



Investment Performance Analysis

North Dakota Board of University and School Lands

Period Ended: September 30, 2020



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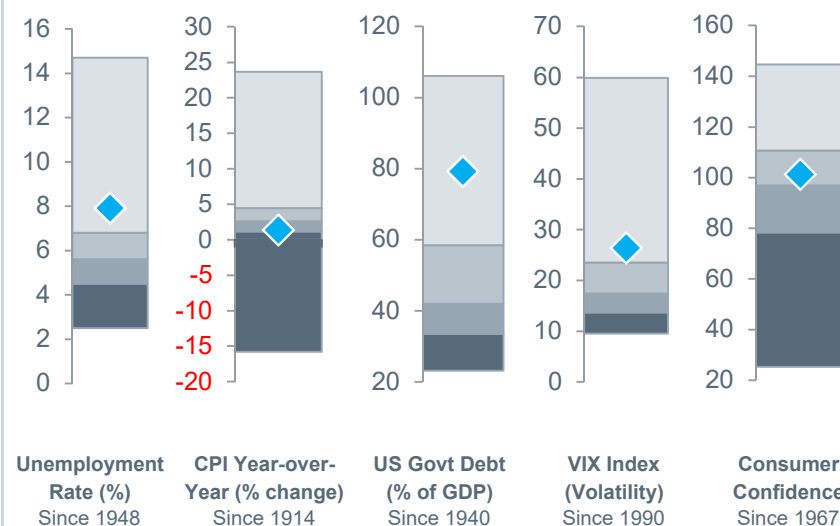
Capital Markets Review



Third Quarter Economic Environment

In the first two months of Q3, capital markets generally tracked trends stemming from the latter half of Q2. After strong results in the first two months of the quarter, returns from risk assets reversed in September due to growing concerns over a stagnating recovery and reduced confidence that the US Congress could agree to enact further fiscal stimulus. In addition, the upcoming US presidential and congressional elections offer another source of uncertainty when building expectations for the ongoing economic recovery. The Federal Open Market Committee (FOMC) maintained its accommodative stance and boosted sentiment further by announcing it will use an average inflation target indicating that it could accept levels above its stated 2% target in future periods. Market participants largely saw this as an indication that policy could remain supportive for longer than expected with a fixed inflation target. As of October 1st, the Atlanta Fed's GDPNow annualized estimate for Q3 growth stood at 34.6% which stands in stark contrast to the final reading of the Q2 GDP decline of -31.4%. On a non-annualized basis, the decline in real US GDP, peak to trough, was -10.1%, according to JP Morgan, compared to a -4.0% decline during the great financial crisis. For calendar year 2020, the OECD released a projection in September for a -4.5% contraction in global GDP, which represented an improvement from its June projection for a -6.0% contraction.

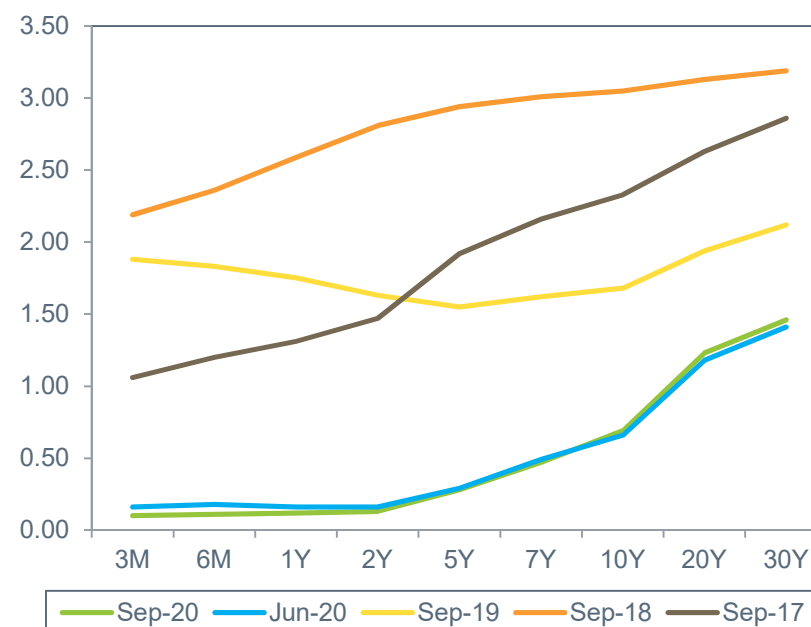
Key Economic Indicators



Economic Indicators	Sep-20	Jun-20	Sep-19	Sep-17	20 Yr
Federal Funds Rate (%)	0.09 ▲	0.08	1.90	1.06	1.57
Breakeven Infl. - 5 Yr (%)	1.49 ▲	1.17	1.35	1.78	1.82
Breakeven Infl. - 10 Yr (%)	1.63 ▲	1.34	1.52	1.85	2.01
CPI YoY (Headline) (%)	1.4 ▲	0.6	1.7	2.2	2.1
Unemployment Rate (%)	7.9 ▼	11.1	3.5	4.2	6.0
Real GDP YoY (%)	-2.9 ▲	-9.0	2.1	2.4	1.8
PMI - Manufacturing	55.4 ▲	52.6	48.2	59.9	52.5
USD Total Wtd Idx	117.35 ▼	120.86	117.99	110.08	103.23
WTI Crude Oil per Barrel (\$)	40.2 ▲	39.3	54.1	51.7	62.2
Gold Spot per Oz (\$)	1,886 ▲	1,781	1,472	1,280	989

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	8.93	5.57	15.15	14.15	13.74
Russell 2000	4.93	-8.69	0.39	8.00	9.85
MSCI EAFE (Net)	4.80	-7.09	0.49	5.26	4.62
MSCI EAFE SC (Net)	10.25	-4.20	6.84	7.37	7.33
MSCI Emg Mkts (Net)	9.56	-1.16	10.54	8.97	2.51
Bloomberg US Agg Bond	0.62	6.79	6.98	4.18	3.64
ICE BofAML 3 Mo US T-Bill	0.04	0.64	1.10	1.20	0.64
NCREIF ODCE (Gross)	0.48	-0.12	1.39	6.64	10.27
FTSE NAREIT Eq REIT (TR)	1.44	-17.54	-18.16	3.95	7.90
HFRI FOF Comp	4.26	2.56	5.72	3.09	2.89
Bloomberg Cmdty (TR)	9.07	-12.08	-8.20	-3.09	-6.03

Treasury Yield Curve (%)



Third Quarter Review

Broad Market

In Q3, US markets continued their climb from the Q1 selloff, bolstered by substantial pent-up demand being released with re-openings across the country and continued accommodative monetary policy. Domestic equities continued their strong performance from Q2, albeit to a lesser extent, with the S&P 500 hitting an all-time high in early September before a slight drawback to finish the quarter. The S&P 500 ended Q3 up 8.9%, with positive YTD returns of 5.57%.

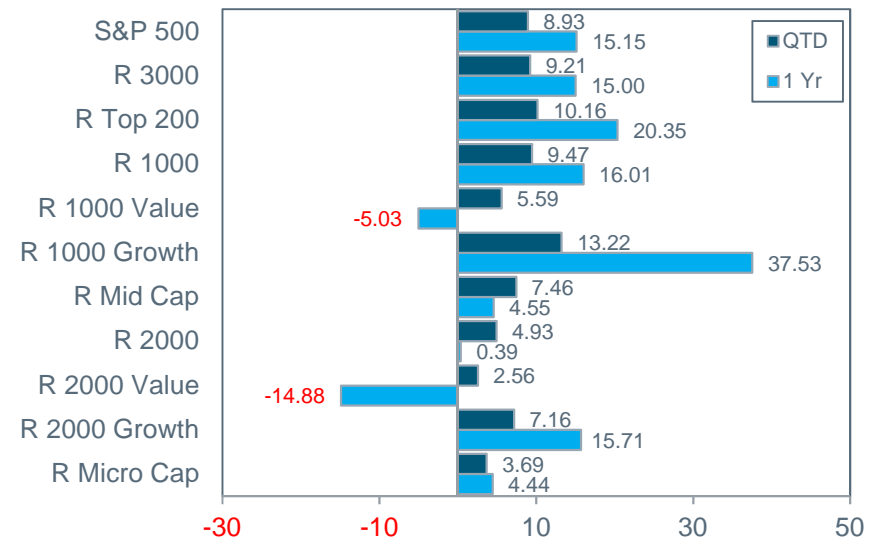
Market Cap

Additionally, larger cap stocks fared best in Q3, a reversal of what was seen in Q2. The Russell Top 200 finished Q3 ahead of its smaller-cap counterparts, returning 10.2%, while the Russell 2000 and Mid Cap indexes returned 4.9% and 7.5%, respectively.

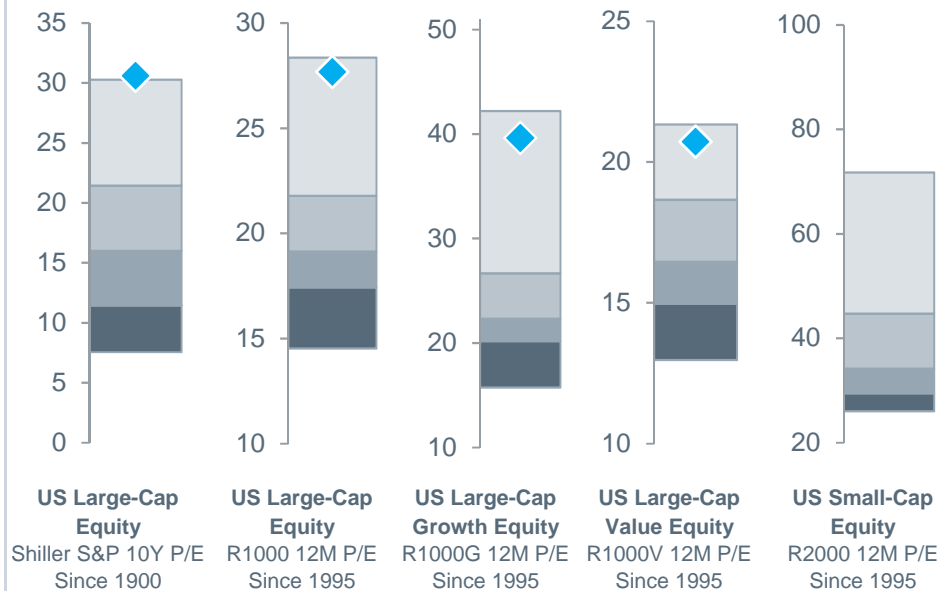
Style and Sector

Growth led value across all market caps by a significant margin once again during Q3. Active management largely struggled once again in Q3.

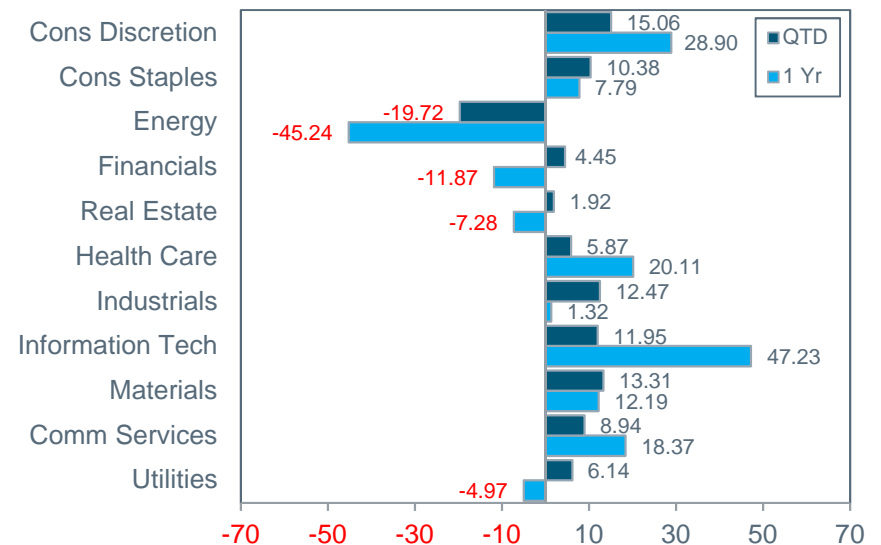
Style and Capitalization Market Performance (%)

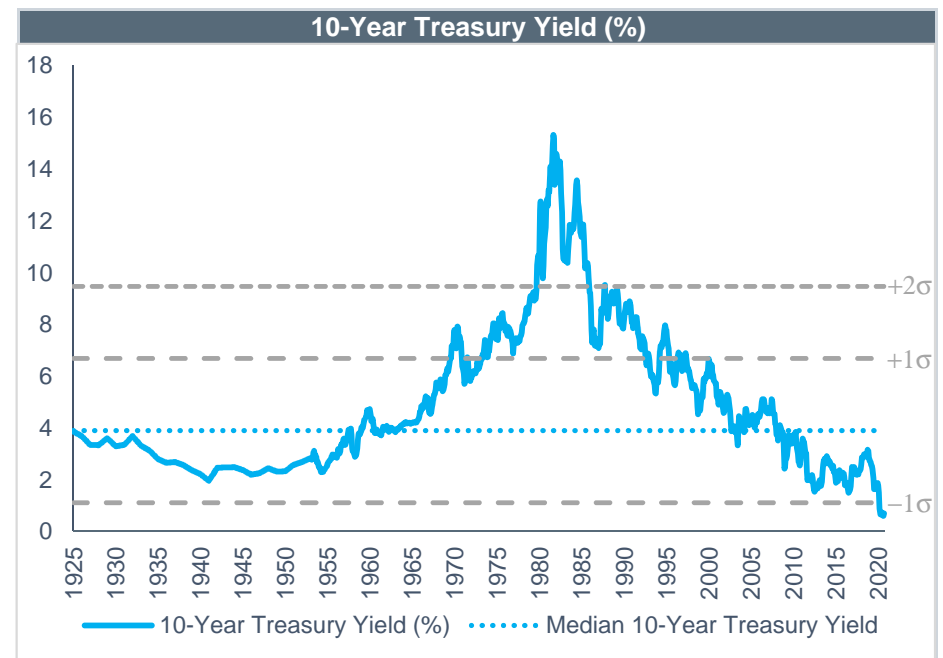
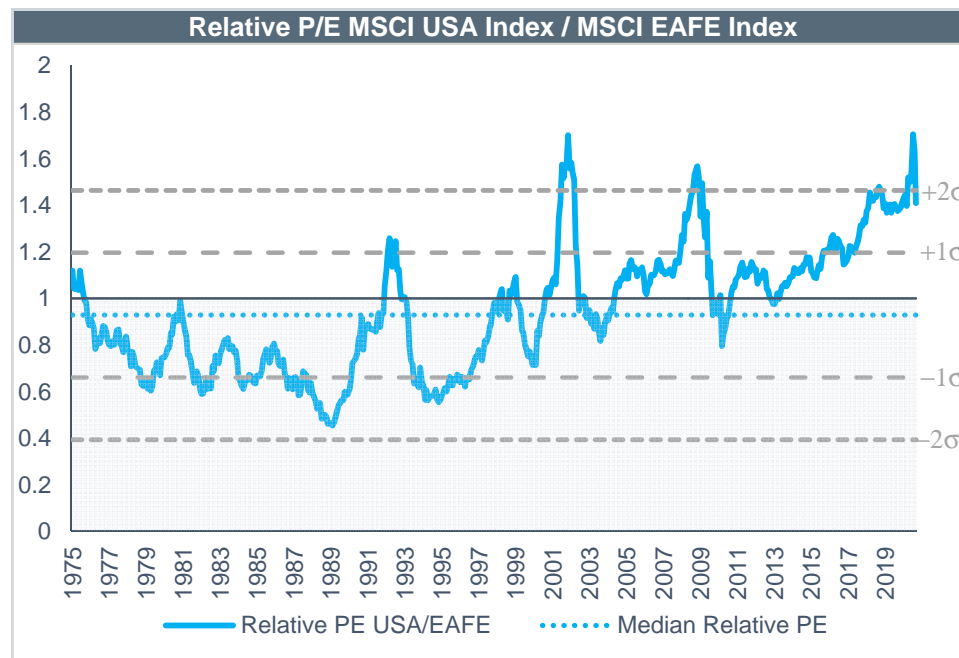
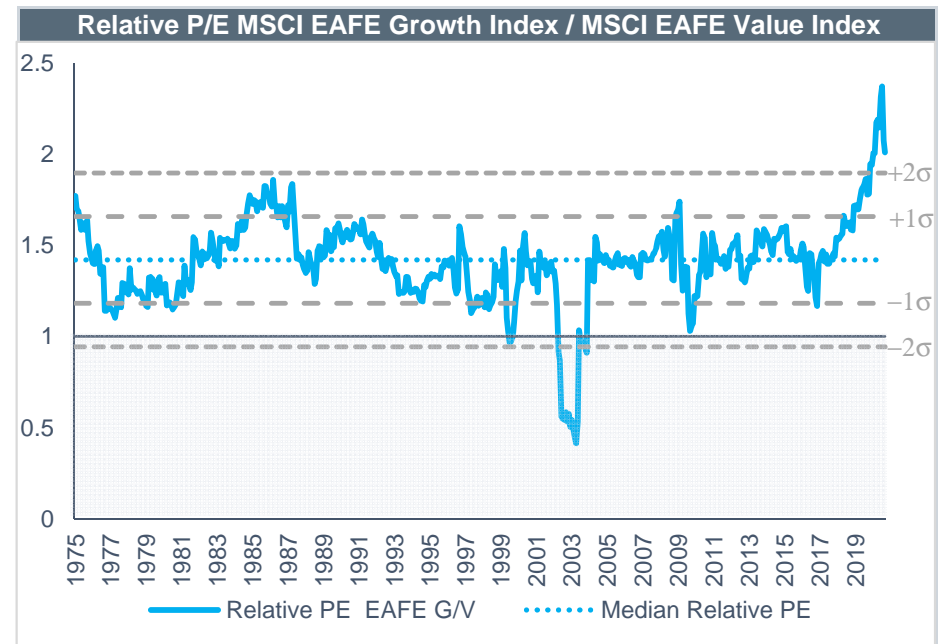
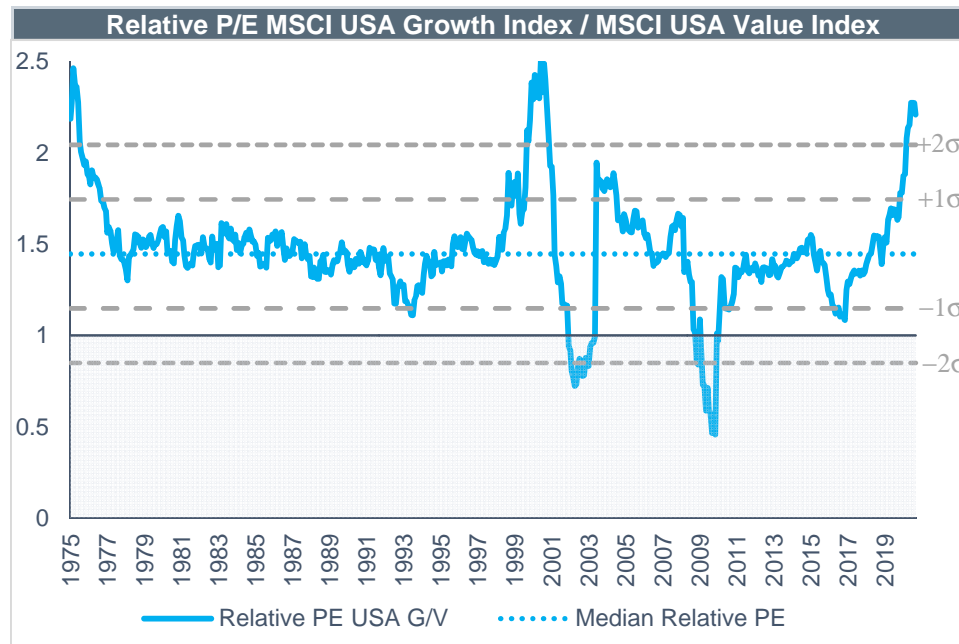


