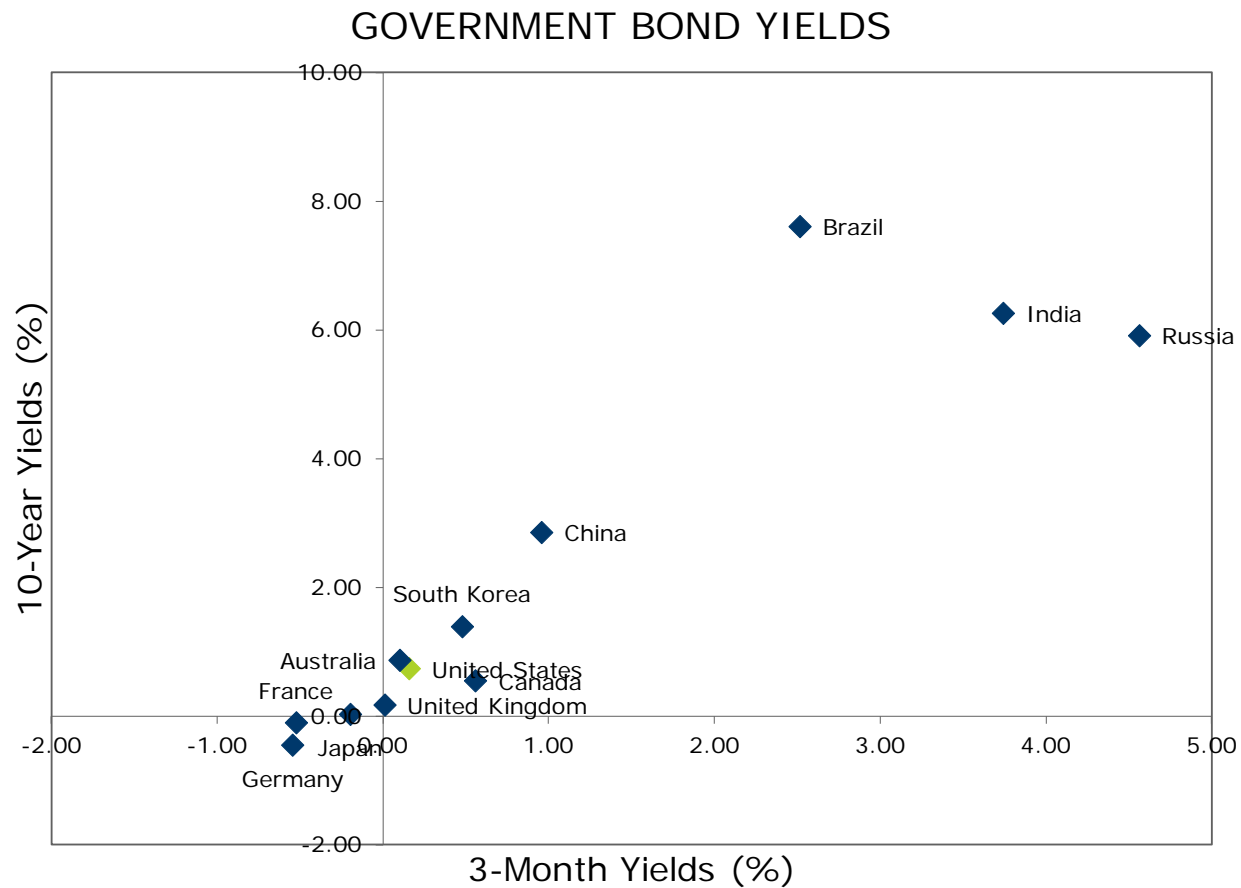


Data sources: Bloomberg

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GLOBAL INTEREST RATES

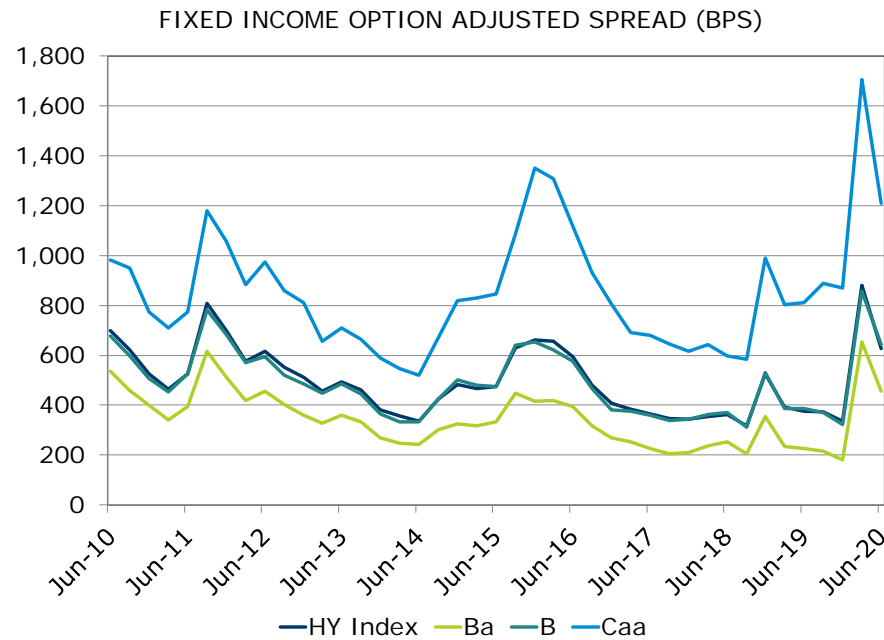
Negative rates found in Germany and France; low but positive rates, and at similar levels, in the U.S. and Australia while the U.K. approaches zero in both the short and long-term



Data sources: Bloomberg

HIGH YIELD BOND MARKET

AS OF 6/30/2020		YTW	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS HIGH YIELD		6.9	10.2	-3.8	0.0	3.3	4.8	6.7
S&P LSTA LEVERAGE LOAN INDEX		6.1	6.6	-3.9	-0.5	2.5	3.0	4.1
HIGH YIELD QUALITY DISTRIBUTION	WEIGHT							
Ba U.S. HIGH YIELD	55.2%	5.2	11.5	0.2	4.7	5.0	5.8	7.2
B U.S. HIGH YIELD	31.9%	7.1	8.6	-5.5	-1.4	3.0	4.1	6.3
Caa U.S. HIGH YIELD	12.2%	12.6	9.1	-13.3	-11.7	-1.9	2.6	5.8
Ca to D U.S. HIGH YIELD	0.7%	29.6	2.1	-28.3	-38.0	-10.3	-3.9	-5.7
Non-Rated U.S. HIGH YIELD	0.0%	0.0	6.1	-6.5	-5.2	0.4	-1.0	4.3



Data sources: Bloomberg

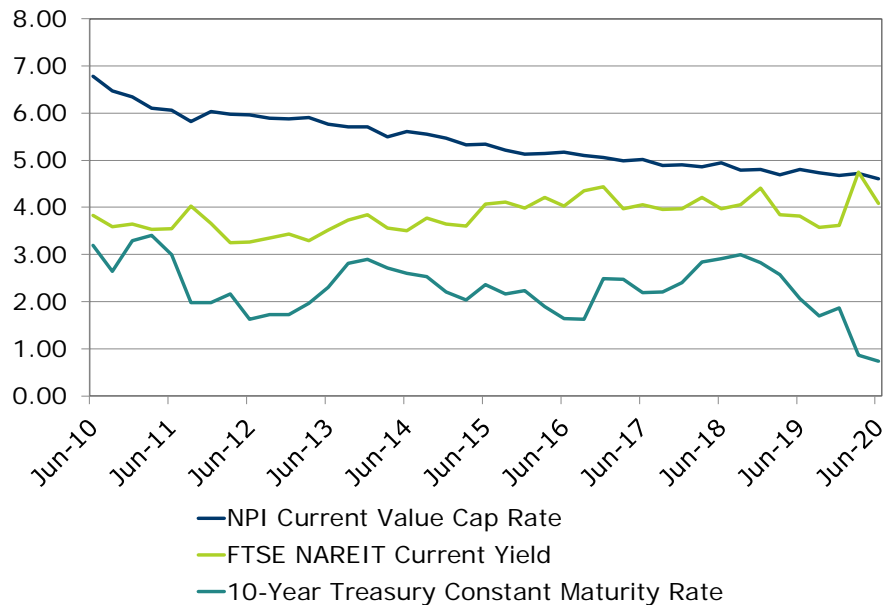
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Wilshire Consulting

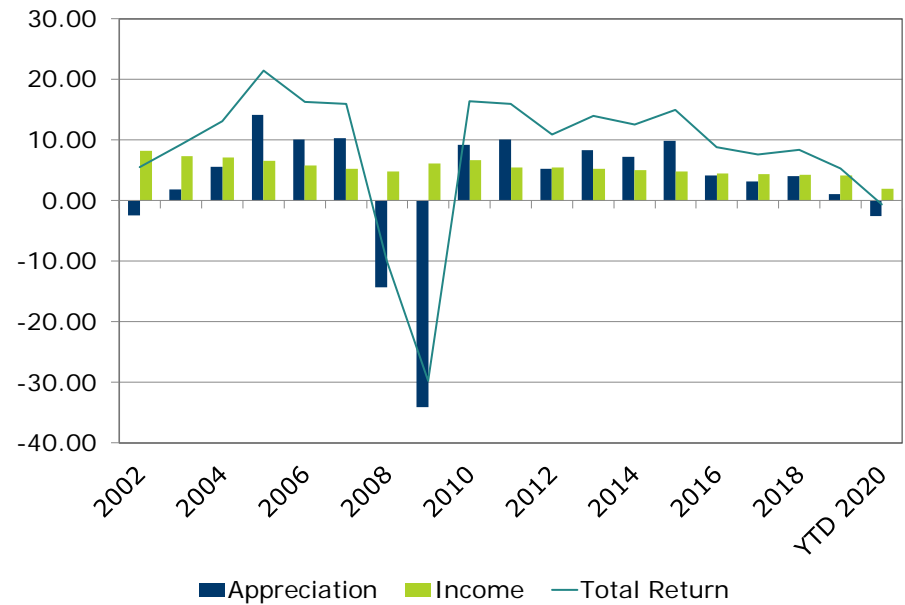
REAL ASSETS

AS OF 6/30/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS U.S. TIPS	4.2	6.0	8.3	5.0	3.7	3.5
BLOOMBERG COMMODITY INDEX	5.1	-19.4	-17.4	-6.1	-7.7	-5.8
WILSHIRE GLOBAL RESI INDEX	9.5	-20.3	-15.2	-0.7	2.6	8.3
NCREIF ODCE FUND INDEX	-1.6	-0.6	2.2	5.7	7.3	10.8
NCREIF TIMBERLAND INDEX	0.1	0.2	0.3	2.3	2.8	4.4
ALERIAN MIDSTREAM ENERGY	32.6	-29.6	-29.4	-8.9	-8.0	n.a.

REAL ESTATE VALUATION (%)



NCREIF ODCE FUND INDEX RETURN (%)



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

ASSET CLASS PERFORMANCE

ASSET CLASS RETURNS - BEST TO WORST						ANNUALIZED 5-YEAR AS OF 6/20
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%	Core Bond 6.1%	U.S. Equity 10.3%
U.S. Equity 0.7%	High Yield 17.1%	Developed 25.6%	Core Bond 0.0%	REITs 25.8%	U.S. TIPS 6.0%	High Yield 4.8%
Core Bond 0.6%	U.S. Equity 13.4%	U.S. Equity 21.0%	U.S. TIPS -1.3%	Developed 22.7%	T-Bills 0.7%	Core Bond 4.3%
T-Bills 0.1%	Commodities 11.8%	High Yield 7.5%	High Yield -2.1%	Emrg Mrkts 18.9%	U.S. Equity -3.3%	REITs 4.0%
Developed -0.4%	Emrg Mrkts 11.6%	REITs 4.2%	REITs -4.8%	High Yield 14.3%	High Yield -3.8%	U.S. TIPS 3.7%
U.S. TIPS -1.4%	REITs 7.2%	Core Bond 3.6%	U.S. Equity -5.3%	Core Bond 8.7%	Emrg Mrkts -9.7%	Emrg Mrkts 3.2%
High Yield -4.5%	U.S. TIPS 4.7%	U.S. TIPS 3.0%	Commodities -11.2%	U.S. TIPS 8.4%	Developed -11.1%	Developed 2.5%
Emrg Mrkts -14.6%	Core Bond 2.6%	Commodities 1.7%	MLPs -12.4%	Commodities 7.7%	REITs -17.8%	T-Bills 1.2%
Commodities -24.7%	Developed 1.5%	T-Bills 0.8%	Developed -13.4%	MLPs 6.6%	Commodities -19.4%	Commodities -7.7%
MLPs -32.6%	T-Bills 0.3%	MLPs -6.5%	Emrg Mrkts -14.2%	T-Bills 2.3%	Midstream -29.6%	MLPs -12.9%

Data sources: Bloomberg

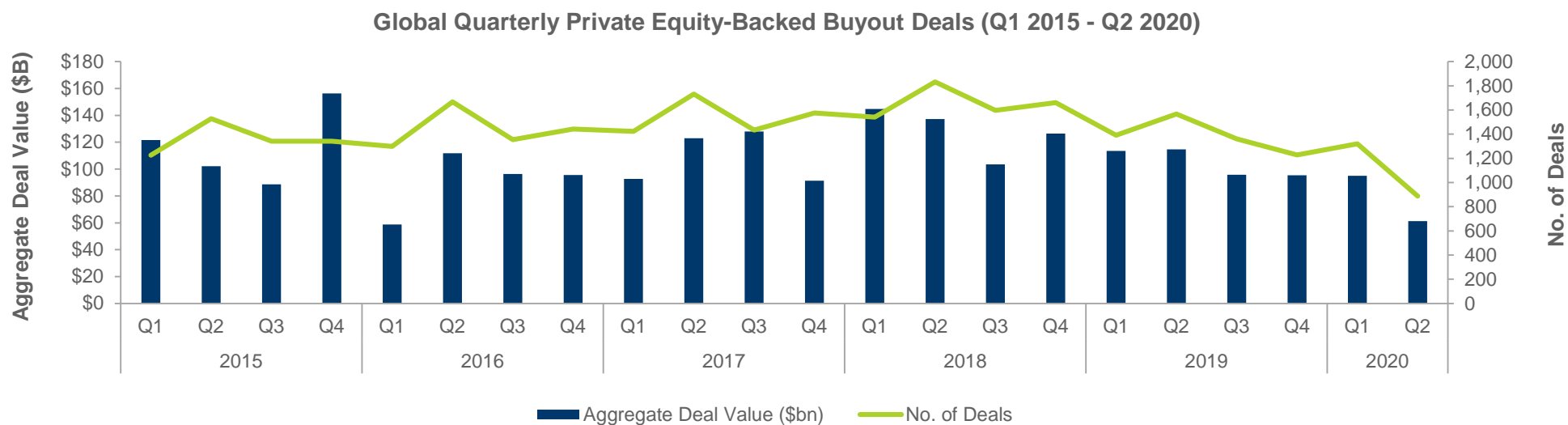
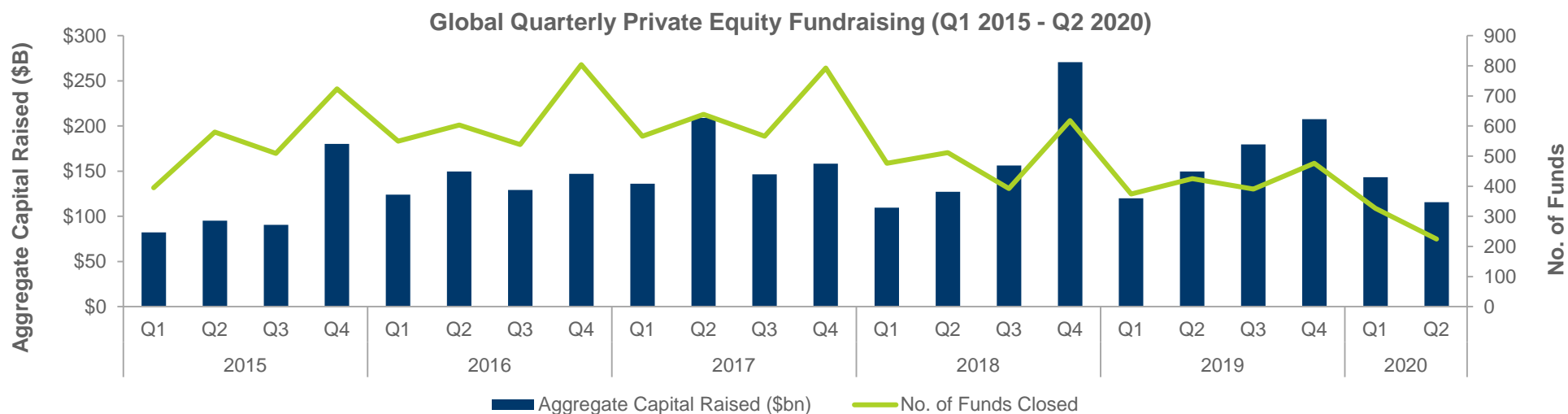
Note: Developed asset class is developed equity markets ex-U.S., ex-Canada



APPENDIX: PRIVATE MARKETS UPDATE

Wilshire Private Markets

PRIVATE EQUITY – FUNDRAISING & INVESTMENT ACTIVITY

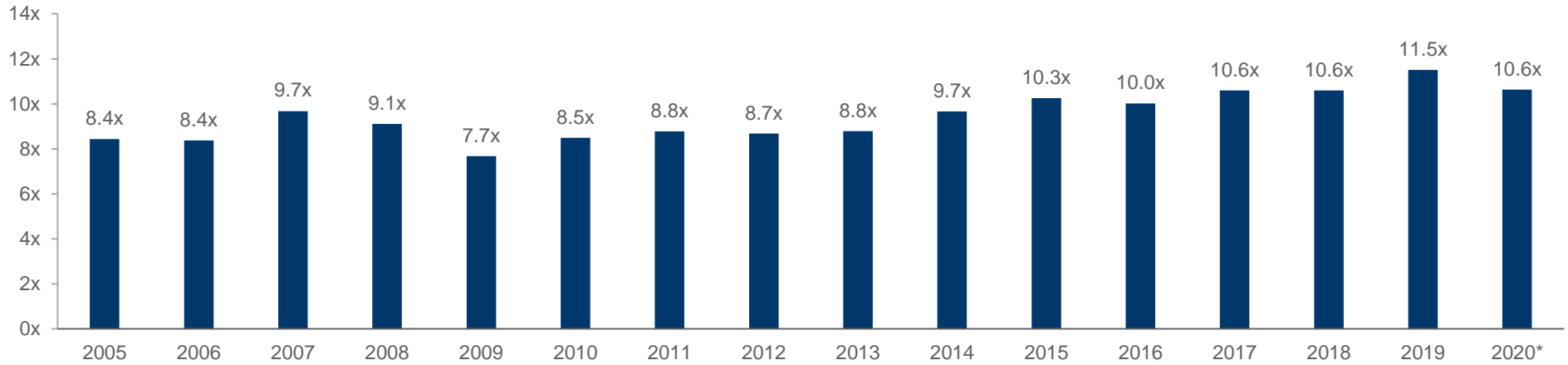


Source: Preqin, as of June 30, 2020.

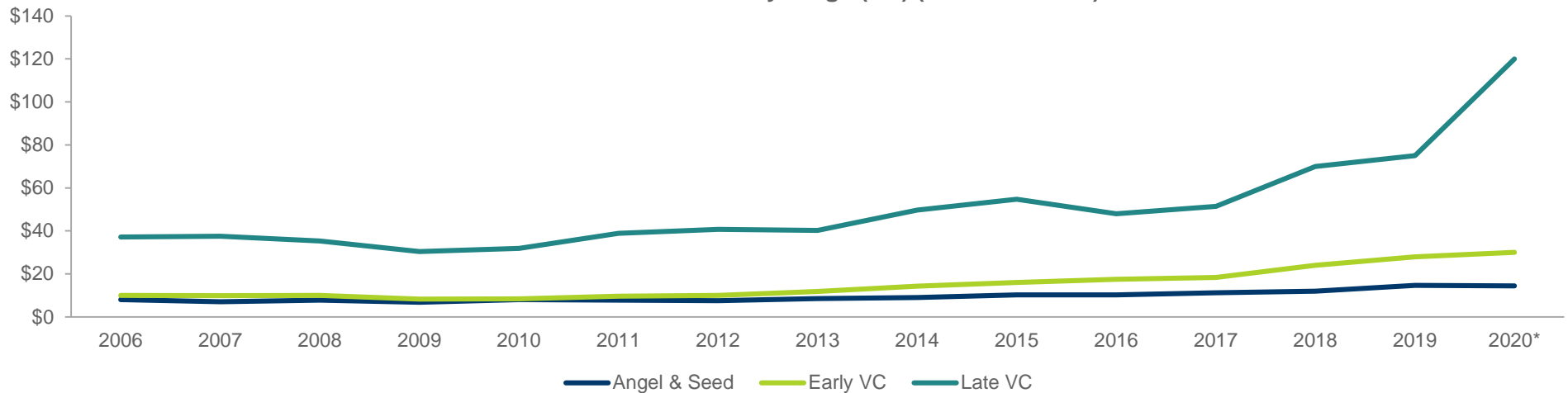
Wilshire Private Markets

PRIVATE EQUITY – PRICING & VALUATIONS

LBO Purchase Price Multiples (2005 - Q2 2020)



U.S. Median Pre-Value by Stage (\$M) (2006 - Q2 2020)

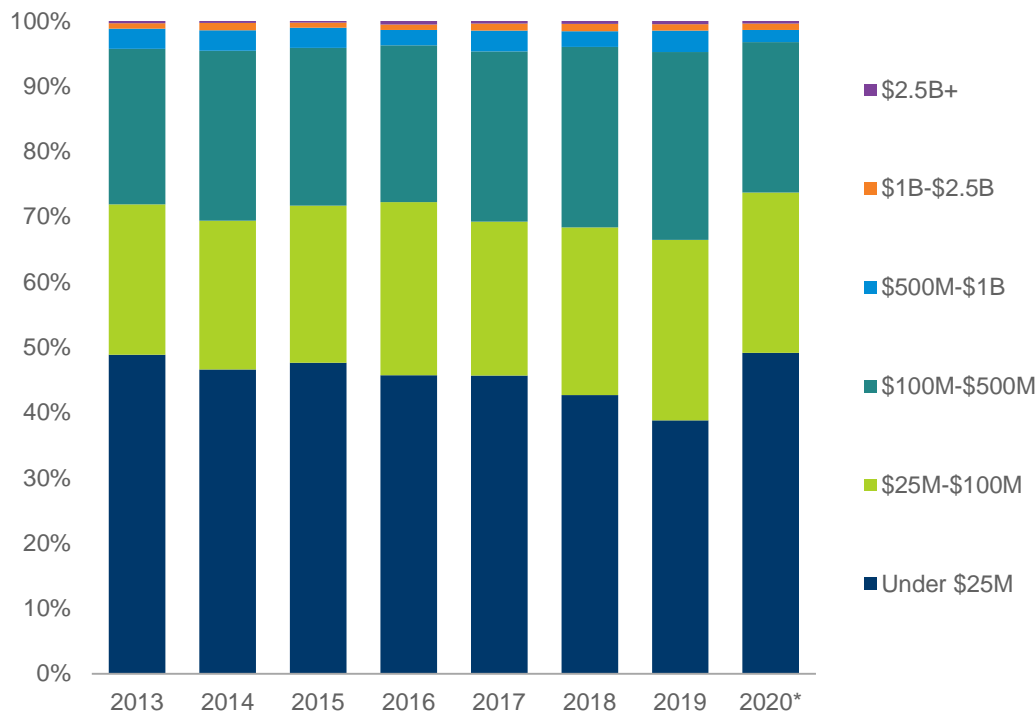


Source: S&P LBO; PitchBook, *as of June 30, 2020.

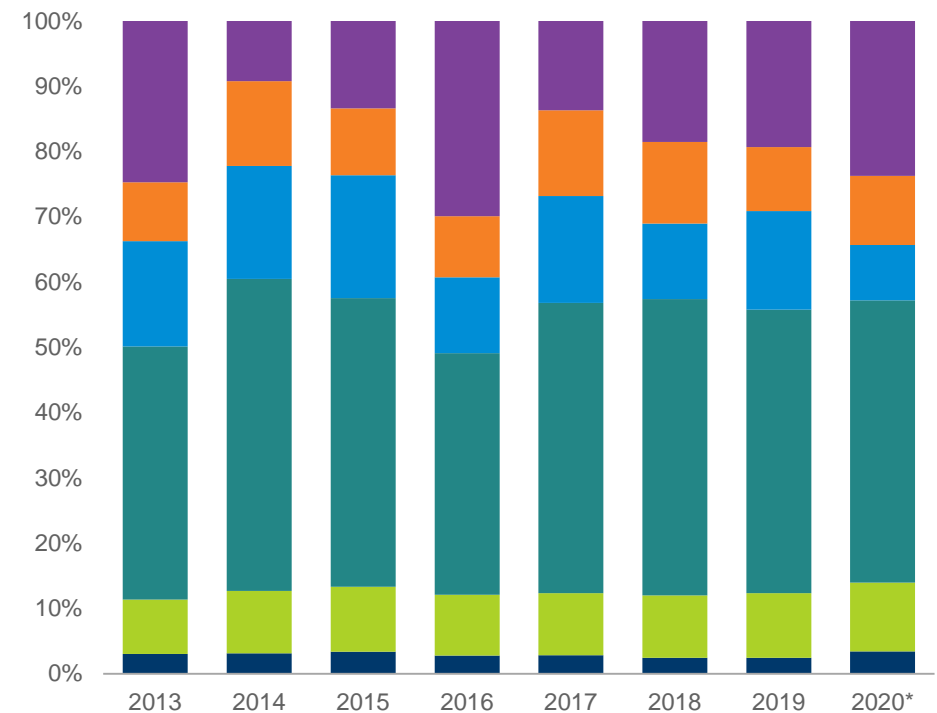
Wilshire Private Markets

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)*



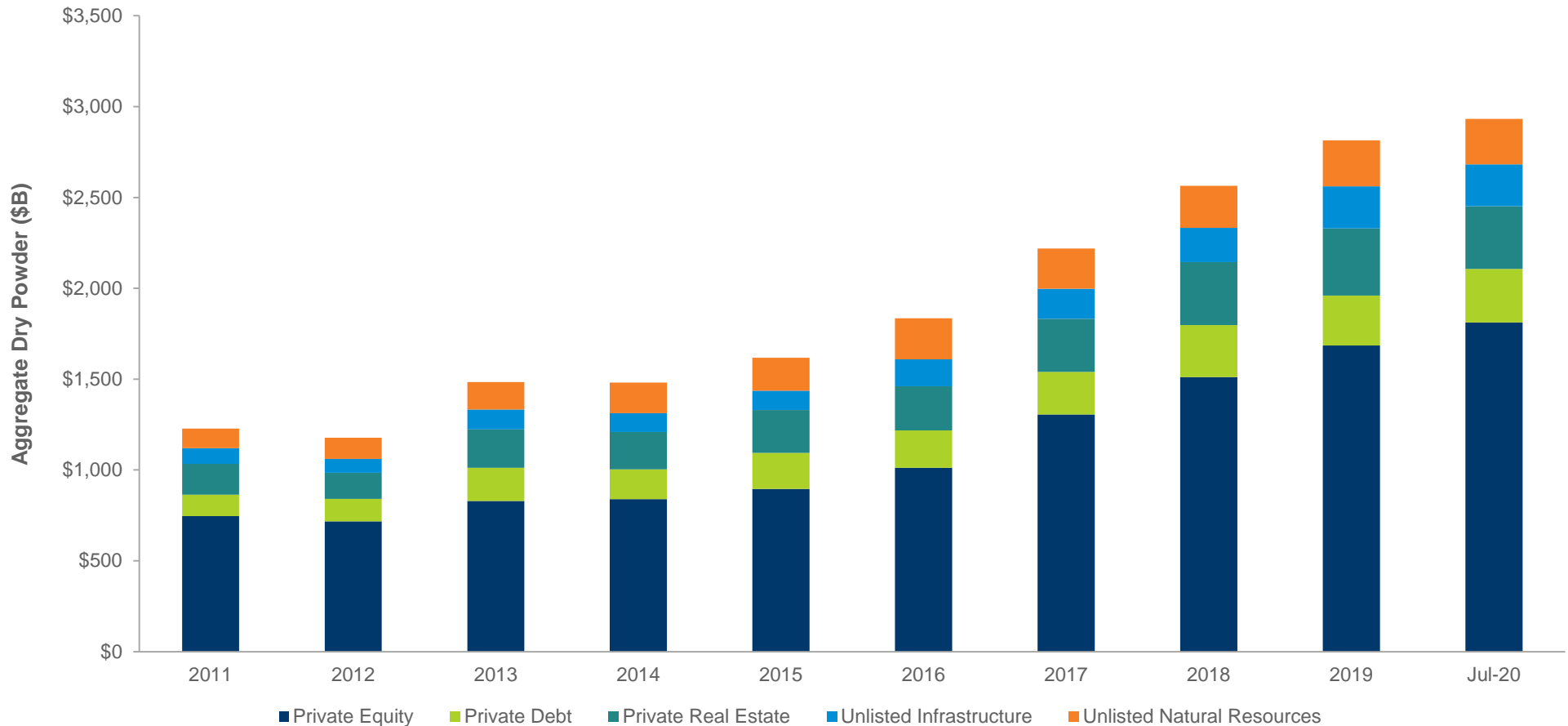
- Deal volume continues to be dominated by lower middle market deals with investment sizes below \$100 million through the second quarter of 2020
- However, deals with below \$100 million check sizes comprised only 14% of all deal volume by amount of capital invested in the second quarter of 2020

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

Wilshire Private Markets

PRIVATE CAPITAL DRY POWDER

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



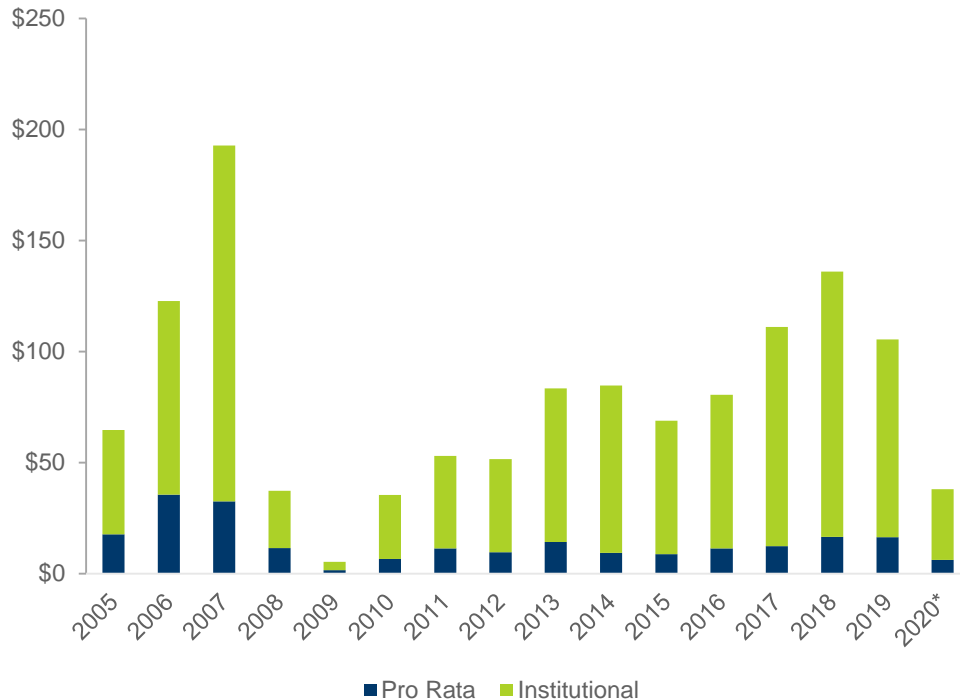
- Global private capital dry powder continues to increase, topping \$2.9 trillion across all fund types
- Private equity comprises just over 60% of total dry powder in the market as of July 2020

Source: Preqin, as of July 27, 2020.

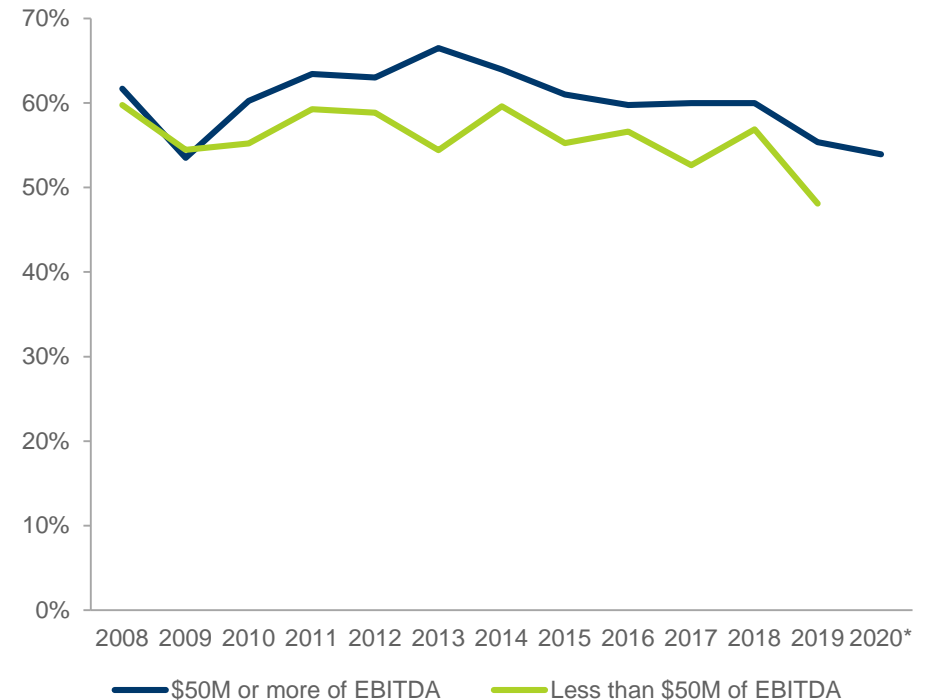
Wilshire Private Markets

PRIVATE EQUITY - U.S. DEBT MARKETS

Total U.S. LBO Loan Volume (\$B) (2005 - Q2 2020)



Percentage of Debt Used in LBOs (2008 - Q2 2020)



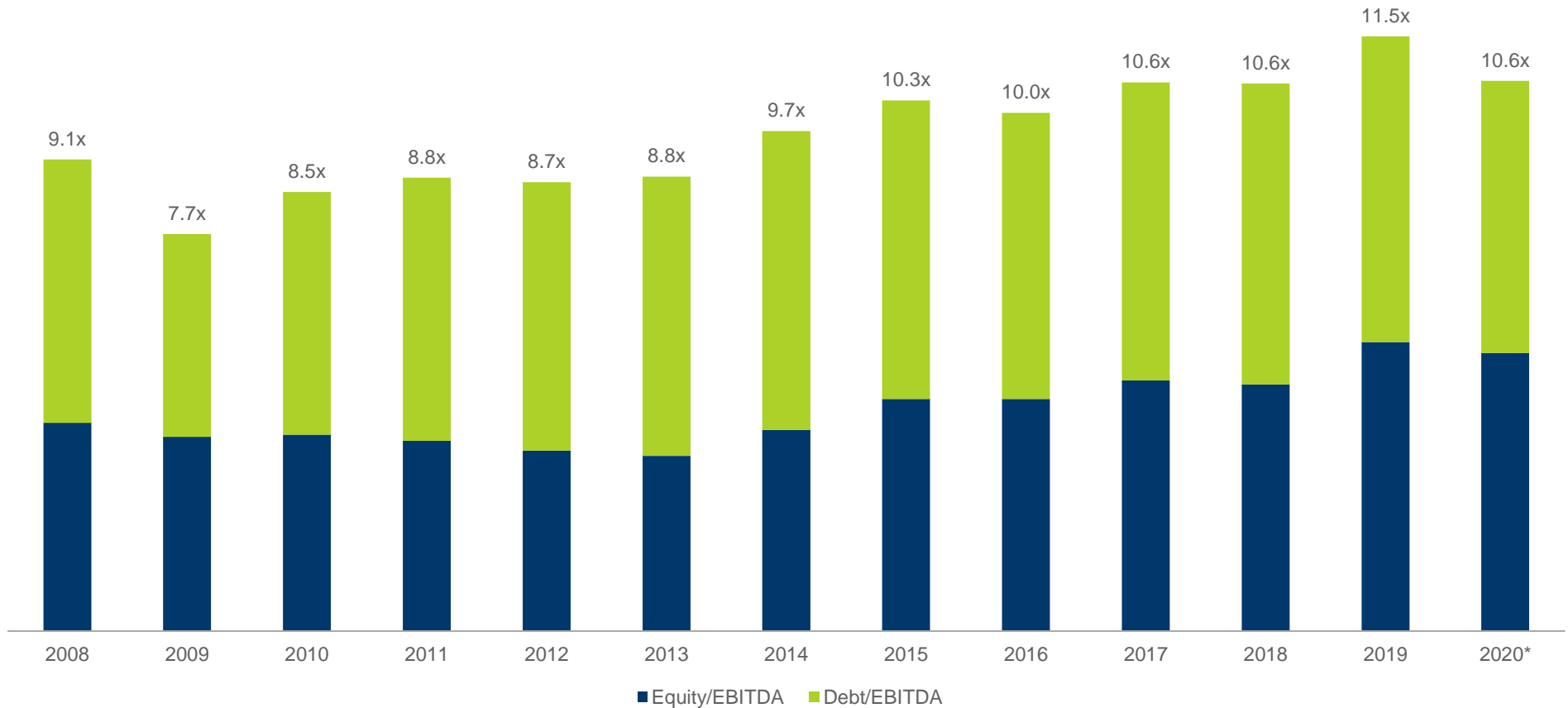
- 2020 has generated approximately \$38 billion in loan volume so far and is on pace to see a slight decrease in loan volume from 2019
- As debt multiples continue to increase, the percentage of debt used to finance leveraged buyouts through the second quarter of 2020 has dropped from 2019 marks

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

Wilshire Private Markets

PRIVATE EQUITY - U.S. LBO PURCHASE PRICE MULTIPLES

Purchase Price Multiples of U.S. LBO Transactions (2008 - Q2 2020)



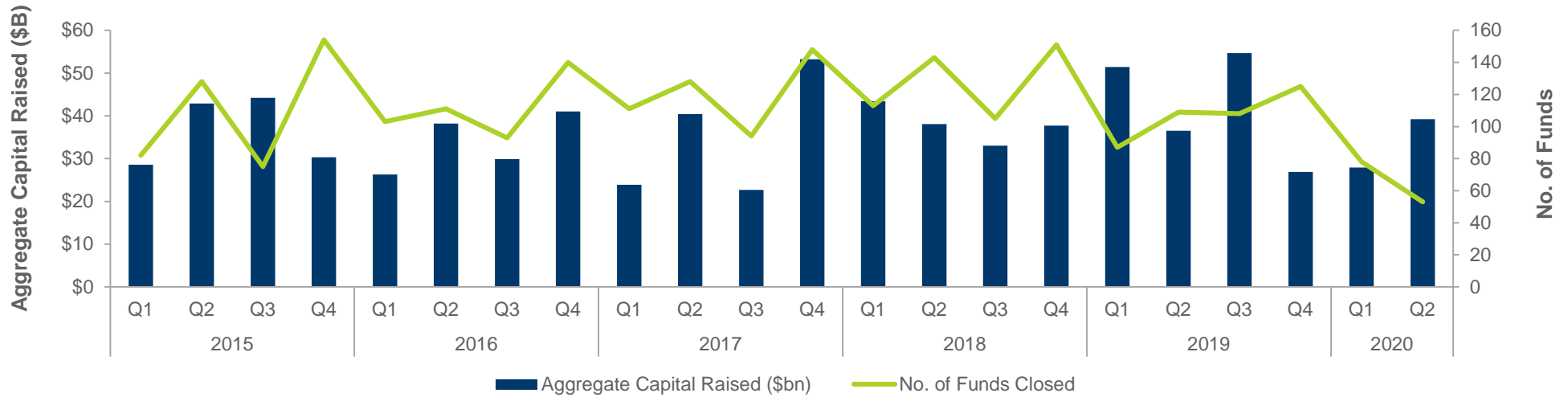
- Purchase price multiples for U.S. LBOs have slightly decreased through Q2 2020, relative to 2019 levels

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

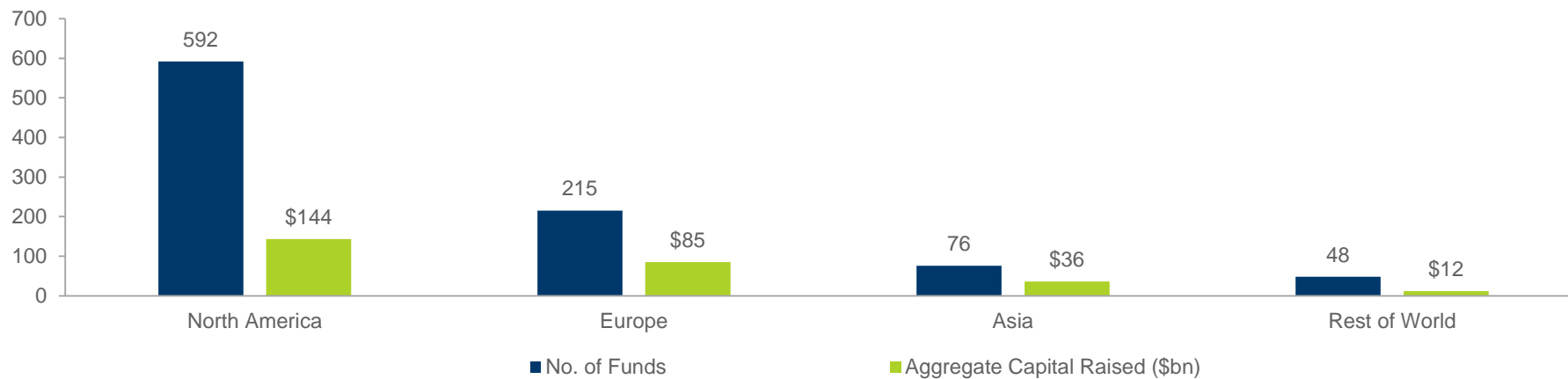
Wilshire Private Markets

PRIVATE REAL ESTATE – FUNDRAISING ACTIVITY

Global Quarterly Closed-End Private Real Estate Fundraising (Q1 2015 - Q2 2020)



Closed-End Private Real Estate Funds Actively in Market in Q2 2020 by Primary Geographic Focus

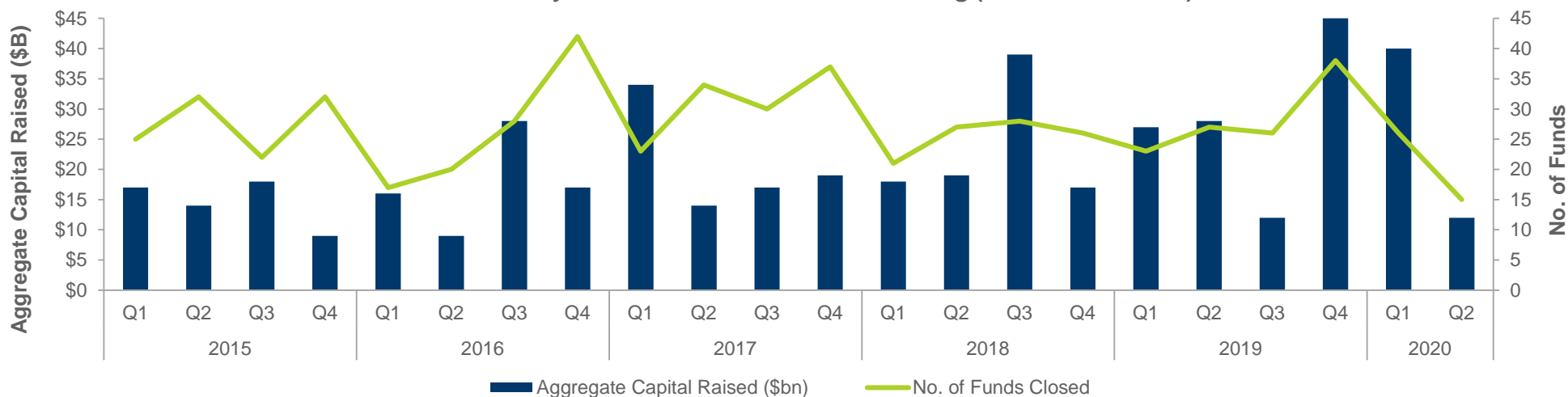


Source: Preqin, as of June 30, 2020.

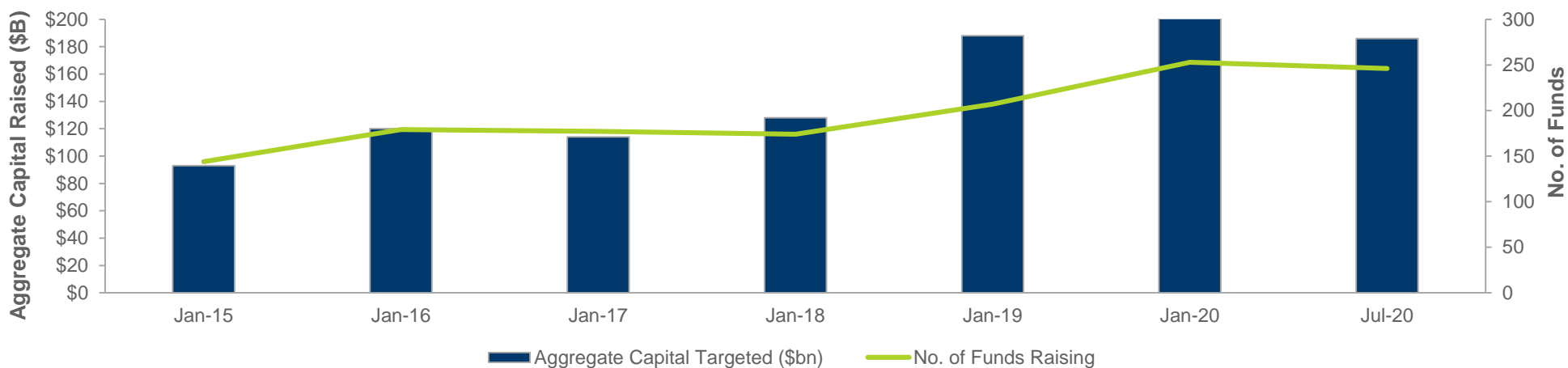
Wilshire Private Markets

UNLISTED INFRASTRUCTURE – FUNDRAISING & INVESTMENT ACTIVITY

Global Quarterly Unlisted Infrastructure Fundraising (Q1 2015 - Q2 2020)



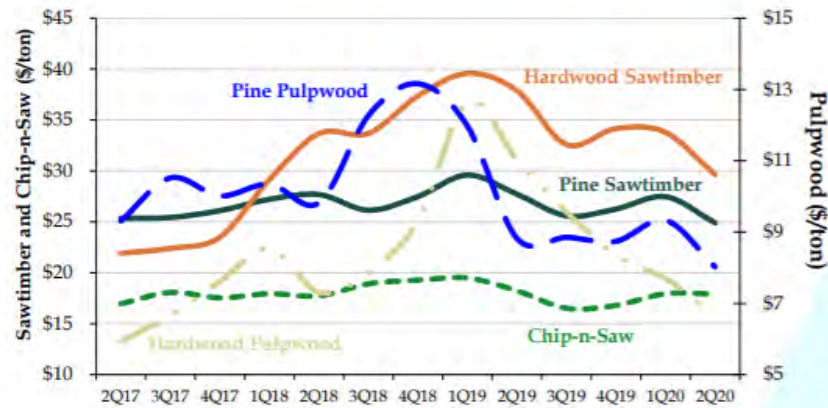
Unlisted Infrastructure Funds in Market over Time (2015 - July 2020)



Source: Preqin, as of June 30, 2020.

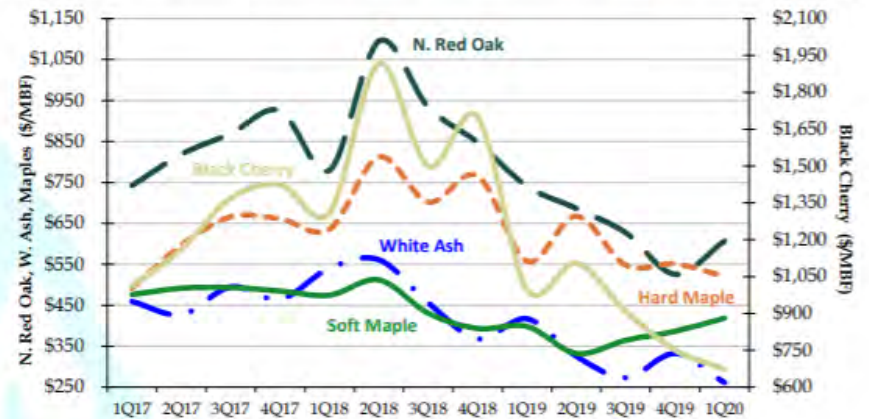
Wilshire Consulting TIMBER

Southeastern Timber Prices



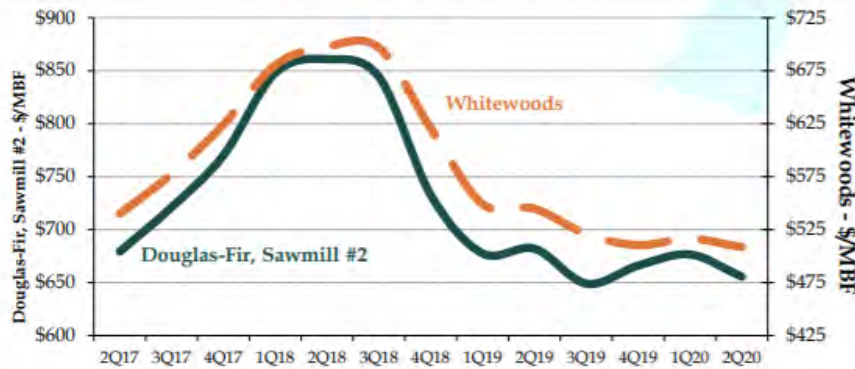
Source: Forest2Market®

Northeastern Hardwood Timber Prices



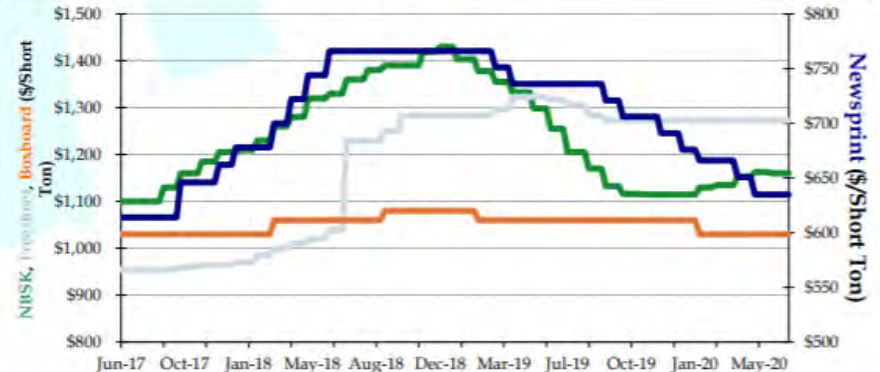
Source: Pennsylvania Woodlands Timber Market Report - Northwest Region

Pacific Northwest Timber Prices



Source: Fastmarkets RISI - Log Lines®

Pulp and Paper

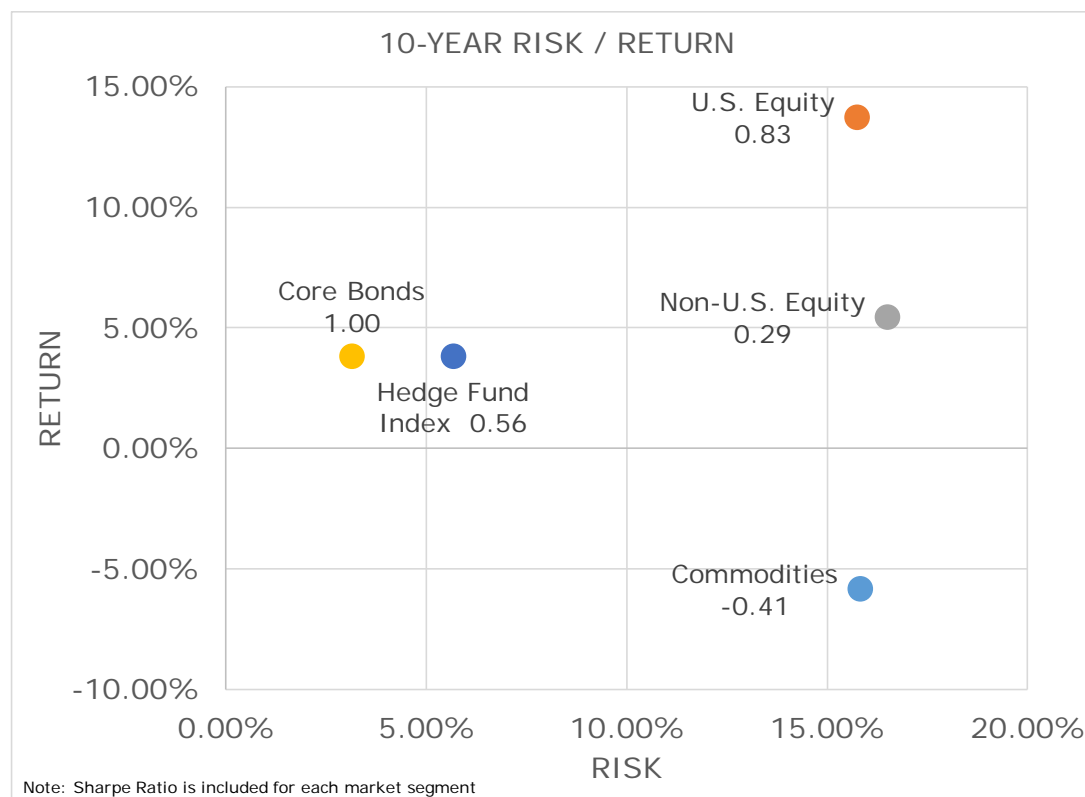


Source: Fastmarkets RISI

Data sources: Forest Investment Associates

HEDGE FUND PERFORMANCE

AS OF 6/30/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
DJ CS HEDGE FUND INDEX	6.2	-3.3	-0.7	2.1	1.6	3.8
EVENT DRIVEN	9.8	-7.6	-6.9	-0.5	-0.7	2.5
GLOBAL MACRO	4.6	-3.9	-1.1	3.2	1.8	3.9
LONG/SHORT EQUITY	9.8	-2.5	2.6	3.5	2.7	5.2
MULTI-STRATEGY	3.9	-2.8	-0.9	1.6	3.0	5.7
WILSHIRE 5000	21.9	-3.3	6.8	10.1	10.3	13.7
MSCI ACWI EX-US (\$G)	16.3	-10.8	-4.4	1.6	2.7	5.5
BLOOMBERG BARCLAYS AGGREGATE	2.9	6.1	8.7	5.3	4.3	3.8
BLOOMBERG COMMODITY INDEX	5.1	-19.4	-17.4	-6.1	-7.7	-5.8



Data sources: Bloomberg

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Total Fund

MONTHLY SUMMARY

Actual Allocation vs. Policy Allocation

As of June 30, 2020

Asset Class	Market Value (\$000)	Actual Allocation	Policy Target	Variance	Allowable Range ⁴	Dollar Variance (\$000)
U.S. Equity	152,596	16.7%	16.5%	0.2%	13.0 - 20.0%	1,732
Non-U.S. Equity	157,712	17.2%	16.5%	0.7%	13.0 - 20.0%	6,848
Global Equity	1,121	0.1%	0.0%	0.1%		1,121
Total Public Equity¹	311,429	34.1%	33.0%	1.1%	26.0 40.0%	9,701
Private Equity Funds	176,479	19.3%	20.0%	-0.7%	15.0 - 25.0%	(6,387)
Life Settlement Investments	27,589	3.0%	0.0%	3.0%		27,589
Total Private Equity	204,068	22.3%	20.0%	2.3%	15.0 - 25.0%	21,202
Core Fixed Income ²	98,142	10.7%	12.5%	-1.8%	10.0 - 15.0%	(16,149)
High Yield	110,150	12.0%	12.0%	0.0%	10.0 - 14.0%	431
Total Fixed Income	208,292	22.8%	24.5%	-1.7%	20.0 - 29.0%	(15,718)
Real Estate ³	110,647	12.1%	12.5%	-0.4%	10.0 - 15.0%	(3,644)
Total Private Real Assets	110,647	12.1%	12.5%	-0.4%	10.0 - 15.0%	(3,644)
TIPS	38,718	4.2%	5.0%	-0.8%	4.0 - 6.0%	(6,998)
MLP's	28,197	3.1%	5.0%	-1.9%	4.0 - 6.0%	(17,519)
Total Public Real Assets	66,915	7.3%	10.0%	-2.7%	8.0 - 12.0%	(24,518)
Hedge Funds	2,673	0.3%	0.0%	0.3%		2,673
Cash	10,304	1.1%	0.0%	1.1%	0.0 - 2.0%	10,304
Total Assets	914,328	100.0%	100.0%			

¹Uninvested private equity capital will remain invested in public equity and will not be considered to be outside of allowable range

²Core Fixed Income includes Israel Bond investments

³Real Estate includes ERECT Fund investment

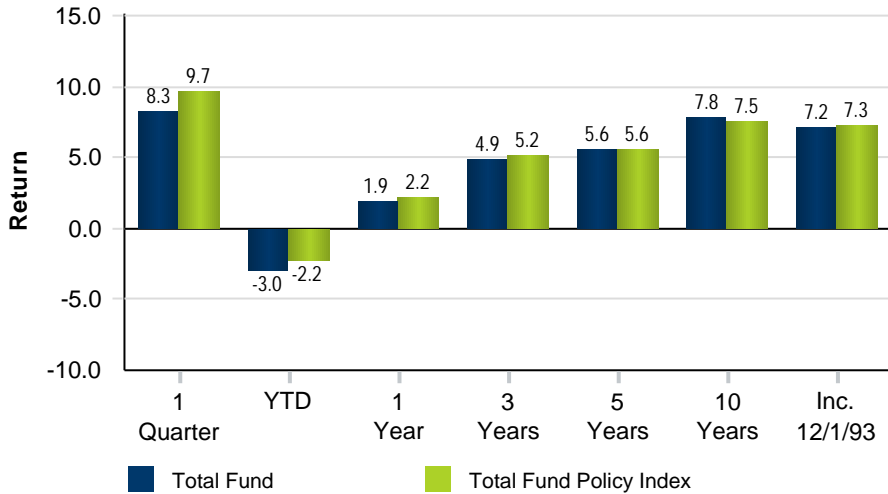
⁴These ranges are preliminary pending the ratification of the updated IPS

Total Fund Summary

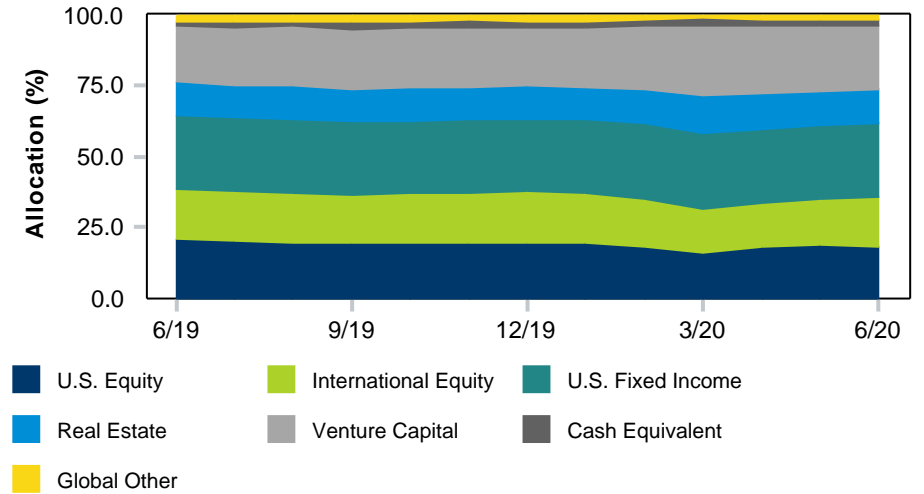
Total Fund

Periods Ended June 30, 2020

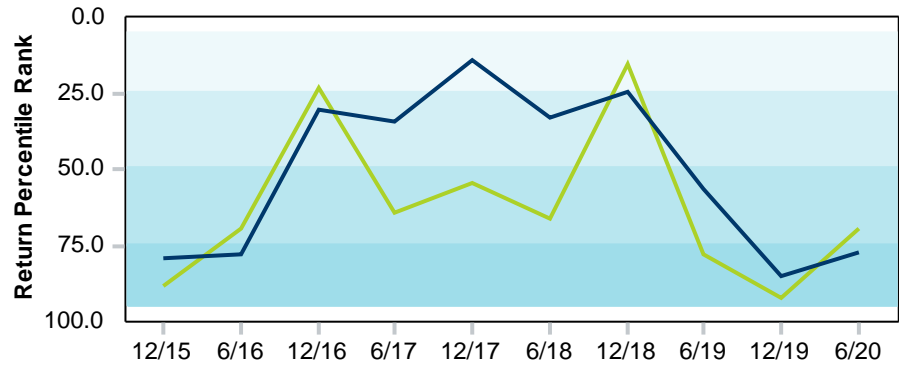
Comparative Performance



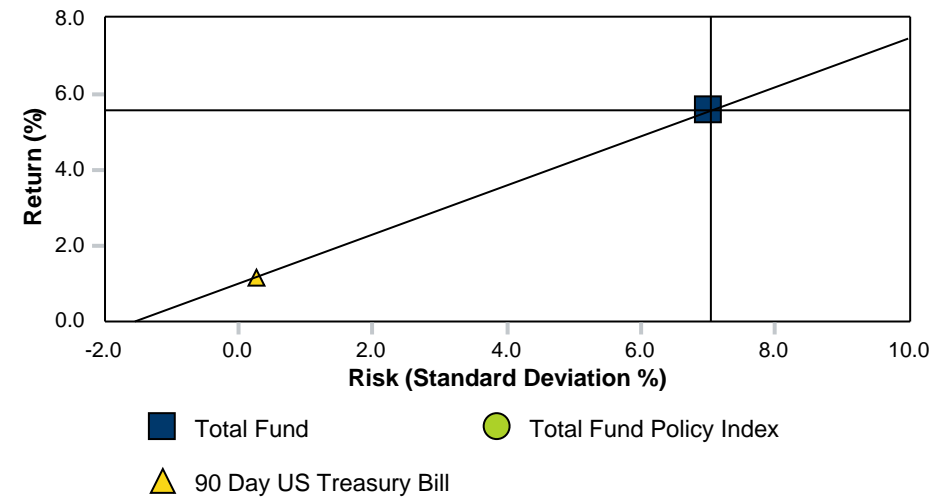
Historical Asset Allocation by Segment



Rolling Percentile Rank: All Public Plans-Total Fund



Risk and Return 07/1/15 - 06/30/20



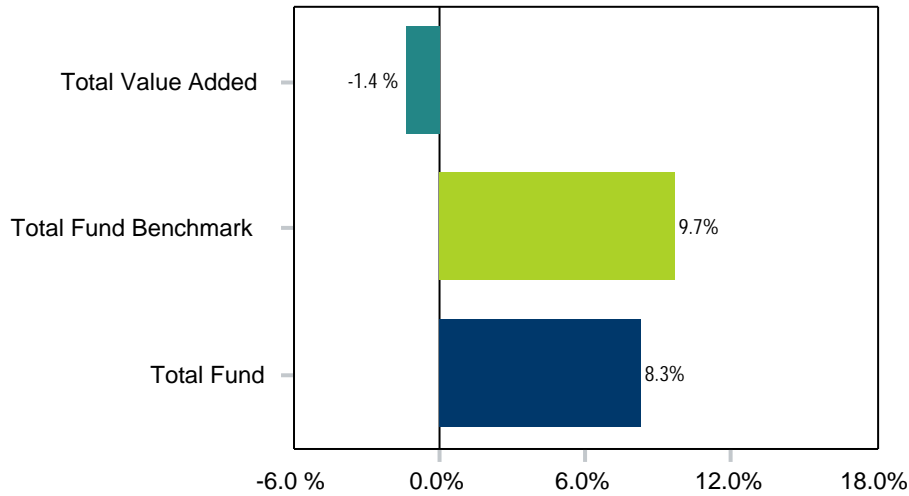
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
— Total Fund	10	2 (20%)	3 (30%)	1 (10%)	4 (40%)
— Benchmark	10	2 (20%)	0 (0%)	5 (50%)	3 (30%)

Total Fund Attribution

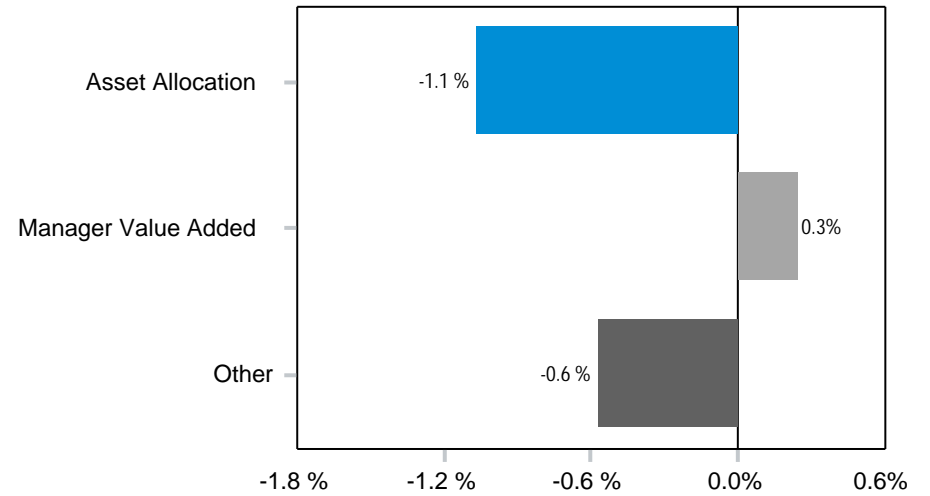
Total Fund

Periods Ended 1 Quarter Ending June 30, 2020

Total Fund Performance



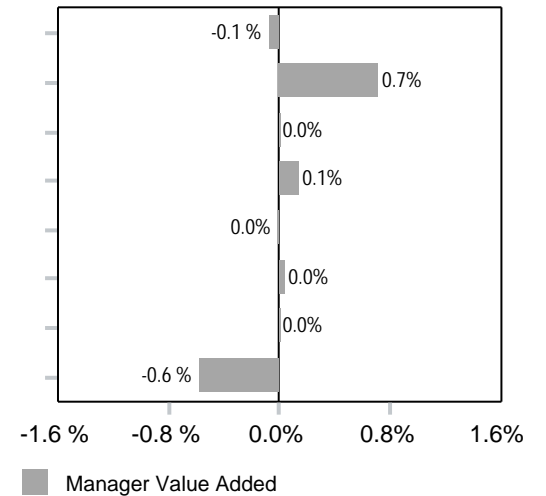
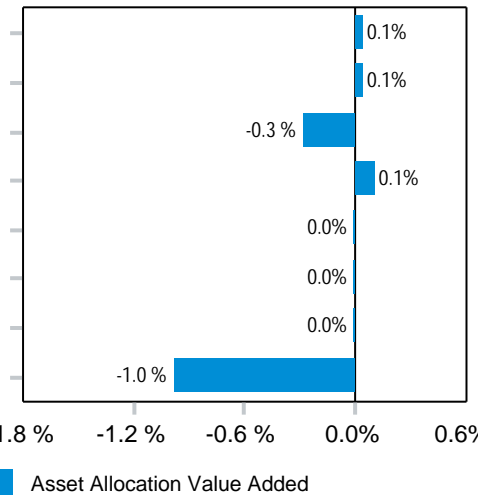
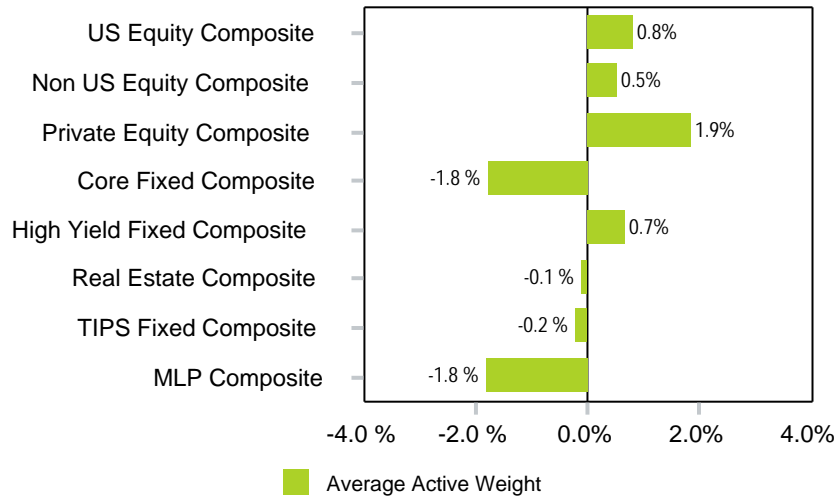
Total Value Added:-1.4 %



Total Asset Allocation:-1.1 %

Asset Allocation Value Added:-1.1 %

Total Manager Value Added:0.3%



■ Average Active Weight

■ Asset Allocation Value Added

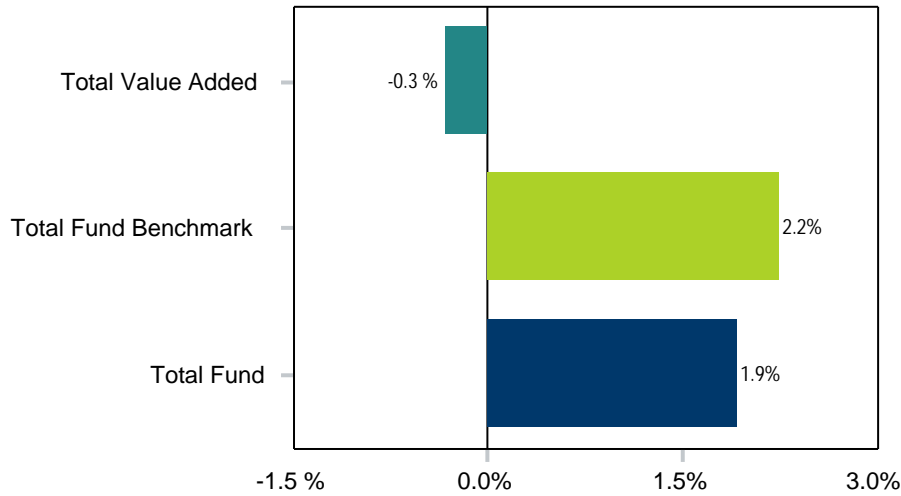
■ Manager Value Added

Total Fund Attribution

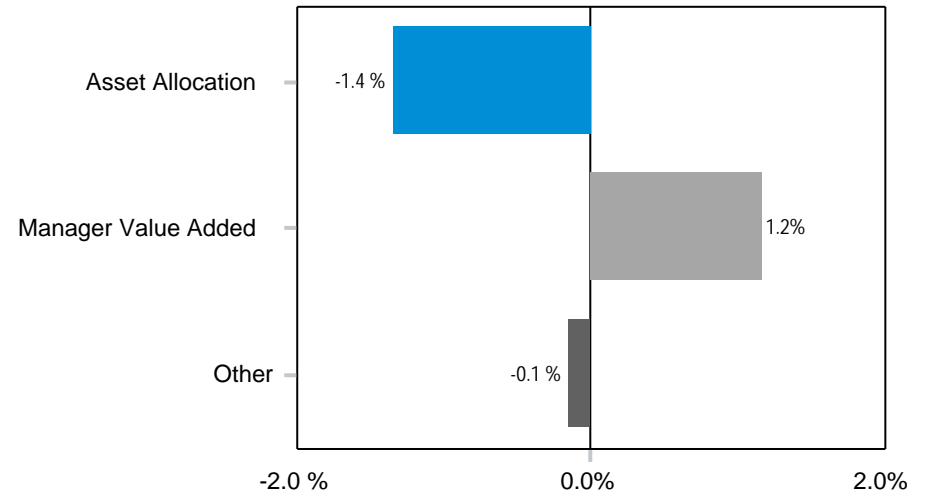
Total Fund

Periods Ended 1 Year Ending June 30, 2020

Total Fund Performance



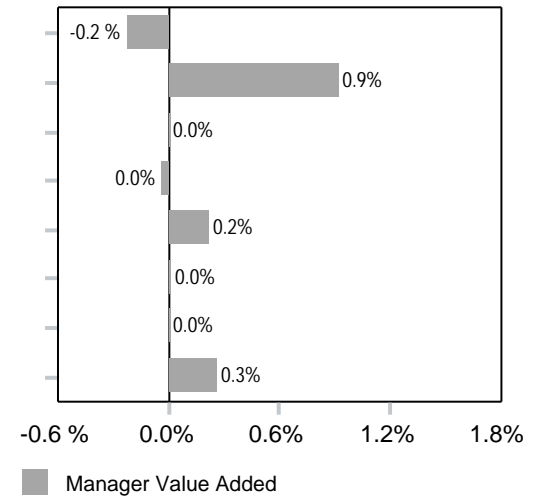
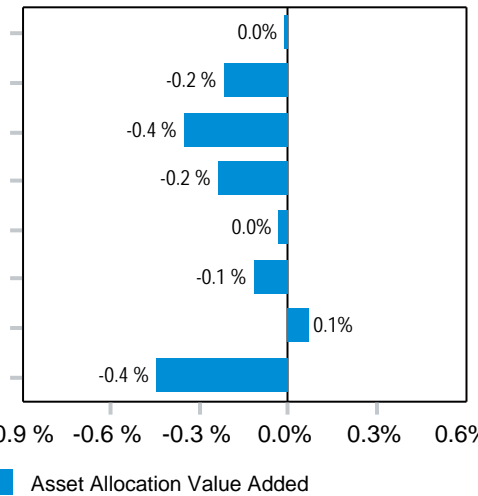
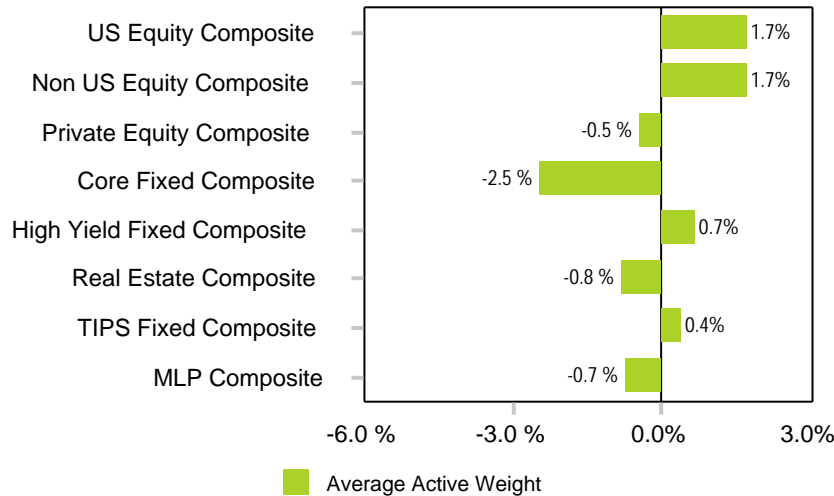
Total Value Added:-0.3 %



Total Asset Allocation:-1.4 %

Asset Allocation Value Added:-1.4 %

Total Manager Value Added:1.2%



PERFORMANCE SUMMARY

Investment Performance and Market Values

Periods Ended June 30, 2020

	Performance (%) net of fees								Allocation	
	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Market Value \$	%
US Equity Composite	21.53	-4.12	5.50	9.36	9.25	13.20	8.70	11/1/1993	152,596,374	16.69
Wilshire 5000 Total Market TR Index	21.94	-3.30	6.78	10.13	10.27	13.72	9.41			
Value Added	-0.41	-0.82	-1.28	-0.77	-1.02	-0.52	-0.71			
Non US Equity Composite	20.63	-8.44	0.08	2.22	4.12	6.23	4.67	2/1/2001	157,712,009	17.25
Non US Equity Policy Index	16.96	-11.24	-4.74	0.96	2.30	5.05	3.56			
Value Added	3.67	2.80	4.82	1.26	1.82	1.18	1.11			
Global Equity Composite	14.03	-9.50	-3.92	1.99	2.65		3.23	12/1/2014	1,121,495	0.12
MSCI AC World Index (Net)	19.22	-6.25	2.11	6.14	6.46		5.89			
Value Added	-5.19	-3.25	-6.03	-4.15	-3.81		-2.66			
Core Fixed Composite	4.25	5.71	8.34	5.07	4.14	3.79	7.06	1/1/1983	90,783,112	9.93
Blmbg. Barc. U.S. Aggregate	2.90	6.14	8.74	5.32	4.30	3.82	7.14			
Value Added	1.35	-0.43	-0.40	-0.25	-0.16	-0.03	-0.08			
High Yield Fixed Composite	9.11	-3.78	0.03	2.23	3.23	5.40	6.39	4/1/2008	110,149,769	12.05
FTSE High Yield Market Capped Index	9.23	-5.32	-1.72	2.67	4.11	6.19	6.75			
Value Added	-0.12	1.54	1.75	-0.44	-0.88	-0.79	-0.36			
TIPS Fixed Composite	4.27	6.05	8.33	5.09	3.82	3.44	3.56	4/1/2008	38,717,790	4.23
Blmbg. Barc. U.S. TIPS	4.24	6.01	8.28	5.05	3.75	3.52	3.51			
Value Added	0.03	0.04	0.05	0.04	0.07	-0.08	0.05			
ERECT Composite	0.75	-0.40	2.75	8.65	7.74		6.89	9/1/2010	9,718,261	1.06
Real Estate Composite	-1.44	-1.14	1.54	7.27	7.81	10.95	8.54	4/1/2003	100,929,333	11.04
NCREIF Fund Index-ODCE (VW) (Net)	-1.75	-1.01	1.33	4.72	6.35	9.78	6.86			
Value Added	0.31	-0.13	0.21	2.55	1.46	1.17	1.68			

PERFORMANCE SUMMARY

Investment Performance and Market Values

Periods Ended June 30, 2020

	Performance (%) net of fees								Allocation	
	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Market Value \$	%
Private Equity Composite	-2.28	2.87	7.92	8.80	9.86	11.35	6.65	4/1/2003	176,478,580	19.30
Private Equity Policy Index	-2.28	2.87	7.92	8.80	9.86	11.35	6.65			
Value Added	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Hedge Fund Composite	10.48	-8.20	-2.86	-2.01	-2.35		0.39	2/1/2011	2,672,965	0.29
90 Day T-Bill Index + 3%	0.76	2.09	4.67	4.82	4.20		3.67			
Value Added	9.72	-10.29	-7.53	-6.83	-6.55		-3.28			
Life Settlement Composite	-1.63	-0.86	-2.52	-2.96	-4.95	5.94	7.17	9/1/2009	27,589,153	3.02
Israel Bonds and Cash	1.08	1.26	2.62	2.06	1.74	1.79	2.88	3/1/1999	17,662,950	1.93
MLP Composite	30.01	-32.54	-35.60				-17.15	2/1/2018	28,197,259	3.08
Alerian MLP Index	50.18	-35.71	-41.43				-20.91			
Value Added	-20.17	3.17	5.83				3.76			
Total Fund	8.29	-3.01	1.92	4.90	5.57	7.84	7.17	12/1/1993	914,329,050	100.00
Total Fund Policy Index	9.67	-2.23	2.25	5.20	5.56	7.50	7.28			
Value Added	-1.38	-0.78	-0.33	-0.30	0.01	0.34	-0.11			

PERFORMANCE SUMMARY

Investment Performance and Market Values

Periods Ended June 30, 2020

	Performance (%) net of fees								Allocation	
	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Market Value \$	%
SSgA S&P 500 Index	20.57	-3.04	7.59	10.76	10.77	14.01	7.95	11/1/2007	85,256,129	9.32
S&P 500	20.54	-3.08	7.51	10.73	10.73	13.99	7.90			
Value Added	0.03	0.04	0.08	0.03	0.04	0.02	0.05			
Fragasso Large Core (EMWO)	15.98	-7.00	2.30	9.97	9.06		11.09	9/1/2012	4,908,395	0.54
S&P 500	20.54	-3.08	7.51	10.73	10.73		12.93			
Value Added	-4.56	-3.92	-5.21	-0.76	-1.67		-1.84			
Twin Capital Enhanced Equity	19.61	-4.22	6.41	9.28	9.53	13.53	8.51	1/1/2006	28,717,384	3.14
S&P 500	20.54	-3.08	7.51	10.73	10.73	13.99	8.73			
Value Added	-0.93	-1.14	-1.10	-1.45	-1.20	-0.46	-0.22			
Earnest Small Value	20.00	-14.41	-7.27	1.93	5.61	10.94	11.67	6/1/2009	11,238,228	1.23
Russell 2000 Value Index	18.91	-23.50	-17.48	-4.35	1.26	7.82	9.18			
Value Added	1.09	9.09	10.21	6.28	4.35	3.12	2.49			
Emerald Advisors Small Cap	32.38	0.09	3.36	9.35	7.27	15.15	10.50	11/1/2004	12,304,143	1.35
Russell 2000 Growth Index	30.58	-3.06	3.48	7.86	6.86	12.92	9.01			
Value Added	1.80	3.15	-0.12	1.49	0.41	2.23	1.49			
Emerald Advisors All Cap (EMWO)	35.65	12.21	23.77	19.14			15.53	10/1/2015	4,032,609	0.44
Russell 3000 Growth Index	27.99	8.98	21.94	18.21			17.60			
Value Added	7.66	3.23	1.83	0.93			-2.07			
Ethos (EMWO)	24.53	-3.14	6.15	11.15			12.37	8/1/2016	1,416,830	0.15
S&P 500	20.54	-3.08	7.51	10.73			11.72			
Value Added	3.99	-0.06	-1.36	0.42			0.65			
CIM Small Cap (EMWO)	23.03	-15.52	-7.38	0.09	1.99		3.24	1/1/2014	4,094,362	0.45
Russell 2000 Index	25.42	-12.98	-6.63	2.01	4.29		4.79			
Value Added	-2.39	-2.54	-0.75	-1.92	-2.30		-1.55			

PERFORMANCE SUMMARY

Investment Performance and Market Values

Periods Ended June 30, 2020

	Performance (%) net of fees								Allocation	
	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Market Value \$	%
Cookson Peirce (EMWO)	26.58	4.77	6.87				15.99	1/1/2019	628,293	0.07
Russell 3000 Index	22.03	-3.48	6.53				16.94			
Value Added	4.55	8.25	0.34				-0.95			
US Equity Composite	21.53	-4.12	5.50	9.36	9.25	13.20	8.70	11/1/1993	152,596,374	16.69
Wilshire 5000 Total Market TR Index	21.94	-3.30	6.78	10.13	10.27	13.72	9.41			
Value Added	-0.41	-0.82	-1.28	-0.77	-1.02	-0.52	-0.71			
SSgA ACWI ex US	16.26	-10.75	-4.17	1.46	2.49		1.68	5/1/2015	31,218,398	3.41
MSCI AC World ex USA (Net)	16.12	-11.00	-4.80	1.13	2.26		1.32			
Value Added	0.14	0.25	0.63	0.33	0.23		0.36			
Baillie Gifford Intl Equity	25.55	-0.47	9.59	7.25	7.91	9.38	8.99	8/1/2009	68,730,842	7.52
MSCI AC World ex USA (Net)	16.12	-11.00	-4.80	1.13	2.26	4.97	4.60			
Value Added	9.43	10.53	14.39	6.12	5.65	4.41	4.39			
FIAM Select International Equity	19.09	-7.67	0.32	1.92	2.25	5.33	4.04	2/1/2001	32,240,232	3.53
FIAM Policy Index	16.12	-11.00	-4.80	1.13	2.26	4.97	3.52			
Value Added	2.97	3.33	5.12	0.79	-0.01	0.36	0.52			
Segal, Bryant & Hamill	15.61	-23.43	-15.33	-7.51	-0.77		-0.74	5/1/2015	25,522,537	2.79
MSCI EAFE Small Cap (Net)	19.88	-13.11	-3.52	0.53	3.81		3.64			
Value Added	-4.27	-10.32	-11.81	-8.04	-4.58		-4.38			
Non US Equity Composite	20.63	-8.44	0.08	2.22	4.12	6.23	4.67	2/1/2001	157,712,009	17.25
Non US Equity Policy Index	16.96	-11.24	-4.74	0.96	2.30	5.05	3.56			
Value Added	3.67	2.80	4.82	1.26	1.82	1.18	1.11			

PERFORMANCE SUMMARY

Investment Performance and Market Values

Periods Ended June 30, 2020

	Performance (%) net of fees								Allocation	
	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Market Value \$	%
Columbus Macro (EMWO)	14.03	-9.50	-3.92	1.99	2.65		3.23	12/1/2014	1,121,495	0.12
MSCI AC World Index (Net)	19.22	-6.25	2.11	6.14	6.46		5.89			
Value Added	-5.19	-3.25	-6.03	-4.15	-3.81		-2.66			
Global Equity Composite	14.03	-9.50	-3.92	1.99	2.65		3.23	12/1/2014	1,121,495	0.12
MSCI AC World Index (Net)	19.22	-6.25	2.11	6.14	6.46		5.89			
Value Added	-5.19	-3.25	-6.03	-4.15	-3.81		-2.66			
C S McKee	4.58	6.15	9.03	5.61	4.53	4.17	7.49	1/1/1983	34,108,211	3.73
Blmbg. Barc. U.S. Aggregate	2.90	6.14	8.74	5.32	4.30	3.82	7.14			
Value Added	1.68	0.01	0.29	0.29	0.23	0.35	0.35			
Federated	5.19	7.51	10.51	6.09	5.02	4.39	5.29	9/1/2006	29,339,966	3.21
Blmbg. Barc. U.S. Aggregate	2.90	6.14	8.74	5.32	4.30	3.82	4.62			
Value Added	2.29	1.37	1.77	0.77	0.72	0.57	0.67			
CIM Investment Mgmt	2.13	5.50	7.14	4.11	2.88	2.66	3.59	11/1/2005	13,816,745	1.51
Blmbg. Barc. Intermed. U.S. Government/Credit	2.81	5.28	7.12	4.43	3.46	3.13	4.00			
Value Added	-0.68	0.22	0.02	-0.32	-0.58	-0.47	-0.41			
StoneRidge Partners (EMWO)	2.07	4.91	6.32	3.90			3.25	8/1/2015	6,421,363	0.70
StoneRidge Policy Index	4.20	4.87	7.07	4.59			3.71			
Value Added	-2.13	0.04	-0.75	-0.69			-0.46			
Gridiron Capital Fixed Income (EMWO)	4.58	-5.11	-1.35	1.94			2.02	2/1/2017	4,294,677	0.47
Blmbg. Barc. U.S. Aggregate	2.90	6.14	8.74	5.32			5.29			
Value Added	1.68	-11.25	-10.09	-3.38			-3.27			

PERFORMANCE SUMMARY

Investment Performance and Market Values

Periods Ended June 30, 2020

	Performance (%) net of fees								Allocation	
	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Market Value \$	%
FNB (EMWO)	3.54	4.56	6.48	3.81			3.81	7/1/2017	2,802,149	0.31
Blmbg. Barc. U.S. Intermediate Aggregate	2.13	4.67	6.60	4.28			4.28			
Value Added	1.41	-0.11	-0.12	-0.47			-0.47			
Core Fixed Composite	4.25	5.71	8.34	5.07	4.14	3.79	7.06	1/1/1983	90,783,112	9.93
Blmbg. Barc. U.S. Aggregate	2.90	6.14	8.74	5.32	4.30	3.82	7.14			
Value Added	1.35	-0.43	-0.40	-0.25	-0.16	-0.03	-0.08			
Oaktree High Yield	8.67	-4.18	-0.95	1.15	2.78	5.25	5.98	4/1/2008	59,454,759	6.50
FTSE High Yield Market Capped Index	9.23	-5.32	-1.72	2.67	4.11	6.19	6.75			
Value Added	-0.56	1.14	0.77	-1.52	-1.33	-0.94	-0.77			
Federated High Yield	9.67	-3.21	1.67	3.78			3.78	7/1/2017	47,580,256	5.20
Blmbg. Barc. U.S. High Yield - 2% Issuer Cap	10.14	-3.83	0.00	3.32			3.32			
Value Added	-0.47	0.62	1.67	0.46			0.46			
Sound Point	9.21	-4.81	-5.61	1.12	2.39		3.23	8/1/2013	3,114,755	0.34
CSFB Leveraged Loan	9.71	-4.76	-2.27	2.13	2.94		3.16			
Value Added	-0.50	-0.05	-3.34	-1.01	-0.55		0.07			
High Yield Fixed Composite	9.11	-3.78	0.03	2.23	3.23	5.40	6.39	4/1/2008	110,149,769	12.05
FTSE High Yield Market Capped Index	9.23	-5.32	-1.72	2.67	4.11	6.19	6.75			
Value Added	-0.12	1.54	1.75	-0.44	-0.88	-0.79	-0.36			
MCM TIPS	4.27	6.05	8.33	5.09			4.71	12/1/2016	38,717,790	4.23
Blmbg. Barc. U.S. TIPS	4.24	6.01	8.28	5.05			4.43			
Value Added	0.03	0.04	0.05	0.04			0.28			