Valuations

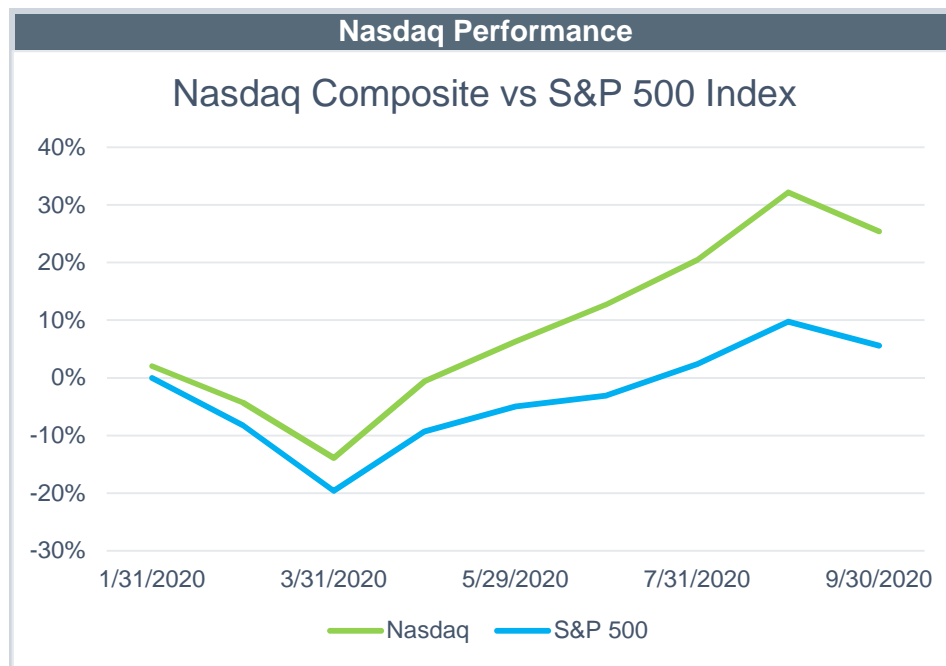
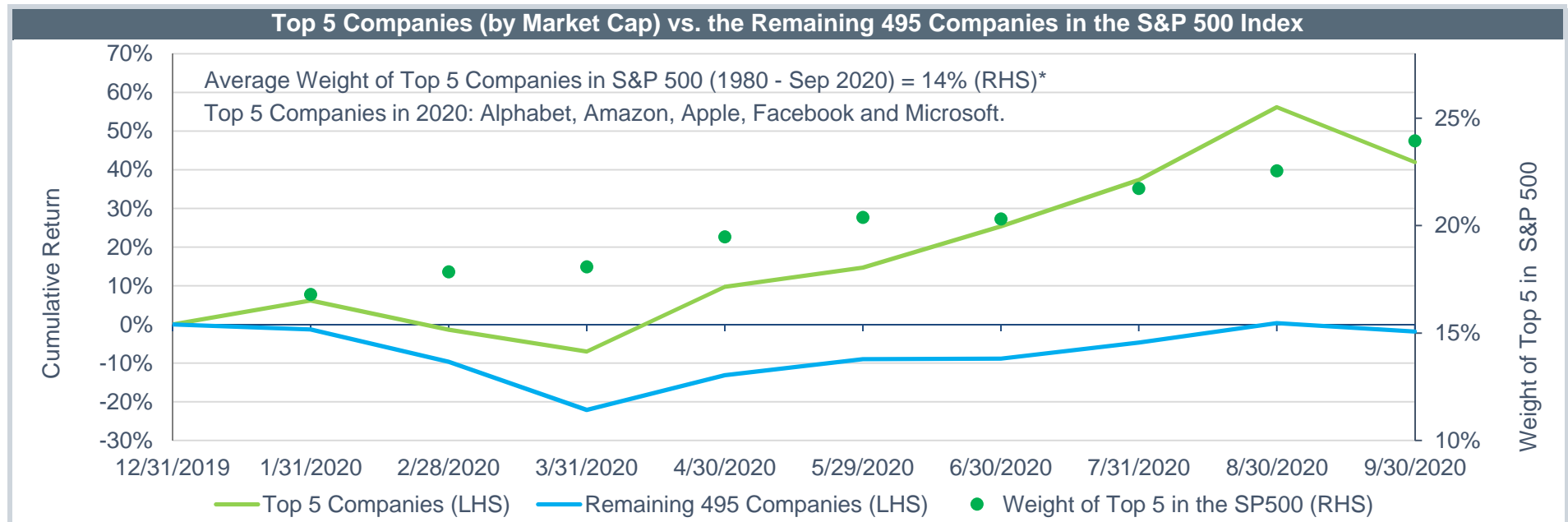


S&P 500 Index Sector Performance (%)





Relative valuation ratios are based on historical P/E ratios using trailing 12-month EPS, courtesy of MSCI. Treasury yield data courtesy of Robert Shiller. Data use monthly periodicity. Sigma symbol represents standard deviation.



Top 5 Companies (by Market Cap) & the Combined Weight in S&P500

1980**	1989**	1999	2009	2019
IBM	Exxon	Microsoft	Exxon	Apple
AT&T	General Electric	General Electric	Microsoft	Microsoft
Exxon	IBM	Cisco	Apple	Alphabet
Standard Oil	AT&T	Wal-Mart	Johnson & Johnson	Amazon
Schlumberger	Royal Dutch	Exxon	Procter & Gamb	Facebook
19%	12%	17%	11%	17%

■ Communications ■ Cons. Staples ■ Health Care ■ Technology
 ■ Cons. Discr. ■ Energy ■ Industrials

*Source: Goldman Sachs Portfolio Strategy Research, "U.S. Kickstart" - April 24, 2020.

**Source: Visual History of the S&P 500 at <https://etfdb.com/history-of-the-s-and-p-500/>. The earliest data available is from Jan 1980.

Data courtesy of Bloomberg Professional Service except when noted. Cumulative returns are calculated assuming hypothetical portfolios consisting of the top 5 companies and of the remaining 495 companies; the weights for each hypothetical portfolio are adjusted based on the actual month end market cap. LHS and RHS refer to the left hand side axis and right hand side axis, respectively.

Third Quarter Review

Developed Markets

Developed international markets had a strong quarter, but remain in negative territory for the year. Growth stocks outperformed value while small outpaced large. The majority of developed market countries had positive returns for the quarter. Active management fared well, with developed equity focused managers beating the benchmark in the large and small cap universes.

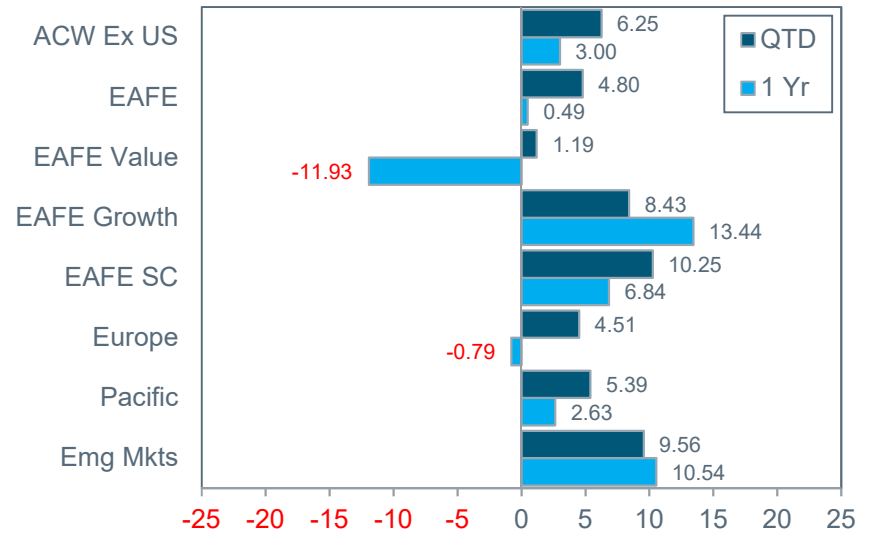
Emerging Markets

Emerging markets outpaced developed markets during Q3. Similar to other regions, value stocks underperformed growth. However, small cap stocks did outperform large within emerging markets. By region, Asia and the Middle East saw double digits returns while Latin America and Eastern Europe delivered negative returns.

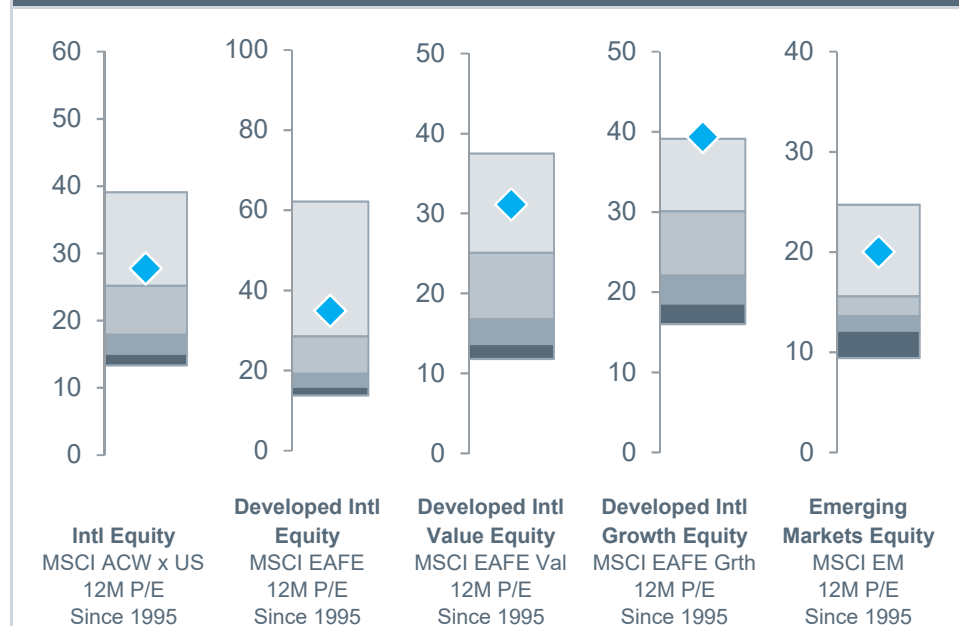
Market Cap & Style

In both developed international markets and emerging markets, value stocks continued to underperform growth, while small-cap stocks outperformed large-cap for the quarter.

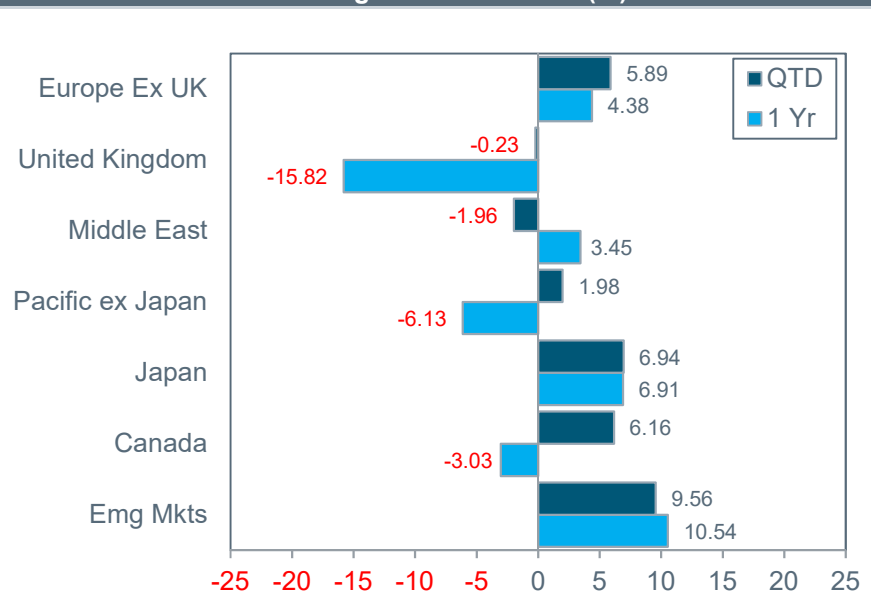
MSCI Style and Capitalization Market Performance (%)



Valuations



MSCI Region Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.

All returns are shown net of foreign taxes on dividends.

Third Quarter Review

Broad Market

The Bloomberg US Aggregate Index returned a modest 0.6% in Q3, ending the quarter with a yield of just 1.2% as Treasury yields remained at historic lows. Although yields initially declined across the Treasury curve, longer-maturity yields rose again in August amid a record issuance of Treasury debt and the Fed's new policy announcement to shift to average inflation targeting resulting in a modest steepening of the curve.

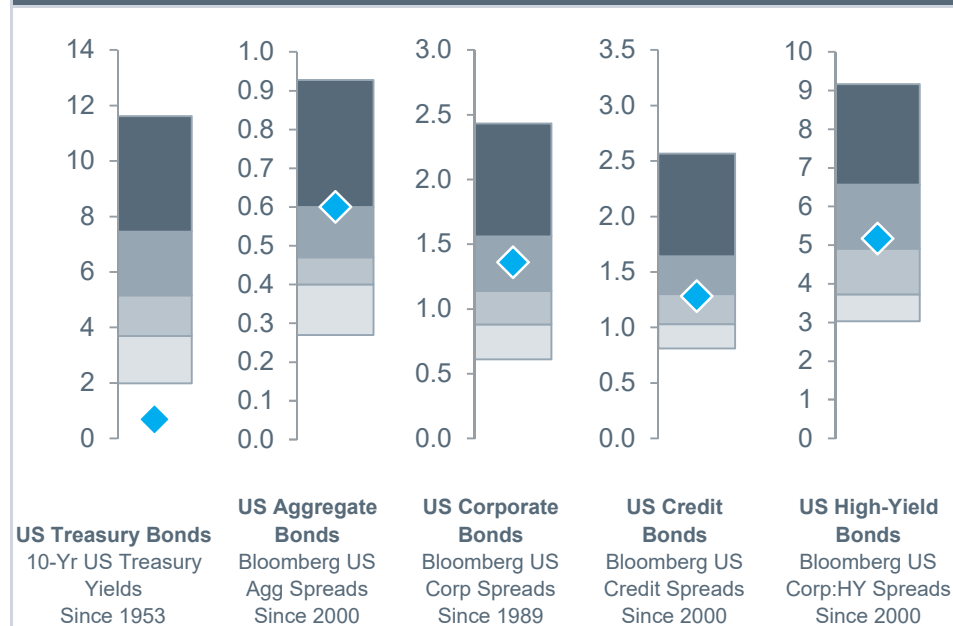
Credit Market

Credit markets extended their rally as the hunt for yield continued, and the Bloomberg US Corporate Investment Grade Index returned 1.5% in Q3 despite record-setting issuance.

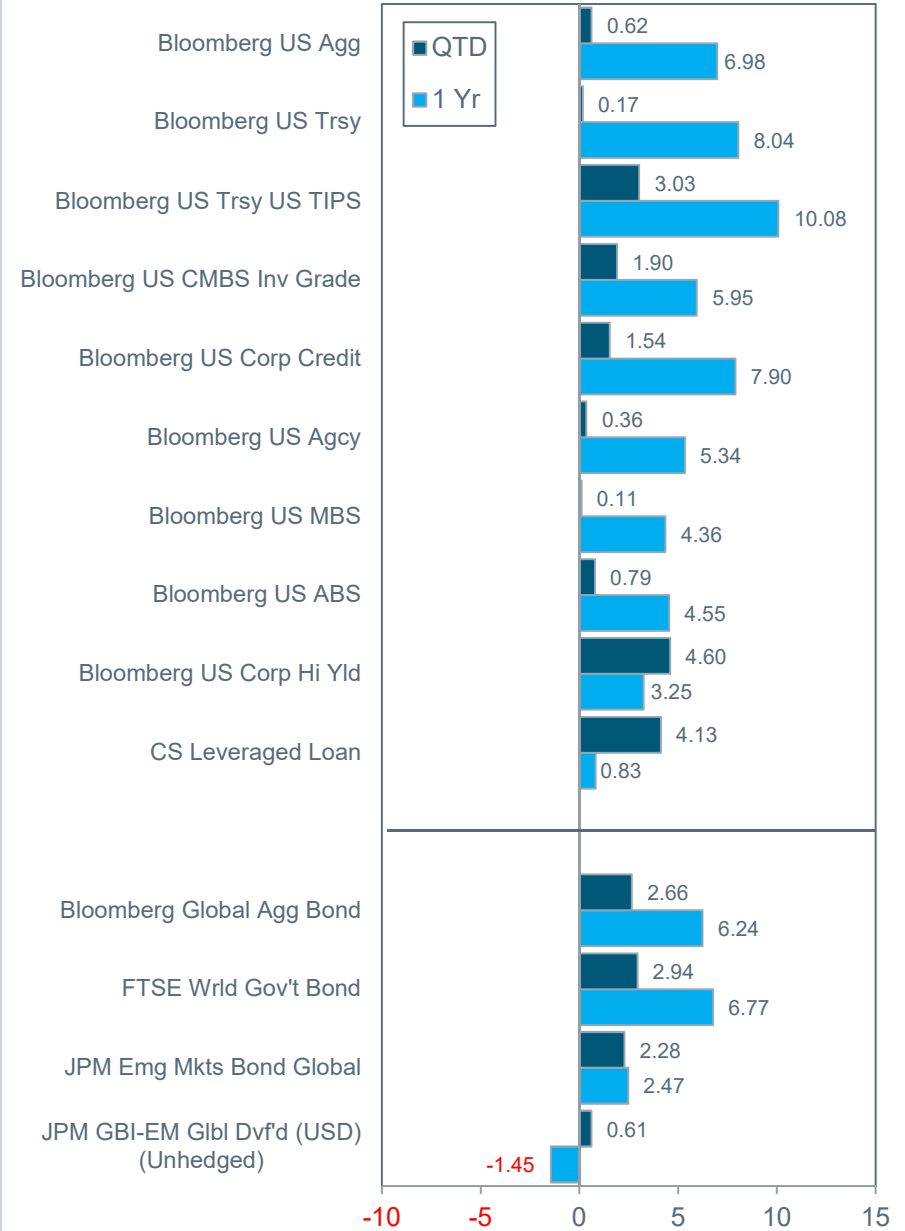
Emerging Market Debt

Emerging market debt also extended its rally, as the JPMorgan EMBI Global Diversified Index returned 2.3% in Q3 despite momentum slowing later in the quarter as uncertainty around the global economic recovery increased.

Valuations



Fixed Income Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.

Third Quarter Review - Absolute Return

General Market - Hedge Funds

Broad hedge fund benchmarks indicated that the industry protected capital relatively well during the heightened equity market volatility in September. The HFRI Fund Weighted Composite Index added to Q2 gains with a return of 4.1% in Q3, bringing the index return into positive territory YTD at 0.5%. Positive performance for the HFRI Hedged Equity and HFRI Event Driven indices helped contribute to the overall index returns.

General Market - Global Tactical Asset Allocation (GTAA)

GTAA strategies RVK follows closely generated positive returns in Q3 ranging from low to high single digits. As with past quarters, long-biased strategies reported mixed performance versus a static and less diversified blend of 60% US equity and 40% US fixed income. The value bias exhibited by some managers in emerging markets has caused them to lag peers. Strategies that have kept risk at relatively higher levels and favored US or other developed markets had a strong quarter with returns ranging from mid to high single digits.

Third Quarter Review - Real Assets

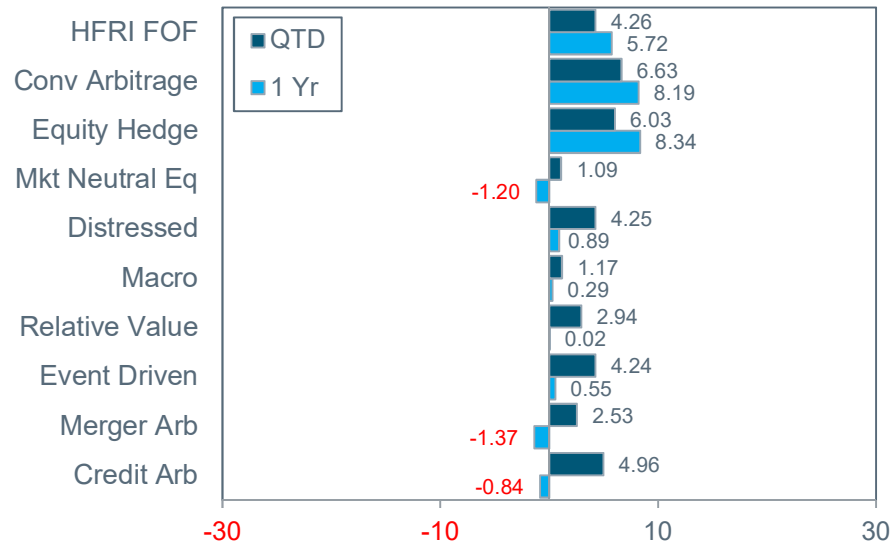
General Market - Diversified Inflation Strategies (DIS)

Performance for DIS managers that RVK follows closely largely saw positive absolute performance during Q3, with many strategies posting returns in the low single digits. Commodities and TIPS indices generally fared better than REITs, listed infrastructure, and global natural resource equities. Divergence across managers within the space was relatively limited when compared to the wide spread in results for the YTD period.

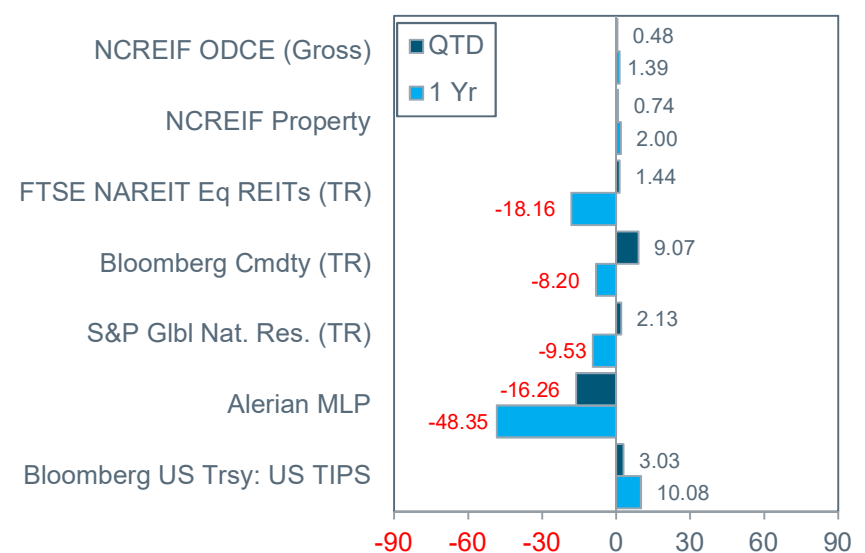
General Market - Real Estate

Core private real estate returned 0.5% during the third quarter, as reported by the NFI-ODCE Index, with the total return comprised of a positive contribution of 1.0% from income and a negative contribution of 0.5% from price appreciation. While the income component remained relatively healthy, price appreciation experienced a further decrease, albeit to a lesser degree relative to the prior quarter. Investors in publicly traded real estate outperformed their private market counterparts.

HFRI Hedge Fund Performance (%)



Real Asset Performance (%)



Annual Asset Class Performance

As of September 30, 2020

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	YTD
Best ↑ 															

NCREIF ODCE (Gross) performance is reported quarterly; performance is shown N/A in interim-quarter months.

Total Fund



North Dakota Board of University and School Lands
AA by Manager, AA vs. Target, and Schedule of Investable Assets

As of September 30, 2020

Asset Allocation by Manager			Asset Allocation vs. Target Allocation					
	Market Value (\$)	Allocation (%)	Asset Allocation (\$000)	Asset Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	
Broad US Equity			Total Fund	4,999,505	100.00	100.00	-	-
State Street Russell 1000 Index SL (US Large Cap)	757,391,430	15.15	Broad US Equity	957,303	19.15	19.00	14.00	24.00
State Street Russell Mid Cap Index (US Mid Cap)	92,004,063	1.84	Broad International Equity	944,904	18.90	19.00	14.00	24.00
NT Small Cap Core (US Small Cap)	107,907,951	2.16	Fixed Income	1,109,809	22.20	22.00	17.00	27.00
Broad International Equity			Absolute Return	740,466	14.81	15.00	10.00	20.00
State Street World Ex US Index (International Equity)	578,525,356	11.57	Diversified Inflation Strategies	125,974	2.52	0.00	0.00	0.00
QMA International Small Cap Equity (International Equity)	160,366,793	3.21	Real Estate	731,764	14.64	15.00	10.00	20.00
DFA Emg Mkts Core Eq:I (Emerging Markets Equity)	103,313,016	2.07	Private Equity	-	0.00	5.00	0.00	10.00
Harding Loevner:IEM;IZ (Emerging Markets Equity)	102,699,147	2.05	Private Infrastructure	-	0.00	5.00	0.00	10.00
Fixed Income			Opportunistic Investments	13,899	0.28	0.00	0.00	5.00
Payden & Rygel Long Term (Investment Grade US FI)	327,889,260	6.56	Transition Account	375,385	7.51	0.00	0.00	0.00
JP Morgan FI Intermediate Bond (Investment Grade US FI)	321,922,984	6.44	Asset Allocation vs. Target Allocation Differences					
Brandywine Gbl Opp FI (Global FI)	185,252,595	3.71	Broad US Equity				0.15%	
FLP (Loans)	9,512,614	0.19	Broad International Equity		-0.10 %			
ECLP (Loans)	952,444	0.02	Fixed Income				0.20%	
AG Direct Lending III LP (Direct Lending)	142,212,022	2.84	Absolute Return		-0.19 %			
Schroders Securitized Credit (Structured Credit)	120,245,180	2.41	Diversified Inflation Strategies				2.52%	
ND Land - PTF Cash (Cash)	1,821,733	0.04	Real Estate		-0.36 %			
Absolute Return			Private Equity		-5.00 %			
GMO:Bchmk-Fr All;IV (GTAA)	367,622,832	7.35	Private Infrastructure		-5.00 %			
PIMCO:All Ast Ath;Inst (GTAA)	372,843,125	7.46	Opportunistic Investments				0.28%	
Diversified Inflation Strategies			Transition Account				7.51%	
Gresham Commodities (Commodities)	251,224	0.01						
Harvest MLP (MLPs)	88,008,267	1.76						
Van Eck NR Equities (Natural Resources)	37,714,422	0.75						
Real Estate								
Morgan Stanley Prime Property (Core Real Estate)	215,739,511	4.32						
UBS Trumbull Property LP (Core Real Estate)	174,355,606	3.49						
Jamestown Premier Property (Core Plus Real Estate)	66,271,670	1.33						
Prologis USLF (Core Plus Real Estate)	142,151,359	2.84						
JP Morgan US RE Inc & Grth LP (Core Plus Real Estate)	133,246,184	2.67						
Opportunistic Investments								
Varde Dislocation Fund, LP	10,939,191	0.22						
Apollo Accord Fund IV, LP	2,959,508	0.06						
Transition Account								
NT STIF (Transition Account)	375,385,078	7.51						
Schedule of Investable Assets								
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return			
QTD	4,823,960,839	111,989	175,431,740	4,999,504,568	3.64			

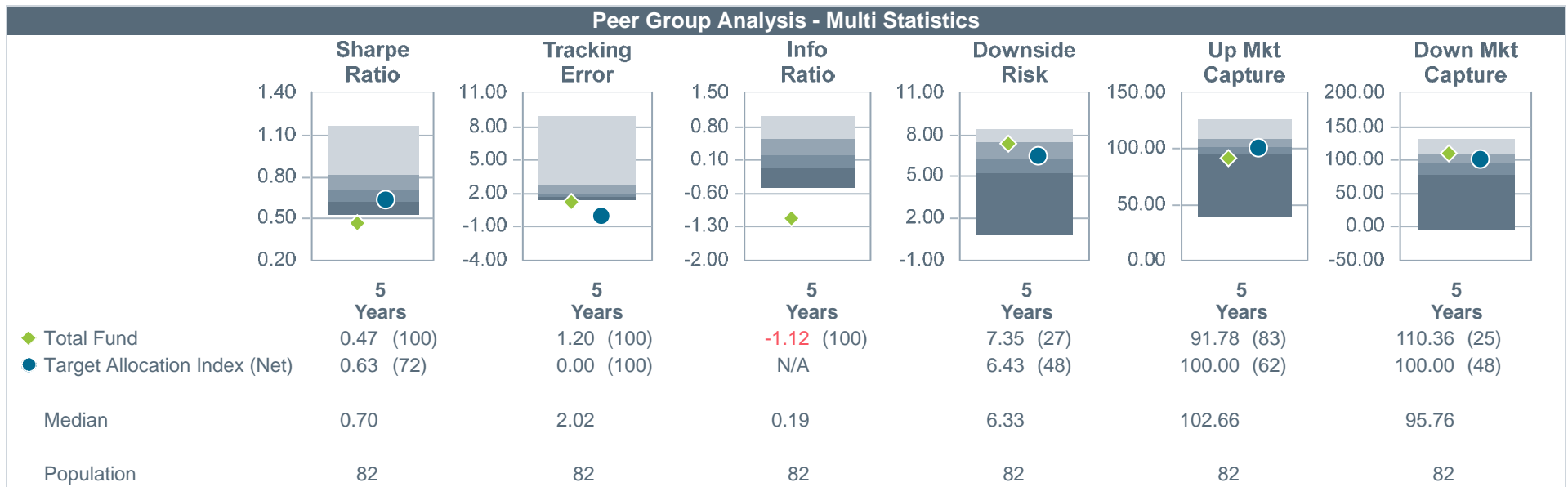
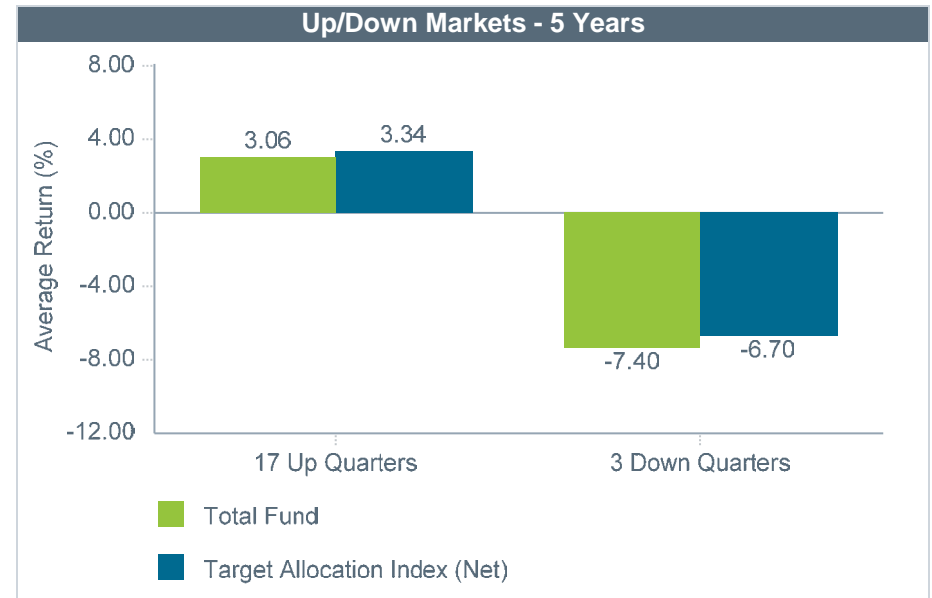
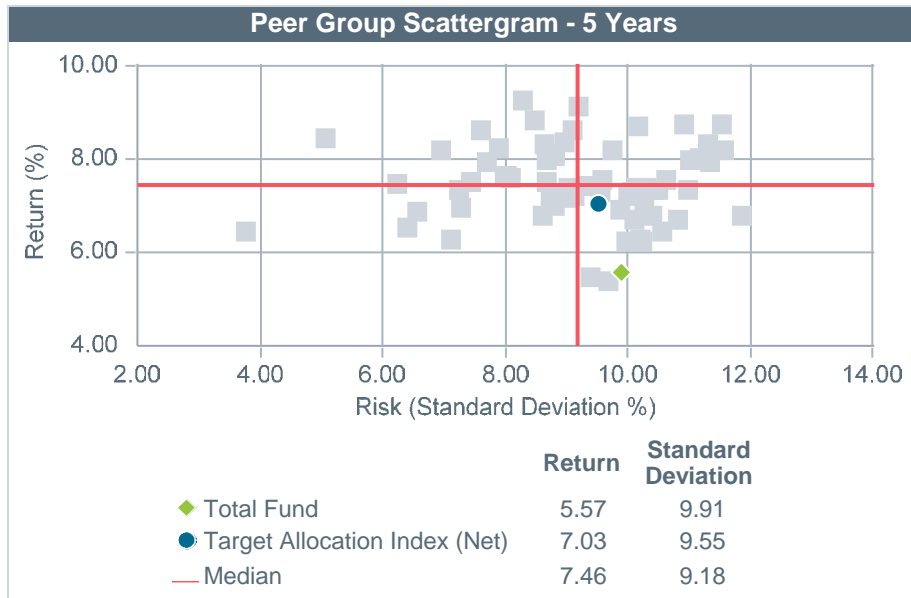
Allocations shown may not sum up to 100% exactly due to rounding. Performance shown is net of fees. Net cash flow includes securities lending income and client directed flows. Gain/loss includes dividend and interest income and capital appreciation. During 07/2020, Varde Dislocation Fund, LP was funded and Gresham Commodities (SA) was liquidated, residual assets held represent cash equivalents not yet wired to custodian. During 09/2020, Apollo Accord Fund IV, LP was funded.

North Dakota Board of University and School Lands
Comparative Performance

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Total Fund	3.64	3.64	-2.72	1.94	2.96	5.57	4.35	5.72	14.40	-5.11	12.62	6.34	08/01/1995
Target Allocation Index (Net)	4.14	4.14	1.53	6.25	5.19	7.03	5.86	6.89	16.30	-4.51	13.14	N/A	
Difference	-0.50	-0.50	-4.25	-4.31	-2.23	-1.46	-1.51	-1.17	-1.90	-0.60	-0.52	N/A	
All Public Plans > \$1B-Total Fund Median	5.03	5.03	0.96	5.81	5.48	7.46	6.32	7.37	17.10	-3.38	15.32	7.16	
Rank	89	89	95	94	97	93	95	93	88	80	96	91	
Broad US Equity	8.65	8.65	4.20	13.30	10.98	13.44	11.50	12.38	30.30	-5.49	21.40	13.87	07/01/2009
Russell 3000 Index	9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	31.02	-5.24	21.13	14.47	
Difference	-0.56	-0.56	-1.21	-1.70	-0.67	-0.25	-0.61	-1.10	-0.72	-0.25	0.27	-0.60	
Broad International Equity	6.50	6.50	-7.14	1.40	-0.30	5.30	2.70	4.09	22.05	-16.49	26.51	5.49	07/01/2009
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	21.51	-14.20	27.19	5.90	
Difference	0.25	0.25	-1.70	-1.60	-1.46	-0.93	-0.48	0.09	0.54	-2.29	-0.68	-0.41	
Fixed Income	1.72	1.72	4.16	5.32	3.95	3.97	3.61	3.79	7.70	-0.24	4.79	5.59	08/01/1995
Global Fixed Income Custom Index	0.99	0.99	6.20	6.68	5.08	4.53	3.87	3.64	9.21	-0.52	4.98	N/A	
Difference	0.73	0.73	-2.04	-1.36	-1.13	-0.56	-0.26	0.15	-1.51	0.28	-0.19	N/A	
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	5.36	
Difference	1.10	1.10	-2.63	-1.66	-1.29	-0.21	-0.36	0.15	-1.02	-0.25	1.25	0.23	
Absolute Return	1.84	1.84	-7.56	-3.40	0.04	3.49	N/A	N/A	11.09	-5.16	12.11	1.02	07/01/2014
Absolute Return Custom Index	5.13	5.13	3.59	9.22	6.38	7.92	6.39	6.78	19.28	-5.93	15.39	5.58	
Difference	-3.29	-3.29	-11.15	-12.62	-6.34	-4.43	N/A	N/A	-8.19	0.77	-3.28	-4.56	
Consumer Price Index+5%	2.20	2.20	5.06	6.44	6.87	6.90	6.60	6.86	7.40	7.01	7.21	6.49	
Difference	-0.36	-0.36	-12.62	-9.84	-6.83	-3.41	N/A	N/A	3.69	-12.17	4.90	-5.47	
Diversified Inflation Strategies	-2.77	-2.77	-20.35	-17.57	-7.20	-2.50	N/A	N/A	12.19	-14.24	2.45	-3.53	04/01/2014
DIS Custom Index	-9.66	-9.66	-22.84	-21.06	-7.38	-1.78	-2.63	0.32	10.27	-9.13	4.80	-3.08	
Difference	6.89	6.89	2.49	3.49	0.18	-0.72	N/A	N/A	1.92	-5.11	-2.35	-0.45	
Real Estate	0.52	0.52	-0.94	0.35	4.93	6.54	N/A	N/A	4.48	8.34	9.52	6.91	07/01/2015
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.74	0.52	4.25	5.69	7.62	9.26	4.39	7.36	6.66	6.09	
Difference	0.25	0.25	-0.20	-0.17	0.68	0.85	N/A	N/A	0.09	0.98	2.86	0.82	
Opportunistic Investments	11.82	11.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.82	07/01/2020

Performance shown is net of fees, and annualized for periods greater than one year. Composite inception dates are based on availability of data for each asset class. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.



Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

North Dakota Board of University and School Lands
Comparative Performance

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Total Fund	3.64	3.64	-2.72	1.94	2.96	5.57	5.72	14.40	-5.11	12.62	6.34	08/01/1995
Target Allocation Index (Net)	4.14	4.14	1.53	6.25	5.19	7.03	6.89	16.30	-4.51	13.14	N/A	
Difference	-0.50	-0.50	-4.25	-4.31	-2.23	-1.46	-1.17	-1.90	-0.60	-0.52	N/A	
Broad US Equity	8.65	8.65	4.20	13.30	10.98	13.44	12.38	30.30	-5.49	21.40	13.87	07/01/2009
Russell 3000 Index	9.21	9.21	5.41	15.00	11.65	13.69	13.48	31.02	-5.24	21.13	14.47	
Difference	-0.56	-0.56	-1.21	-1.70	-0.67	-0.25	-1.10	-0.72	-0.25	0.27	-0.60	
State Street Russell 1000 Index SL (CF)	9.43	9.43	6.34	15.95	12.35	N/A	N/A	31.39	-4.78	N/A	12.75	06/01/2017
Russell 1000 Index	9.47	9.47	6.40	16.01	12.38	14.09	13.76	31.43	-4.78	21.69	12.78	
Difference	-0.04	-0.04	-0.06	-0.06	-0.03	N/A	N/A	-0.04	0.00	N/A	-0.03	
State Street Russell Mid Cap Index (SA)	7.44	7.44	-2.35	4.52	7.11	N/A	N/A	30.38	-8.97	N/A	7.80	06/01/2017
Russell Mid Cap Index	7.46	7.46	-2.35	4.55	7.13	10.13	11.76	30.54	-9.06	18.52	7.81	
Difference	-0.02	-0.02	0.00	-0.03	-0.02	N/A	N/A	-0.16	0.09	N/A	-0.01	
NT Small Cap Core (CF)	4.61	4.61	-4.51	3.23	5.00	10.18	10.24	23.13	-7.63	21.82	6.19	07/01/2014
Russell 2000 Index	4.93	4.93	-8.69	0.39	1.77	8.00	9.85	25.53	-11.01	14.65	5.27	
Difference	-0.32	-0.32	4.18	2.84	3.23	2.18	0.39	-2.40	3.38	7.17	0.92	

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North Dakota Board of University and School Lands
Comparative Performance

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Broad International Equity	6.50	6.50	-7.14	1.40	-0.30	5.30	4.09	22.05	-16.49	26.51	5.49	07/01/2009
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	4.00	21.51	-14.20	27.19	5.90	
Difference	0.25	0.25	-1.70	-1.60	-1.46	-0.93	0.09	0.54	-2.29	-0.68	-0.41	
State Street World Ex US Index (CF)	4.90	4.90	-7.18	0.10	0.53	5.24	N/A	22.38	-14.16	24.15	1.43	07/01/2014
MSCI Wrld Ex US Index (USD) (Net)	4.92	4.92	-7.13	0.16	0.62	5.32	4.37	22.49	-14.09	24.21	1.50	
Difference	-0.02	-0.02	-0.05	-0.06	-0.09	-0.08	N/A	-0.11	-0.07	-0.06	-0.07	
QMA International Small Cap Equity (CF)	9.14	9.14	-6.80	4.19	N/A	N/A	N/A	22.54	N/A	N/A	-7.03	02/01/2018
MSCI EAFE Sm Cap Index (USD) (Net)	10.25	10.25	-4.20	6.84	1.40	7.37	7.33	24.96	-17.89	33.01	-2.48	
Difference	-1.11	-1.11	-2.60	-2.65	N/A	N/A	N/A	-2.42	N/A	N/A	-4.55	
DFA Emg Mkts Core Eq;I (DFCEX)	8.47	8.47	-6.09	3.82	-0.18	7.17	N/A	16.04	-15.25	36.55	1.73	07/01/2014
MSCI Emg Mkts Index (USD) (Net)	9.56	9.56	-1.16	10.54	2.42	8.97	2.51	18.44	-14.58	37.28	2.92	
Difference	-1.09	-1.09	-4.93	-6.72	-2.60	-1.80	N/A	-2.40	-0.67	-0.73	-1.19	
Harding Loevner:IEM;IZ (HLEZX)	9.26	9.26	-7.04	4.34	0.33	8.17	N/A	25.97	-18.53	35.79	2.50	07/01/2014
MSCI Emg Mkts Index (USD) (Net)	9.56	9.56	-1.16	10.54	2.42	8.97	2.51	18.44	-14.58	37.28	2.92	
Difference	-0.30	-0.30	-5.88	-6.20	-2.09	-0.80	N/A	7.53	-3.95	-1.49	-0.42	

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**North Dakota Board of University and School Lands
Comparative Performance**