PERFORMANCE SUMMARY

Investment Performance and Market Values

Periods Ended June 30, 2020

	Performance (%) net of fees								Allocation	
	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Market Value \$	%
TIPS Fixed Composite	4.27	6.05	8.33	5.09	3.82	3.44	3.56	4/1/2008	38,717,790	4.23
Blmbg. Barc. U.S. TIPS	4.24	6.01	8.28	5.05	3.75	3.52	3.51			
Value Added	0.03	0.04	0.05	0.04	0.07	-0.08	0.05			
ERECT Fund II	0.75	-0.40	2.75	8.65	7.74	8.31	6.91	6/1/2005	9,718,261	1.06
CPI - All Urban Consumers (SA)	-0.29	-0.48	0.71	1.75	1.59	1.71	1.90			
Value Added	1.04	0.08	2.04	6.90	6.15	6.60	5.01			
ERECT Composite	0.75	-0.40	2.75	8.65	7.74		6.89	9/1/2010	9,718,261	1.06
Morgan Stanley	-1.85	-1.26	1.66	5.71	7.50	11.38	8.44	4/1/2003	71,277,021	7.80
NCREIF Fund Index-ODCE (VW) (Net)	-1.75	-1.01	1.33	4.72	6.35	9.78	6.86			
Value Added	-0.10	-0.25	0.33	0.99	1.15	1.60	1.58			
Oaktree Real Estate	-1.90	-3.58	-3.17	4.44	3.90		5.19	8/1/2013	7,035,603	0.77
Washington Alliance (EMWO)	0.00	0.00	3.11	14.55	14.41		12.46	8/1/2013	11,753,894	1.29
Washington Alliance II (EMWO)	0.00						0.00	3/1/2020	983,333	0.11
Siguler Guff Distressed RE	0.00	0.00	2.31	12.22	8.94		7.44	3/1/2014	9,879,482	1.08
Real Estate Composite	-1.44	-1.14	1.54	7.27	7.81	10.95	8.54	4/1/2003	100,929,333	11.04
NCREIF Fund Index-ODCE (VW) (Net)	-1.75	-1.01	1.33	4.72	6.35	9.78	6.86			
Value Added	0.31	-0.13	0.21	2.55	1.46	1.17	1.68			
Private Equity Composite	-2.28	2.87	7.92	8.80	9.86	11.35	6.65	4/1/2003	176,478,580	19.30
Private Equity Policy Index	-2.28	2.87	7.92	8.80	9.86	11.35	6.65			
Value Added	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

PERFORMANCE SUMMARY

Investment Performance and Market Values

Periods Ended June 30, 2020

	Performance (%) net of fees								Allocation	
	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Market Value \$	%
Gridiron Capital (EMWO)	13.21	-5.82	0.45	-0.85	0.95		1.22	8/1/2013	2,630,126	0.29
HFRI FoF Composite Lagged	-2.27	-1.92	0.06	1.58	0.89		2.44			
Value Added	15.48	-3.90	0.39	-2.43	0.06		-1.22			
Maplewood (EMWO)	-0.52	-17.62	-14.65				-11.19	3/1/2019	42,840	0.00
HFRX Macro Index	0.47	-0.72	1.47				3.96			
Value Added	-0.99	-16.90	-16.12				-15.15			
Hedge Fund Composite	10.48	-8.20	-2.86	-2.01	-2.35		0.39	2/1/2011	2,672,965	0.29
90 Day T-Bill Index + 3%	0.76	2.09	4.67	4.82	4.20		3.67			
Value Added	9.72	-10.29	-7.53	-6.83	-6.55		-3.28			
Salient MLP Fund	26.34	-32.95	-34.68				-14.73	1/1/2018	12,077,934	1.32
Alerian MLP Index	50.18	-35.71	-41.43				-18.48			
Value Added	-23.84	2.76	6.75				3.75			
Harvest MLP Fund	32.90	-32.24	-36.26				-17.52	2/1/2018	16,119,326	1.76
Alerian MLP Index	50.18	-35.71	-41.43				-20.91			
Value Added	-17.28	3.47	5.17				3.39			
MLP Composite	30.01	-32.54	-35.60				-17.15	2/1/2018	28,197,259	3.08
Alerian MLP Index	50.18	-35.71	-41.43				-20.91			
Value Added	-20.17	3.17	5.83				3.76			

PERFORMANCE SUMMARY

Investment Performance and Market Values

Periods Ended June 30, 2020

	Performance (%) net of fees								Allocation	
	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	Market Value \$	%
CCA Green	-3.89	-4.95	-11.88	-7.72	-9.73	3.31	4.67	10/1/2009	11,611,252	1.27
CCA Blue	-3.18	-6.03	-10.00	-7.50	-6.77		-5.26	1/1/2013	2,534,176	0.28
CCA Black	-0.79	1.41	4.65	3.73	5.09		6.15	1/1/2015	8,192,017	0.90
CCA Longevity Fund VI LP	2.88	7.72	14.84				9.67	1/1/2019	5,251,708	0.57
Life Settlement Composite	-1.63	-0.86	-2.52	-2.96	-4.95	5.94	7.14	10/1/2009	27,589,153	3.02
Israel Bonds	1.53	1.31	2.70	2.05	2.15		2.93	1/1/2012	7,359,141	0.80
Cash Account	0.02	0.60	1.63	1.78	1.21		0.78	1/1/2012	10,303,809	1.13
Total Fund	8.29	-3.01	1.92	4.90	5.57	7.84	7.17	12/1/1993	914,329,050	100.00
Total Fund Policy Index	9.67	-2.23	2.25	5.20	5.56	7.50	7.28			
Value Added	-1.38	-0.78	-0.33	-0.30	0.01	0.34	-0.11			

Historical Hybrid Composition

Retirement Board of Allegheny County

Periods Ended June 30, 2020

Policy Index	Weight (%)
Jan-1979	
Russell 3000 Index	65.00
Blmbg. Barc. U.S. Aggregate	35.00
Mar-2007	
Wilshire 5000 Total Market TR Index	45.00
Blmbg. Barc. U.S. Aggregate	25.00
Private Equity Composite	5.00
MSCI EAFE Index (Net)	10.00
Bloomberg Commodity Index Total Return	5.00
90 Day US Treasury Bill	5.00
NCREIF Fund Index-ODCE (VW) (Net)	5.00
Sep-2008	
Wilshire 5000 Total Market TR Index	45.00
Blmbg. Barc. U.S. Aggregate	25.00
Private Equity Composite	5.00
MSCI AC World ex USA (Net)	10.00
Bloomberg Commodity Index Total Return	5.00
90 Day US Treasury Bill	5.00
NCREIF Fund Index-ODCE (VW) (Net)	5.00

Policy Index	Weight (%)
Dec-2008	
Wilshire 5000 Total Market TR Index	35.00
Blmbg. Barc. U.S. Aggregate	20.00
Private Equity Composite	5.00
MSCI AC World ex USA (Net)	15.00
Bloomberg Commodity Index Total Return	5.00
90 Day US Treasury Bill	2.50
NCREIF Fund Index-ODCE (VW) (Net)	7.50
Blmbg. Barc. U.S. TIPS	5.00
FTSE High Yield Market Capped Index	5.00
Sep-2009	
Wilshire 5000 Total Market TR Index	30.00
Blmbg. Barc. U.S. Aggregate	15.00
Private Equity Composite	5.00
MSCI AC World ex USA (Net)	20.00
Bloomberg Commodity Index Total Return	2.50
NCREIF Fund Index-ODCE (VW) (Net)	10.00
Blmbg. Barc. U.S. TIPS	7.50
FTSE High Yield Market Capped Index	10.00
Jun-2010	
Wilshire 5000 Total Market TR Index	20.00
Blmbg. Barc. U.S. Aggregate	14.00
Private Equity Composite	10.00
MSCI AC World ex USA (Net)	25.00
Bloomberg Commodity Index Total Return	5.00
NCREIF Fund Index-ODCE (VW) (Net)	10.00
Blmbg. Barc. U.S. TIPS	6.00
FTSE High Yield Market Capped Index	10.00

Historical Hybrid Composition

Retirement Board of Allegheny County

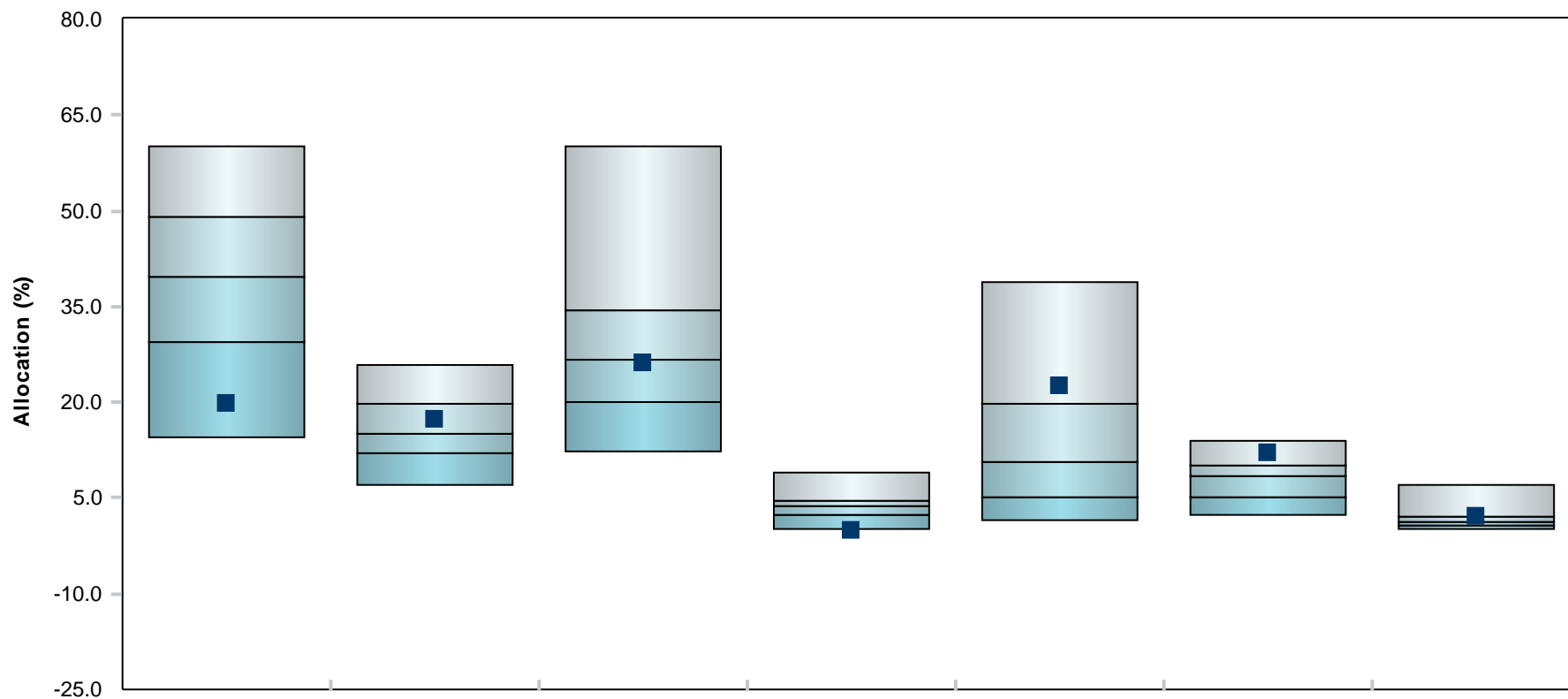
Periods Ended June 30, 2020

Policy Index	Weight (%)
Mar-2013	
Wilshire 5000 Total Market TR Index	16.10
Blmbg. Barc. U.S. Aggregate	10.00
Private Equity Composite	20.00
MSCI AC World ex USA (Net)	18.90
Bloomberg Commodity Index Total Return	8.00
NCREIF Fund Index-ODCE (VW) (Net)	10.00
Blmbg. Barc. U.S. TIPS	5.00
FTSE High Yield Market Capped Index	12.00
Apr-2016	
Wilshire 5000 Total Market TR Index	15.00
Blmbg. Barc. U.S. Aggregate	10.00
Private Equity Composite	22.50
MSCI AC World ex USA (Net)	15.00
Bloomberg Commodity Index Total Return	2.50
NCREIF Fund Index-ODCE (VW) (Net)	10.00
Blmbg. Barc. U.S. TIPS	8.00
FTSE High Yield Market Capped Index	12.00
Alerian MLP Index	5.00
Jan-2019	
Wilshire 5000 Total Market TR Index	16.50
Blmbg. Barc. U.S. Aggregate	12.50
Private Equity Composite	20.00
MSCI AC World ex USA (Net)	16.50
NCREIF Fund Index-ODCE (VW) (Net)	12.50
Blmbg. Barc. U.S. TIPS	5.00
FTSE High Yield Market Capped Index	12.00
Alerian MLP Index	5.00

Plan Sponsor TF Asset Allocation

Total Fund vs All Public Plans-Total Fund

Periods Ended June 30, 2020

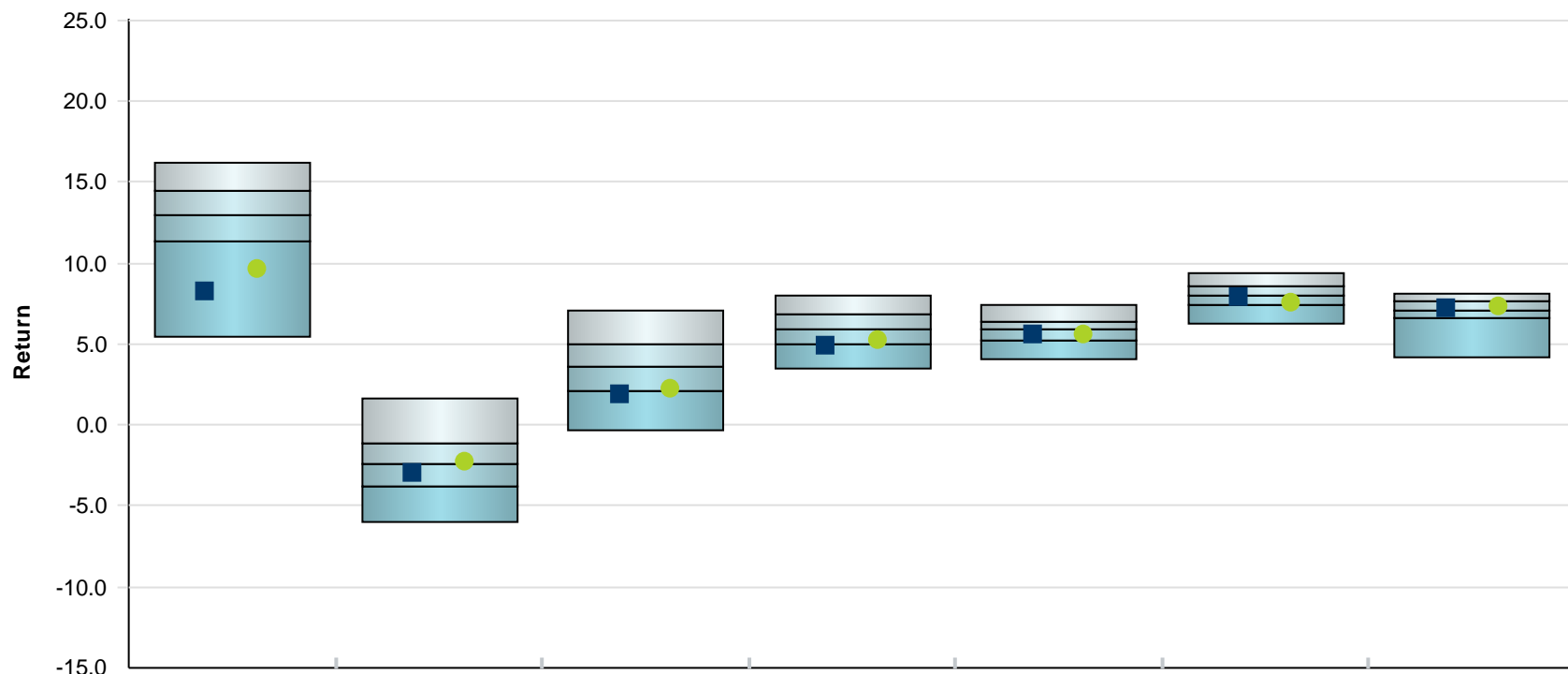


	US Equity	Intl. Equity	US Fixed Income	Intl. Fixed Income	Alternative Inv.	Real Estate	Cash
■ Total Fund	19.77	17.37	26.21	0.00	22.58	12.10	1.96
5th Percentile	60.14	25.95	60.05	8.96	38.71	14.02	6.99
1st Quartile	49.18	19.84	34.41	4.63	19.86	10.21	2.06
Median	39.72	14.98	26.68	3.71	10.54	8.57	1.13
3rd Quartile	29.36	11.95	20.01	2.22	5.15	5.22	0.56
95th Percentile	14.57	7.05	12.37	0.17	1.65	2.46	0.07
Population	666	615	619	218	216	346	449

Plan Sponsor Peer Group Analysis

Total Fund vs All Public Plans-Total Fund

Periods Ended June 30, 2020

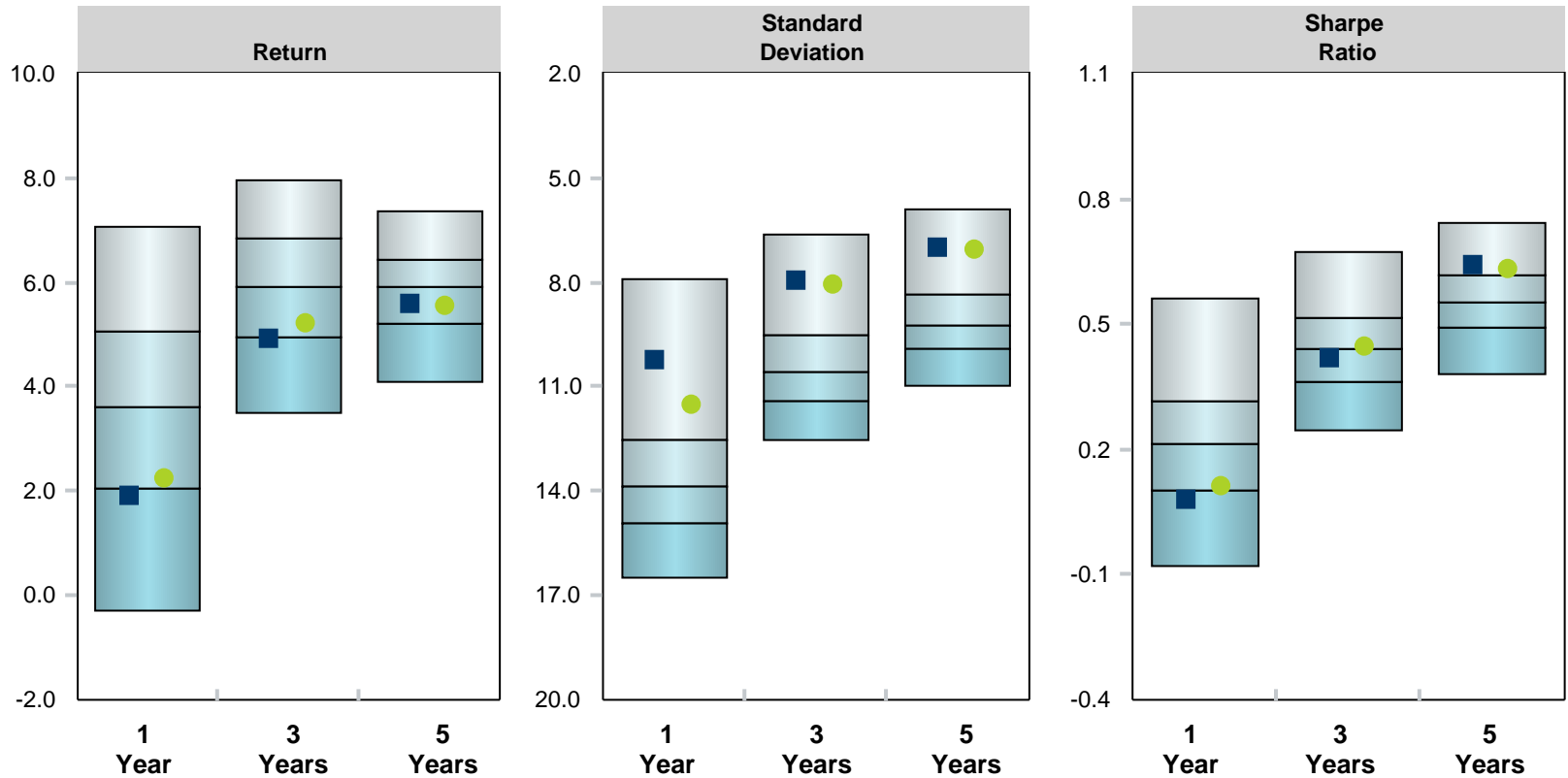


	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception
■ Total Fund	8.29 (92)	-3.01 (61)	1.92 (77)	4.90 (77)	5.57 (66)	7.84 (60)	7.17 (46)
● Total Fund Policy Index	9.67 (88)	-2.23 (47)	2.25 (72)	5.20 (69)	5.56 (66)	7.50 (72)	7.28 (40)
5th Percentile	16.24	1.63	7.07	7.96	7.38	9.41	8.08
1st Quartile	14.51	-1.18	5.04	6.85	6.42	8.63	7.66
Median	12.93	-2.40	3.59	5.93	5.90	8.05	7.12
3rd Quartile	11.34	-3.74	2.05	4.95	5.23	7.41	6.66
95th Percentile	5.49	-6.00	-0.30	3.51	4.08	6.25	4.16
Population	674	673	665	632	582	478	94

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 June 30, 2020

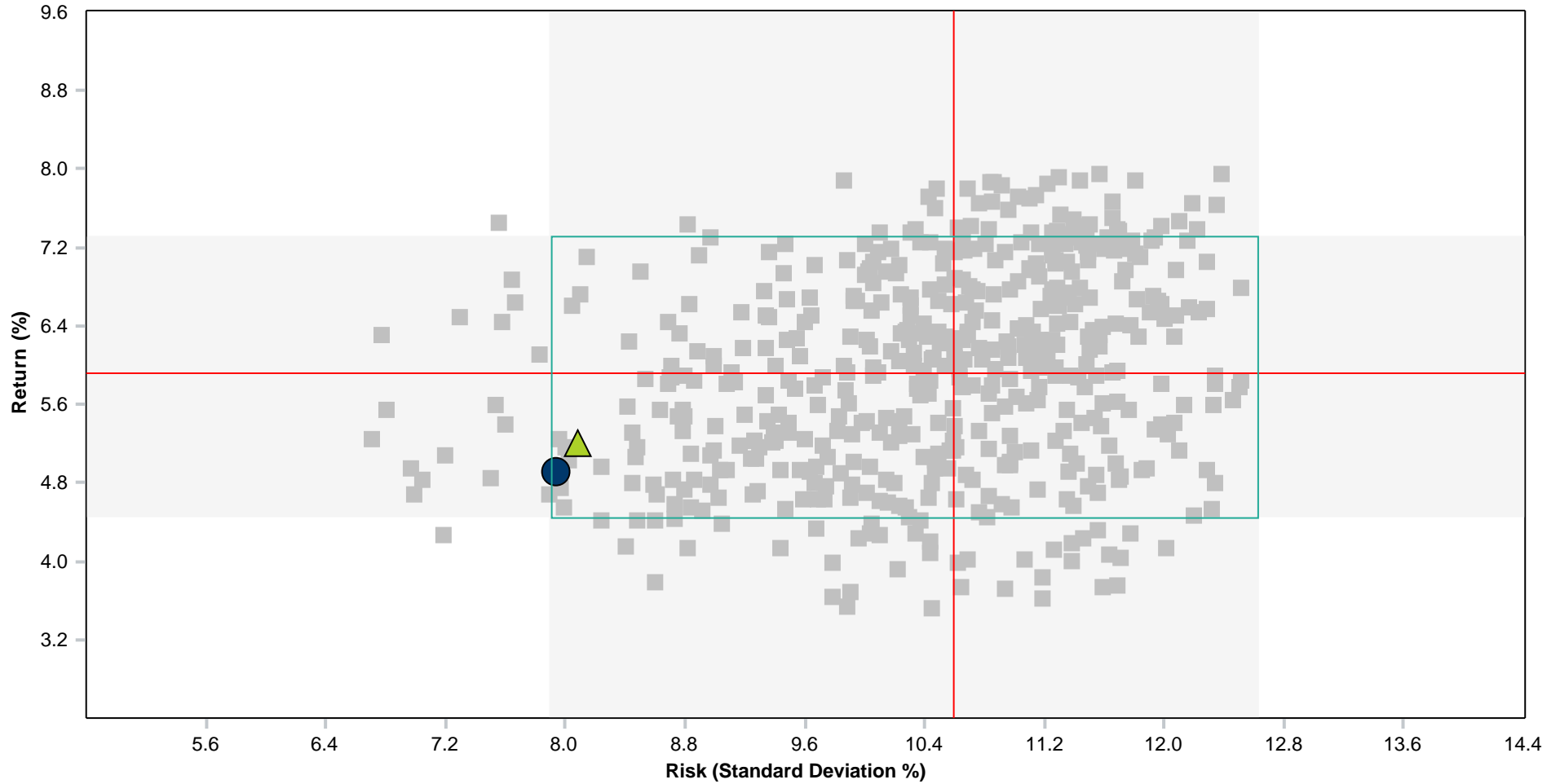


	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years
■ Total Fund	1.92 (77)	4.90 (77)	5.57 (66)	10.27 (8)	7.95 (8)	7.01 (8)	0.08 (79)	0.42 (60)	0.64 (18)
● Total Fund Policy Index	2.25 (72)	5.20 (69)	5.56 (66)	11.55 (15)	8.08 (9)	7.06 (8)	0.11 (74)	0.45 (48)	0.63 (20)
5th Percentile	7.07	7.96	7.38	7.90	6.64	5.90	0.56	0.67	0.74
1st Quartile	5.04	6.85	6.42	12.54	9.55	8.35	0.32	0.51	0.62
Median	3.59	5.93	5.90	13.85	10.59	9.23	0.21	0.44	0.55
3rd Quartile	2.05	4.95	5.23	14.94	11.39	9.90	0.10	0.36	0.49
95th Percentile	-0.30	3.51	4.08	16.52	12.53	10.95	-0.08	0.25	0.38
Population	665	632	582	665	632	582	665	632	582

Parenteses contain percentile rankings.
 Calculation based on monthly periodicity.

Plan Sponsor Scattergram

Total Fund vs All Public Plans-Total Fund
 Periods Ended July 1, 2017 To June 30, 2020

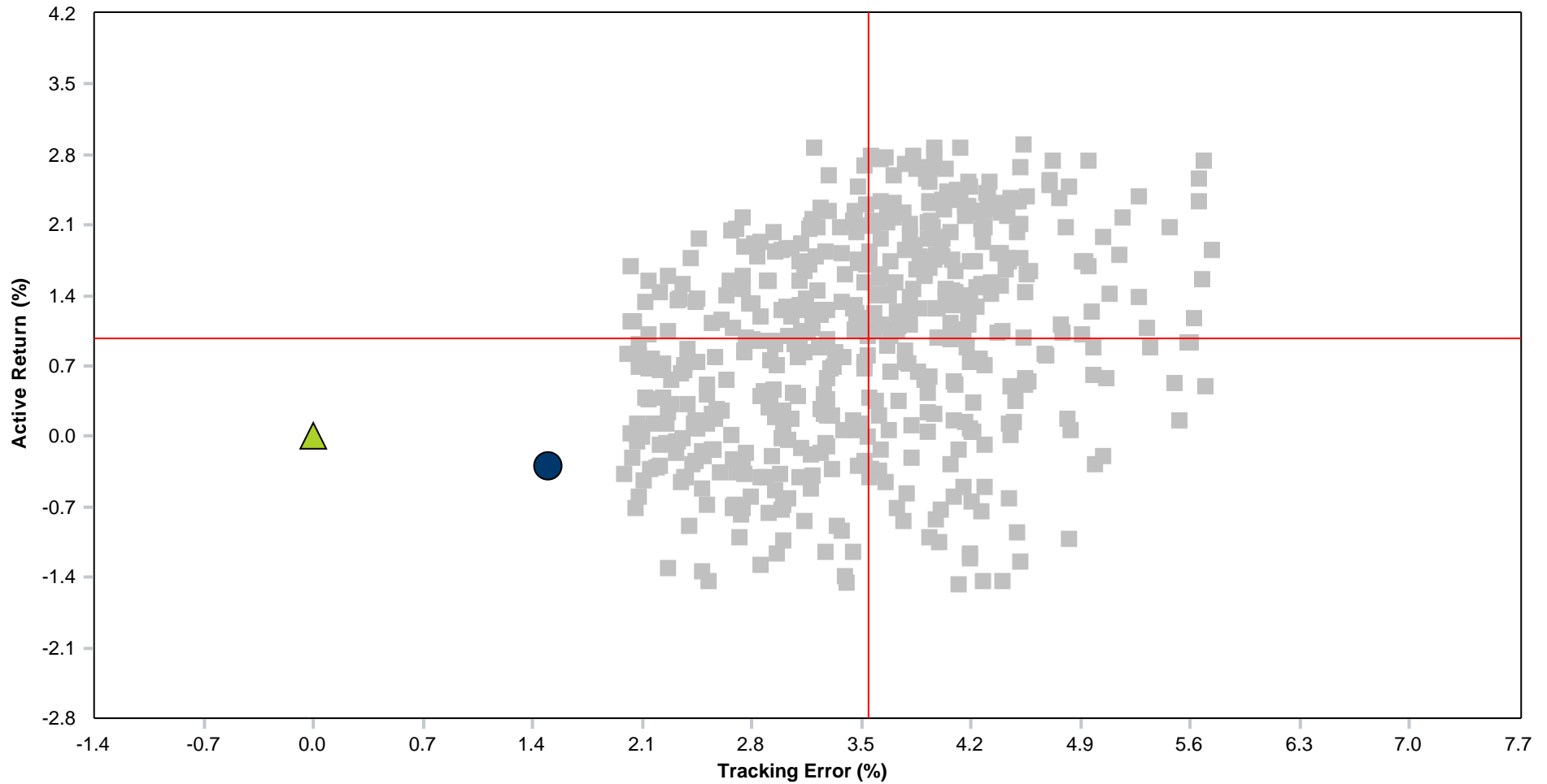


	Return	Standard Deviation
● Total Fund	4.90	7.95
▲ Total Fund Policy Index	5.20	8.08
— Median	5.93	10.59

Calculation based on monthly periodicity.

Plan Sponsor Scattergram

Total Fund vs All Public Plans-Total Fund
 Periods Ended July 1, 2017 To June 30, 2020



	Active Return	Tracking Error
● Total Fund	-0.30	1.50
▲ Total Fund Policy Index	0.00	0.00
— Median	0.97	3.55

Calculation based on monthly periodicity.

Cash Flow Summary

Total Fund

1 Quarter Ending June 30, 2020

	Begin Value	Contributions	Distributions	Net Transfers	Fees	Expenses	Capital Apprec./ Deprec.	End Value
Total Fund	853,214,290		-8,675,000		-589,797	-779,467	71,159,025	914,329,050
Total Fund x Private Equity								
US Equity Composite	129,689,101			-5,000,000	-92,295	-39	27,999,606	152,596,374
SSgA S&P 500 Index	72,787,707			-2,500,000	-4,816		14,973,238	85,256,129
Twin Capital Enhanced Equity	24,009,638				-24,310		4,732,056	28,717,384
Earnest Small Value	9,781,593			-500,000	-28,905		1,985,540	11,238,228
Emerald Advisors Small Cap	10,053,168			-1,000,000	-20,080	-11	3,271,066	12,304,143
Fragasso Large Core (EMWO)	5,122,069			-1,000,000	-8,462	-10	794,799	4,908,395
CIM Small Cap (EMWO)	3,328,036						766,326	4,094,362
Emerald Advisors All Cap (EMWO)	2,972,807				-5,028		1,064,830	4,032,609
Ethos (EMWO)	1,137,701						279,129	1,416,830
Cookson Peirce (EMWO)	496,383				-696	-17	132,623	628,293
Non US Equity Composite	130,744,345				-31,319		26,998,984	157,712,009
Baillie Gifford Intl Equity	54,742,816						13,988,026	68,730,842
FIAM Select International Equity	27,071,171				-25,227		5,194,288	32,240,232
Segal, Bryant & Hamill	22,077,059						3,445,478	25,522,537
SSgA ACWI ex US	26,853,299				-6,093		4,371,191	31,218,398
Global Equity Composite	983,468				-1,911		139,938	1,121,495
Columbus Macro (EMWO)	983,468				-1,911		139,938	1,121,495
Fixed Income Composite								
Core Fixed Composite	87,330,406			-247,459	-31,043		3,731,208	90,783,112
C S McKee	32,615,933						1,492,278	34,108,211
CIM Investment Mgmt	13,529,209				-19,746		307,283	13,816,745
Federated	27,855,261						1,484,705	29,339,966
StoneRidge Partners (EMWO)	6,516,965			-247,459	-4,132		155,990	6,421,363
Gridiron Capital Fixed Income (EMWO)	4,106,755				-7,165		195,088	4,294,677
FNB (EMWO)	2,706,283						95,866	2,802,149
High Yield Fixed Composite	100,950,223						9,199,546	110,149,769
Federated High Yield	43,384,803						4,195,453	47,580,256

Cash Flow Summary

Total Fund

1 Quarter Ending June 30, 2020

	Begin Value	Contributions	Distributions	Net Transfers	Fees	Expenses	Capital Apprec./ Deprec.	End Value
Oaktree High Yield	54,713,257						4,741,501	59,454,759
Sound Point	2,852,164						262,591	3,114,755
TIPS Fixed Composite	42,021,433			-5,000,000	-6,162		1,702,519	38,717,790
MCM TIPS	42,021,433			-5,000,000	-6,162		1,702,519	38,717,790
ERECT Composite	9,646,257						72,004	9,718,261
ERECT Fund II	9,646,257						72,004	9,718,261
Real Estate Composite	102,738,899			-318,573	-27,589	-7,431	-1,455,973	100,929,333
Morgan Stanley	72,624,120						-1,347,099	71,277,021
Oaktree Real Estate	7,179,497				-27,589	-7,431	-108,874	7,035,603
Siguler Guff Distressed RE	9,880,982			-1,500				9,879,482
Washington Alliance (EMWO)	12,070,967			-317,073				11,753,894
Washington Alliance II (EMWO)	983,333							983,333
MLP Composite	21,688,538				-60,821		6,569,543	28,197,259
Harvest MLP Fund	12,128,825				-34,445		4,024,946	16,119,326
Salient MLP Fund	9,559,713				-26,376		2,544,596	12,077,934
Life Settlement Composite	28,507,639			-454,650	-29,508		-434,328	27,589,153
CCA Black	8,404,359			-145,825			-66,517	8,192,017
CCA Blue	2,617,378						-83,202	2,534,176
CCA Green	12,080,890						-469,639	11,611,252
CCA Longevity Fund VI LP	5,405,011			-308,825	-29,508		185,030	5,251,708
Israel Bonds and Cash	14,280,614		-8,675,000	11,885,385		-654	172,605	17,662,950
Cash Account	7,032,160		-8,675,000	11,885,385		-654	61,918	10,303,809
Israel Bonds	7,248,454						110,687	7,359,141
Hedge Fund Composite	3,181,250			-810,757	-4,866		307,338	2,672,965
Gridiron Capital (EMWO)	2,323,160				-4,866		311,831	2,630,126
Gridiron Capital Multi-Asset (EMWO)	2,323,160				-4,866		311,831	2,630,126
Maplewood (EMWO)	858,090			-810,757			-4,493	42,840
Private Equity Composite	181,452,118			-53,946	-304,282	-771,343	-3,843,966	176,478,580
Accolade V	3,659,332			-65,907			450,466	4,043,891

Cash Flow Summary

Total Fund

1 Quarter Ending June 30, 2020

	Begin Value	Contributions	Distributions	Net Transfers	Fees	Expenses	Capital Apprec./ Deprec.	End Value
Accolade Partners VI	1,080,096			225,000			28,693	1,333,789
Adams Street 2003	1,666,994						-217,238	1,449,756
Adams Street 2008 Global	6,272,937			-692,297	-16,881		-567,063	4,996,696
Adams Street 2009 Global	3,666,610			-300,864	-4,030		-333,300	3,028,416
Auldbrass Spec Opps II	587,388			-142,701			416,100	860,787
Birchmere Ventures	229,871			3,038				232,909
BlackRock Multi-Alternative Opps	1,051,469			-61,368	-4,669	-28,732	-91,482	865,218
Blackstone	836,733			-477	-2,069	-748	-165,996	667,443
Blackstone Tac Op II	1,853,836			66,345		-1,841	-277,007	1,641,333
Blackstone Tac Op III	1,286,815			441,290		-27,588	-234,177	1,466,340
Commonfund Venture Partners XII	1,060,645			150,000			-4,189	1,206,456
Constitution	213,107				-11,250	-26,976	-152,859	22,023
Crestline Opportunity Fund III	3,626,886			158,165	-14,959	-6,151	16,923	3,780,864
Crestline Recovery II	409,042				-3,750		-8,257	397,034
DCM Fund IV	2,671,431			154,494	-23,015		-144,866	2,658,044
Draper Triangle	362,666						-565	362,101
Draper Triangle III	10,655,322				-50,852	-10,466	23,339	10,617,343
Emerald Advisors Fin Srv I	849,111						-161,205	687,906
Entrust	1,591,299			-162,165			-356,360	1,072,774
Entrust Special Opps IV	3,087,081			223,425	-5,686		-662,474	2,642,346
Farol Fund II	3,081,081			10,000			-315,942	2,775,139
Five Points III	2,014,711			106,705				2,121,415
Goldman Sachs	854,162							854,162
Greenspring	2,272,231			-555,000				1,717,231
Greenspring Early Stage I LP	1,642,927							1,642,927
Greenspring III	4,633,715			-97,500			-365,596	4,170,619
Greenspring IV	3,382,053			90,000			-38,831	3,433,222
Greenspring Sec I	2,338,745			-97,500			-21,441	2,219,804
Greenspring Sec II	2,694,219			-70,000			3,571	2,627,790

Cash Flow Summary

Total Fund

1 Quarter Ending June 30, 2020

	Begin Value	Contributions	Distributions	Net Transfers	Fees	Expenses	Capital Apprec./ Deprec.	End Value
Greenspring V	3,006,933							3,006,933
iNetworks	12,769,601					-96,722	490,465	13,163,344
iNetworks II	2,383,311			777,500		-164,160	160	2,996,811
INOF II	5,748,429			200,000		-344,849	27,422	5,631,002
Ironside III	6,535,415				-7,944	-9,255	66,751	6,584,968
Ironside IV	3,079,978				-3,484	-1,544	-32,618	3,042,332
Ironside Opportunities Fund	2,656,934					-4,729	-44,781	2,607,424
JMI Equity Fund IX-A	992,519			525,000	-9,130		-67,657	1,440,732
Mellon PAM Fund V	4,023,452				-12,500		-405,094	3,605,858
Mesirow Partners Fund IV	6,435,498			-425,000	-41,621		-276,563	5,692,314
North Haven Capital Partners	2,457,109			-461,024			358,509	2,354,594
North Haven Senior Loan Fund	1,753,593			23,117	-7,703	-19,812	37,714	1,786,909
Permal Capital Mgmt	671,223			-53,111	-9,739	-889	-58,134	549,350
Pharos Capital	3,398,513			-23,110			11,575	3,386,978
PLSG Accelerator Fund	240,115							240,115
ValStone Partners IV	13,240							13,240
ValStone Partners V	25,088,032							25,088,032
ValStone Partners VI	16,536,719				-75,000	-26,882	-771,959	15,662,879
Valstone Senior Living	14,028,989							14,028,989



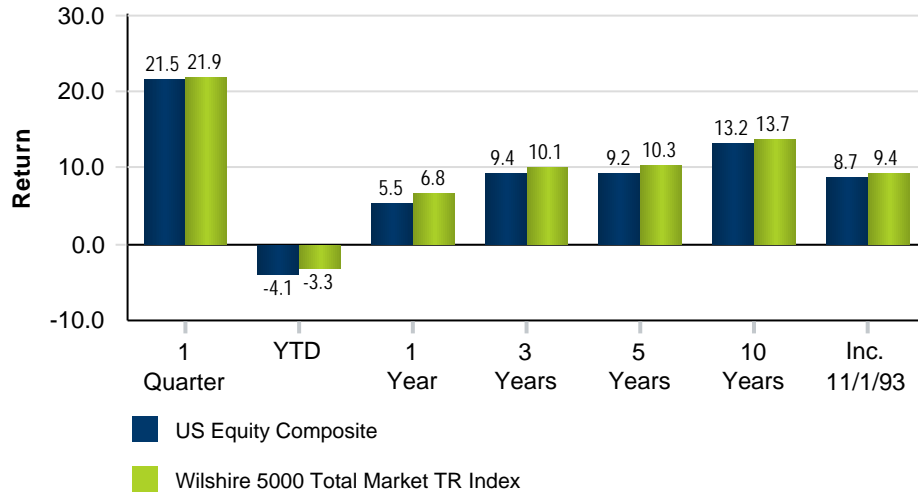
US Equity Composite

Composite Performance Summary

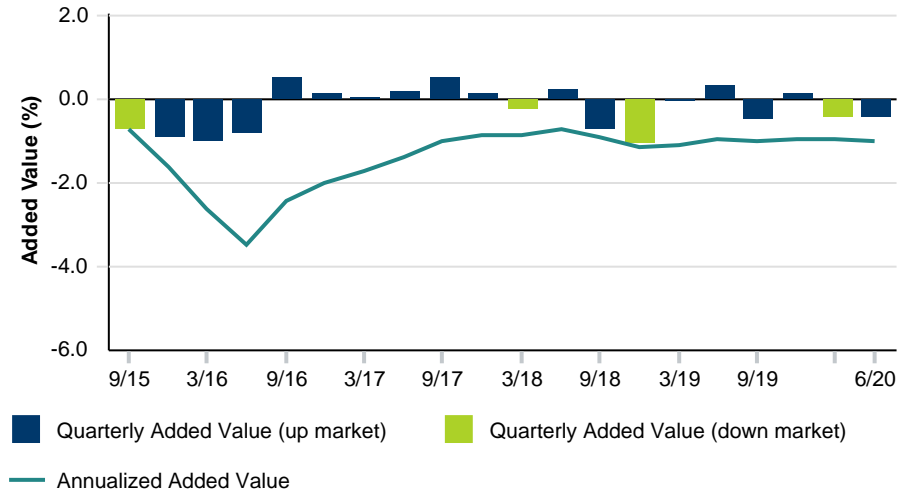
US Equity Composite

Periods Ended June 30, 2020

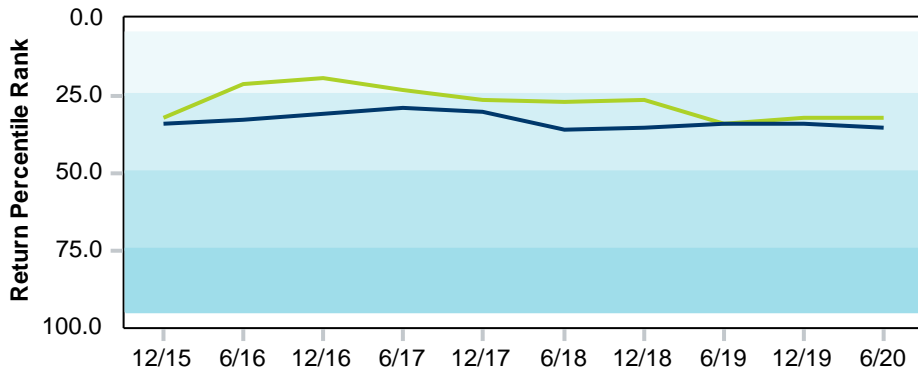
Comparative Performance



Added Value History

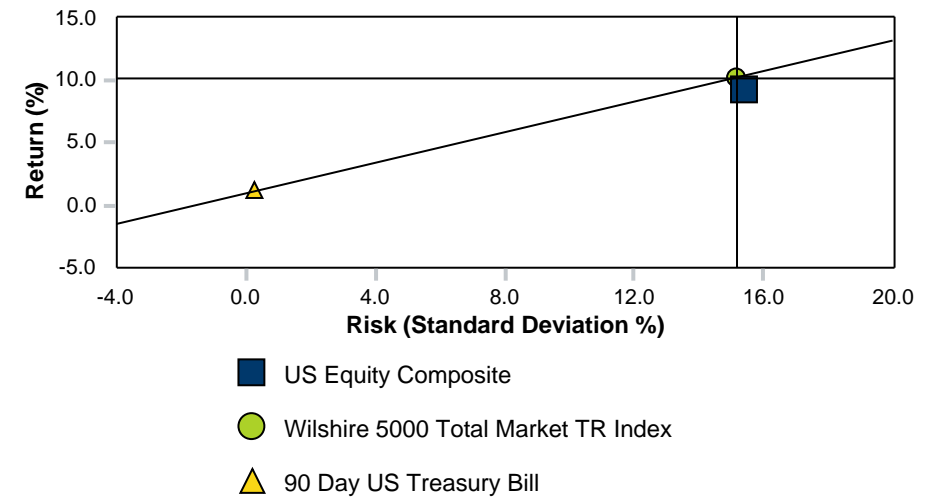


Rolling Percentile Rank: IM U.S. Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
US Equity Composite	10	0 (0%)	10 (100%)	0 (0%)	0 (0%)
Benchmark	10	3 (30%)	7 (70%)	0 (0%)	0 (0%)

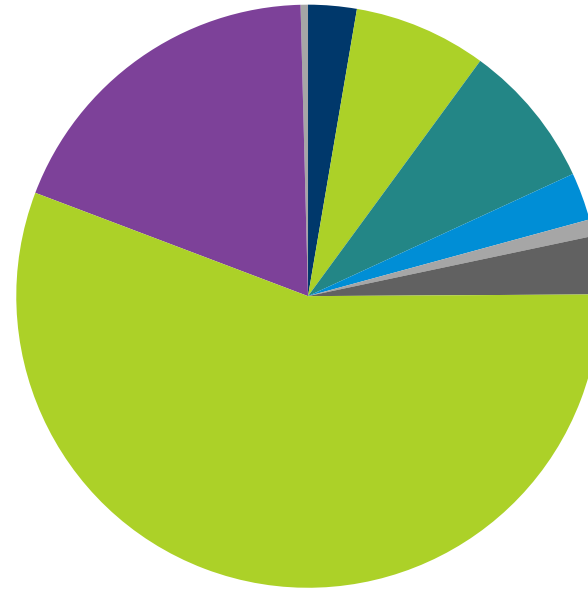
Risk and Return 07/1/15 - 06/30/20



Asset Allocation By Manager

US Equity Composite
 Periods Ended June 30, 2020

Jun-2020 : 152,596,374

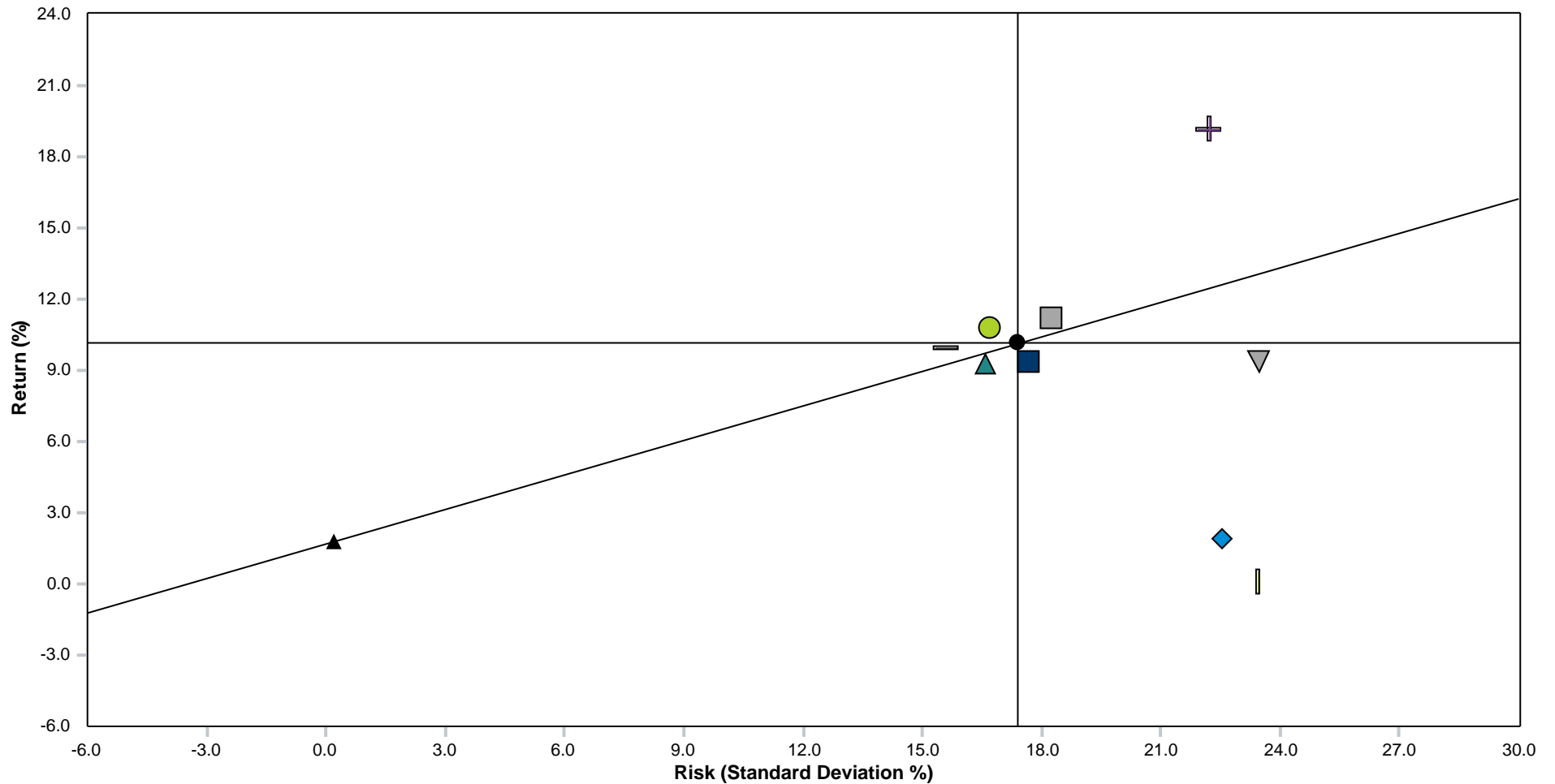


	Market Value \$	Allocation (%)
■ CIM Small Cap (EMWO)	4,094,362	2.7
■ Earnest Small Value	11,238,228	7.4
■ Emerald Advisors Small Cap	12,304,143	8.1
■ Emerald Advisors All Cap (EMWO)	4,032,609	2.6
■ Ethos (EMWO)	1,416,830	0.9
■ Fragasso Large Core (EMWO)	4,908,395	3.2
■ SSGA S&P 500 Index	85,256,129	55.9
■ Twin Capital Enhanced Equity	28,717,384	18.8
■ Cookson Peirce (EMWO)	628,293	0.4

Risk vs. Return

US Equity Composite

Periods Ended 3 Years Ending June 30, 2020



- | | | | |
|----------------------------|----------------------------|-------------------------------------|---------------------------------|
| US Equity Composite | SSgA S&P 500 Index | Twin Capital Enhanced Equity | Earnest Small Value |
| Emerald Advisors Small Cap | Fragasso Large Core (EMWO) | CIM Small Cap (EMWO) | Emerald Advisors All Cap (EMWO) |
| Ethos (EMWO) | Cookson Peirce (EMWO) | Wilshire 5000 Total Market TR Index | 90 Day US Treasury Bill |

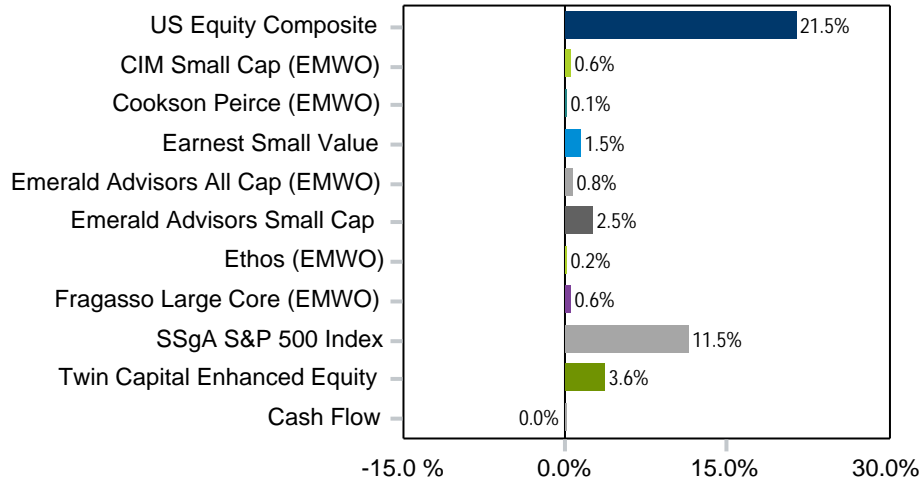
Calculation based on monthly periodicity.

Return and Risk Contribution

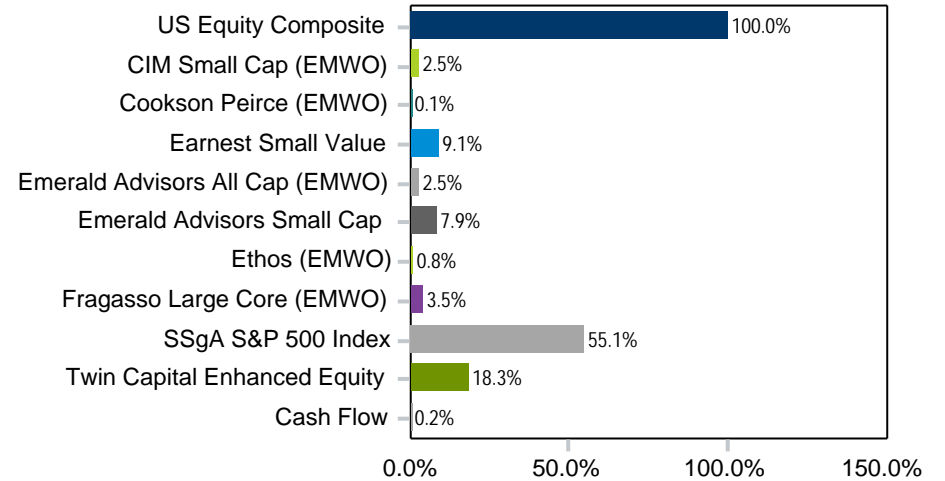
US Equity Composite

Periods Ended 1 Quarter June 30, 2020

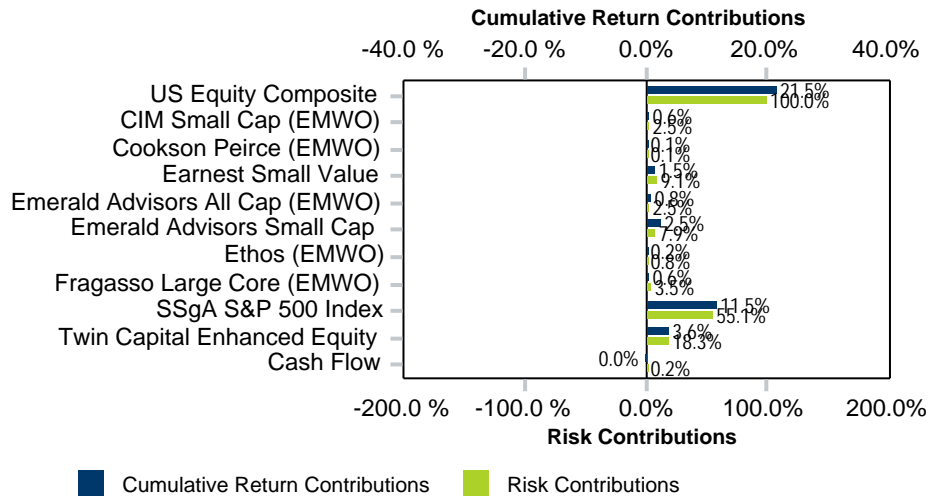
Cumulative Return Contributions



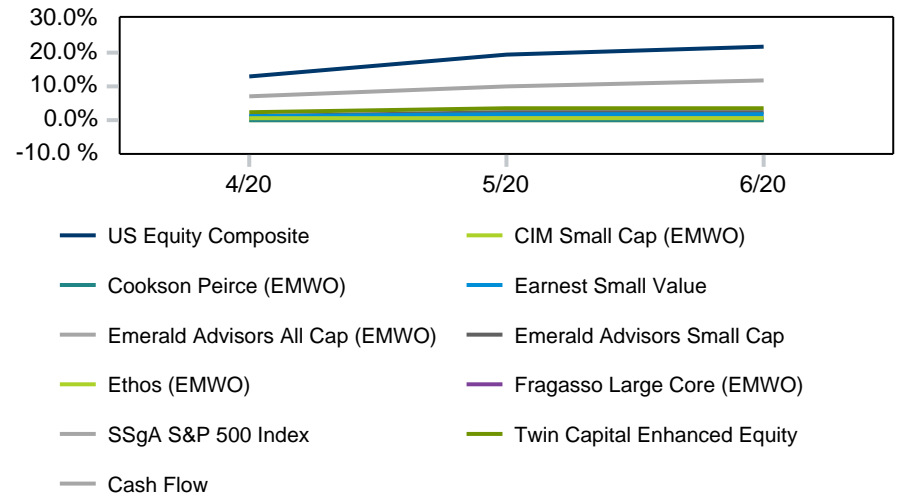
Risk Contributions



Cumulative Return and Risk Contributions



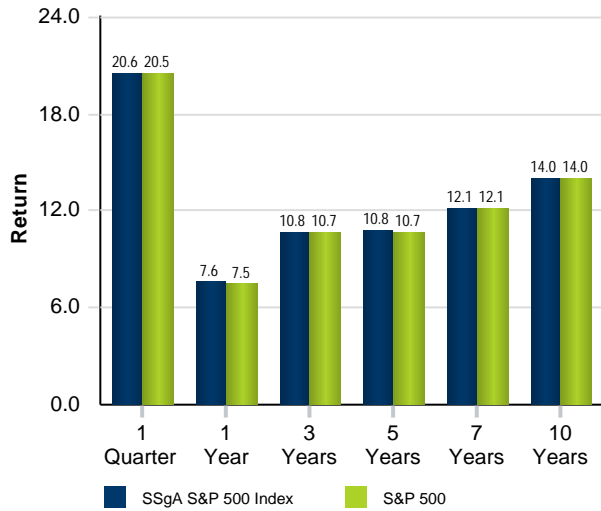
Cumulative Return Contributions History



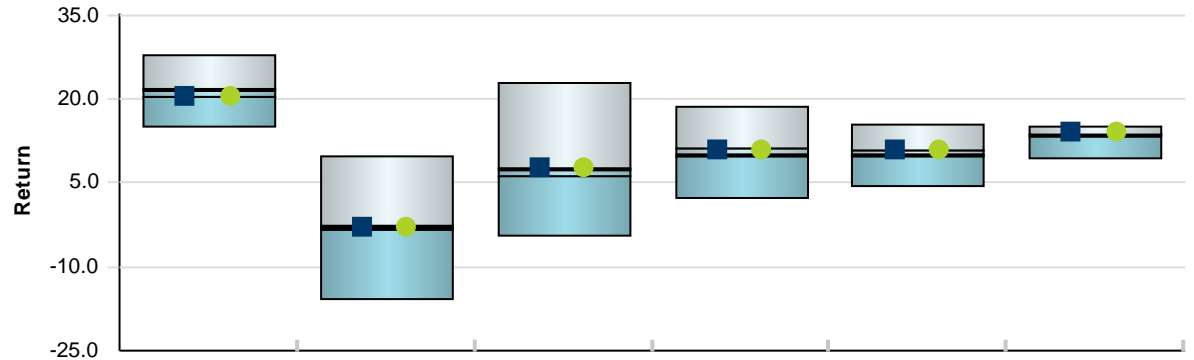
Performance Summary

SSgA S&P 500 Index
Periods Ended June 30, 2020

Comparative Performance

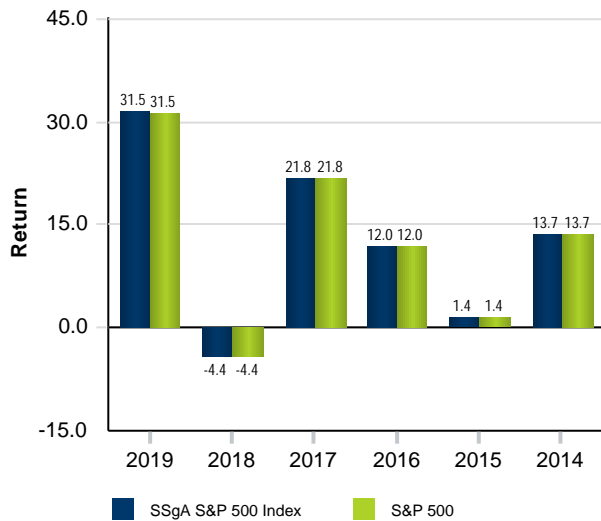


Peer Group Analysis: IM U.S. Large Cap Index Equity (SA+CF)

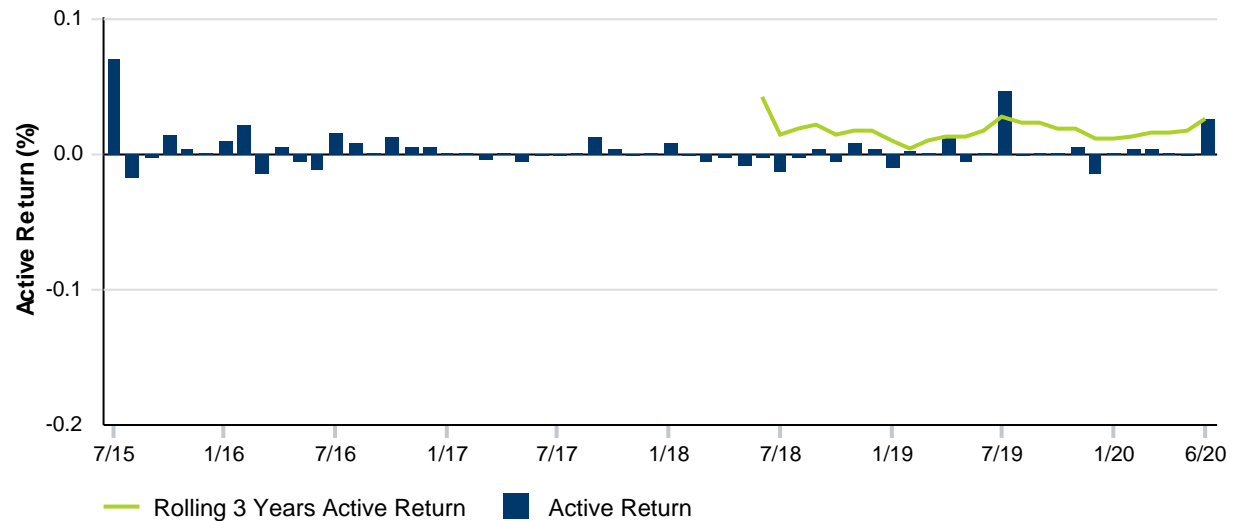


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
■ Fund	20.57 (73)	-3.04 (53)	7.59 (28)	10.76 (30)	10.77 (23)	14.01 (9)
● Benchmark	20.54 (74)	-3.08 (56)	7.51 (30)	10.73 (30)	10.73 (26)	13.99 (10)
Median	21.44	-2.94	7.19	10.06	10.09	13.74

Comparative Performance



Rolling 3 Years Performance



Summary Statistics

SSgA S&P 500 Index

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>SSgA S&P 500 Index</u>	<u>S&P 500</u>
Maximum Return	12.82	12.82
Minimum Return	-12.35	-12.35
Return	7.59	7.51
Cumulative Return	7.59	7.51
Active Return	0.08	0.00
Excess Return	7.94	7.87

Risk Summary Statistics

	<u>SSgA S&P 500 Index</u>	<u>S&P 500</u>
Upside Risk	4.32	4.32
Downside Risk	14.92	14.93
Beta	1.00	1.00

Risk/Return Summary Statistics

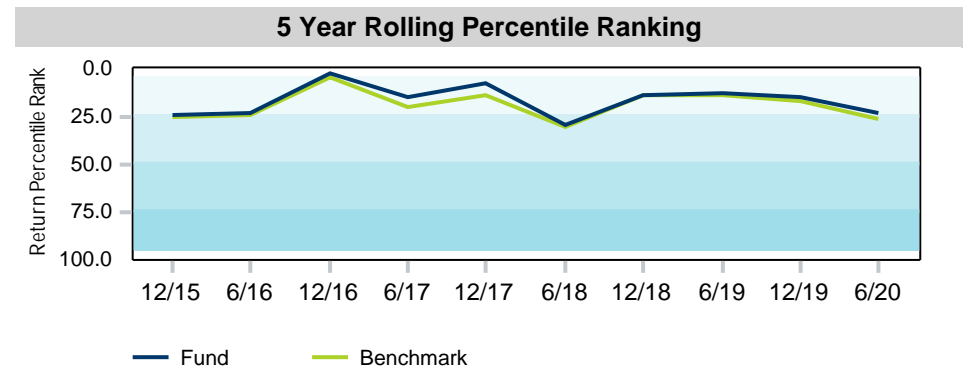
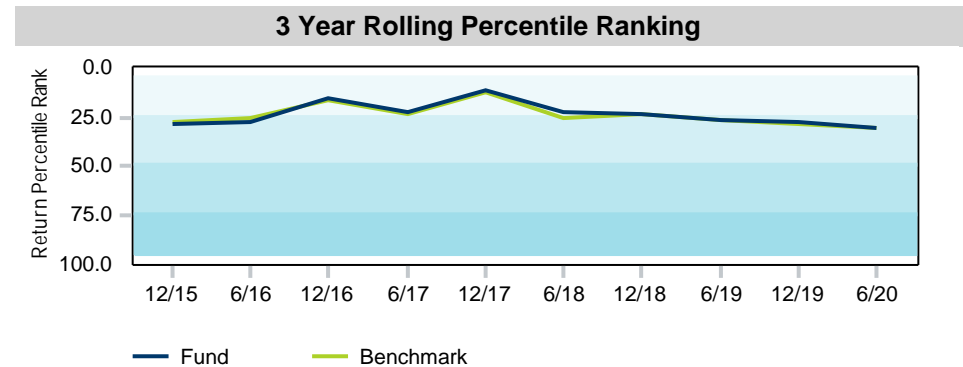
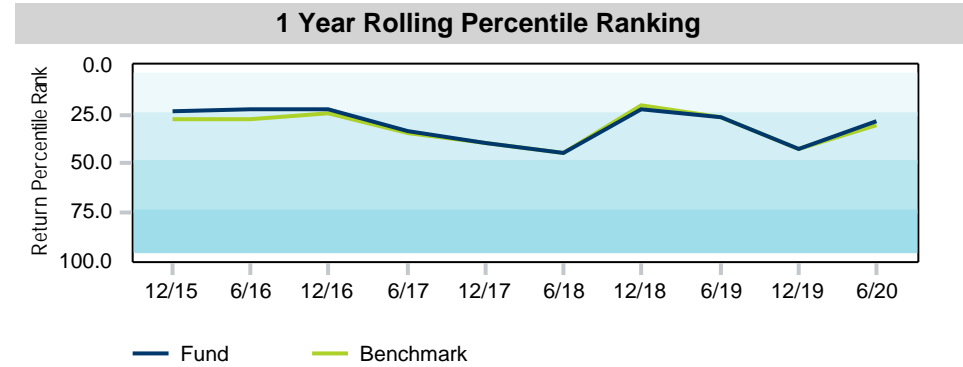
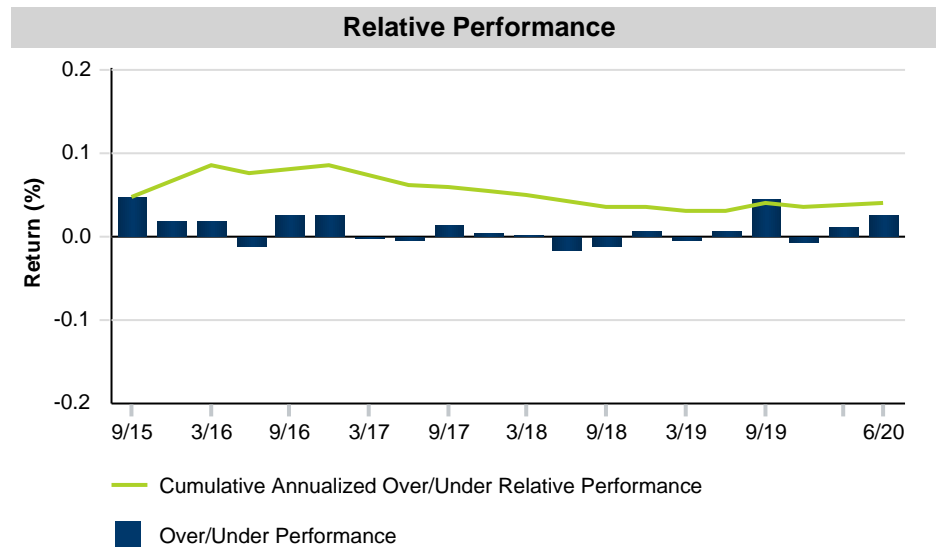
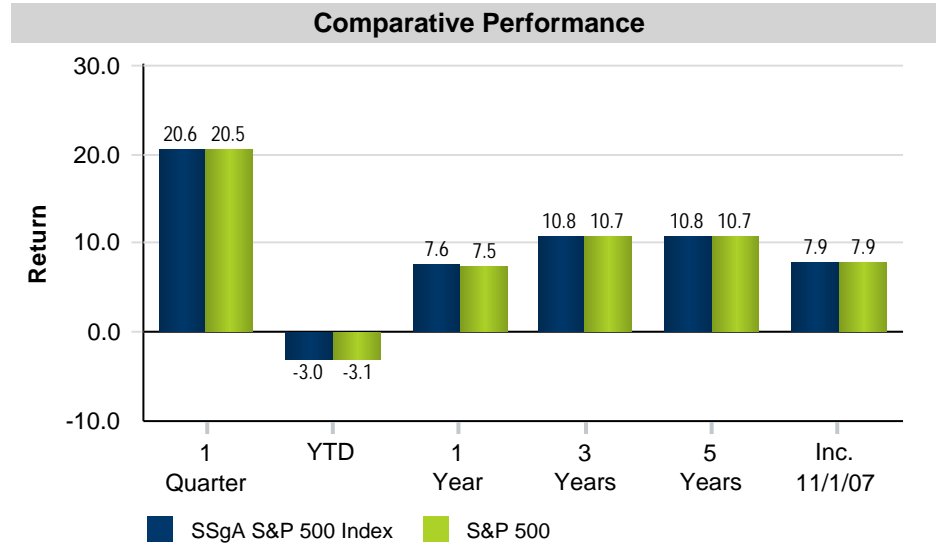
	<u>SSgA S&P 500 Index</u>	<u>S&P 500</u>
Standard Deviation	20.95	20.95
Alpha	0.08	0.00
Active Return/Risk	0.00	0.00
Tracking Error	0.05	0.00
Information Ratio	1.45	
Sharpe Ratio	0.38	0.37

Correlation Statistics

	<u>SSgA S&P 500 Index</u>	<u>S&P 500</u>
R-Squared	1.00	1.00
Actual Correlation	1.00	1.00

Manager Summary

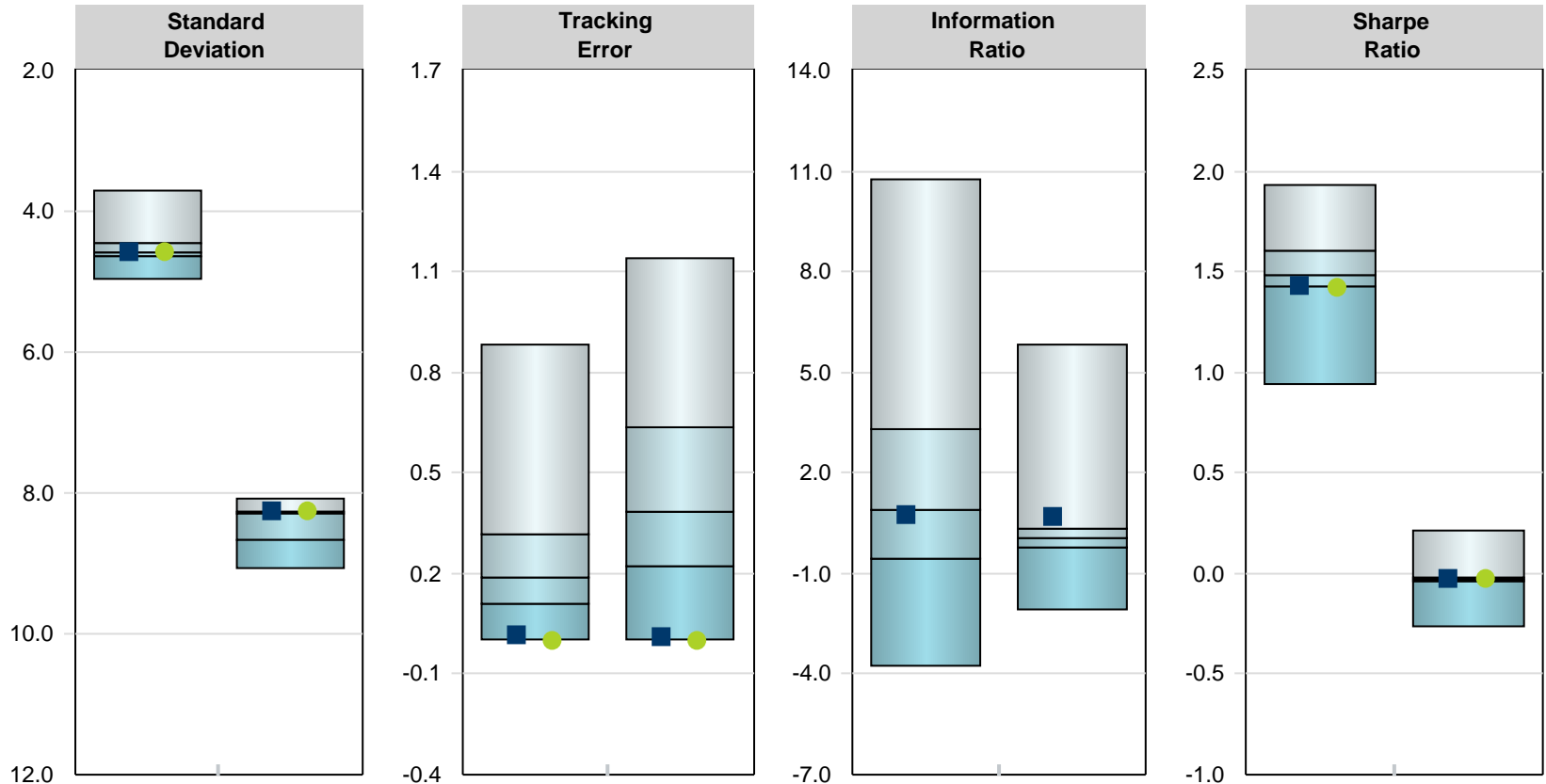
SSgA S&P 500 Index vs IM U.S. Large Cap Index Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

SSgA S&P 500 Index

Periods Ended June 30, 2020



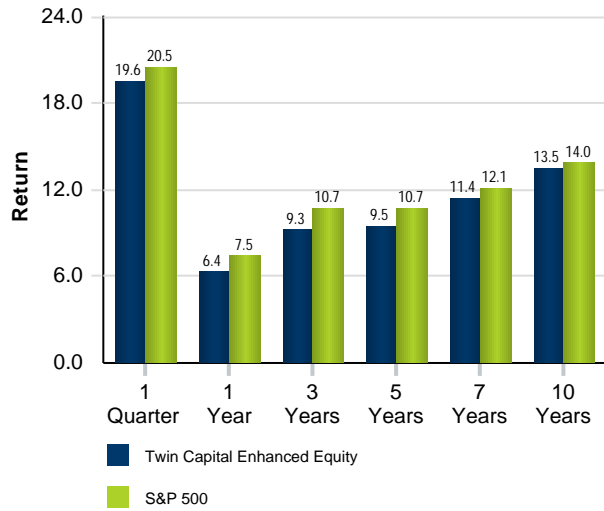
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ SSgA S&P 500 Index	4.59 (41)	8.28 (42)	0.01 (92)	0.01 (94)	0.70 (52)	0.67 (16)	1.42 (77)	-0.03 (53)
● S&P 500	4.59 (45)	8.28 (43)	0.00 (100)	0.00 (100)			1.42 (79)	-0.03 (58)
5th Percentile	3.72	8.08	0.88	1.14	10.74	5.82	1.93	0.22
1st Quartile	4.46	8.26	0.32	0.64	3.33	0.36	1.61	-0.02
Median	4.59	8.30	0.19	0.38	0.90	0.07	1.49	-0.03
3rd Quartile	4.63	8.67	0.11	0.22	-0.58	-0.22	1.43	-0.04
95th Percentile	4.95	9.06	0.00	0.01	-3.78	-2.07	0.94	-0.27

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

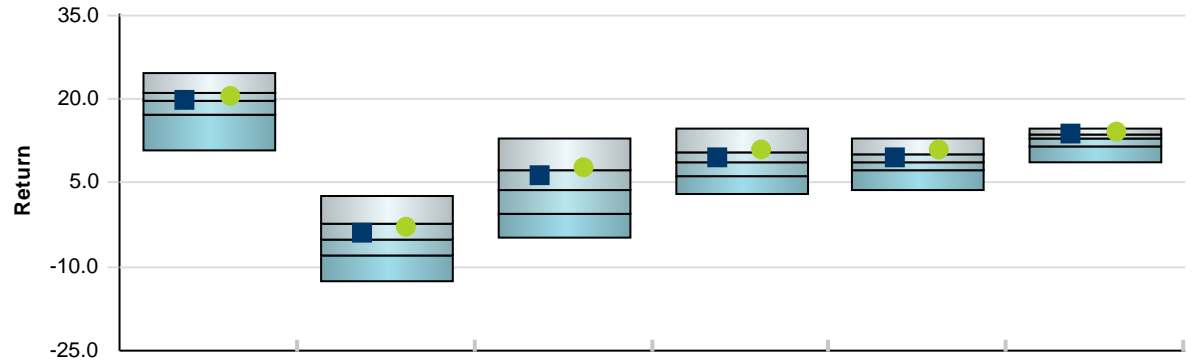
Performance Summary

Twin Capital Enhanced Equity
 Periods Ended June 30, 2020

Comparative Performance

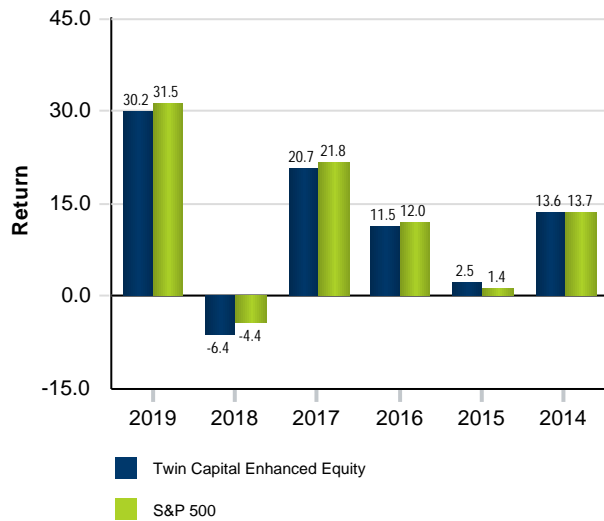


Peer Group Analysis: IM U.S. Large Cap Core Equity (SA+CF)

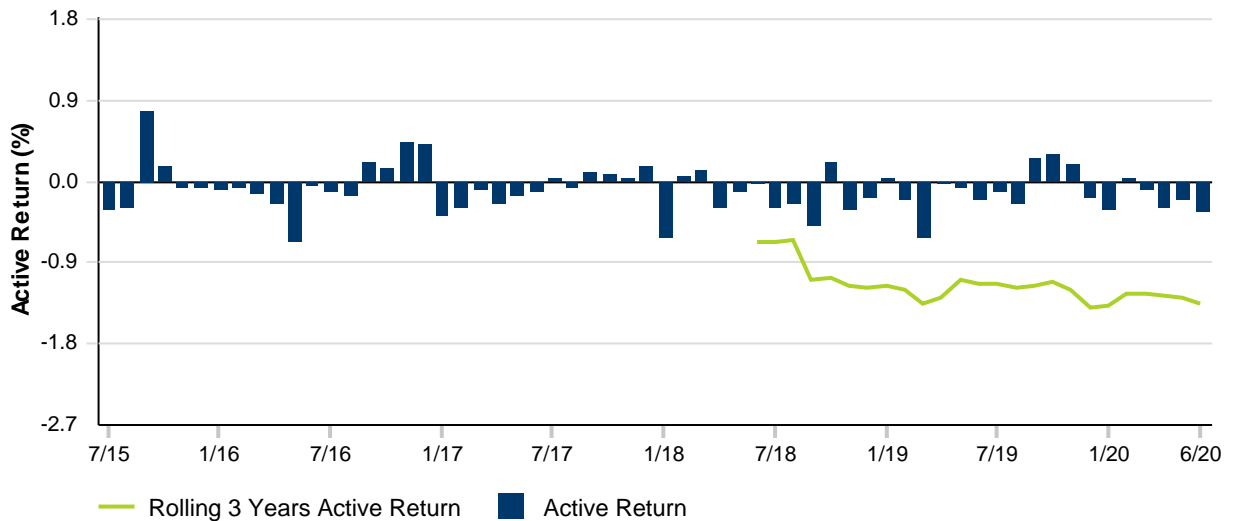


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
Fund	19.61 (52)	-4.22 (38)	6.41 (28)	9.28 (44)	9.53 (37)	13.53 (33)
Benchmark	20.54 (34)	-3.08 (30)	7.51 (23)	10.73 (22)	10.73 (14)	13.99 (16)
Median	19.85	-5.24	3.92	8.83	8.81	12.94

Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Twin Capital Enhanced Equity

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Twin Capital Enhanced Equity</u>	<u>S&P 500</u>
Maximum Return	12.53	12.82
Minimum Return	-12.45	-12.35
Return	6.41	7.51
Cumulative Return	6.41	7.51
Active Return	-1.05	0.00
Excess Return	6.82	7.87

Risk Summary Statistics

	<u>Twin Capital Enhanced Equity</u>	<u>S&P 500</u>
Upside Risk	4.24	4.32
Downside Risk	15.02	14.93
Beta	1.00	1.00

Risk/Return Summary Statistics

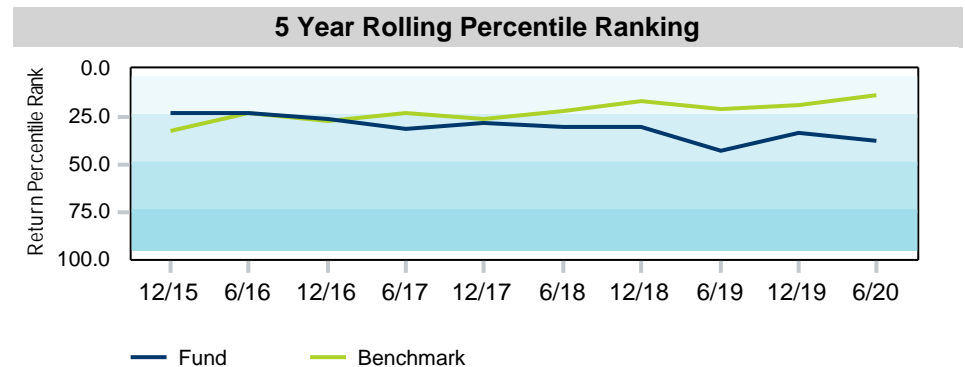
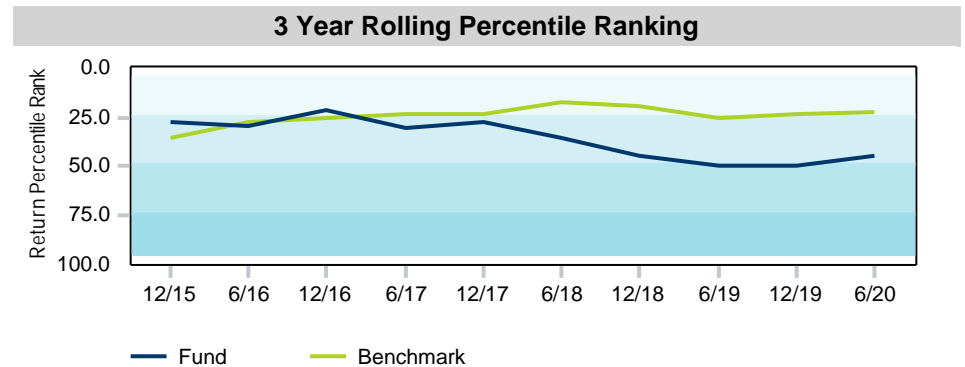
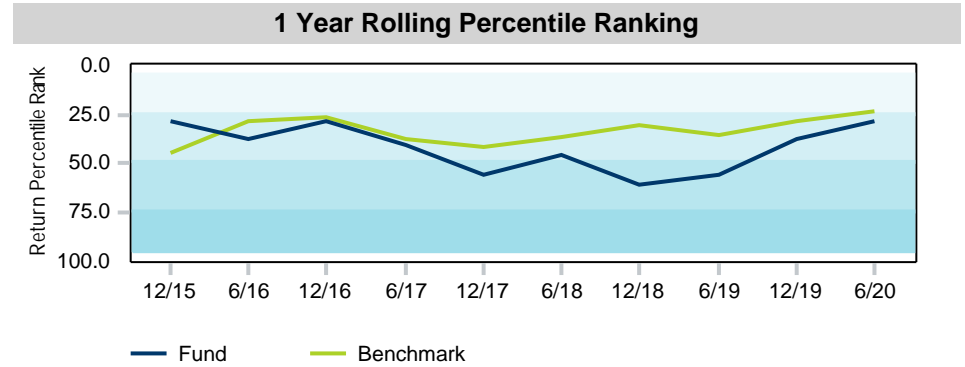
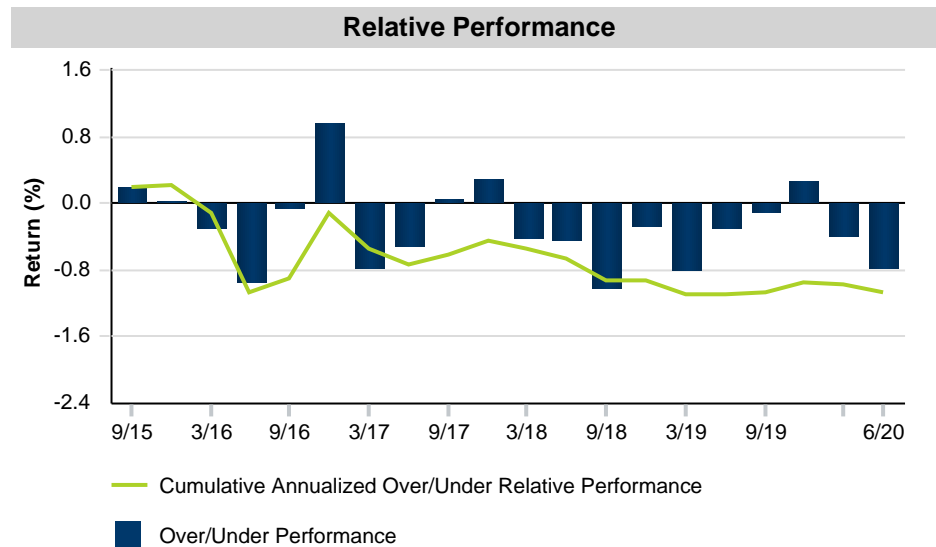
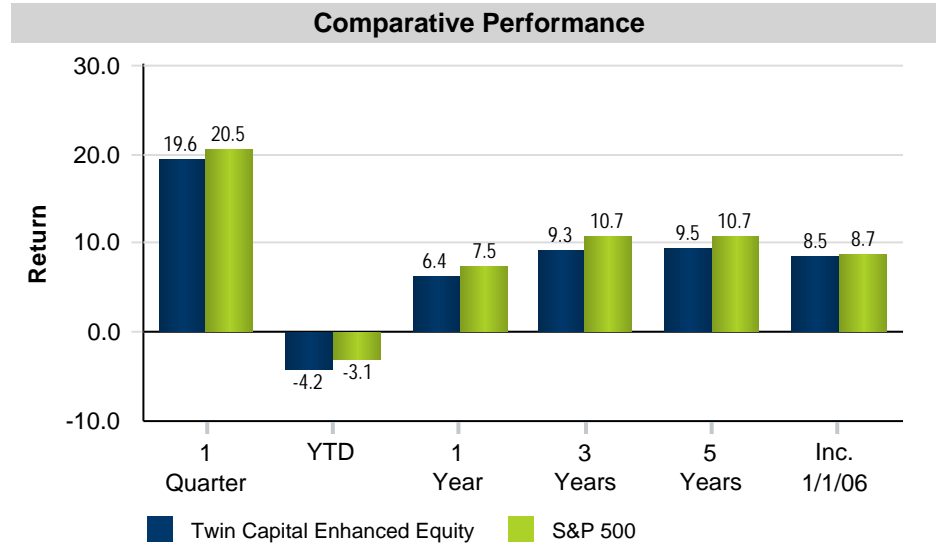
	<u>Twin Capital Enhanced Equity</u>	<u>S&P 500</u>
Standard Deviation	20.86	20.95
Alpha	-0.99	0.00
Active Return/Risk	-0.05	0.00
Tracking Error	0.75	0.00
Information Ratio	-1.40	
Sharpe Ratio	0.32	0.37

Correlation Statistics

	<u>Twin Capital Enhanced Equity</u>	<u>S&P 500</u>
R-Squared	1.00	1.00
Actual Correlation	1.00	1.00

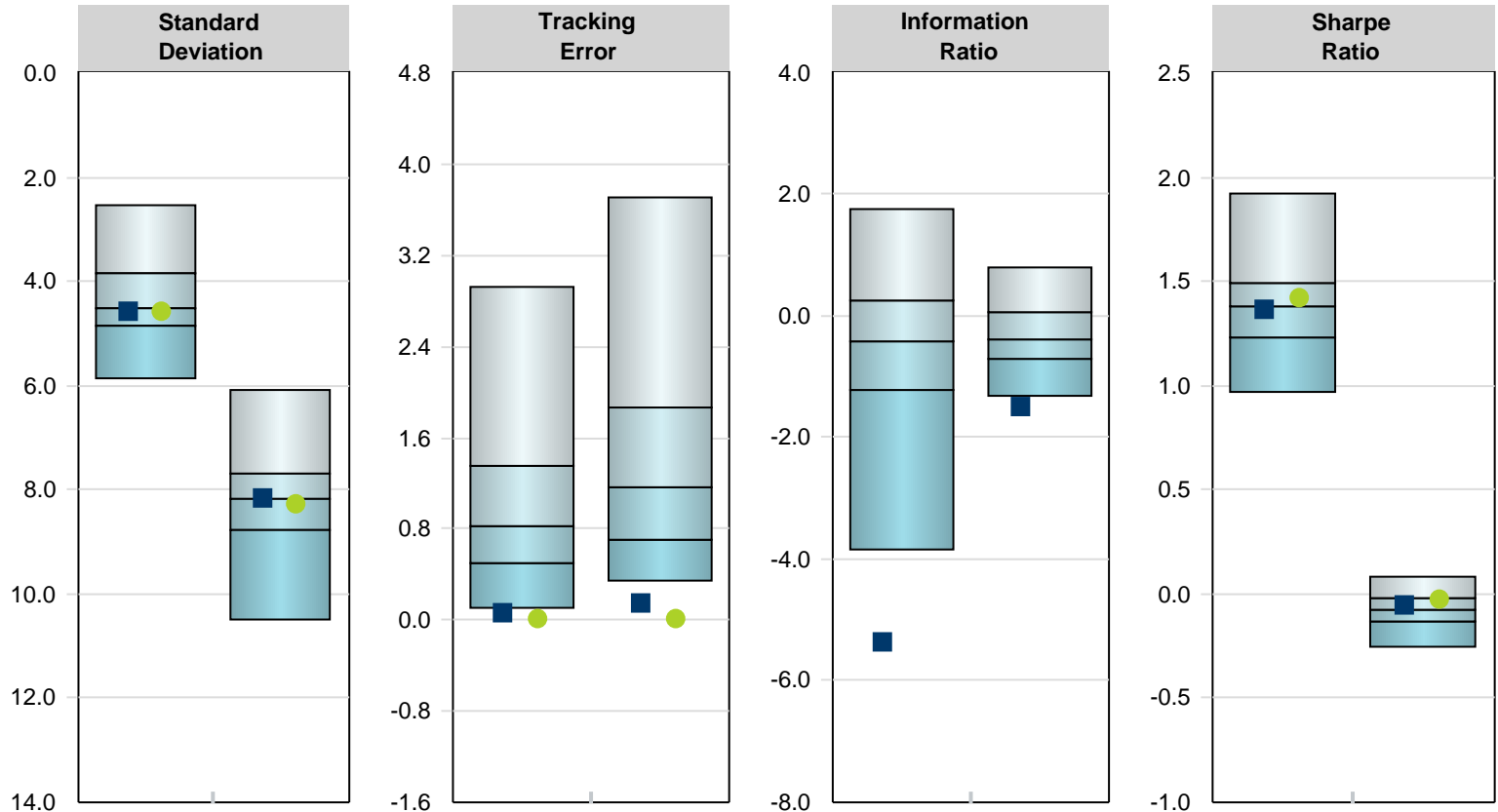
Manager Summary

Twin Capital Enhanced Equity vs IM U.S. Large Cap Core Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

Twin Capital Enhanced Equity
 Periods Ended June 30, 2020



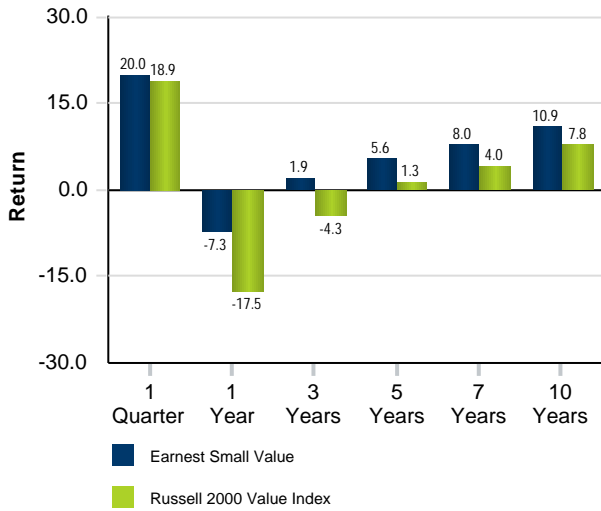
	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Twin Capital Enhanced Equity	4.60 (58)	8.19 (50)	0.05 (99)	0.13 (99)	-5.39 (98)	-1.52 (97)	1.36 (54)	-0.06 (37)
● S&P 500	4.59 (57)	8.28 (56)	0.00 (100)	0.00 (100)			1.42 (41)	-0.03 (31)
5th Percentile	2.53	6.07	2.92	3.70	1.74	0.79	1.92	0.09
1st Quartile	3.84	7.70	1.35	1.87	0.25	0.06	1.49	-0.02
Median	4.53	8.18	0.83	1.16	-0.43	-0.38	1.38	-0.07
3rd Quartile	4.84	8.76	0.49	0.70	-1.22	-0.69	1.23	-0.13
95th Percentile	5.87	10.47	0.11	0.34	-3.85	-1.33	0.97	-0.25

Parenteses contain percentile rankings.
 Calculation based on monthly periodicity.