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Fixed Income	1.72	1.72	4.16	5.32	3.95	3.97	3.79	7.70	-0.24	4.79	5.59	08/01/1995
Global Fixed Income Custom Index	0.99	0.99	6.20	6.68	5.08	4.53	3.64	9.21	-0.52	4.98	N/A	
Difference	0.73	0.73	-2.04	-1.36	-1.13	-0.56	0.15	-1.51	0.28	-0.19	N/A	
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.64	8.72	0.01	3.54	5.36	
Difference	1.10	1.10	-2.63	-1.66	-1.29	-0.21	0.15	-1.02	-0.25	1.25	0.23	
Payden & Rygel Long Term (SA)	1.16	1.16	5.93	6.22	5.42	4.75	4.26	9.42	0.16	4.99	5.93	08/01/1995
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.64	8.72	0.01	3.54	5.36	
Difference	0.54	0.54	-0.86	-0.76	0.18	0.57	0.62	0.70	0.15	1.45	0.57	
JP Morgan FI Intermediate Bond (SA)	0.84	0.84	5.76	5.98	4.48	3.47	N/A	6.70	1.01	2.71	2.83	08/01/2012
Bloomberg US Gov't Crdt Int Trm Bond Index	0.61	0.61	5.92	6.32	4.43	3.39	2.91	6.80	0.88	2.14	2.66	
Difference	0.23	0.23	-0.16	-0.34	0.05	0.08	N/A	-0.10	0.13	0.57	0.17	
Brandywine Gbl Opp FI (CF)	3.46	3.46	1.08	5.26	1.41	4.37	N/A	9.31	-5.16	12.91	2.07	11/01/2014
FTSE Wrld Gov't Bond Index	2.94	2.94	7.14	6.77	4.37	3.95	1.86	5.90	-0.84	7.49	2.69	
Difference	0.52	0.52	-6.06	-1.51	-2.96	0.42	N/A	3.41	-4.32	5.42	-0.62	
AG Direct Lending III LP	2.96	2.96	3.81	6.25	N/A	N/A	N/A	10.02	N/A	N/A	7.78	09/01/2018
CS Lvg'd Loan Index	4.13	4.13	-0.83	0.83	3.16	4.03	4.44	8.17	1.14	4.25	2.22	
Difference	-1.17	-1.17	4.64	5.42	N/A	N/A	N/A	1.85	N/A	N/A	5.56	
Schroders Securitized Credit (SA)	1.74	1.74	-0.15	0.29	N/A	N/A	N/A	3.85	N/A	N/A	1.89	12/01/2018
3 Month LIBOR Index (USD)+1.75%	0.52	0.52	2.35	3.35	3.78	3.28	2.67	4.39	3.86	2.88	3.89	
Difference	1.22	1.22	-2.50	-3.06	N/A	N/A	N/A	-0.54	N/A	N/A	-2.00	
ND Land - PTF Cash (SA)	0.02	0.02	0.38	0.81	1.61	N/A	N/A	2.49	1.71	N/A	1.61	07/01/2017
ICE BofAML 3 Mo US T-Bill Index	0.04	0.04	0.64	1.10	1.69	1.20	0.64	2.28	1.87	0.86	1.64	
Difference	-0.02	-0.02	-0.26	-0.29	-0.08	N/A	N/A	0.21	-0.16	N/A	-0.03	
FLP (Loans)	1.22	1.22	3.08	4.30	5.24	5.57	5.76	4.86	6.15	6.16	7.05	08/01/1995
ECLP (Loans)	1.14	1.14	3.49	4.64	4.57	4.60	N/A	4.49	4.58	4.25	5.00	11/01/2010

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North Dakota Board of University and School Lands
Comparative Performance

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Absolute Return	1.84	1.84	-7.56	-3.40	0.04	3.49	N/A	11.09	-5.16	12.11	1.02	07/01/2014
Absolute Return Custom Index	5.13	5.13	3.59	9.22	6.38	7.92	6.78	19.28	-5.93	15.39	5.58	
Difference	-3.29	-3.29	-11.15	-12.62	-6.34	-4.43	N/A	-8.19	0.77	-3.28	-4.56	
GMO:Bchmk-Fr All;IV (GBMBX)	2.30	2.30	-7.35	-2.34	0.22	3.07	N/A	11.64	-5.27	13.07	0.96	07/01/2014
60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx	5.97	5.97	3.56	9.26	6.22	7.96	6.24	18.55	-6.00	17.09	4.97	
Difference	-3.67	-3.67	-10.91	-11.60	-6.00	-4.89	N/A	-6.91	0.73	-4.02	-4.01	
Consumer Price Index+5%	2.20	2.20	5.06	6.44	6.87	6.90	6.86	7.40	7.01	7.21	6.49	
Difference	0.10	0.10	-12.41	-8.78	-6.65	-3.83	N/A	4.24	-12.28	5.86	-5.53	
PIMCO:All Ast Ath;Inst (PAUIX)	1.38	1.38	-7.52	-4.21	-1.57	3.26	N/A	7.62	-6.14	12.04	-0.56	07/01/2014
All Asset Custom Index (EqI Wtd)	3.68	3.68	4.30	7.52	5.76	6.31	5.41	12.97	-1.62	8.94	4.56	
Difference	-2.30	-2.30	-11.82	-11.73	-7.33	-3.05	N/A	-5.35	-4.52	3.10	-5.12	
Consumer Price Index+5%	2.20	2.20	5.06	6.44	6.87	6.90	6.86	7.40	7.01	7.21	6.49	
Difference	-0.82	-0.82	-12.58	-10.65	-8.44	-3.64	N/A	0.22	-13.15	4.83	-7.05	

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North Dakota Board of University and School Lands
Comparative Performance

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Diversified Inflation Strategies	-2.77	-2.77	-20.35	-17.57	-7.20	-2.50	N/A	12.19	-14.24	2.45	-3.53	04/01/2014
DIS Custom Index	-9.66	-9.66	-22.84	-21.06	-7.38	-1.78	0.32	10.27	-9.13	4.80	-3.08	
Difference	6.89	6.89	2.49	3.49	0.18	-0.72	N/A	1.92	-5.11	-2.35	-0.45	
Harvest MLP (SA)	-9.69	-9.69	-38.97	-39.64	-16.05	-8.30	N/A	12.72	-13.63	-5.50	-12.41	07/01/2015
S&P MLP Index (TR)	-14.31	-14.31	-44.87	-46.57	-18.92	-10.50	-3.10	9.78	-11.67	-5.58	-14.66	
Difference	4.62	4.62	5.90	6.93	2.87	2.20	N/A	2.94	-1.96	0.08	2.25	
Van Eck NR Equities (SA)	20.17	20.17	-0.99	7.84	-4.44	1.39	N/A	12.89	-28.52	-0.55	-4.61	07/01/2015
S&P Gbl Ntrl Res Sect Index (TR)	2.13	2.13	-17.42	-9.53	-2.78	6.67	0.16	17.20	-12.57	22.66	1.30	
Difference	18.04	18.04	16.43	17.37	-1.66	-5.28	N/A	-4.31	-15.95	-23.21	-5.91	
S&P N Amer Ntrl Res Index	-7.56	-7.56	-31.90	-26.81	-12.51	-3.83	-2.63	17.63	-21.07	1.23	-7.56	
Difference	27.73	27.73	30.91	34.65	8.07	5.22	N/A	-4.74	-7.45	-1.78	2.95	

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North Dakota Board of University and School Lands
Comparative Performance

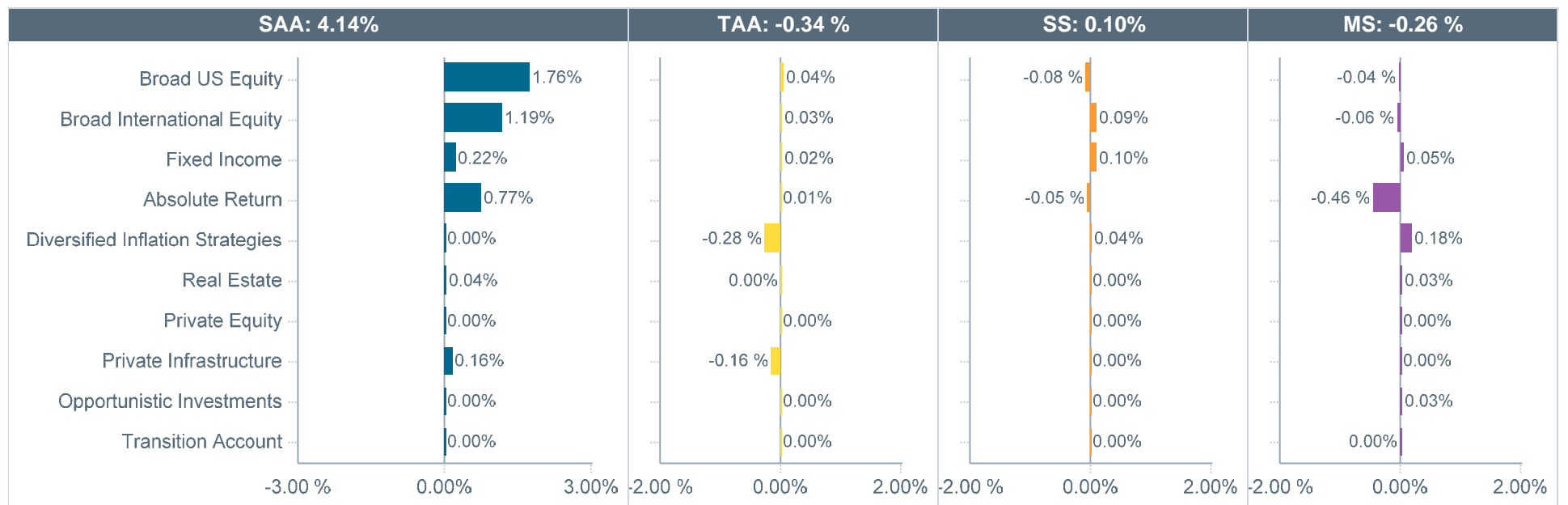
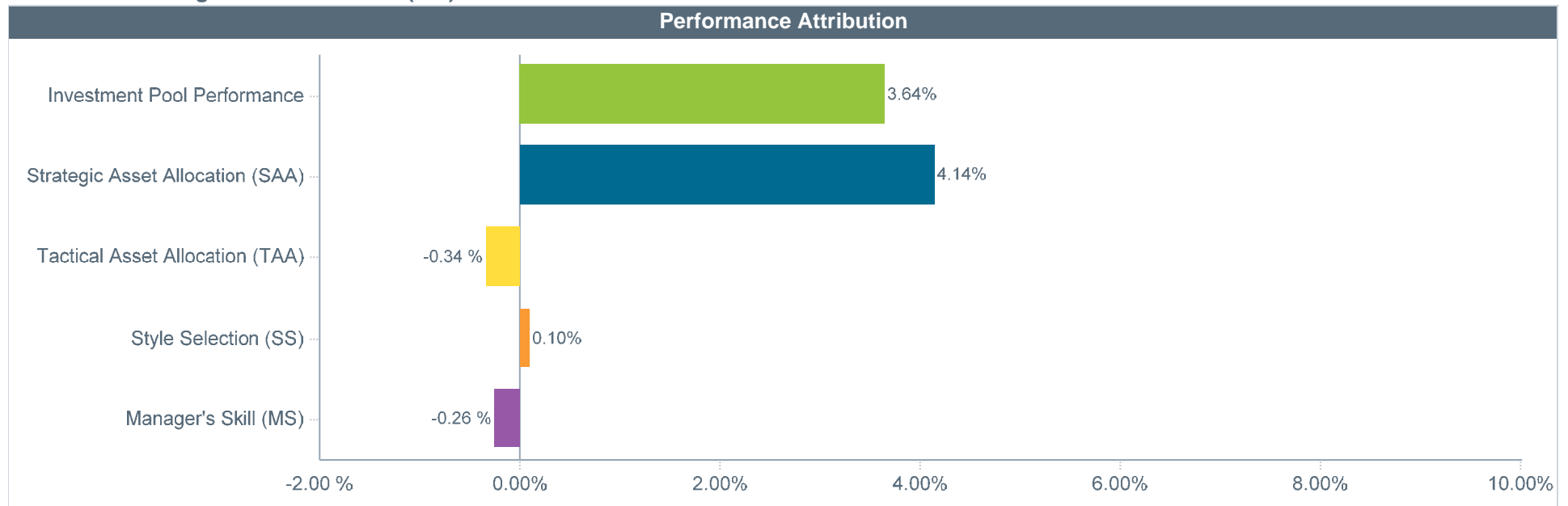
As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Real Estate	0.52	0.52	-0.94	0.35	4.93	6.54	N/A	4.48	8.34	9.52	6.91	07/01/2015
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.74	0.52	4.25	5.69	9.26	4.39	7.36	6.66	6.09	
Difference	0.25	0.25	-0.20	-0.17	0.68	0.85	N/A	0.09	0.98	2.86	0.82	
Morgan Stanley Prime Property (CF)	1.06	1.06	-0.21	1.31	5.30	6.97	N/A	6.17	7.96	8.75	7.35	07/01/2015
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.74	0.52	4.25	5.69	9.26	4.39	7.36	6.66	6.09	
Difference	0.79	0.79	0.53	0.79	1.05	1.28	N/A	1.78	0.60	2.09	1.26	
UBS Trumbull Property LP (CF)	-0.33	-0.33	-2.68	-2.82	0.84	2.91	N/A	-2.84	6.17	5.42	3.38	07/01/2015
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.74	0.52	4.25	5.69	9.26	4.39	7.36	6.66	6.09	
Difference	-0.60	-0.60	-1.94	-3.34	-3.41	-2.78	N/A	-7.23	-1.19	-1.24	-2.71	
Jamestown Premier Property (CF)	-3.54	-3.54	-8.24	-8.31	3.11	4.84	N/A	2.40	7.75	14.22	5.15	07/01/2015
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.74	0.52	4.25	5.69	9.26	4.39	7.36	6.66	6.09	
Difference	-3.81	-3.81	-7.50	-8.83	-1.14	-0.85	N/A	-1.99	0.39	7.56	-0.94	
Prologis USLF (CF)	3.27	3.27	3.78	8.21	13.80	N/A	N/A	16.84	16.18	20.21	15.27	04/01/2016
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.74	0.52	4.25	5.69	9.26	4.39	7.36	6.66	5.17	
Difference	3.00	3.00	4.52	7.69	9.55	N/A	N/A	12.45	8.82	13.55	10.10	
JP Morgan US Real Estate Income and Growth LP (CF)	-0.01	-0.01	-0.69	0.02	2.77	N/A	N/A	2.24	5.73	5.82	4.29	07/01/2016
NCREIF ODCE Index (AWA) (Net)	0.27	0.27	-0.74	0.52	4.25	5.69	9.26	4.39	7.36	6.66	5.01	
Difference	-0.28	-0.28	0.05	-0.50	-1.48	N/A	N/A	-2.15	-1.63	-0.84	-0.72	
Opportunistic Investments												
Varde Dislocation Fund, LP	9.39	9.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.39	07/01/2020
Apollo Accord Fund IV, LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10/01/2020
Transition Account												
NT STIF (Transition Account)	0.09	0.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.12	06/01/2020
ICE BofAML 3 Mo US T-Bill Index	0.04	0.04	0.64	1.10	1.69	1.20	0.64	2.28	1.87	0.86	0.05	
Difference	0.05	0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.07	

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North Dakota Board of University and School Lands
Total Fund Attribution - IDP
Total Fund vs. Target Allocation Index (Net)

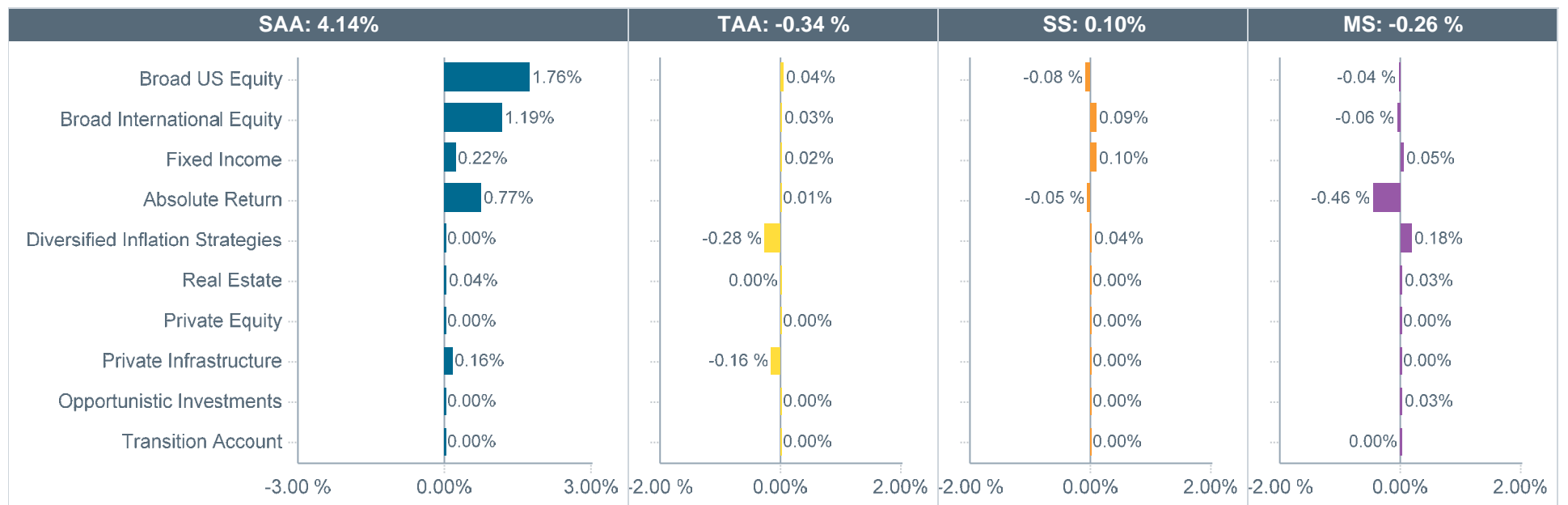
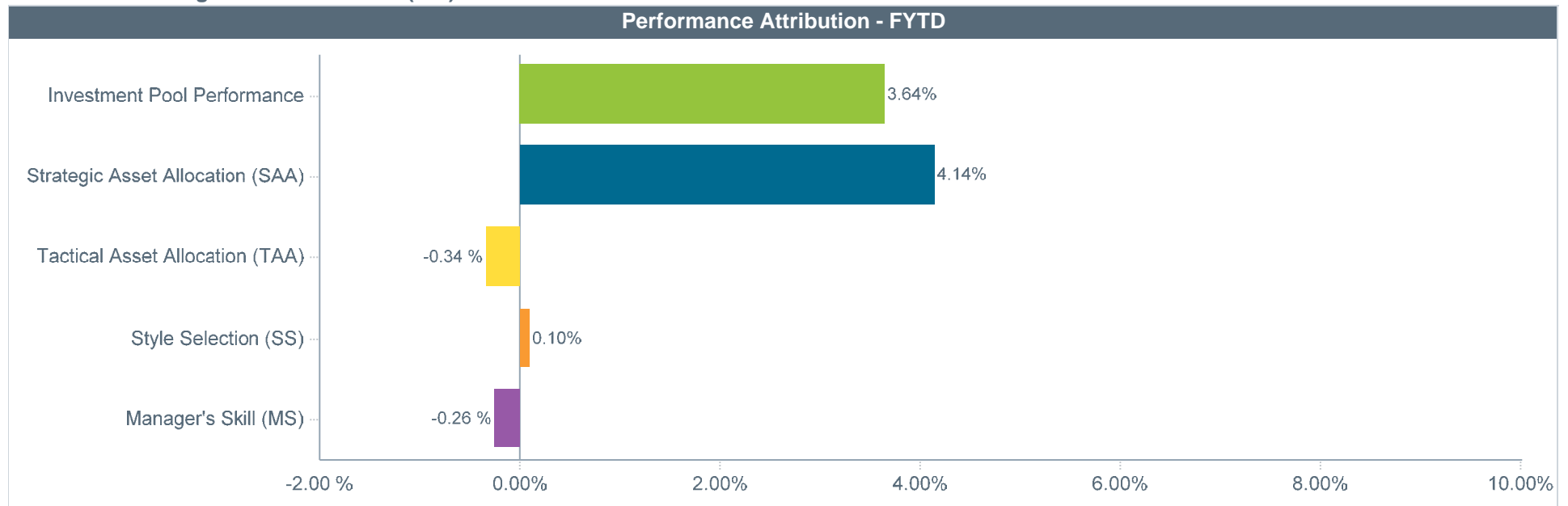
Quarter To Date Ending September 30, 2020



Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.

North Dakota Board of University and School Lands
Total Fund Attribution - IDP
Total Fund vs. Target Allocation Index (Net)

Fiscal Year To Date as of September 30, 2020



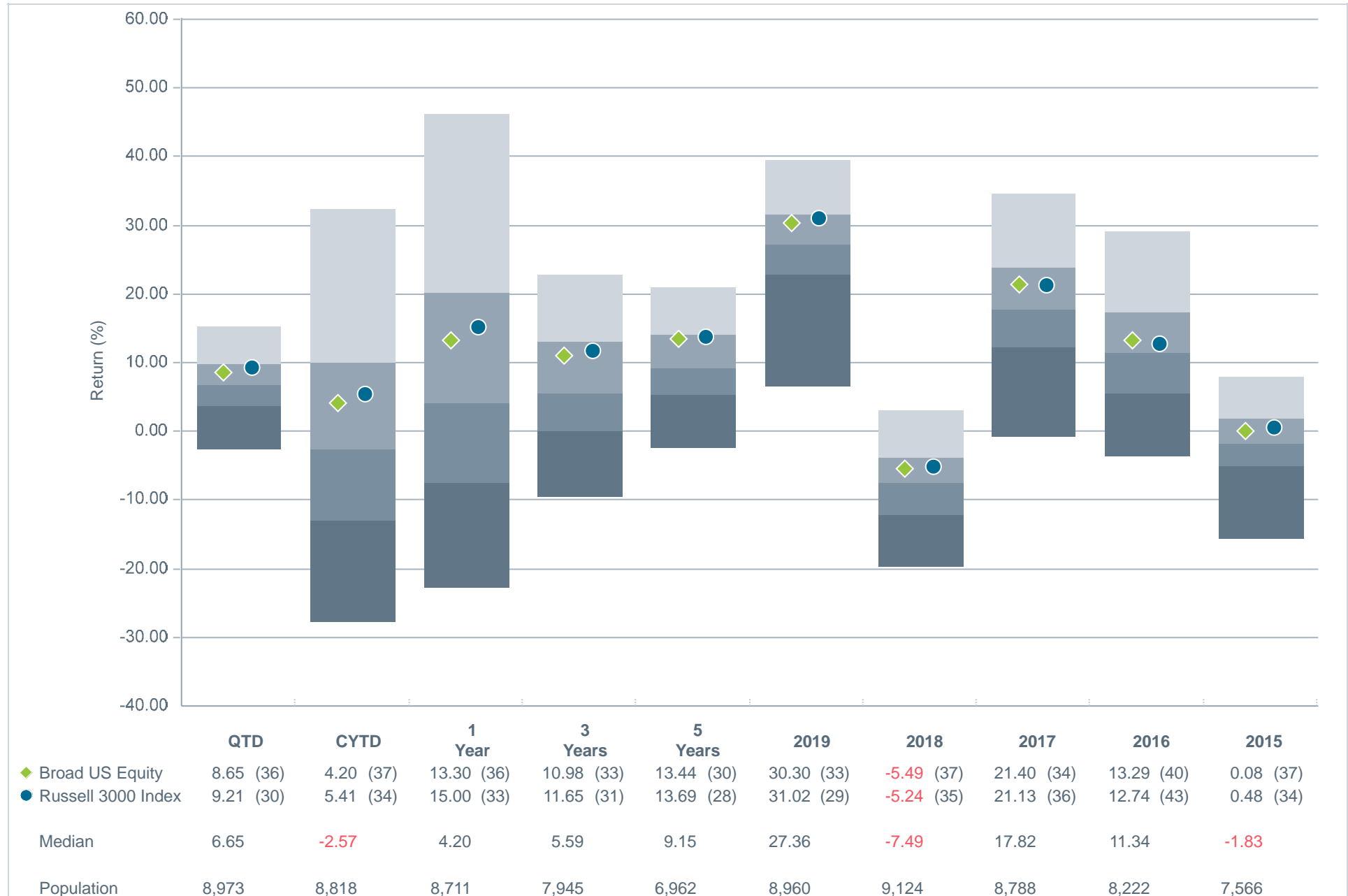
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation. Fiscal year ends 06/30.

Composite Profiles

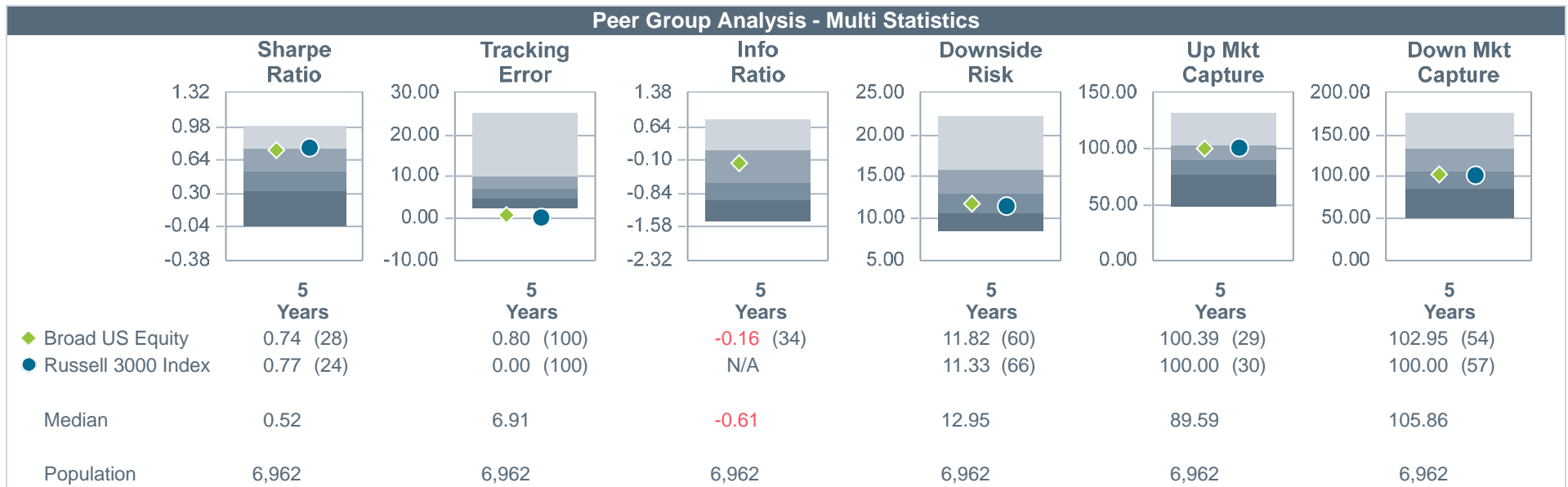
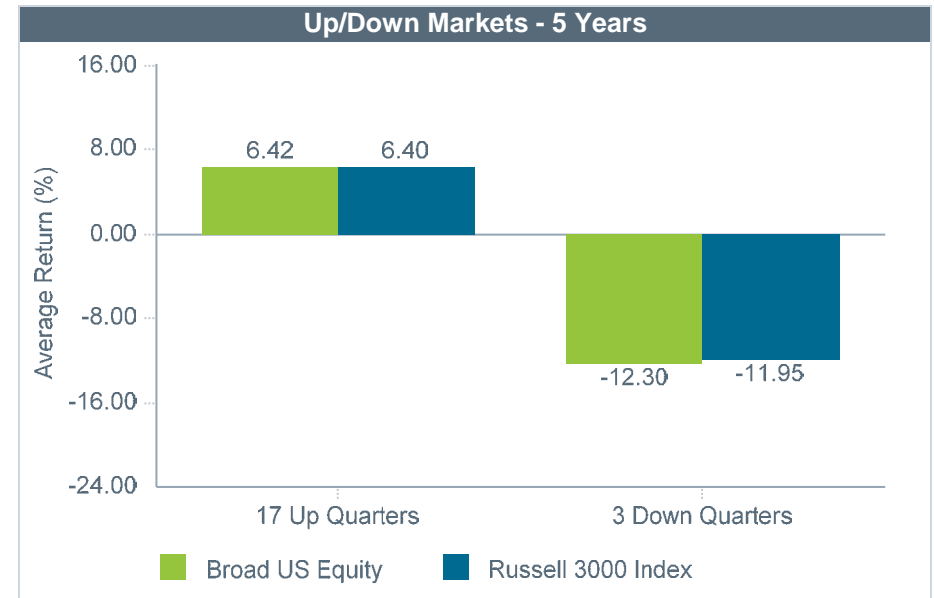
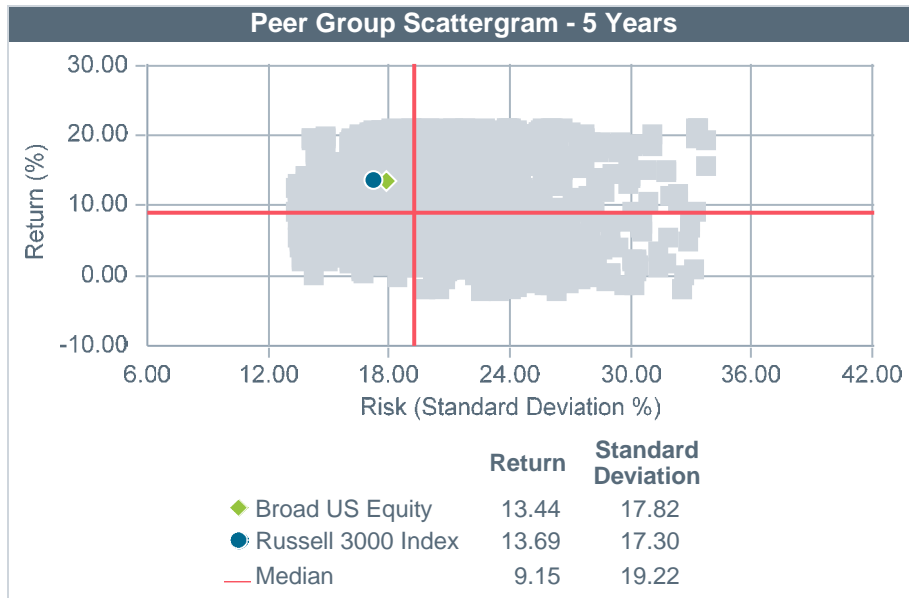


North Dakota Board of University and School Lands
IM U.S. Equity (MF)
Peer Group Analysis

As of September 30, 2020



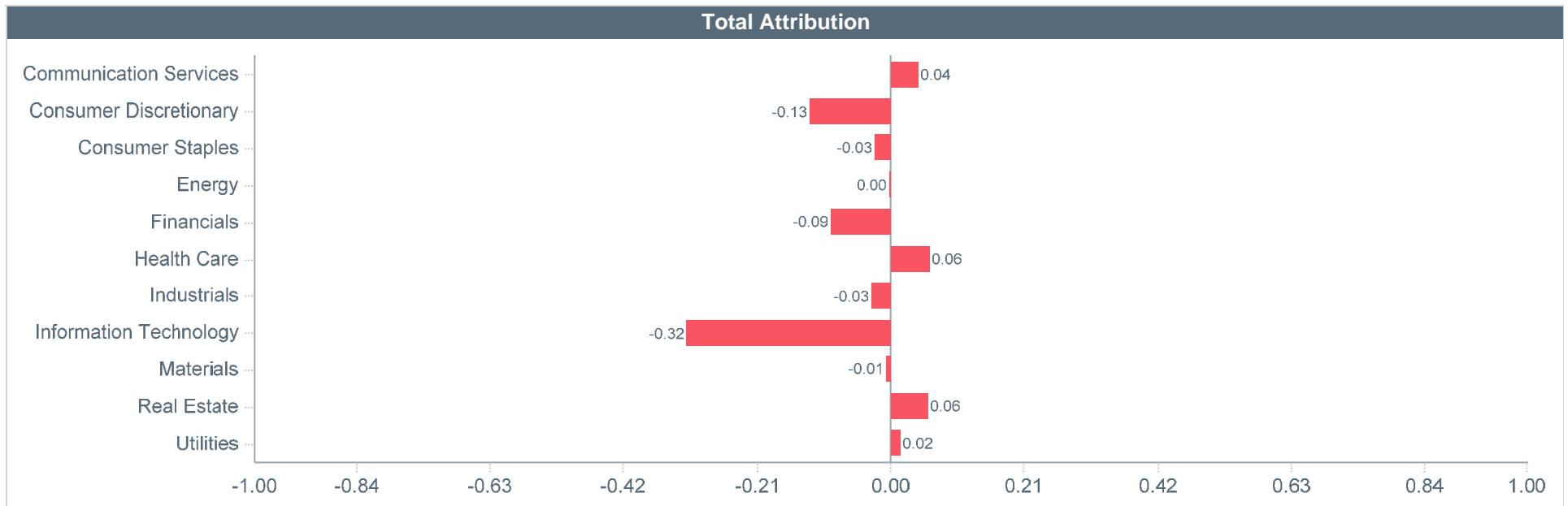
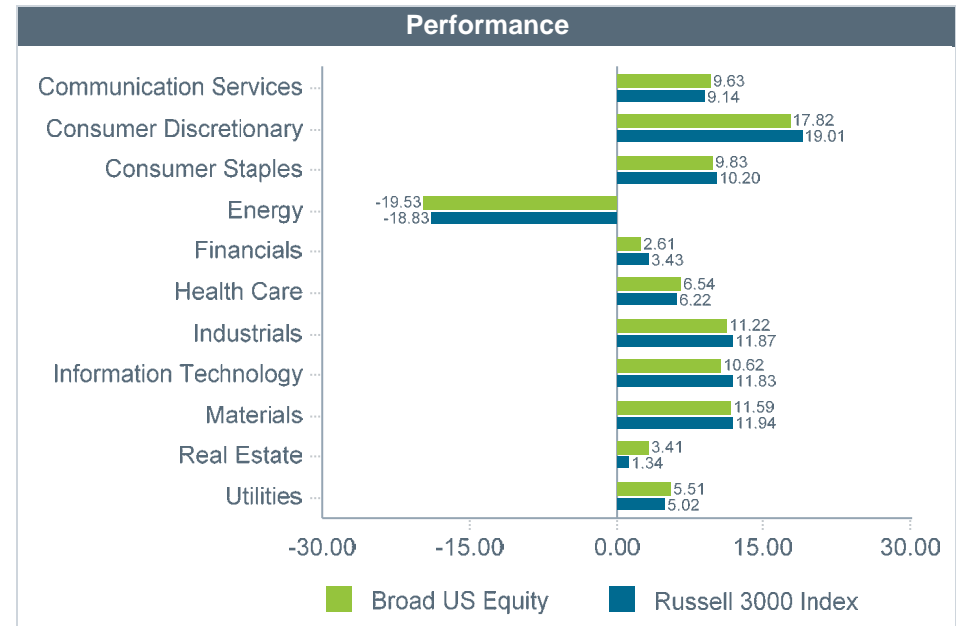
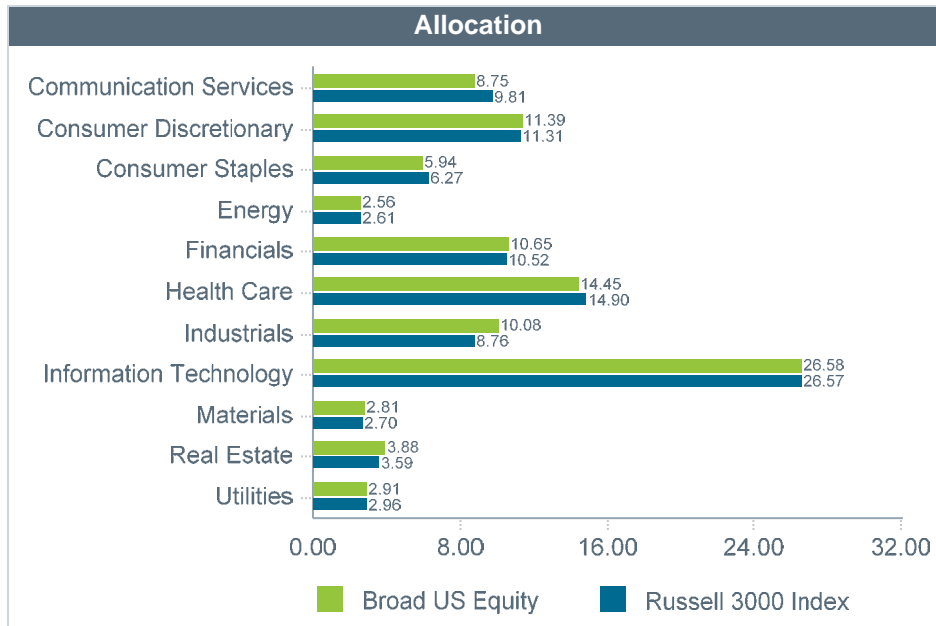
Performance shown is net of fees. Parentheses contain percentile ranks.



Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

North Dakota Board of University and School Lands
Broad US Equity vs. Russell 3000 Index
Buy and Hold Sector Attribution Graph

1 Quarter Ending September 30, 2020

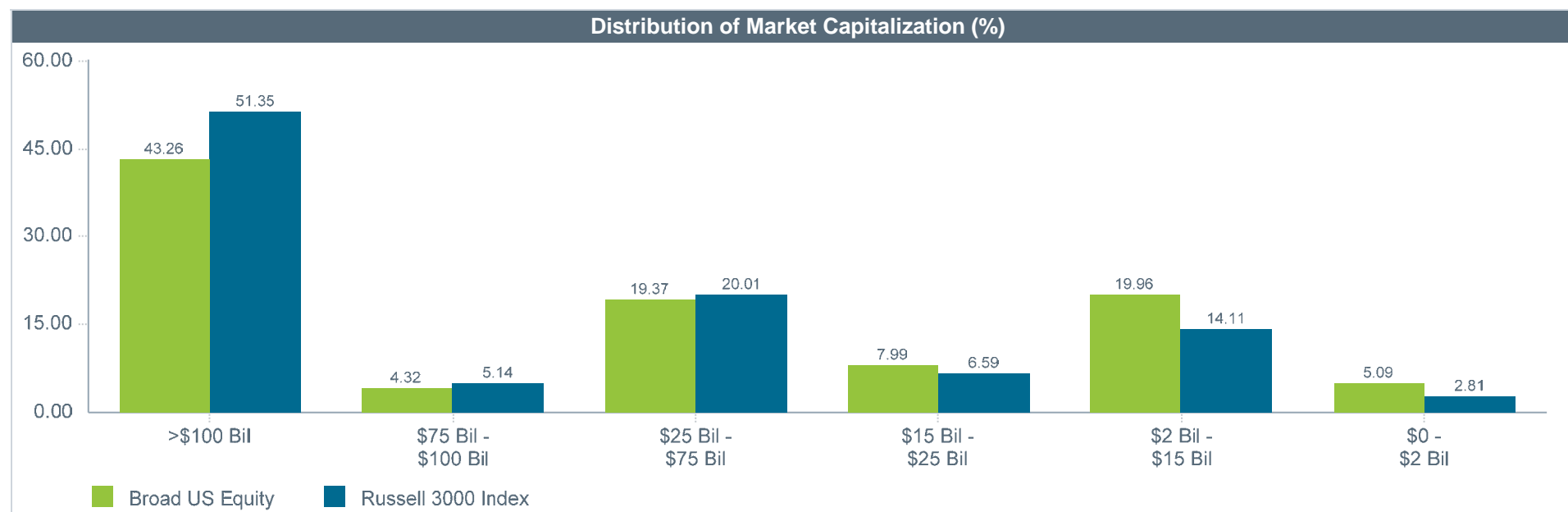


North Dakota Board of University and School Lands
Broad US Equity vs. Russell 3000 Index
Portfolio Characteristics

As of September 30, 2020

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Apple Inc	4.74	5.62	-0.88	27.22
Microsoft Corp	3.99	4.74	-0.75	3.60
Amazon.com Inc	3.38	4.02	-0.64	14.13
Facebook Inc	1.59	1.89	-0.30	15.34
Alphabet Inc	1.11	1.32	-0.21	3.35
Alphabet Inc	1.10	1.31	-0.21	3.96
Berkshire Hathaway Inc	1.03	1.23	-0.20	19.29
Johnson & Johnson	0.99	1.18	-0.19	6.57
Procter & Gamble Co (The)	0.86	1.02	-0.16	16.97
Visa Inc	0.86	1.02	-0.16	3.68
% of Portfolio	19.65	23.35	-3.70	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	321,108	378,976
Median Mkt. Cap (\$M)	8,453	1,536
Price/Earnings Ratio	26.66	26.57
Price/Book Ratio	4.21	4.39
5 Yr. EPS Growth Rate (%)	12.70	12.89
Current Yield (%)	1.54	1.59
Beta (5 Years, Monthly)	1.02	1.00
Number of Securities	1,195	3,034