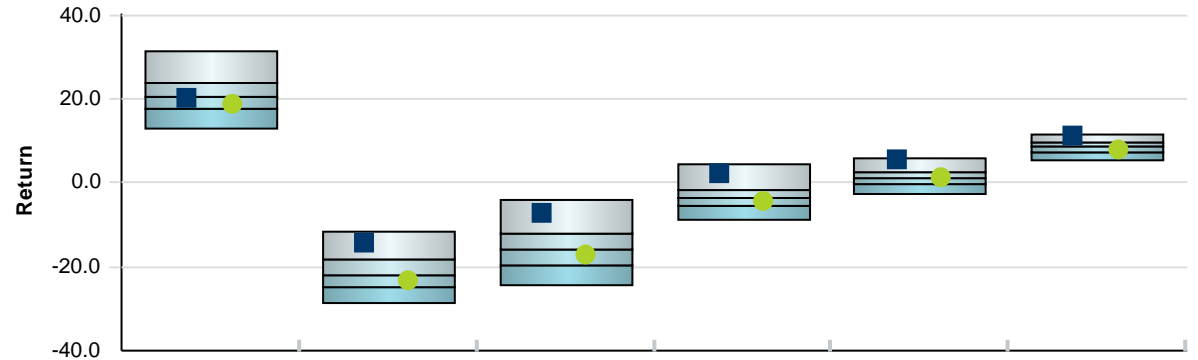
Performance Summary

Earnest Small Value
Periods Ended June 30, 2020

Comparative Performance

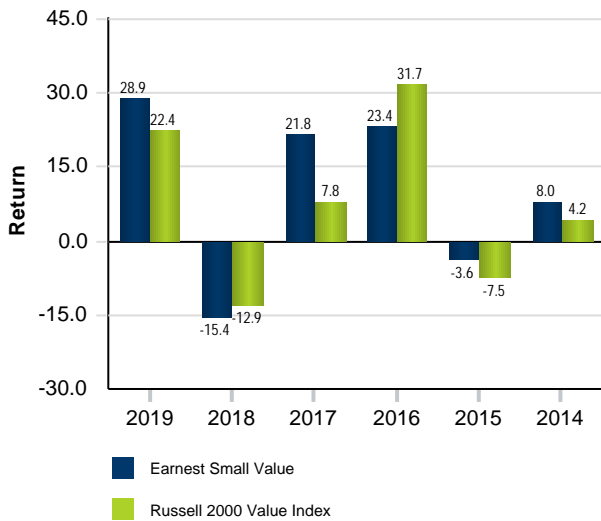


Peer Group Analysis: IM U.S. Small Cap Value Equity (SA+CF)

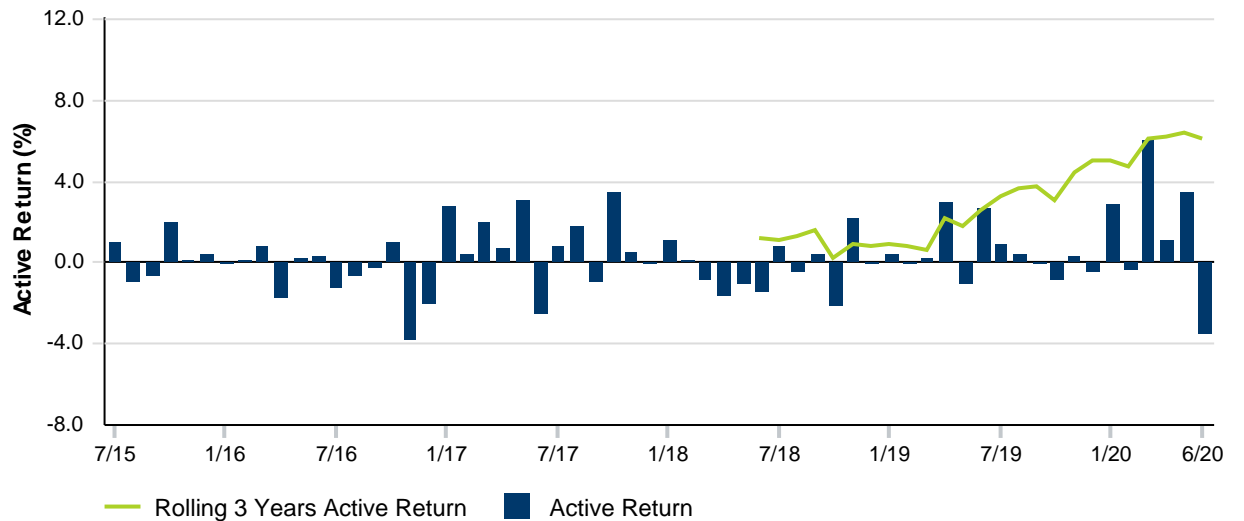


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
Fund	20.00 (55)	-14.41 (11)	-7.27 (12)	1.93 (11)	5.61 (8)	10.94 (7)
Benchmark	18.91 (70)	-23.50 (63)	-17.48 (61)	-4.35 (60)	1.26 (44)	7.82 (72)
Median	20.70	-21.80	-15.93	-3.53	0.96	8.58

Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Earnest Small Value

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Earnest Small Value</u>	<u>Russell 2000 Value Index</u>
Maximum Return	13.43	12.34
Minimum Return	-18.65	-24.67
Return	-7.27	-17.48
Cumulative Return	-7.27	-17.48
Active Return	10.11	0.00
Excess Return	-5.21	-15.32

Risk Summary Statistics

	<u>Earnest Small Value</u>	<u>Russell 2000 Value Index</u>
Upside Risk	4.72	4.27
Downside Risk	21.96	27.63
Beta	0.85	1.00

Risk/Return Summary Statistics

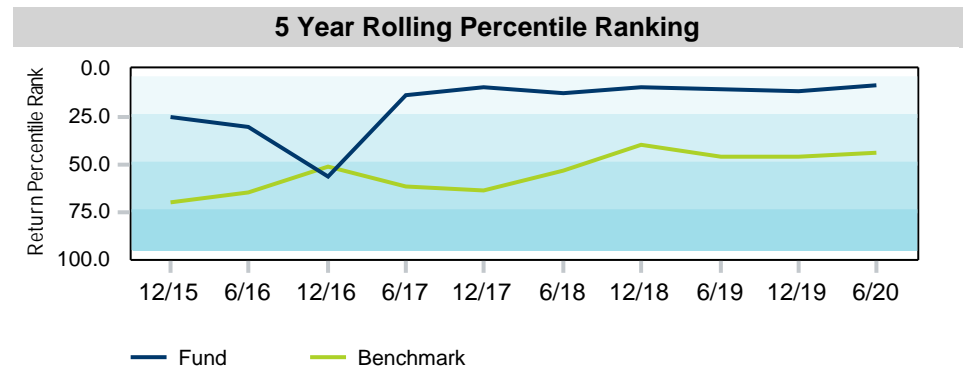
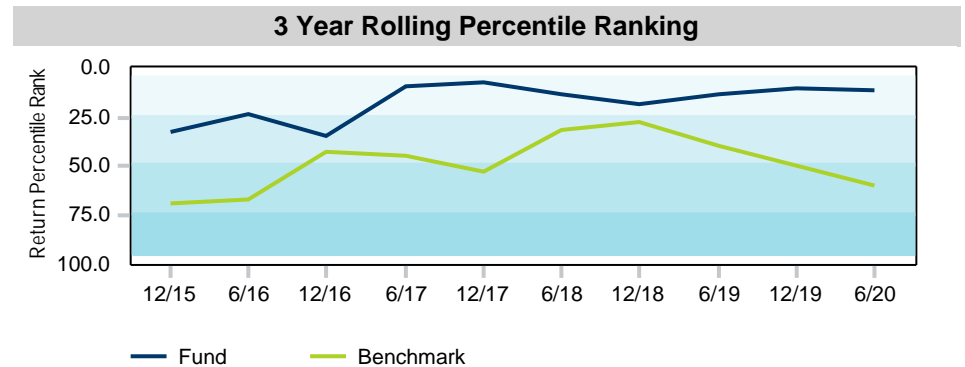
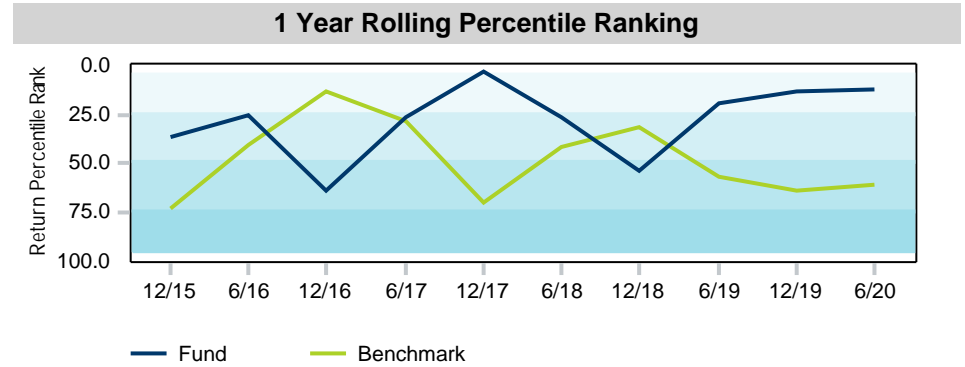
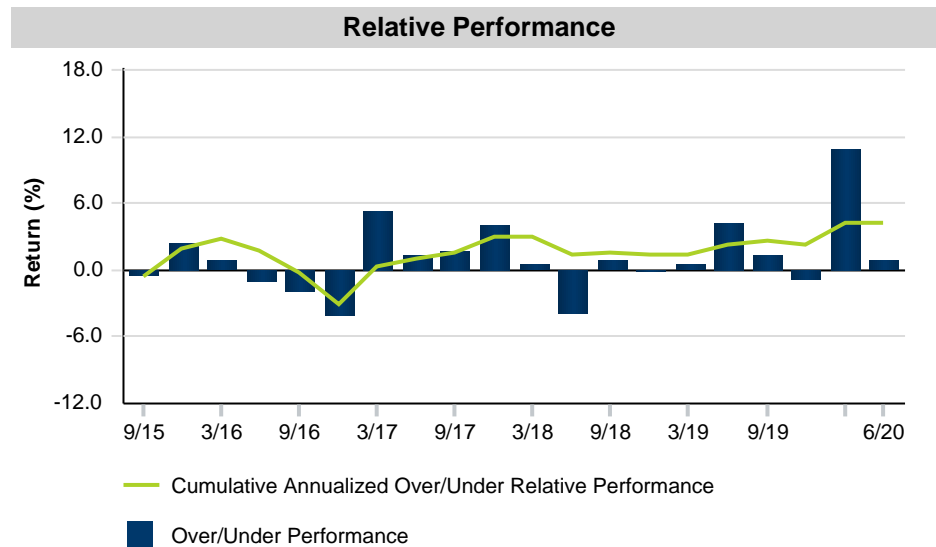
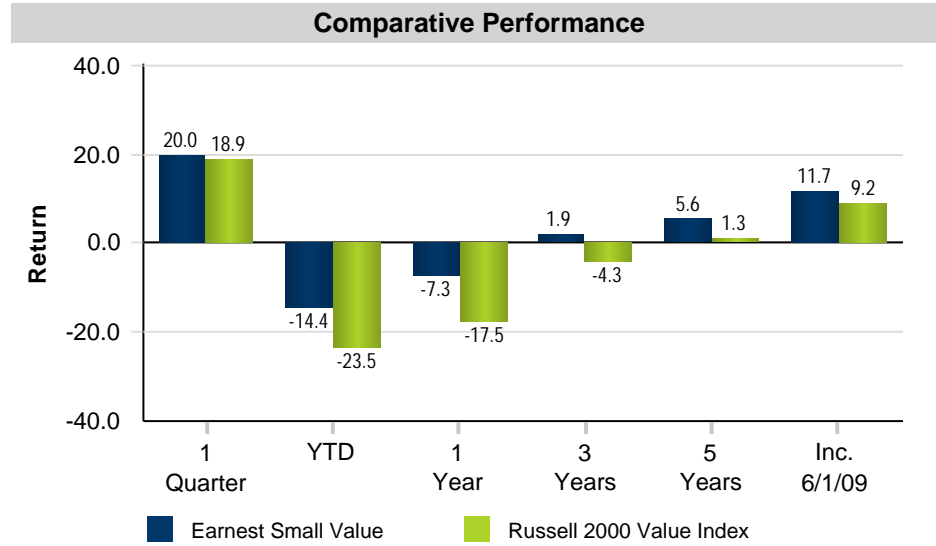
	<u>Earnest Small Value</u>	<u>Russell 2000 Value Index</u>
Standard Deviation	27.37	31.09
Alpha	8.42	0.00
Active Return/Risk	0.37	0.00
Tracking Error	7.99	0.00
Information Ratio	1.27	
Sharpe Ratio	-0.19	-0.49

Correlation Statistics

	<u>Earnest Small Value</u>	<u>Russell 2000 Value Index</u>
R-Squared	0.94	1.00
Actual Correlation	0.97	1.00

Manager Summary

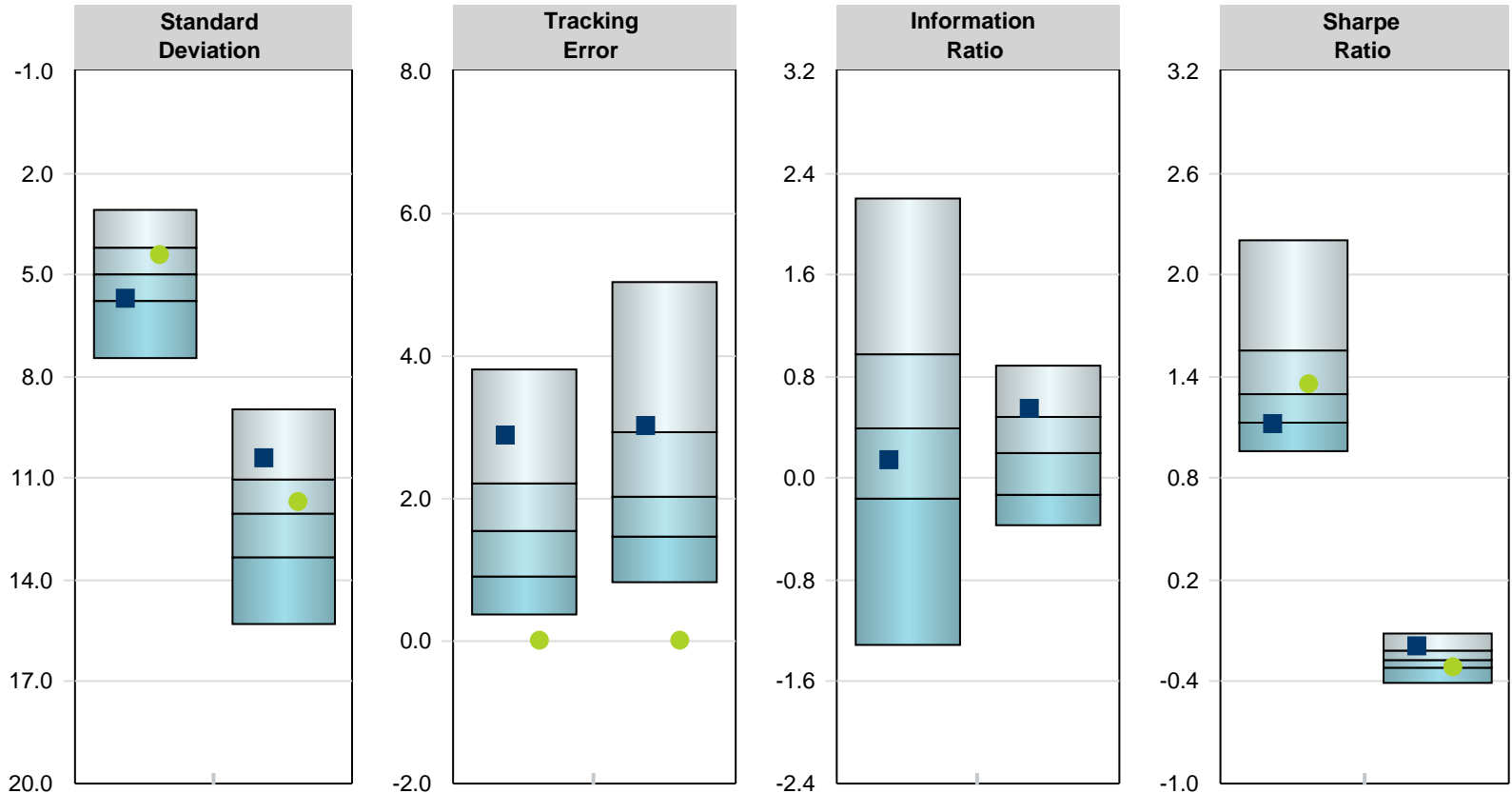
Earnest Small Value vs IM U.S. Small Cap Value Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

Earnest Small Value

Periods Ended June 30, 2020



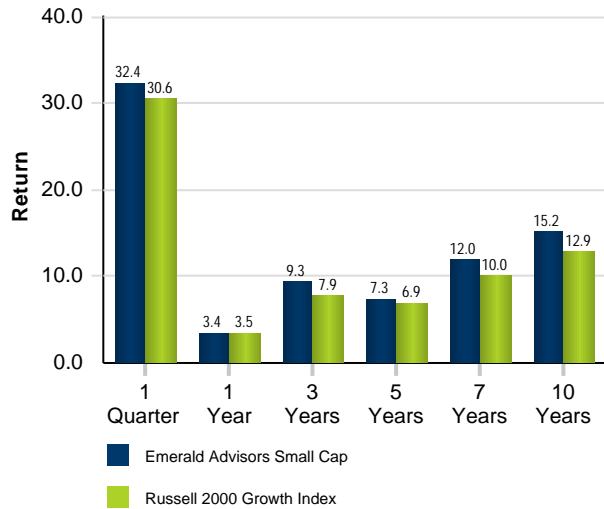
	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Earnest Small Value	5.71 (73)	10.43 (14)	2.89 (15)	3.02 (21)	0.13 (63)	0.54 (22)	1.12 (76)	-0.20 (18)
● Russell 2000 Value Index	4.46 (32)	11.71 (43)	0.00 (100)	0.00 (100)			1.35 (43)	-0.31 (75)
5th Percentile	3.09	8.98	3.82	5.04	2.20	0.89	2.20	-0.11
1st Quartile	4.21	11.03	2.22	2.92	0.97	0.48	1.55	-0.22
Median	4.99	12.05	1.54	2.02	0.39	0.20	1.29	-0.28
3rd Quartile	5.78	13.31	0.91	1.46	-0.16	-0.13	1.12	-0.31
95th Percentile	7.45	15.30	0.37	0.84	-1.31	-0.37	0.96	-0.41

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

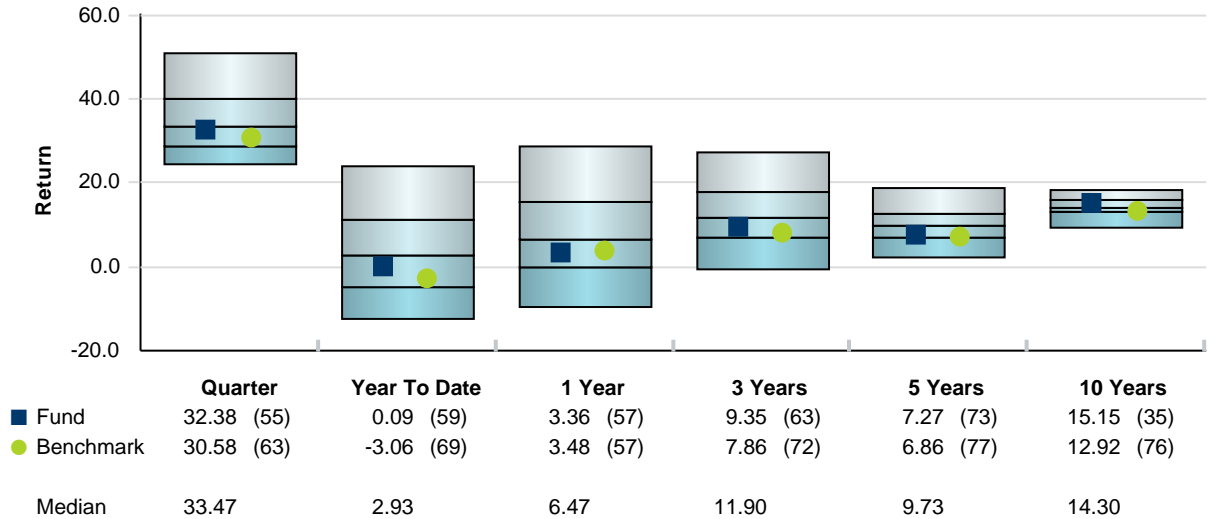
Performance Summary

Emerald Advisors Small Cap
 Periods Ended June 30, 2020

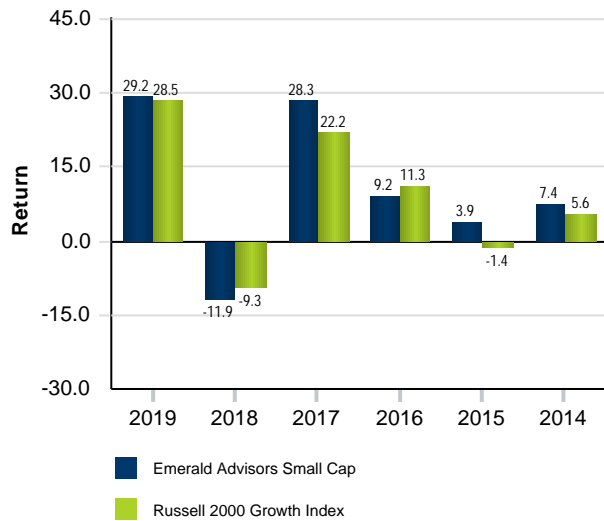
Comparative Performance



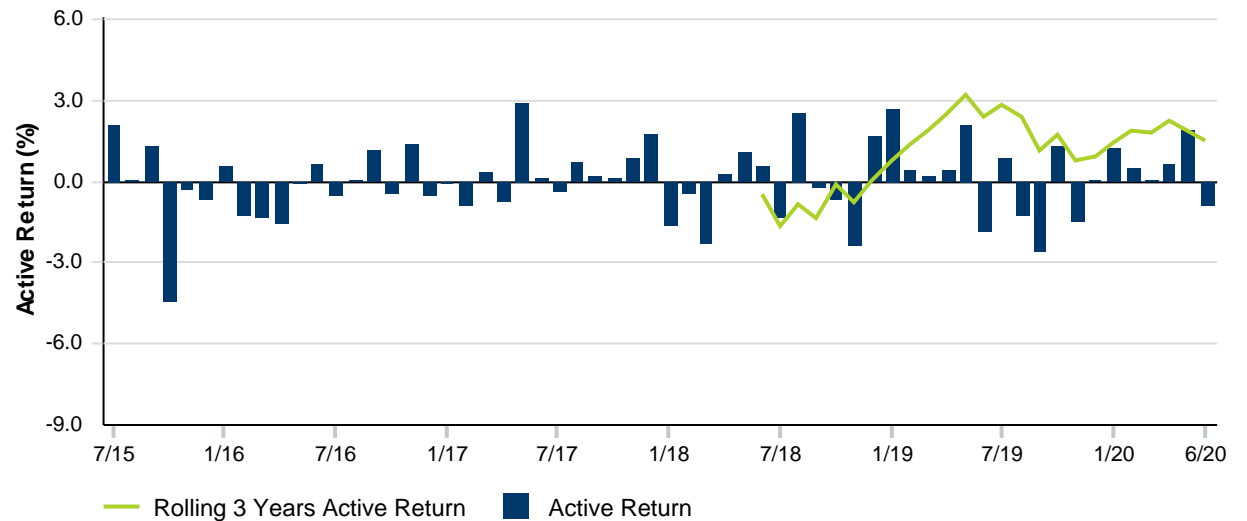
Peer Group Analysis: IM U.S. Small Cap Growth Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Emerald Advisors Small Cap

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Emerald Advisors Small Cap</u>	<u>Russell 2000 Growth Index</u>
Maximum Return	15.49	14.89
Minimum Return	-19.05	-19.10
Return	3.36	3.48
Cumulative Return	3.36	3.48
Active Return	0.16	0.00
Excess Return	6.18	6.02

Risk Summary Statistics

	<u>Emerald Advisors Small Cap</u>	<u>Russell 2000 Growth Index</u>
Upside Risk	5.94	5.59
Downside Risk	21.23	20.91
Beta	1.03	1.00

Risk/Return Summary Statistics

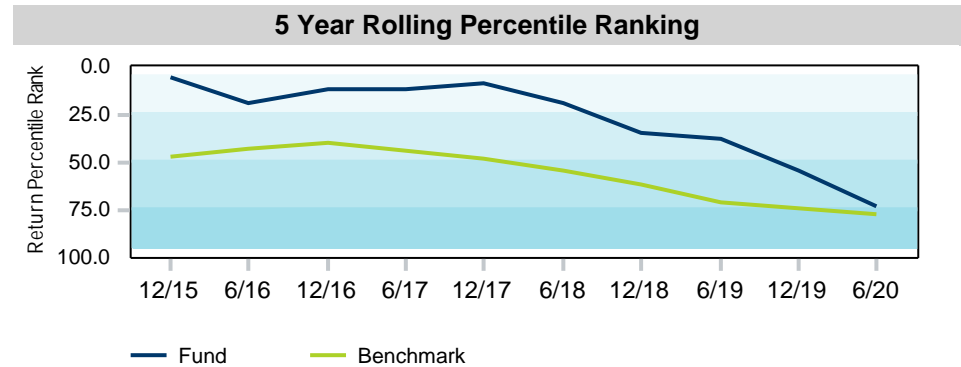
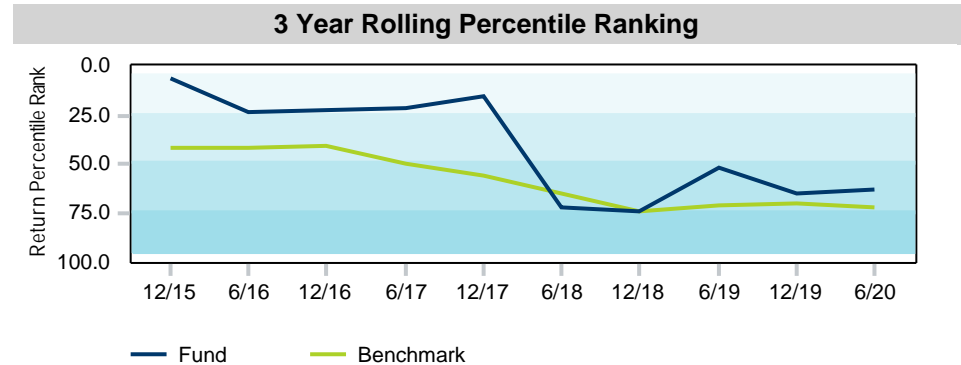
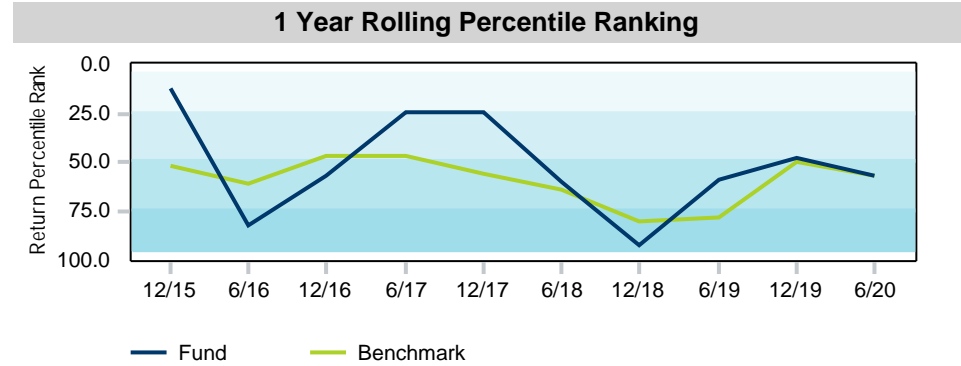
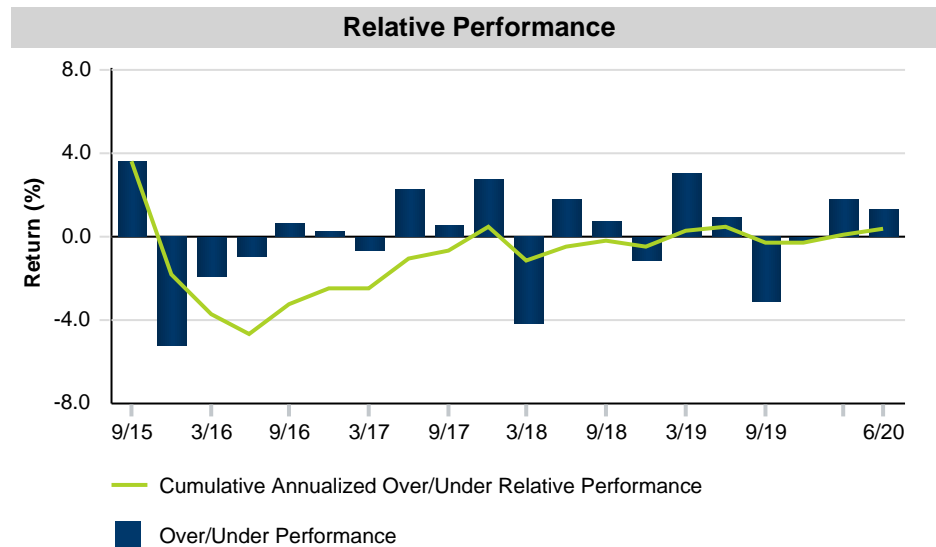
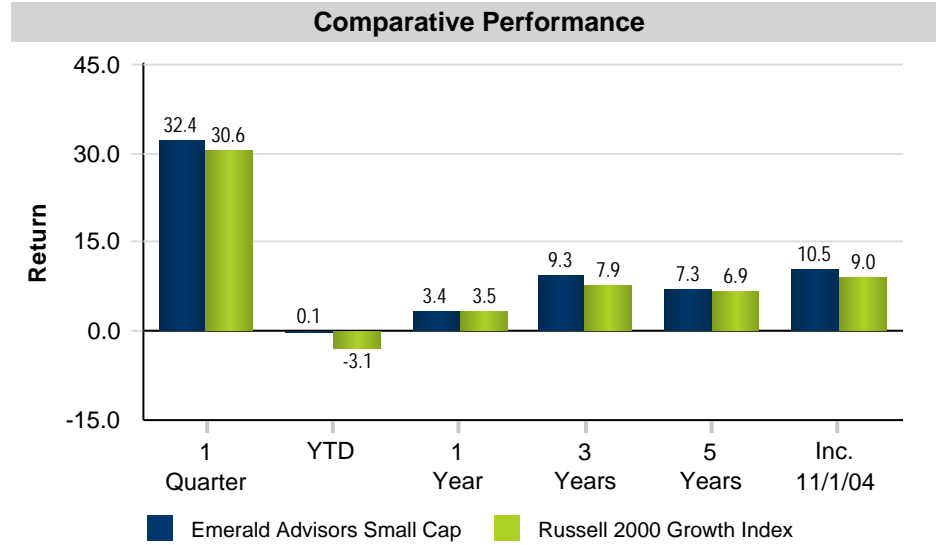
	<u>Emerald Advisors Small Cap</u>	<u>Russell 2000 Growth Index</u>
Standard Deviation	29.47	28.41
Alpha	-0.03	0.00
Active Return/Risk	0.01	0.00
Tracking Error	4.43	0.00
Information Ratio	0.04	
Sharpe Ratio	0.21	0.21

Correlation Statistics

	<u>Emerald Advisors Small Cap</u>	<u>Russell 2000 Growth Index</u>
R-Squared	0.98	1.00
Actual Correlation	0.99	1.00

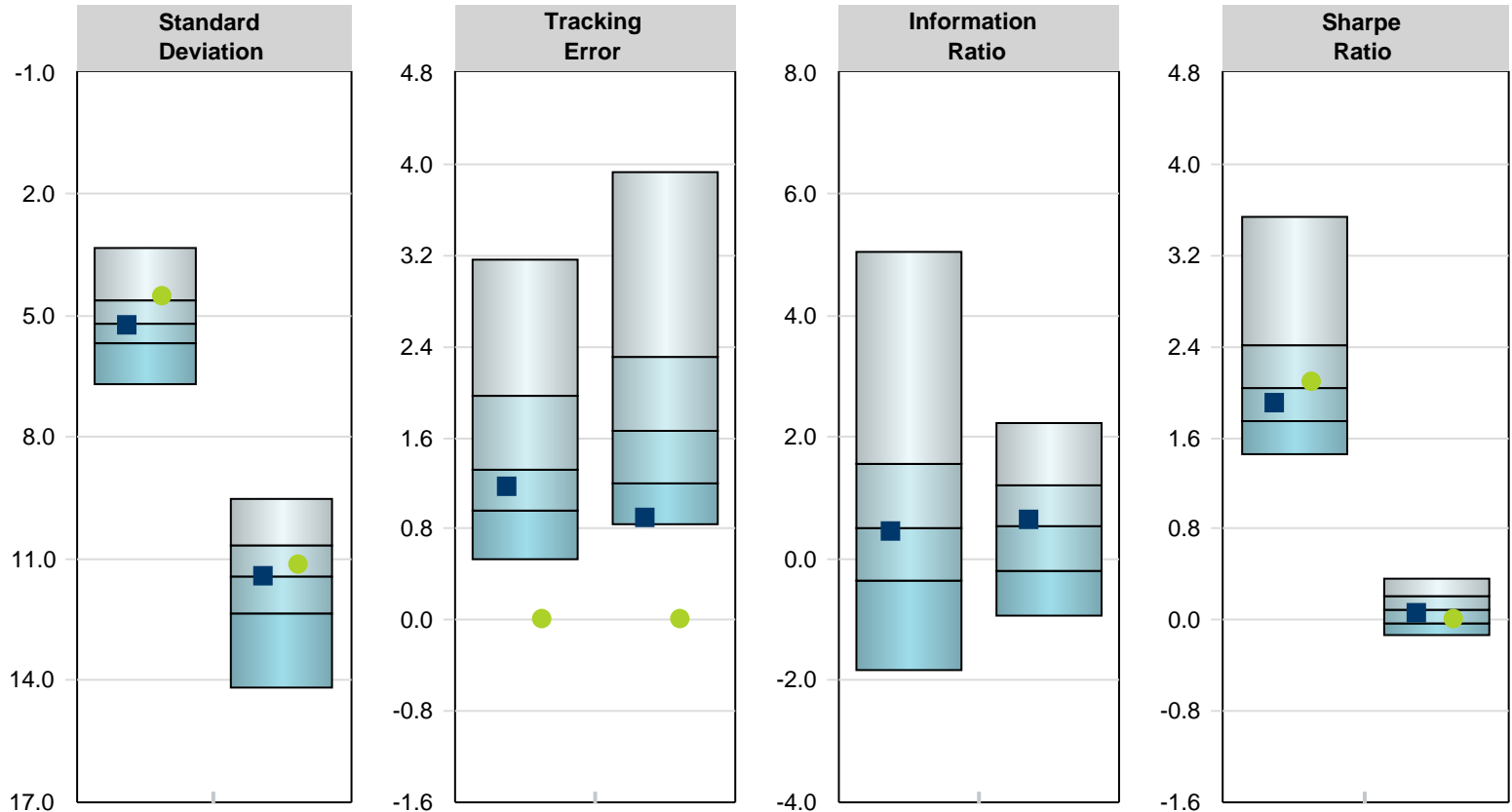
Manager Summary

Emerald Advisors Small Cap vs IM U.S. Small Cap Growth Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

Emerald Advisors Small Cap
 Periods Ended June 30, 2020



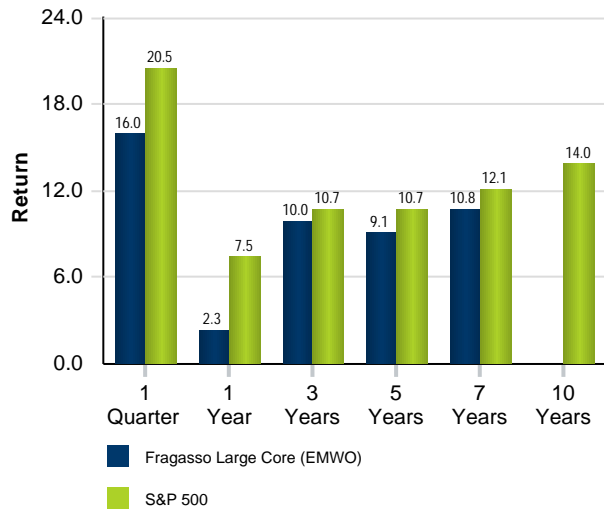
	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Emerald Advisors Small Cap	5.23 (53)	11.42 (50)	1.16 (66)	0.89 (93)	0.46 (53)	0.63 (48)	1.89 (62)	0.05 (58)
● Russell 2000 Growth Index	4.51 (22)	11.13 (42)	0.00 (100)	0.00 (100)			2.08 (48)	0.00 (69)
5th Percentile	3.31	9.52	3.17	3.94	5.04	2.24	3.55	0.36
1st Quartile	4.62	10.66	1.97	2.32	1.58	1.22	2.41	0.20
Median	5.18	11.41	1.31	1.67	0.52	0.54	2.03	0.09
3rd Quartile	5.67	12.32	0.96	1.20	-0.35	-0.19	1.75	-0.03
95th Percentile	6.68	14.18	0.53	0.83	-1.82	-0.92	1.46	-0.13

Parenteses contain percentile rankings.
 Calculation based on monthly periodicity.

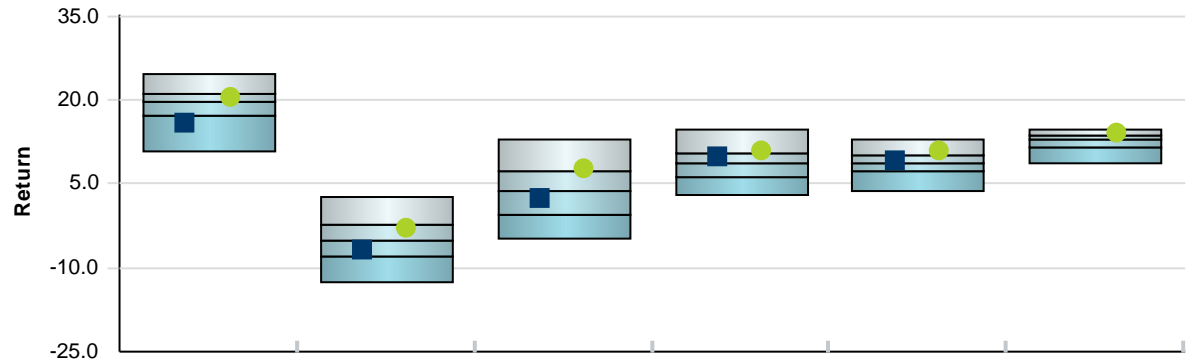
Performance Summary

Fragasso Large Core (EMWO)
Periods Ended June 30, 2020

Comparative Performance

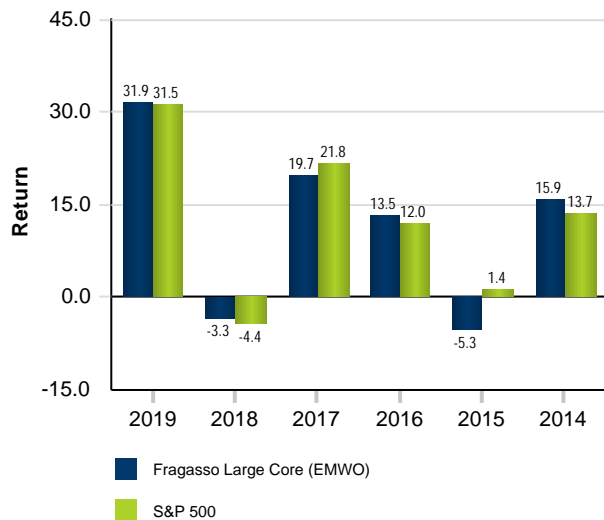


Peer Group Analysis: IM U.S. Large Cap Core Equity (SA+CF)

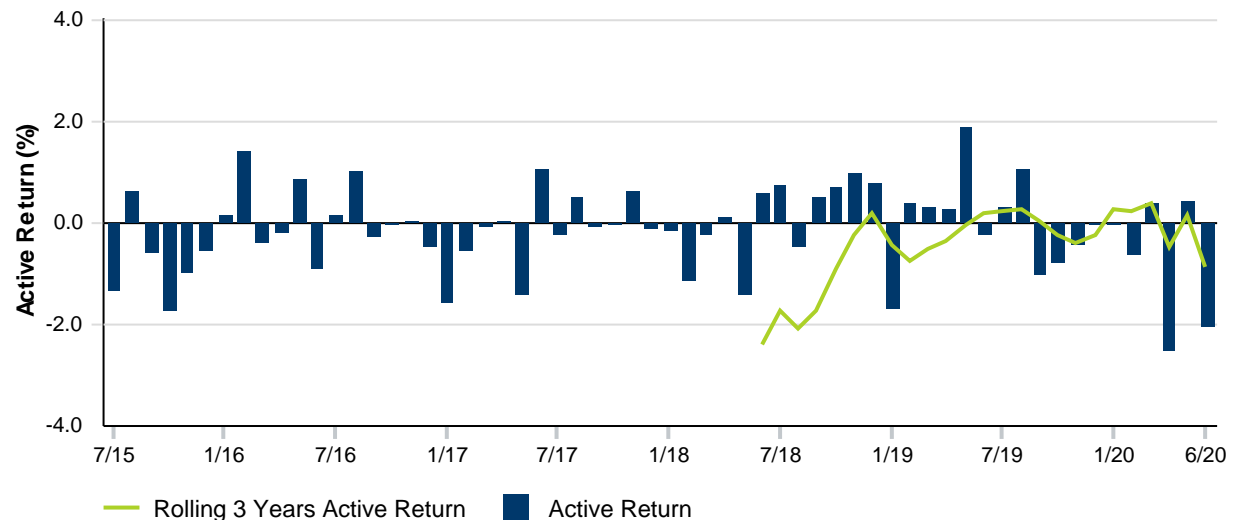


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
■ Fund	15.98 (81)	-7.00 (67)	2.30 (62)	9.97 (32)	9.06 (43)	-
● Benchmark	20.54 (34)	-3.08 (30)	7.51 (23)	10.73 (22)	10.73 (14)	13.99 (16)
Median	19.85	-5.24	3.92	8.83	8.81	12.94

Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Fragasso Large Core (EMWO)

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Fragasso Large Core (EMWO)</u>	<u>S&P 500</u>
Maximum Return	10.30	12.82
Minimum Return	-11.97	-12.35
Return	2.30	7.51
Cumulative Return	2.30	7.51
Active Return	-5.26	0.00
Excess Return	2.60	7.87

Risk Summary Statistics

	<u>Fragasso Large Core (EMWO)</u>	<u>S&P 500</u>
Upside Risk	3.63	4.32
Downside Risk	14.89	14.93
Beta	0.92	1.00

Risk/Return Summary Statistics

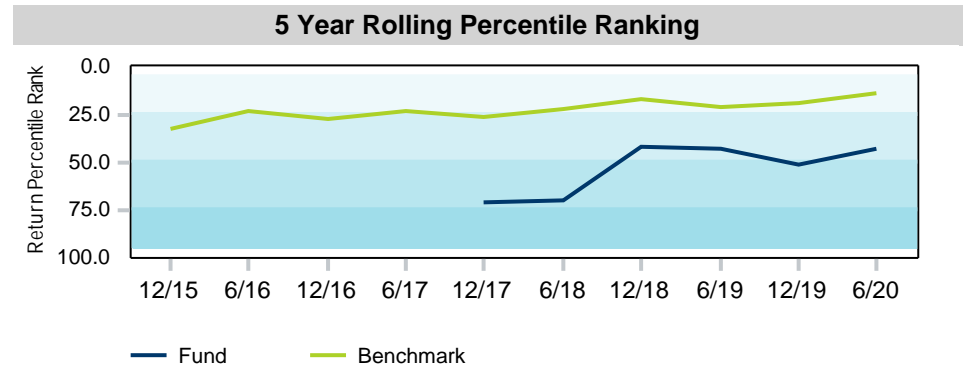
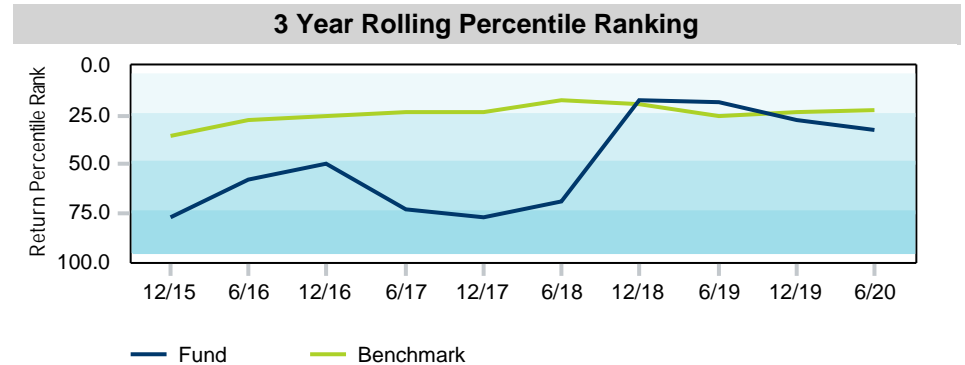
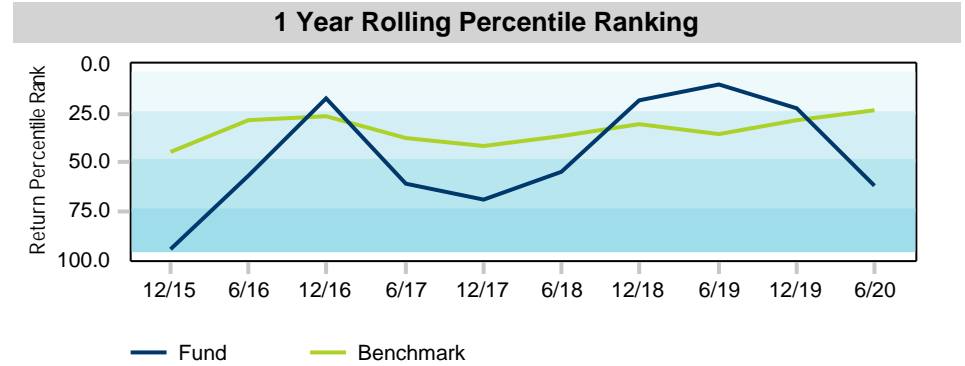
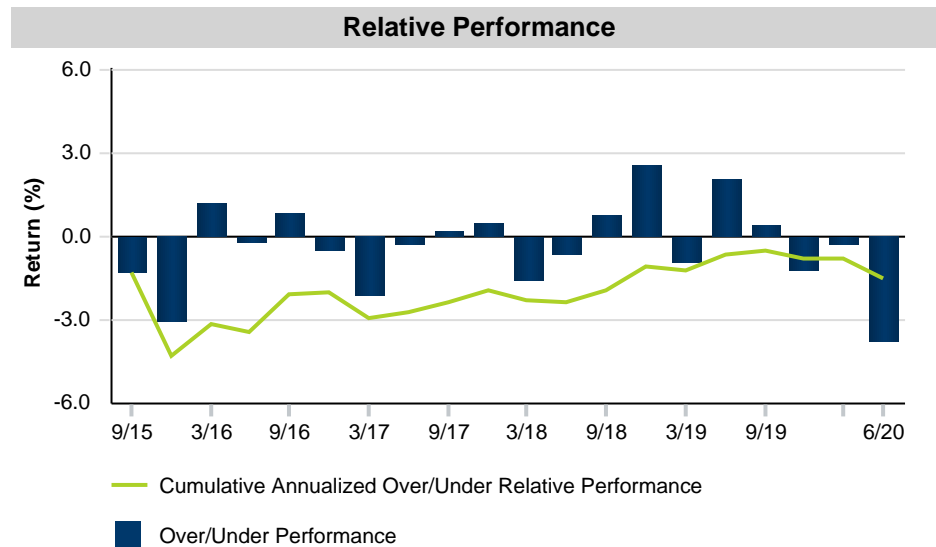
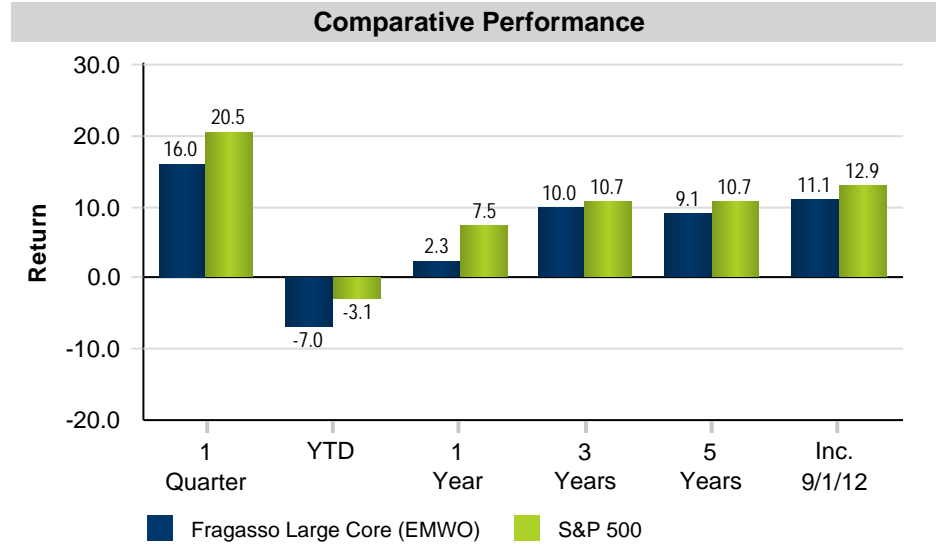
	<u>Fragasso Large Core (EMWO)</u>	<u>S&P 500</u>
Standard Deviation	19.45	20.95
Alpha	-4.39	0.00
Active Return/Risk	-0.27	0.00
Tracking Error	3.47	0.00
Information Ratio	-1.52	
Sharpe Ratio	0.13	0.37

Correlation Statistics

	<u>Fragasso Large Core (EMWO)</u>	<u>S&P 500</u>
R-Squared	0.98	1.00
Actual Correlation	0.99	1.00

Manager Summary

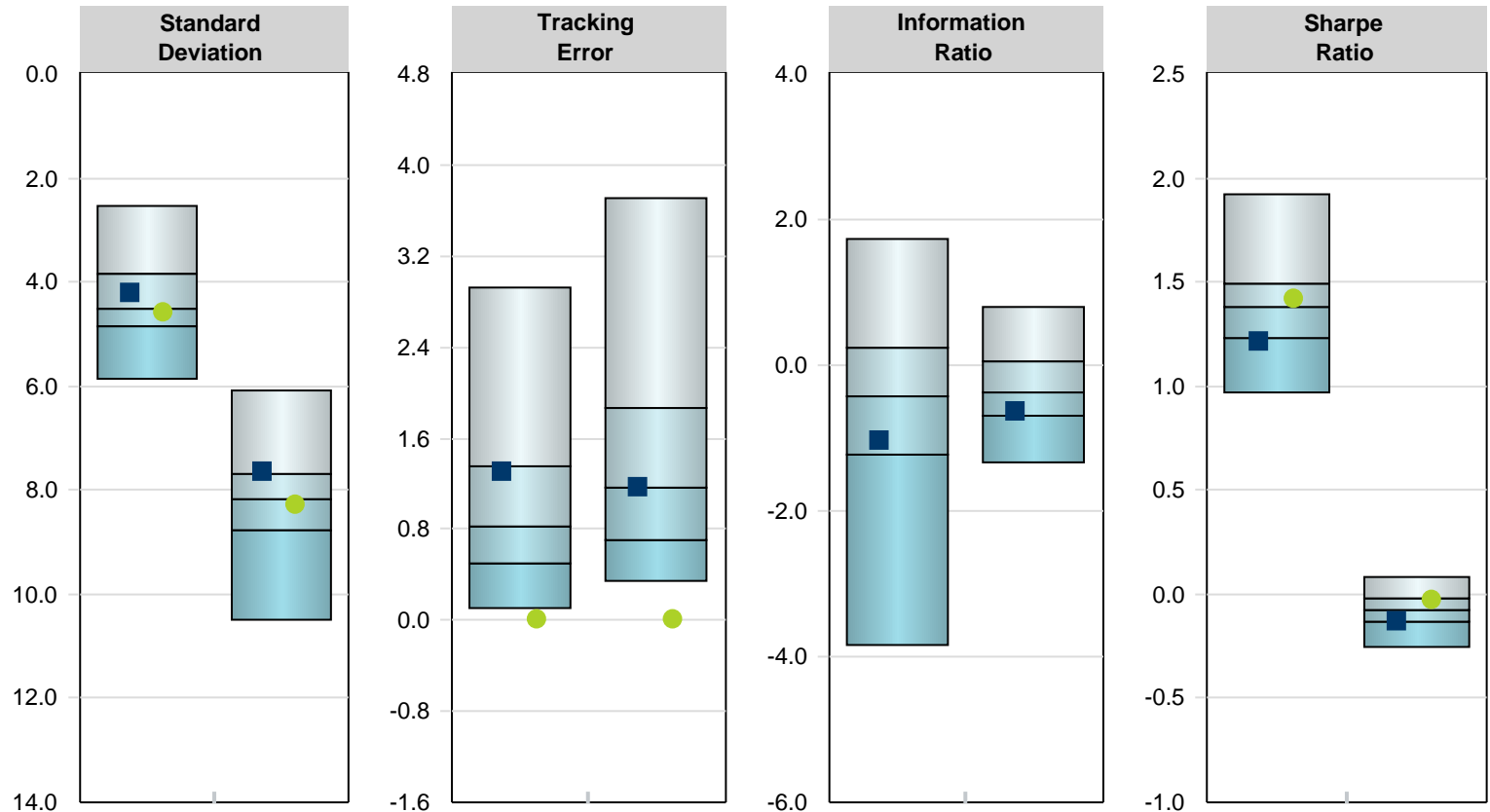
Fragasso Large Core (EMWO) vs IM U.S. Large Cap Core Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

Fragasso Large Core (EMWO)

Periods Ended June 30, 2020



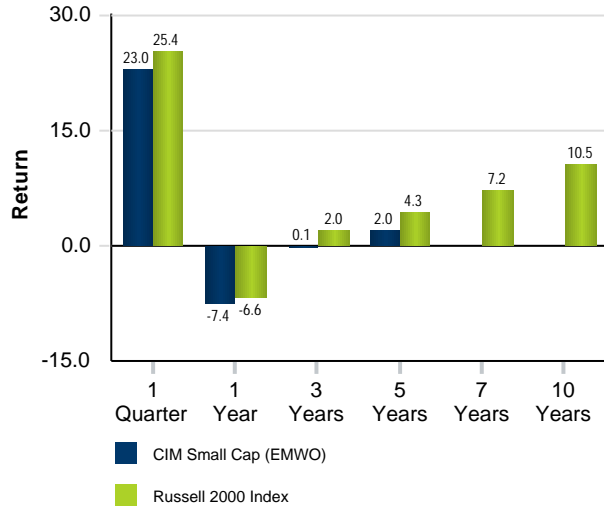
	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Fragasso Large Core (EMWO)	4.23 (36)	7.64 (21)	1.30 (28)	1.16 (51)	-1.05 (70)	-0.63 (69)	1.22 (77)	-0.13 (73)
● S&P 500	4.59 (57)	8.28 (56)	0.00 (100)	0.00 (100)			1.42 (41)	-0.03 (31)
5th Percentile	2.53	6.07	2.92	3.70	1.74	0.79	1.92	0.09
1st Quartile	3.84	7.70	1.35	1.87	0.25	0.06	1.49	-0.02
Median	4.53	8.18	0.83	1.16	-0.43	-0.38	1.38	-0.07
3rd Quartile	4.84	8.76	0.49	0.70	-1.22	-0.69	1.23	-0.13
95th Percentile	5.87	10.47	0.11	0.34	-3.85	-1.33	0.97	-0.25

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

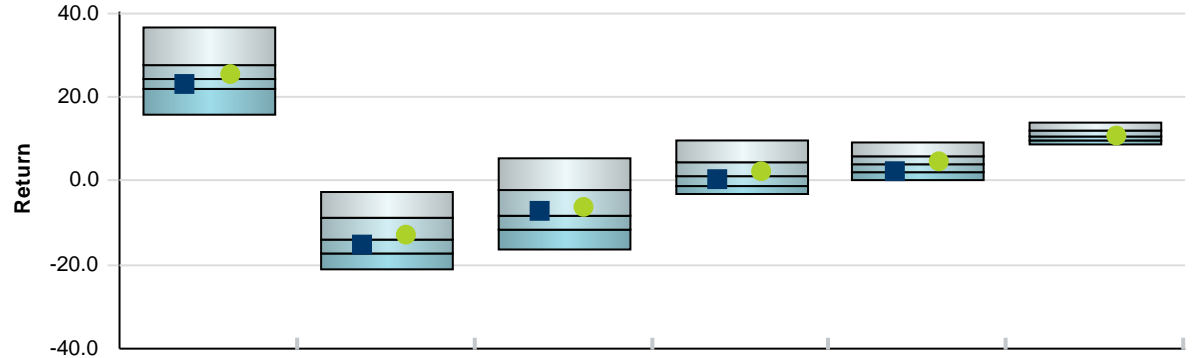
Performance Summary

CIM Small Cap (EMWO)
 Periods Ended June 30, 2020

Comparative Performance

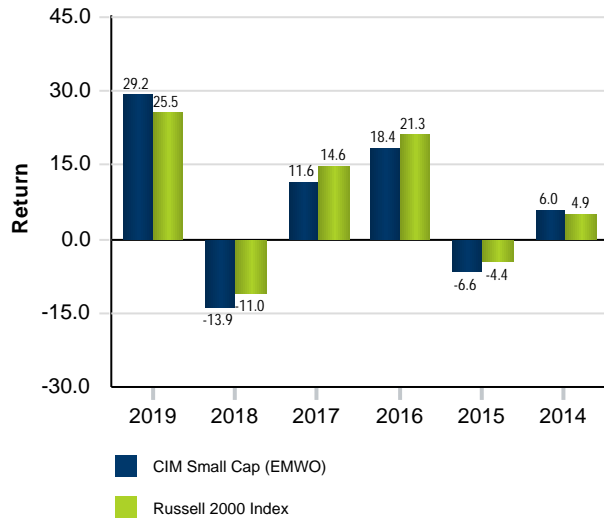


Peer Group Analysis: IM U.S. Small Cap Core Equity (SA+CF)

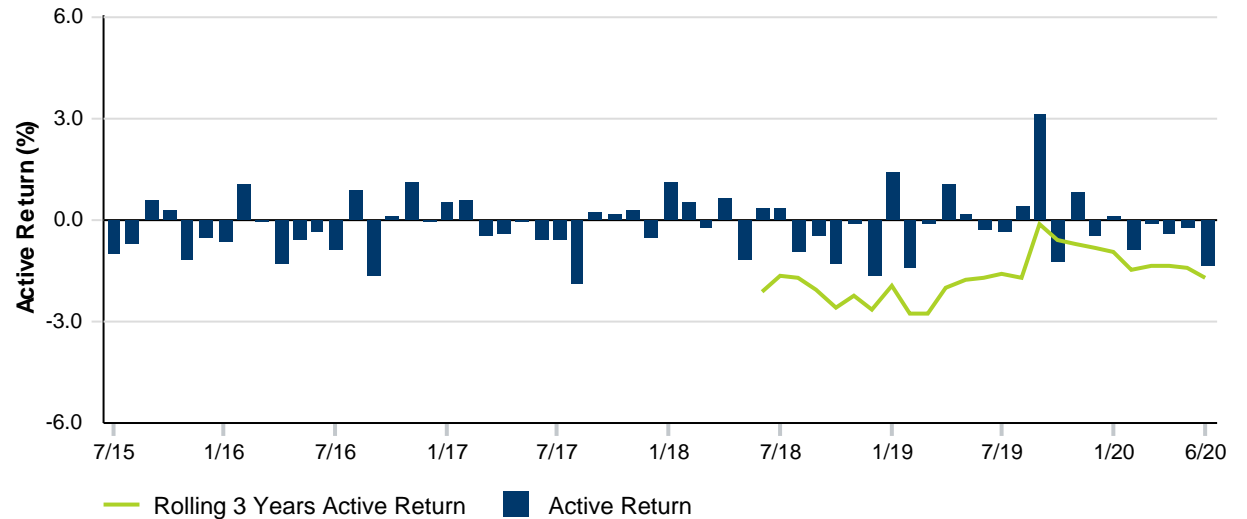


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
Fund	23.03 (65)	-15.52 (61)	-7.38 (49)	0.09 (60)	1.99 (82)	
Benchmark	25.42 (39)	-12.98 (48)	-6.63 (46)	2.01 (42)	4.29 (49)	10.50 (58)
Median	24.45	-13.99	-8.26	1.36	4.15	10.85

Comparative Performance



Rolling 3 Years Performance



Summary Statistics

CIM Small Cap (EMWO)

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>CIM Small Cap (EMWO)</u>	<u>Russell 2000 Index</u>
Maximum Return	13.34	13.74
Minimum Return	-21.85	-21.73
Return	-7.38	-6.63
Cumulative Return	-7.38	-6.63
Active Return	-0.71	0.00
Excess Return	-4.55	-3.84

Risk Summary Statistics

	<u>CIM Small Cap (EMWO)</u>	<u>Russell 2000 Index</u>
Upside Risk	4.83	4.83
Downside Risk	24.38	24.03
Beta	1.00	1.00

Risk/Return Summary Statistics

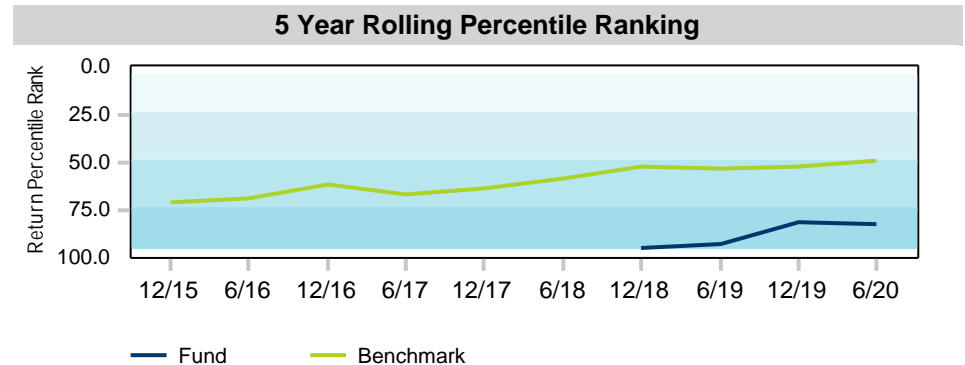
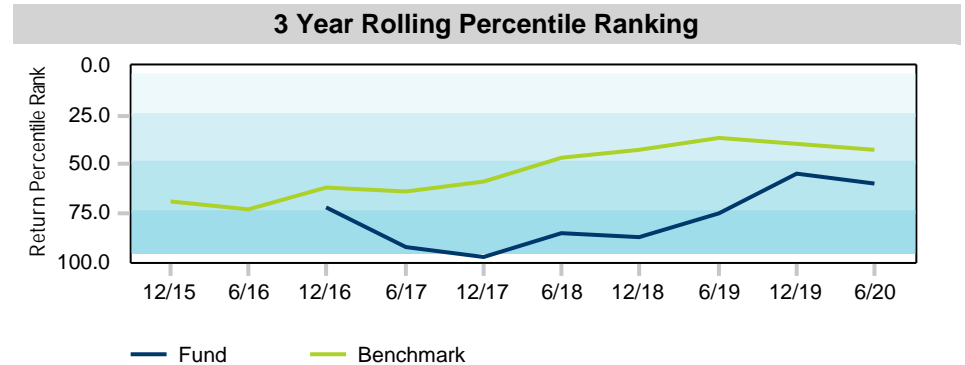
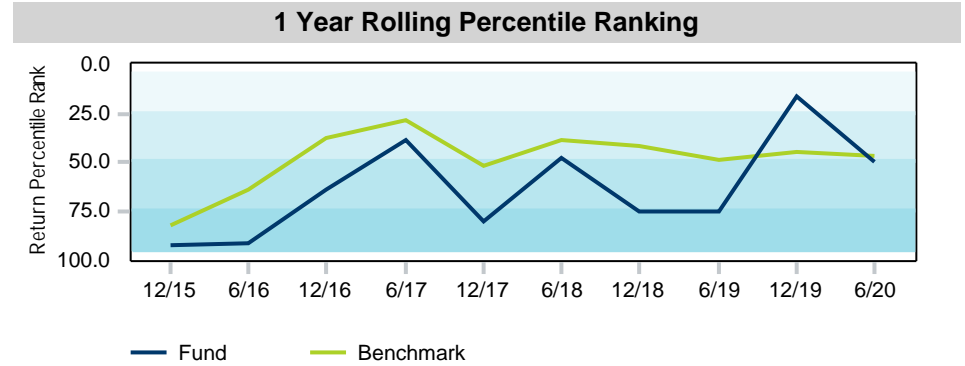
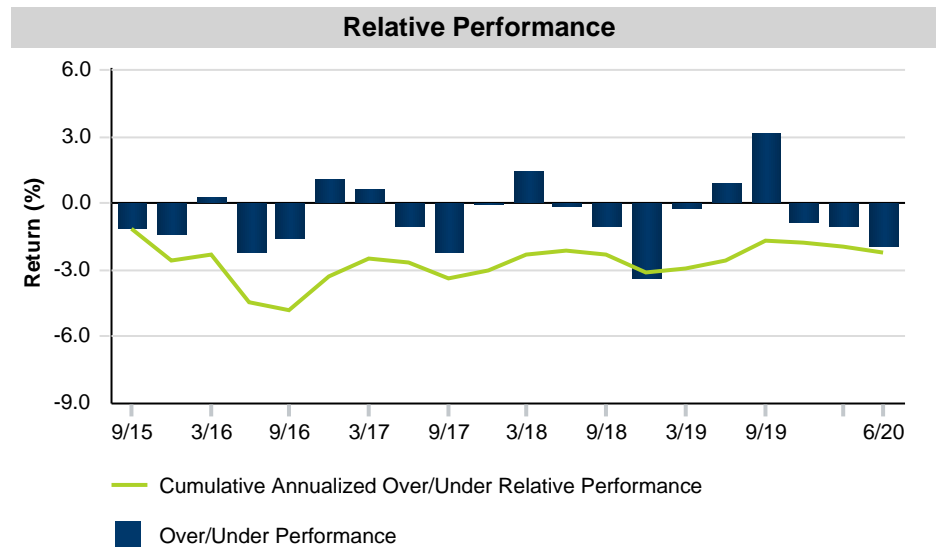
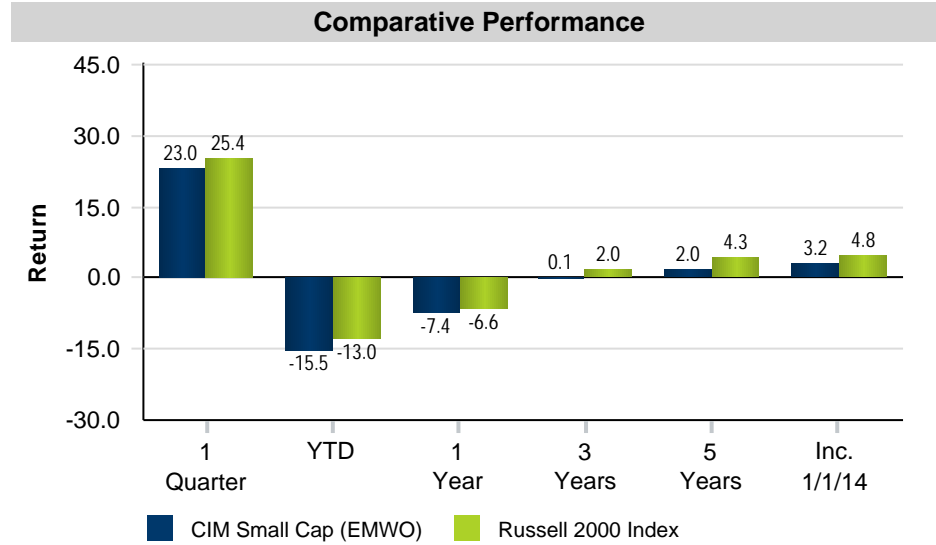
	<u>CIM Small Cap (EMWO)</u>	<u>Russell 2000 Index</u>
Standard Deviation	29.56	29.28
Alpha	-0.71	0.00
Active Return/Risk	-0.02	0.00
Tracking Error	3.89	0.00
Information Ratio	-0.18	
Sharpe Ratio	-0.15	-0.13

Correlation Statistics

	<u>CIM Small Cap (EMWO)</u>	<u>Russell 2000 Index</u>
R-Squared	0.98	1.00
Actual Correlation	0.99	1.00

Manager Summary

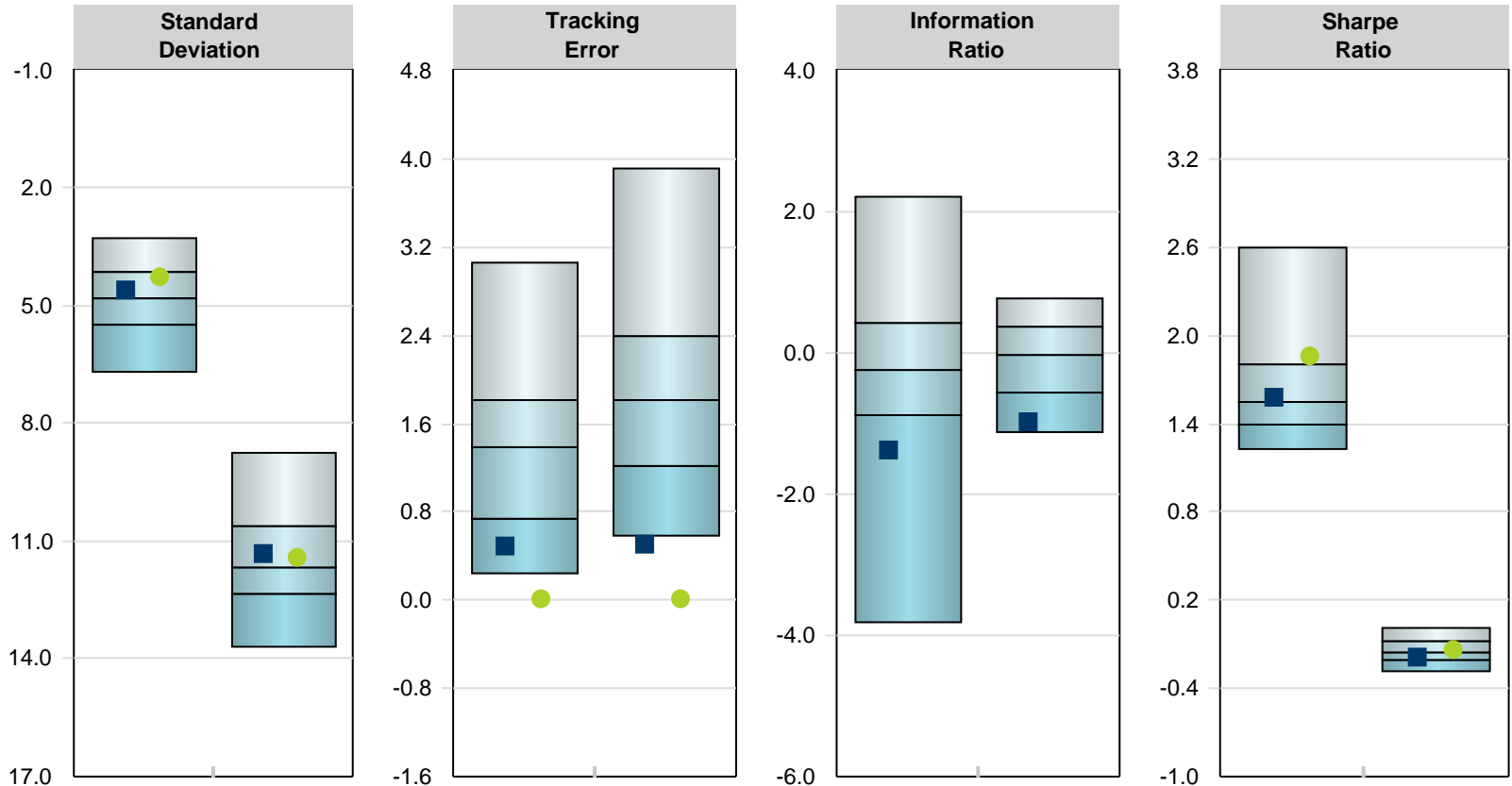
CIM Small Cap (EMWO) vs IM U.S. Small Cap Core Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

CIM Small Cap (EMWO)

Periods Ended June 30, 2020



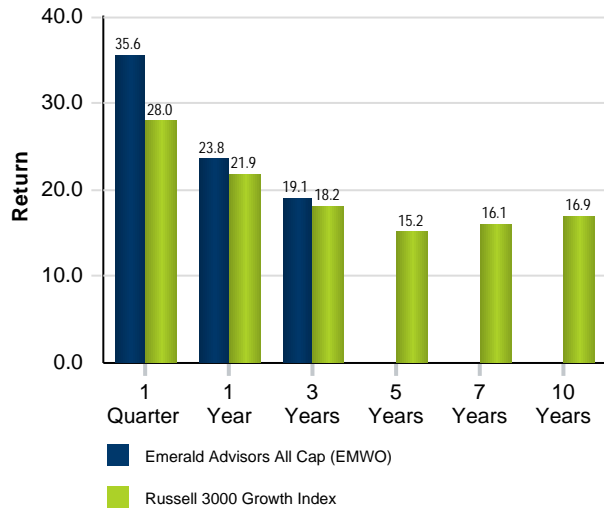
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ CIM Small Cap (EMWO)	4.61 (40)	11.32 (39)	0.49 (89)	0.50 (99)	-1.38 (84)	-0.99 (93)	1.57 (49)	-0.19 (67)
● Russell 2000 Index	4.28 (30)	11.41 (41)	0.00 (100)	0.00 (100)			1.85 (23)	-0.15 (48)
5th Percentile	3.27	8.77	3.06	3.91	2.21	0.78	2.59	0.01
1st Quartile	4.13	10.64	1.81	2.40	0.44	0.36	1.81	-0.07
Median	4.80	11.69	1.38	1.81	-0.25	-0.02	1.55	-0.15
3rd Quartile	5.46	12.36	0.73	1.22	-0.88	-0.57	1.39	-0.21
95th Percentile	6.68	13.68	0.25	0.58	-3.81	-1.12	1.23	-0.28

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

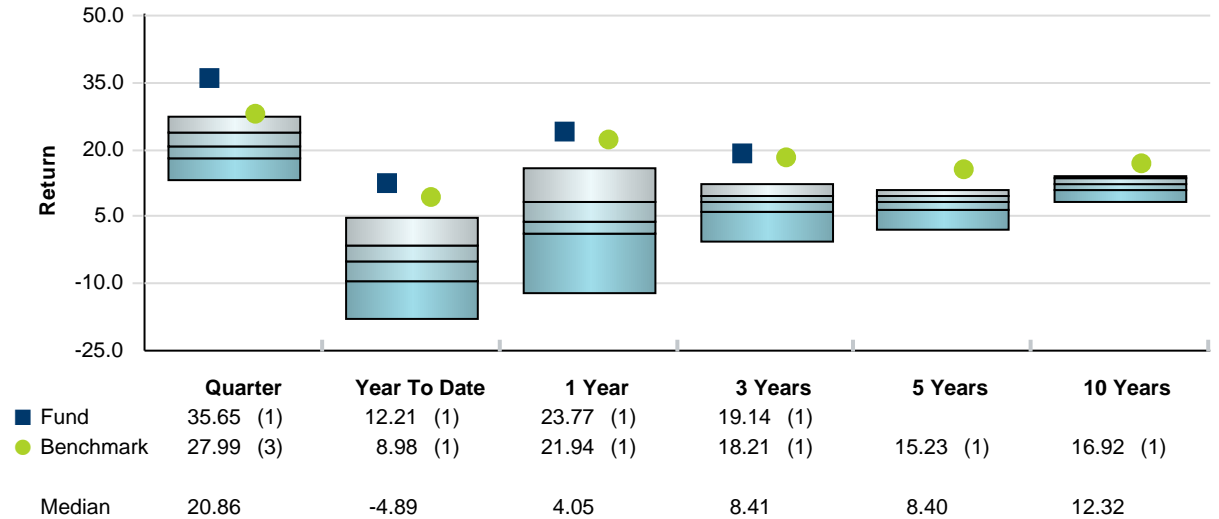
Performance Summary

Emerald Advisors All Cap (EMWO)
 Periods Ended June 30, 2020

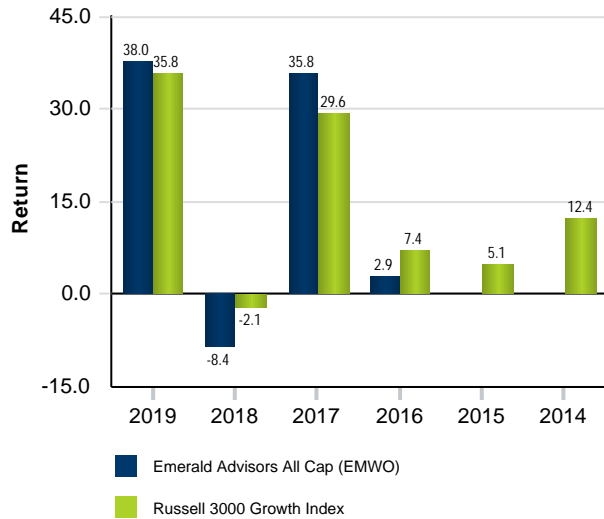
Comparative Performance



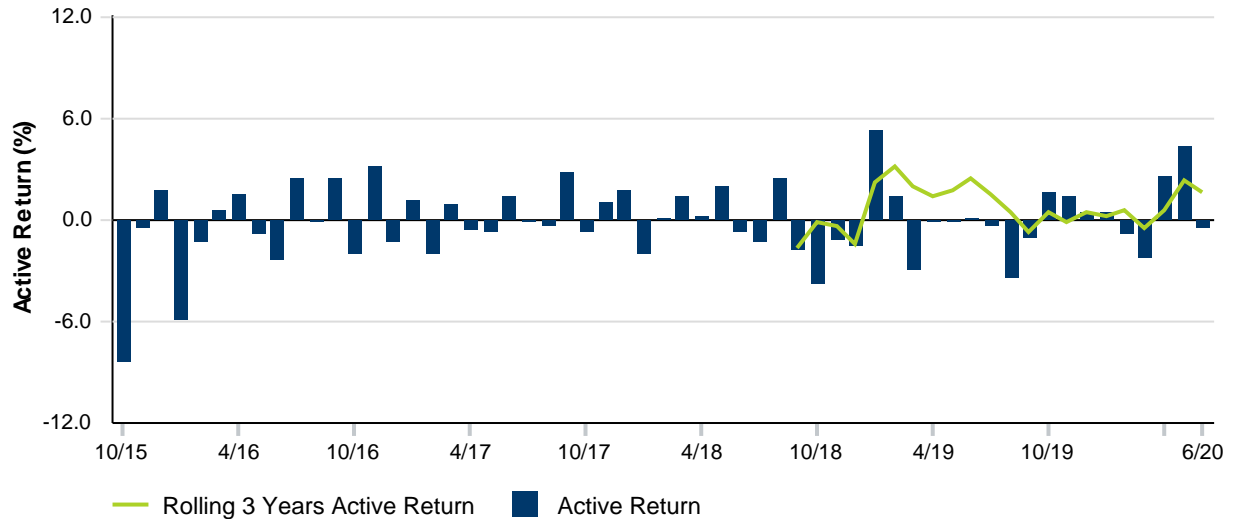
Peer Group Analysis: IM U.S. All Cap Core Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Emerald Advisors All Cap (EMWO)

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Emerald Advisors All Cap (EMWO)</u>	<u>Russell 3000 Growth Index</u>
Maximum Return	17.36	14.80
Minimum Return	-12.59	-10.41
Return	23.77	21.94
Cumulative Return	23.77	21.94
Active Return	2.78	0.00
Excess Return	23.37	20.59

Risk Summary Statistics

	<u>Emerald Advisors All Cap (EMWO)</u>	<u>Russell 3000 Growth Index</u>
Upside Risk	6.59	5.25
Downside Risk	15.39	12.50
Beta	1.24	1.00

Risk/Return Summary Statistics

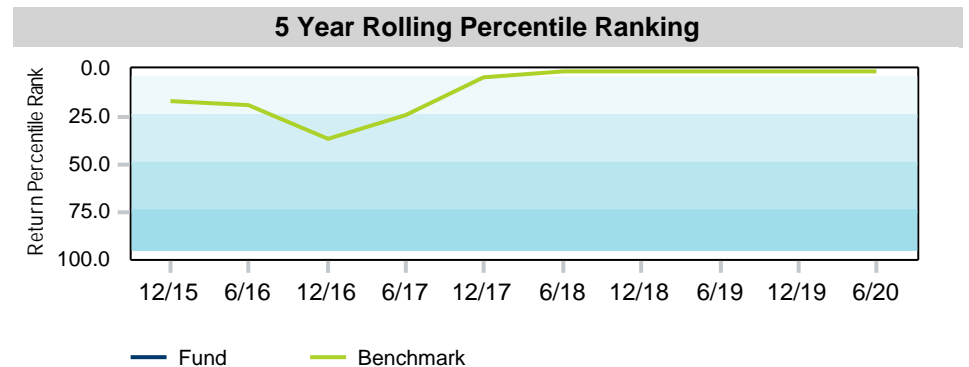
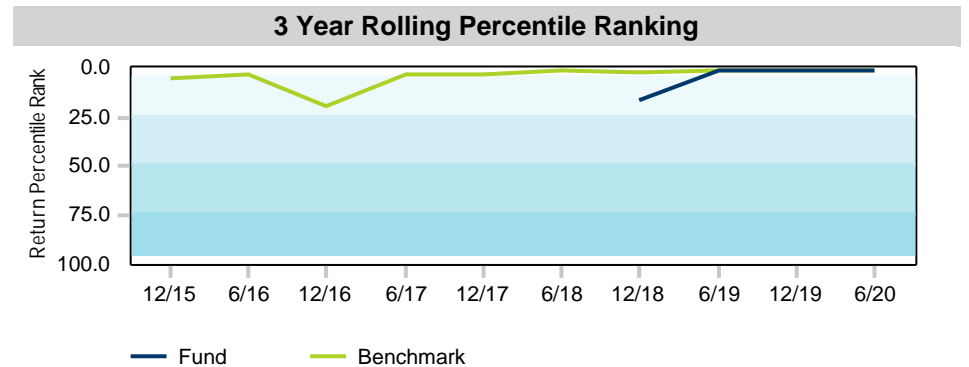
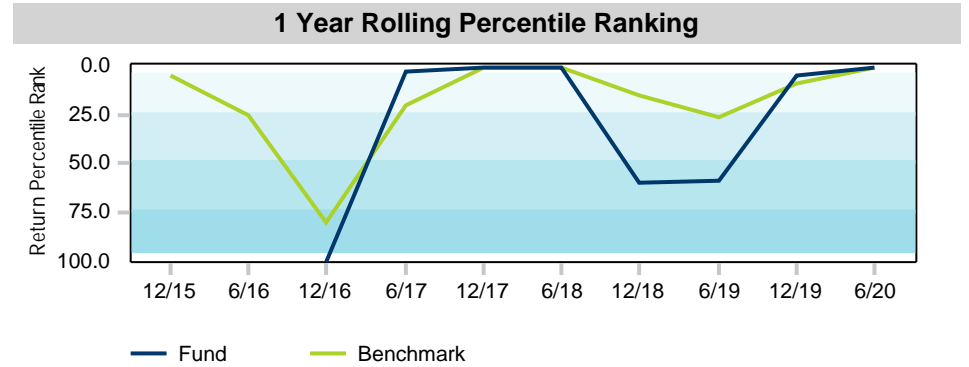
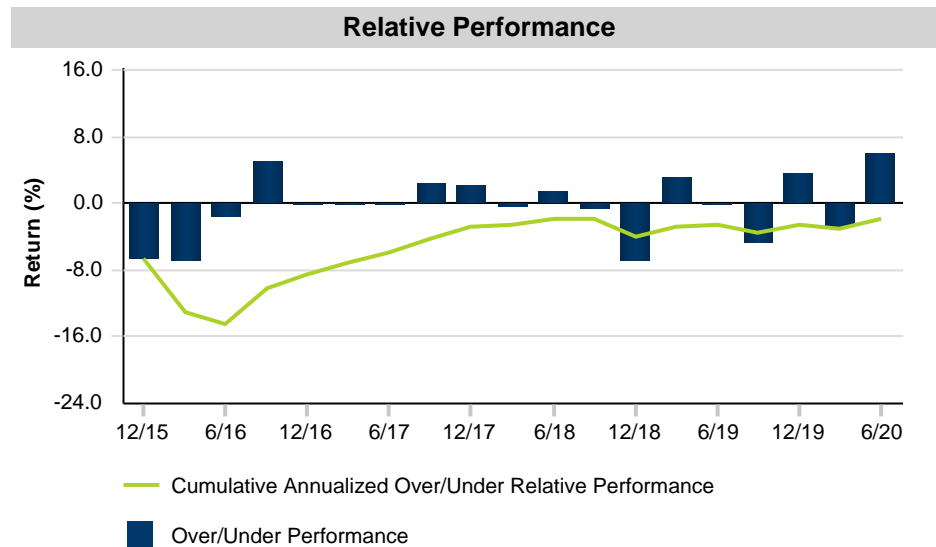
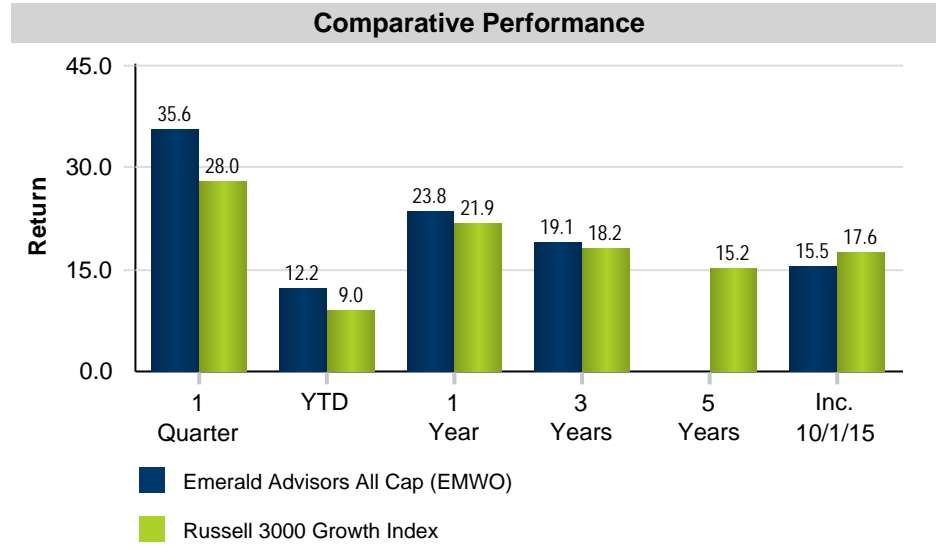
	<u>Emerald Advisors All Cap (EMWO)</u>	<u>Russell 3000 Growth Index</u>
Standard Deviation	26.56	21.12
Alpha	-2.43	0.00
Active Return/Risk	0.10	0.00
Tracking Error	6.98	0.00
Information Ratio	0.40	
Sharpe Ratio	0.87	0.96

Correlation Statistics

	<u>Emerald Advisors All Cap (EMWO)</u>	<u>Russell 3000 Growth Index</u>
R-Squared	0.97	1.00
Actual Correlation	0.98	1.00

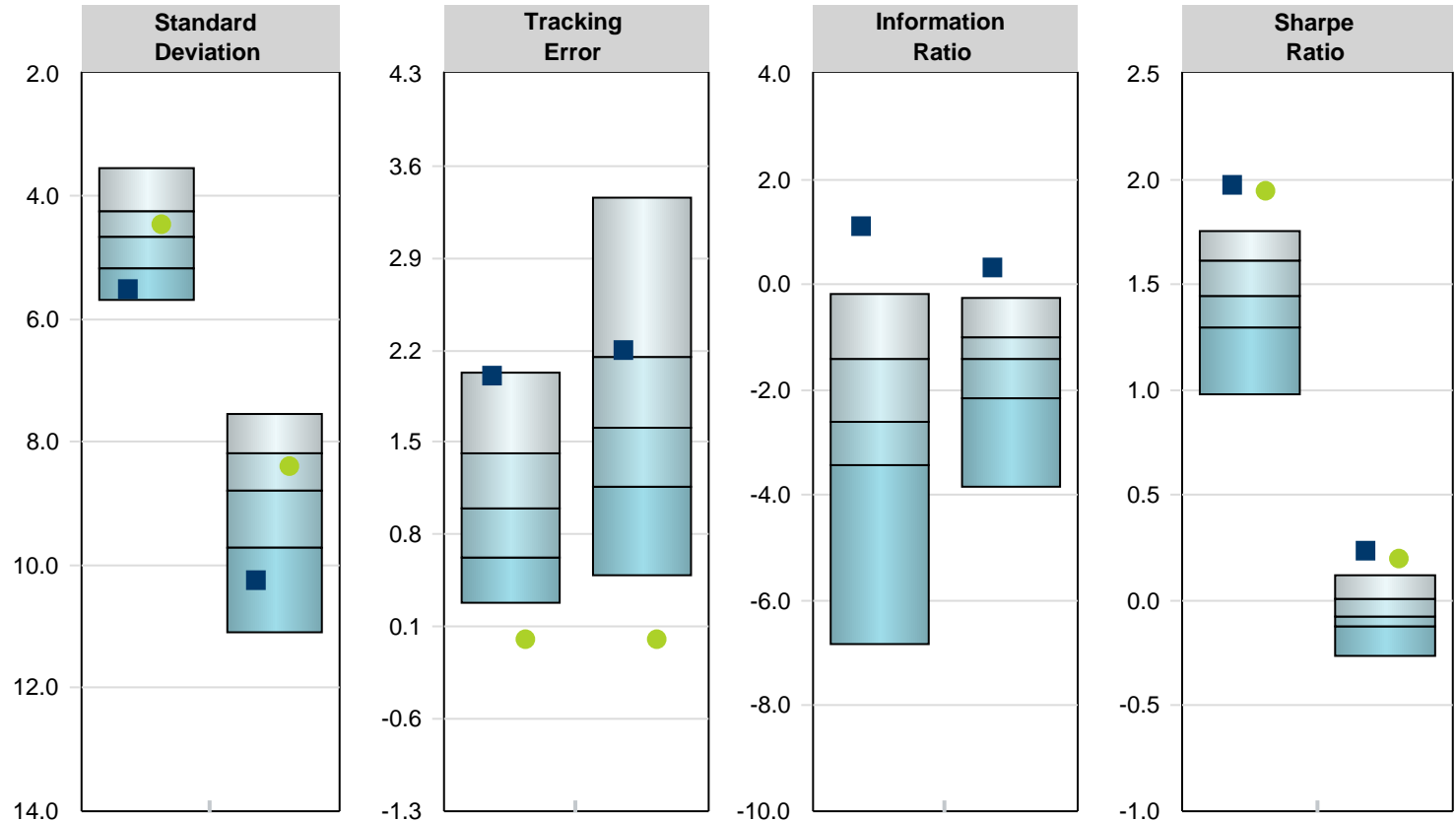
Manager Summary

Emerald Advisors All Cap (EMWO) vs IM U.S. All Cap Core Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

Emerald Advisors All Cap (EMWO)
 Periods Ended June 30, 2020



	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Emerald Advisors All Cap (EMWO)	5.51 (89)	10.24 (84)	2.00 (6)	2.20 (23)	1.09 (1)	0.30 (1)	1.96 (1)	0.23 (1)
● Russell 3000 Growth Index	4.46 (38)	8.42 (31)	0.00 (100)	0.00 (100)			1.94 (1)	0.20 (1)
5th Percentile	3.53	7.54	2.04	3.37	-0.18	-0.26	1.76	0.12
1st Quartile	4.25	8.19	1.41	2.15	-1.42	-1.01	1.61	0.01
Median	4.64	8.77	1.00	1.61	-2.62	-1.42	1.44	-0.07
3rd Quartile	5.16	9.70	0.63	1.17	-3.43	-2.16	1.30	-0.12
95th Percentile	5.69	11.09	0.29	0.49	-6.84	-3.85	0.98	-0.27

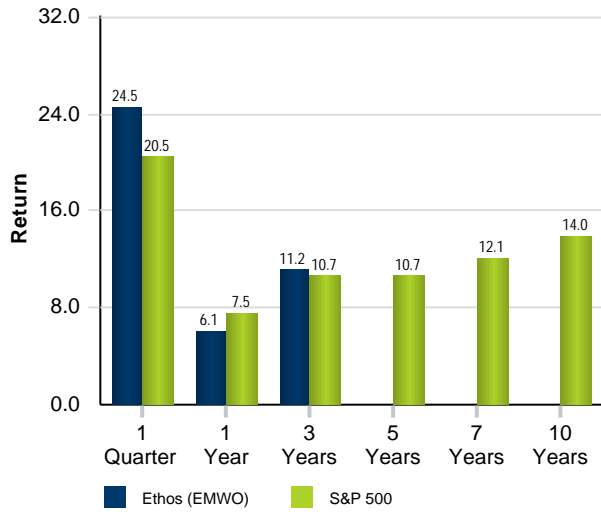
Parenteses contain percentile rankings.
 Calculation based on monthly periodicity.

Performance Summary

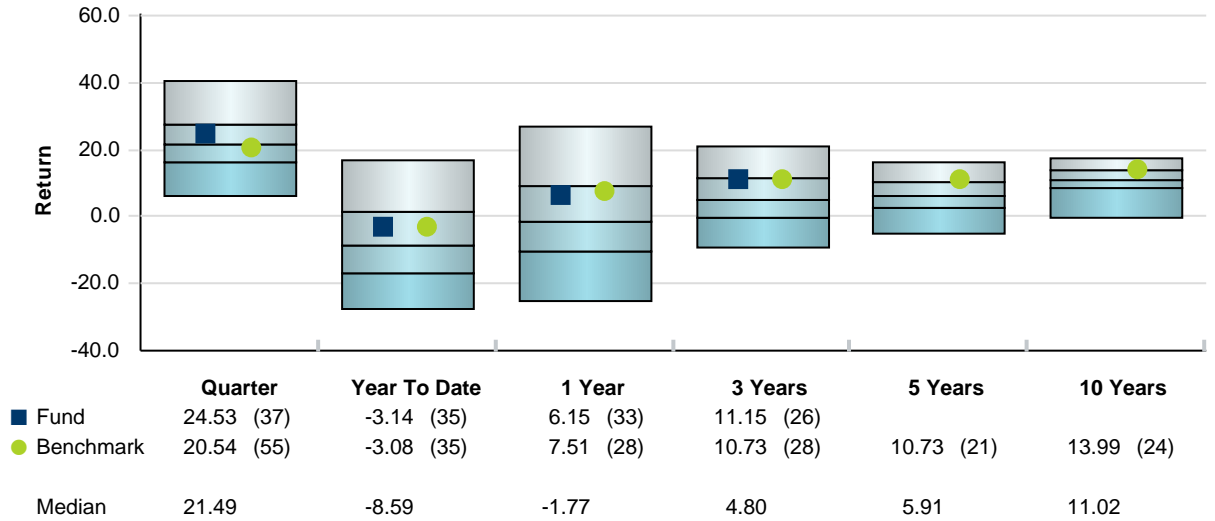
Ethos (EMWO)

Periods Ended June 30, 2020

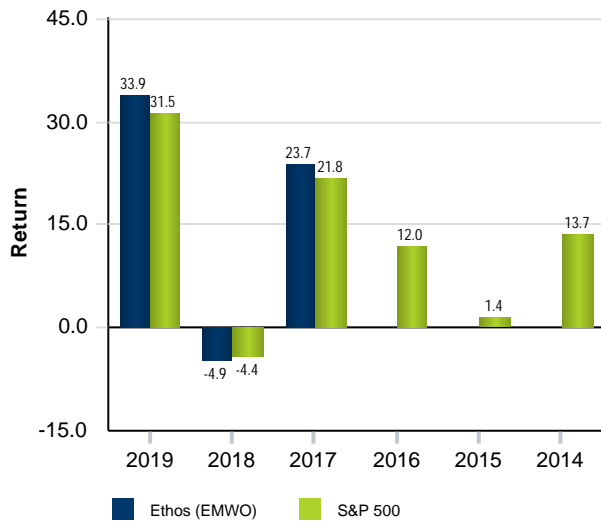
Comparative Performance



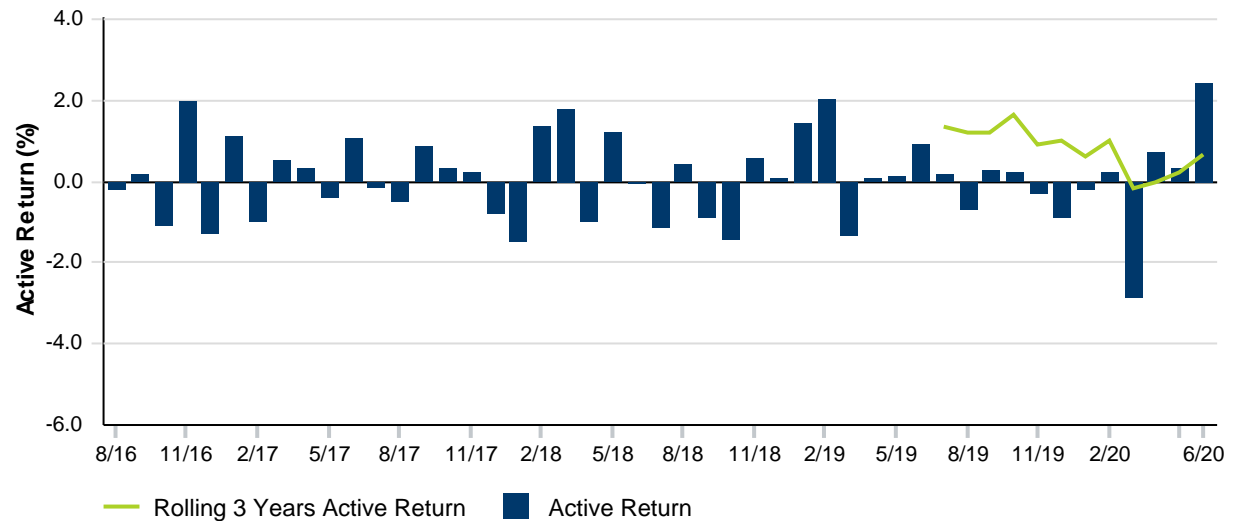
Peer Group Analysis: IM U.S. Equity (MF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Ethos (EMWO)

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Ethos (EMWO)</u>	<u>S&P 500</u>
Maximum Return	13.51	12.82
Minimum Return	-15.23	-12.35
Return	6.15	7.51
Cumulative Return	6.15	7.51
Active Return	-0.66	0.00
Excess Return	7.20	7.87

Risk Summary Statistics

	<u>Ethos (EMWO)</u>	<u>S&P 500</u>
Upside Risk	4.62	4.32
Downside Risk	17.37	14.93
Beta	1.11	1.00

Risk/Return Summary Statistics

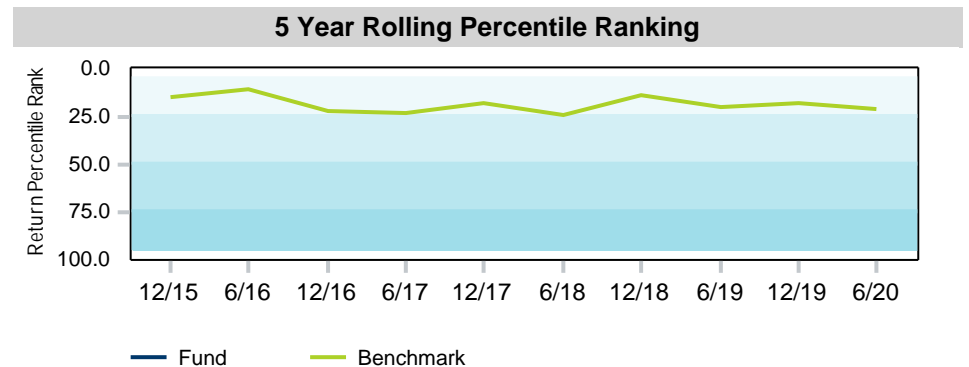
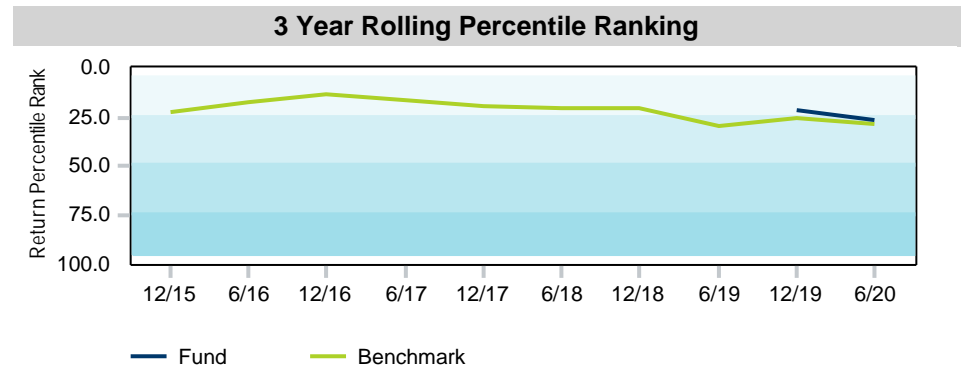
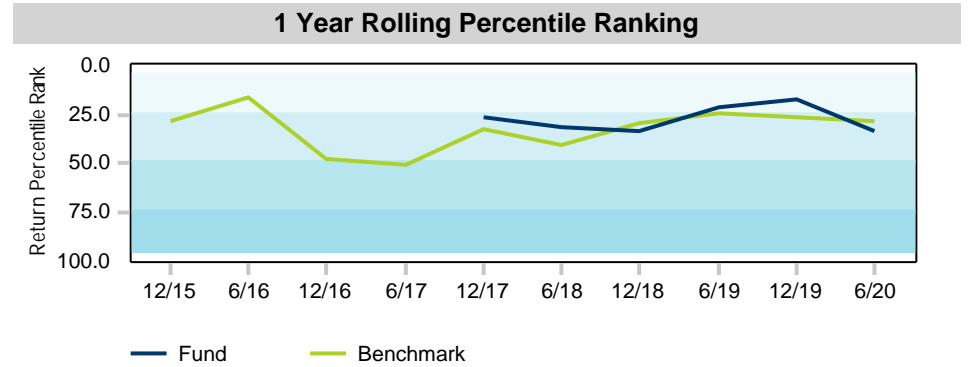
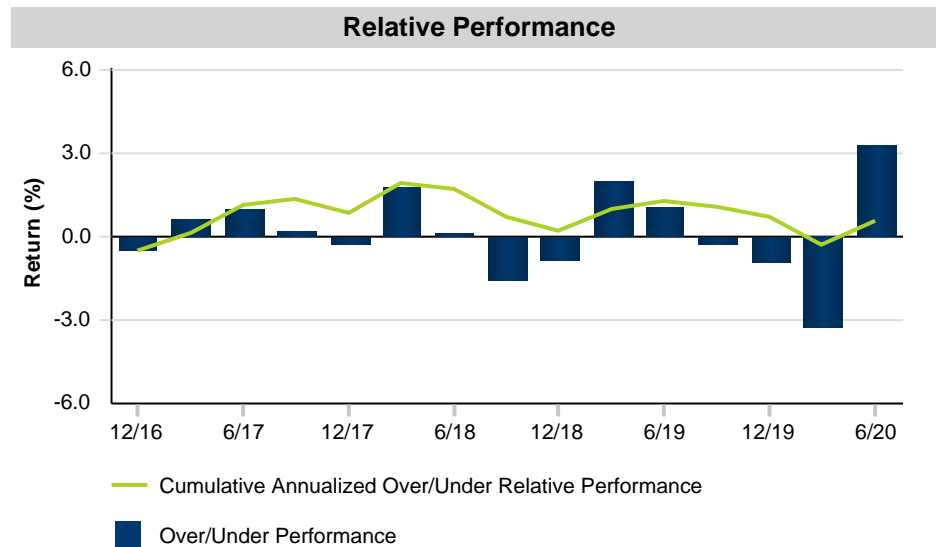
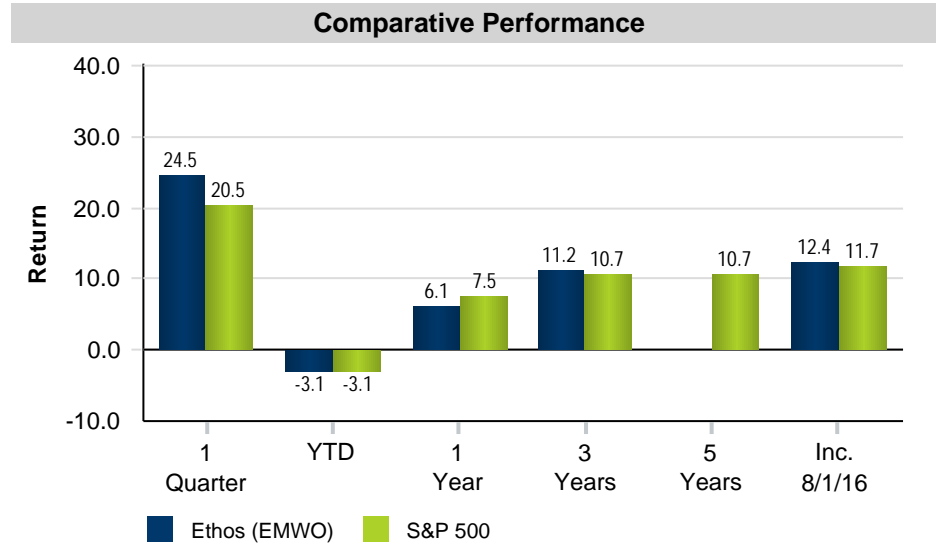
	<u>Ethos (EMWO)</u>	<u>S&P 500</u>
Standard Deviation	23.48	20.95
Alpha	-1.69	0.00
Active Return/Risk	-0.03	0.00
Tracking Error	4.04	0.00
Information Ratio	-0.16	
Sharpe Ratio	0.30	0.37

Correlation Statistics

	<u>Ethos (EMWO)</u>	<u>S&P 500</u>
R-Squared	0.98	1.00
Actual Correlation	0.99	1.00

Manager Summary

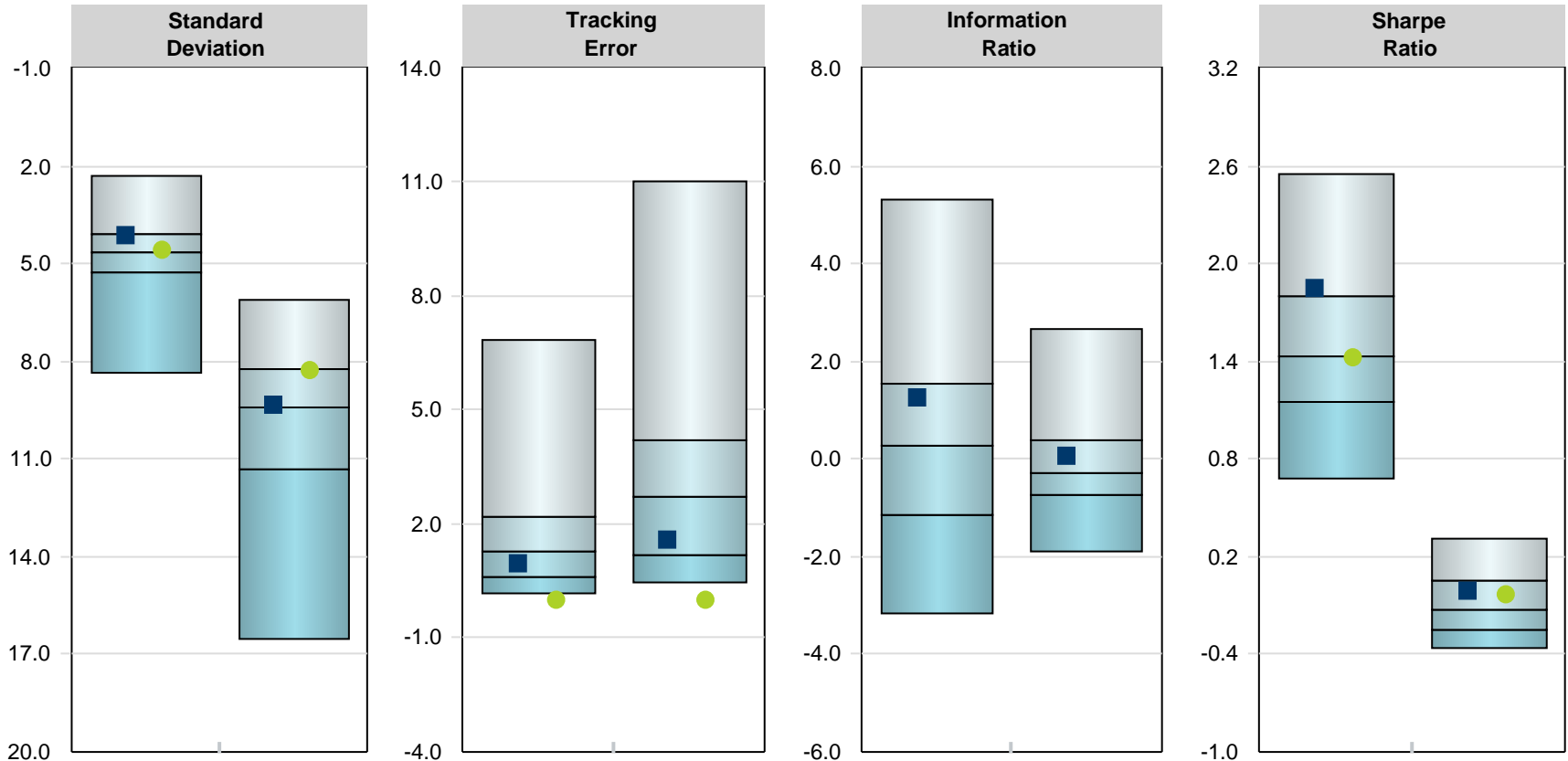
Ethos (EMWO) vs IM U.S. Equity (MF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

Ethos (EMWO)

Periods Ended June 30, 2020



	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Ethos (EMWO)	4.14 (27)	9.35 (49)	0.93 (62)	1.57 (69)	1.23 (30)	0.06 (33)	1.85 (23)	-0.02 (34)
● S&P 500	4.59 (46)	8.28 (27)	0.00 (100)	0.00 (100)			1.42 (52)	-0.03 (36)
5th Percentile	2.29	6.10	6.85	11.02	5.31	2.68	2.55	0.31
1st Quartile	4.07	8.22	2.21	4.21	1.53	0.38	1.79	0.06
Median	4.66	9.43	1.27	2.70	0.27	-0.30	1.43	-0.12
3rd Quartile	5.28	11.33	0.61	1.20	-1.16	-0.72	1.15	-0.25
95th Percentile	8.33	16.53	0.18	0.46	-3.18	-1.91	0.68	-0.36

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

Summary Statistics

Cookson Peirce (EMWO)

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Cookson Peirce (EMWO)</u>	<u>Russell 3000 Index</u>
Maximum Return	10.54	13.24
Minimum Return	-11.06	-13.75
Return	6.87	6.53
Cumulative Return	6.87	6.53
Active Return	0.13	0.00
Excess Return	7.39	7.26

Risk Summary Statistics

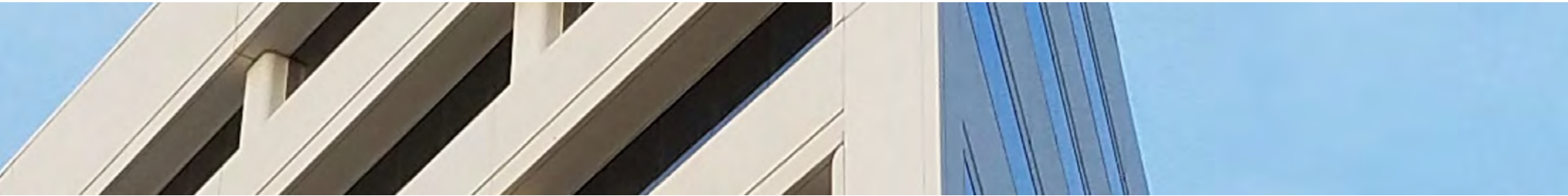
	<u>Cookson Peirce (EMWO)</u>	<u>Russell 3000 Index</u>
Upside Risk	4.49	4.49
Downside Risk	15.01	16.13
Beta	0.89	1.00

Risk/Return Summary Statistics

	<u>Cookson Peirce (EMWO)</u>	<u>Russell 3000 Index</u>
Standard Deviation	21.47	22.26
Alpha	1.08	0.00
Active Return/Risk	0.01	0.00
Tracking Error	8.44	0.00
Information Ratio	0.02	
Sharpe Ratio	0.34	0.32

Correlation Statistics

	<u>Cookson Peirce (EMWO)</u>	<u>Russell 3000 Index</u>
R-Squared	0.86	1.00
Actual Correlation	0.93	1.00

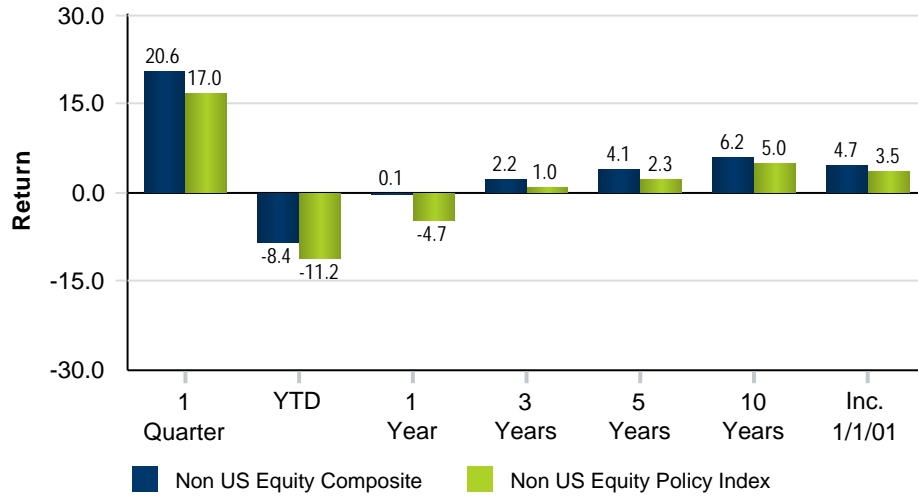


Non US Equity Composite

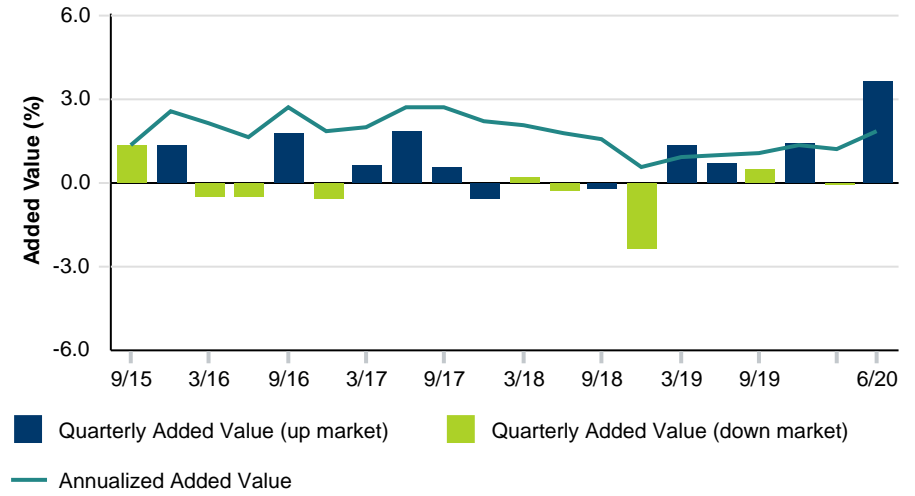
Composite Performance Summary

Non US Equity Composite
Periods Ended June 30, 2020

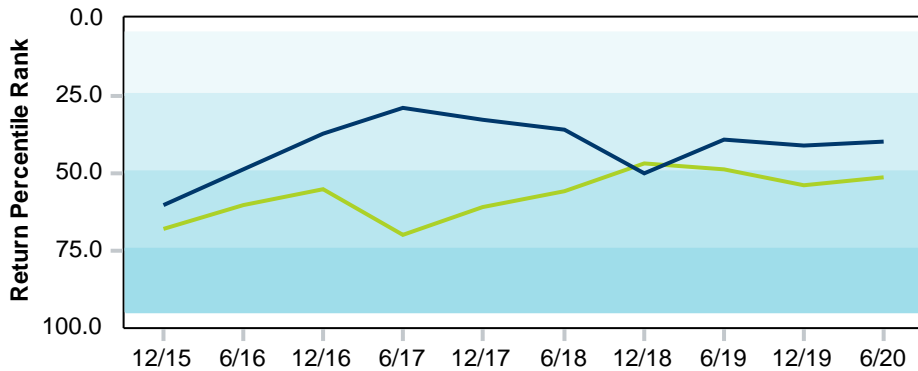
Comparative Performance



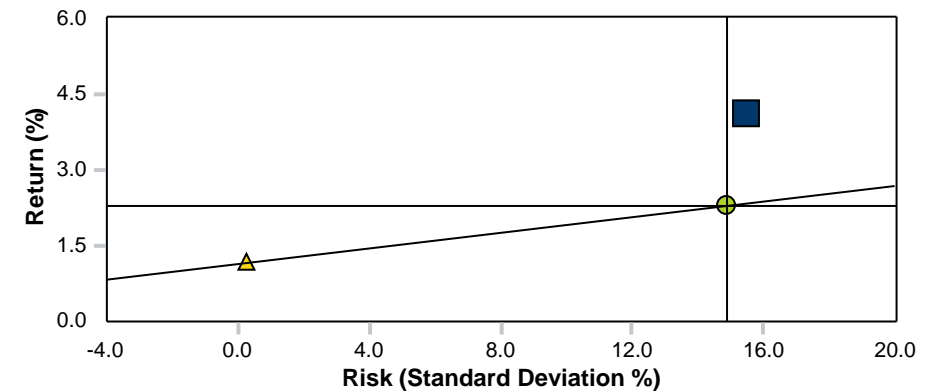
Added Value History



Rolling Percentile Rank: IM International Equity (SA+CF)



Risk and Return 07/1/15 - 06/30/20

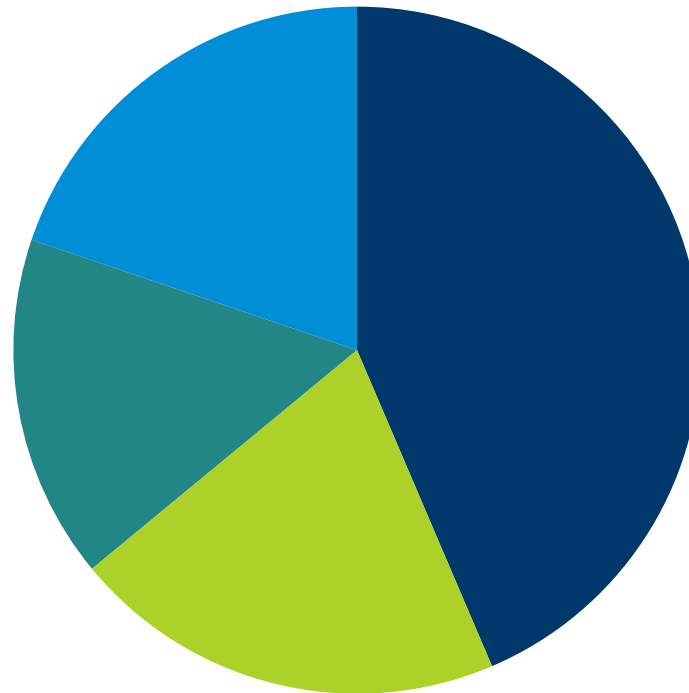


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Non US Equity Composite	10	0 (0%)	9 (90%)	1 (10%)	0 (0%)
Benchmark	10	0 (0%)	2 (20%)	8 (80%)	0 (0%)

Asset Allocation By Manager

Non US Equity Composite
 Periods Ended June 30, 2020

Jun-2020 : 157,712,009

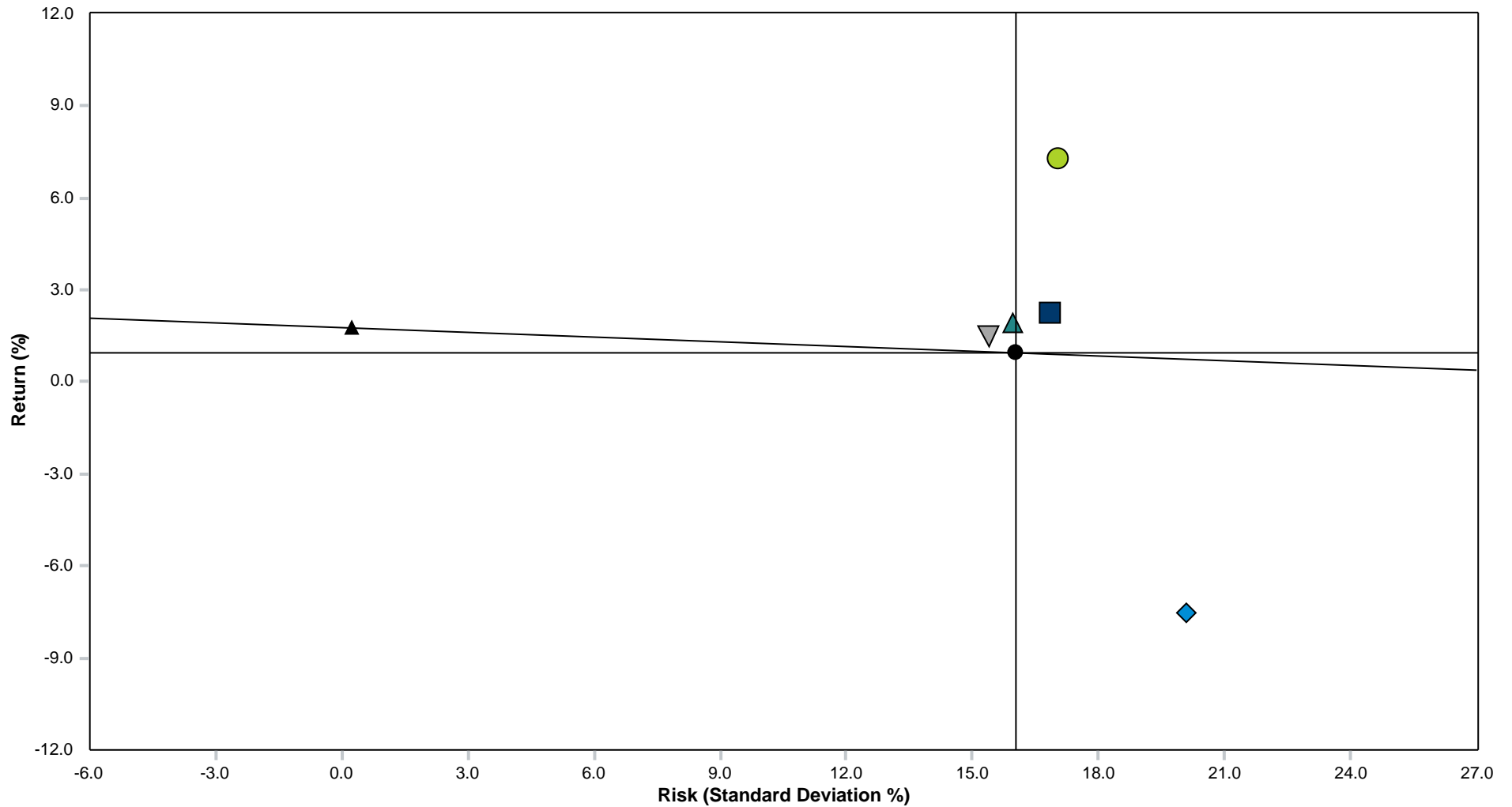


	Market Value \$	Allocation (%)
■ Baillie Gifford Intl Equity	68,730,842	43.6
■ FIAM Select International Equity	32,240,232	20.4
■ Segal, Bryant & Hamill	25,522,537	16.2
■ SSgA ACWI ex US	31,218,398	19.8

Risk vs. Return

Non US Equity Composite

Periods Ended 3 Years Ending June 30, 2020



- Non US Equity Composite
 Baillie Gifford Intl Equity
 FIAM Select International Equity
 Segal, Bryant & Hamill
- SSgA ACWI ex US
 Non US Equity Policy Index
 90 Day US Treasury Bill

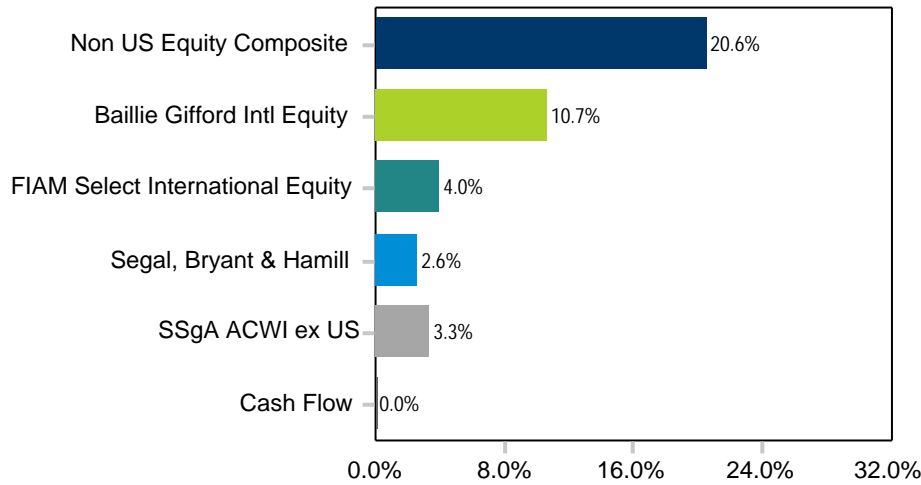
Calculation based on monthly periodicity.

Return and Risk Contribution

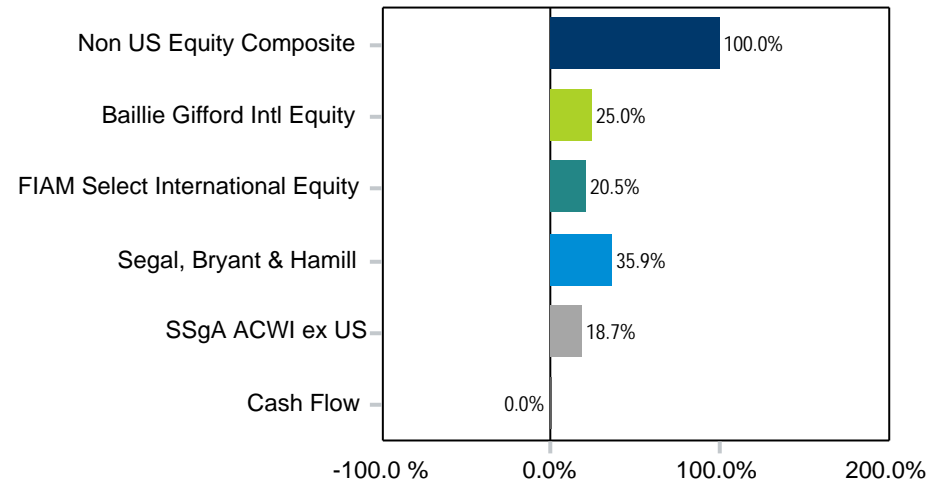
Non US Equity Composite

Periods Ended 1 Quarter June 30, 2020

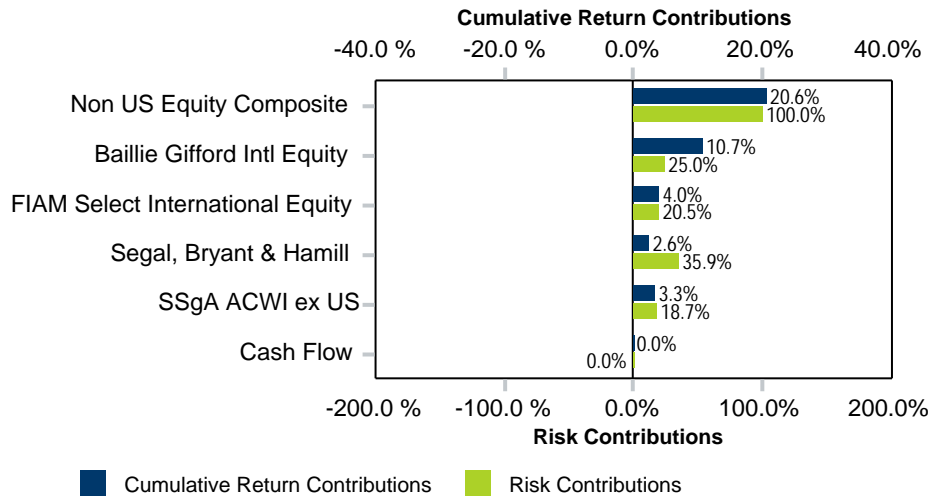
Cumulative Return Contributions



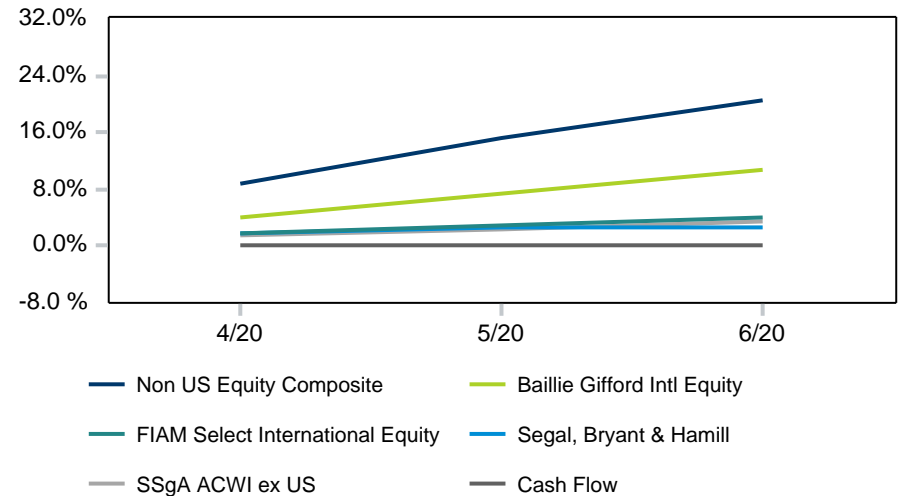
Risk Contributions



Cumulative Return and Risk Contributions

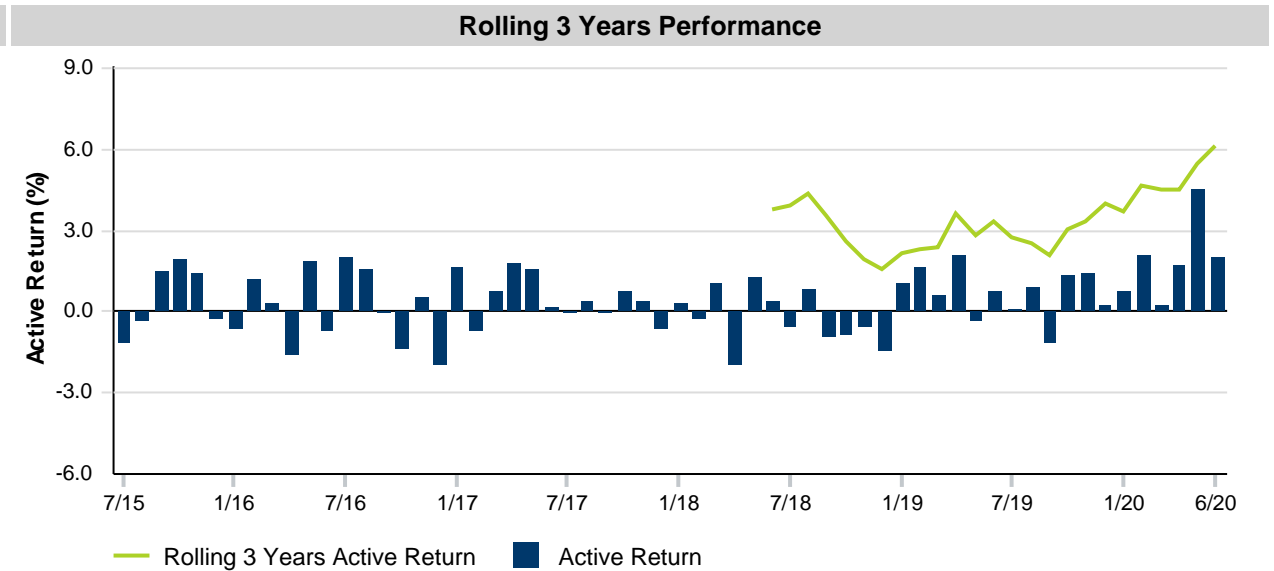
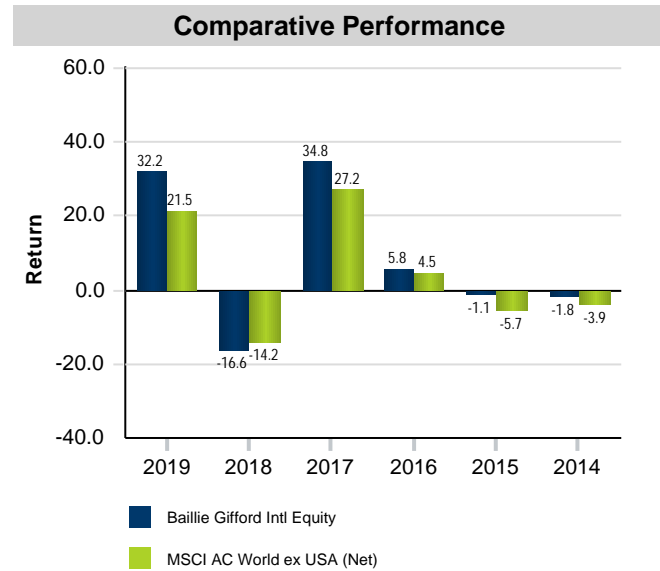
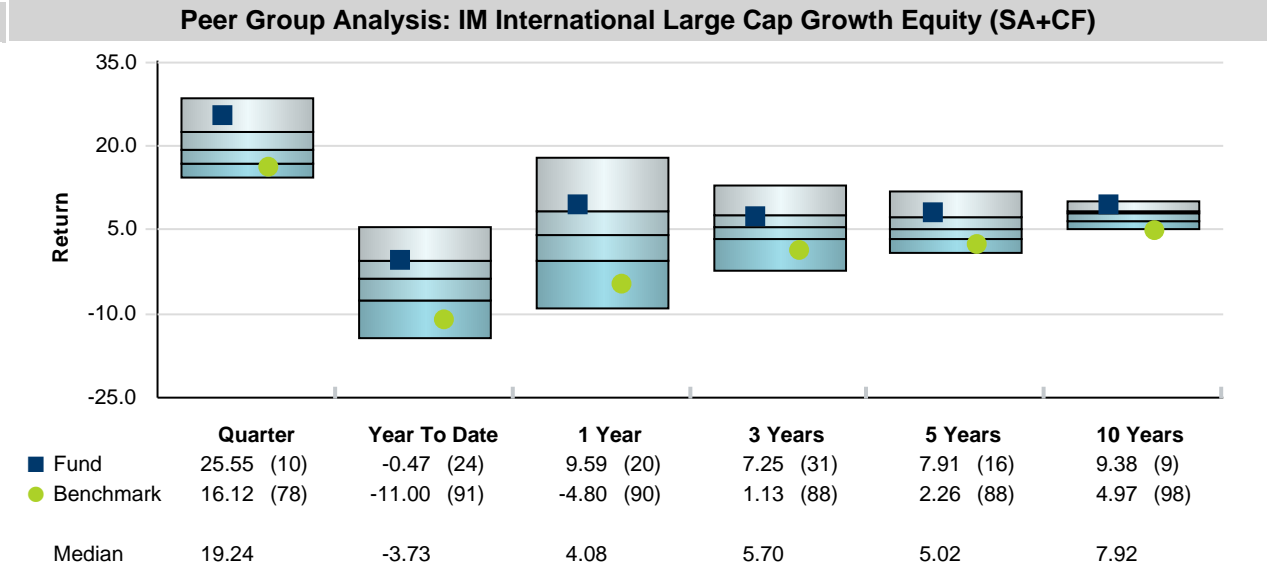
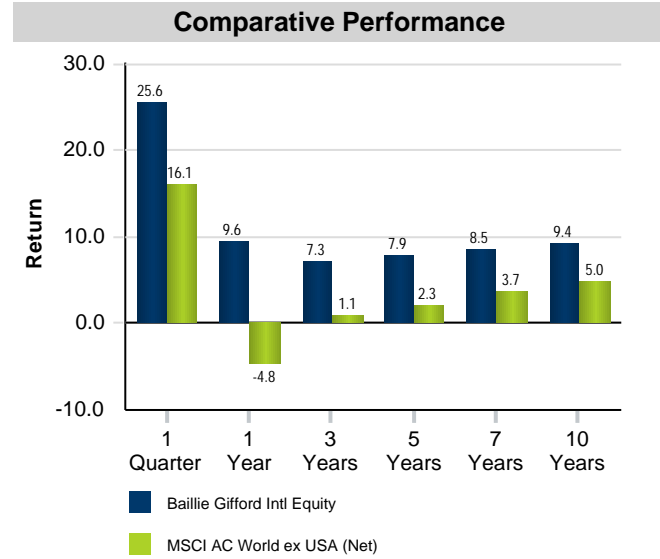


Cumulative Return Contributions History



Performance Summary

Baillie Gifford Intl Equity
 Periods Ended June 30, 2020



Summary Statistics

Baillie Gifford Intl Equity

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Baillie Gifford Intl Equity</u>	<u>MSCI AC World ex USA (Net)</u>
Maximum Return	9.33	7.58
Minimum Return	-14.19	-14.48
Return	9.59	-4.80
Cumulative Return	9.59	-4.80
Active Return	14.37	0.00
Excess Return	10.03	-4.34

Risk Summary Statistics

	<u>Baillie Gifford Intl Equity</u>	<u>MSCI AC World ex USA (Net)</u>
Upside Risk	4.49	3.25
Downside Risk	15.64	17.04
Beta	1.04	1.00

Risk/Return Summary Statistics

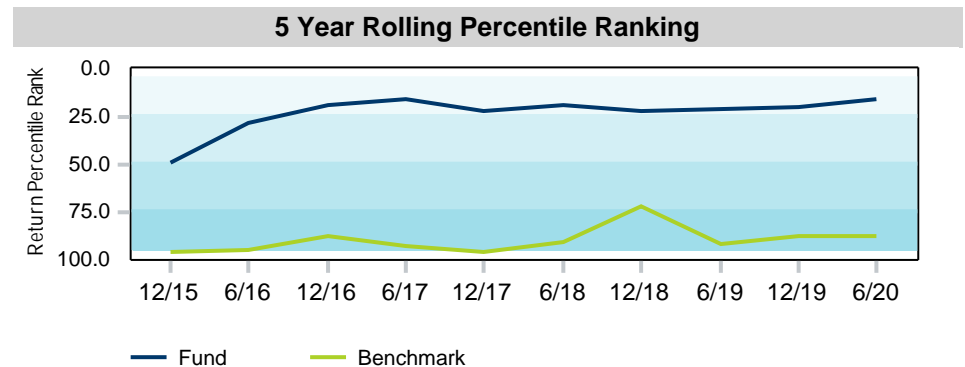
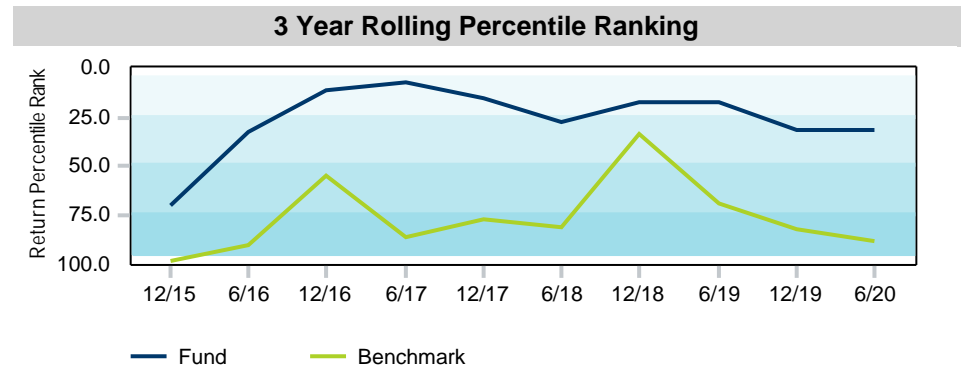
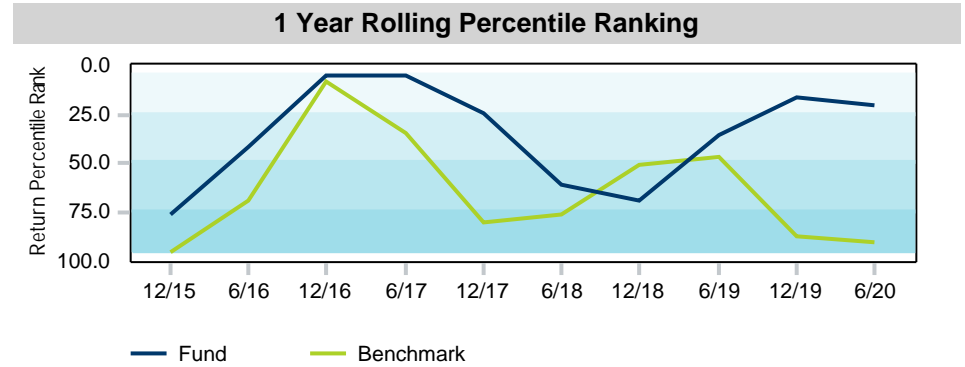
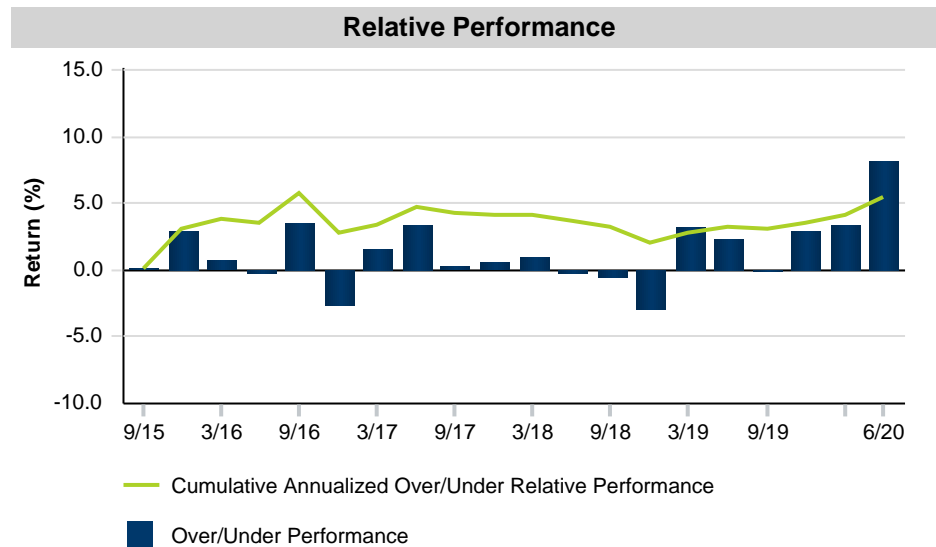
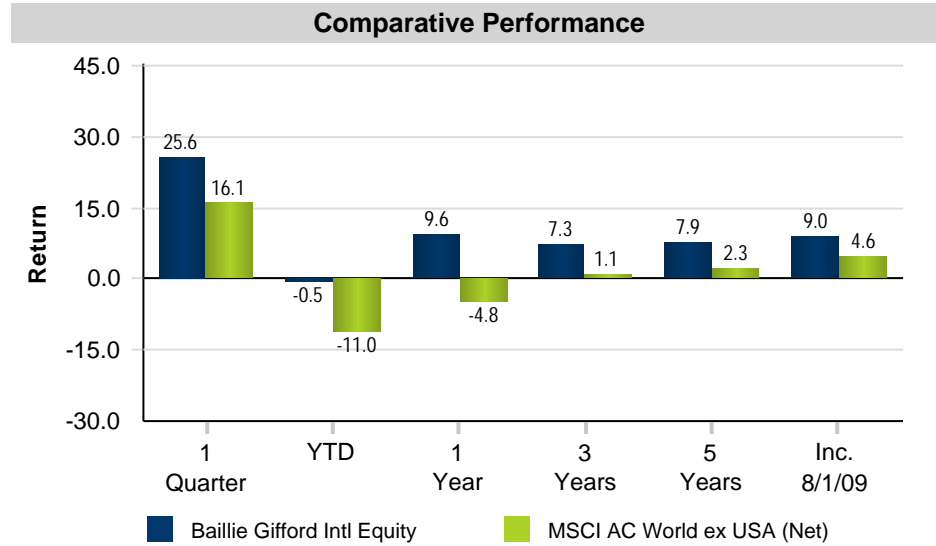
	<u>Baillie Gifford Intl Equity</u>	<u>MSCI AC World ex USA (Net)</u>
Standard Deviation	21.80	20.41
Alpha	15.50	0.00
Active Return/Risk	0.66	0.00
Tracking Error	4.63	0.00
Information Ratio	3.10	
Sharpe Ratio	0.46	-0.21

Correlation Statistics

	<u>Baillie Gifford Intl Equity</u>	<u>MSCI AC World ex USA (Net)</u>
R-Squared	0.96	1.00
Actual Correlation	0.98	1.00

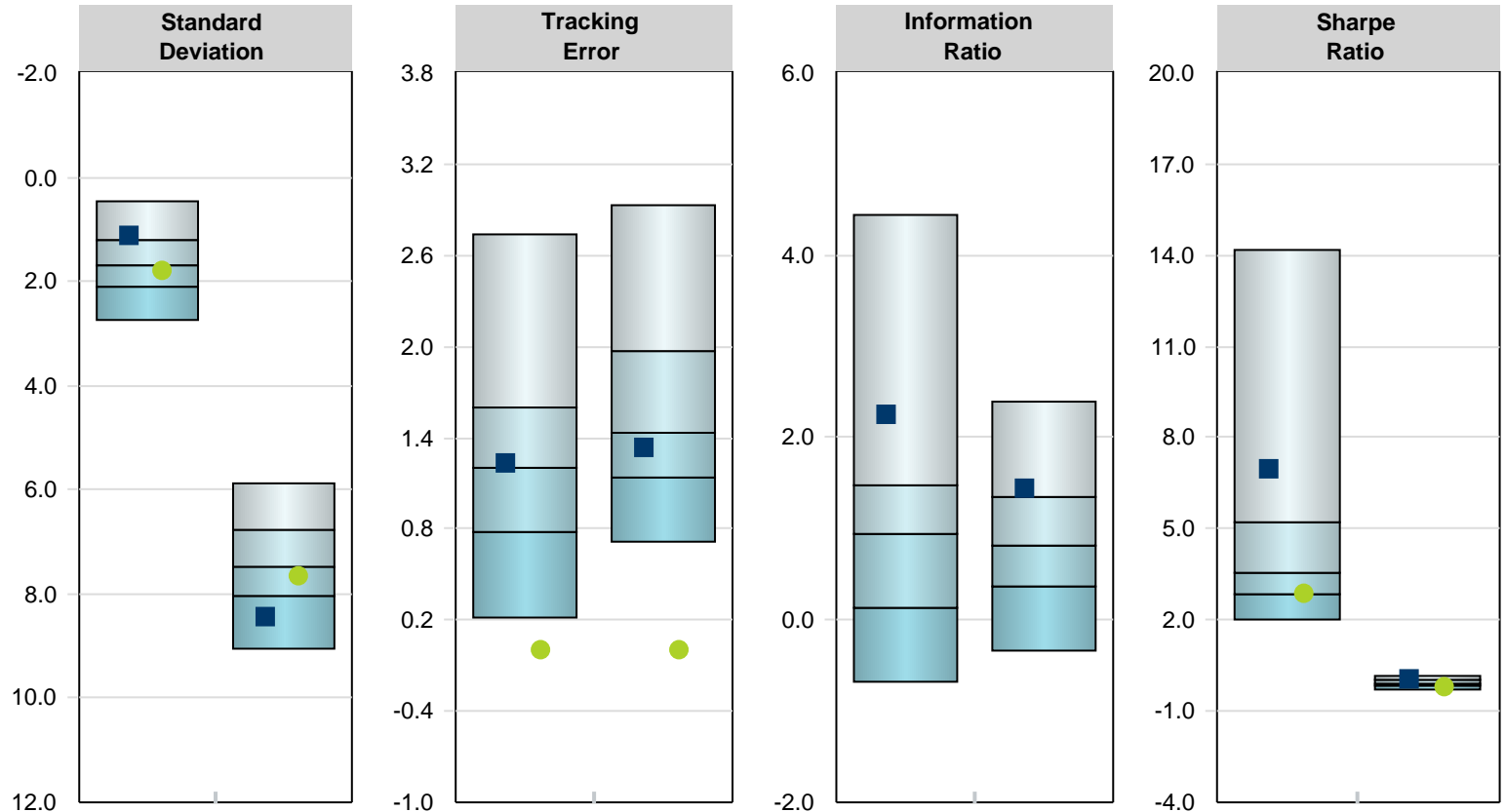
Manager Summary

Baillie Gifford Intl Equity vs IM International Large Cap Growth Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

Baillie Gifford Intl Equity
 Periods Ended June 30, 2020



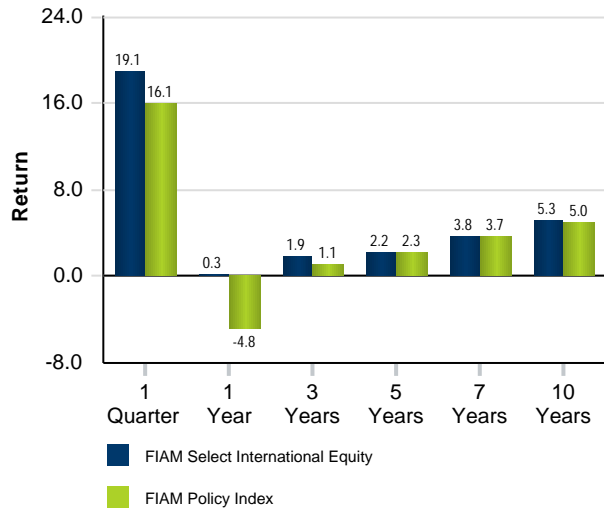
	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Baillie Gifford Intl Equity	1.13 (22)	8.45 (85)	1.23 (46)	1.34 (59)	2.24 (16)	1.43 (24)	6.94 (15)	0.02 (23)
● MSCI AC World ex USA (Net)	1.81 (58)	7.66 (61)	0.00 (100)	0.00 (100)			2.83 (77)	-0.22 (89)
5th Percentile	0.45	5.89	2.73	2.93	4.45	2.39	14.15	0.14
1st Quartile	1.20	6.78	1.59	1.97	1.48	1.36	5.21	0.02
Median	1.69	7.47	1.20	1.44	0.95	0.82	3.58	-0.07
3rd Quartile	2.10	8.05	0.79	1.14	0.14	0.38	2.86	-0.16
95th Percentile	2.73	9.07	0.22	0.72	-0.67	-0.34	1.99	-0.26

Parenteses contain percentile rankings.
 Calculation based on monthly periodicity.

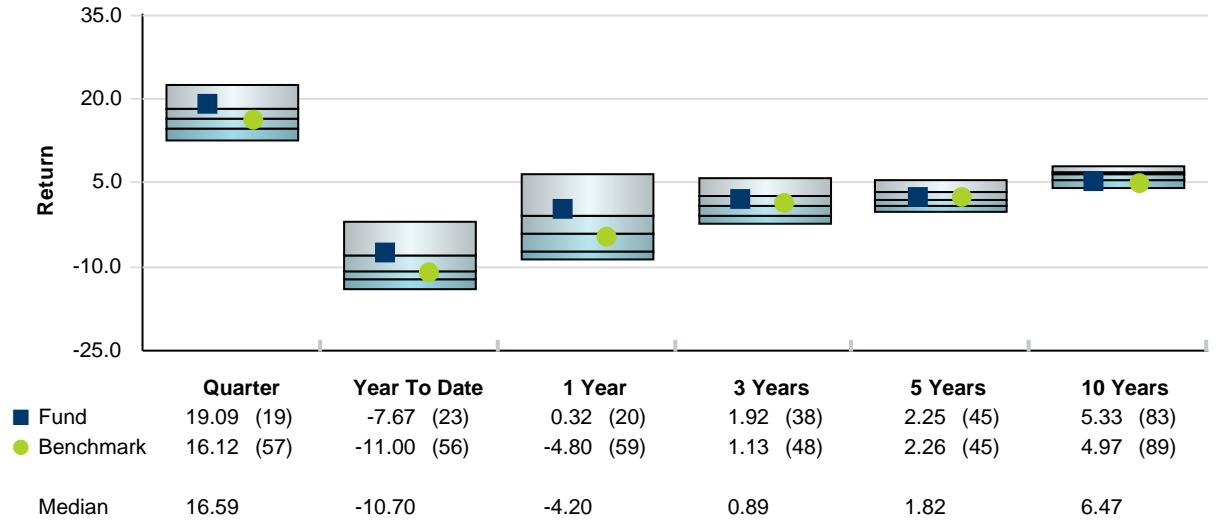
Performance Summary

FIAM Select International Equity
Periods Ended June 30, 2020

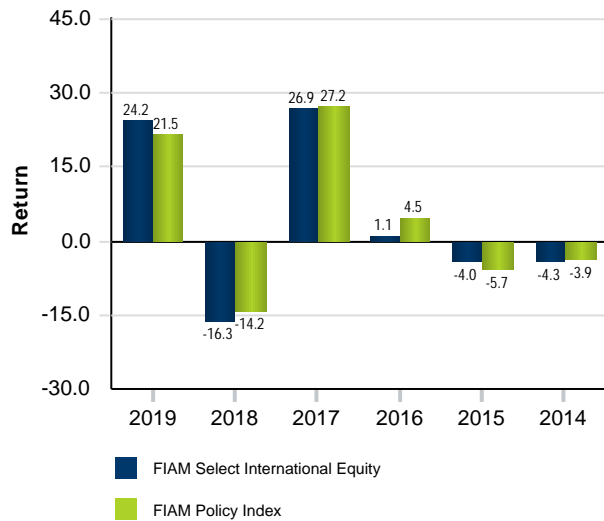
Comparative Performance



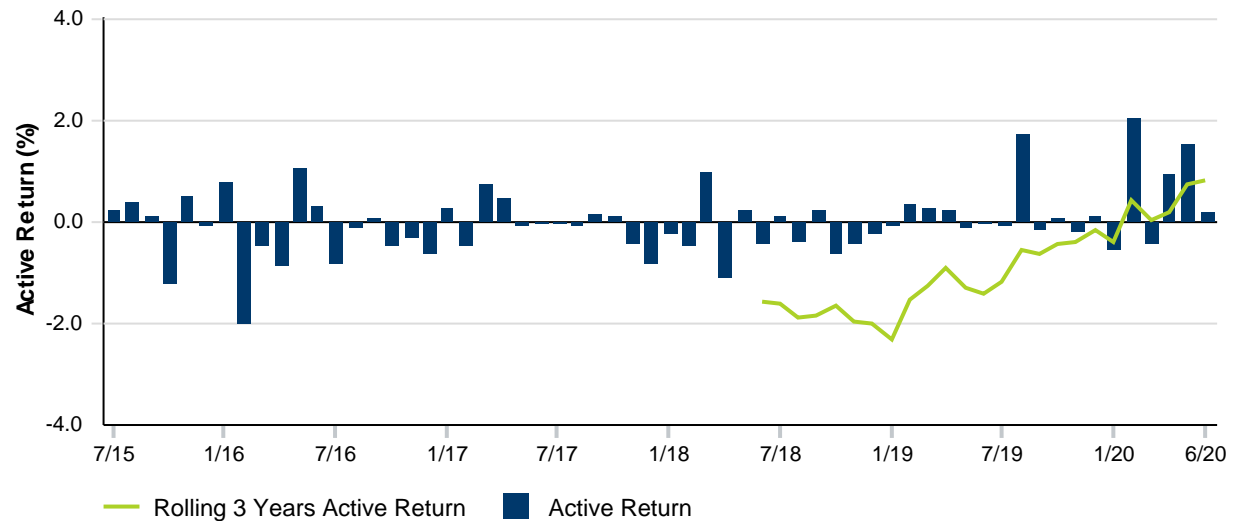
Peer Group Analysis: IM International Large Cap Core Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

FIAM Select International Equity

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>FIAM Select International Equity</u>	<u>FIAM Policy Index</u>
Maximum Return	8.53	7.58
Minimum Return	-14.90	-14.48
Return	0.32	-4.80
Cumulative Return	0.32	-4.80
Active Return	5.28	0.00
Excess Return	0.94	-4.34

Risk Summary Statistics

	<u>FIAM Select International Equity</u>	<u>FIAM Policy Index</u>
Upside Risk	3.62	3.25
Downside Risk	16.44	17.04
Beta	1.00	1.00

Risk/Return Summary Statistics

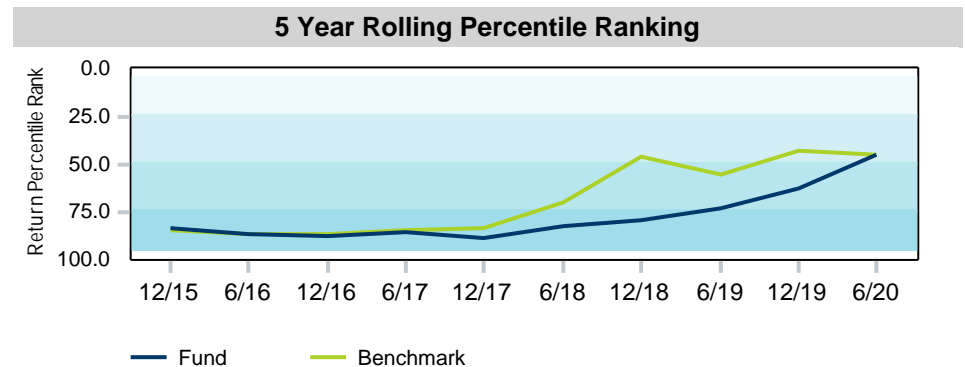
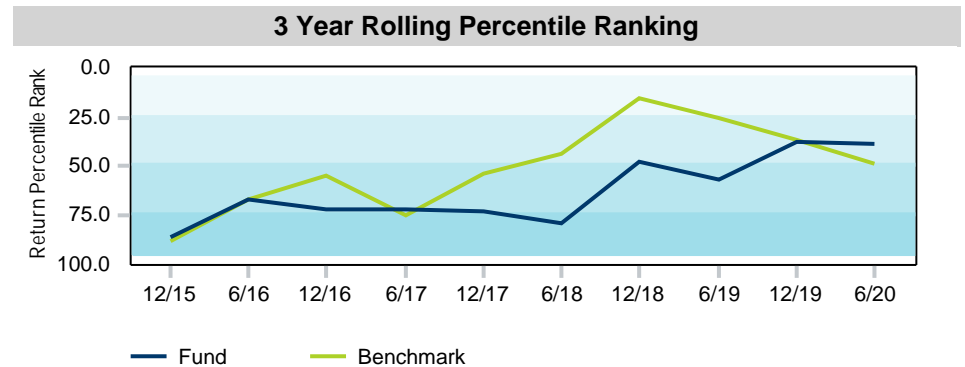
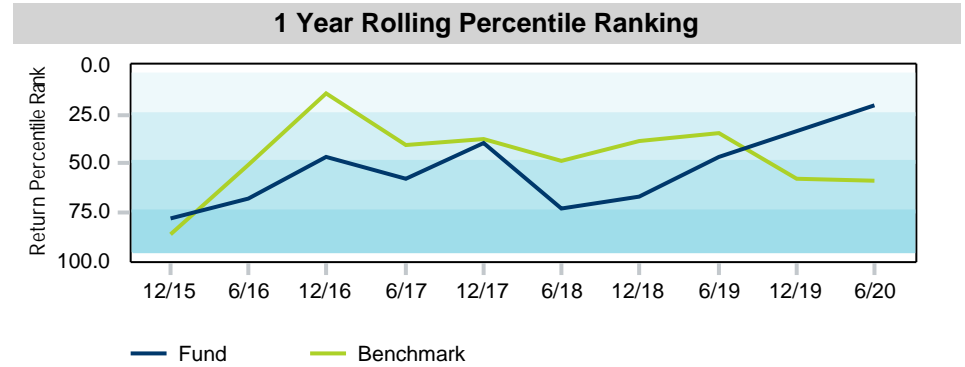
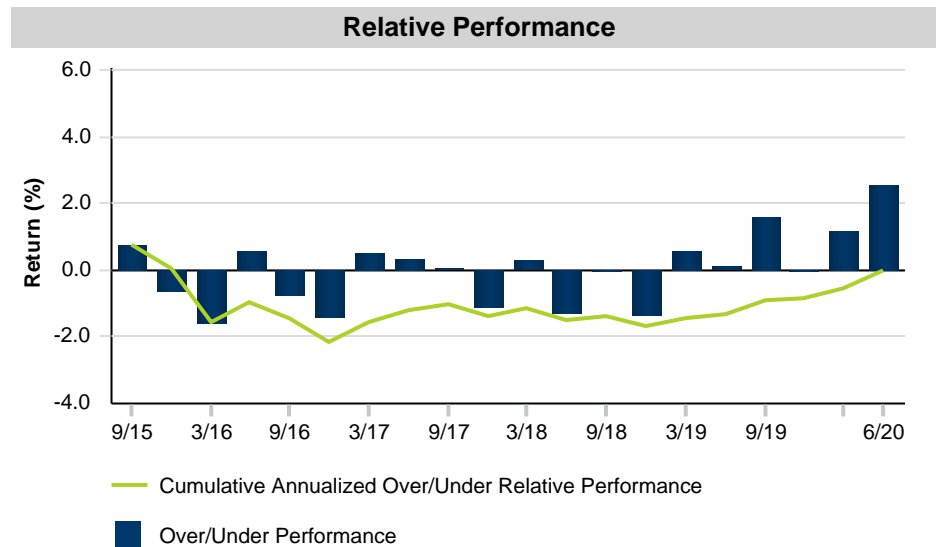
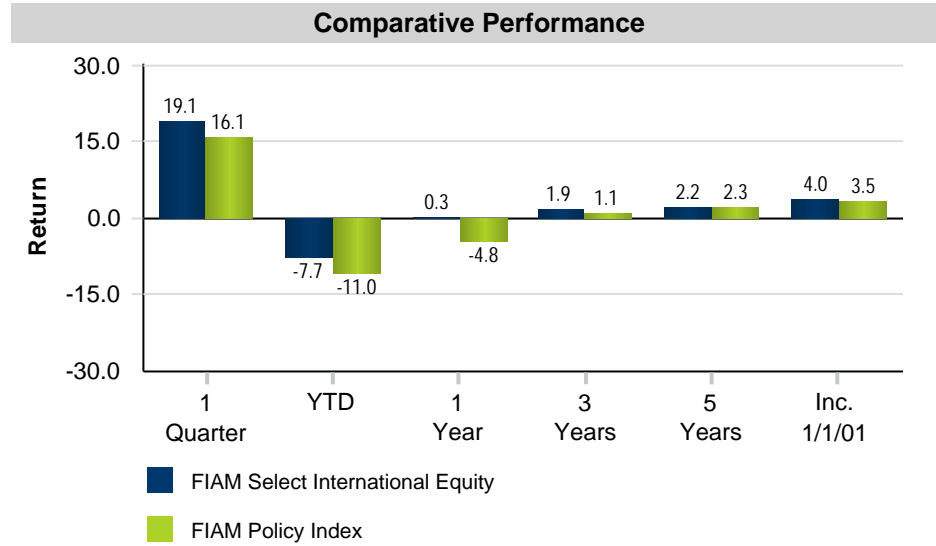
	<u>FIAM Select International Equity</u>	<u>FIAM Policy Index</u>
Standard Deviation	20.65	20.41
Alpha	5.41	0.00
Active Return/Risk	0.26	0.00
Tracking Error	2.95	0.00
Information Ratio	1.79	
Sharpe Ratio	0.04	-0.21

Correlation Statistics

	<u>FIAM Select International Equity</u>	<u>FIAM Policy Index</u>
R-Squared	0.98	1.00
Actual Correlation	0.99	1.00

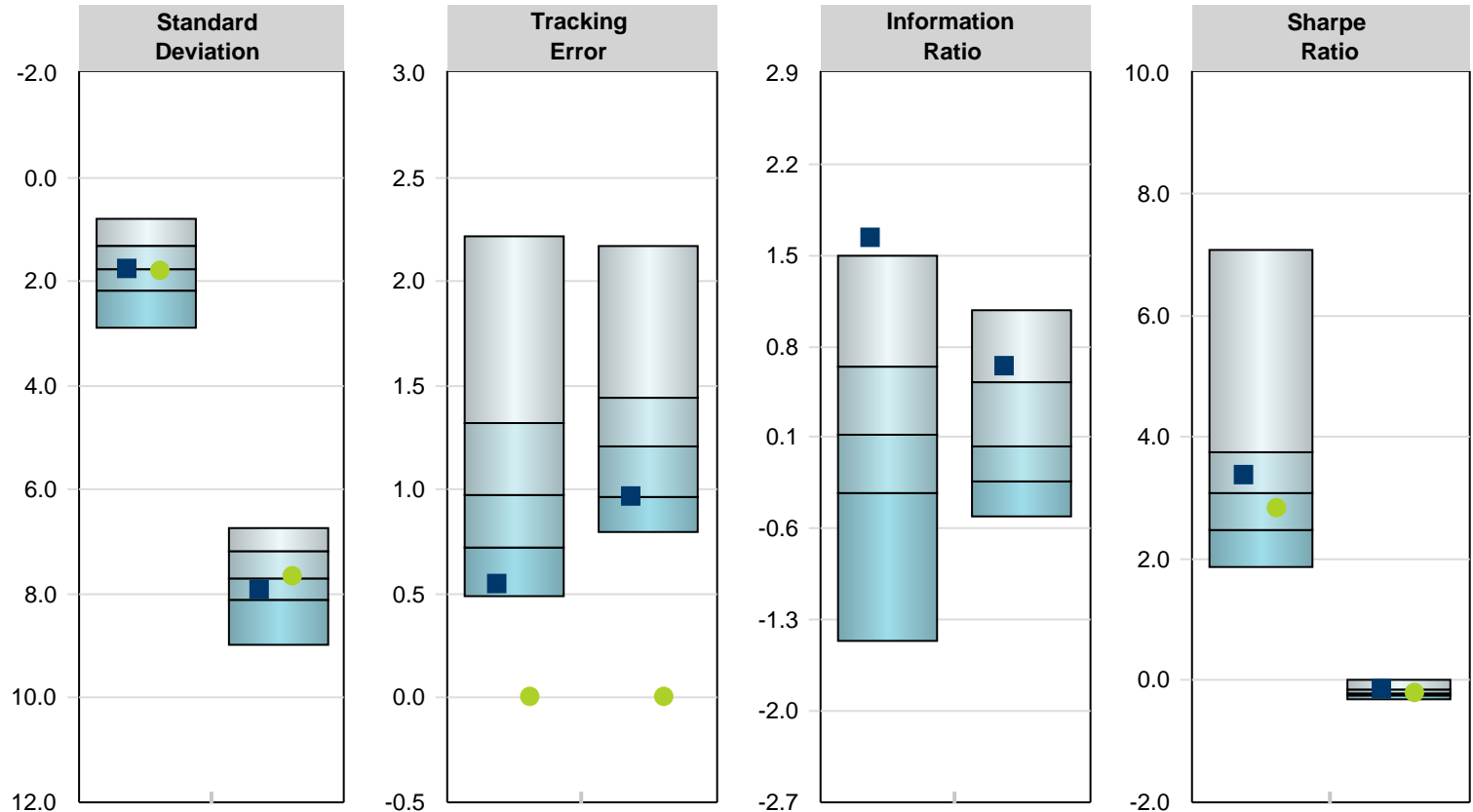
Manager Summary

FIAM Select International Equity vs IM International Large Cap Core Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

FIAM Select International Equity
 Periods Ended June 30, 2020



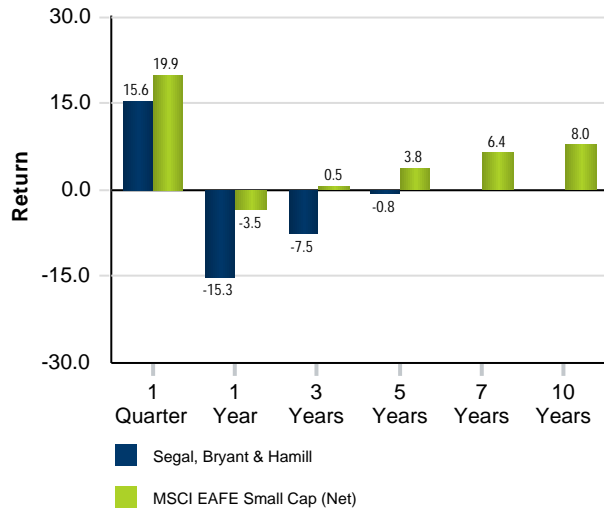
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ FIAM Select International Equity	1.78 (52)	7.95 (66)	0.55 (91)	0.96 (76)	1.63 (5)	0.65 (14)	3.38 (39)	-0.14 (21)
● FIAM Policy Index	1.81 (52)	7.66 (47)	0.00 (100)	0.00 (100)			2.83 (57)	-0.22 (54)
5th Percentile	0.81	6.72	2.22	2.16	1.50	1.08	7.08	0.01
1st Quartile	1.32	7.17	1.32	1.44	0.65	0.52	3.77	-0.14
Median	1.76	7.71	0.98	1.21	0.12	0.04	3.10	-0.22
3rd Quartile	2.17	8.11	0.72	0.97	-0.32	-0.24	2.47	-0.25
95th Percentile	2.89	8.97	0.49	0.80	-1.47	-0.50	1.87	-0.29

Parenteses contain percentile rankings.
 Calculation based on monthly periodicity.