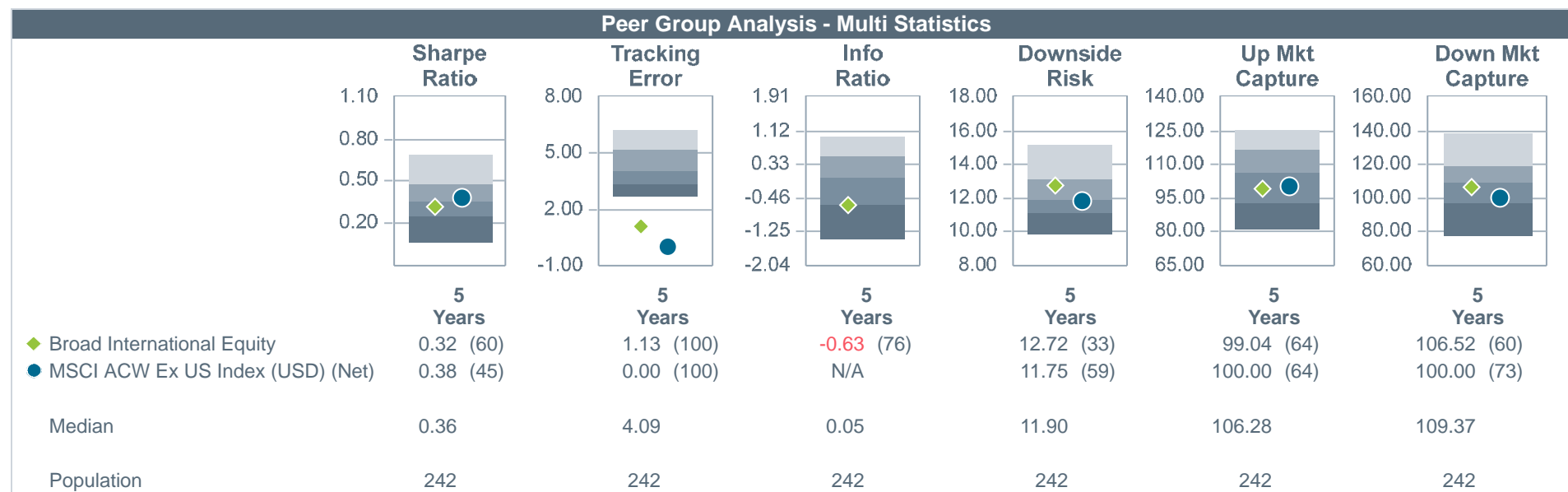
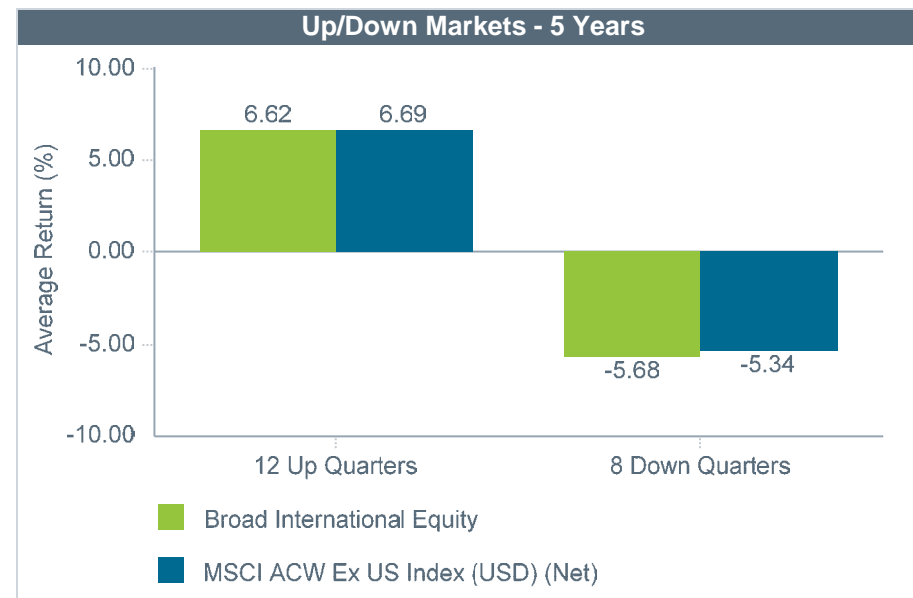
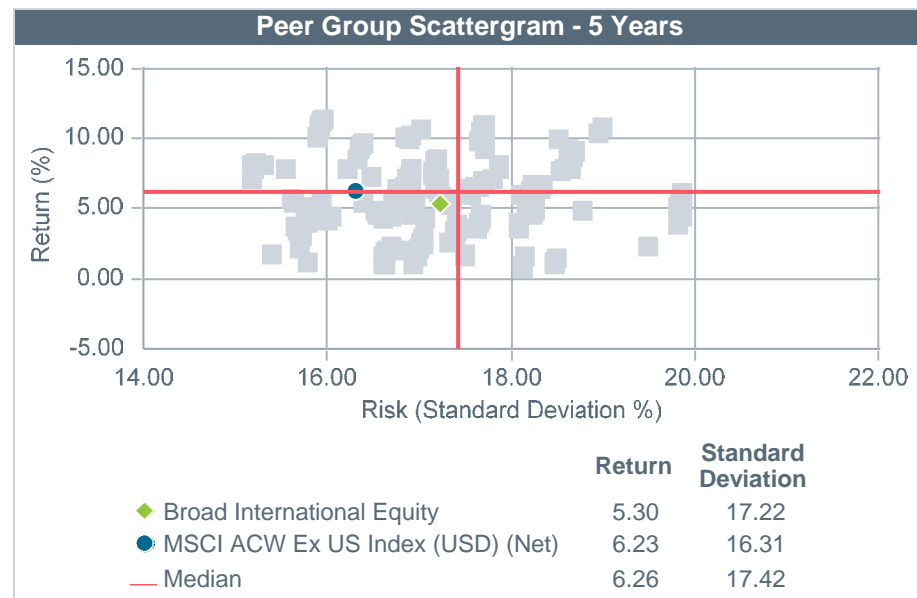
Alphabet Inc. is shown twice in the Top Ten Equity Holdings, but represents two different share classes: GOOGL (Class A) and GOOG (Class C).

North Dakota Board of University and School Lands
IM International Large Cap Equity (MF)
Peer Group Analysis

As of September 30, 2020



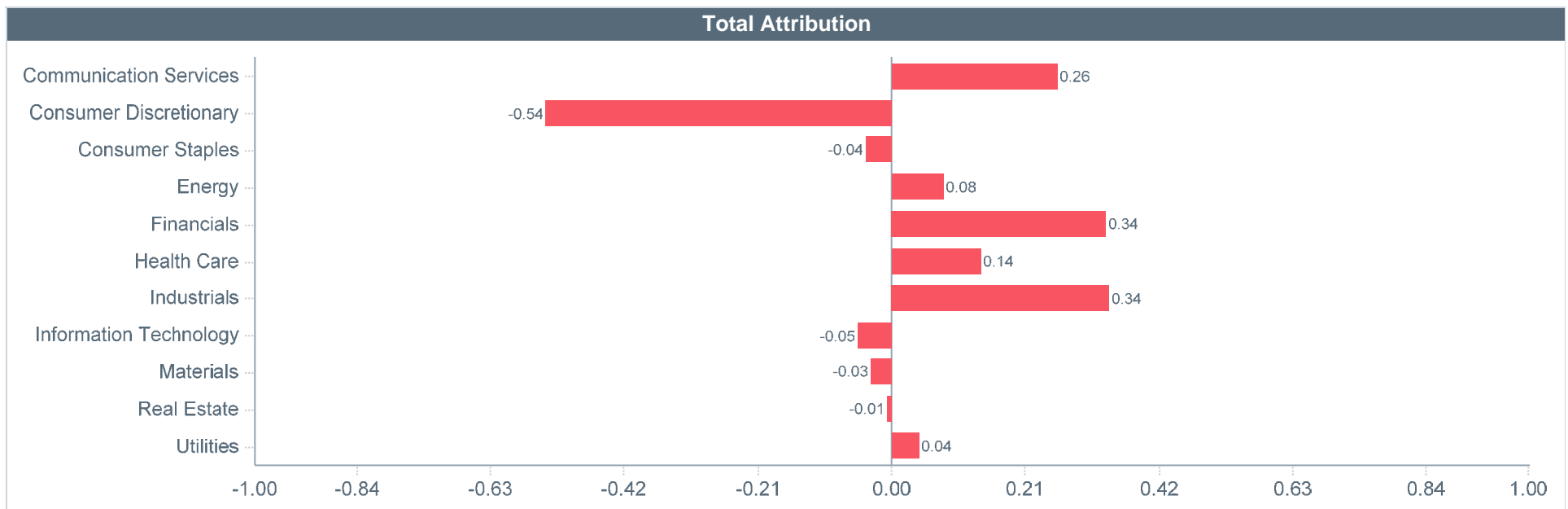
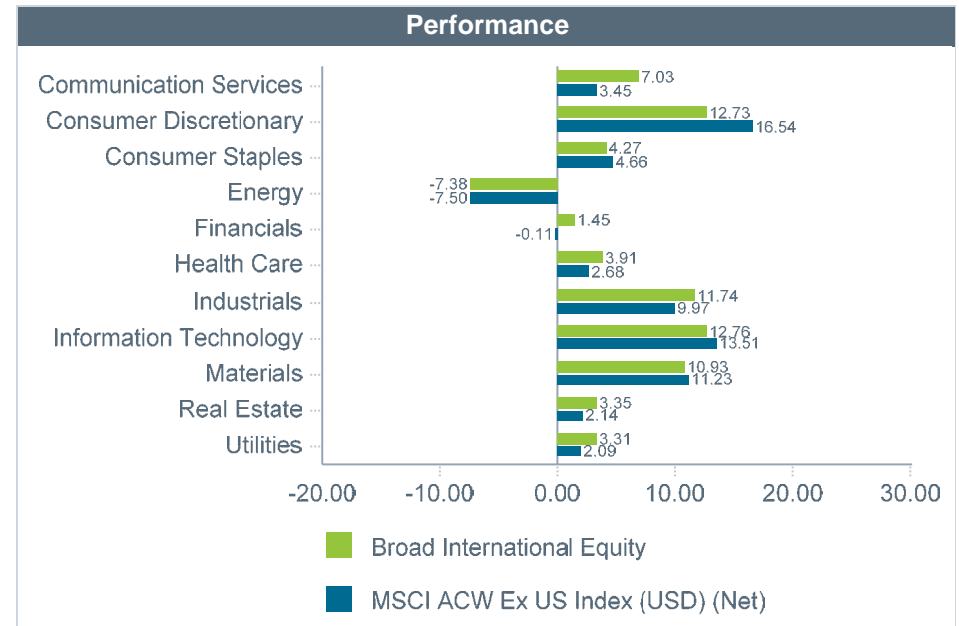
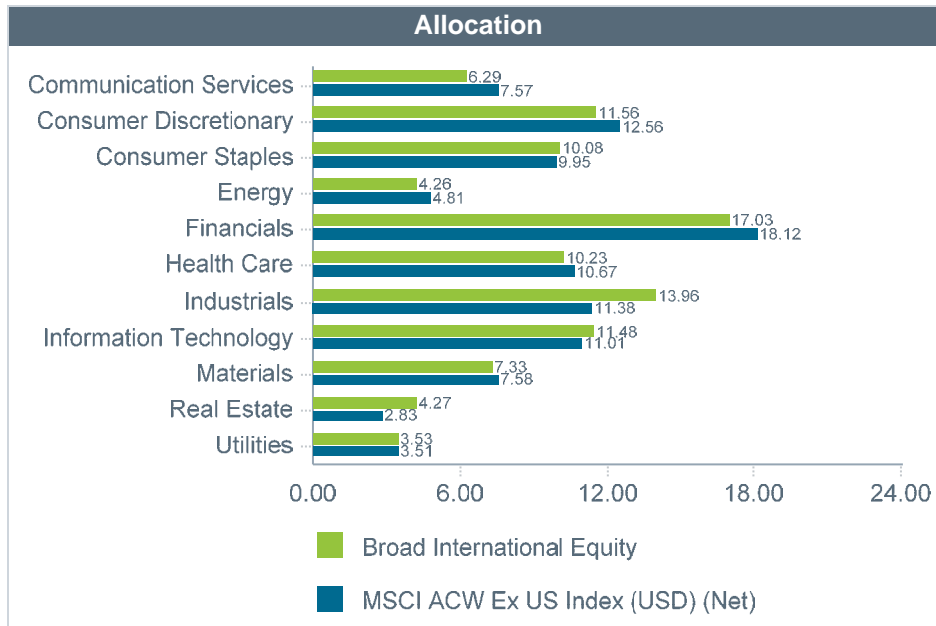
Performance shown is net of fees. Parentheses contain percentile ranks.



Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

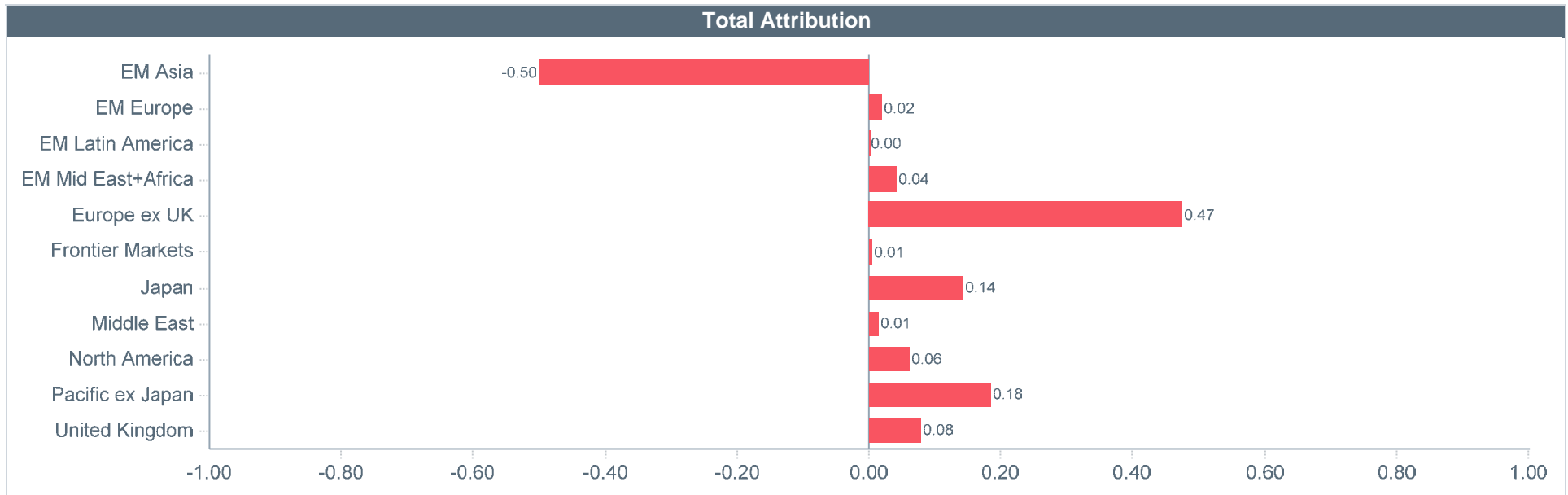
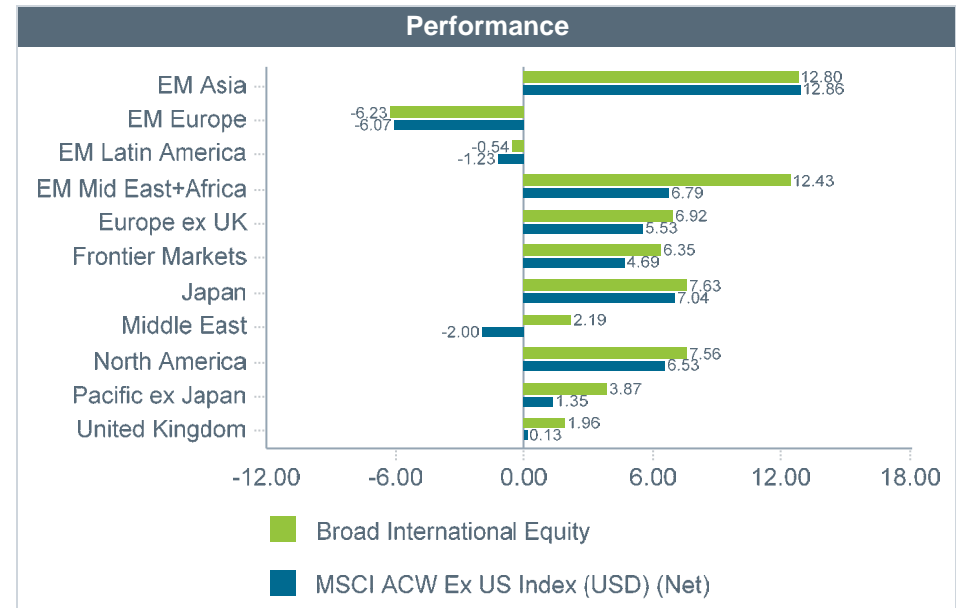
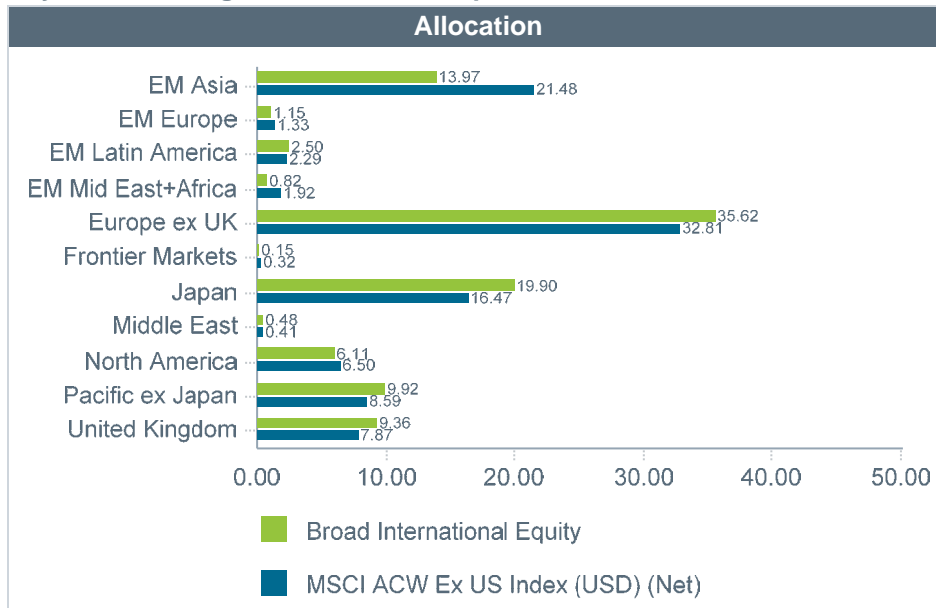
North Dakota Board of University and School Lands
Broad International Equity vs. MSCI ACW Ex US Index (USD) (Net)
Buy and Hold Sector Attribution Graph

1 Quarter Ending September 30, 2020



North Dakota Board of University and School Lands
Broad International Equity vs. MSCI ACW Ex US Index (USD) (Net)
Buy and Hold Region Attribution Graph

1 Quarter Ending September 30, 2020

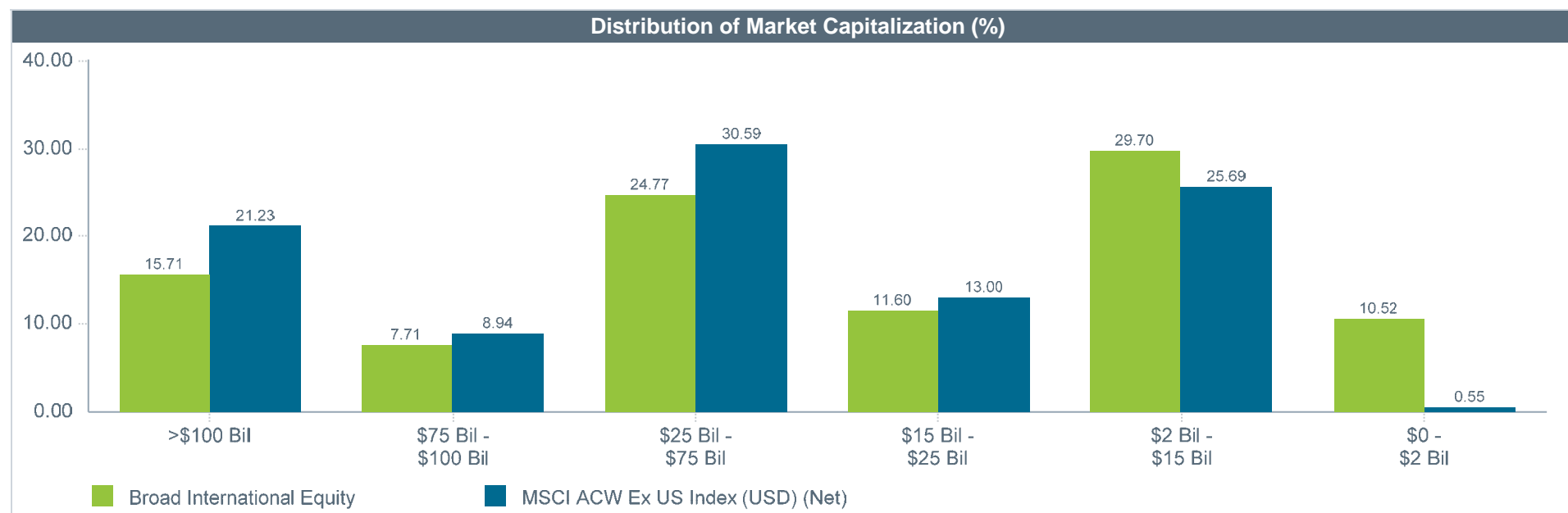


North Dakota Board of University and School Lands
Broad International Equity vs. MSCI ACW Ex US Index (USD) (Net)
Portfolio Characteristics

As of September 30, 2020

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Nestle SA, Cham Und Vevey	1.45	1.65	-0.20	7.78
Tencent Holdings LTD	1.09	1.76	-0.67	2.59
Roche Holding AG	0.98	1.12	-0.14	-0.91
Taiwan Semiconductor Mfg	0.93	1.72	-0.79	41.41
Novartis AG	0.79	0.90	-0.11	0.10
AIA Group Ltd	0.78	0.55	0.23	5.43
SAP AG Systeme Anwendungen	0.65	0.76	-0.11	11.42
ASML Holding NV	0.64	0.73	-0.09	0.44
Alibaba Group Holding Ltd	0.64	2.57	-1.93	36.29
Astrazeneca PLC	0.57	0.67	-0.10	5.74
% of Portfolio	8.52	12.43	-3.91	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	63,875	95,729
Median Mkt. Cap (\$M)	1,086	7,795
Price/Earnings Ratio	16.39	18.16
Price/Book Ratio	2.72	2.84
5 Yr. EPS Growth Rate (%)	6.99	6.23
Current Yield (%)	2.71	2.63
Beta (5 Years, Monthly)	1.02	1.00
Number of Securities	6,757	2,375

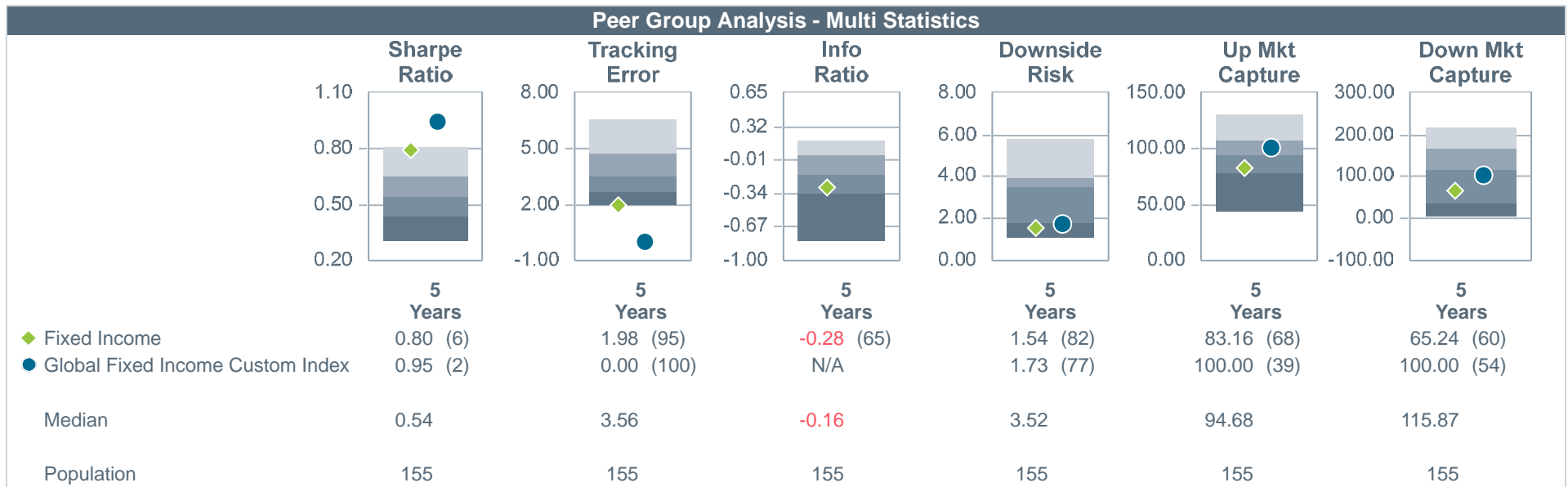
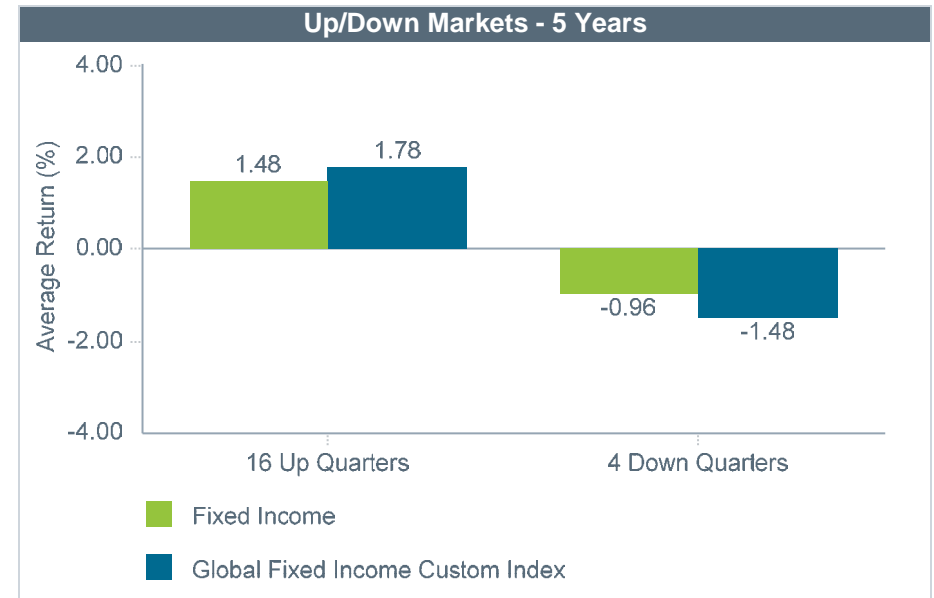
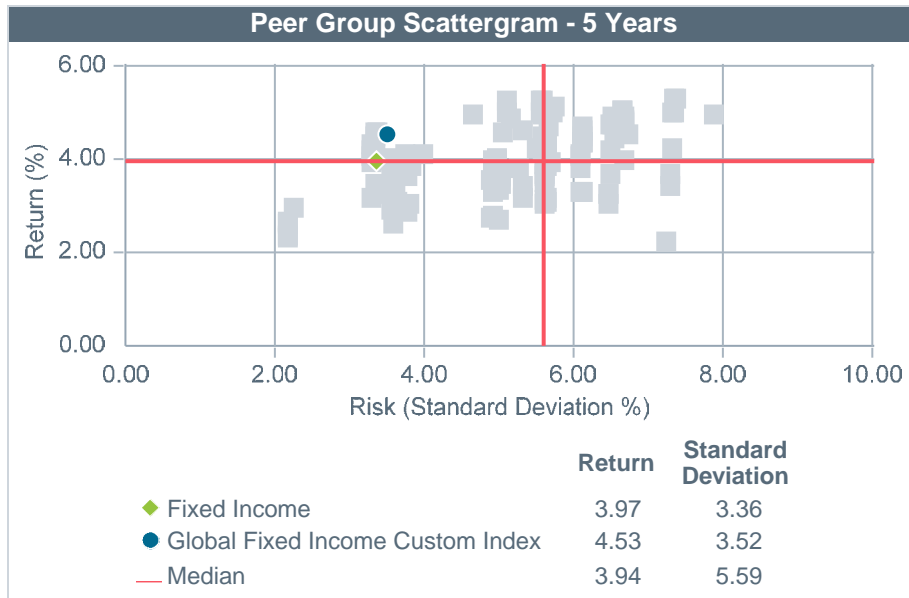


North Dakota Board of University and School Lands
IM Global Fixed Income (MF)
Peer Group Analysis

As of September 30, 2020



Performance shown is net of fees. Parentheses contain percentile ranks.

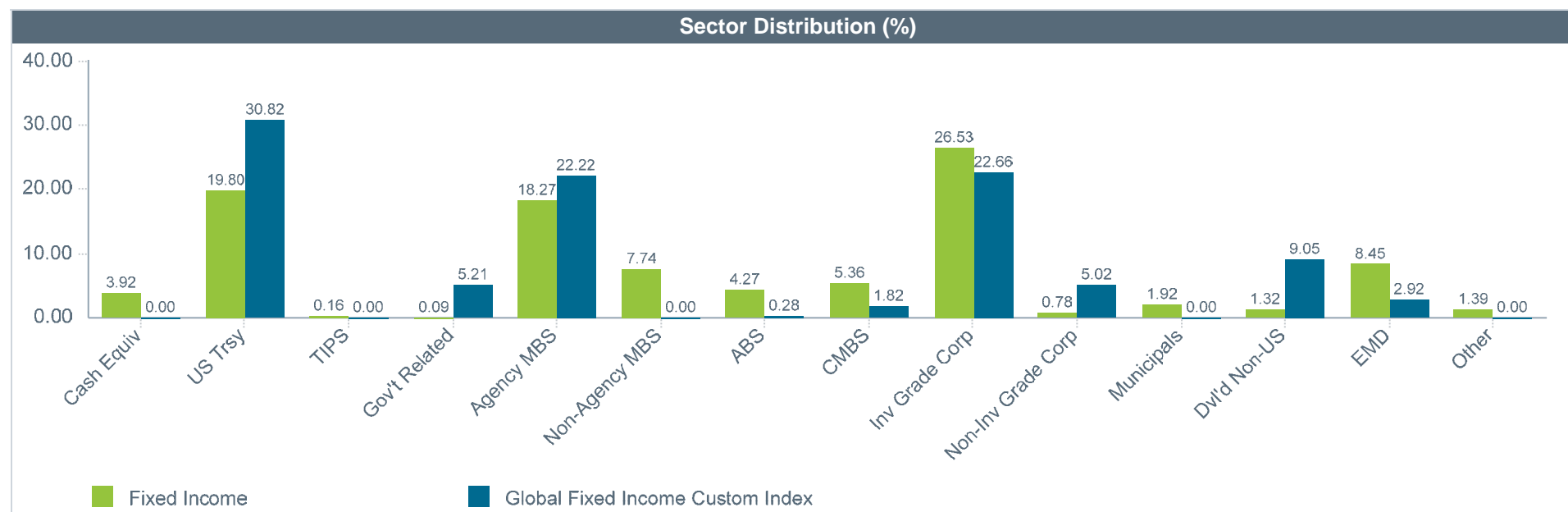


Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

North Dakota Board of University and School Lands
Fixed Income vs. Global Fixed Income Custom Index
Portfolio Characteristics

As of September 30, 2020

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	4.51	5.97
Avg. Maturity	7.58	8.12
Avg. Quality	A1	N/A
Coupon Rate (%)	3.41	3.23
Yield To Worst (%)	1.98	1.65
Current Yield (%)	3.20	0.17



FLP & ECLP Bank Loans, AG Direct Lending Fund III LP and ND Land - PTF Cash (SA) are excluded from portfolio characteristics and sector distribution.
Allocation to "Other" consists of derivatives and CLOs.

North Dakota Board of University and School Lands
Alternative Investment Fund Performance Listing

As of September 30, 2020

Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
Apollo Accord Fund IV, LP	2020	Private Credit - Opportunistic Credit	100,000,000	2,565,394	0	2,959,508	N/M	N/A	N/M	1.15
Varde Dislocation Fund, LP	2020	Private Equity - Distressed	100,000,000	10,000,000	0	10,939,191	N/M	N/A	N/M	1.09
			200,000,000	12,565,394	0	13,898,700				1.11

Certain valuations (marked with a "**") are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the S&P 500 Index (Cap Wtd) assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Preqin.



Investment Manager Profiles



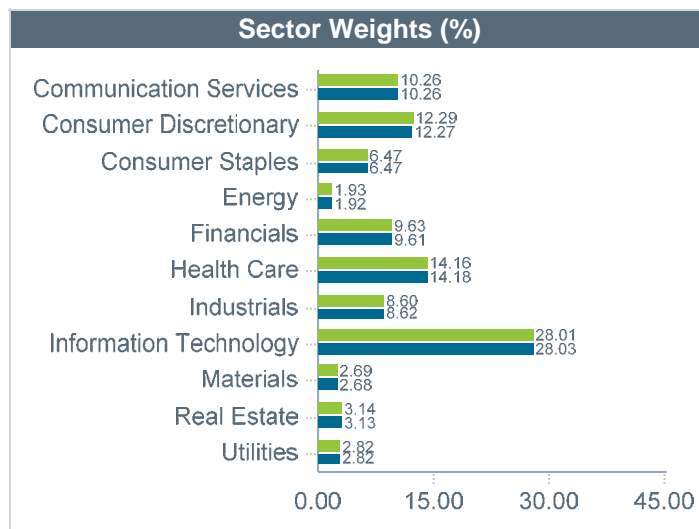
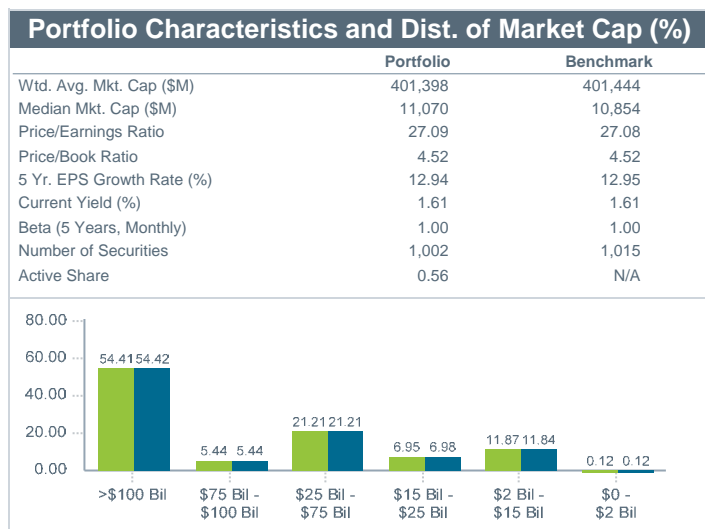
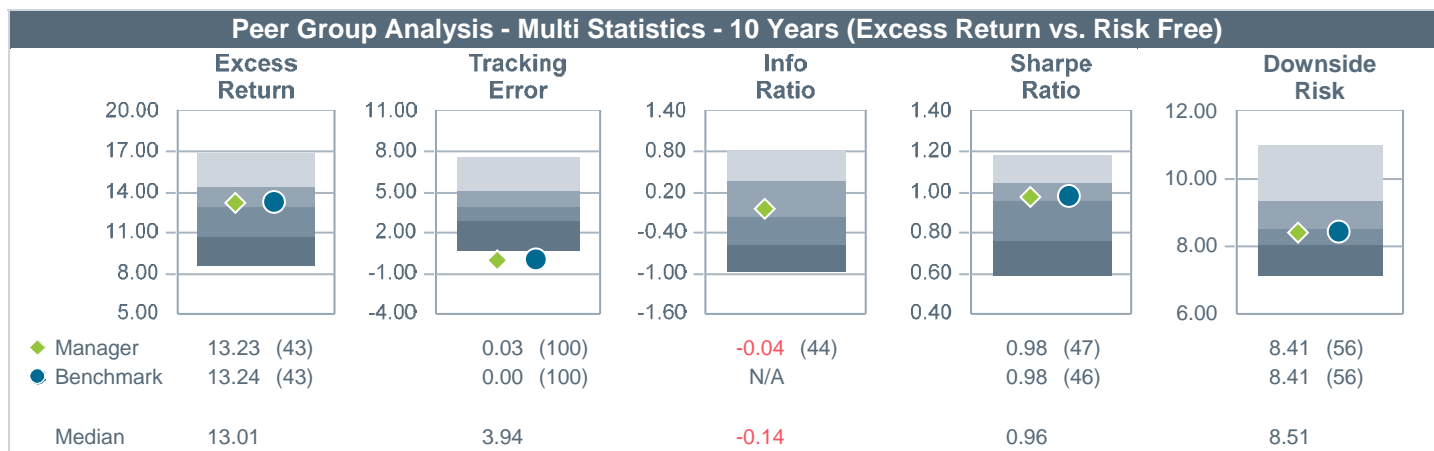
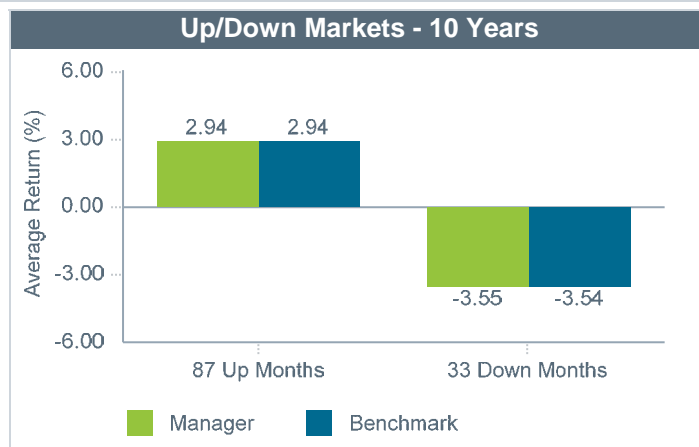
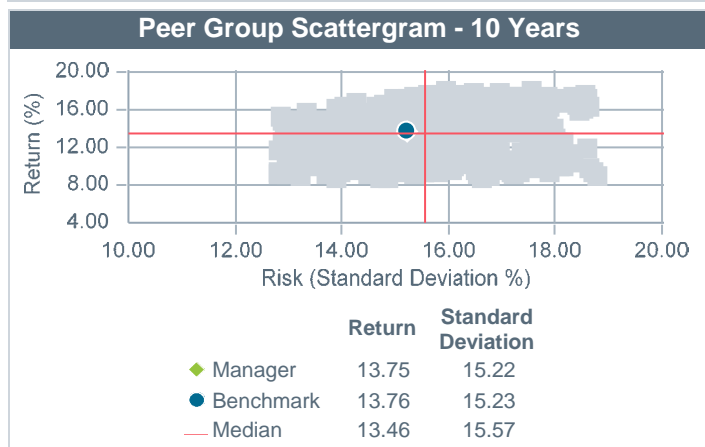
Manager: State Street Russell 1000 Index Lending (CF)

As of September 30, 2020

Benchmark: Russell 1000 Index

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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	9.43	15.96	12.36	14.08	12.54	13.75	31.42	-4.77	21.70	12.03	0.96
Benchmark	9.47	16.01	12.38	14.09	12.54	13.76	31.43	-4.78	21.69	12.05	0.92
Difference	-0.04	-0.05	-0.02	-0.01	0.00	-0.01	-0.01	0.01	0.01	-0.02	0.04
Peer Group Median	8.41	13.02	10.93	13.11	12.05	13.46	30.25	-5.09	21.73	11.06	0.95
Rank	35	38	38	40	43	43	40	47	51	40	50
Population	847	846	838	806	780	702	955	1,048	1,105	1,182	1,249



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

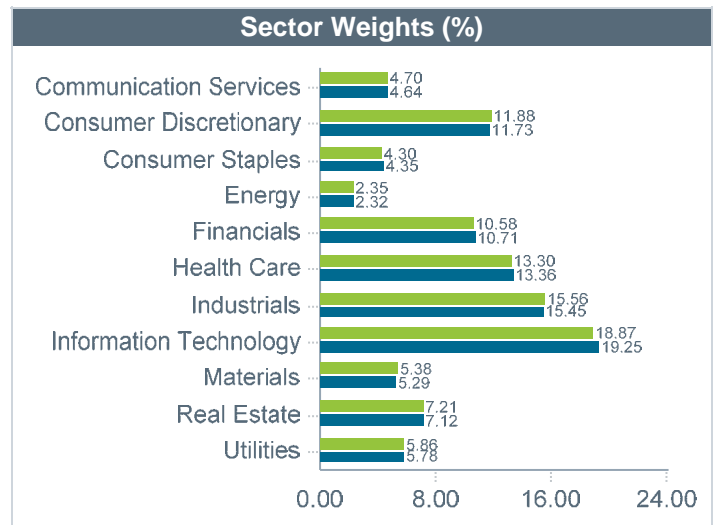
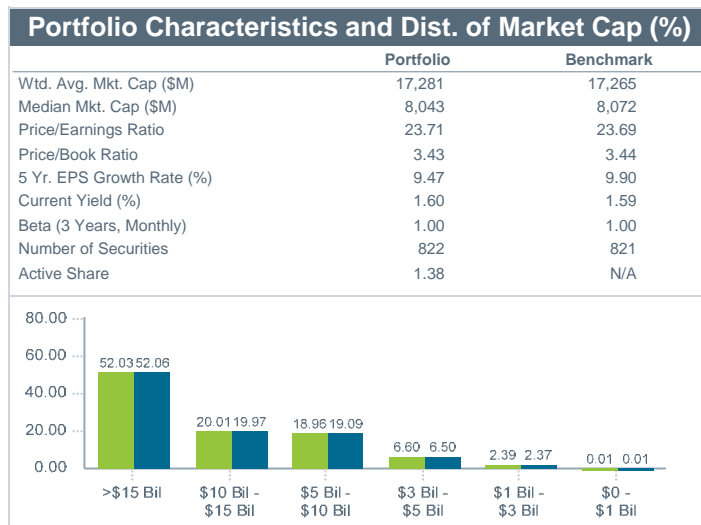
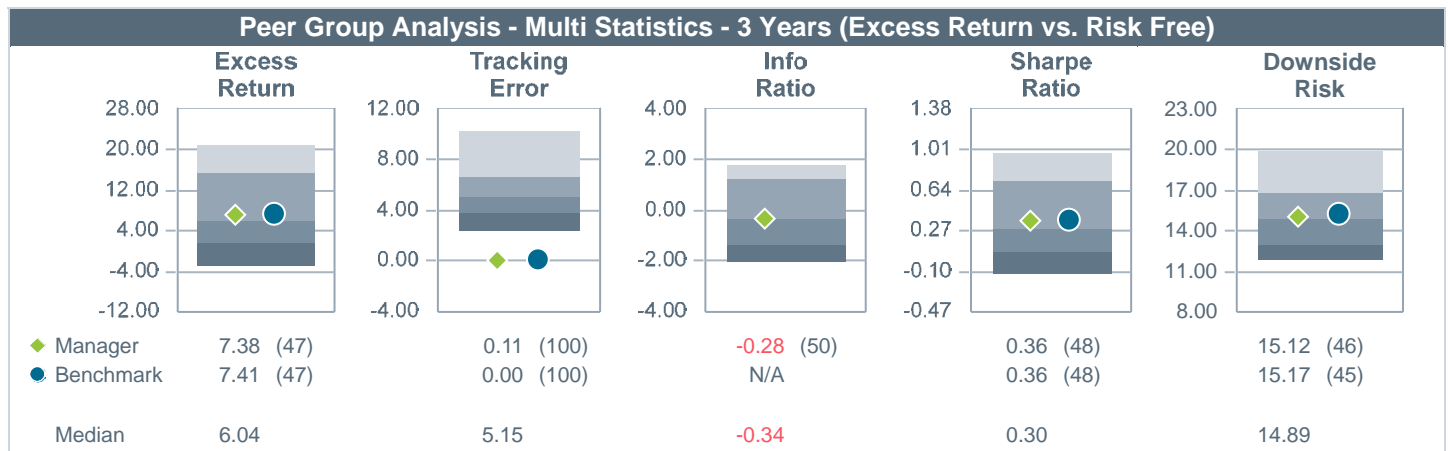
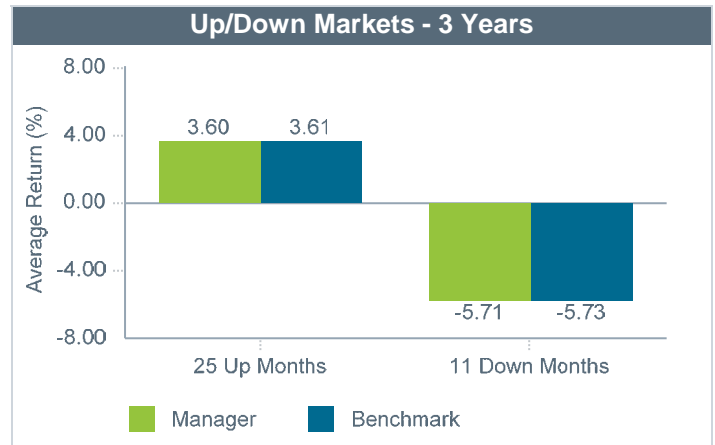
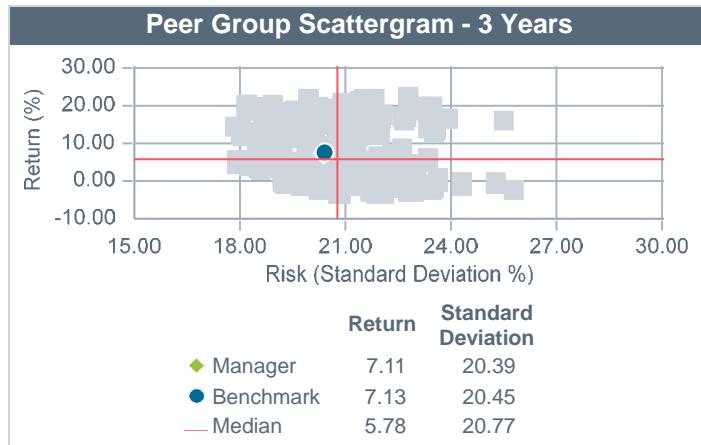
Manager: State Street Russell Mid Cap Index (SA)