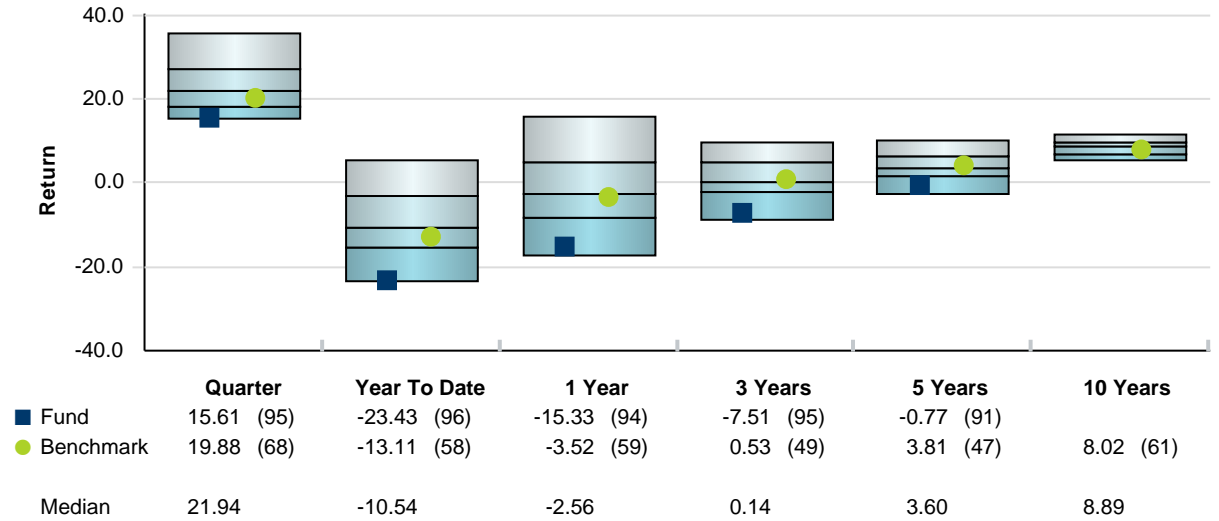
Performance Summary

Segal, Bryant & Hamill
 Periods Ended June 30, 2020

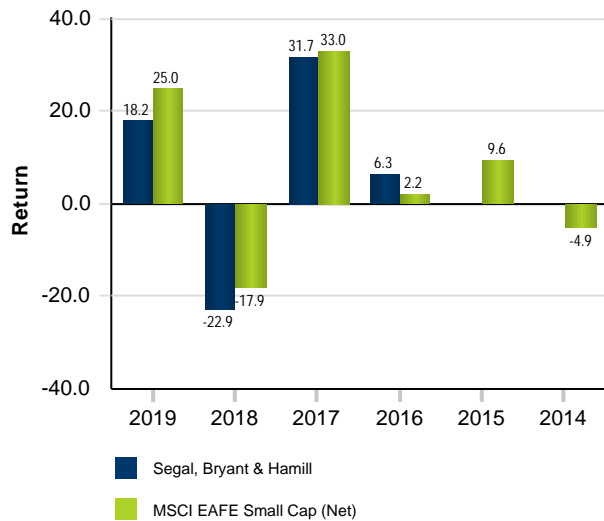
Comparative Performance



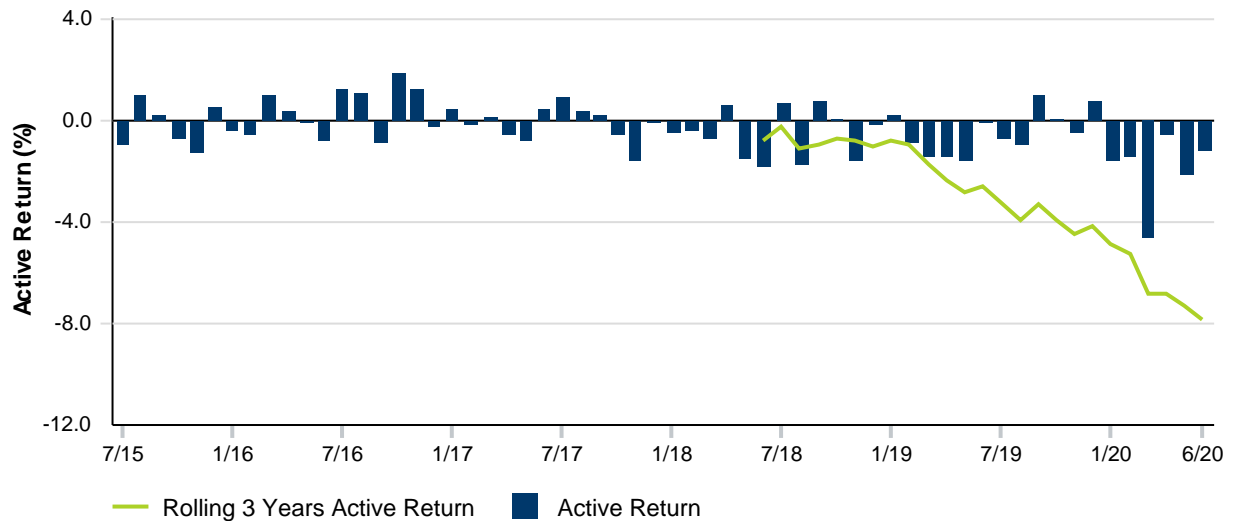
Peer Group Analysis: IM International Small Cap Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Segal, Bryant & Hamill

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Segal, Bryant & Hamill</u>	<u>MSCI EAFE Small Cap (Net)</u>
Maximum Return	9.83	10.40
Minimum Return	-21.87	-17.24
Return	-15.33	-3.52
Cumulative Return	-15.33	-3.52
Active Return	-11.78	0.00
Excess Return	-13.70	-1.91

Risk Summary Statistics

	<u>Segal, Bryant & Hamill</u>	<u>MSCI EAFE Small Cap (Net)</u>
Upside Risk	3.96	4.22
Downside Risk	25.27	20.21
Beta	1.14	1.00

Risk/Return Summary Statistics

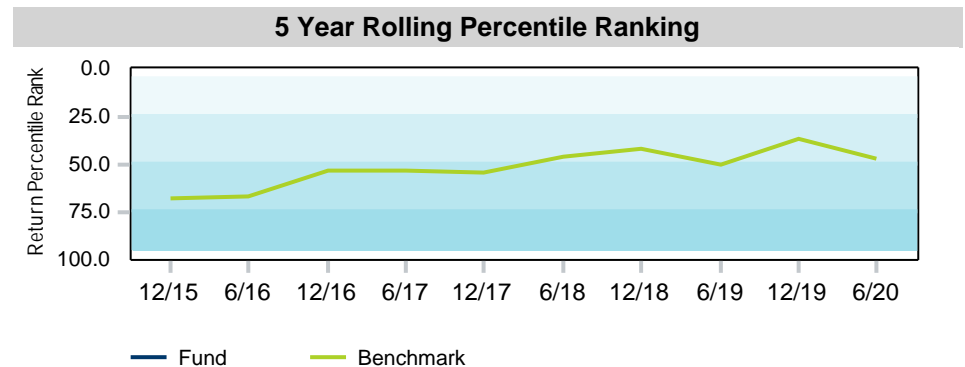
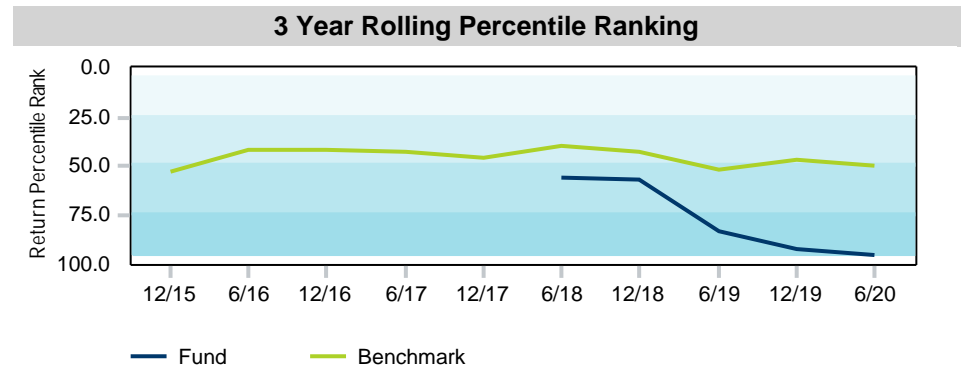
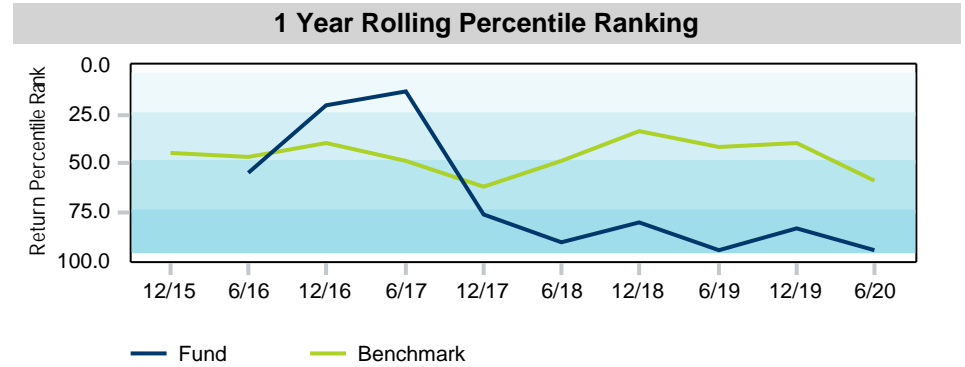
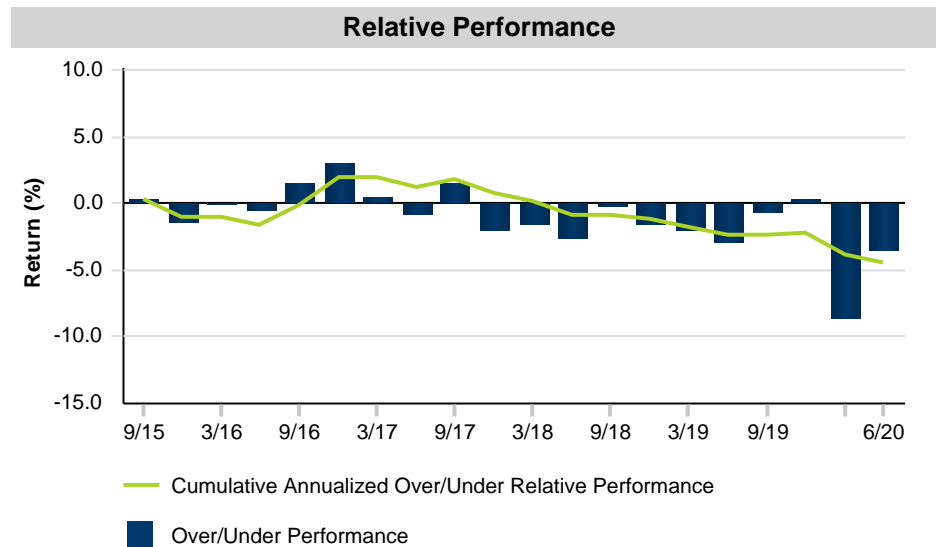
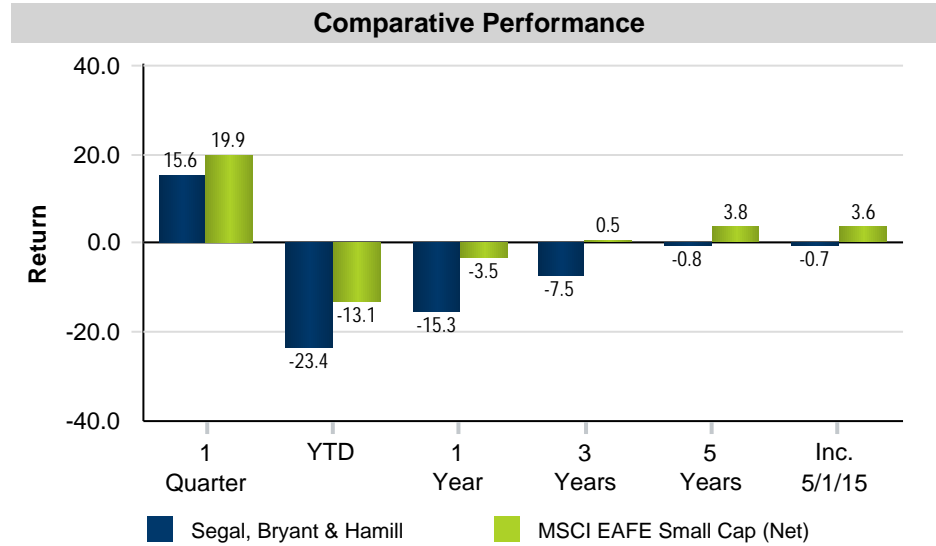
	<u>Segal, Bryant & Hamill</u>	<u>MSCI EAFE Small Cap (Net)</u>
Standard Deviation	28.54	24.94
Alpha	-11.13	0.00
Active Return/Risk	-0.41	0.00
Tracking Error	4.89	0.00
Information Ratio	-2.41	
Sharpe Ratio	-0.48	-0.08

Correlation Statistics

	<u>Segal, Bryant & Hamill</u>	<u>MSCI EAFE Small Cap (Net)</u>
R-Squared	0.98	1.00
Actual Correlation	0.99	1.00

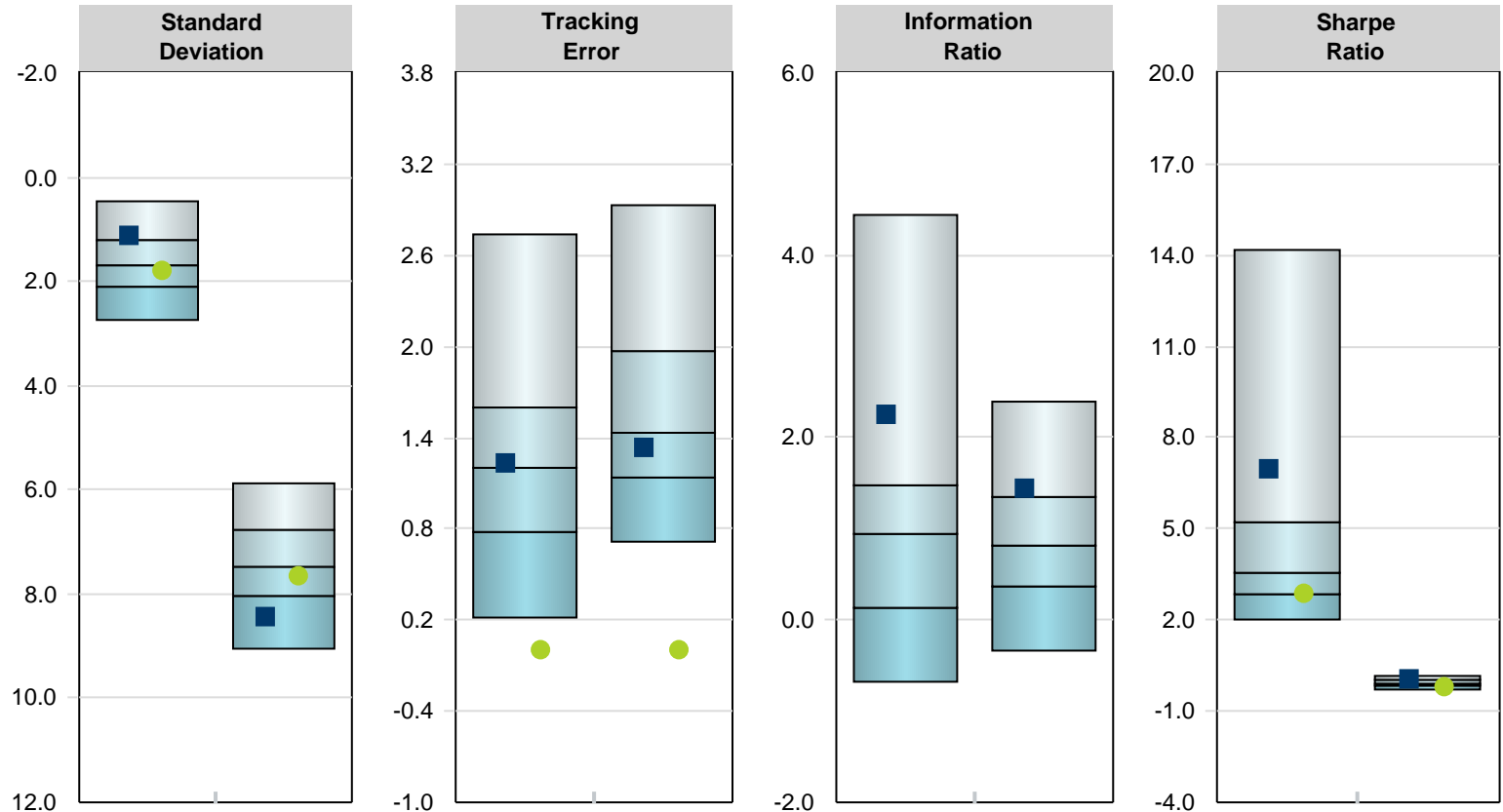
Manager Summary

Segal, Bryant & Hamill vs IM International Small Cap Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

Baillie Gifford Intl Equity
 Periods Ended June 30, 2020



	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Baillie Gifford Intl Equity	1.13 (22)	8.45 (85)	1.23 (46)	1.34 (59)	2.24 (16)	1.43 (24)	6.94 (15)	0.02 (23)
● MSCI AC World ex USA (Net)	1.81 (58)	7.66 (61)	0.00 (100)	0.00 (100)			2.83 (77)	-0.22 (89)

5th Percentile	0.45	5.89	2.73	2.93	4.45	2.39	14.15	0.14
1st Quartile	1.20	6.78	1.59	1.97	1.48	1.36	5.21	0.02
Median	1.69	7.47	1.20	1.44	0.95	0.82	3.58	-0.07
3rd Quartile	2.10	8.05	0.79	1.14	0.14	0.38	2.86	-0.16
95th Percentile	2.73	9.07	0.22	0.72	-0.67	-0.34	1.99	-0.26

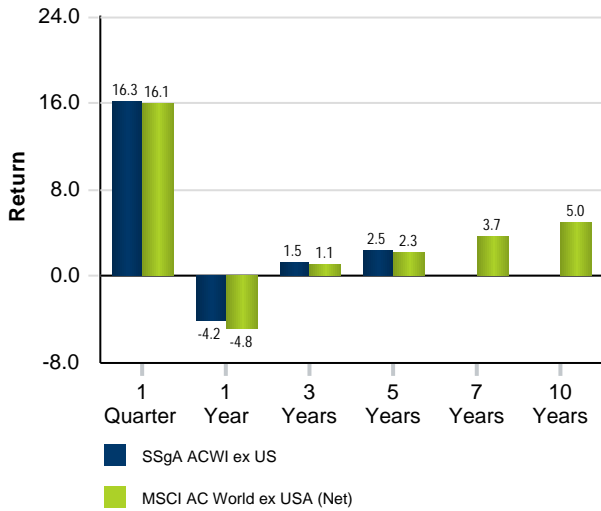
Parenteses contain percentile rankings.
 Calculation based on monthly periodicity.

Performance Summary

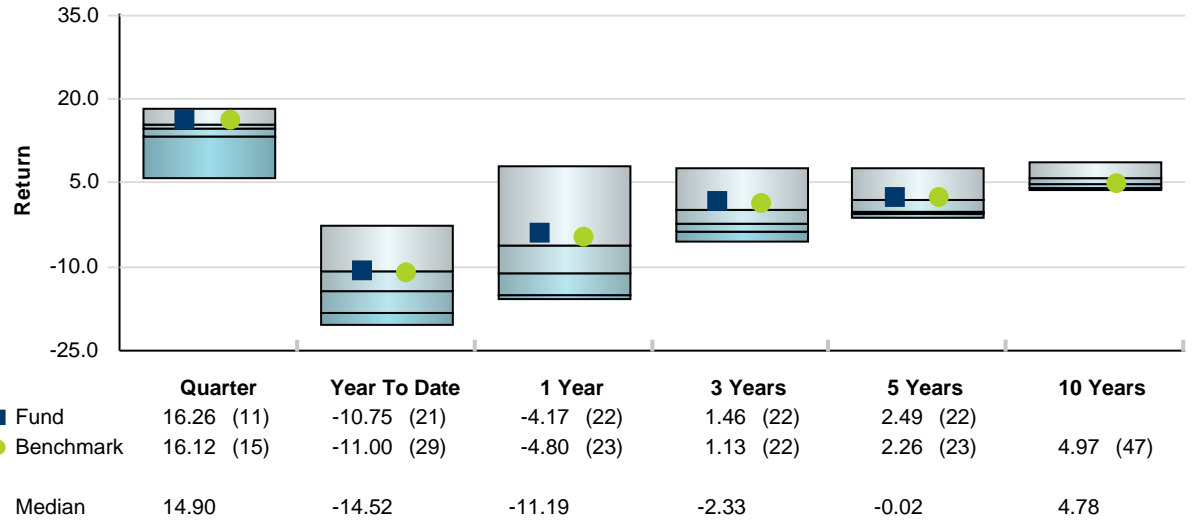
SSgA ACWI ex US

Periods Ended June 30, 2020

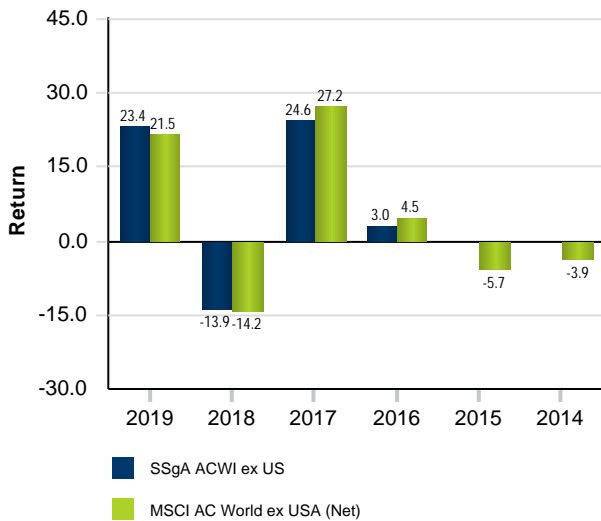
Comparative Performance



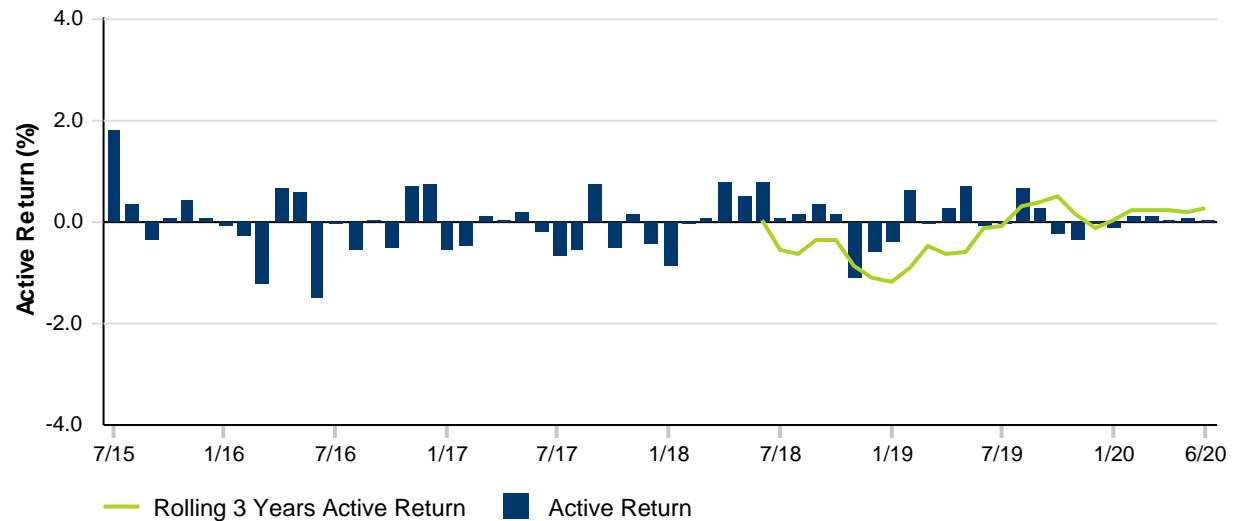
Peer Group Analysis: IM Enhanced and Indexed International Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

SSgA ACWI ex US

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>SSgA ACWI ex US</u>	<u>MSCI AC World ex USA (Net)</u>
Maximum Return	7.61	7.58
Minimum Return	-14.36	-14.48
Return	-4.17	-4.80
Cumulative Return	-4.17	-4.80
Active Return	0.62	0.00
Excess Return	-3.73	-4.34

Risk Summary Statistics

	<u>SSgA ACWI ex US</u>	<u>MSCI AC World ex USA (Net)</u>
Upside Risk	3.26	3.25
Downside Risk	16.79	17.04
Beta	0.99	1.00

Risk/Return Summary Statistics

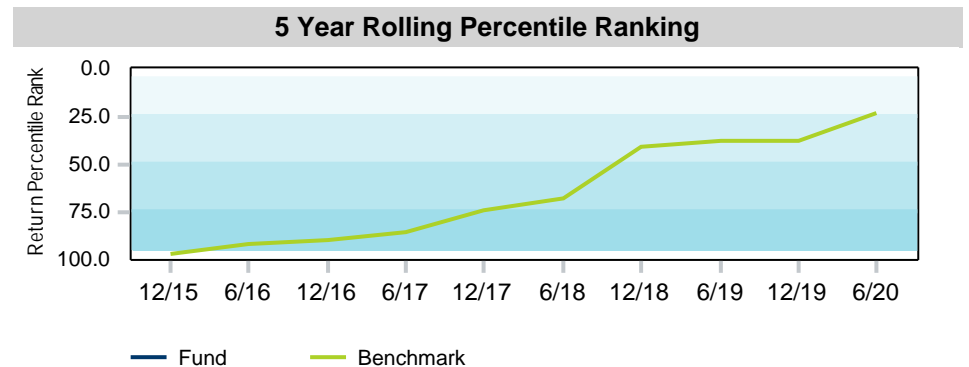
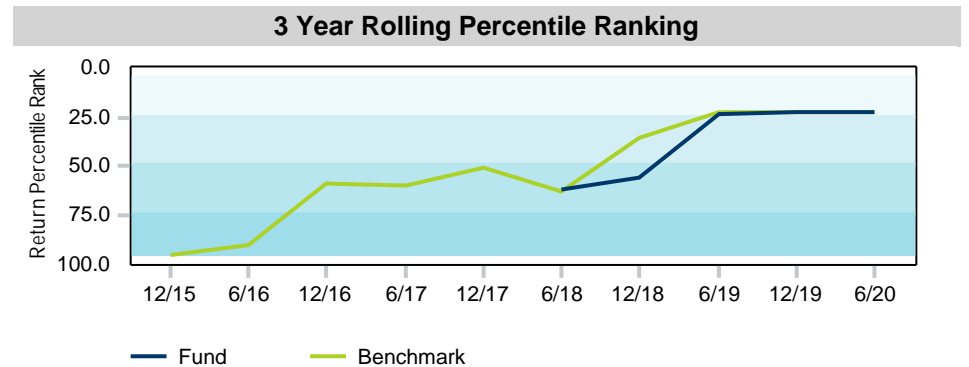
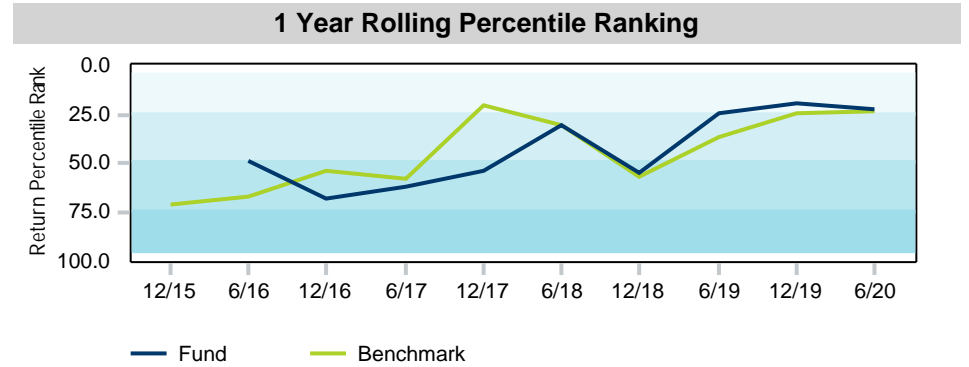
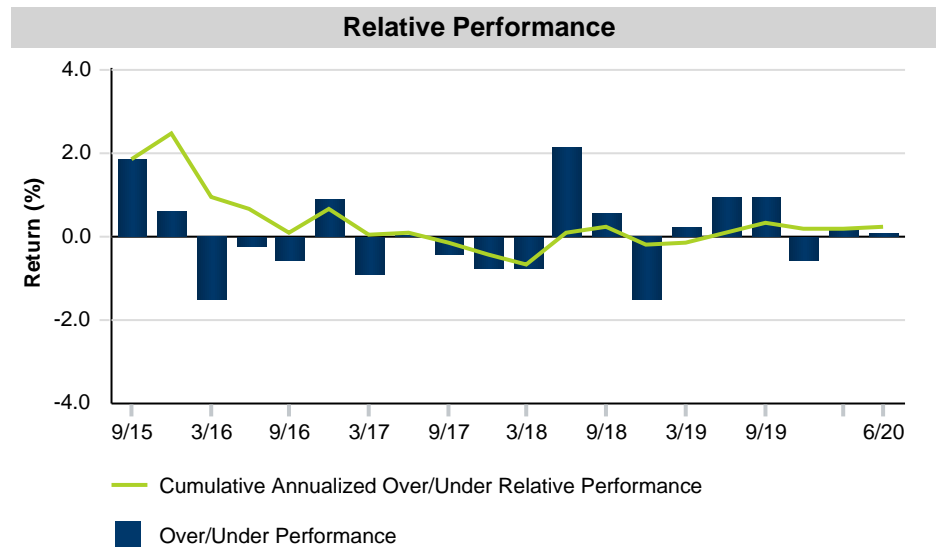
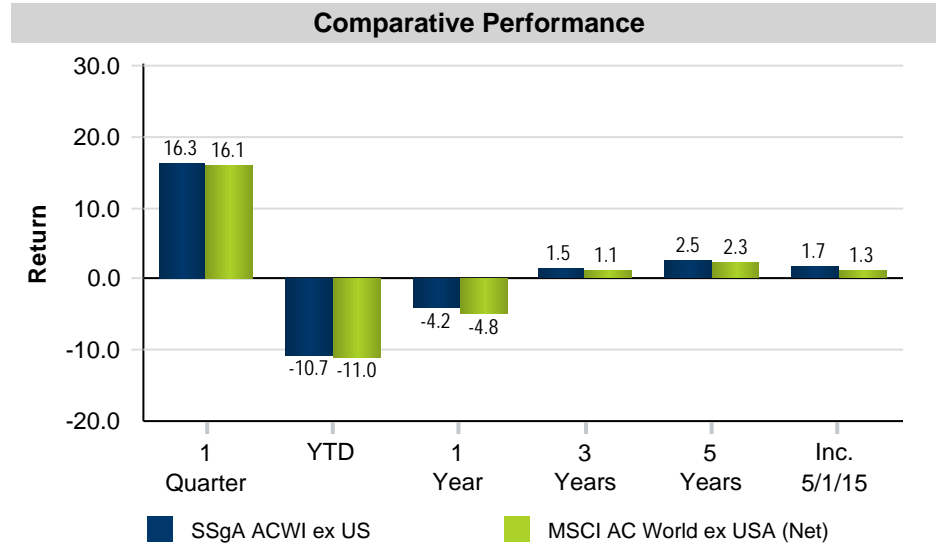
	<u>SSgA ACWI ex US</u>	<u>MSCI AC World ex USA (Net)</u>
Standard Deviation	20.23	20.41
Alpha	0.59	0.00
Active Return/Risk	0.03	0.00
Tracking Error	0.84	0.00
Information Ratio	0.74	
Sharpe Ratio	-0.18	-0.21

Correlation Statistics

	<u>SSgA ACWI ex US</u>	<u>MSCI AC World ex USA (Net)</u>
R-Squared	1.00	1.00
Actual Correlation	1.00	1.00

Manager Summary

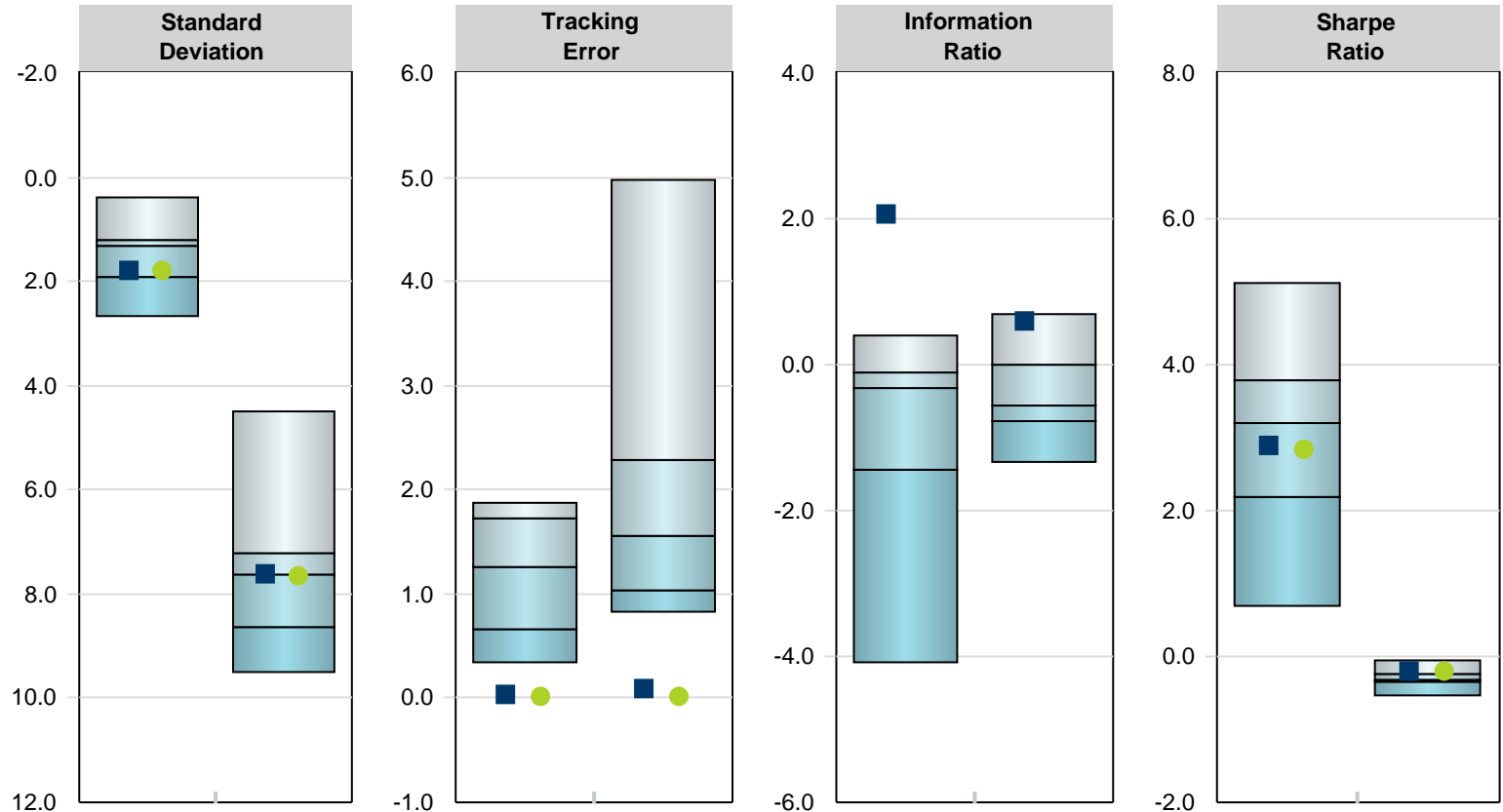
SSgA ACWI ex US vs IM Enhanced and Indexed International Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

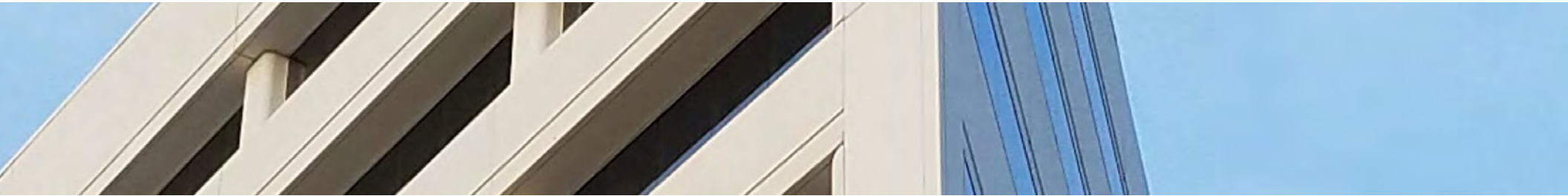
SSgA ACWI ex US

Periods Ended June 30, 2020



	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ SSgA ACWI ex US	1.80 (71)	7.63 (50)	0.02 (100)	0.07 (100)	2.06 (1)	0.59 (8)	2.87 (55)	-0.22 (20)
● MSCI AC World ex USA (Net)	1.81 (72)	7.66 (50)	0.00 (100)	0.00 (100)			2.83 (55)	-0.22 (22)
5th Percentile	0.39	4.50	1.87	4.97	0.39	0.70	5.12	-0.05
1st Quartile	1.19	7.21	1.72	2.29	-0.11	0.00	3.78	-0.23
Median	1.33	7.62	1.26	1.56	-0.31	-0.57	3.21	-0.33
3rd Quartile	1.92	8.65	0.66	1.03	-1.43	-0.77	2.18	-0.36
95th Percentile	2.68	9.51	0.34	0.83	-4.09	-1.35	0.68	-0.54

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

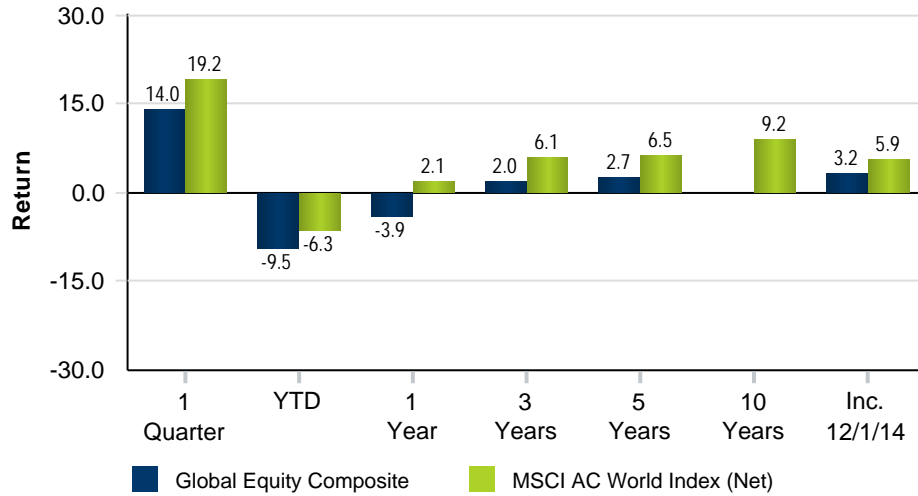


Global Equity

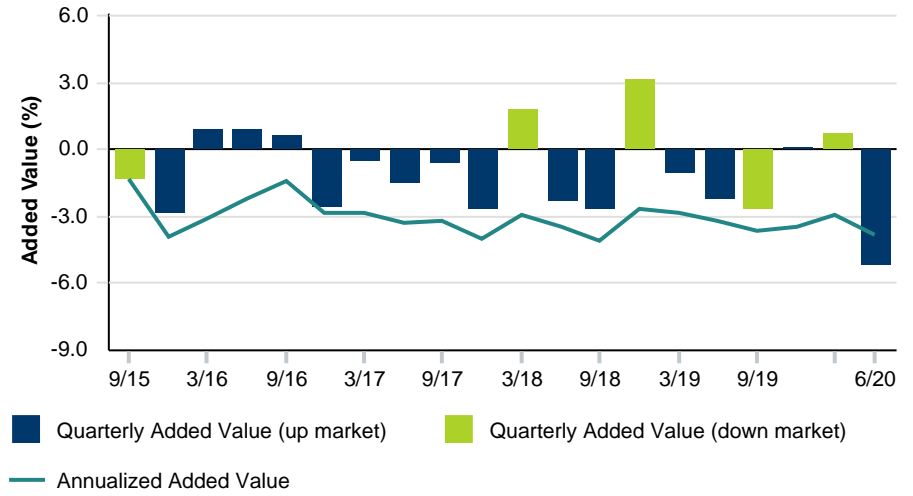
Composite Performance Summary

Global Equity Composite
Periods Ended June 30, 2020

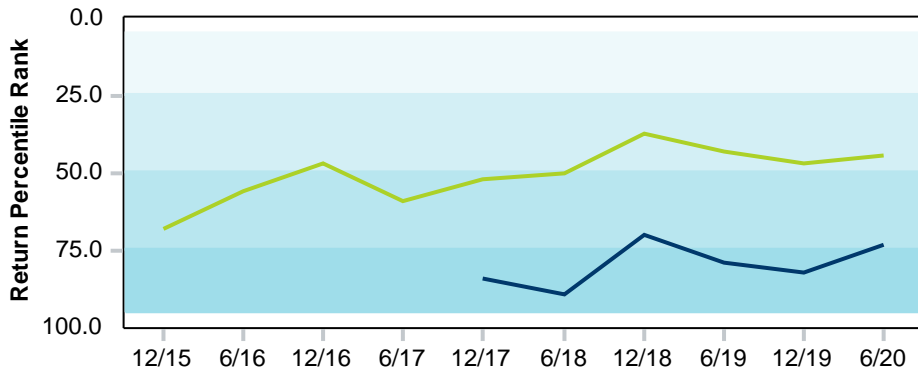
Comparative Performance



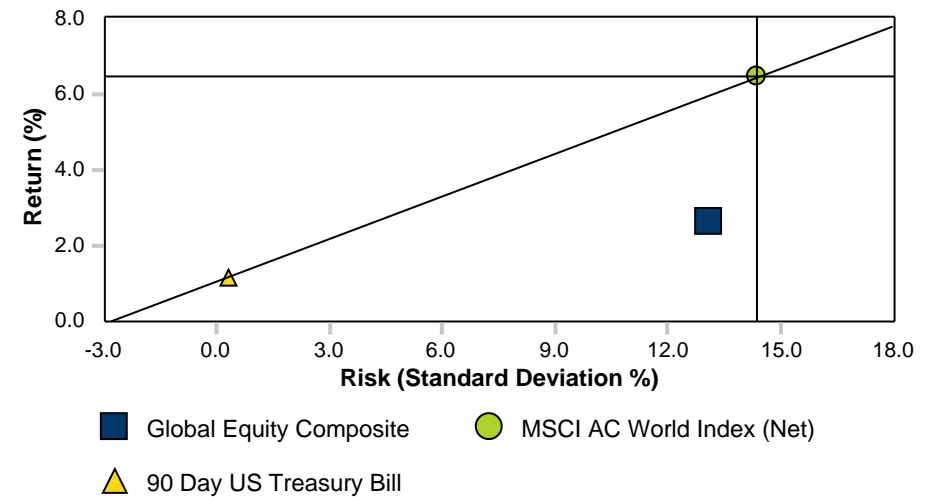
Added Value History



Rolling Percentile Rank: IM Global Equity (SA+CF)



Risk and Return 07/1/15 - 06/30/20

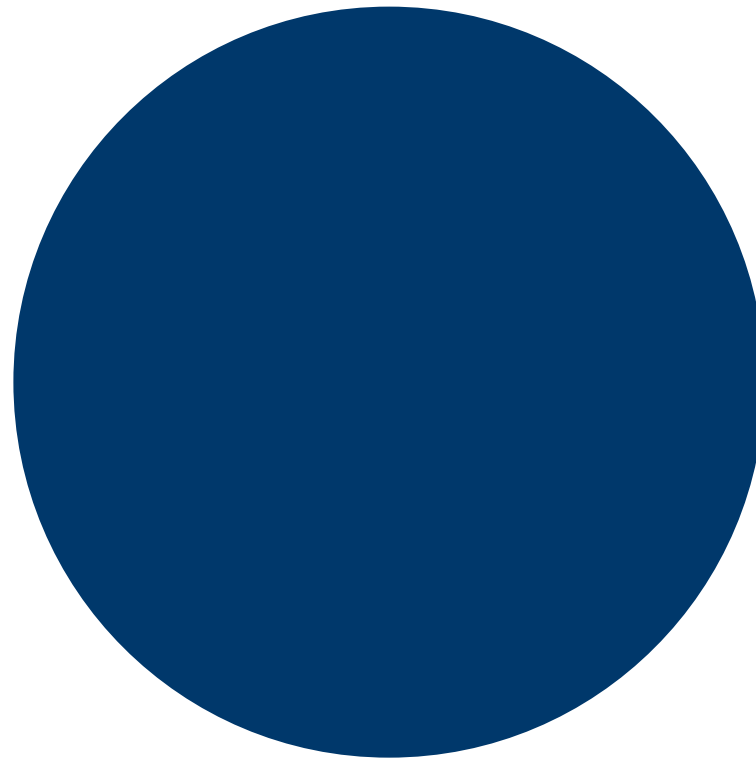


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Global Equity Composite	6	0 (0%)	0 (0%)	2 (33%)	4 (67%)
Benchmark	10	0 (0%)	6 (60%)	4 (40%)	0 (0%)

Asset Allocation By Manager

Global Equity Composite
Periods Ended June 30, 2020

Jun-2020 : 1,121,495

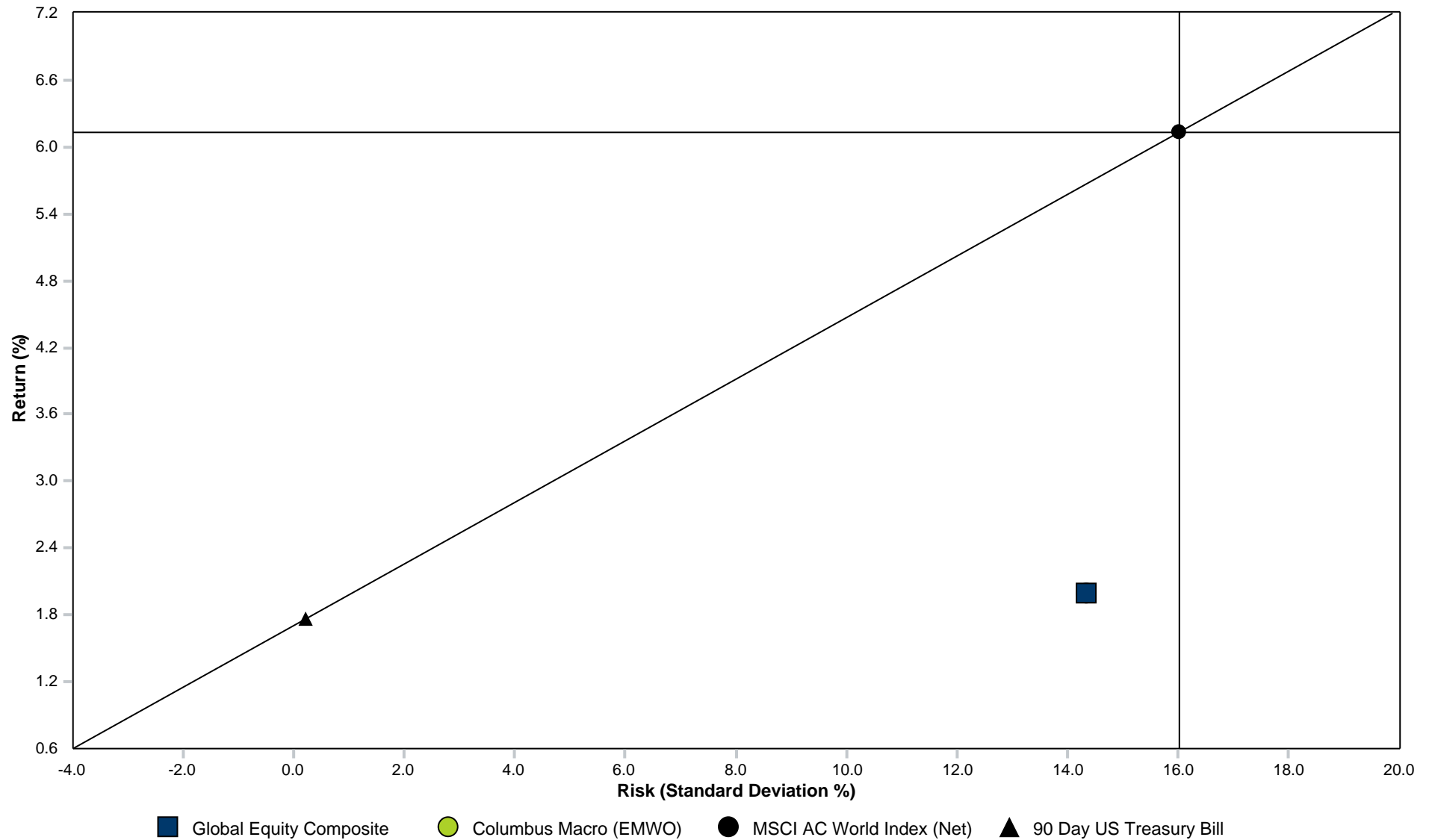


	Market Value \$	Allocation (%)
■ Columbus Macro (EMWO)	1,121,495	100.0

Risk vs. Return

Global Equity Composite

Periods Ended 3 Years Ending June 30, 2020

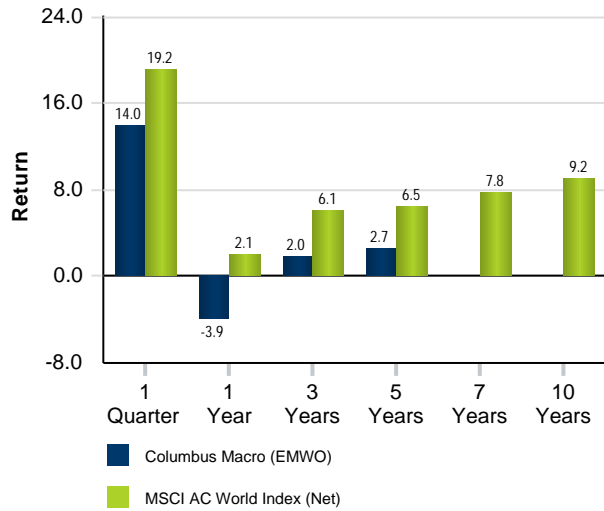


Calculation based on monthly periodicity.

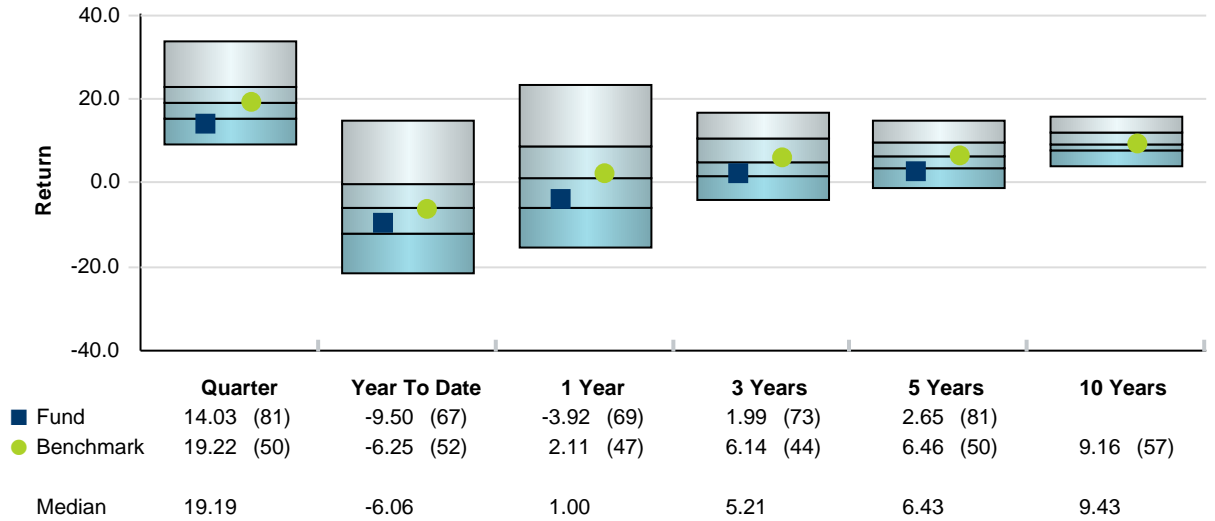
Performance Summary

Columbus Macro (EMWO)
Periods Ended June 30, 2020

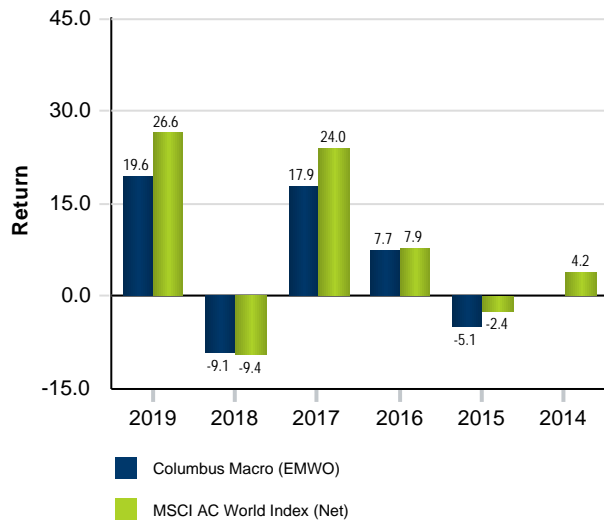
Comparative Performance



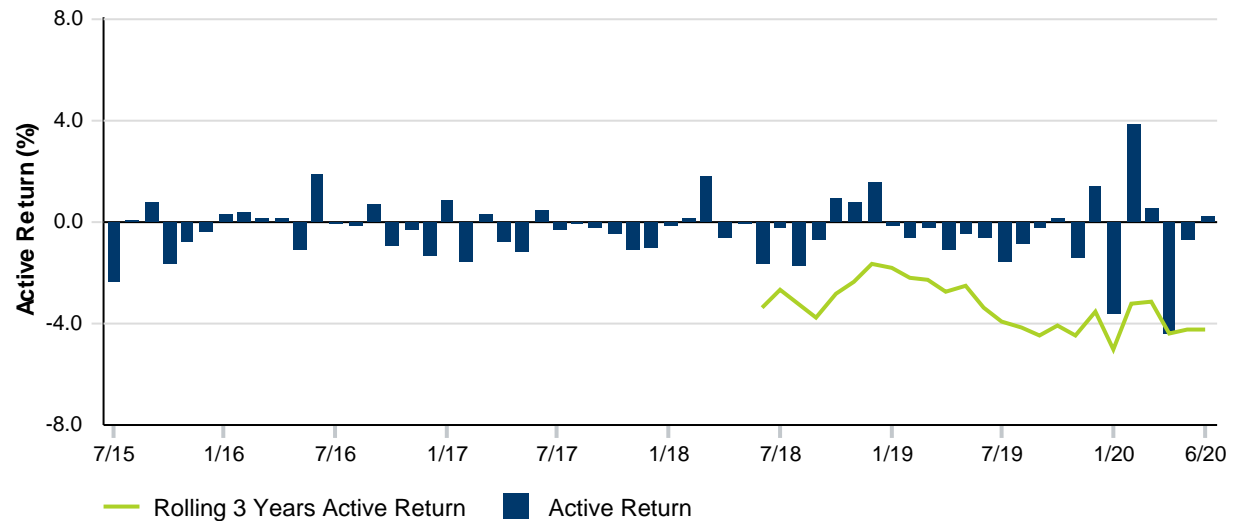
Peer Group Analysis: IM Global Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Columbus Macro (EMWO)

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Columbus Macro (EMWO)</u>	<u>MSCI AC World Index (Net)</u>
Maximum Return	6.35	10.71
Minimum Return	-12.98	-13.50
Return	-3.92	2.11
Cumulative Return	-3.92	2.11
Active Return	-6.60	0.00
Excess Return	-3.92	2.68

Risk Summary Statistics

	<u>Columbus Macro (EMWO)</u>	<u>MSCI AC World Index (Net)</u>
Upside Risk	2.93	3.81
Downside Risk	14.87	15.95
Beta	0.82	1.00

Risk/Return Summary Statistics

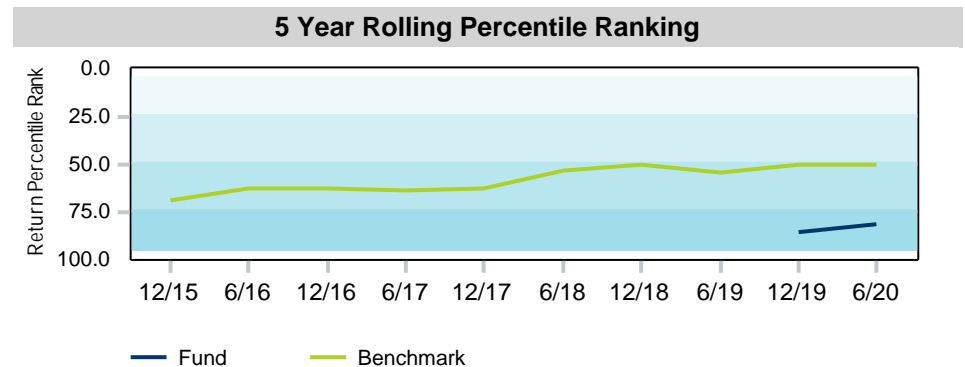
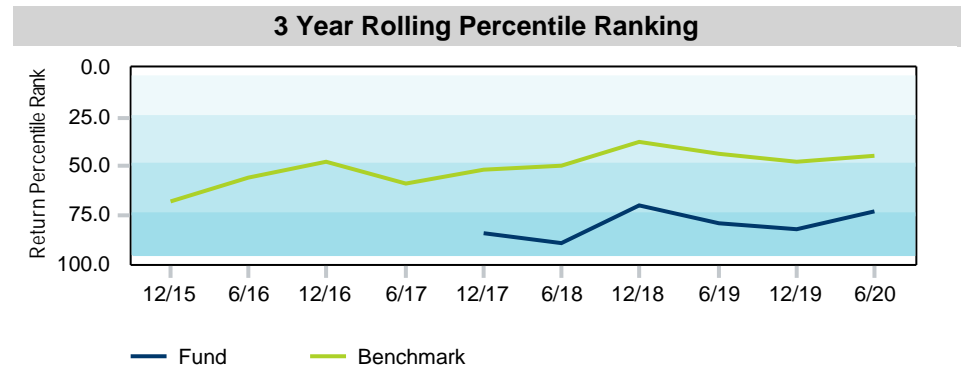
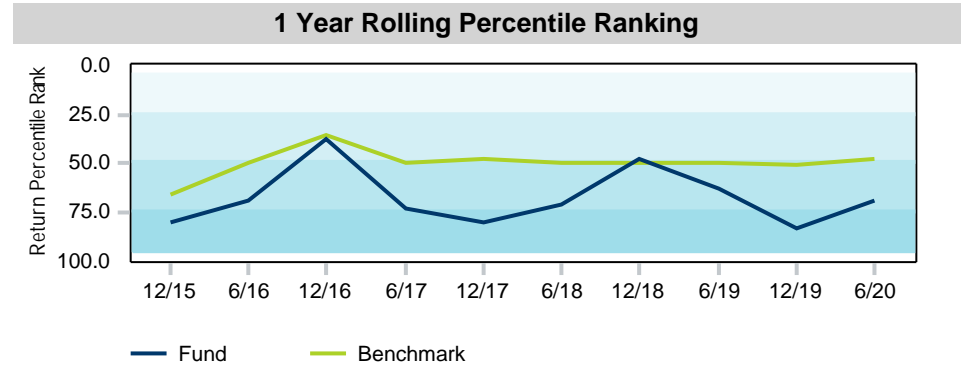
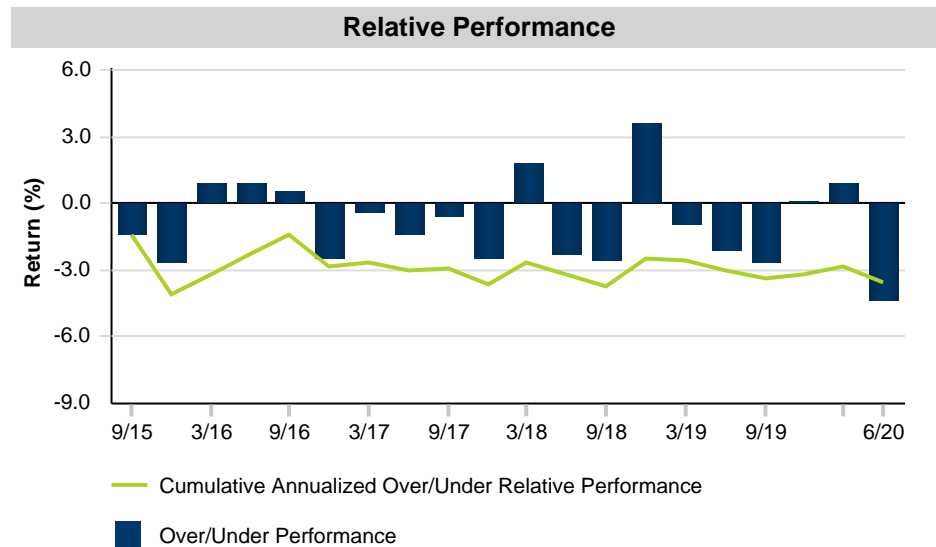
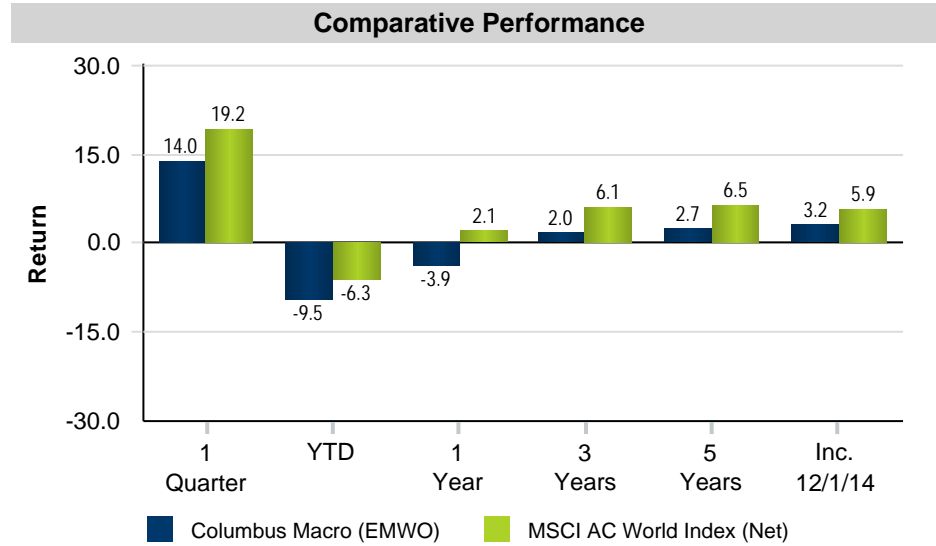
	<u>Columbus Macro (EMWO)</u>	<u>MSCI AC World Index (Net)</u>
Standard Deviation	17.99	20.67
Alpha	-5.67	0.00
Active Return/Risk	-0.37	0.00
Tracking Error	7.17	0.00
Information Ratio	-0.92	
Sharpe Ratio	-0.22	0.13

Correlation Statistics

	<u>Columbus Macro (EMWO)</u>	<u>MSCI AC World Index (Net)</u>
R-Squared	0.88	1.00
Actual Correlation	0.94	1.00

Manager Summary

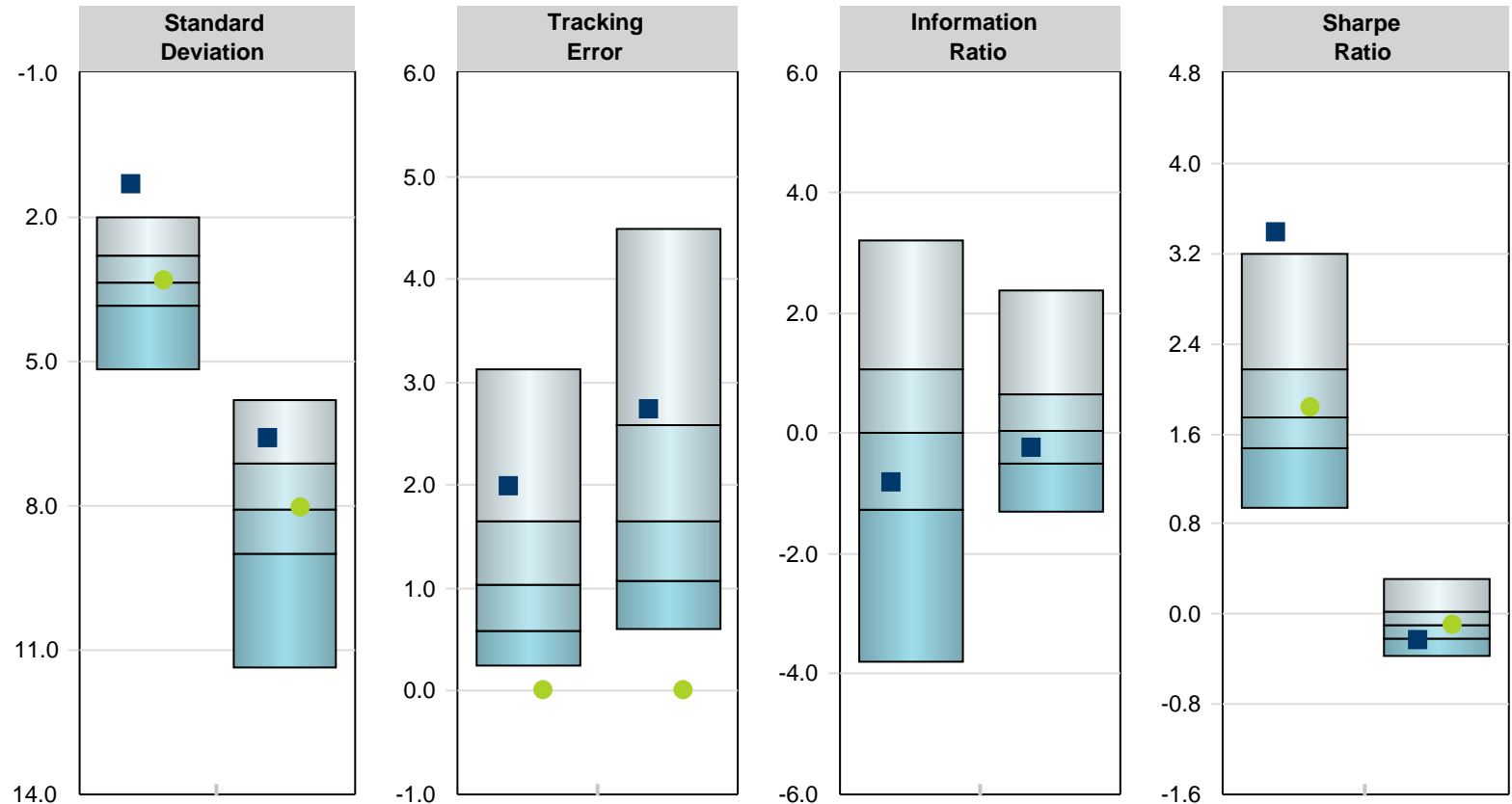
Columbus Macro (EMWO) vs IM Global Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

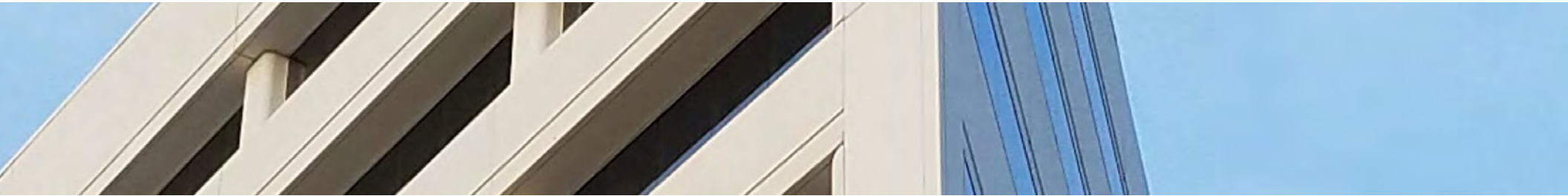
Columbus Macro (EMWO)

Periods Ended June 30, 2020



	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Columbus Macro (EMWO)	1.32 (1)	6.61 (12)	1.99 (17)	2.73 (23)	-0.80 (66)	-0.25 (65)	3.39 (4)	-0.23 (76)
● MSCI AC World Index (Net)	3.31 (46)	8.06 (49)	0.00 (100)	0.00 (100)			1.84 (43)	-0.10 (53)
5th Percentile	1.98	5.78	3.13	4.48	3.22	2.38	3.19	0.31
1st Quartile	2.82	7.13	1.64	2.58	1.08	0.65	2.17	0.02
Median	3.37	8.08	1.04	1.65	0.01	0.04	1.74	-0.09
3rd Quartile	3.82	8.98	0.59	1.08	-1.26	-0.51	1.48	-0.22
95th Percentile	5.15	11.35	0.25	0.60	-3.79	-1.28	0.94	-0.37

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

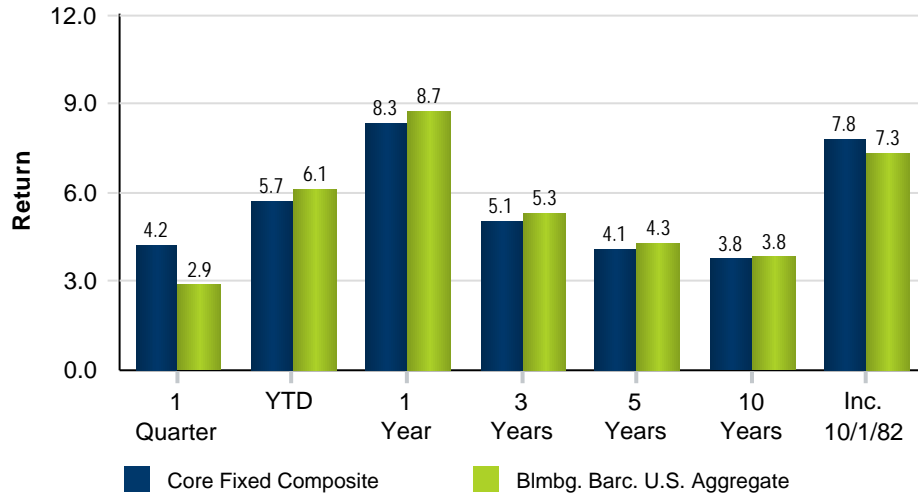


Core Fixed Composite

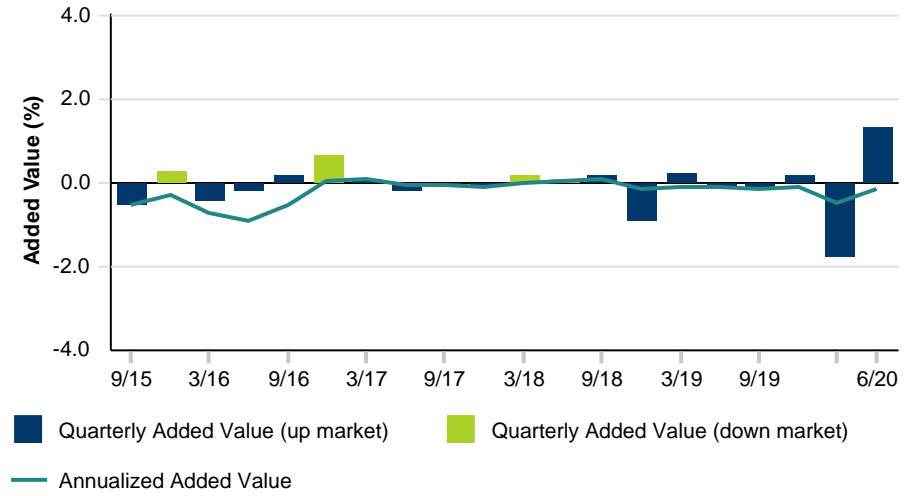
Composite Performance Summary

Core Fixed Composite
Periods Ended June 30, 2020

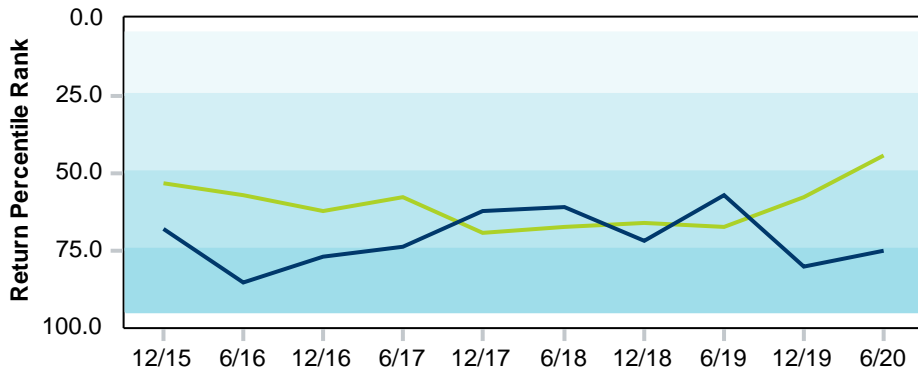
Comparative Performance



Added Value History

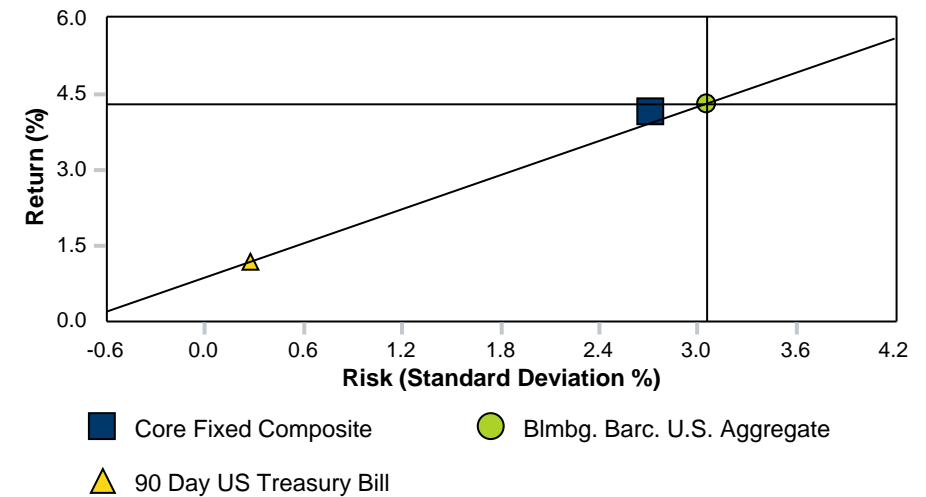


Rolling Percentile Rank: IM U.S. Broad Market Core Fixed Income (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Core Fixed Composite	10	0 (0%)	0 (0%)	7 (70%)	3 (30%)
Benchmark	10	0 (0%)	1 (10%)	9 (90%)	0 (0%)

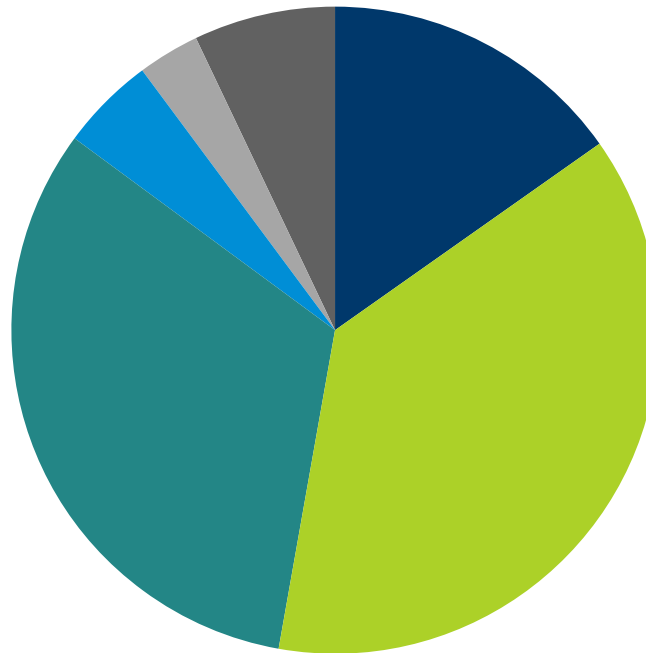
Risk and Return 07/1/15 - 06/30/20



Asset Allocation By Manager

Core Fixed Composite
 Periods Ended June 30, 2020

Jun-2020 : 90,783,112

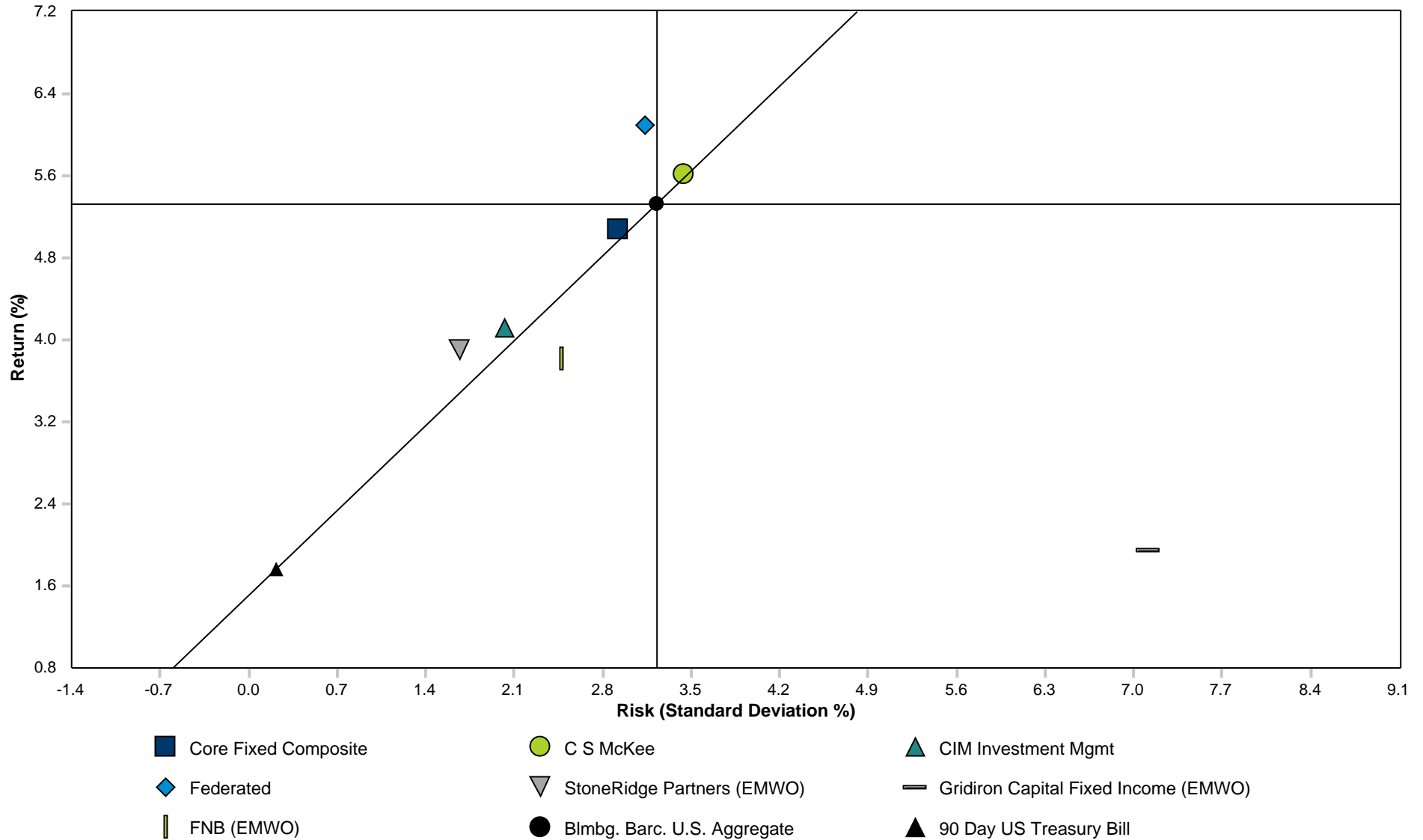


	Market Value \$	Allocation (%)
■ CIM Investment Mgmt	13,816,745	15.2
■ C S McKee	34,108,211	37.6
■ Federated	29,339,966	32.3
■ Gridiron Capital Fixed Income (EMWO)	4,294,677	4.7
■ FNB (EMWO)	2,802,149	3.1
■ StoneRidge Partners (EMWO)	6,421,363	7.1

Risk vs. Return

Core Fixed Composite

Periods Ended 3 Years Ending June 30, 2020



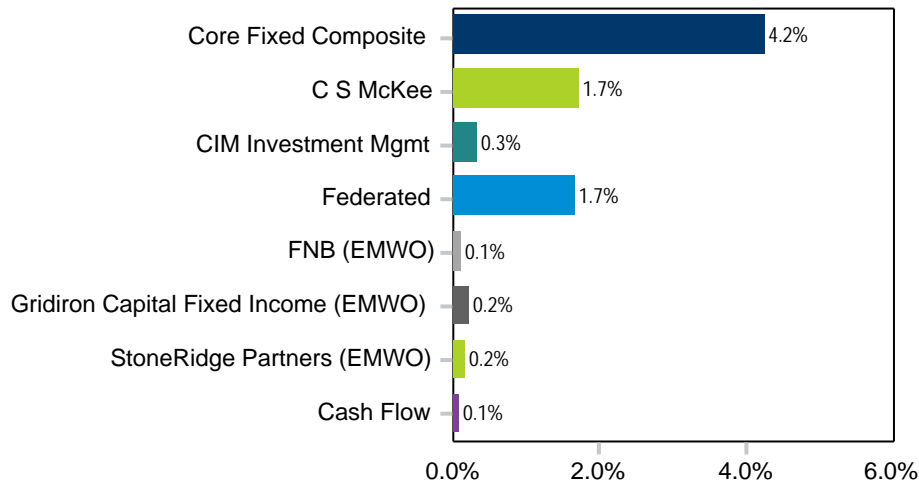
Calculation based on monthly periodicity.

Return and Risk Contribution

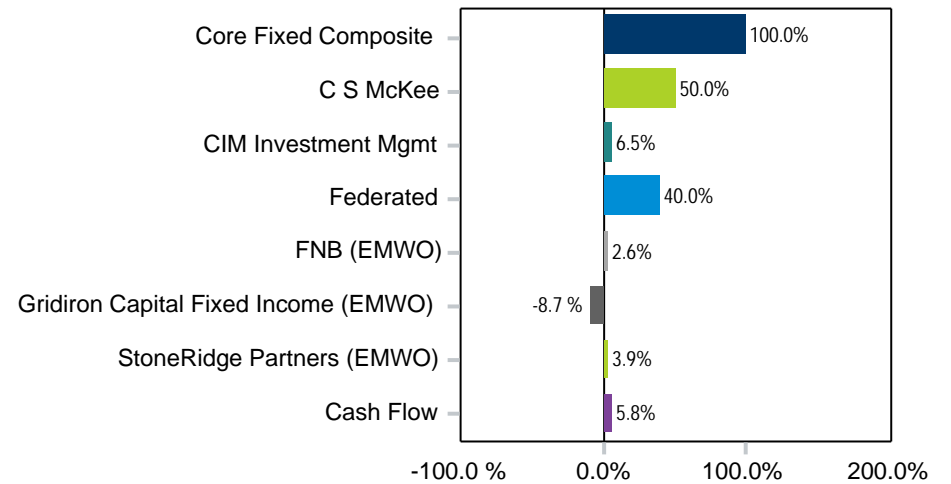
Core Fixed Composite

Periods Ended 1 Quarter June 30, 2020

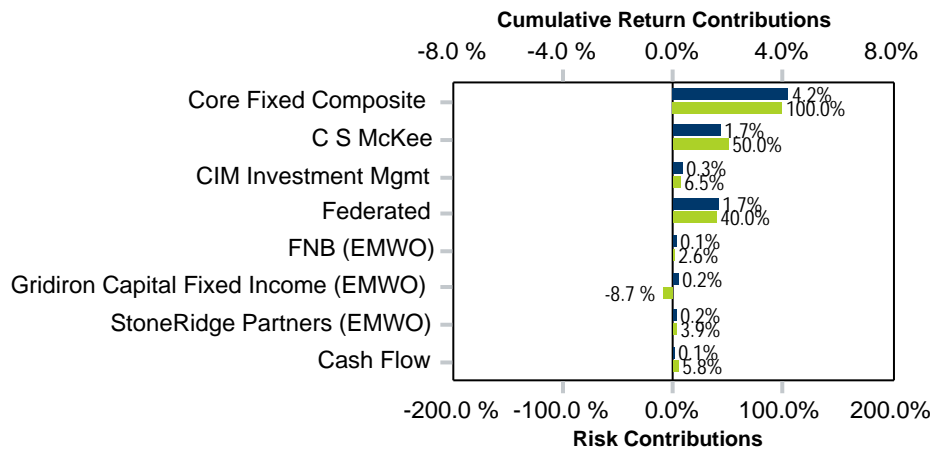
Cumulative Return Contributions



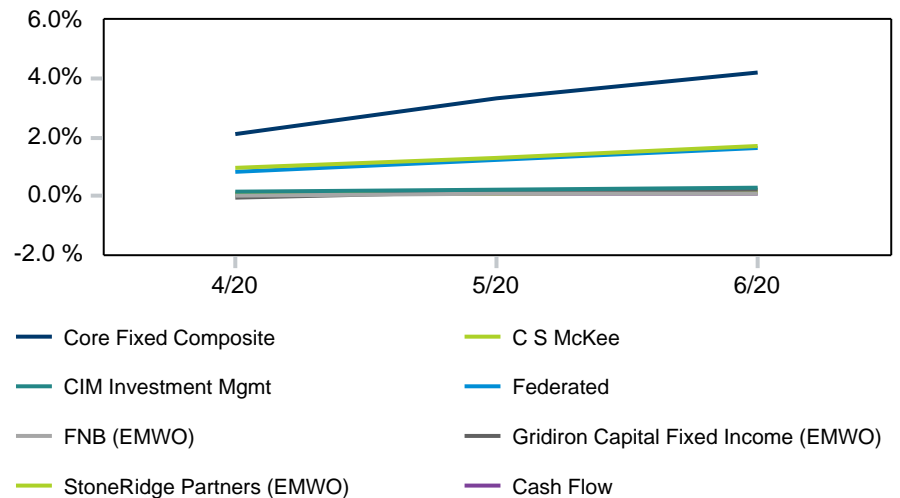
Risk Contributions



Cumulative Return and Risk Contributions



Cumulative Return Contributions History



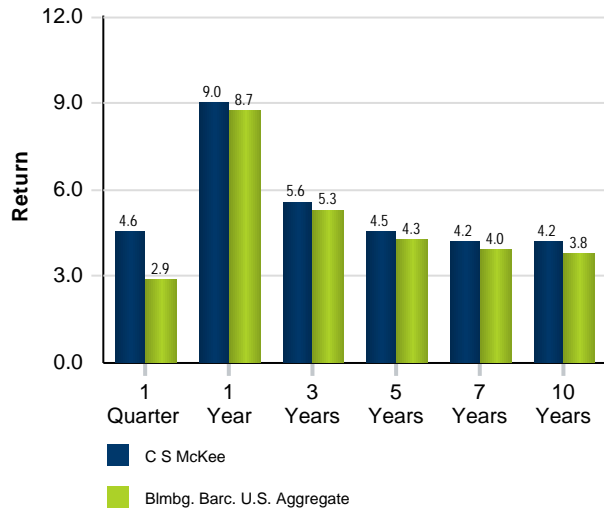
■ Cumulative Return Contributions ■ Risk Contributions

Performance Summary

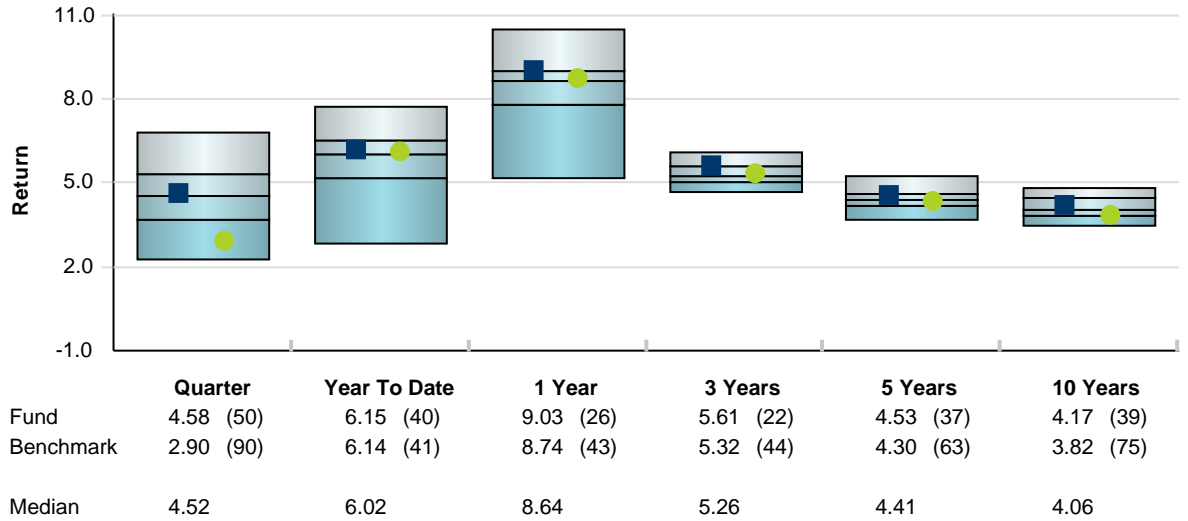
C S McKee

Periods Ended June 30, 2020

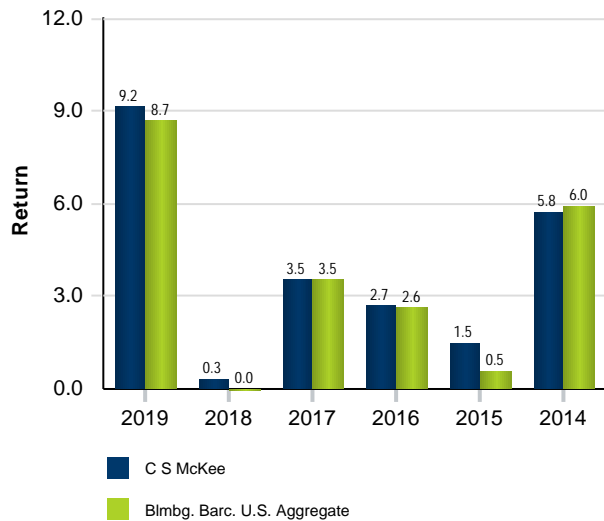
Comparative Performance



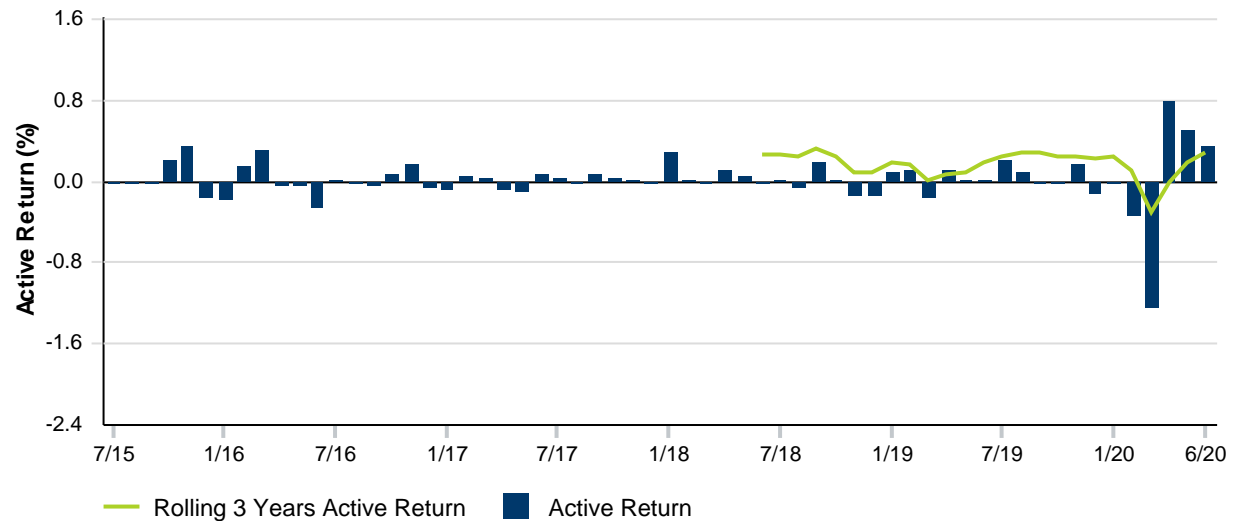
Peer Group Analysis: IM U.S. Broad Market Core Fixed Income (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

C S McKee

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>C S McKee</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
Maximum Return	2.67	2.59
Minimum Return	-1.82	-0.59
Return	9.03	8.74
Cumulative Return	9.03	8.74
Active Return	0.30	0.00
Excess Return	7.15	6.85

Risk Summary Statistics

	<u>C S McKee</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
Upside Risk	1.34	1.21
Downside Risk	1.92	0.80
Beta	1.16	1.00

Risk/Return Summary Statistics

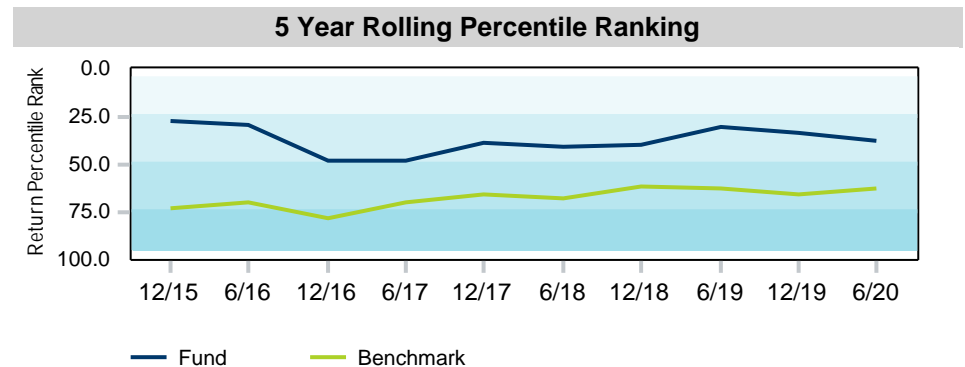
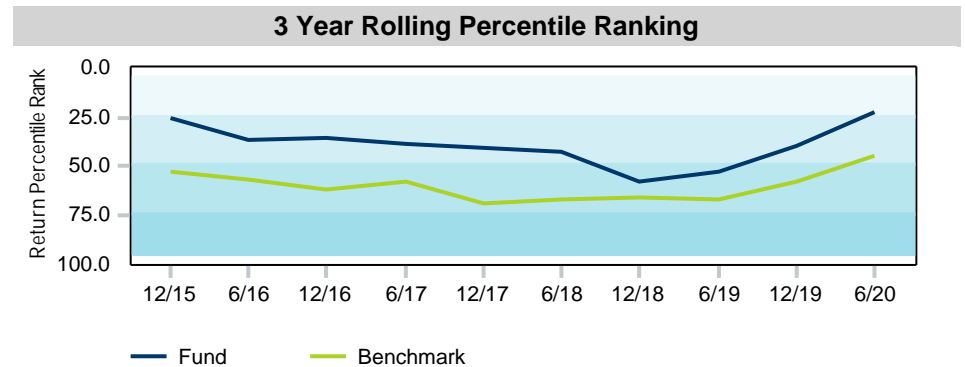
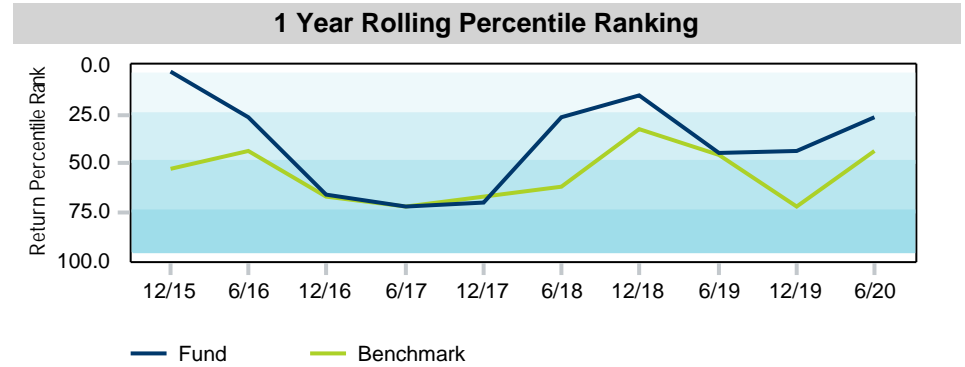
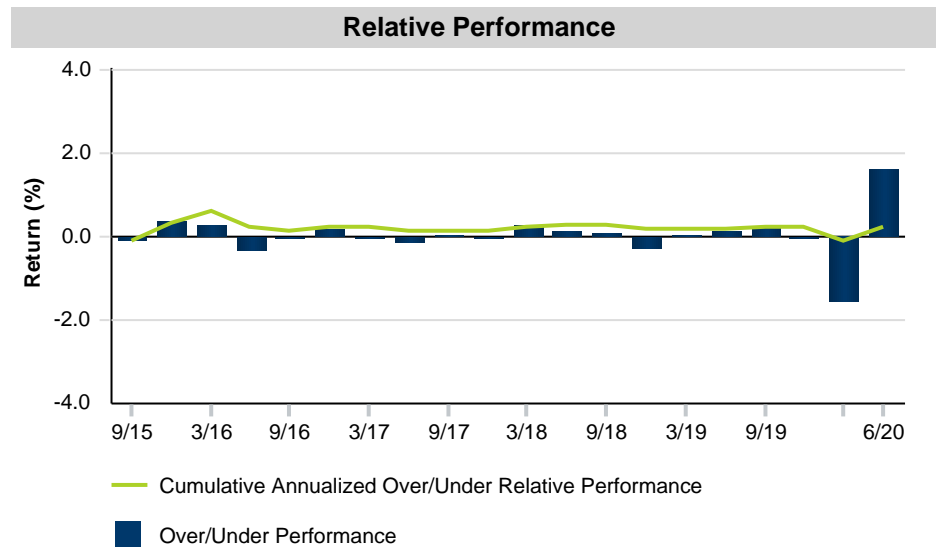
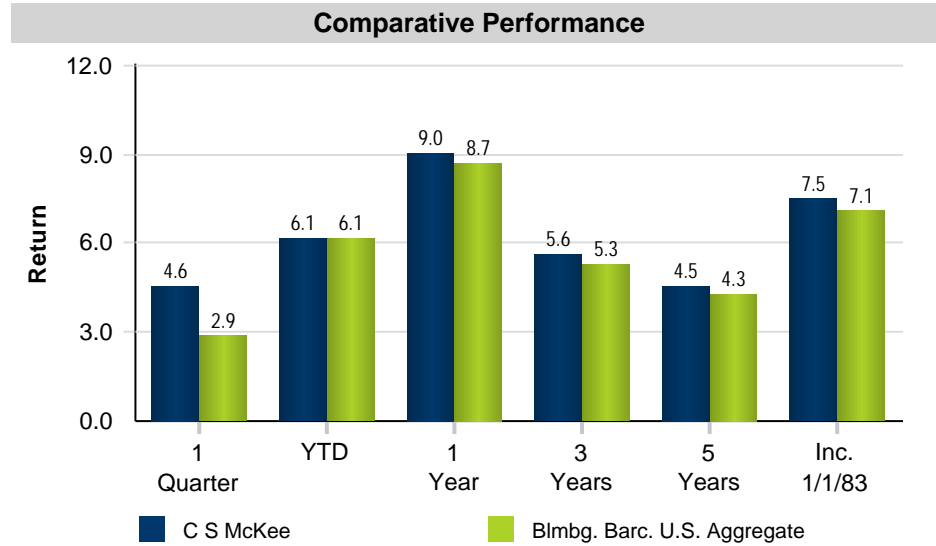
	<u>C S McKee</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
Standard Deviation	4.35	3.50
Alpha	-1.07	0.00
Active Return/Risk	0.07	0.00
Tracking Error	1.65	0.00
Information Ratio	0.18	
Sharpe Ratio	1.59	1.91

Correlation Statistics

	<u>C S McKee</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
R-Squared	0.87	1.00
Actual Correlation	0.93	1.00

Manager Summary

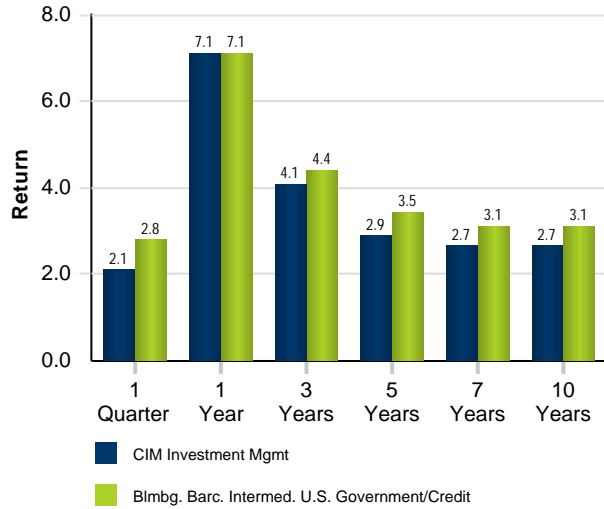
C S McKee vs IM U.S. Broad Market Core Fixed Income (SA+CF)
 Periods Ended June 30, 2020



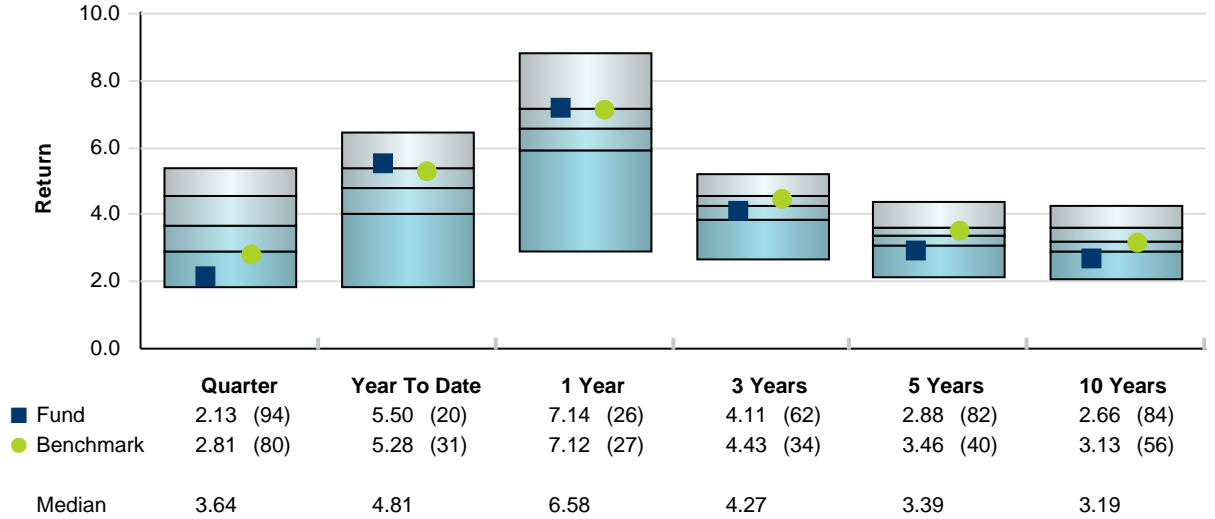
Performance Summary

CIM Investment Mgmt
Periods Ended June 30, 2020

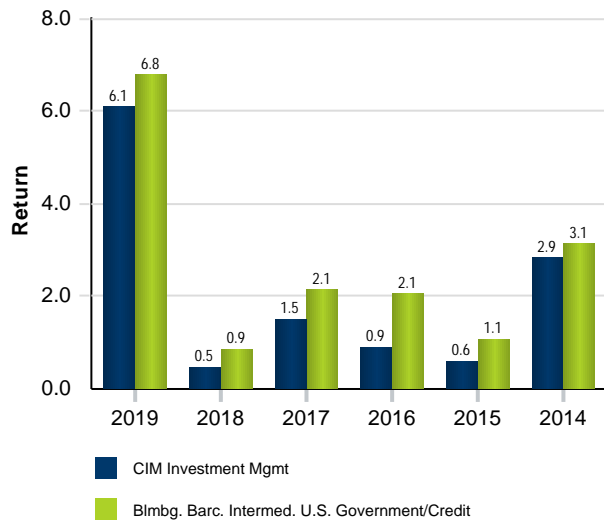
Comparative Performance



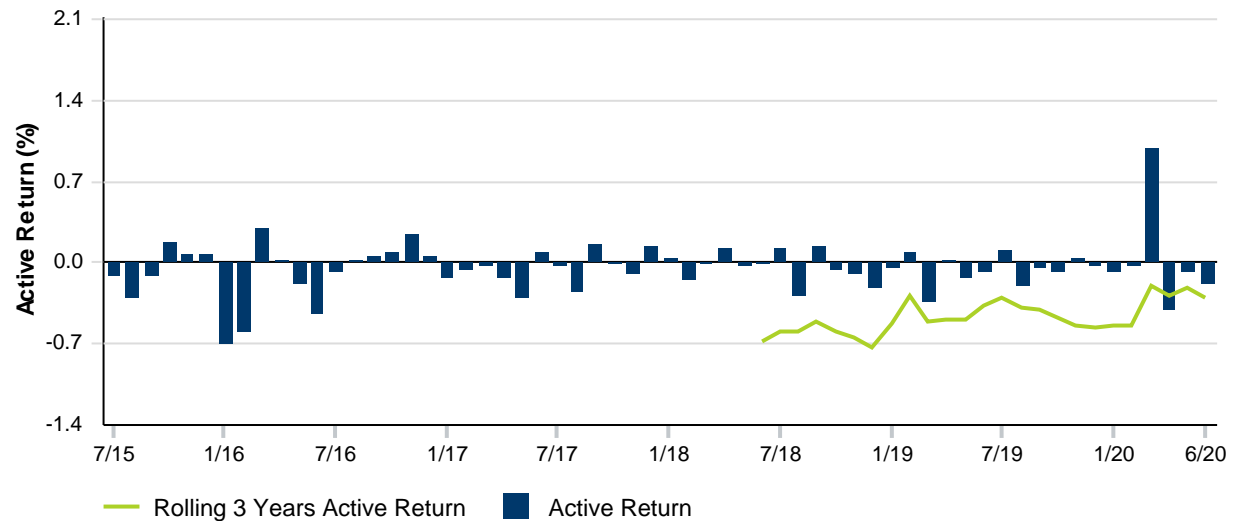
Peer Group Analysis: IM U.S. Intermediate Duration (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

CIM Investment Mgmt

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>CIM Investment Mgmt</u>	<u>Blmbg. Barc. Intermed. U.S. Government/Credit</u>
Maximum Return	1.57	1.77
Minimum Return	-0.40	-0.44
Return	7.14	7.12
Cumulative Return	7.14	7.12
Active Return	0.01	0.00
Excess Return	5.32	5.31

Risk Summary Statistics

	<u>CIM Investment Mgmt</u>	<u>Blmbg. Barc. Intermed. U.S. Government/Credit</u>
Upside Risk	0.83	0.92
Downside Risk	0.41	0.59
Beta	0.74	1.00

Risk/Return Summary Statistics

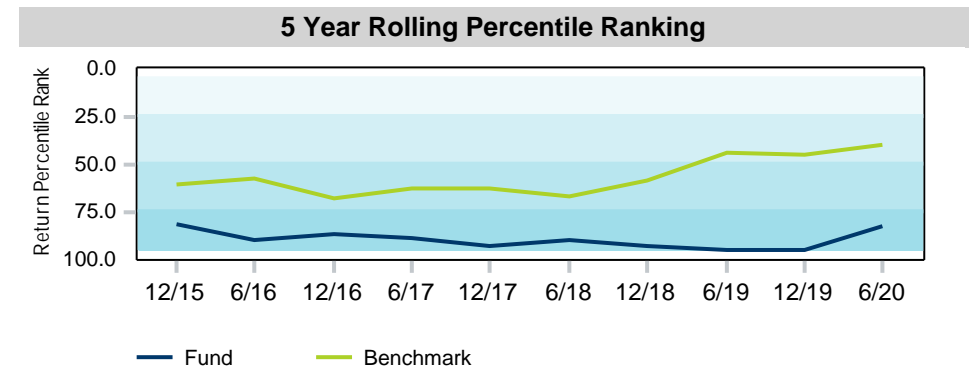
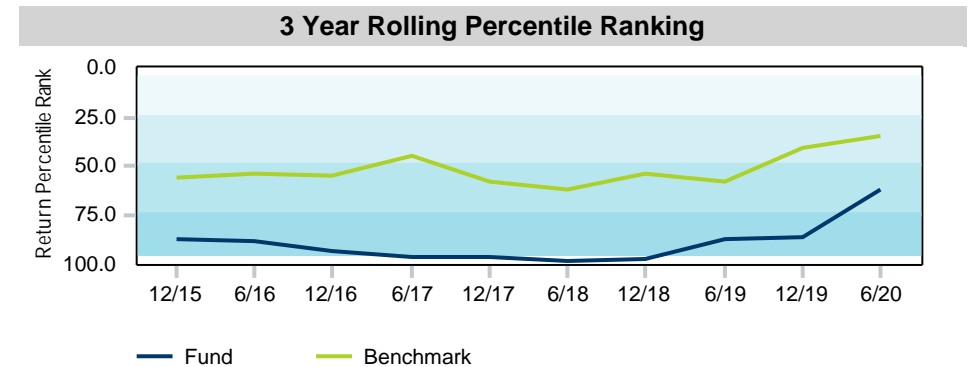
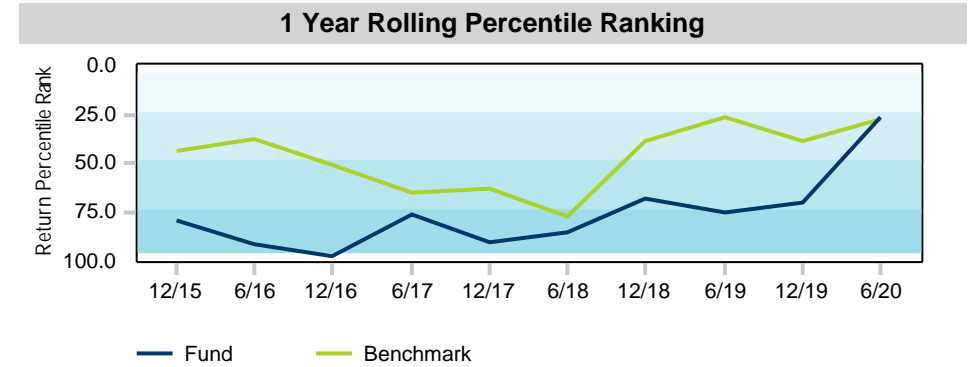
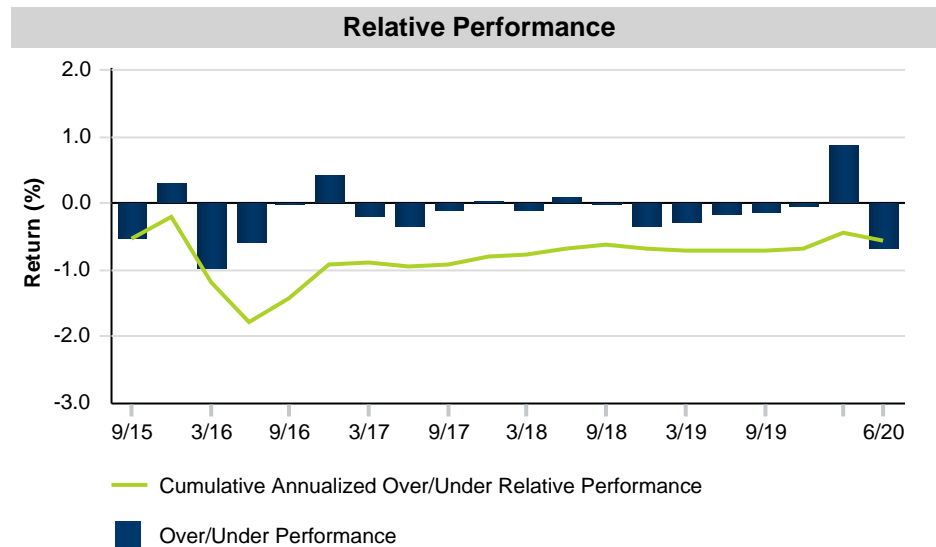
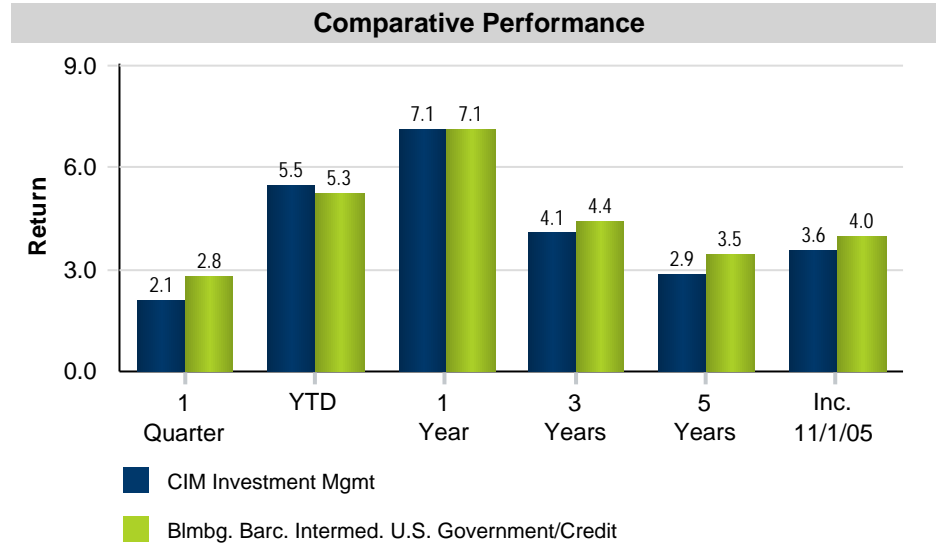
	<u>CIM Investment Mgmt</u>	<u>Blmbg. Barc. Intermed. U.S. Government/Credit</u>
Standard Deviation	2.10	2.57
Alpha	1.85	0.00
Active Return/Risk	0.01	0.00
Tracking Error	1.12	0.00
Information Ratio	0.01	
Sharpe Ratio	2.49	1.97

Correlation Statistics

	<u>CIM Investment Mgmt</u>	<u>Blmbg. Barc. Intermed. U.S. Government/Credit</u>
R-Squared	0.82	1.00
Actual Correlation	0.90	1.00

Manager Summary

CIM Investment Mgmt vs IM U.S. Intermediate Duration (SA+CF)
 Periods Ended June 30, 2020

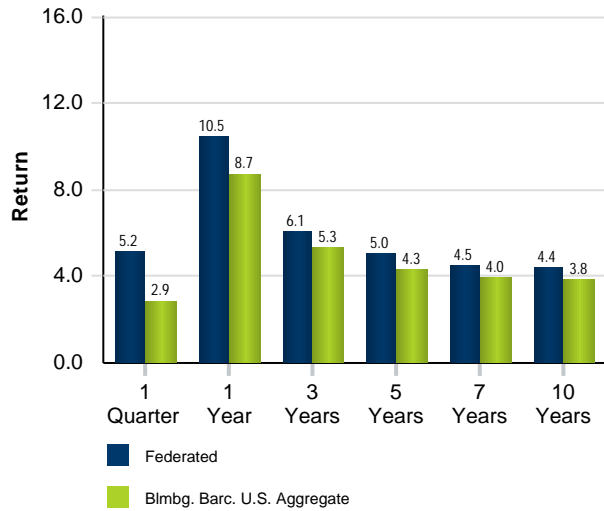


Performance Summary

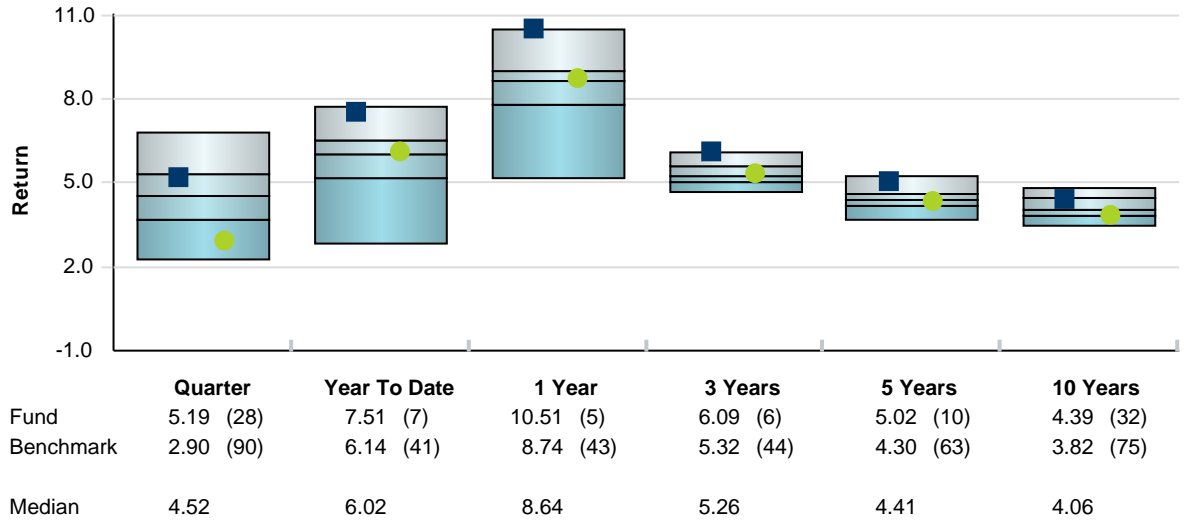
Federated

Periods Ended June 30, 2020

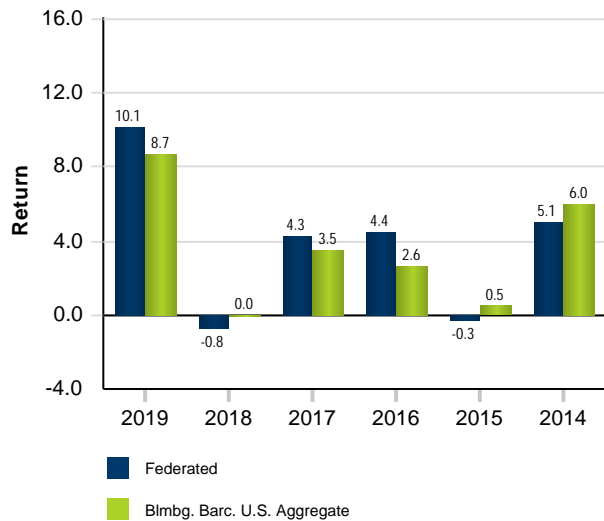
Comparative Performance



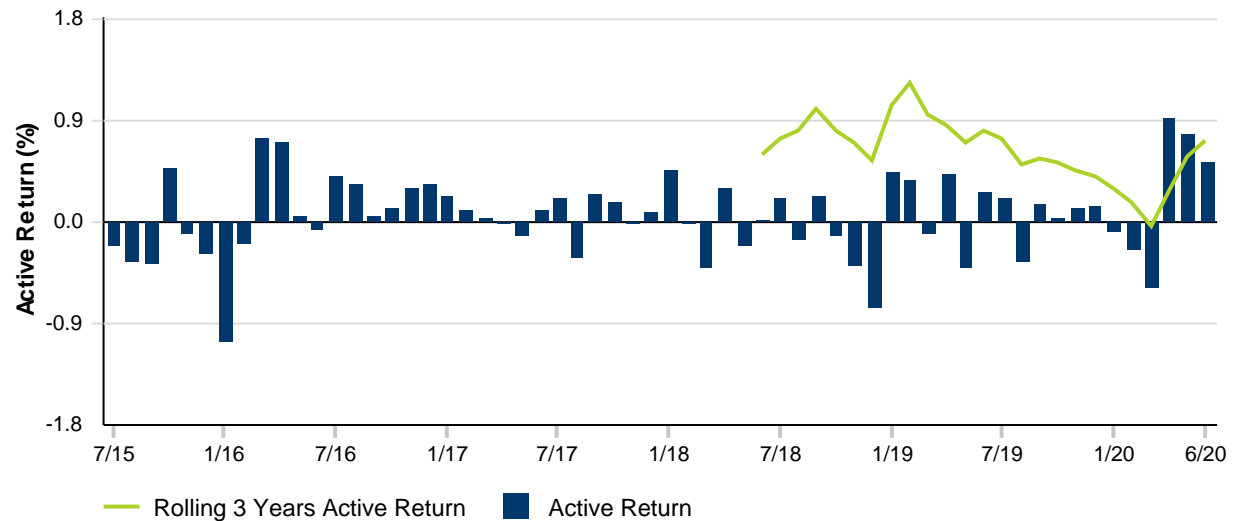
Peer Group Analysis: IM U.S. Broad Market Core Fixed Income (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Federated

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Federated</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
Maximum Return	2.70	2.59
Minimum Return	-1.17	-0.59
Return	10.51	8.74
Cumulative Return	10.51	8.74
Active Return	1.64	0.00
Excess Return	8.49	6.85

Risk Summary Statistics

	<u>Federated</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
Upside Risk	1.33	1.21
Downside Risk	1.23	0.80
Beta	1.00	1.00

Risk/Return Summary Statistics

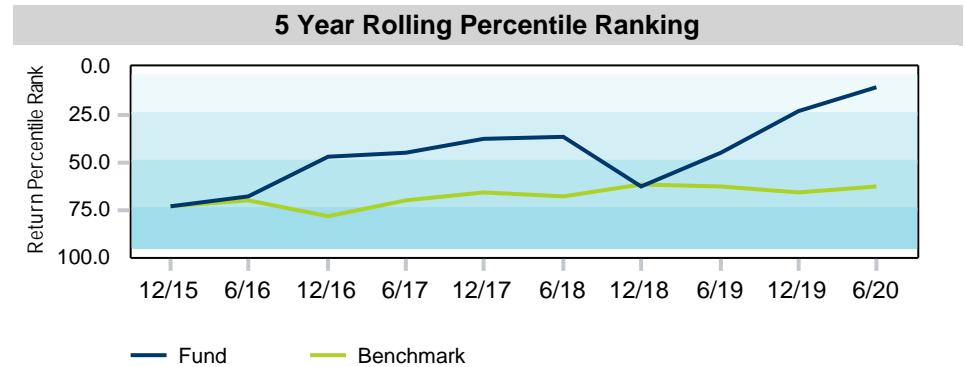
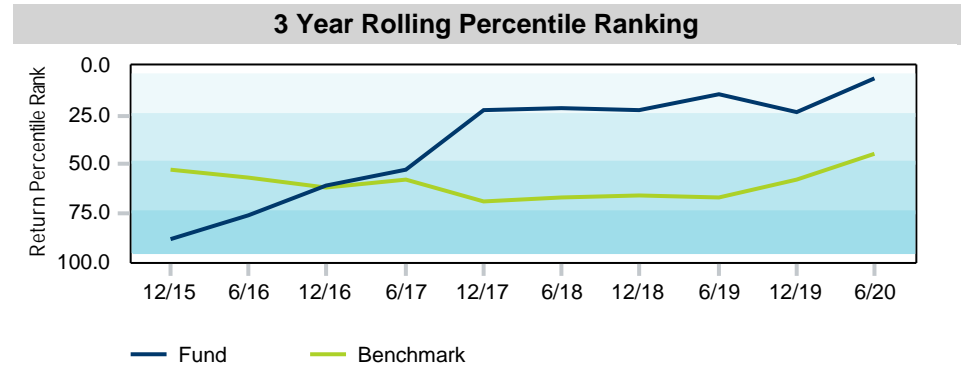
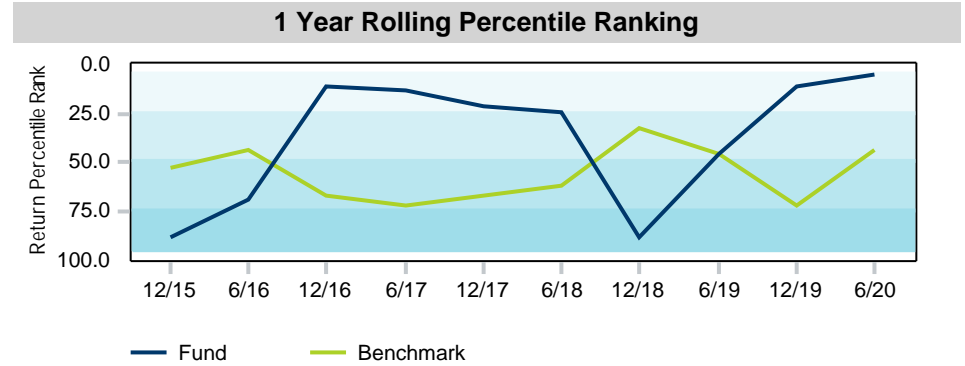
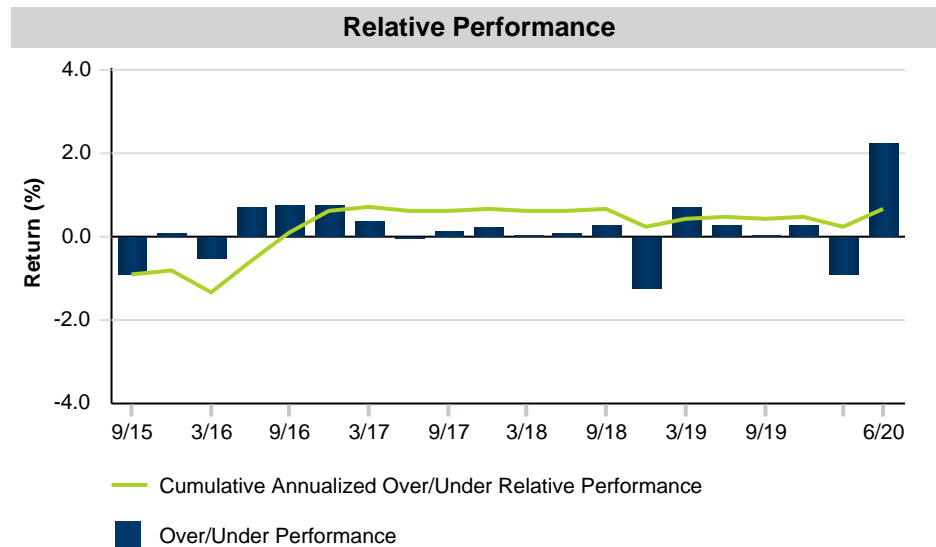
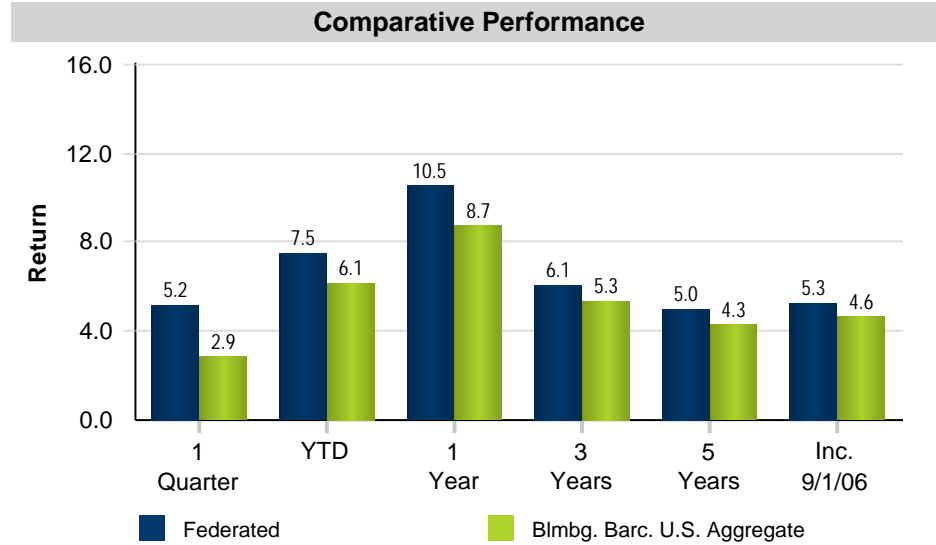
	<u>Federated</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
Standard Deviation	3.78	3.50
Alpha	1.69	0.00
Active Return/Risk	0.43	0.00
Tracking Error	1.47	0.00
Information Ratio	1.11	
Sharpe Ratio	2.15	1.91

Correlation Statistics

	<u>Federated</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
R-Squared	0.85	1.00
Actual Correlation	0.92	1.00

Manager Summary

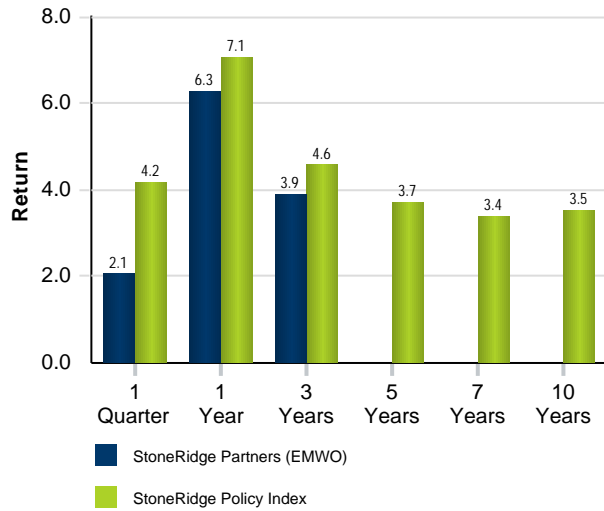
Federated vs IM U.S. Broad Market Core Fixed Income (SA+CF)
 Periods Ended June 30, 2020



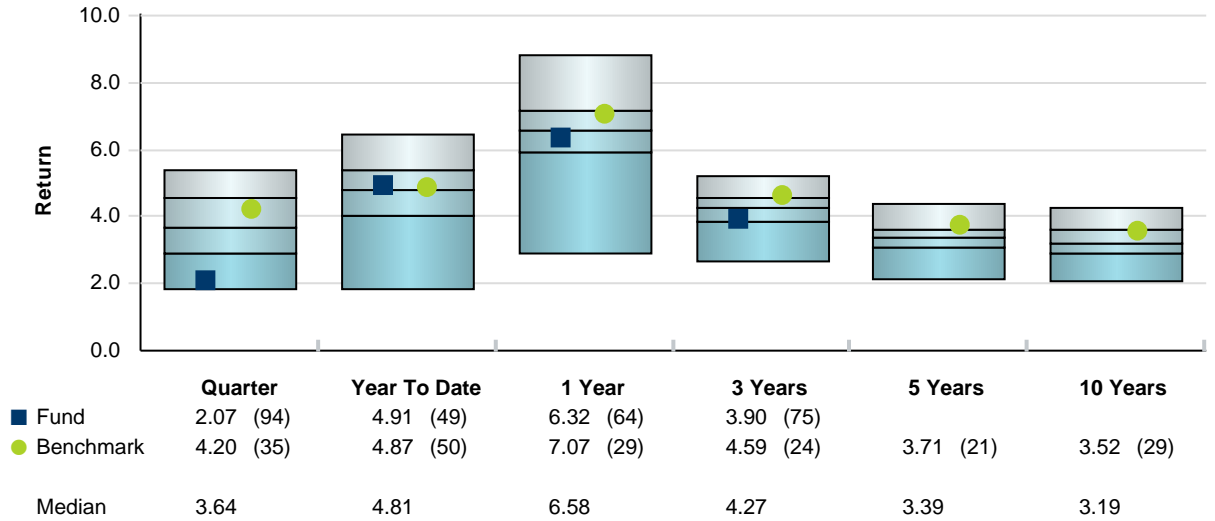
Performance Summary

StoneRidge Partners (EMWO)
 Periods Ended June 30, 2020

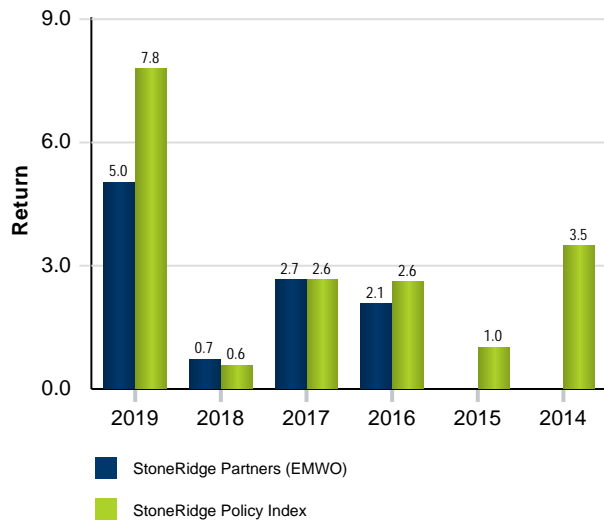
Comparative Performance



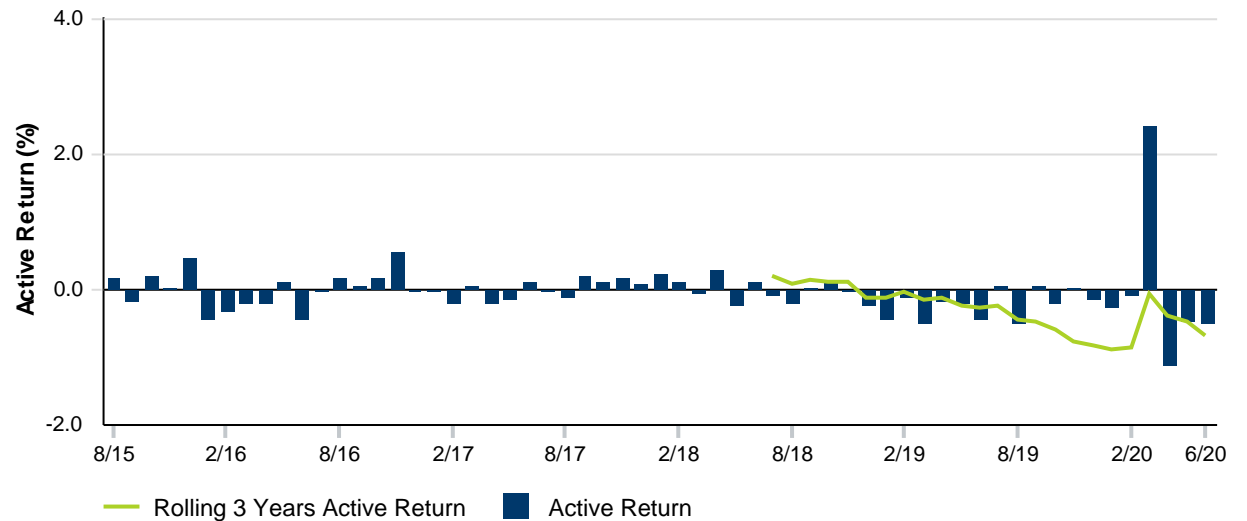
Peer Group Analysis: IM U.S. Intermediate Duration (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

StoneRidge Partners (EMWO)

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>StoneRidge Partners (EMWO)</u>	<u>StoneRidge Policy Index</u>
Maximum Return	1.26	2.18
Minimum Return	-0.26	-2.01
Return	6.32	7.07
Cumulative Return	6.32	7.07
Active Return	-0.76	0.00
Excess Return	4.54	5.30

Risk Summary Statistics

	<u>StoneRidge Partners (EMWO)</u>	<u>StoneRidge Policy Index</u>
Upside Risk	0.72	1.07
Downside Risk	0.27	2.03
Beta	0.33	1.00

Risk/Return Summary Statistics

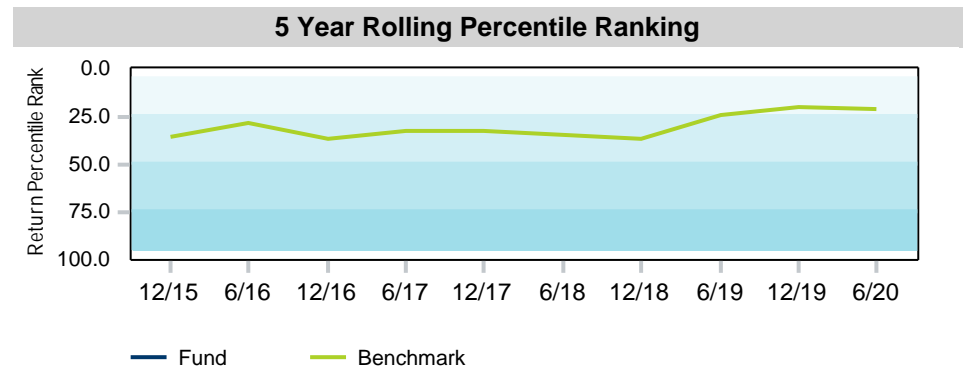
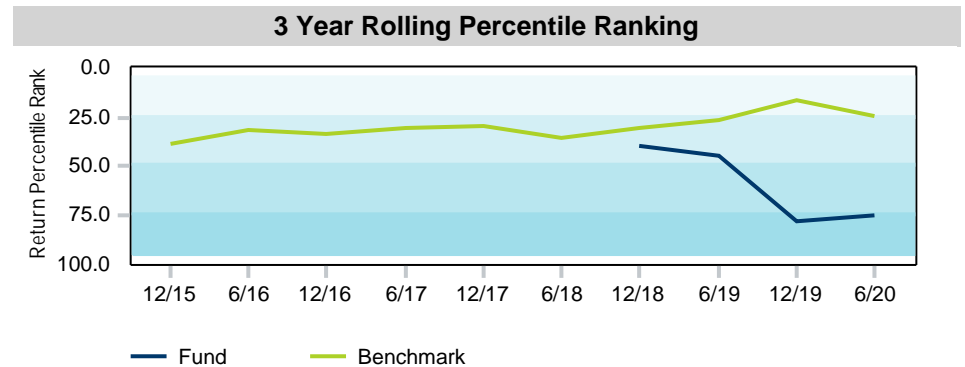
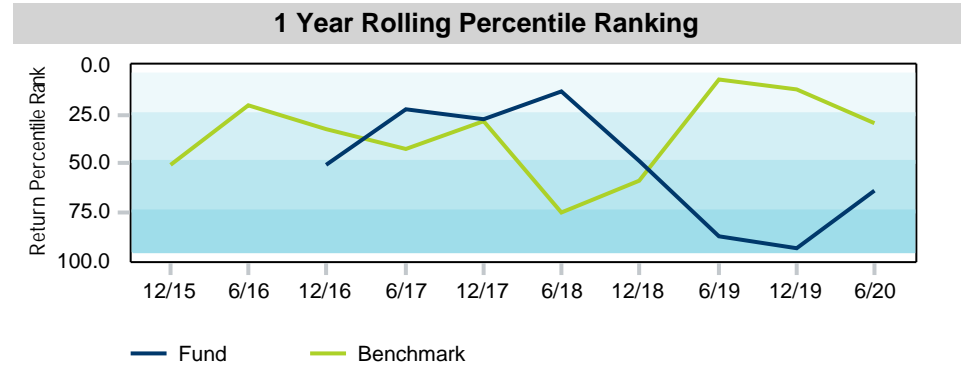
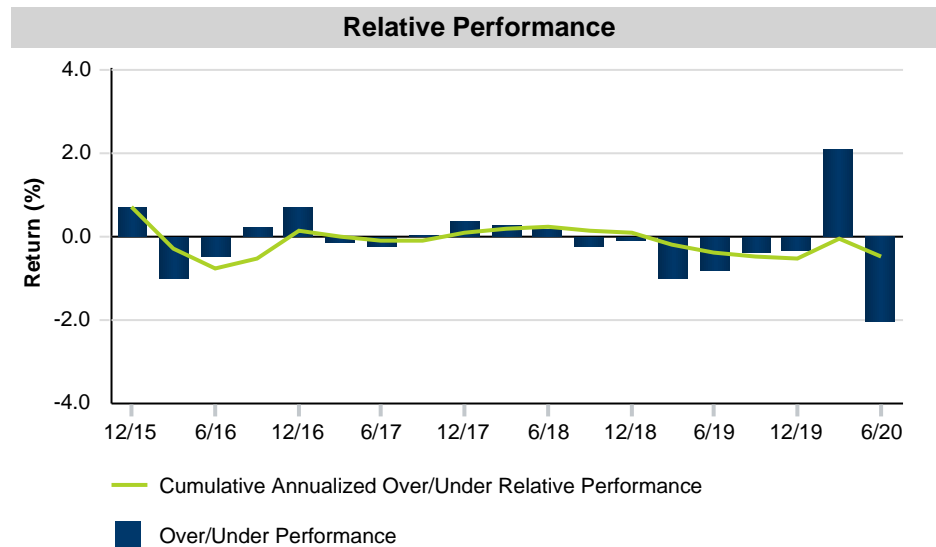
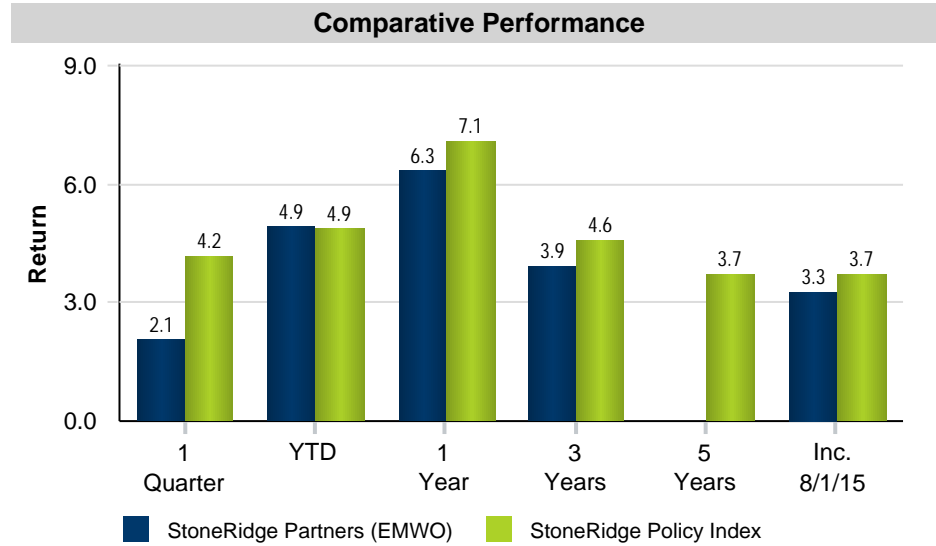
	<u>StoneRidge Partners (EMWO)</u>	<u>StoneRidge Policy Index</u>
Standard Deviation	1.78	3.72
Alpha	3.95	0.00
Active Return/Risk	-0.43	0.00
Tracking Error	2.80	0.00
Information Ratio	-0.27	
Sharpe Ratio	2.46	1.35

Correlation Statistics

	<u>StoneRidge Partners (EMWO)</u>	<u>StoneRidge Policy Index</u>
R-Squared	0.48	1.00
Actual Correlation	0.69	1.00

Manager Summary

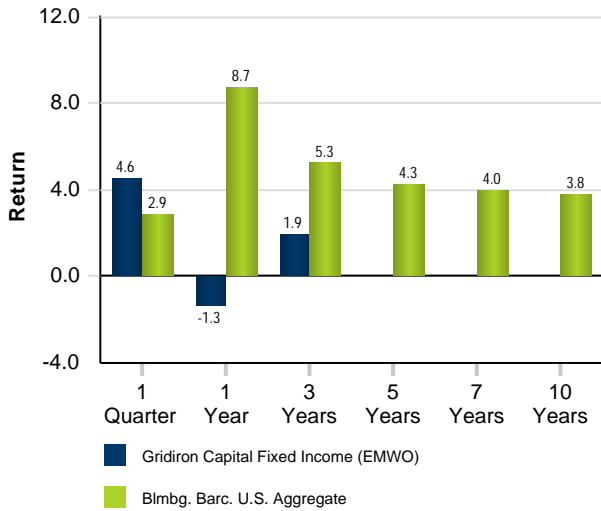
StoneRidge Partners (EMWO) vs IM U.S. Intermediate Duration (SA+CF)
 Periods Ended June 30, 2020



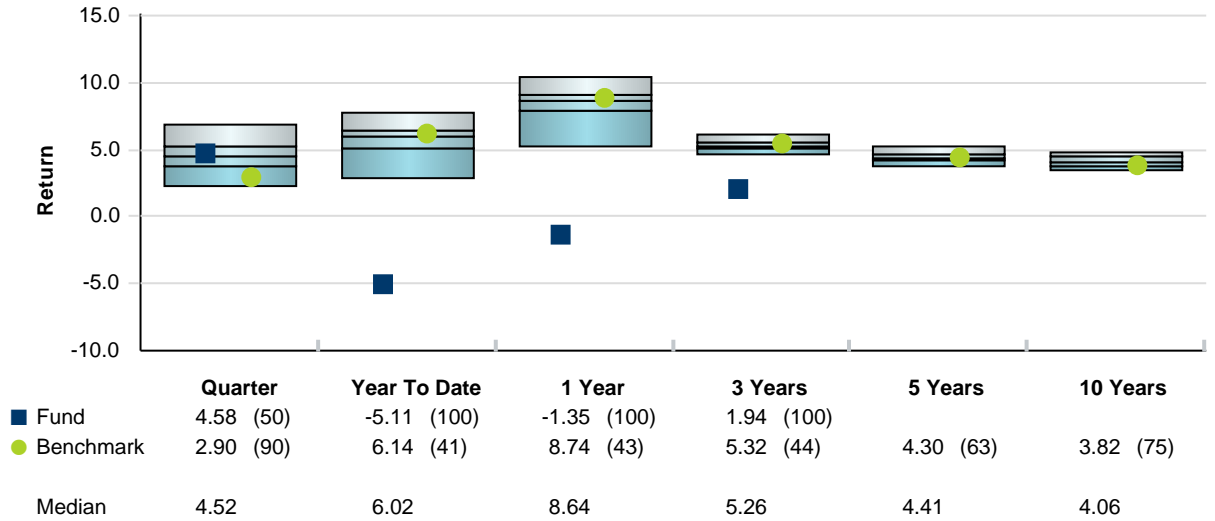
Performance Summary

Gridiron Capital Fixed Income (EMWO)
 Periods Ended June 30, 2020

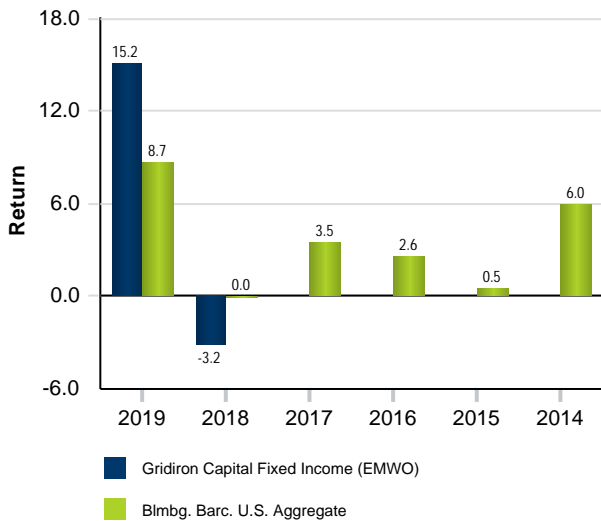
Comparative Performance



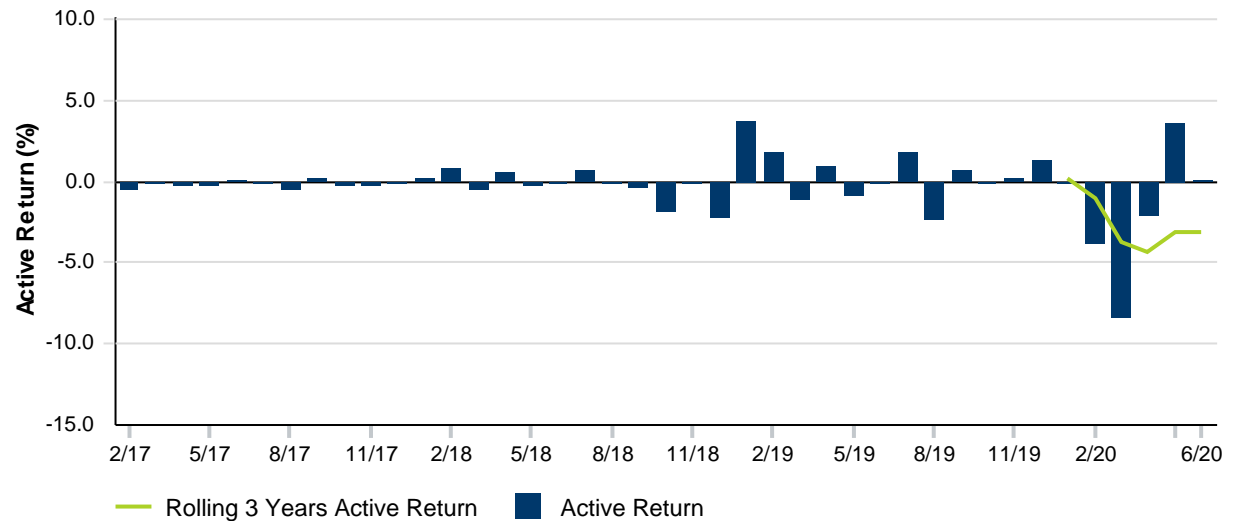
Peer Group Analysis: IM U.S. Broad Market Core Fixed Income (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Gridiron Capital Fixed Income (EMWO)
 Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Gridiron Capital Fixed Income (EMWO)</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
Maximum Return	4.13	2.59
Minimum Return	-8.99	-0.59
Return	-1.35	8.74
Cumulative Return	-1.35	8.74
Active Return	-9.24	0.00
Excess Return	-2.39	6.85

Risk Summary Statistics

	<u>Gridiron Capital Fixed Income (EMWO)</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
Upside Risk	1.49	1.21
Downside Risk	9.24	0.80
Beta	0.68	1.00

Risk/Return Summary Statistics

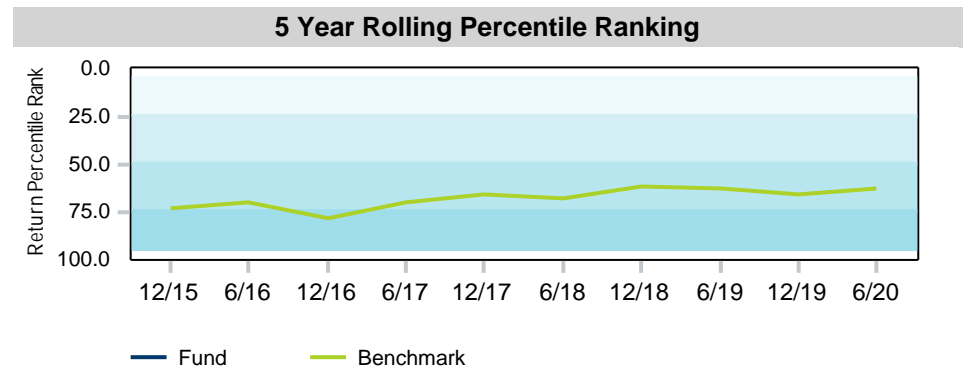
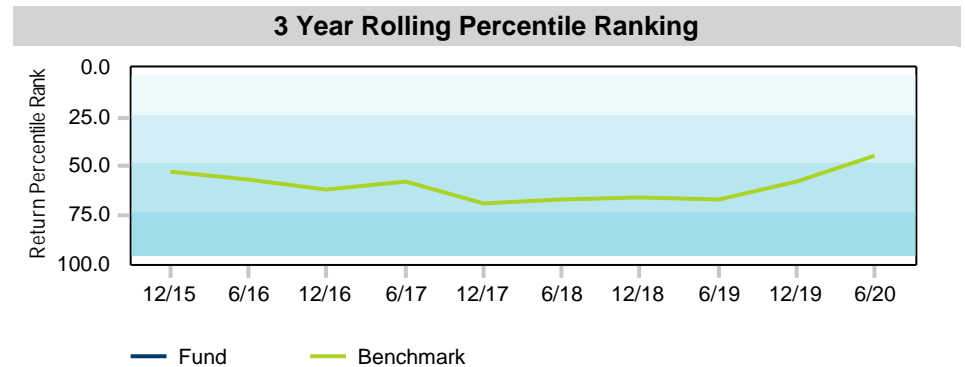
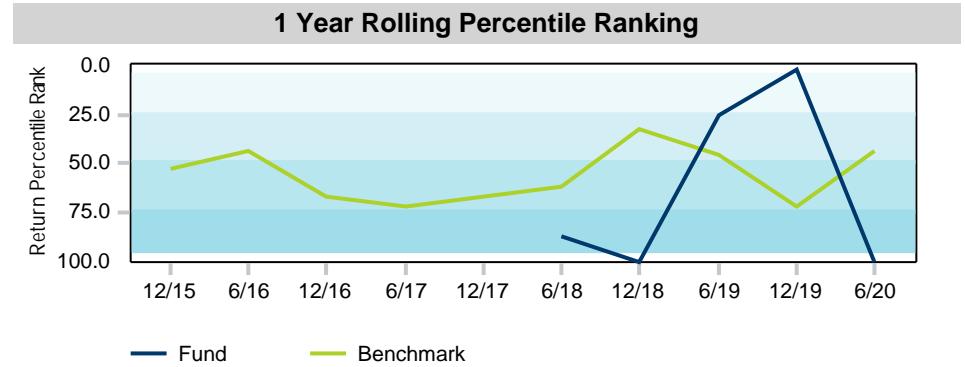
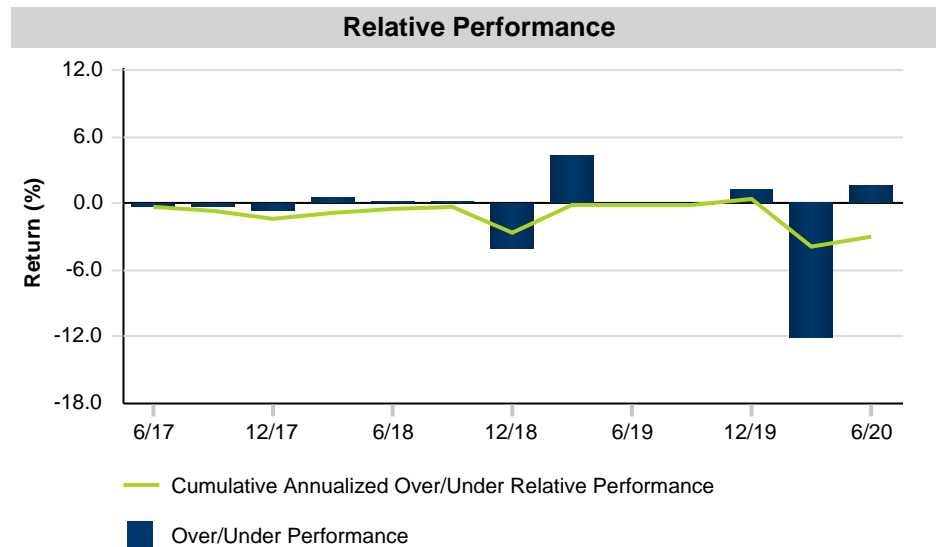
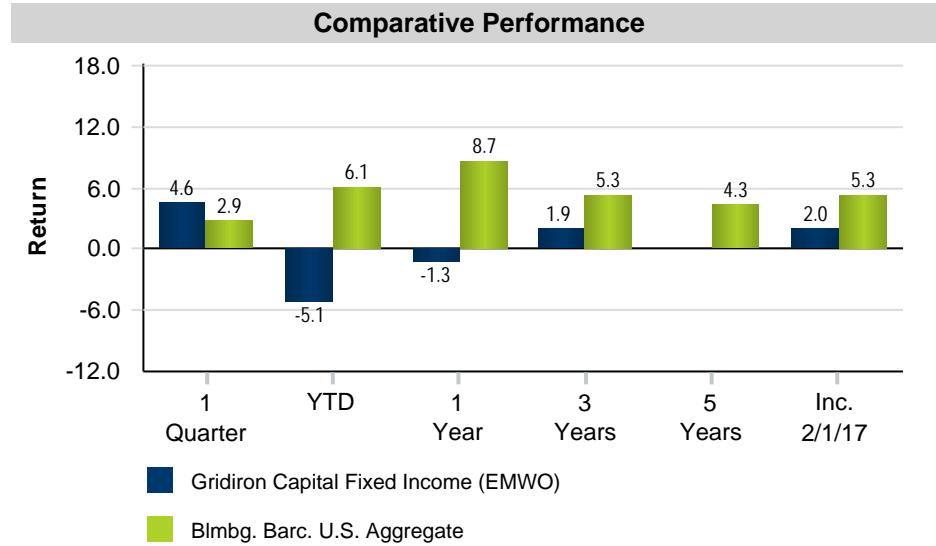
	<u>Gridiron Capital Fixed Income (EMWO)</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
Standard Deviation	10.58	3.50
Alpha	-6.36	0.00
Active Return/Risk	-0.87	0.00
Tracking Error	10.37	0.00
Information Ratio	-0.89	
Sharpe Ratio	-0.22	1.91

Correlation Statistics

	<u>Gridiron Capital Fixed Income (EMWO)</u>	<u>Blmbg. Barc. U.S. Aggregate</u>
R-Squared	0.05	1.00
Actual Correlation	0.23	1.00

Manager Summary

Gridiron Capital Fixed Income (EMWO) vs IM U.S. Broad Market Core Fixed Income
 Periods Ended June 30, 2020



Summary Statistics

FNB (EMWO)

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>FNB (EMWO)</u>	<u>Blmbg. Barc. U.S. Intermediate Aggregate</u>
Maximum Return	1.82	1.49
Minimum Return	-1.51	-0.23
Return	6.48	6.60
Cumulative Return	6.48	6.60
Active Return	-0.09	0.00
Excess Return	4.73	4.81

Risk Summary Statistics

	<u>FNB (EMWO)</u>	<u>Blmbg. Barc. U.S. Intermediate Aggregate</u>
Upside Risk	0.93	0.78
Downside Risk	1.51	0.24
Beta	1.30	1.00

Risk/Return Summary Statistics

	<u>FNB (EMWO)</u>	<u>Blmbg. Barc. U.S. Intermediate Aggregate</u>
Standard Deviation	3.07	1.99
Alpha	-2.03	0.00
Active Return/Risk	-0.03	0.00
Tracking Error	1.74	0.00
Information Ratio	-0.05	
Sharpe Ratio	1.45	2.32

Correlation Statistics

	<u>FNB (EMWO)</u>	<u>Blmbg. Barc. U.S. Intermediate Aggregate</u>
R-Squared	0.72	1.00
Actual Correlation	0.85	1.00

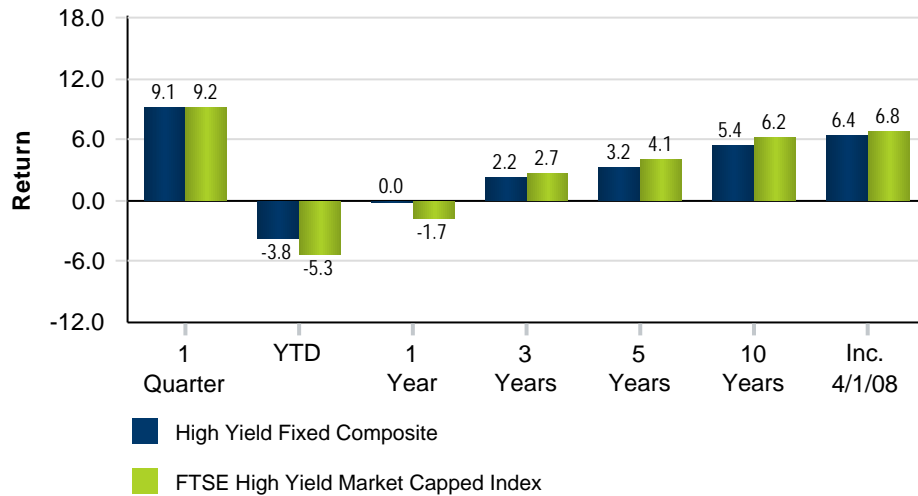


High Yield Fixed Composite

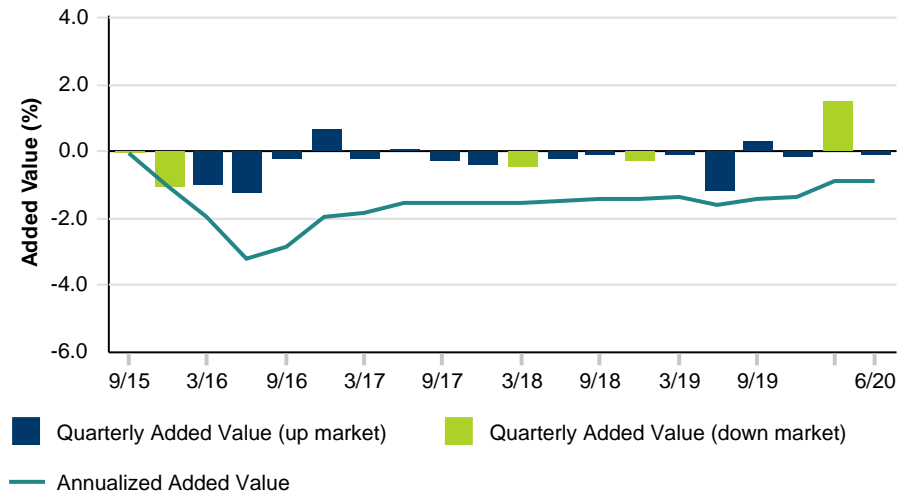
Composite Performance Summary

High Yield Fixed Composite
Periods Ended June 30, 2020

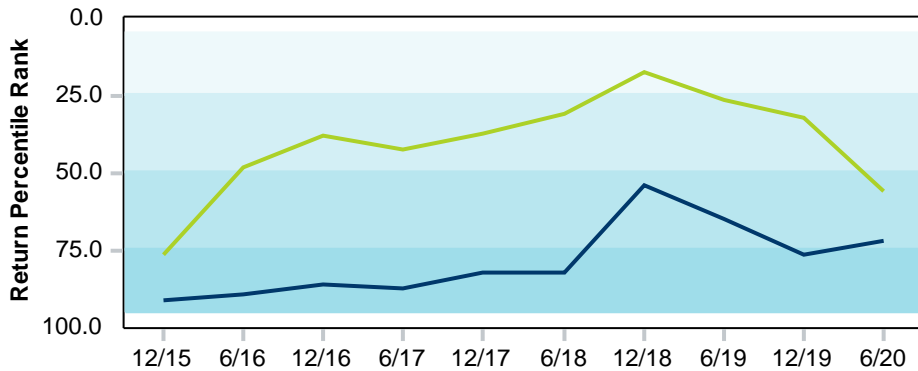
Comparative Performance



Added Value History

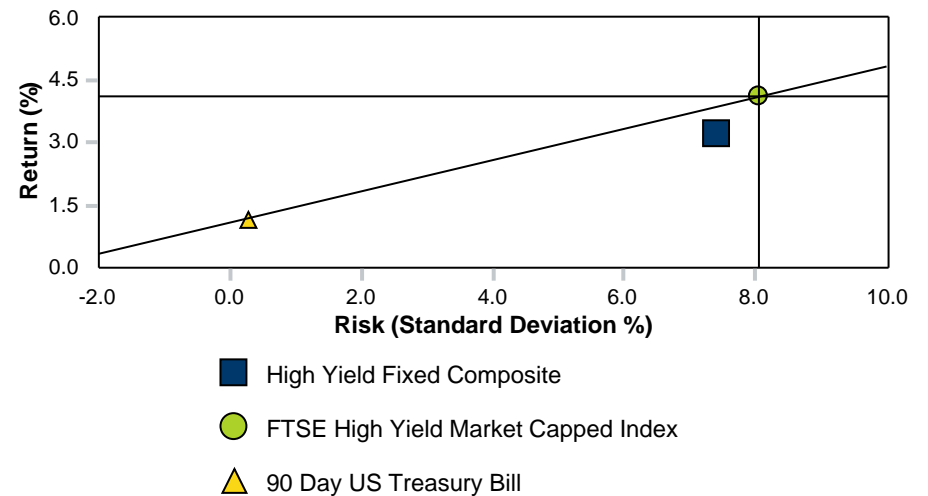


Rolling Percentile Rank: IM U.S. High Yield Bonds (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
High Yield Fixed Composite	10	0 (0%)	0 (0%)	3 (30%)	7 (70%)
Benchmark	10	1 (10%)	7 (70%)	1 (10%)	1 (10%)

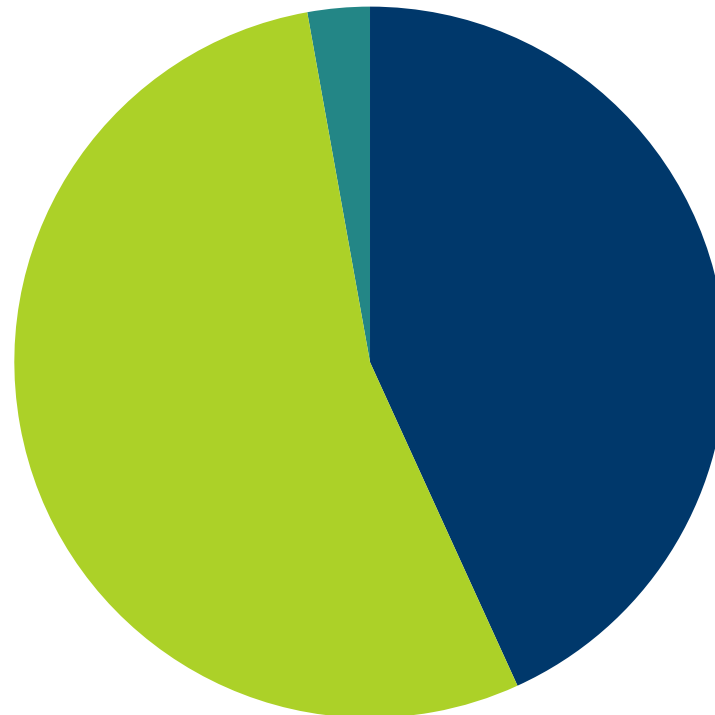
Risk and Return 07/1/15 - 06/30/20



Asset Allocation By Manager

High Yield Fixed Composite
Periods Ended June 30, 2020

Jun-2020 : 110,149,769

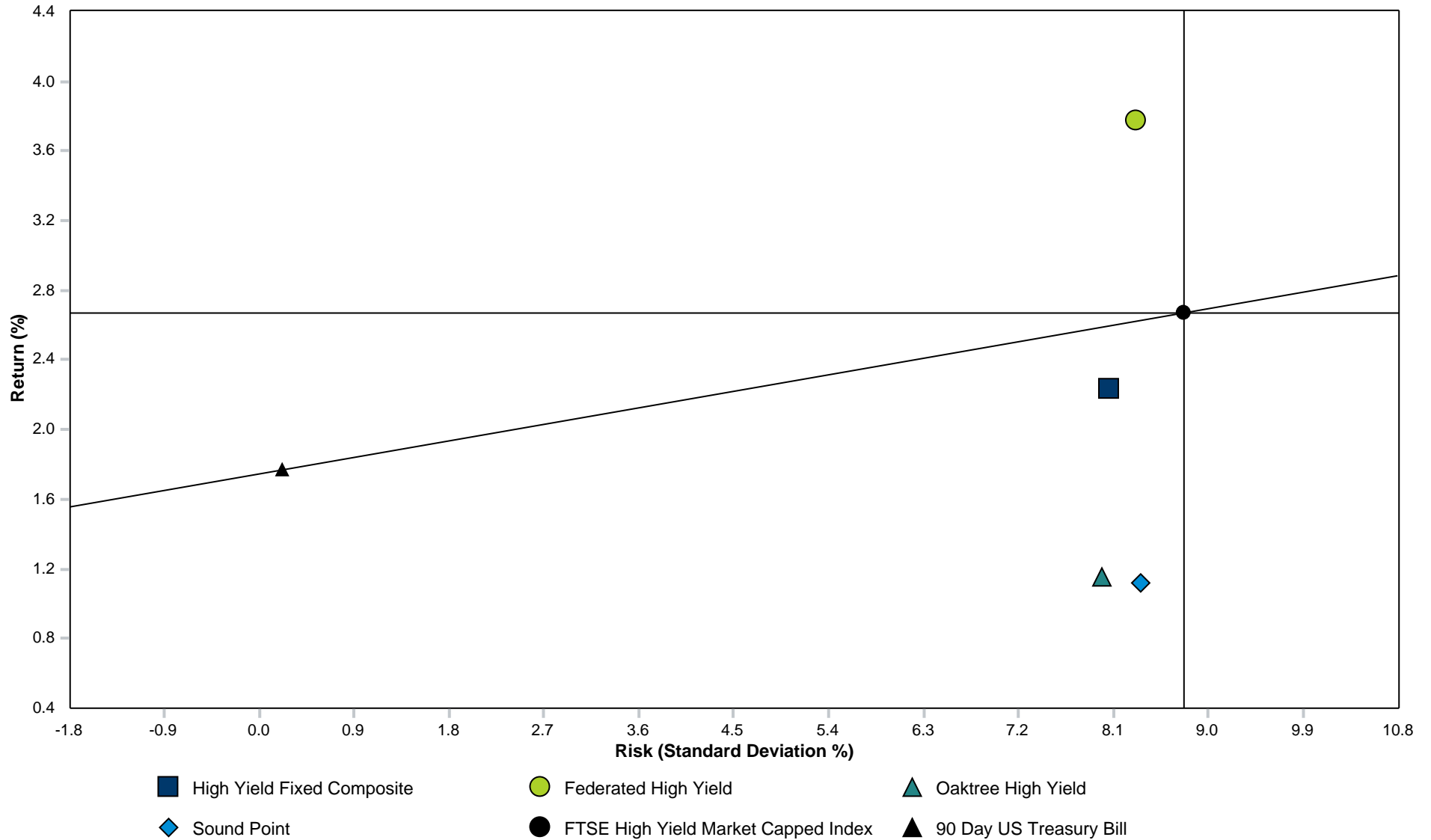


	Market Value \$	Allocation (%)
■ Federated High Yield	47,580,256	43.2
■ Oaktree High Yield	59,454,759	54.0
■ Sound Point	3,114,755	2.8

Risk vs. Return

High Yield Fixed Composite

Periods Ended 3 Years Ending June 30, 2020



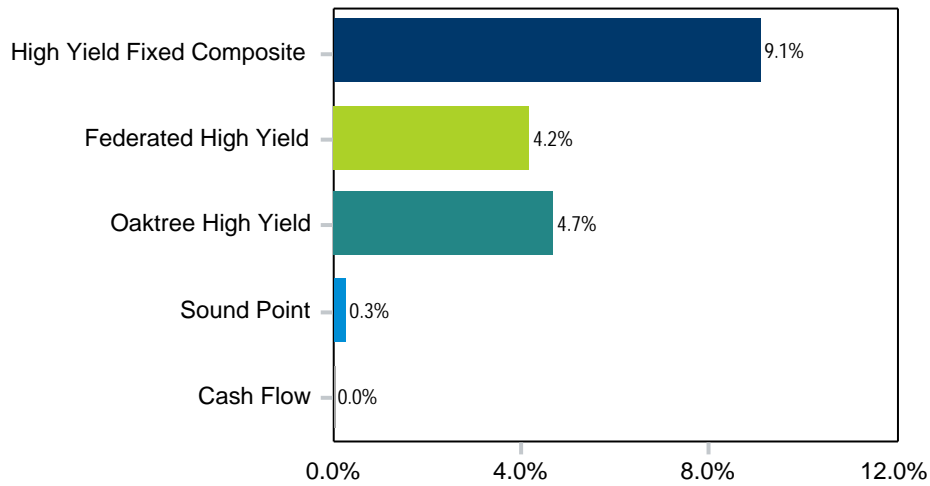
Calculation based on monthly periodicity.

Return and Risk Contribution

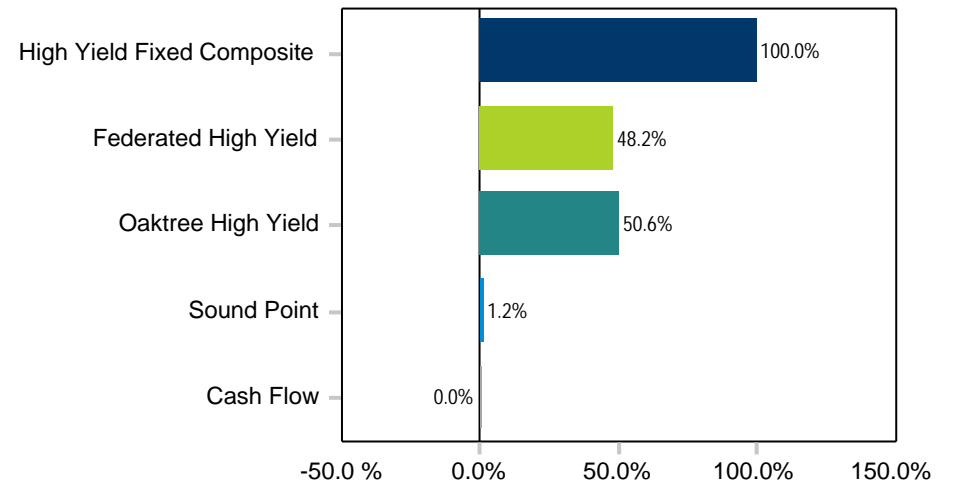
High Yield Fixed Composite

Periods Ended 1 Quarter June 30, 2020

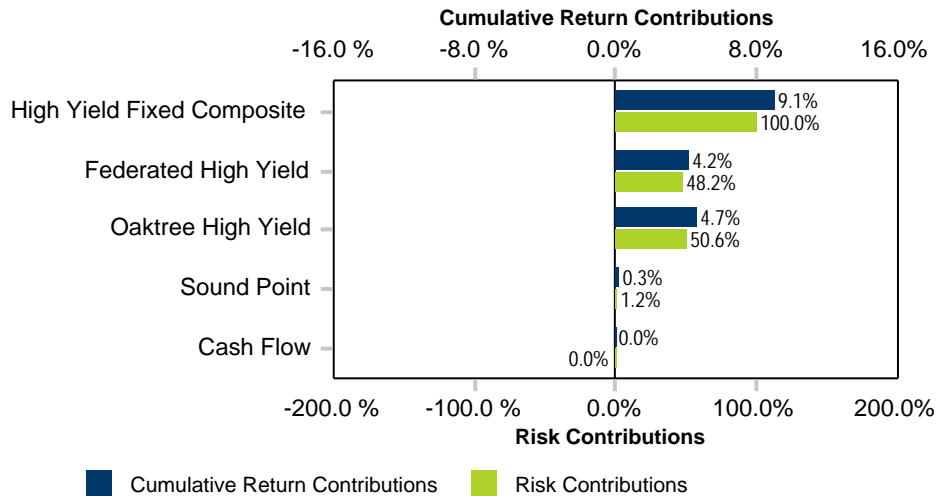
Cumulative Return Contributions



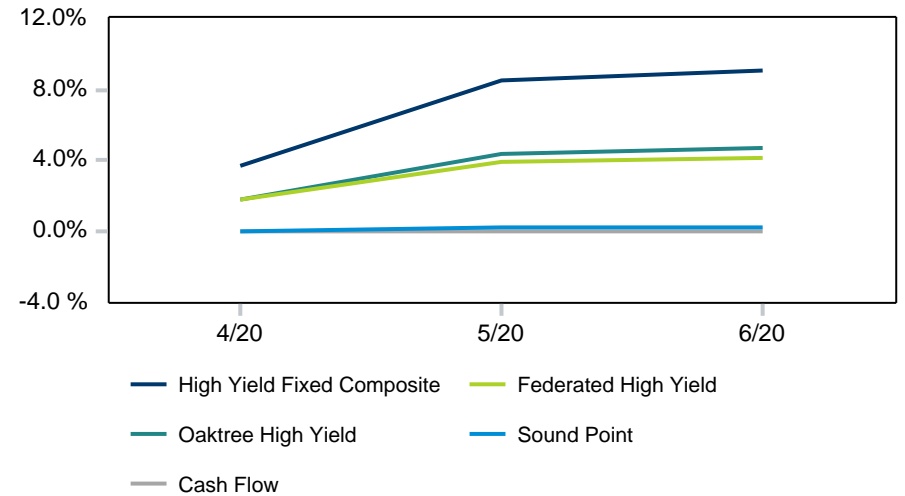
Risk Contributions



Cumulative Return and Risk Contributions



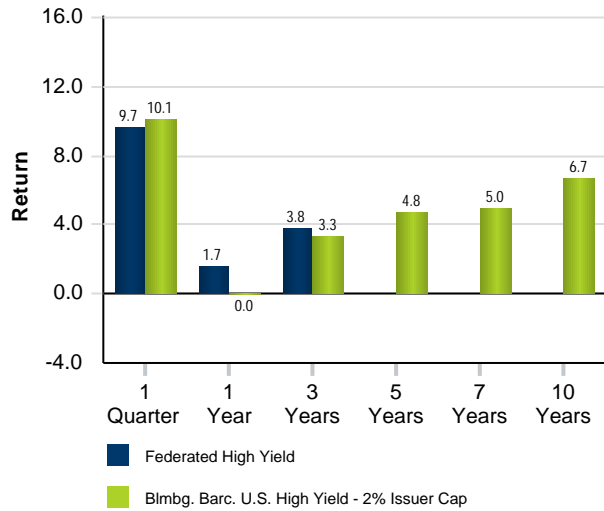
Cumulative Return Contributions History



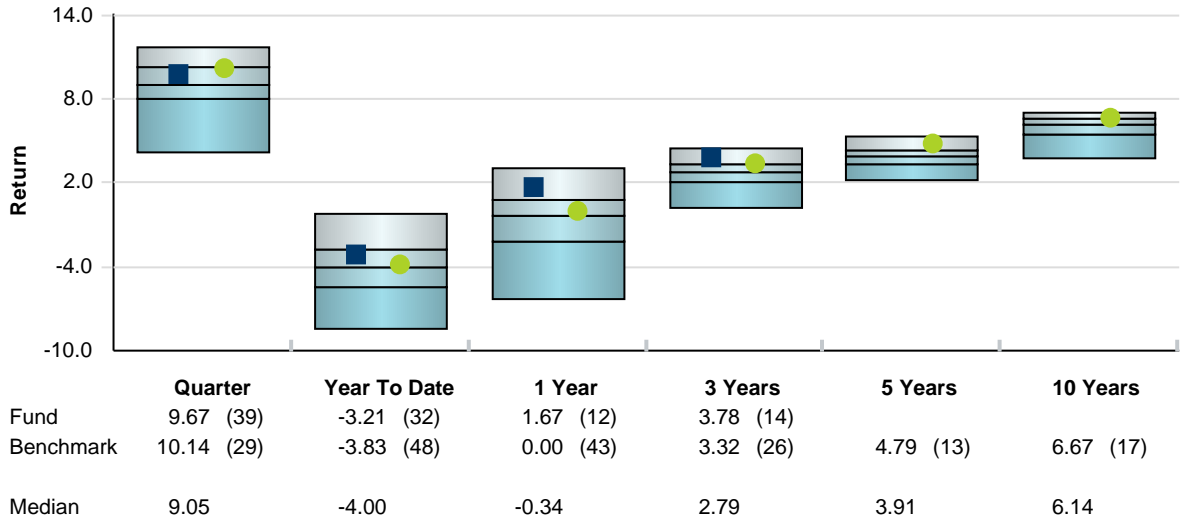
Performance Summary

Federated High Yield
Periods Ended June 30, 2020

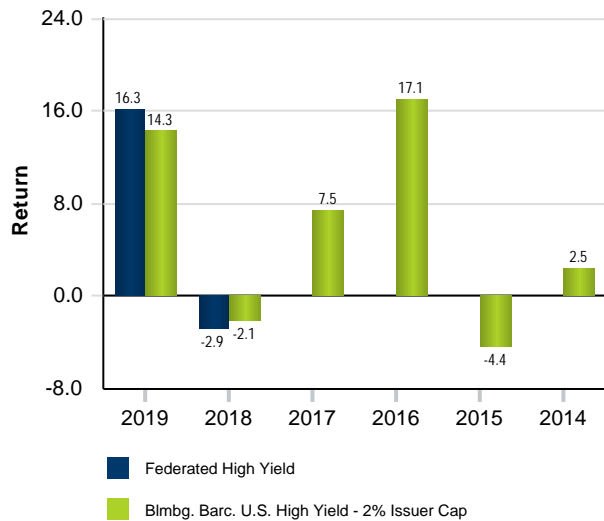
Comparative Performance



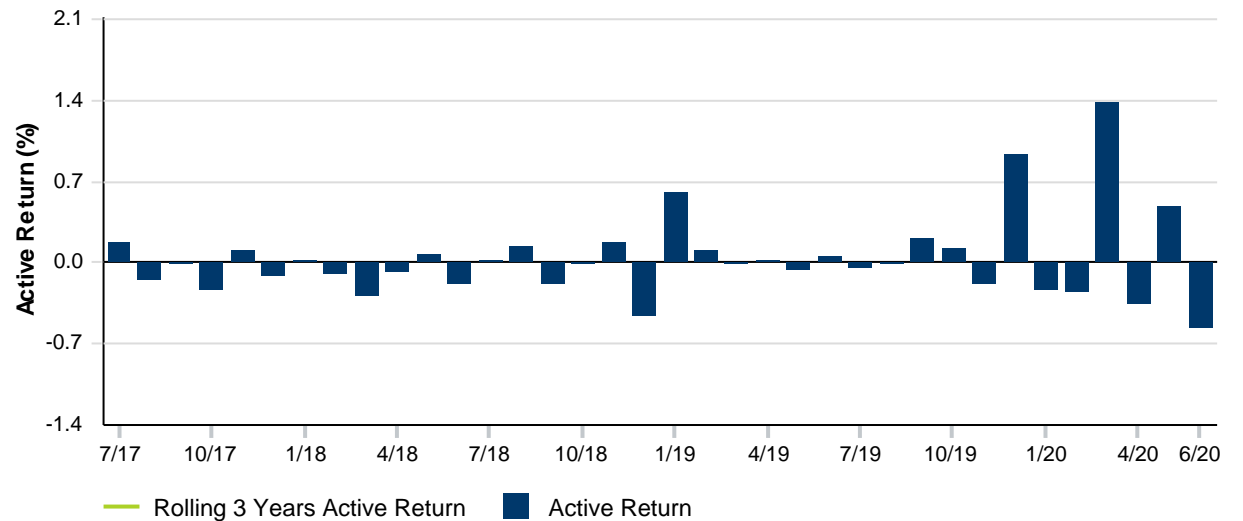
Peer Group Analysis: IM U.S. High Yield Bonds (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Federated High Yield

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Federated High Yield</u>	<u>Blmbg. Barc. U.S. High Yield - 2% Issuer Cap</u>
Maximum Return	4.85	4.53
Minimum Return	-10.08	-11.46
Return	1.67	0.00
Cumulative Return	1.67	0.00
Active Return	1.53	0.00
Excess Return	0.85	-0.68

Risk Summary Statistics

	<u>Federated High Yield</u>	<u>Blmbg. Barc. U.S. High Yield - 2% Issuer Cap</u>
Upside Risk	2.05	1.94
Downside Risk	10.22	11.55
Beta	0.92	1.00

Risk/Return Summary Statistics

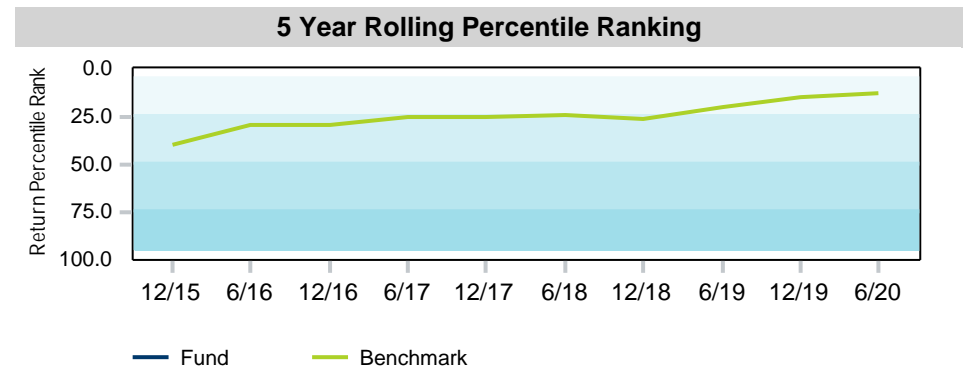
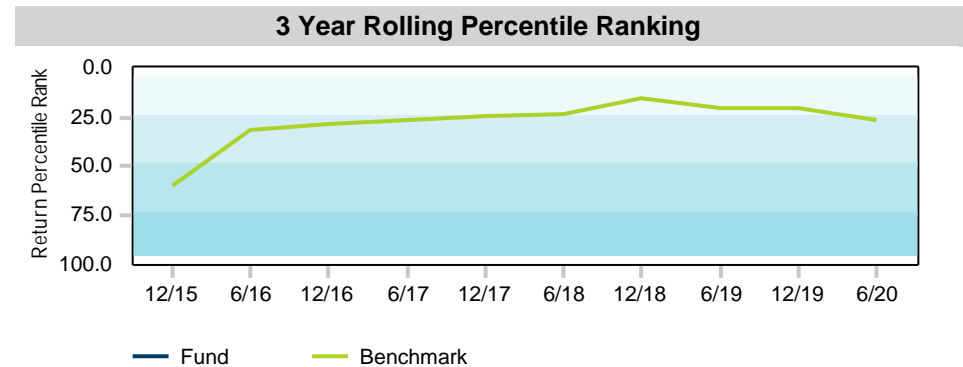
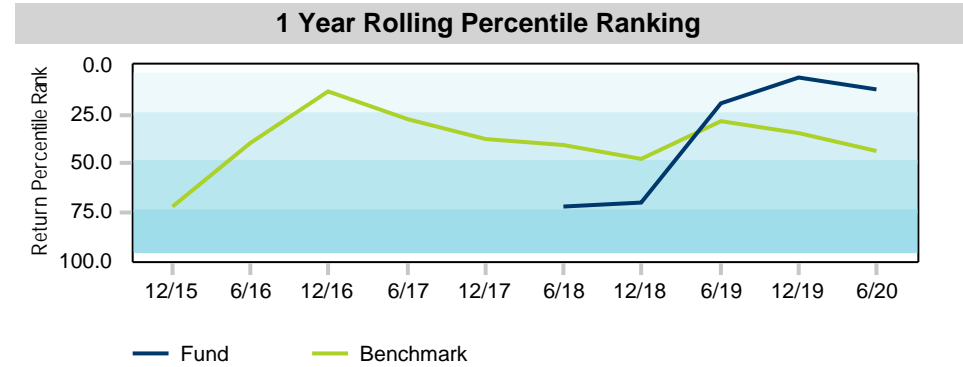
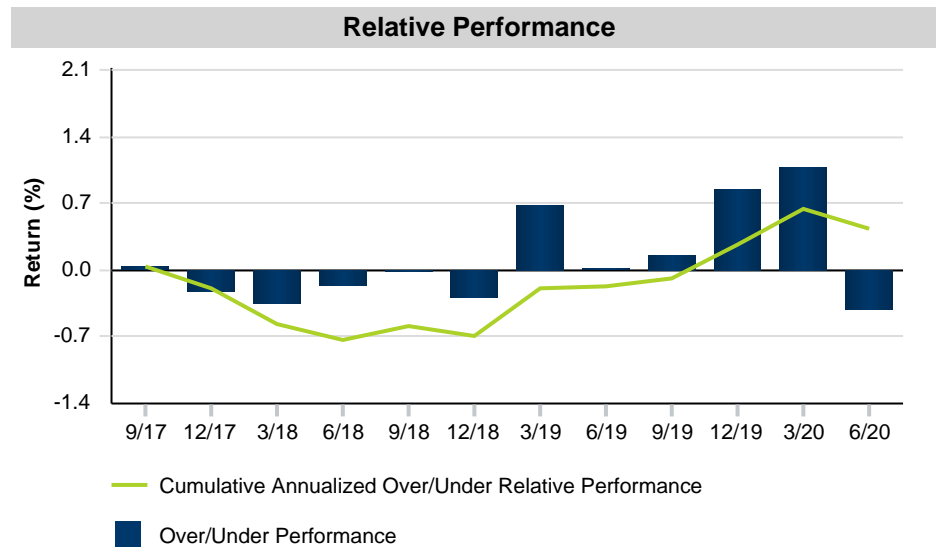
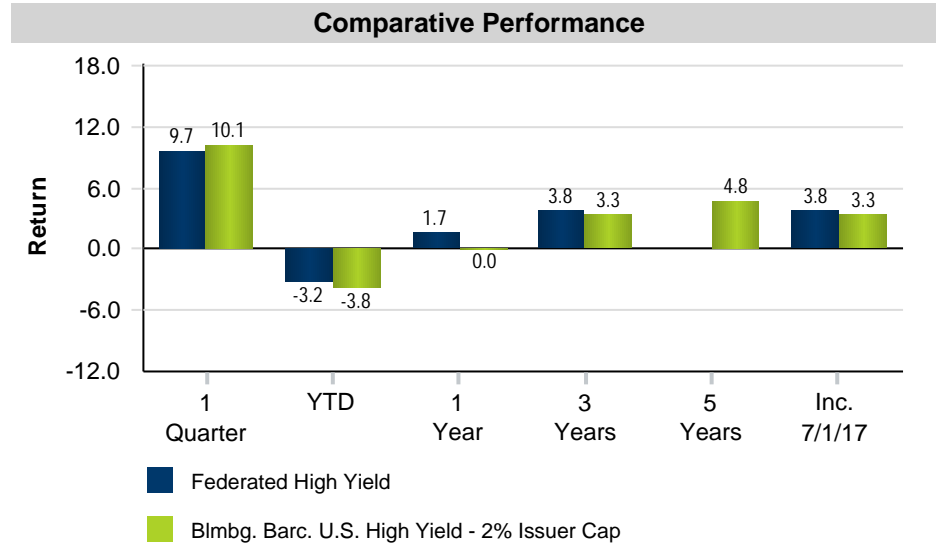
	<u>Federated High Yield</u>	<u>Blmbg. Barc. U.S. High Yield - 2% Issuer Cap</u>
Standard Deviation	12.43	13.36
Alpha	1.61	0.00
Active Return/Risk	0.12	0.00
Tracking Error	1.86	0.00
Information Ratio	0.82	
Sharpe Ratio	0.07	-0.05

Correlation Statistics

	<u>Federated High Yield</u>	<u>Blmbg. Barc. U.S. High Yield - 2% Issuer Cap</u>
R-Squared	0.98	1.00
Actual Correlation	0.99	1.00

Manager Summary

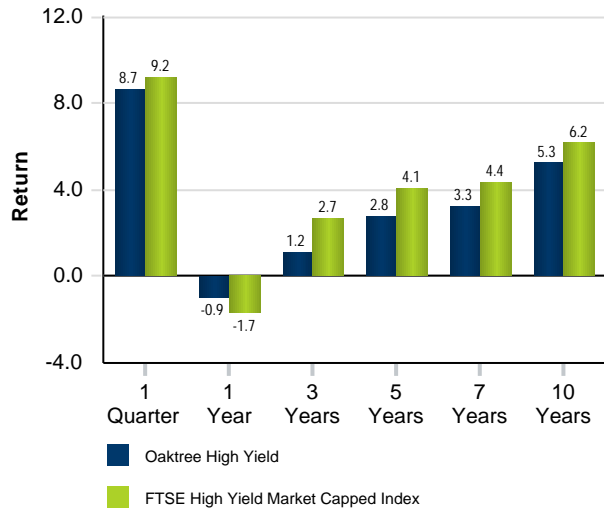
Federated High Yield vs IM U.S. High Yield Bonds (SA+CF)
 Periods Ended June 30, 2020



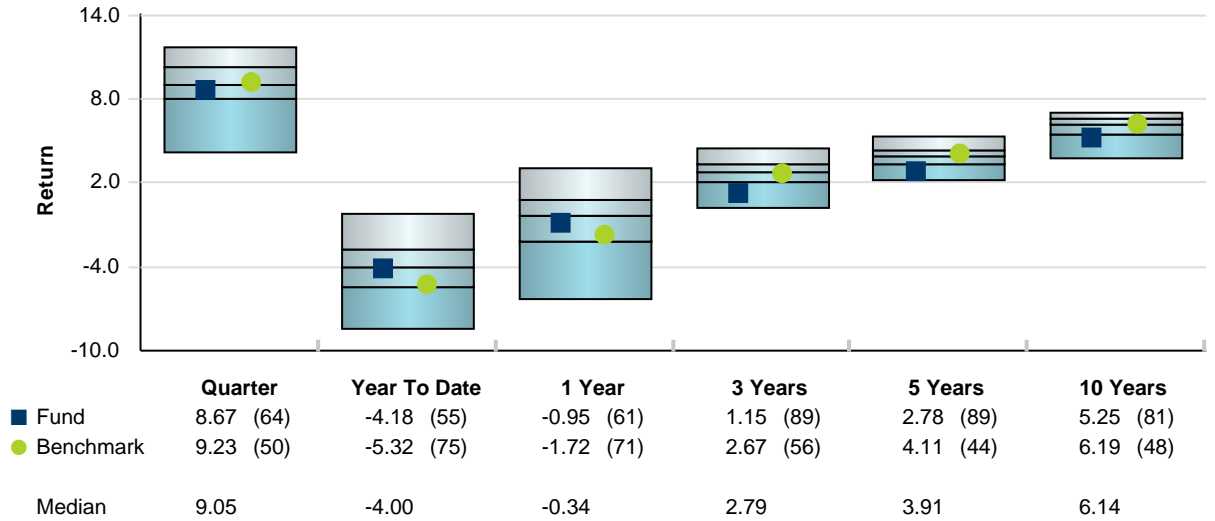
Performance Summary

Oaktree High Yield
Periods Ended June 30, 2020

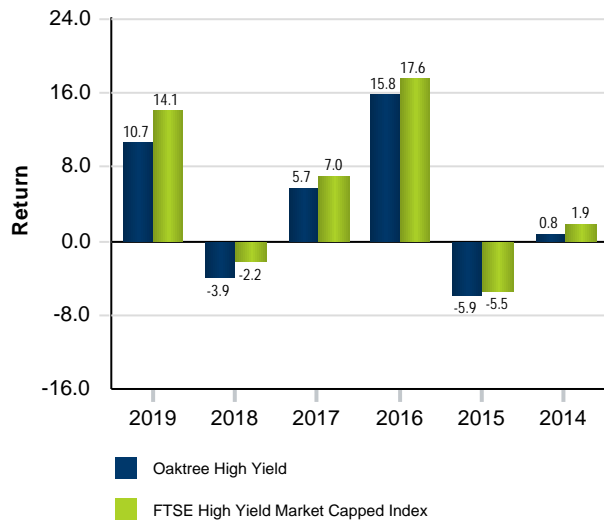
Comparative Performance



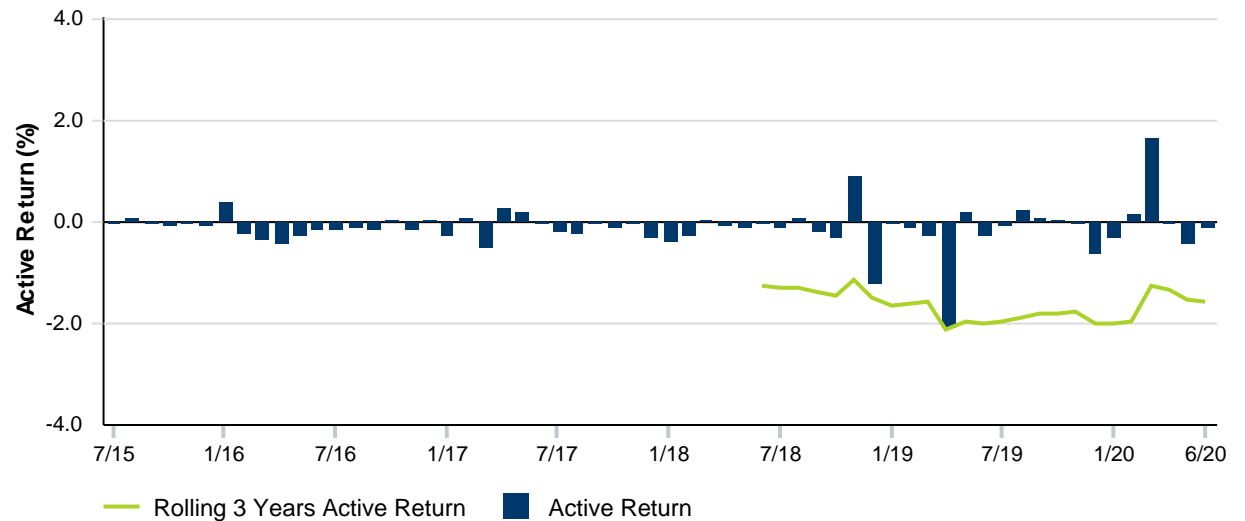
Peer Group Analysis: IM U.S. High Yield Bonds (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Oaktree High Yield

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Oaktree High Yield</u>	<u>FTSE High Yield Market Capped Index</u>
Maximum Return	4.46	4.88
Minimum Return	-10.14	-11.78
Return	-0.95	-1.72
Cumulative Return	-0.95	-1.72
Active Return	0.55	0.00
Excess Return	-1.84	-2.39

Risk Summary Statistics

	<u>Oaktree High Yield</u>	<u>FTSE High Yield Market Capped Index</u>
Upside Risk	1.70	1.85
Downside Risk	10.26	11.91
Beta	0.87	1.00

Risk/Return Summary Statistics

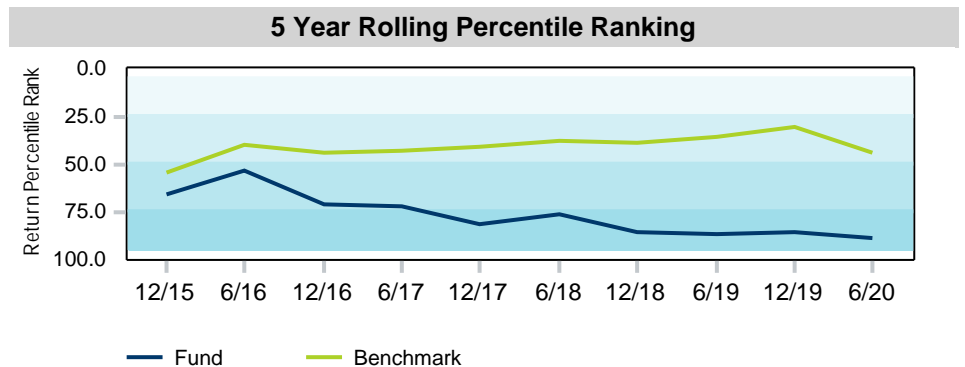
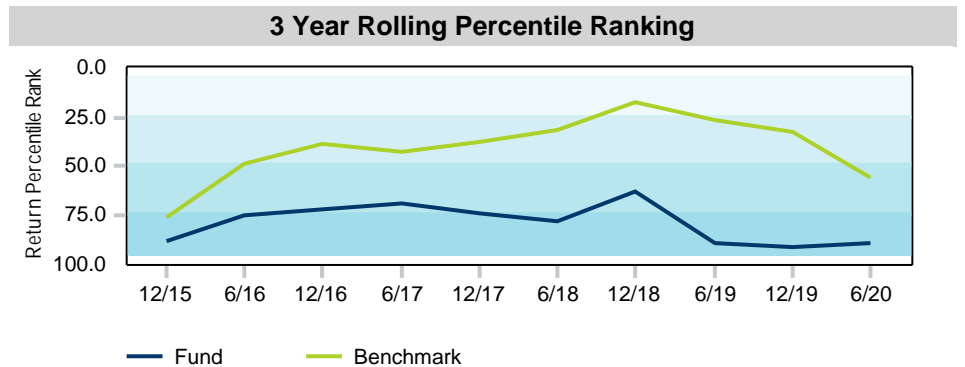
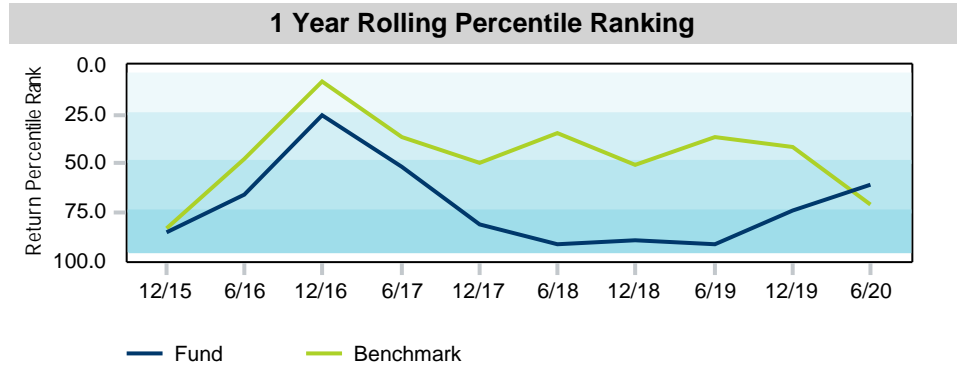
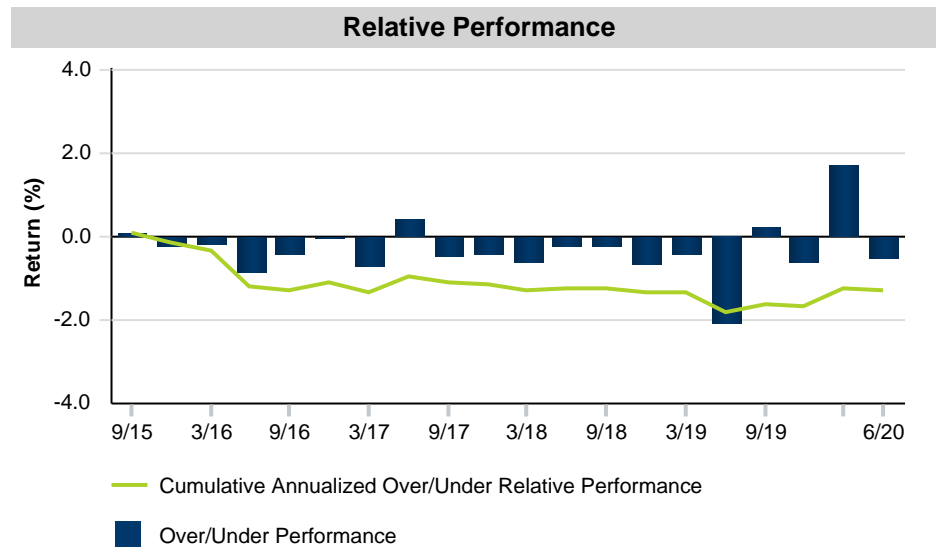
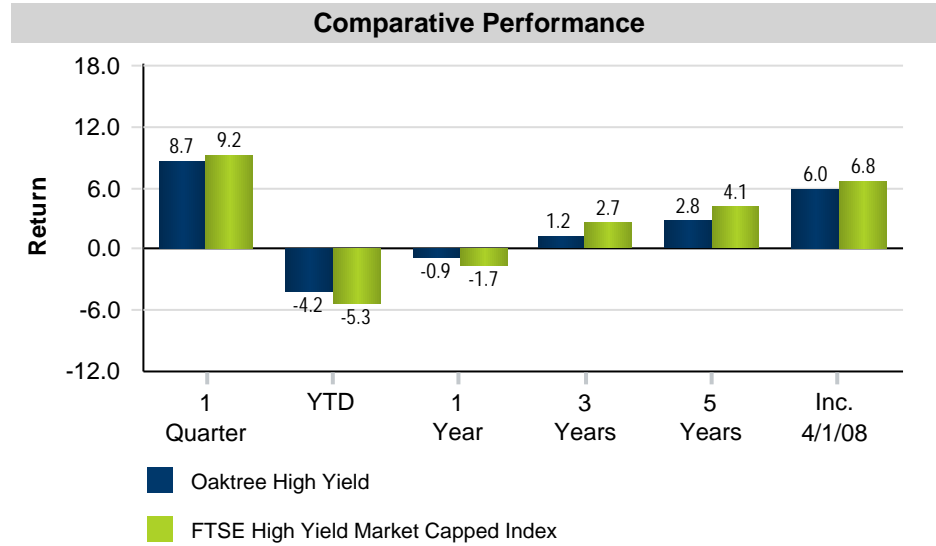
	<u>Oaktree High Yield</u>	<u>FTSE High Yield Market Capped Index</u>
Standard Deviation	11.84	13.52
Alpha	0.45	0.00
Active Return/Risk	0.05	0.00
Tracking Error	1.86	0.00
Information Ratio	0.30	
Sharpe Ratio	-0.15	-0.17

Correlation Statistics

	<u>Oaktree High Yield</u>	<u>FTSE High Yield Market Capped Index</u>
R-Squared	1.00	1.00
Actual Correlation	1.00	1.00

Manager Summary

Oaktree High Yield vs IM U.S. High Yield Bonds (SA+CF)
 Periods Ended June 30, 2020

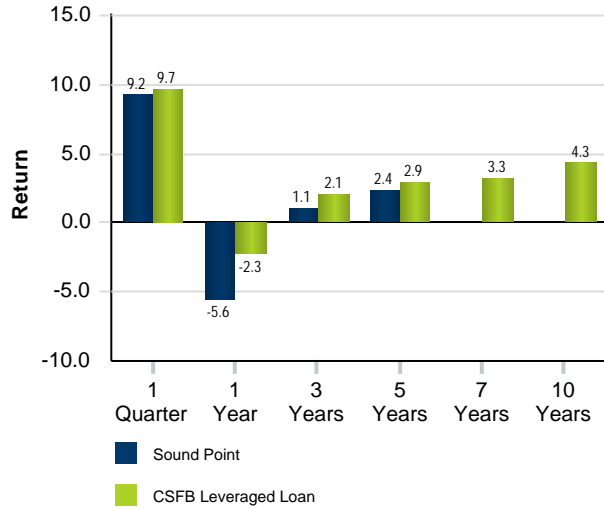


Performance Summary

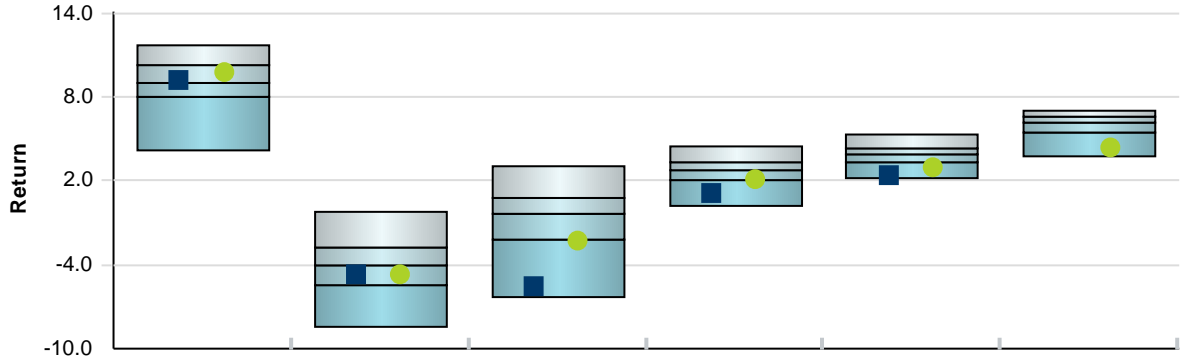
Sound Point

Periods Ended June 30, 2020

Comparative Performance

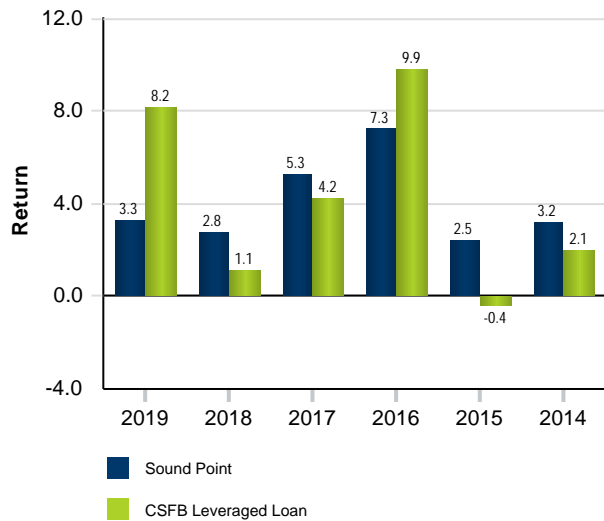


Peer Group Analysis: IM U.S. High Yield Bonds (SA+CF)

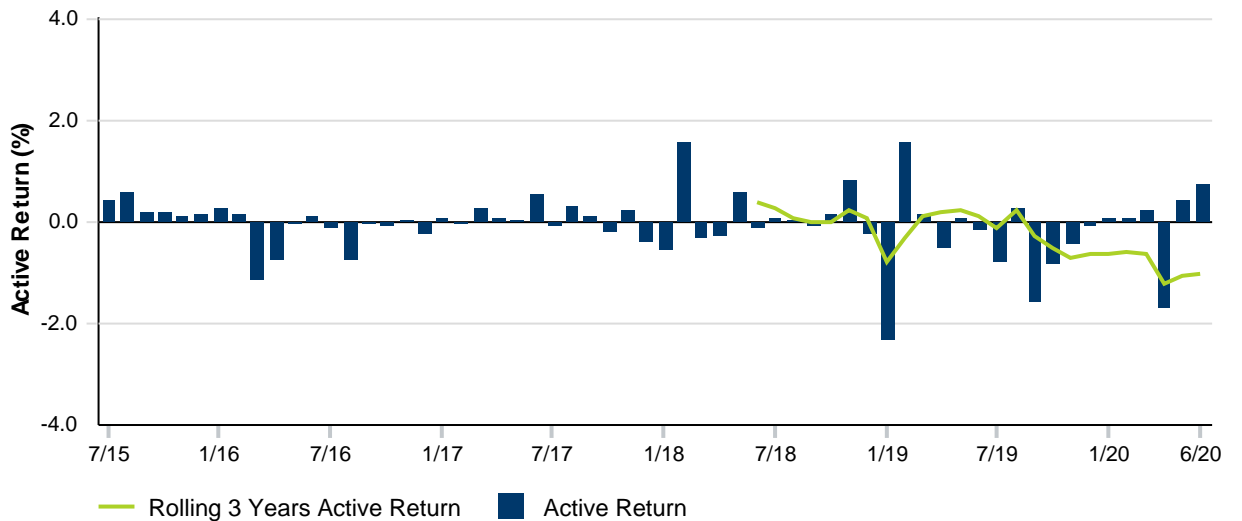


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
Fund	9.21 (50)	-4.81 (69)	-5.61 (94)	1.12 (89)	2.39 (95)	
Benchmark	9.71 (36)	-4.76 (66)	-2.27 (77)	2.13 (74)	2.94 (83)	4.33 (93)
Median	9.05	-4.00	-0.34	2.79	3.91	6.14

Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Sound Point

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Sound Point</u>	<u>CSFB Leveraged Loan</u>
Maximum Return	4.25	4.29
Minimum Return	-12.24	-12.46
Return	-5.61	-2.27
Cumulative Return	-5.61	-2.27
Active Return	-3.53	0.00
Excess Return	-6.39	-2.86

Risk Summary Statistics

	<u>Sound Point</u>	<u>CSFB Leveraged Loan</u>
Upside Risk	1.63	1.79
Downside Risk	12.43	12.55
Beta	0.95	1.00

Risk/Return Summary Statistics

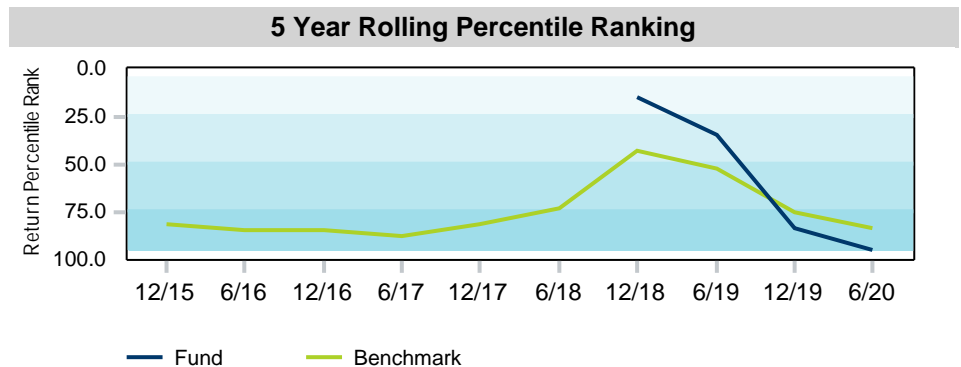
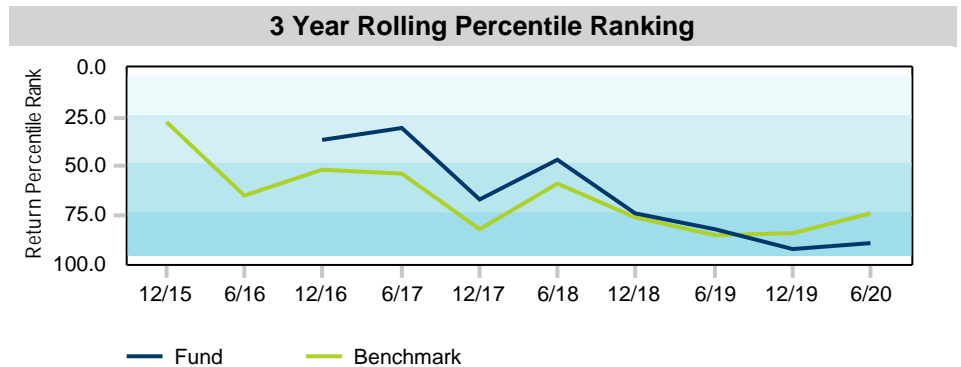
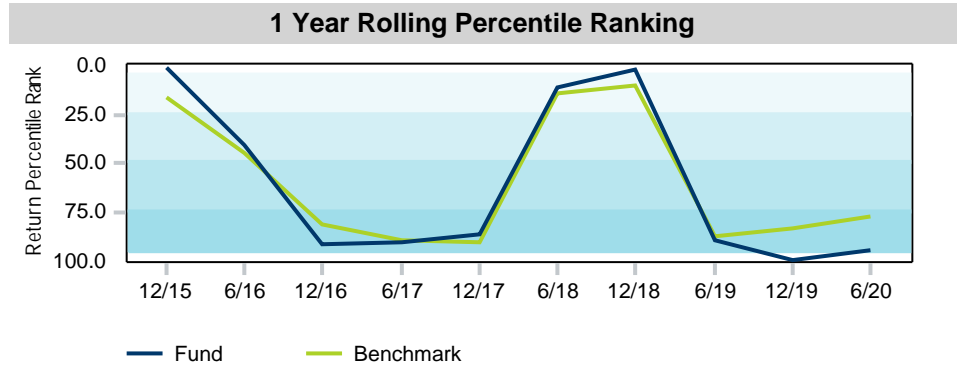
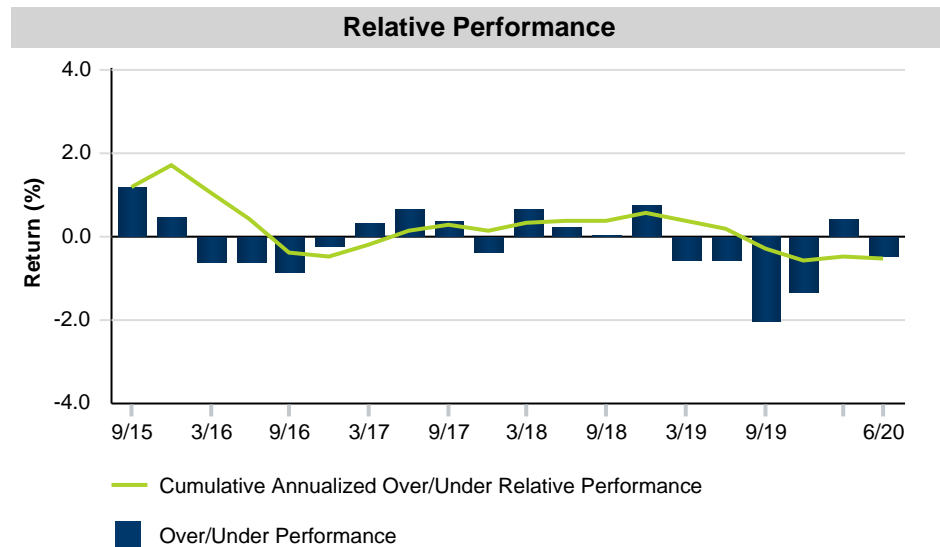
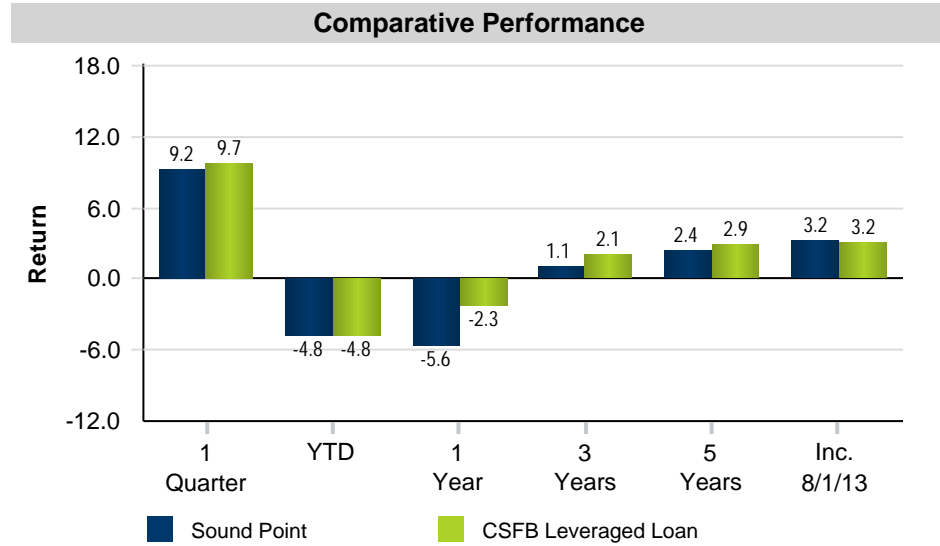
	<u>Sound Point</u>	<u>CSFB Leveraged Loan</u>
Standard Deviation	13.59	14.00
Alpha	-3.53	0.00
Active Return/Risk	-0.26	0.00
Tracking Error	2.60	0.00
Information Ratio	-1.36	
Sharpe Ratio	-0.46	-0.20

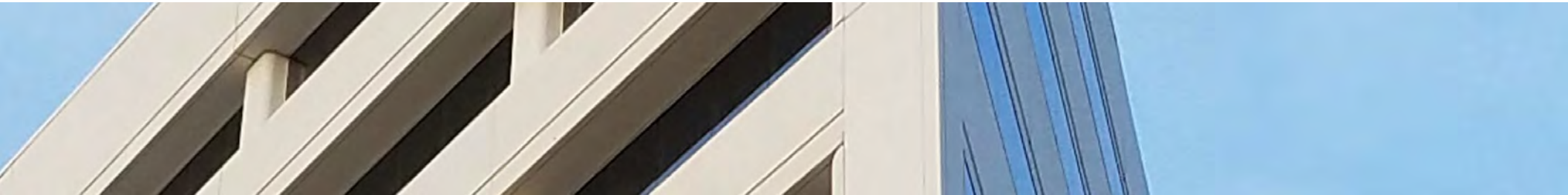
Correlation Statistics

	<u>Sound Point</u>	<u>CSFB Leveraged Loan</u>
R-Squared	0.97	1.00
Actual Correlation	0.98	1.00

Manager Summary

Sound Point vs IM U.S. High Yield Bonds (SA+CF)
 Periods Ended June 30, 2020

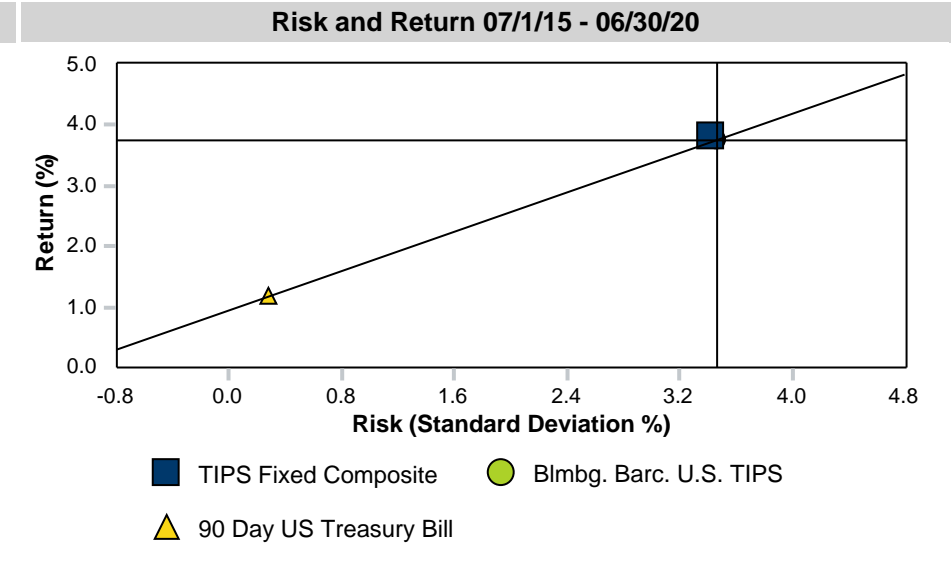
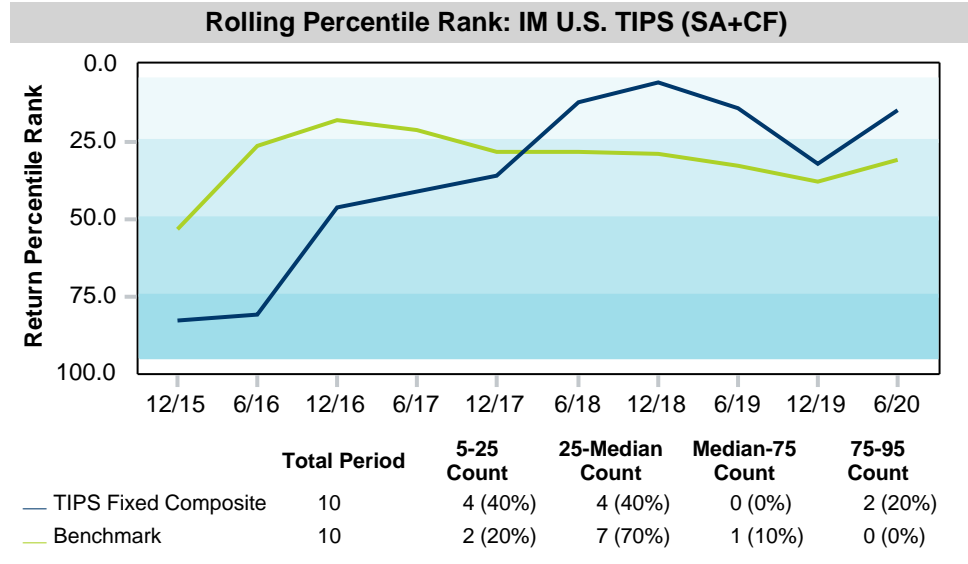
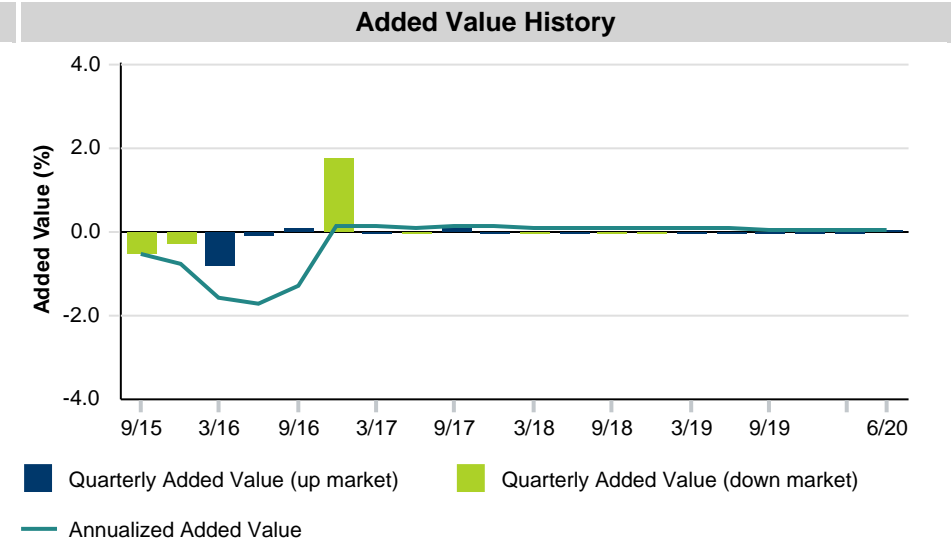
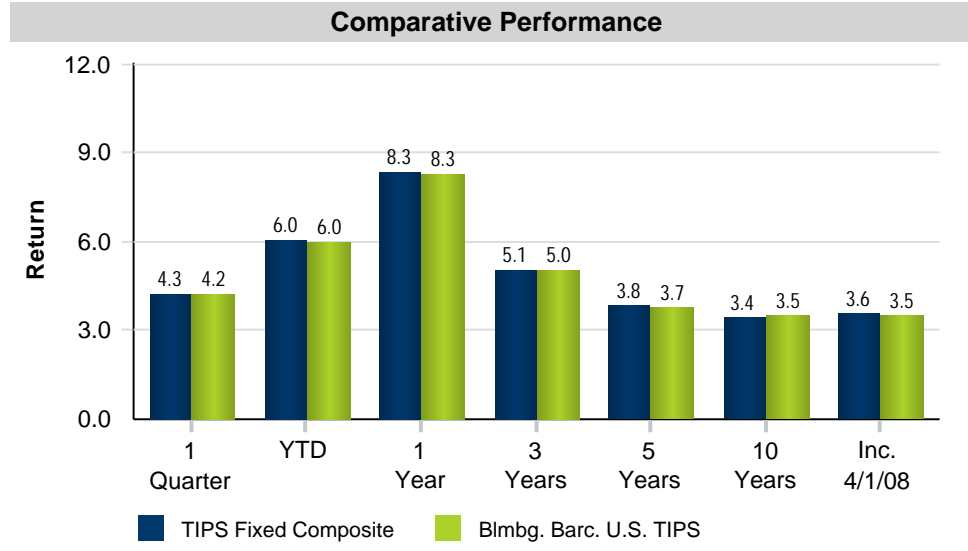




TIPS Fixed Composite

Composite Performance Summary

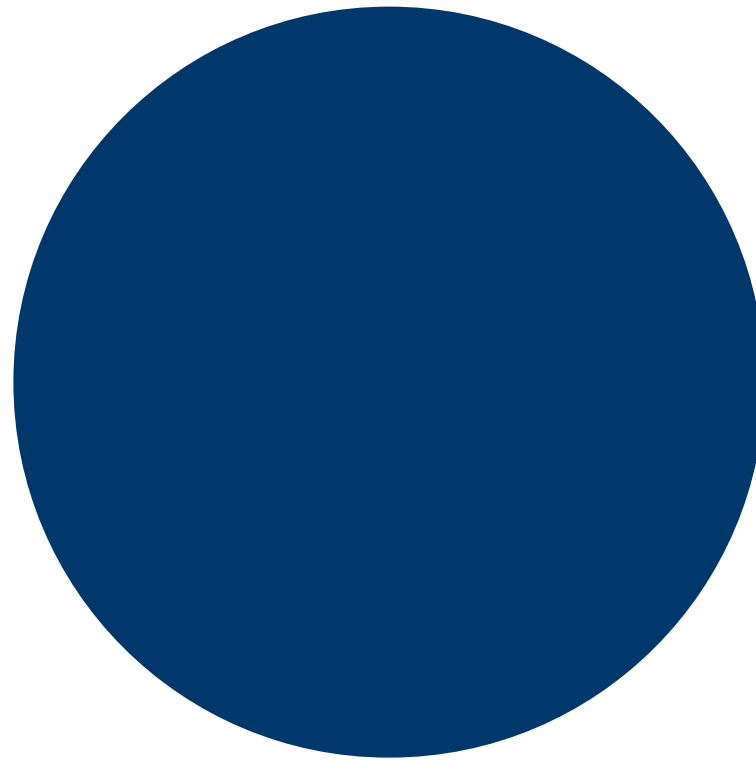
TIPS Fixed Composite
Periods Ended June 30, 2020



Asset Allocation By Manager

TIPS Fixed Composite
Periods Ended June 30, 2020

Jun-2020 : 38,717,790

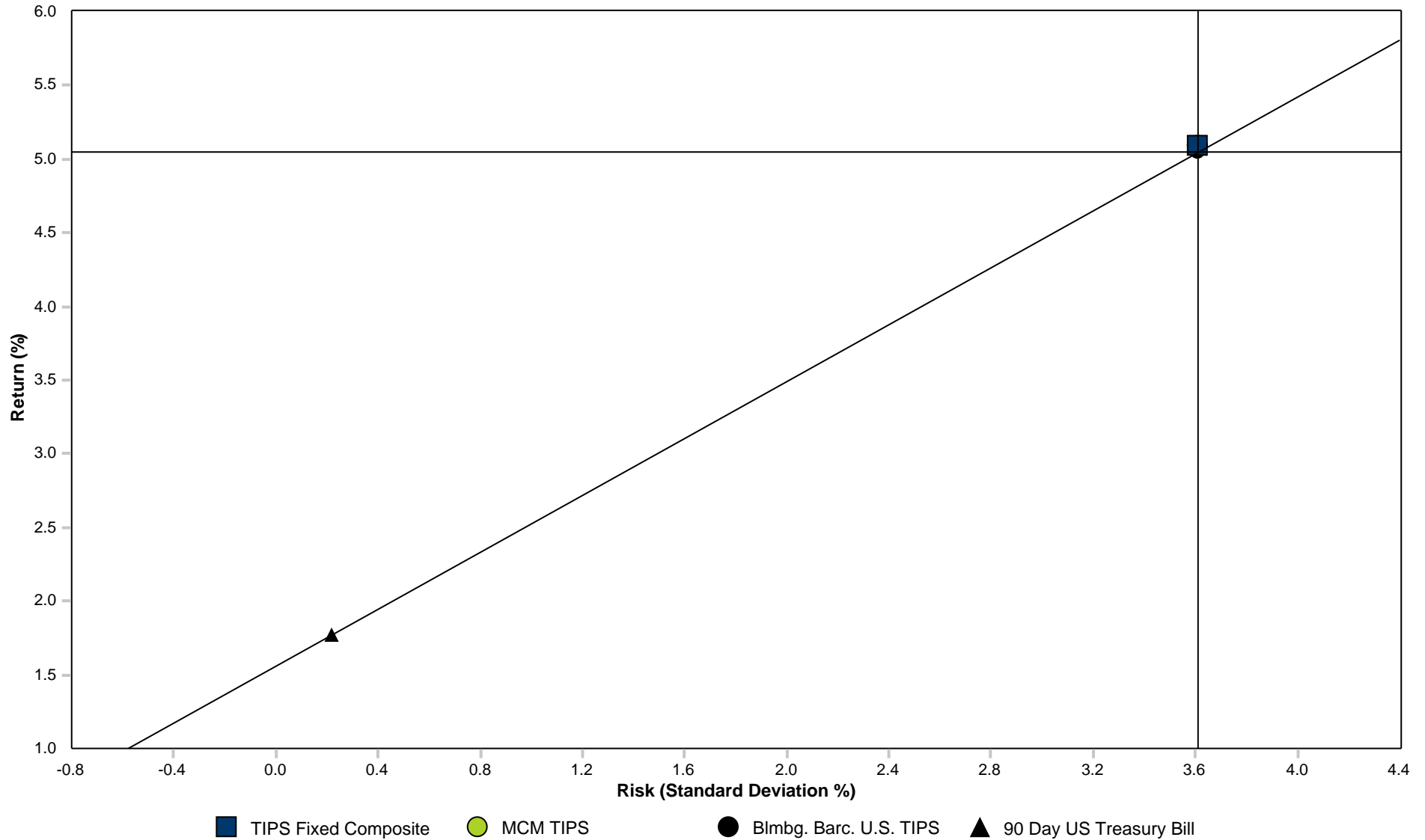


	Market Value \$	Allocation (%)
■ MCM TIPS	38,717,790	100.0

Risk vs. Return

TIPS Fixed Composite

Periods Ended 3 Years Ending June 30, 2020



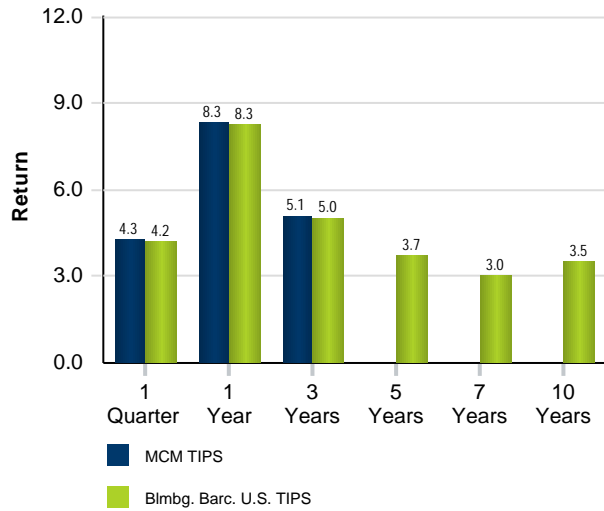
Calculation based on monthly periodicity.

Performance Summary

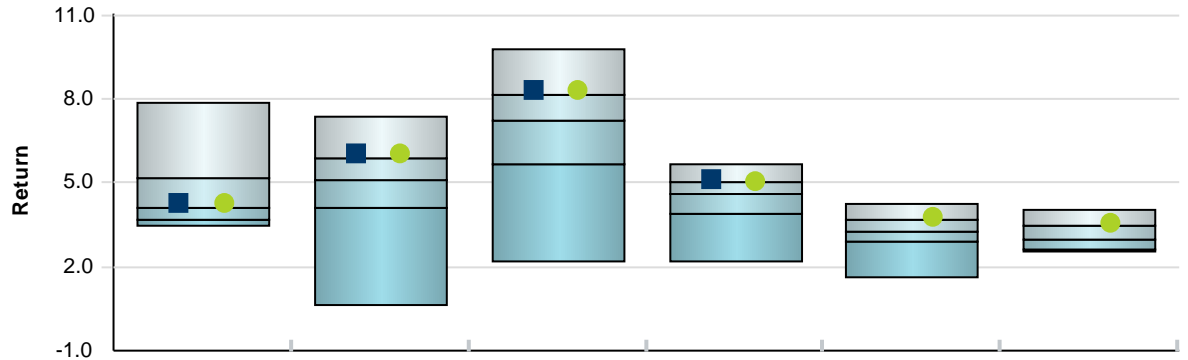
MCM TIPS

Periods Ended June 30, 2020

Comparative Performance

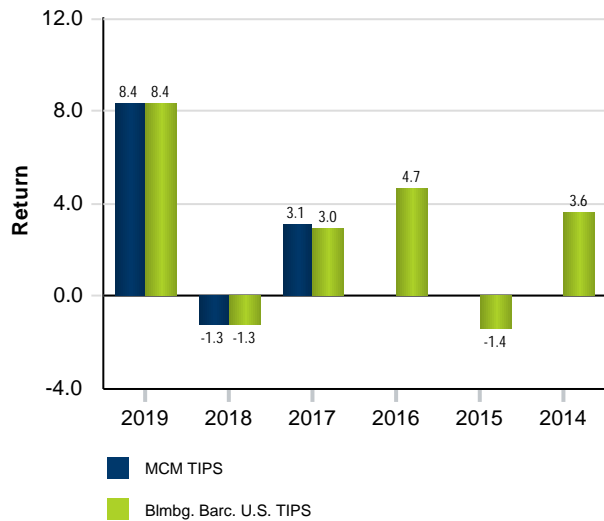


Peer Group Analysis: IM U.S. TIPS (SA+CF)

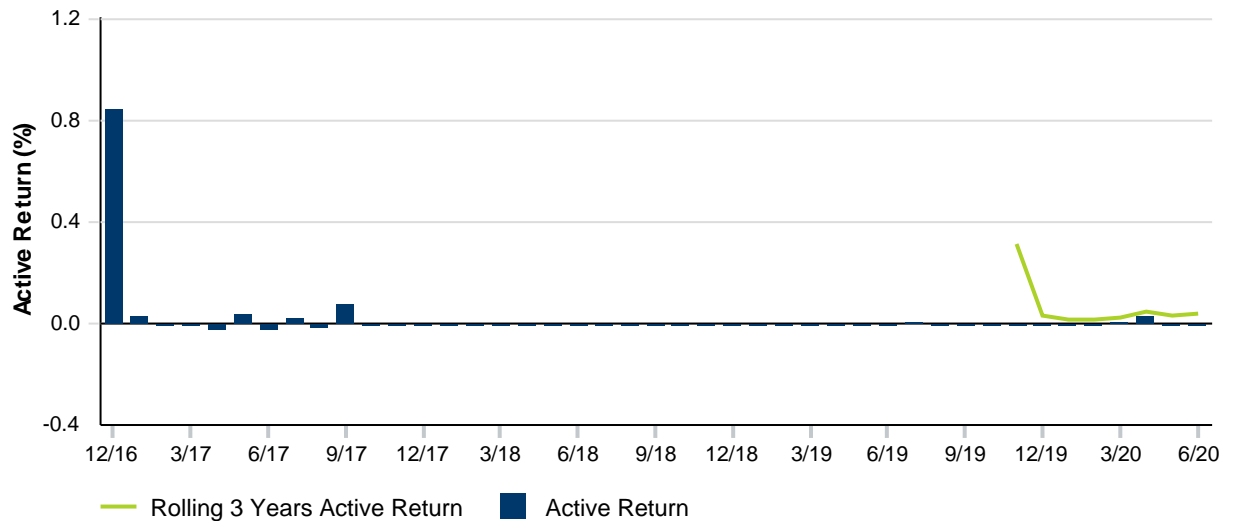


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
Fund	4.27 (46)	6.05 (21)	8.33 (14)	5.09 (15)	-	-
Benchmark	4.24 (47)	6.01 (24)	8.28 (22)	5.05 (31)	3.75 (19)	3.52 (20)
Median	4.13	5.11	7.23	4.59	3.29	2.97

Comparative Performance



Rolling 3 Years Performance



Summary Statistics

MCM TIPS

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>MCM TIPS</u>	<u>Blmbg. Barc. U.S. TIPS</u>
Maximum Return	2.81	2.78
Minimum Return	-1.75	-1.76
Return	8.33	8.28
Cumulative Return	8.33	8.28
Active Return	0.04	0.00
Excess Return	6.51	6.47

Risk Summary Statistics

	<u>MCM TIPS</u>	<u>Blmbg. Barc. U.S. TIPS</u>
Upside Risk	1.34	1.34
Downside Risk	2.22	2.22
Beta	1.00	1.00

Risk/Return Summary Statistics

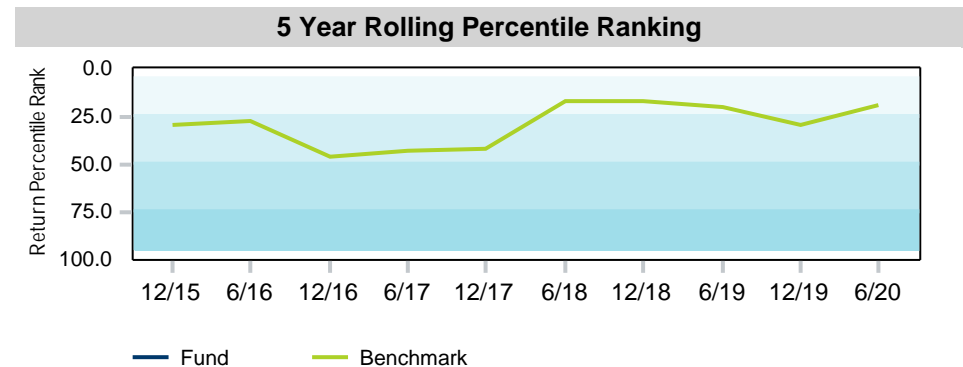
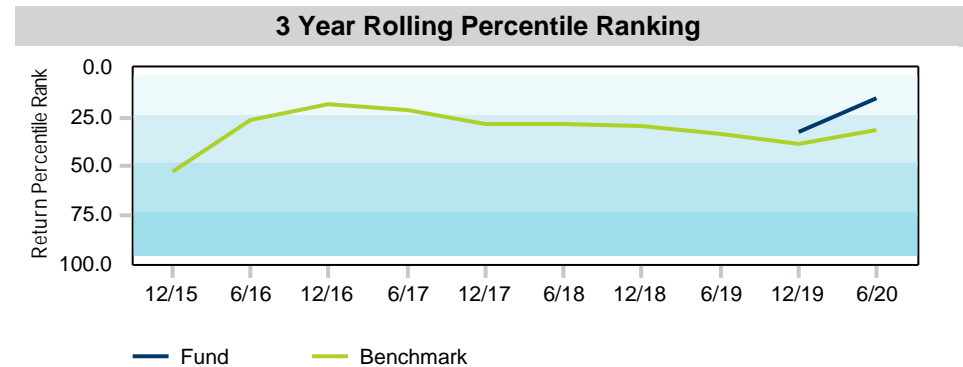
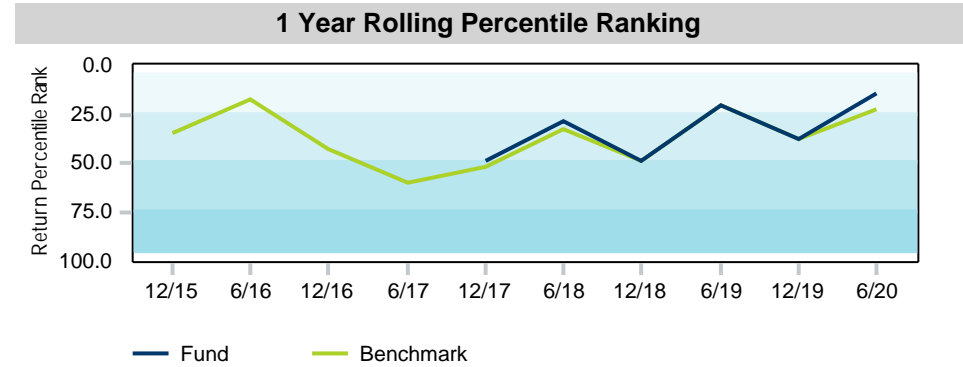
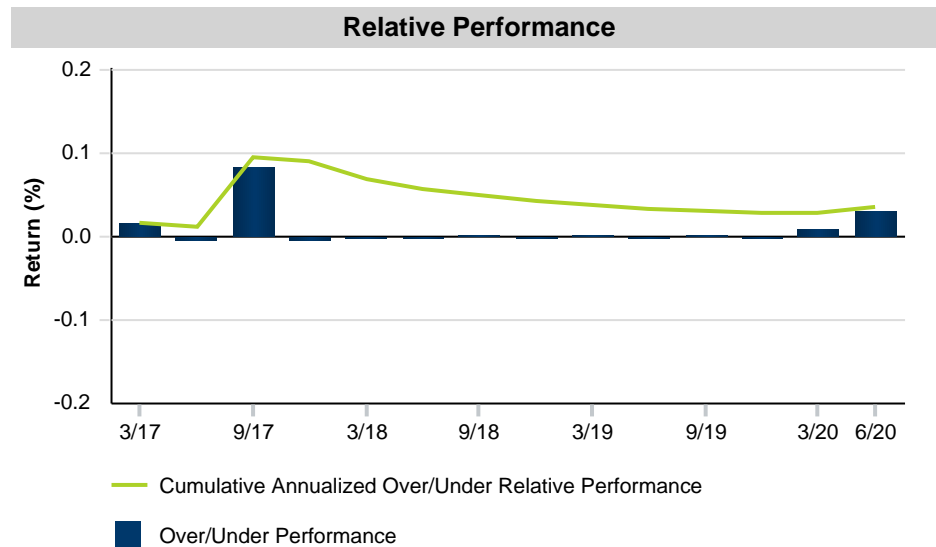
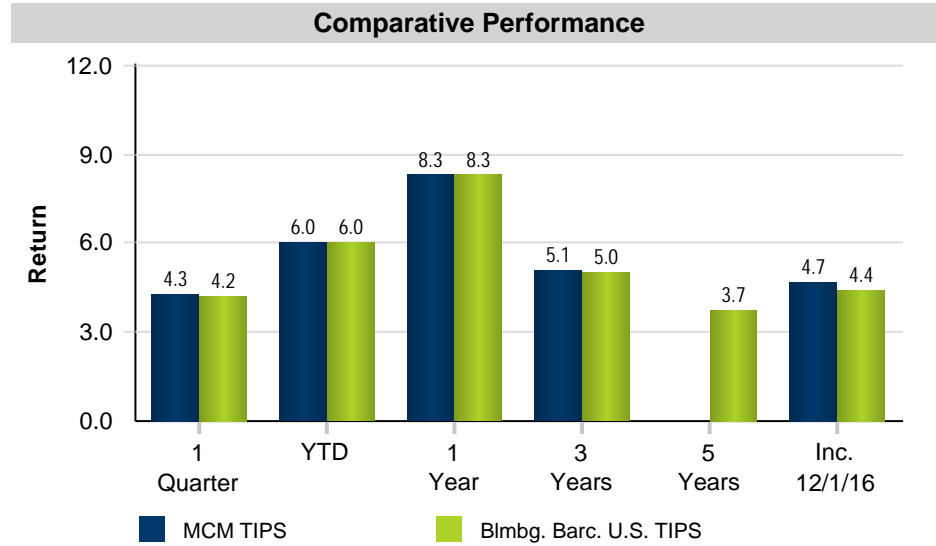
	<u>MCM TIPS</u>	<u>Blmbg. Barc. U.S. TIPS</u>
Standard Deviation	4.58	4.57
Alpha	0.03	0.00
Active Return/Risk	0.01	0.00
Tracking Error	0.03	0.00
Information Ratio	1.41	
Sharpe Ratio	1.38	1.37

Correlation Statistics

	<u>MCM TIPS</u>	<u>Blmbg. Barc. U.S. TIPS</u>
R-Squared	1.00	1.00
Actual Correlation	1.00	1.00

Manager Summary

MCM TIPS vs IM U.S. TIPS (SA+CF)
 Periods Ended June 30, 2020



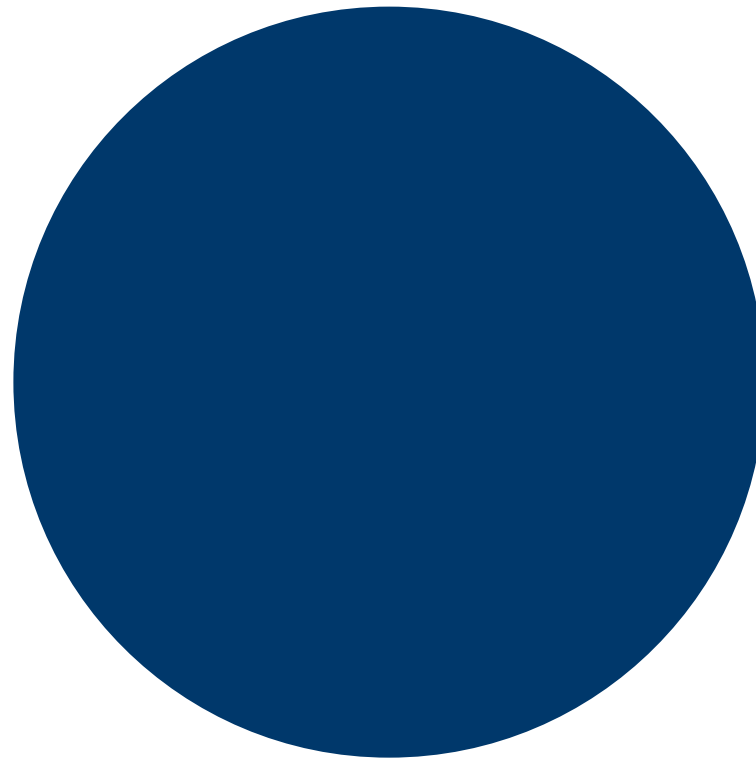


ERECT Composite

Asset Allocation By Manager

ERECT Composite
Periods Ended June 30, 2020

Jun-2020 : 9,718,261

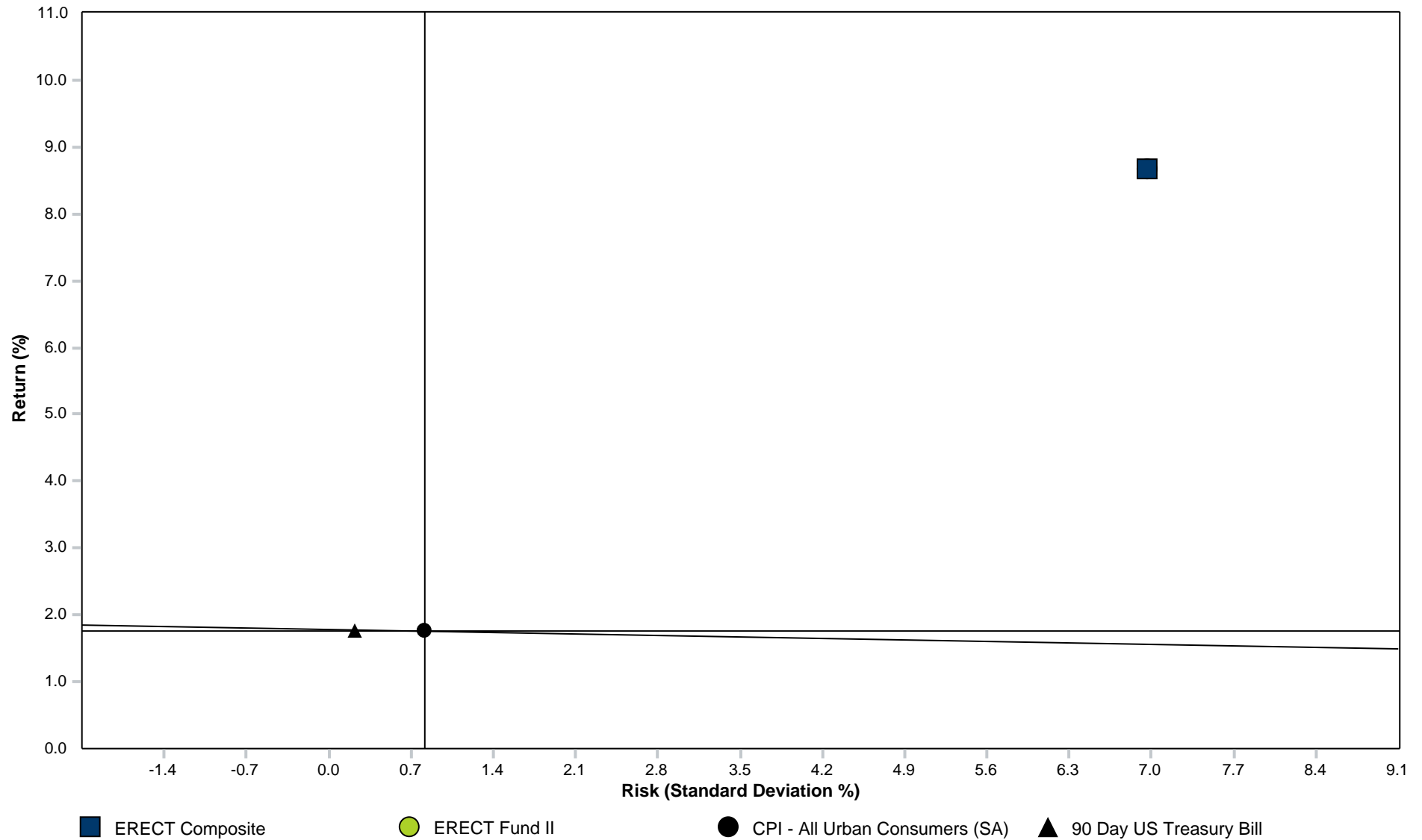


	Market Value \$	Allocation (%)
■ ERECT Fund II	9,718,261	100.0

Risk vs. Return

ERECT Composite

Periods Ended 3 Years Ending June 30, 2020



Calculation based on monthly periodicity.

Summary Statistics

ERECT Fund II

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>ERECT Fund II</u>	<u>CPI - All Urban Consumers (SA)</u>
Maximum Return	2.17	0.57
Minimum Return	-1.14	-0.80
Return	2.75	0.71
Cumulative Return	2.75	0.71
Active Return	2.04	0.00
Excess Return	1.13	-0.90

Risk Summary Statistics

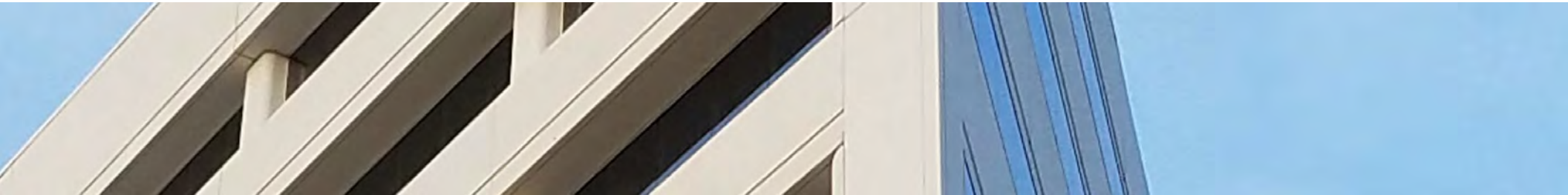
	<u>ERECT Fund II</u>	<u>CPI - All Urban Consumers (SA)</u>
Upside Risk	0.72	0.23
Downside Risk	1.14	0.90
Beta	0.89	1.00

Risk/Return Summary Statistics

	<u>ERECT Fund II</u>	<u>CPI - All Urban Consumers (SA)</u>
Standard Deviation	2.62	1.18
Alpha	2.14	0.00
Active Return/Risk	0.78	0.00
Tracking Error	2.41	0.00
Information Ratio	0.84	
Sharpe Ratio	0.42	-0.75

Correlation Statistics

	<u>ERECT Fund II</u>	<u>CPI - All Urban Consumers (SA)</u>
R-Squared	0.16	1.00
Actual Correlation	0.40	1.00

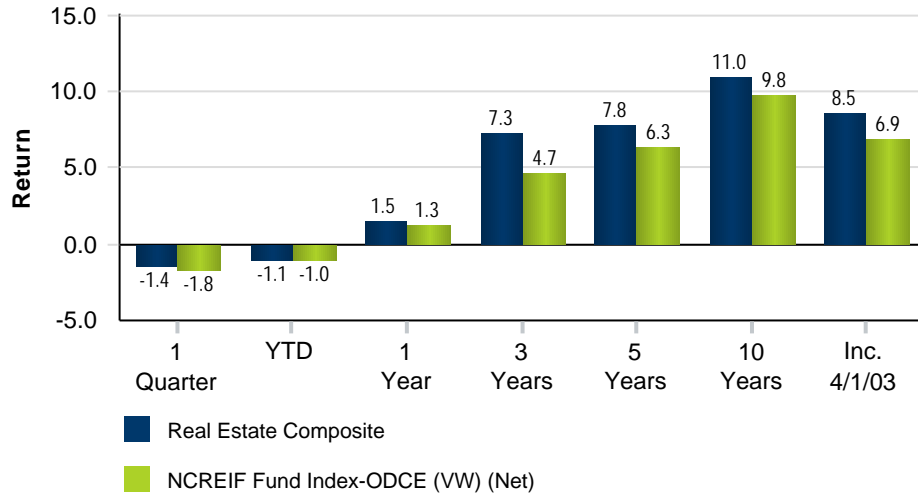


Real Estate Composite

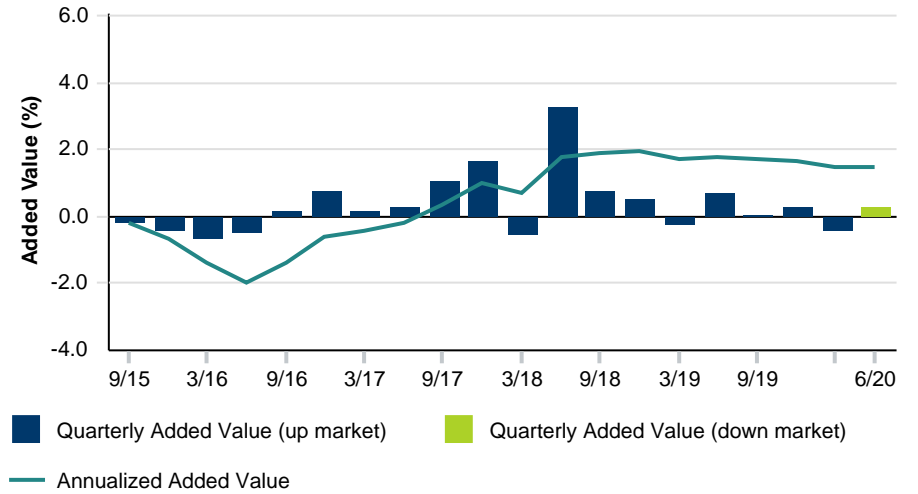
Composite Performance Summary

Real Estate Composite
Periods Ended June 30, 2020

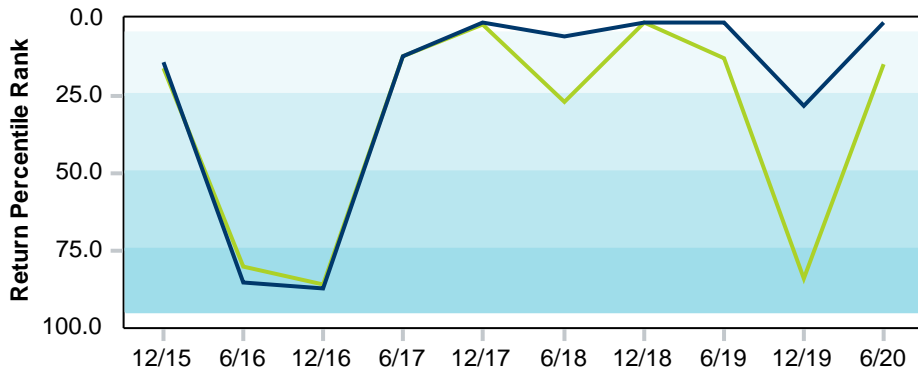
Comparative Performance



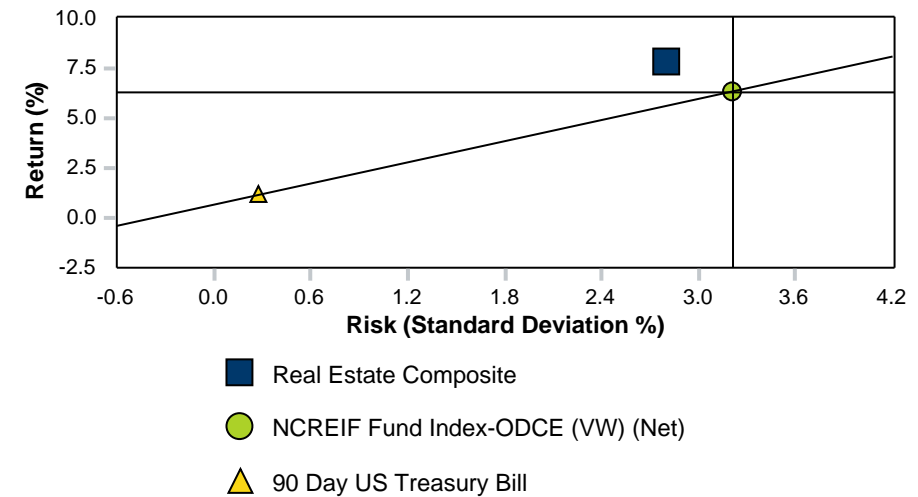
Added Value History



Rolling Percentile Rank: IM U.S. REIT (SA+CF)



Risk and Return 07/1/15 - 06/30/20

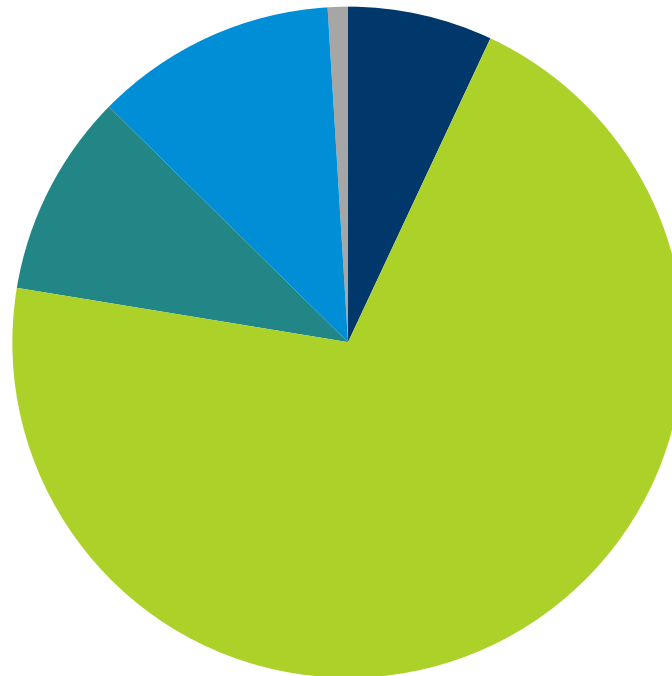


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Real Estate Composite	10	7 (70%)	1 (10%)	0 (0%)	2 (20%)
Benchmark	10	6 (60%)	1 (10%)	0 (0%)	3 (30%)

Asset Allocation By Manager

Real Estate Composite
 Periods Ended June 30, 2020

Jun-2020 : 100,929,333

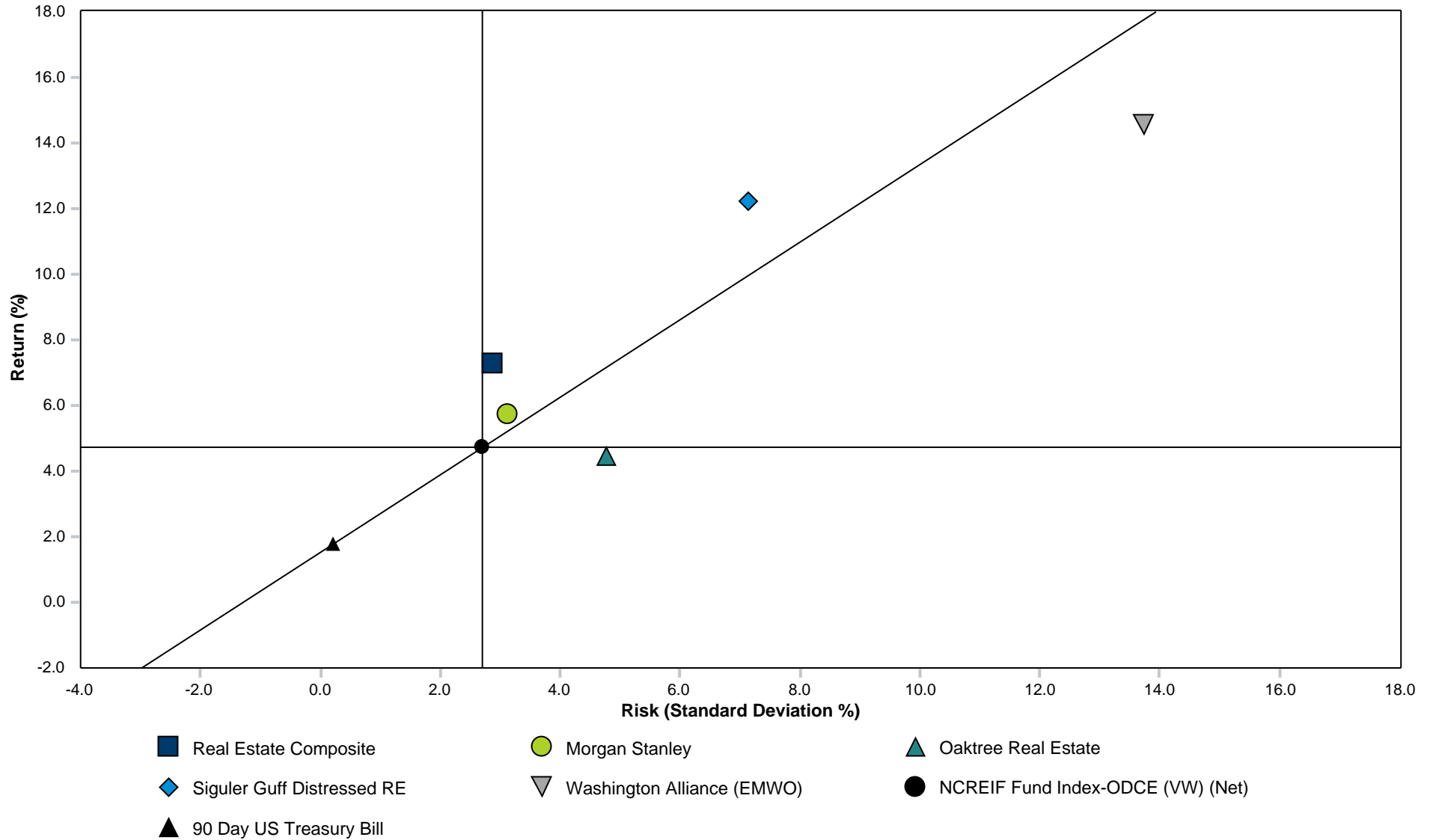


	Market Value \$	Allocation (%)
■ Oaktree Real Estate	7,035,603	7.0
■ Morgan Stanley	71,277,021	70.6
■ Siguler Guff Distressed RE	9,879,482	9.8
■ Washington Alliance (EMWO)	11,753,894	11.6
■ Washington Alliance II (EMWO)	983,333	1.0

Risk vs. Return

Real Estate Composite

Periods Ended 3 Years Ending June 30, 2020



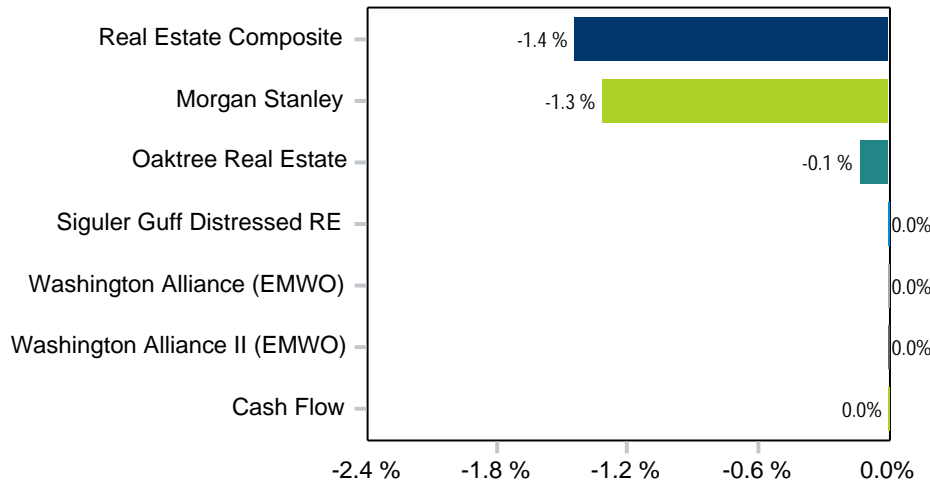
Calculation based on monthly periodicity.

Return and Risk Contribution

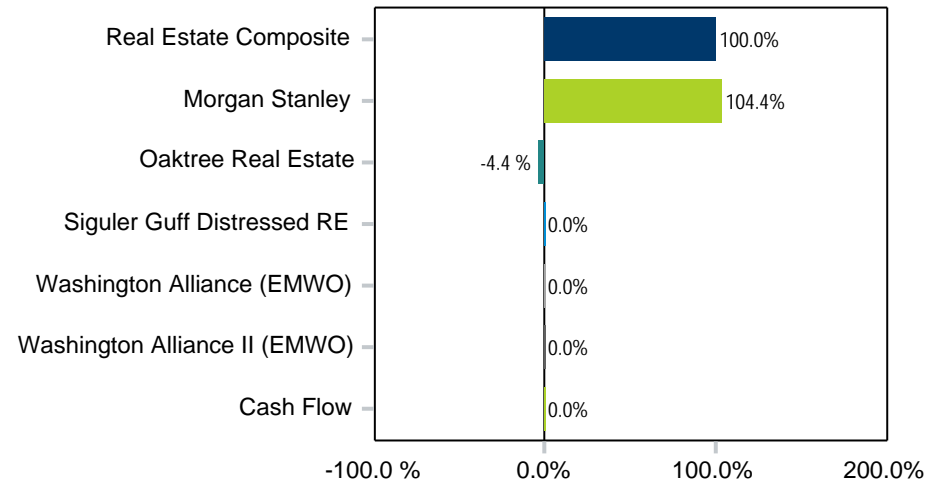
Real Estate Composite

Periods Ended 1 Quarter June 30, 2020

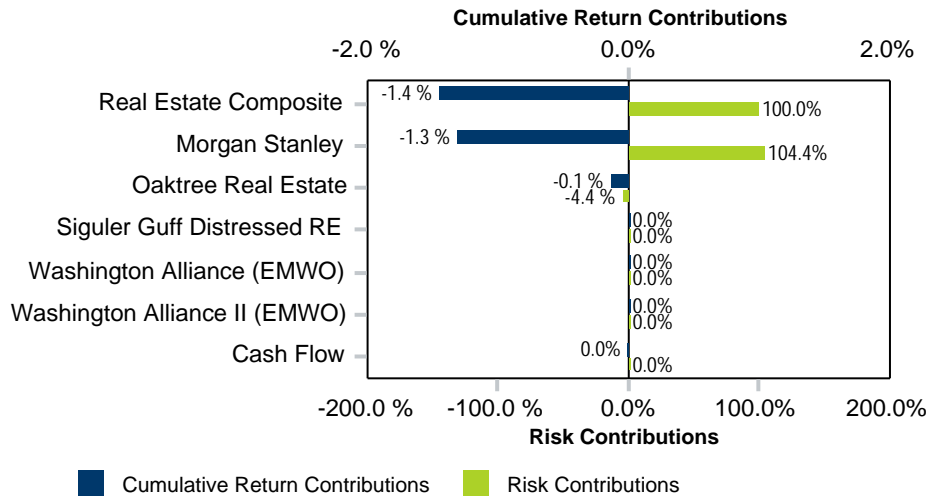
Cumulative Return Contributions



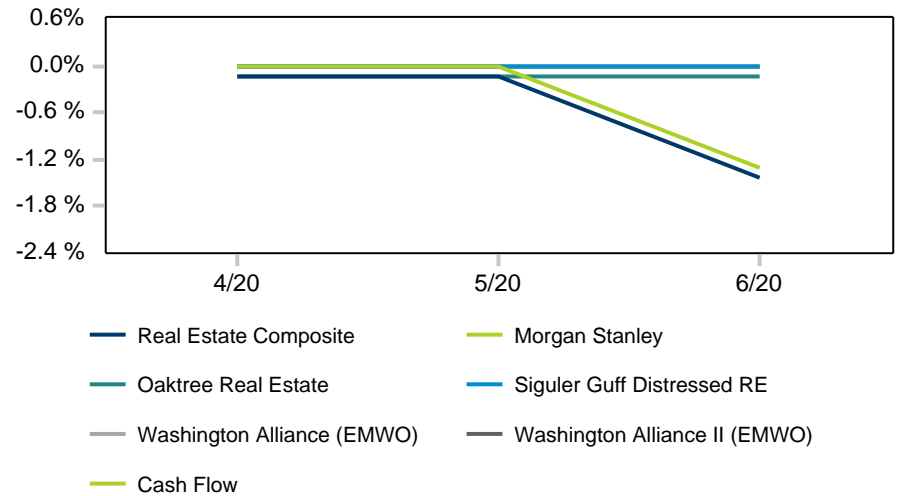
Risk Contributions



Cumulative Return and Risk Contributions



Cumulative Return Contributions History

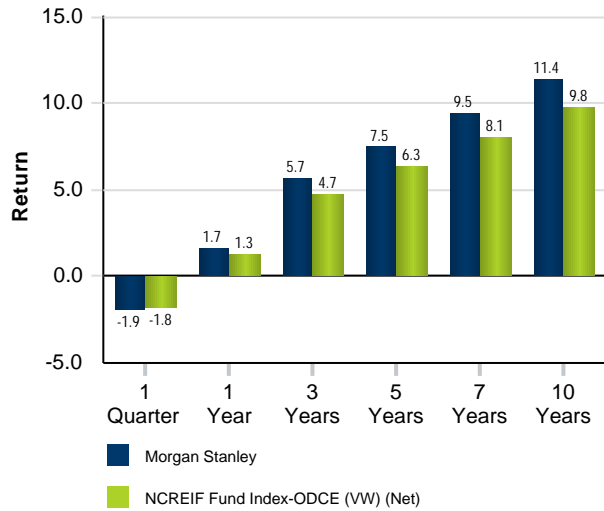


Performance Summary

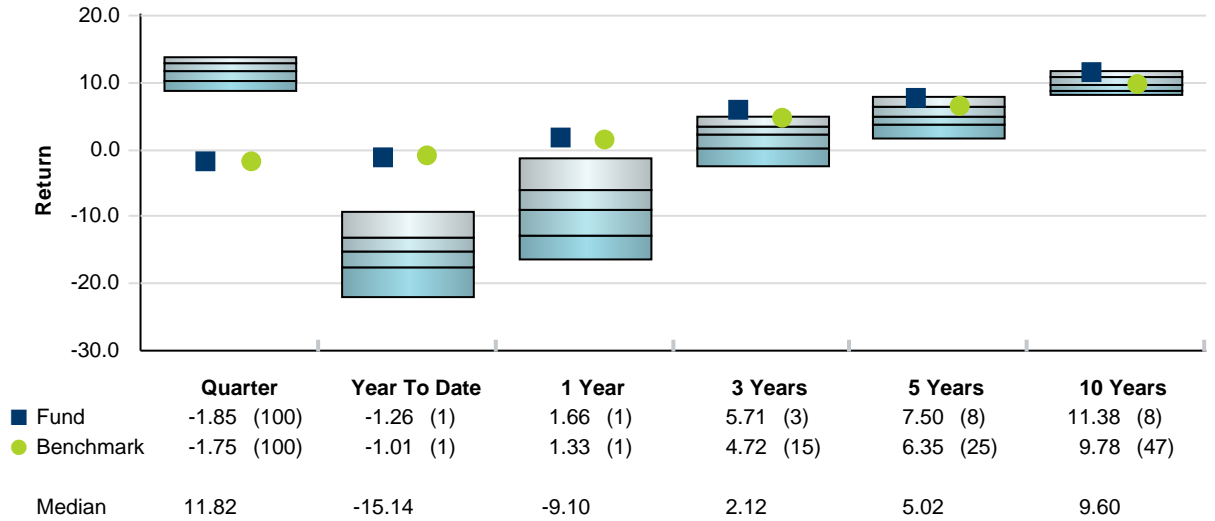
Morgan Stanley

Periods Ended June 30, 2020

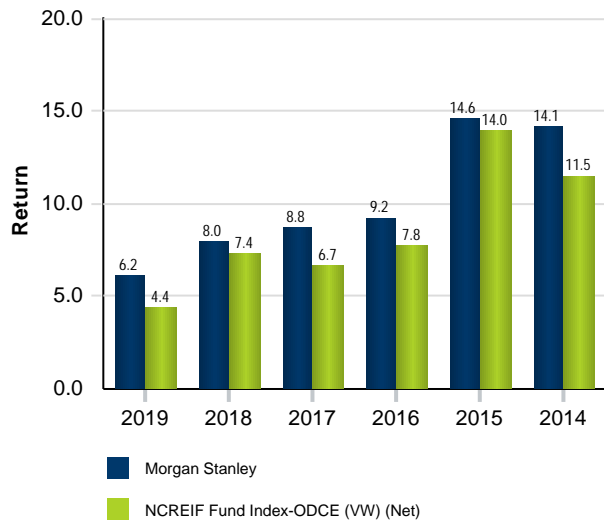
Comparative Performance



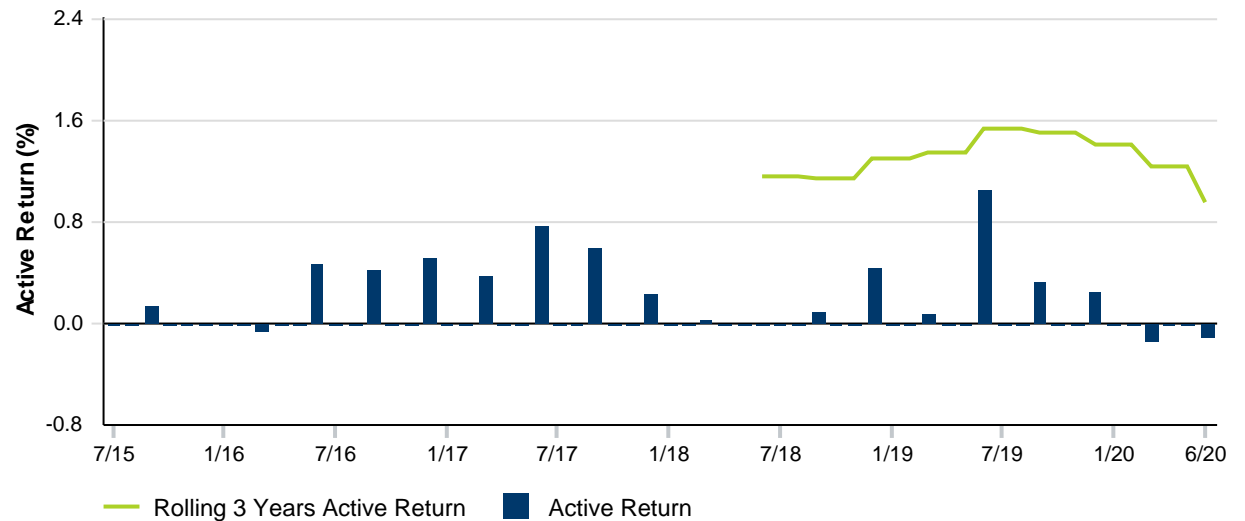
Peer Group Analysis: IM U.S. REIT (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Summary Statistics

Morgan Stanley

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Morgan Stanley</u>	<u>NCREIF Fund Index-ODCE (VW) (Net)</u>
Maximum Return	1.53	1.27
Minimum Return	-1.85	-1.75
Return	1.66	1.33
Cumulative Return	1.66	1.33
Active Return	0.34	0.00
Excess Return	0.07	-0.27

Risk Summary Statistics

	<u>Morgan Stanley</u>	<u>NCREIF Fund Index-ODCE (VW) (Net)</u>
Upside Risk	0.63	0.53
Downside Risk	1.85	1.75
Beta	1.11	1.00

Risk/Return Summary Statistics

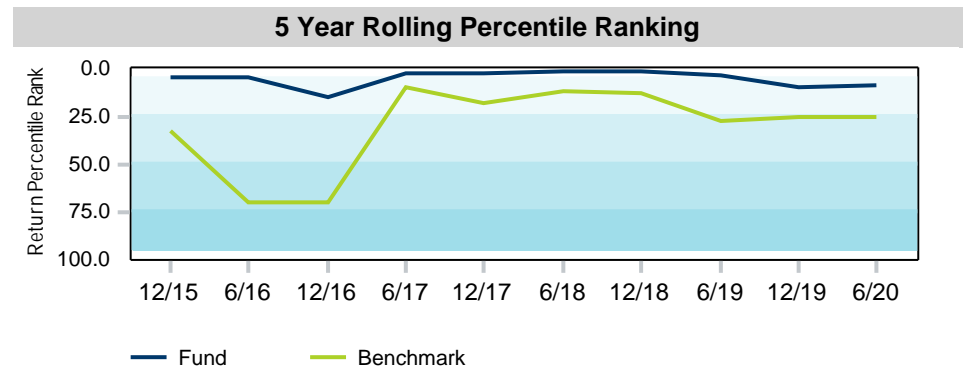
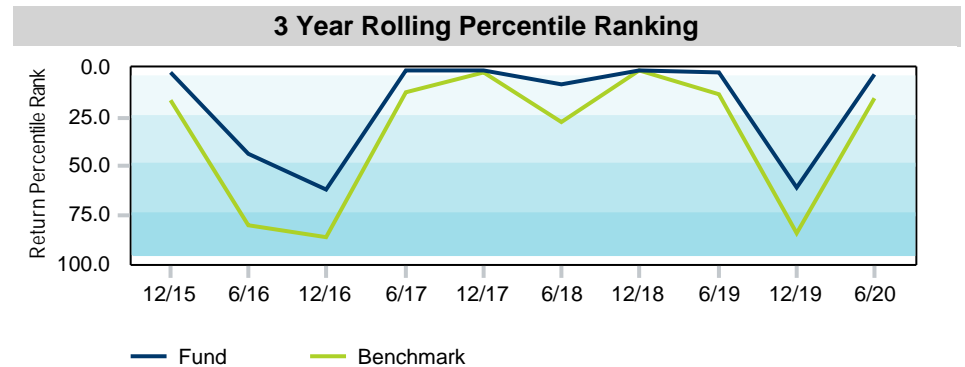
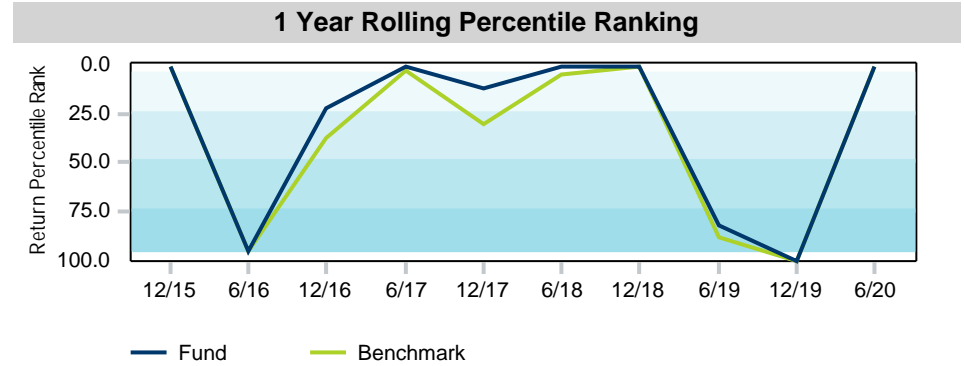
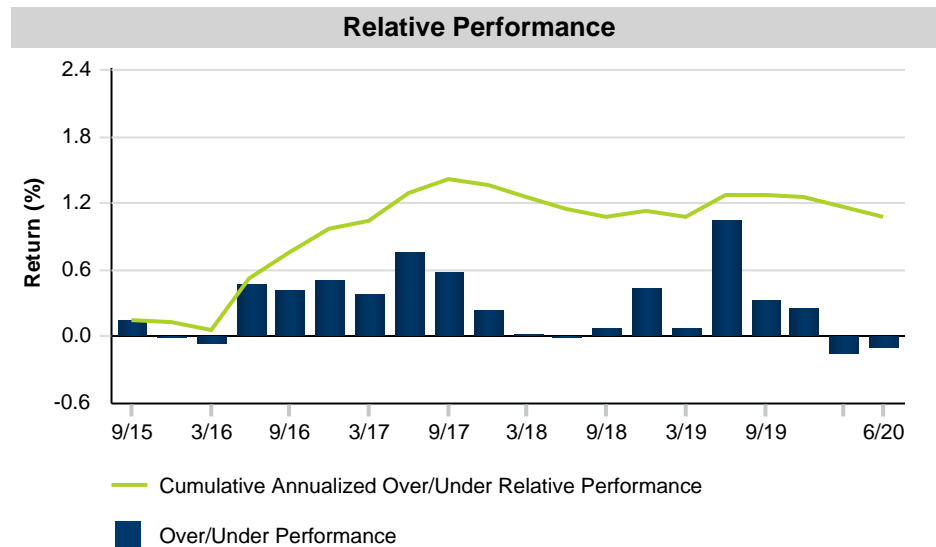
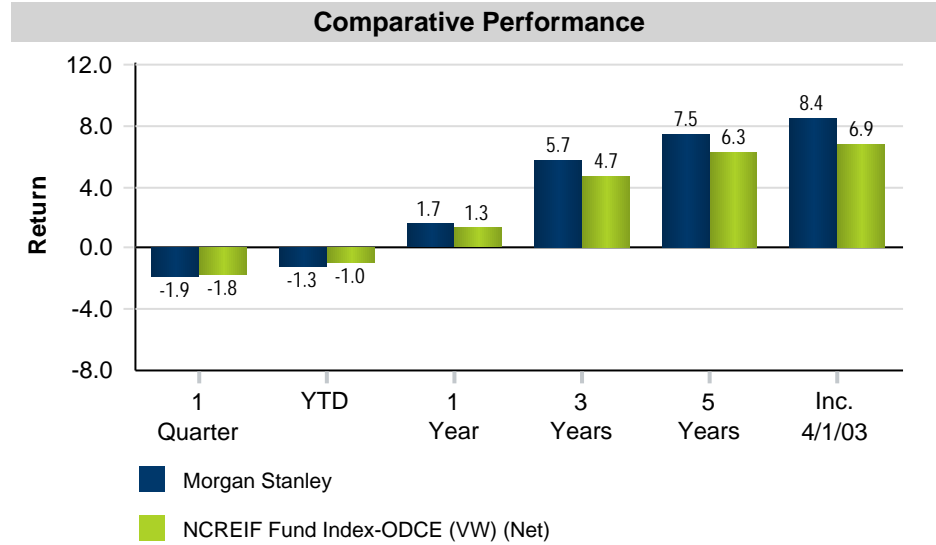
	<u>Morgan Stanley</u>	<u>NCREIF Fund Index-ODCE (VW) (Net)</u>
Standard Deviation	2.81	2.50
Alpha	0.19	0.00
Active Return/Risk	0.12	0.00
Tracking Error	0.45	0.00
Information Ratio	0.76	
Sharpe Ratio	0.03	-0.11

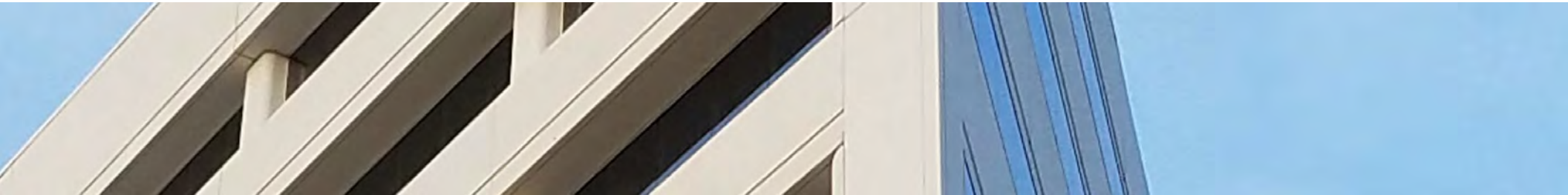
Correlation Statistics

	<u>Morgan Stanley</u>	<u>NCREIF Fund Index-ODCE (VW) (Net)</u>
R-Squared	0.99	1.00
Actual Correlation	0.99	1.00

Manager Summary

Morgan Stanley vs IM U.S. REIT (SA+CF)
 Periods Ended June 30, 2020





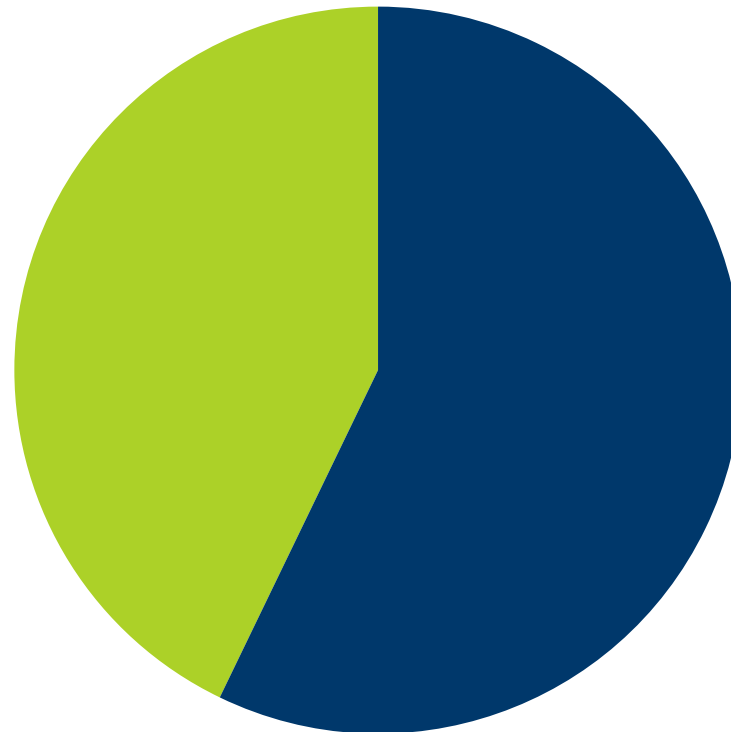
MLP Composite

Asset Allocation By Manager

MLP Composite

Periods Ended June 30, 2020

Jun-2020 : 28,197,259

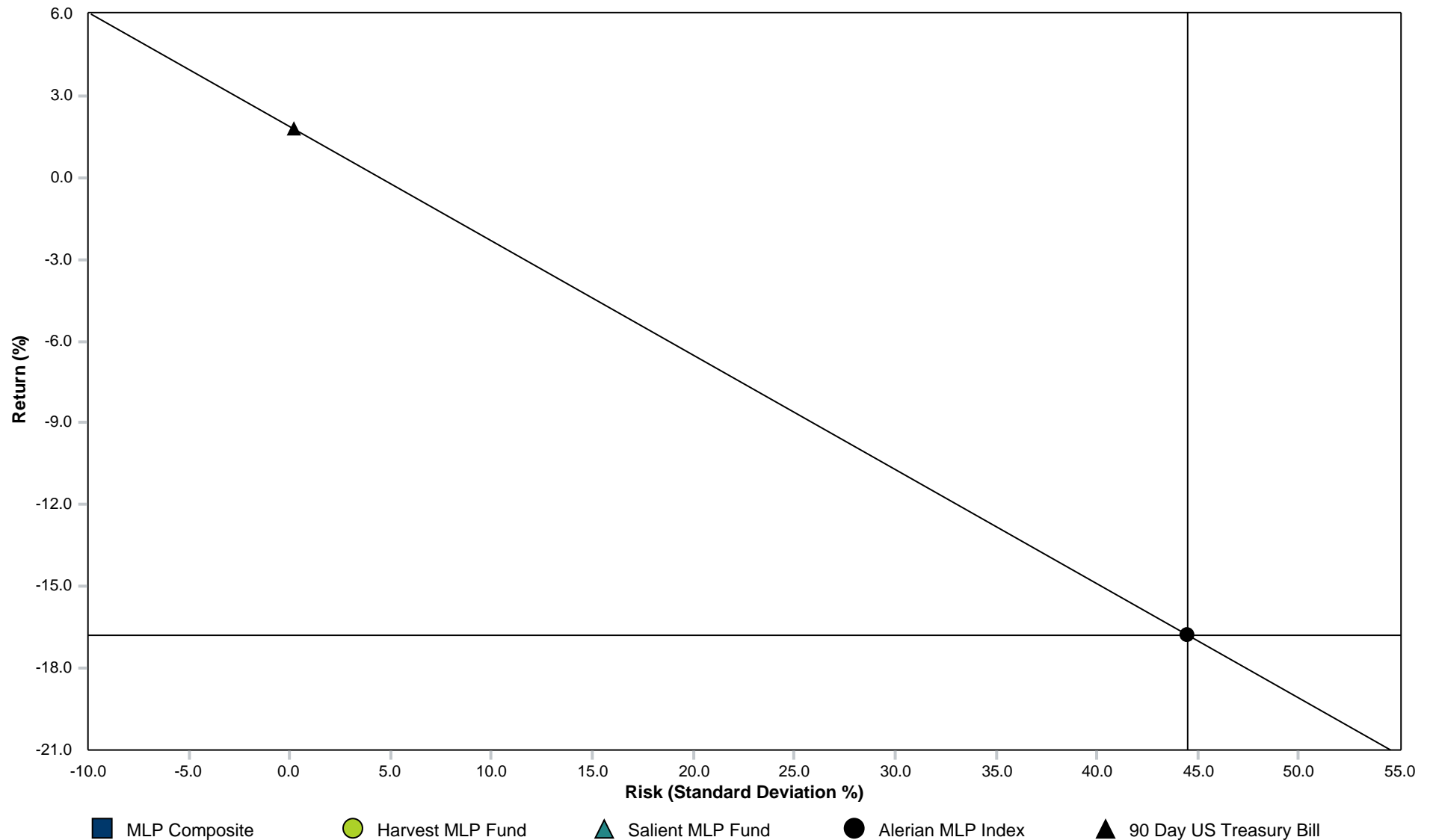


	Market Value \$	Allocation (%)
■ Harvest MLP Fund	16,119,326	57.2
■ Salient MLP Fund	12,077,934	42.8

Risk vs. Return

MLP Composite

Periods Ended 3 Years Ending June 30, 2020



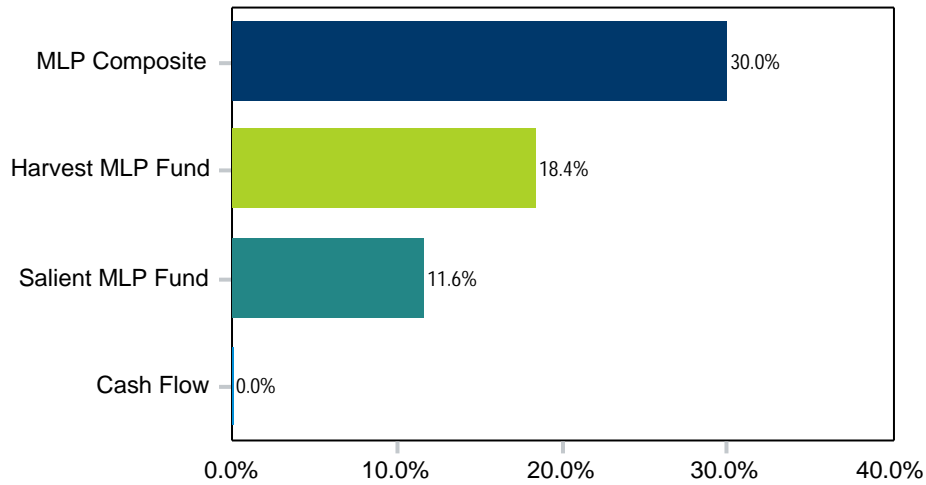
Calculation based on monthly periodicity.

Return and Risk Contribution

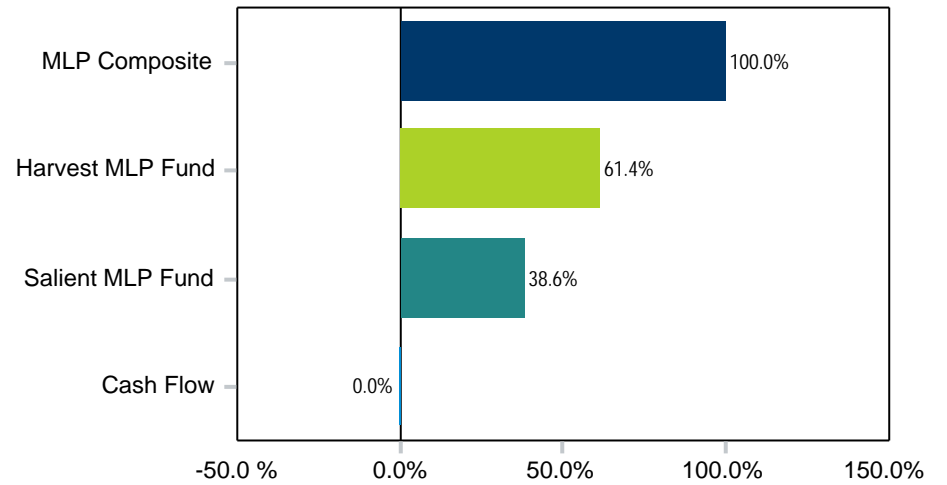
MLP Composite

Periods Ended 1 Quarter June 30, 2020

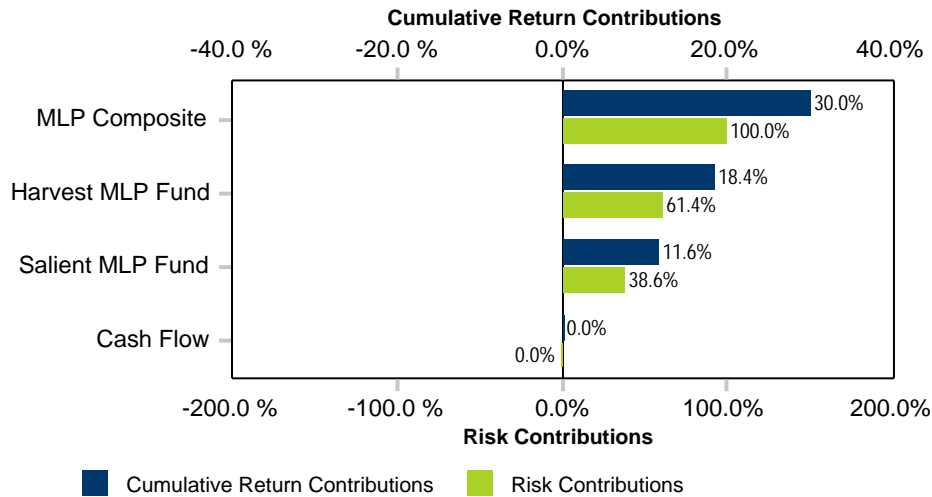
Cumulative Return Contributions



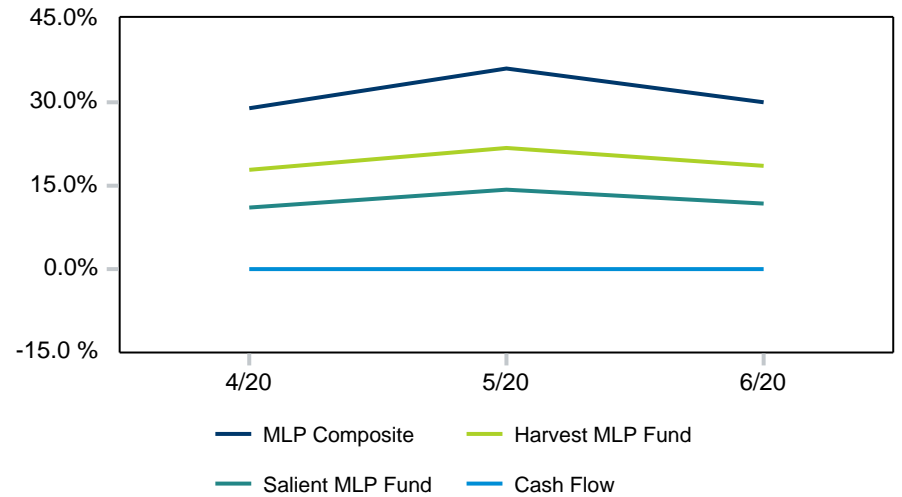
Risk Contributions



Cumulative Return and Risk Contributions

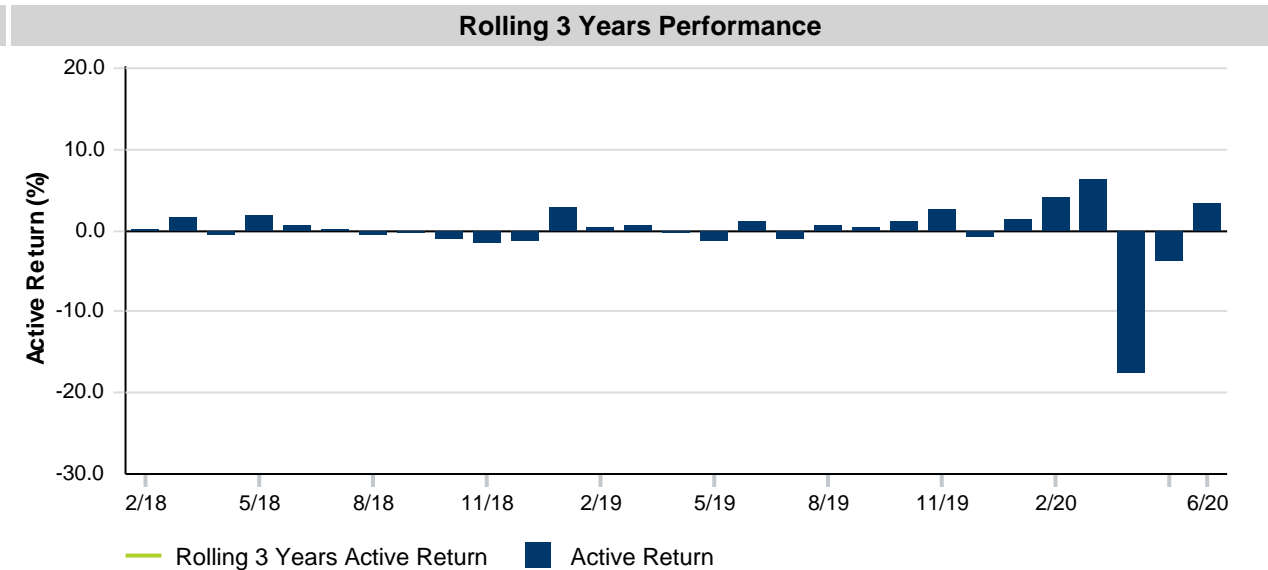
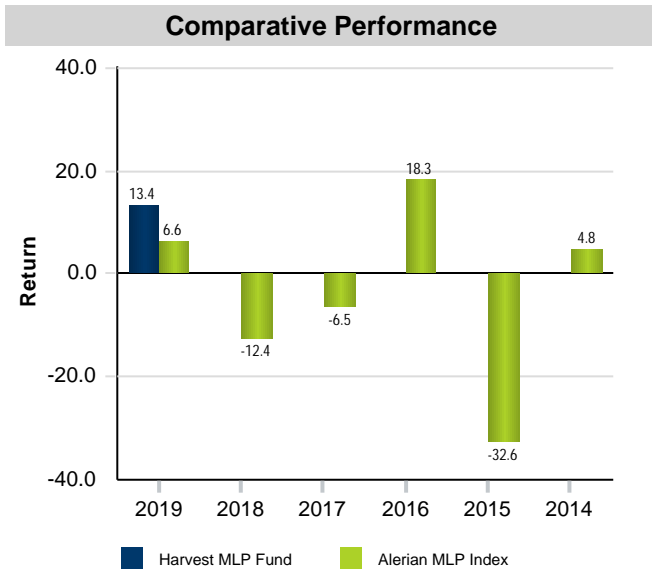
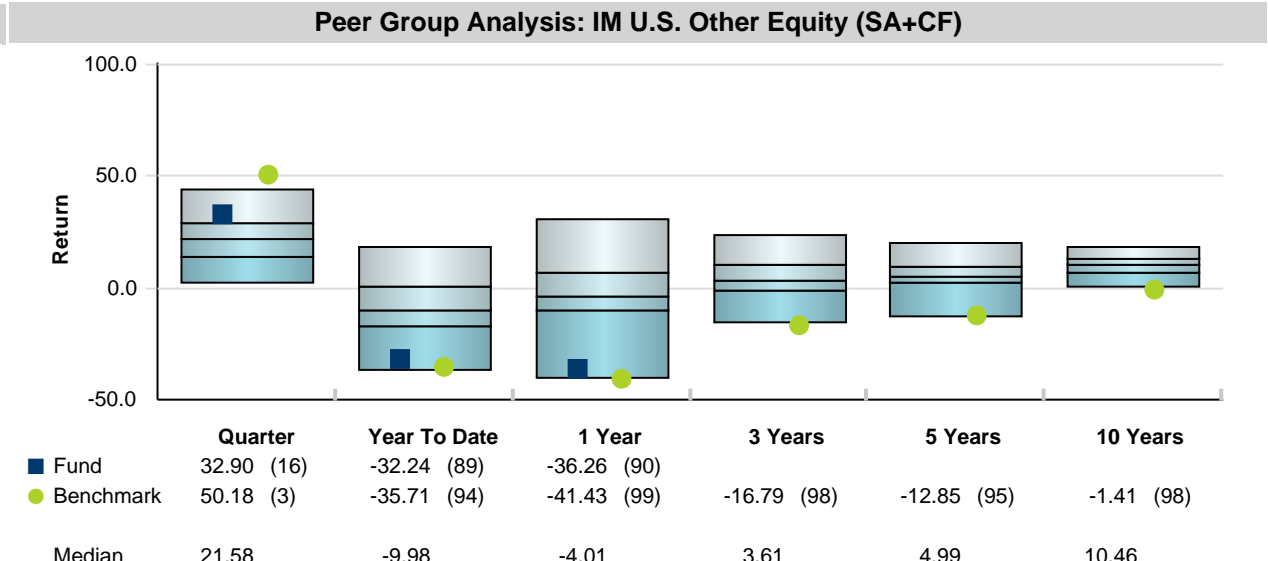
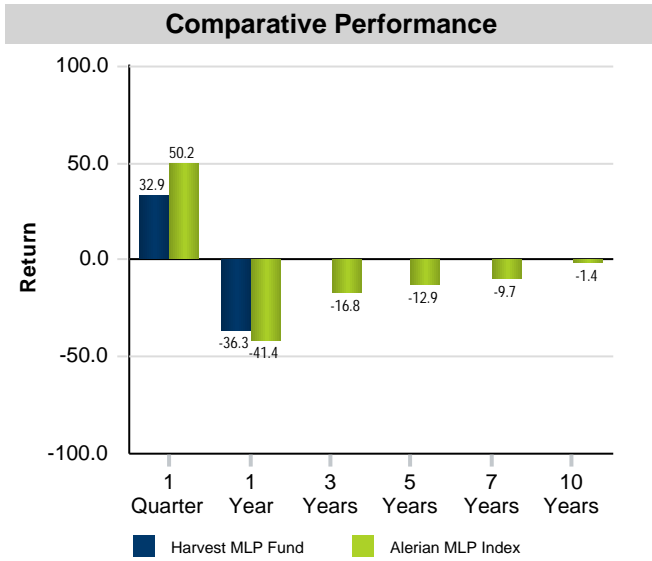


Cumulative Return Contributions History



Performance Summary

Harvest MLP Fund
Periods Ended June 30, 2020



Summary Statistics

Harvest MLP Fund

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Harvest MLP Fund</u>	<u>Alerian MLP Index</u>
Maximum Return	32.14	49.62
Minimum Return	-40.88	-47.23
Return	-36.26	-41.43
Cumulative Return	-36.26	-41.43
Active Return	-3.00	0.00
Excess Return	-29.25	-26.25

Risk Summary Statistics

	<u>Harvest MLP Fund</u>	<u>Alerian MLP Index</u>
Upside Risk	9.67	14.76
Downside Risk	43.22	51.22
Beta	0.74	1.00

Risk/Return Summary Statistics

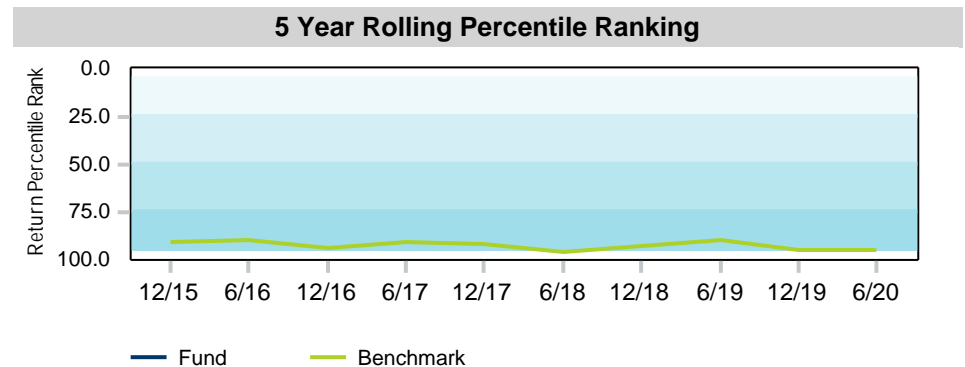
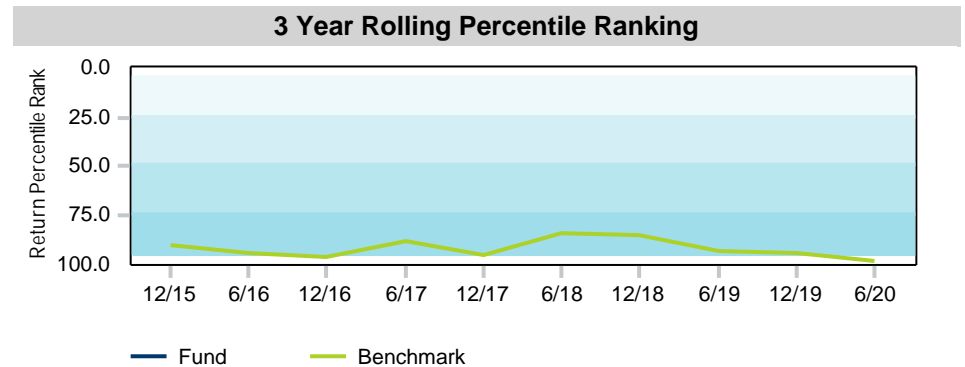
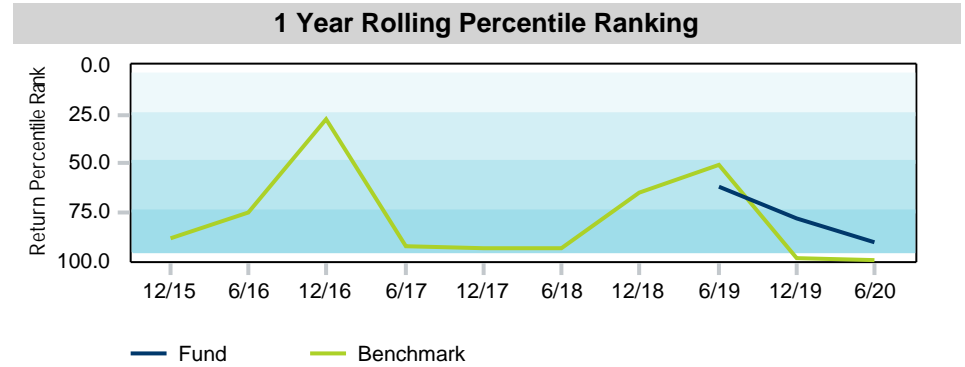
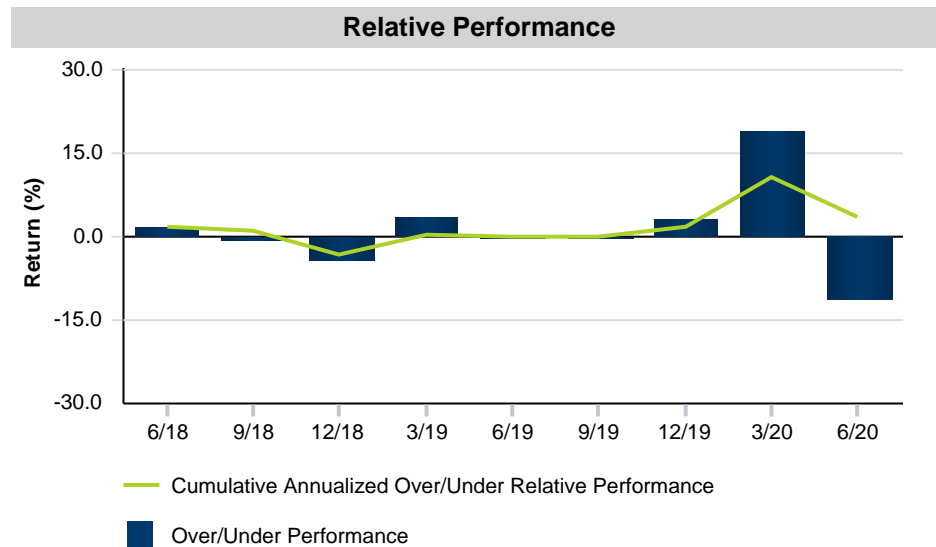
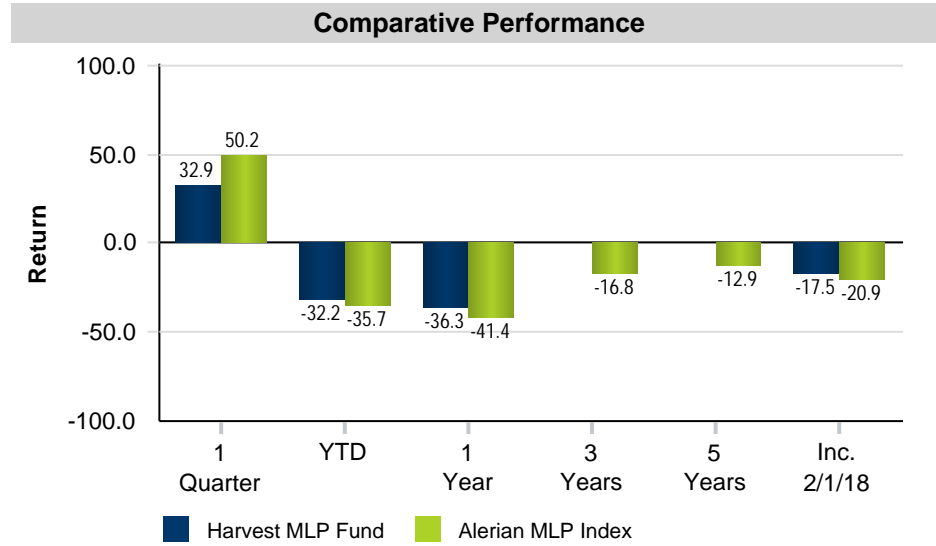
	<u>Harvest MLP Fund</u>	<u>Alerian MLP Index</u>
Standard Deviation	54.10	72.03
Alpha	-8.93	0.00
Active Return/Risk	-0.06	0.00
Tracking Error	19.99	0.00
Information Ratio	-0.15	
Sharpe Ratio	-0.54	-0.36

Correlation Statistics

	<u>Harvest MLP Fund</u>	<u>Alerian MLP Index</u>
R-Squared	0.98	1.00
Actual Correlation	0.99	1.00

Manager Summary

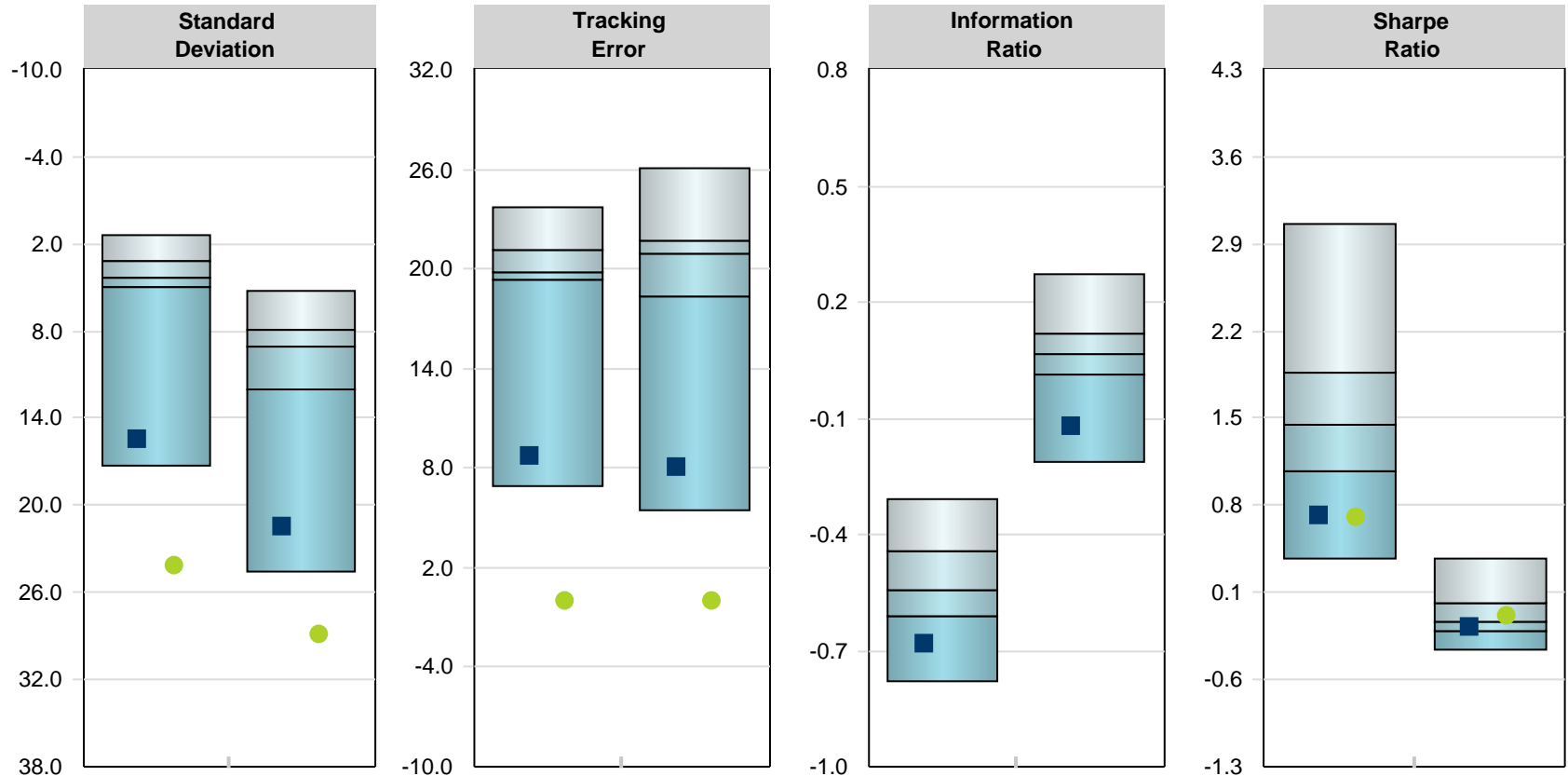
Harvest MLP Fund vs IM U.S. Other Equity (SA+CF)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

Harvest MLP Fund

Periods Ended June 30, 2020



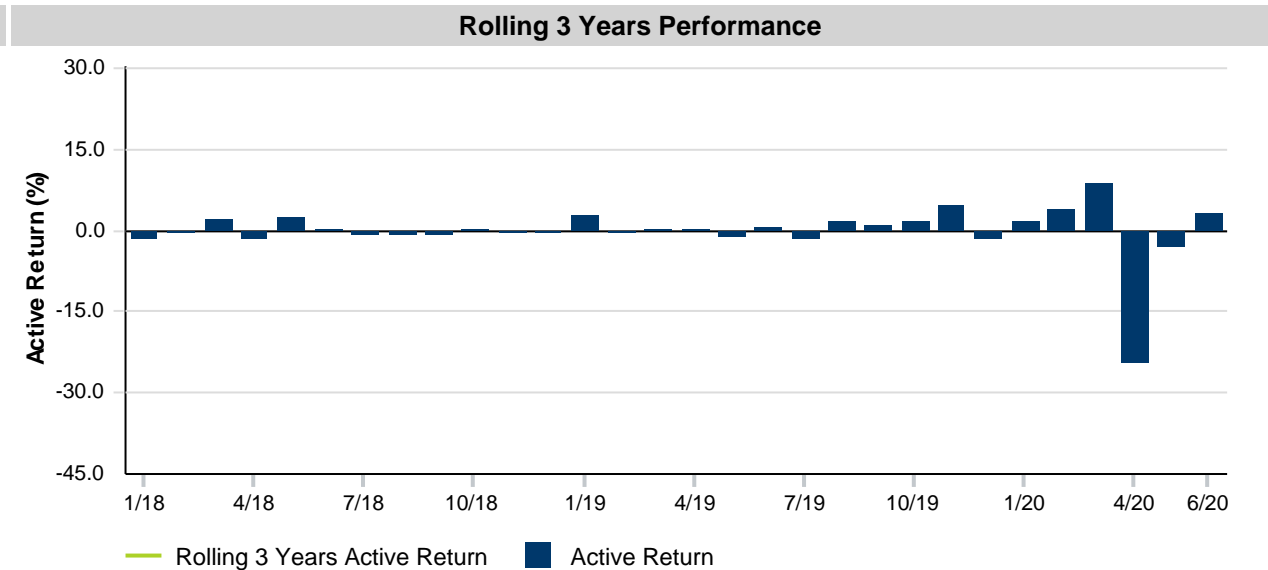
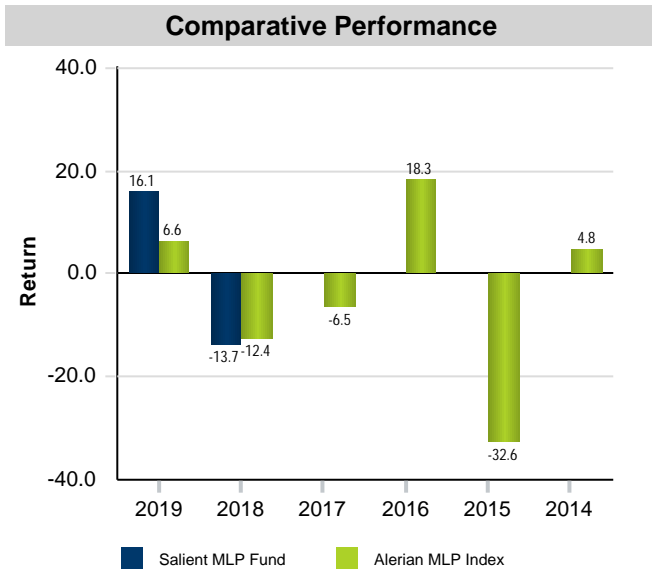
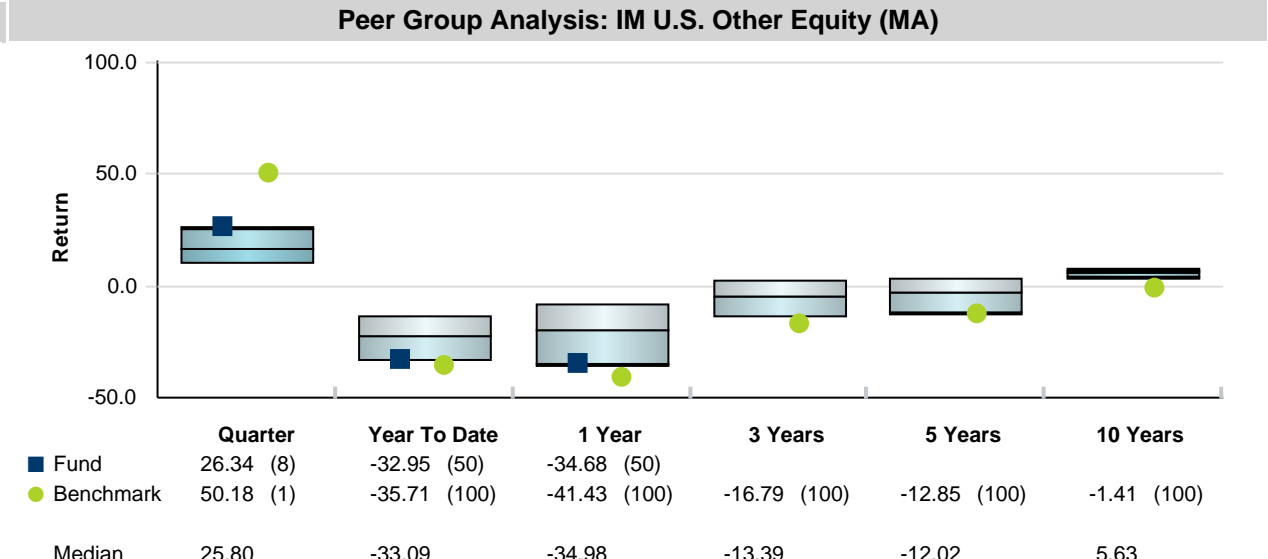
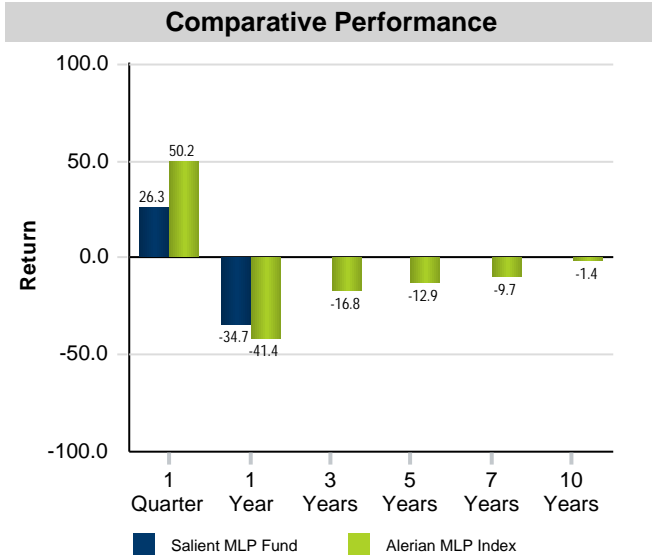
	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Harvest MLP Fund	15.47 (89)	21.55 (90)	8.68 (90)	8.01 (91)	-0.68 (91)	-0.12 (87)	0.71 (91)	-0.17 (64)
● Alerian MLP Index	24.13 (100)	28.93 (100)	0.00 (100)	0.00 (100)			0.70 (92)	-0.10 (42)

5th Percentile	1.41	5.21	23.68	26.04	-0.31	0.27	3.06	0.38
1st Quartile	3.22	7.97	21.18	21.67	-0.44	0.12	1.87	0.01
Median	4.35	9.11	19.85	20.90	-0.54	0.07	1.45	-0.14
3rd Quartile	4.98	11.97	19.35	18.39	-0.61	0.01	1.07	-0.22
95th Percentile	17.23	24.51	6.94	5.48	-0.78	-0.21	0.37	-0.36

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

Performance Summary

Salient MLP Fund
Periods Ended June 30, 2020



Summary Statistics

Salient MLP Fund

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Salient MLP Fund</u>	<u>Alerian MLP Index</u>
Maximum Return	25.17	49.62
Minimum Return	-38.58	-47.23
Return	-34.68	-41.43
Cumulative Return	-34.68	-41.43
Active Return	-3.73	0.00
Excess Return	-29.98	-26.25

Risk Summary Statistics

	<u>Salient MLP Fund</u>	<u>Alerian MLP Index</u>
Upside Risk	7.75	14.76
Downside Risk	40.81	51.22
Beta	0.65	1.00

Risk/Return Summary Statistics

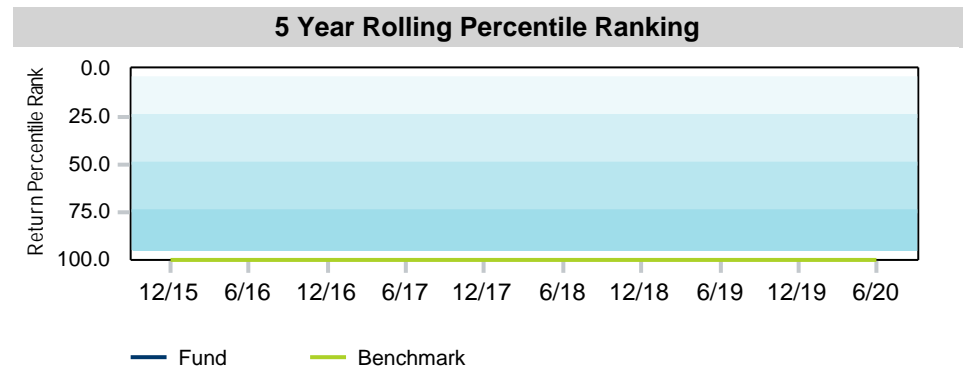
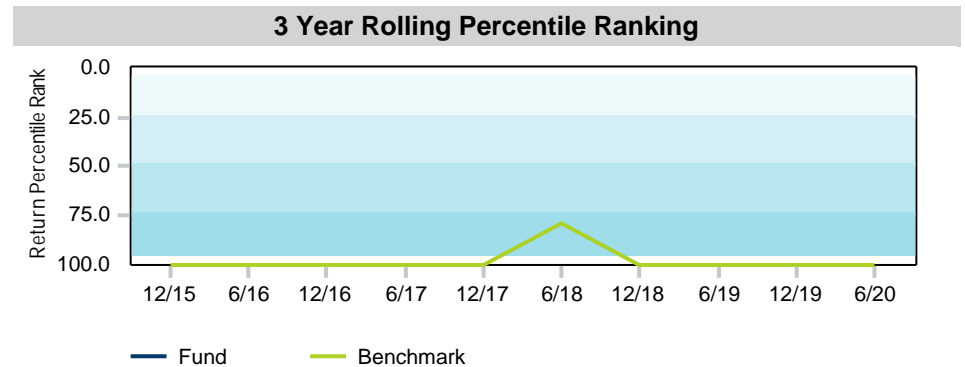
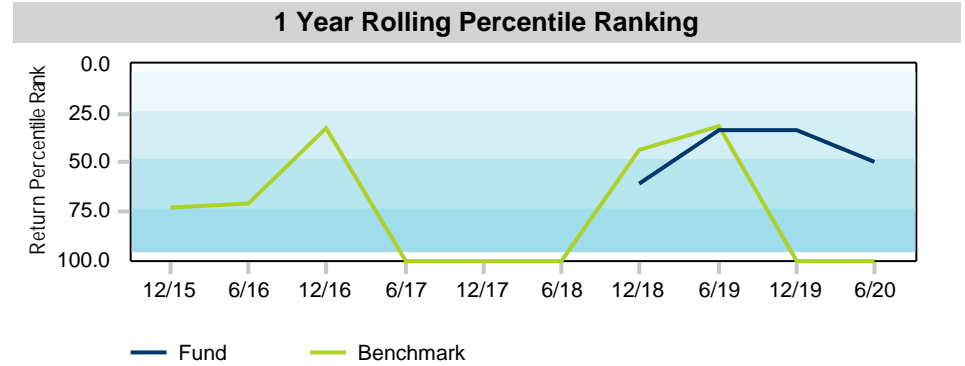
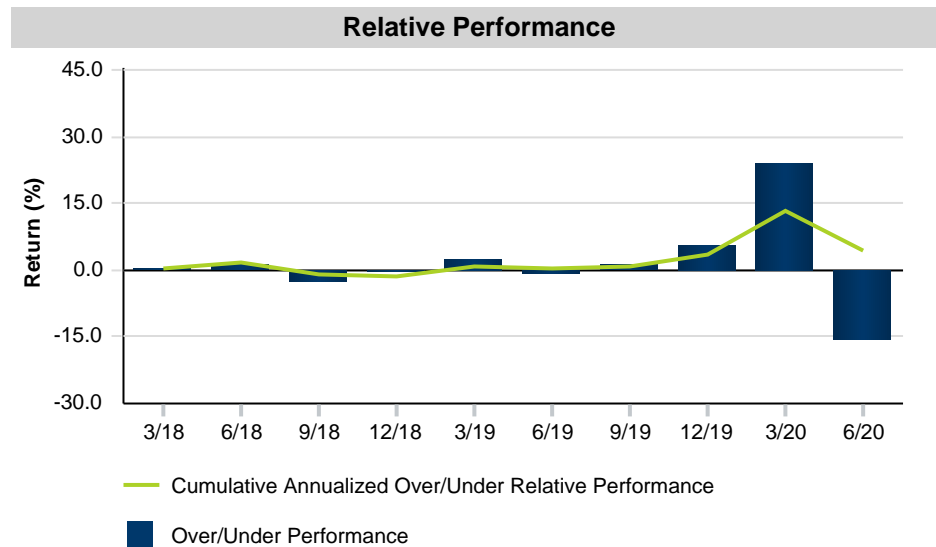
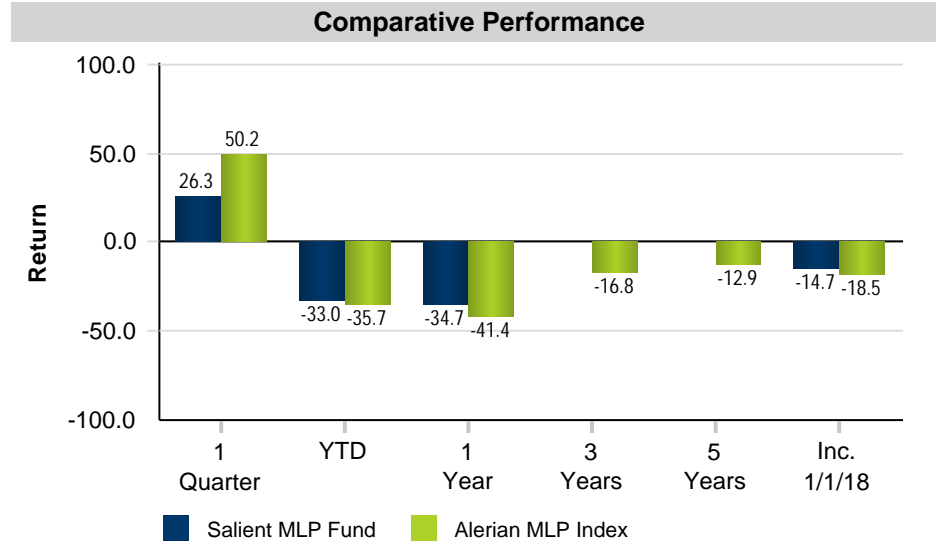
	<u>Salient MLP Fund</u>	<u>Alerian MLP Index</u>
Standard Deviation	48.16	72.03
Alpha	-11.63	0.00
Active Return/Risk	-0.08	0.00
Tracking Error	27.27	0.00
Information Ratio	-0.14	
Sharpe Ratio	-0.62	-0.36

Correlation Statistics

	<u>Salient MLP Fund</u>	<u>Alerian MLP Index</u>
R-Squared	0.95	1.00
Actual Correlation	0.97	1.00

Manager Summary

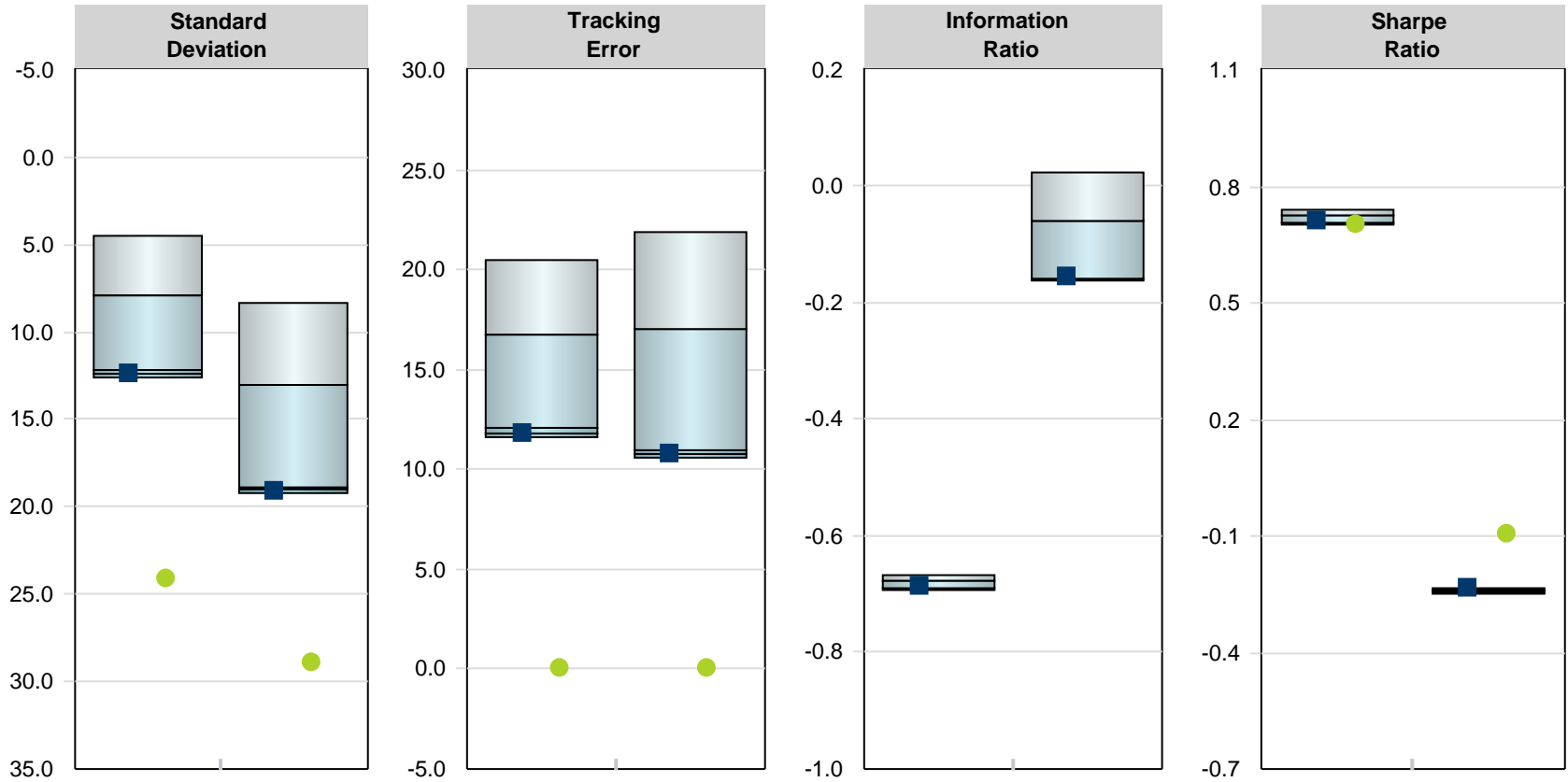
Salient MLP Fund vs IM U.S. Other Equity (MA)
 Periods Ended June 30, 2020



Peer Group Analysis - Multi Statistics

Salient MLP Fund

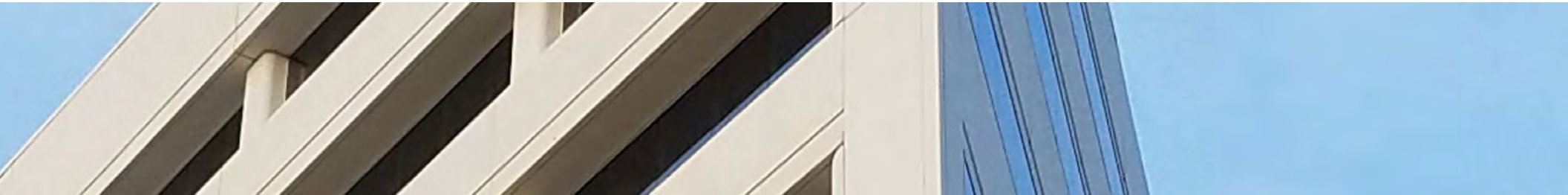
Periods Ended June 30, 2020



	Standard Deviation		Tracking Error		Information Ratio		Sharpe Ratio	
	QTD	YTD	QTD	YTD	QTD	YTD	QTD	YTD
■ Salient MLP Fund	12.37 (72)	19.07 (77)	11.83 (74)	10.75 (76)	-0.69 (45)	-0.15 (50)	0.71 (47)	-0.23 (1)
● Alerian MLP Index	24.13 (100)	28.93 (100)	0.00 (100)	0.00 (100)			0.70 (100)	-0.10 (1)

5th Percentile	4.50	8.32	20.44	21.87	-0.67	0.02	0.74	-0.23
1st Quartile	7.91	13.01	16.70	17.01	-0.68	-0.06	0.73	-0.24
Median	12.17	18.88	12.03	10.94	-0.69	-0.16	0.71	-0.24
3rd Quartile	12.39	19.05	11.81	10.75	-0.69	-0.16	0.70	-0.25
95th Percentile	12.57	19.19	11.63	10.60	-0.69	-0.16	0.70	-0.25

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

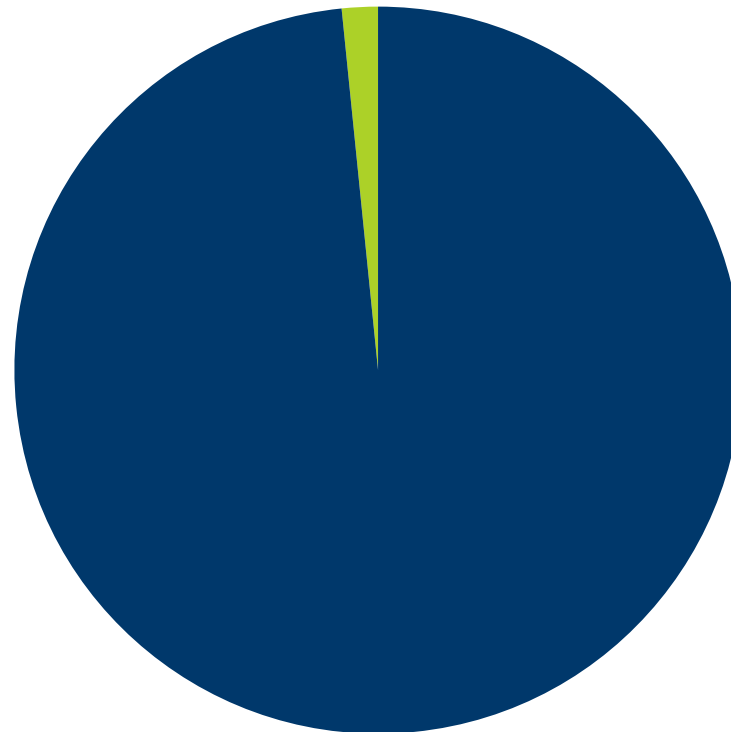


Hedge Fund Composite

Asset Allocation By Manager

Hedge Fund Composite
Periods Ended June 30, 2020

Jun-2020 : 2,672,965

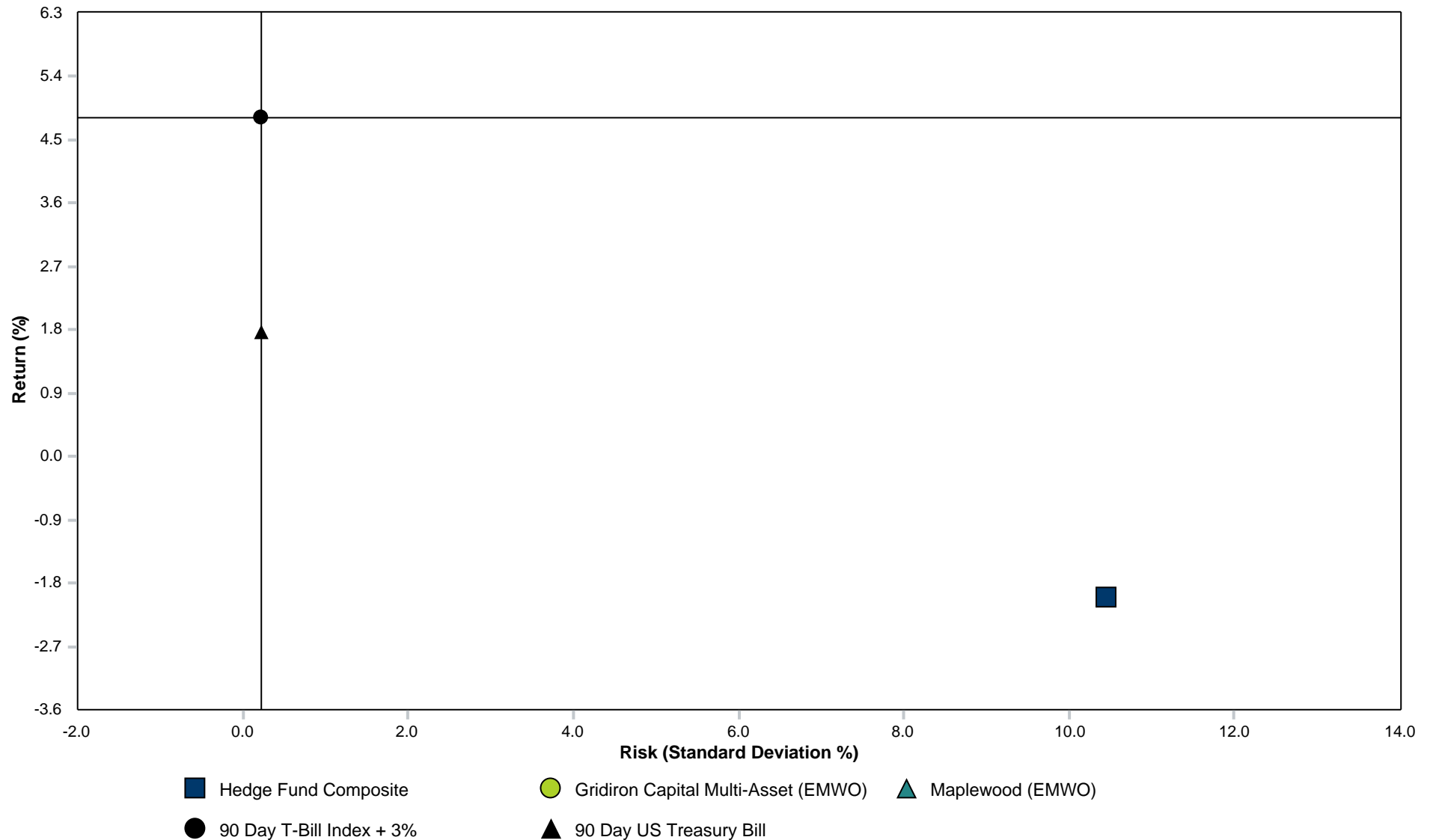


	Market Value \$	Allocation (%)
■ Gridiron Capital Multi-Asset (EMWO)	2,630,126	98.4
■ Maplewood (EMWO)	42,840	1.6

Risk vs. Return

Hedge Fund Composite

Periods Ended 3 Years Ending June 30, 2020



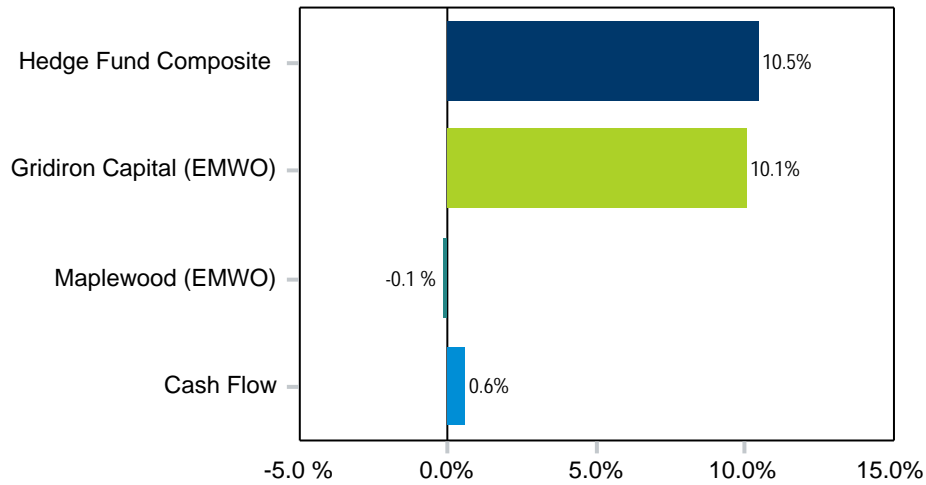
Calculation based on monthly periodicity.

Return and Risk Contribution

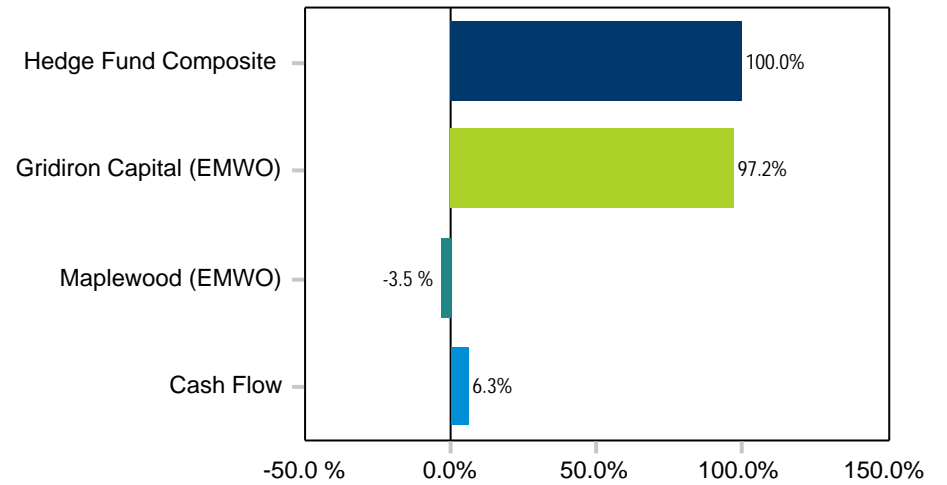
Hedge Fund Composite

Periods Ended 1 Quarter June 30, 2020

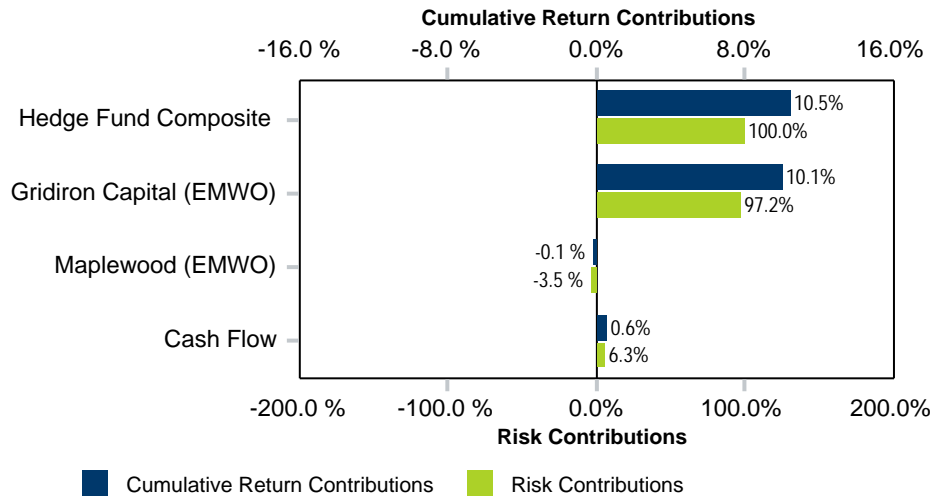
Cumulative Return Contributions



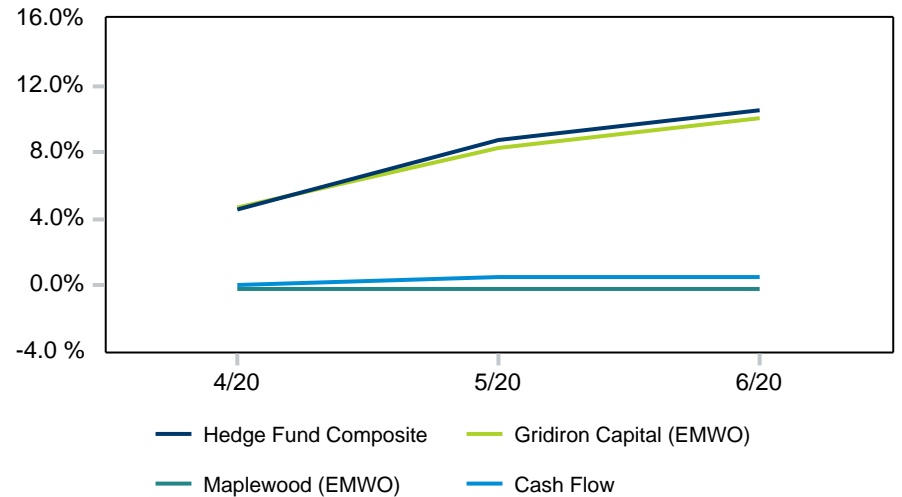
Risk Contributions



Cumulative Return and Risk Contributions



Cumulative Return Contributions History



Summary Statistics

Gridiron Capital (EMWO)

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Gridiron Capital (EMWO)</u>	<u>HFRI FoF Composite Lagged</u>
Maximum Return	6.46	3.42
Minimum Return	-12.83	-7.63
Return	0.45	0.06
Cumulative Return	0.45	0.06
Active Return	1.35	0.00
Excess Return	0.24	-1.12

Risk Summary Statistics

	<u>Gridiron Capital (EMWO)</u>	<u>HFRI FoF Composite Lagged</u>
Upside Risk	2.56	1.39
Downside Risk	13.75	7.83
Beta	-0.10	1.00

Risk/Return Summary Statistics

	<u>Gridiron Capital (EMWO)</u>	<u>HFRI FoF Composite Lagged</u>
Standard Deviation	16.35	9.20
Alpha	1.92	0.00
Active Return/Risk	0.08	0.00
Tracking Error	19.21	0.00
Information Ratio	0.07	
Sharpe Ratio	0.01	-0.12

Correlation Statistics

	<u>Gridiron Capital (EMWO)</u>	<u>HFRI FoF Composite Lagged</u>
R-Squared	0.00	1.00
Actual Correlation	-0.06	1.00

Summary Statistics

Maplewood (EMWO)

Periods Ended 1 Year Ending June 30, 2020

Return Summary Statistics

	<u>Maplewood (EMWO)</u>	<u>HFRX Macro Index</u>
Maximum Return	1.42	1.83
Minimum Return	-12.81	-1.40
Return	-14.65	1.47
Cumulative Return	-14.65	1.47
Active Return	-16.36	0.00
Excess Return	-16.45	-0.09

Risk Summary Statistics

	<u>Maplewood (EMWO)</u>	<u>HFRX Macro Index</u>
Upside Risk	0.60	0.82
Downside Risk	13.48	2.30
Beta	1.58	1.00

Risk/Return Summary Statistics

	<u>Maplewood (EMWO)</u>	<u>HFRX Macro Index</u>
Standard Deviation	12.95	3.63
Alpha	-15.94	0.00
Active Return/Risk	-1.26	0.00
Tracking Error	11.80	0.00
Information Ratio	-1.39	
Sharpe Ratio	-1.26	-0.02

Correlation Statistics

	<u>Maplewood (EMWO)</u>	<u>HFRX Macro Index</u>
R-Squared	0.20	1.00
Actual Correlation	0.44	1.00