As of September 30, 2020

Benchmark: Russell Mid Cap Index

Peer Group: IM U.S. Mid Cap Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	7.44	4.52	7.11	N/A	N/A	N/A	30.38	-8.97	N/A	N/A	N/A
Benchmark	7.46	4.55	7.13	10.13	9.37	11.76	30.54	-9.06	18.52	13.80	-2.44
Difference	-0.02	-0.03	-0.02	N/A	N/A	N/A	-0.16	0.09	N/A	N/A	N/A
Peer Group Median	7.02	4.48	5.78	9.82	9.06	11.00	30.29	-9.95	18.71	11.41	-2.50
Rank	46	50	47	N/A	N/A	N/A	49	44	N/A	N/A	N/A
Population	852	835	772	677	590	500	855	889	859	797	739



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

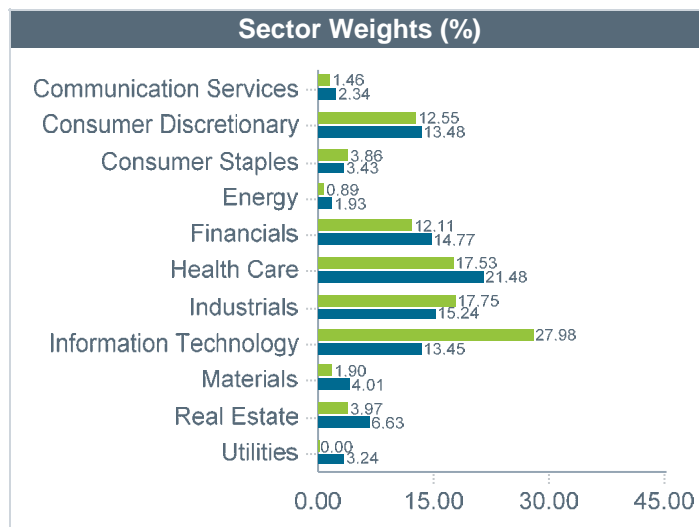
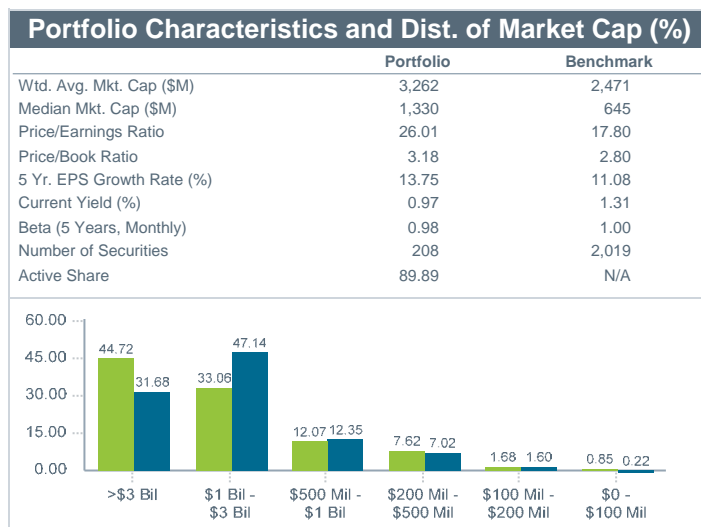
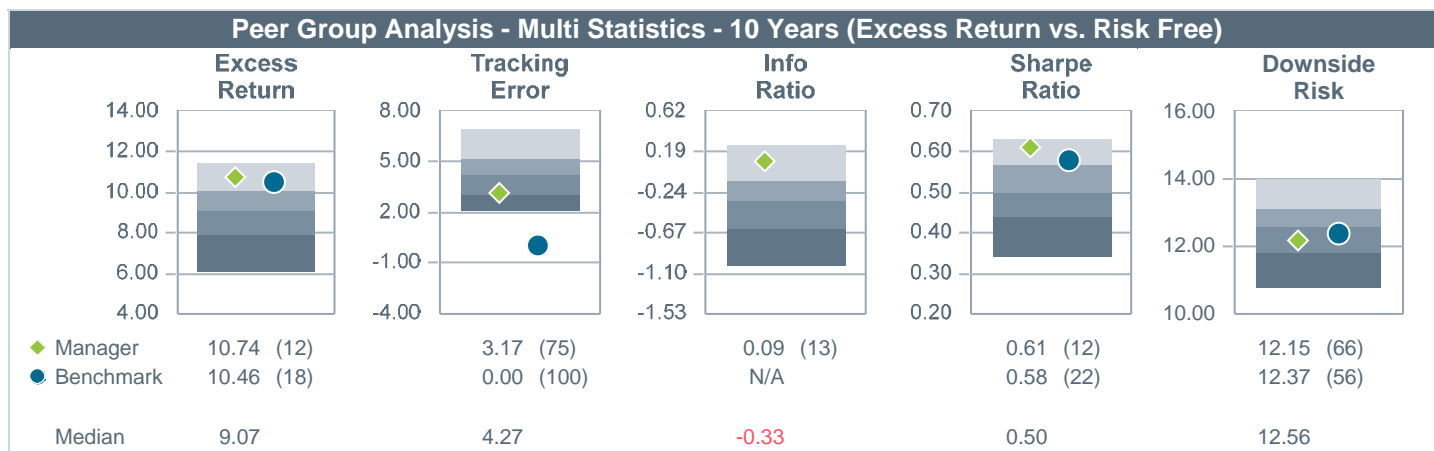
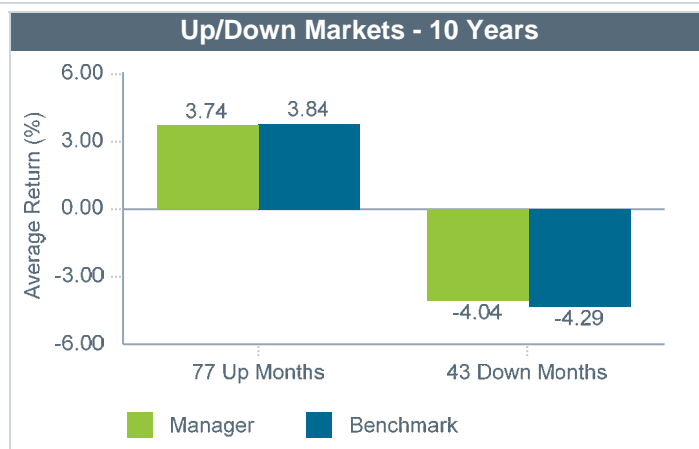
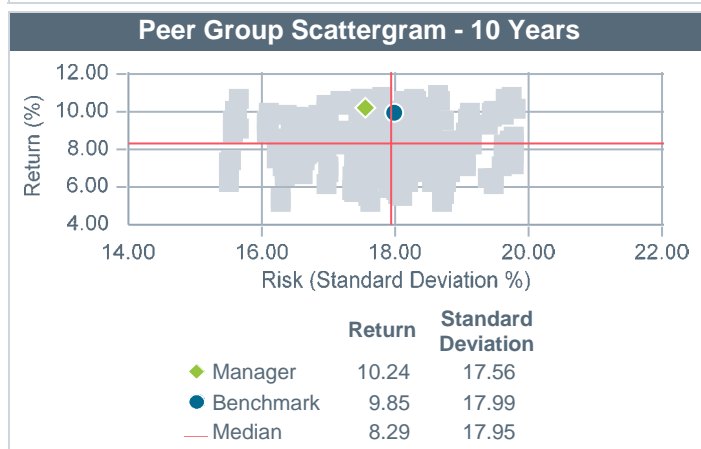
Manager: NT Small Cap Core (CF)

As of September 30, 2020

Benchmark: Russell 2000 Index

Peer Group: IM U.S. Small Cap Core Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	4.61	3.23	5.00	10.18	7.31	10.24	23.13	-7.63	21.82	18.20	-6.01
Benchmark	4.93	0.39	1.77	8.00	6.42	9.85	25.53	-11.01	14.65	21.31	-4.41
Difference	-0.32	2.84	3.23	2.18	0.89	0.39	-2.40	3.38	7.17	-3.11	-1.60
Peer Group Median	3.45	-7.64	-1.21	5.50	4.75	8.29	23.86	-12.67	12.38	21.35	-4.34
Rank	38	10	3	3	7	12	59	7	2	79	73
Population	780	767	725	615	512	420	781	819	815	746	670

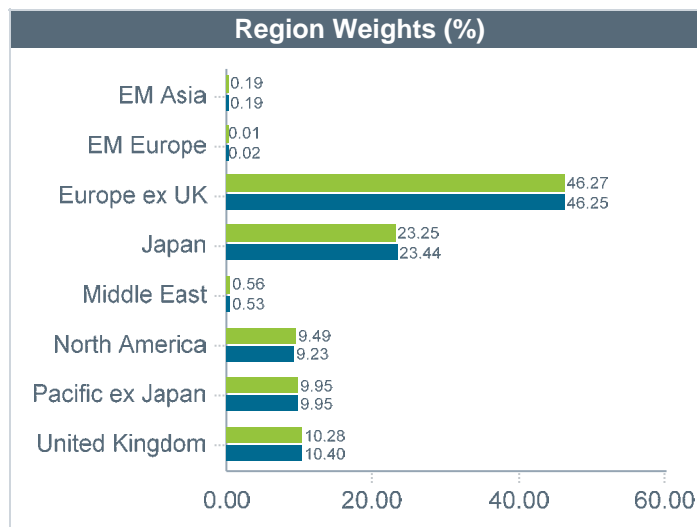
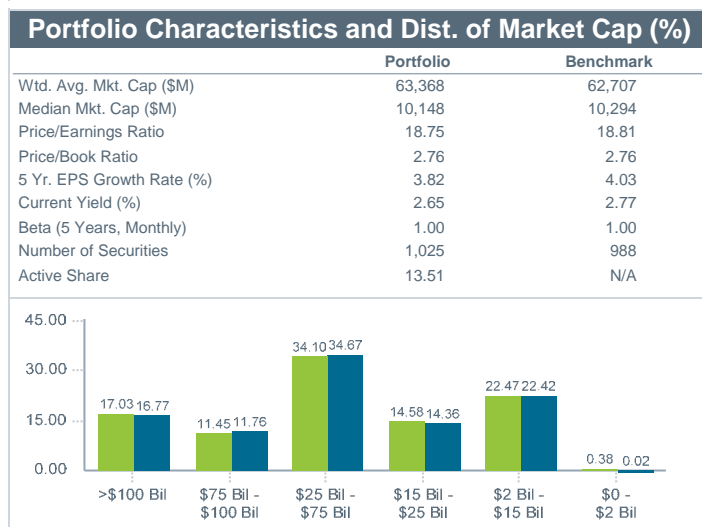
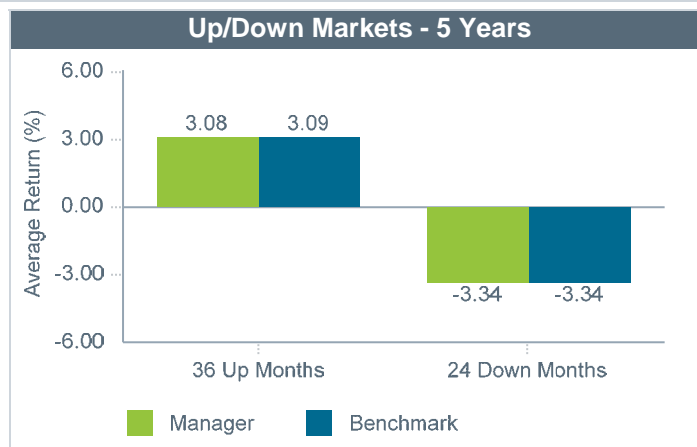
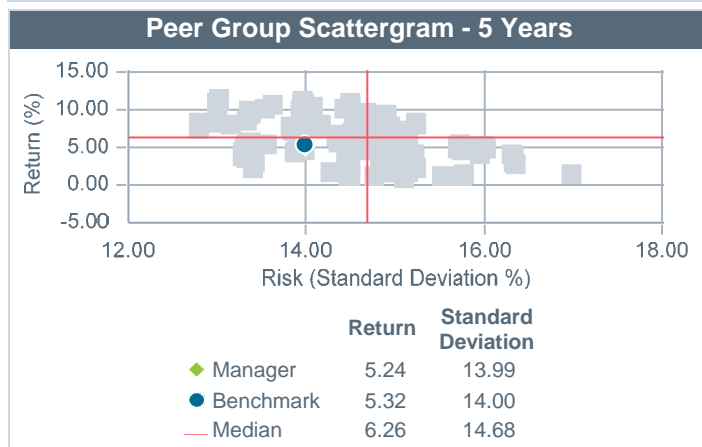


Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Manager: State Street World Ex US Index (CF)
Benchmark: MSCI Wrld Ex US Index (USD) (Net)
Peer Group: IM International Large Cap Equity (MF)

As of September 30, 2020

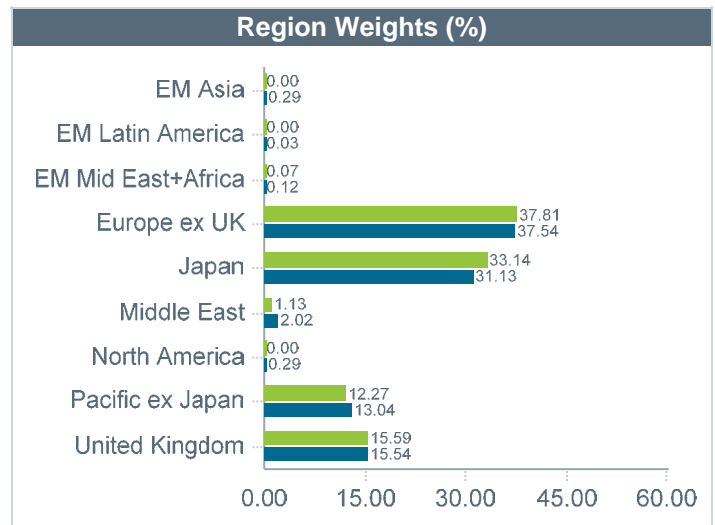
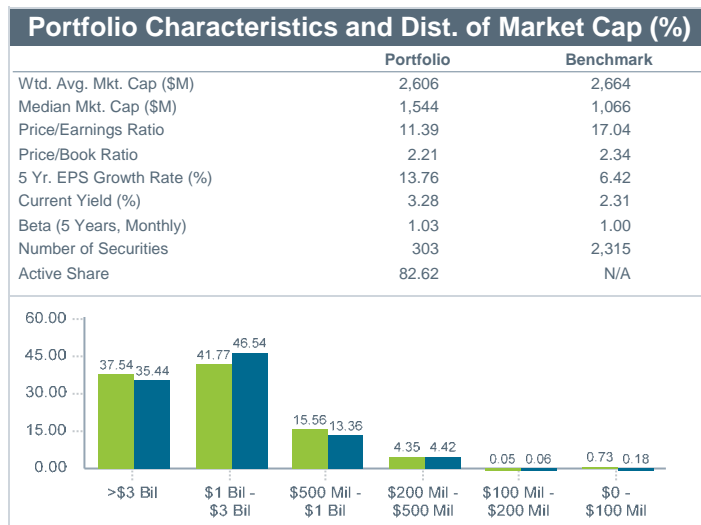
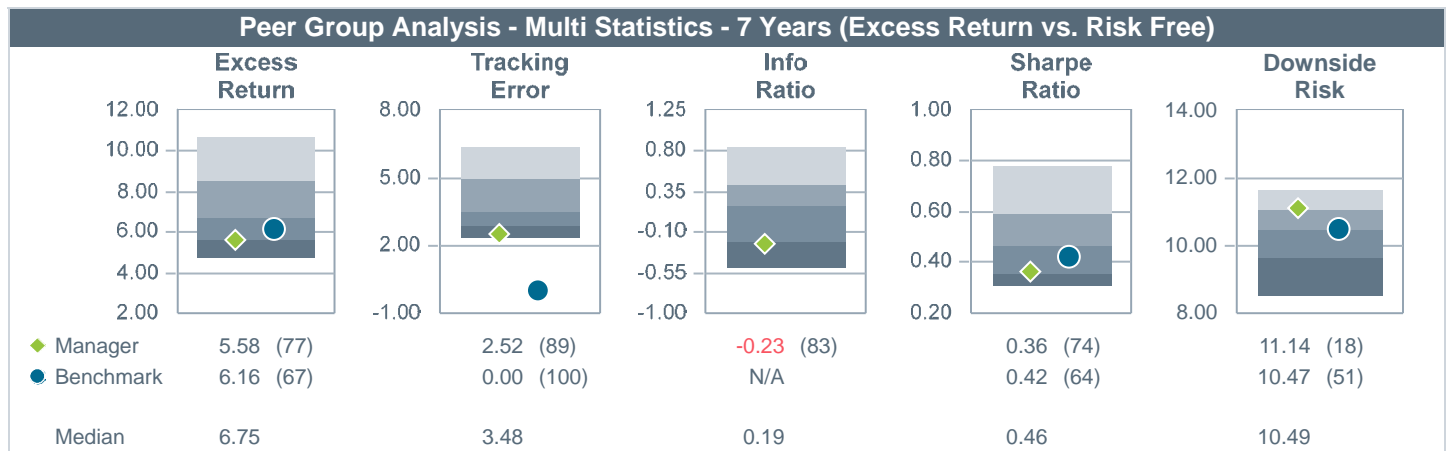
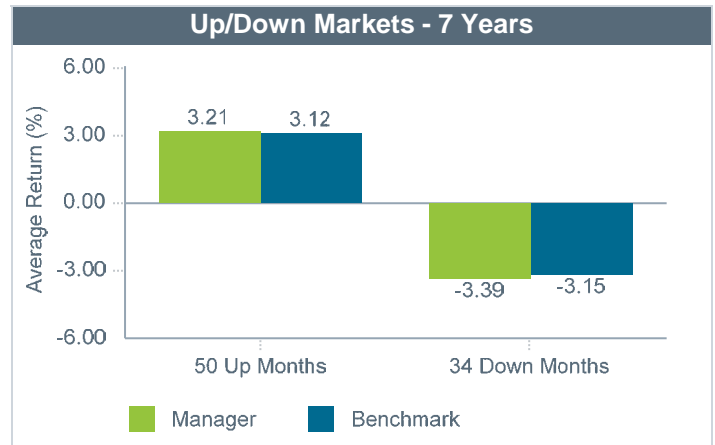
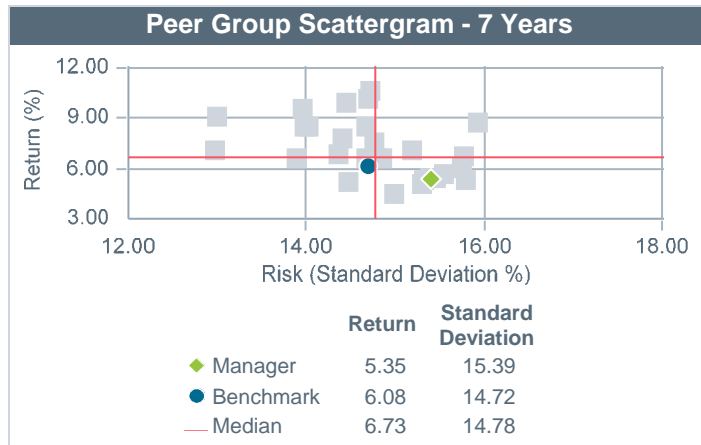
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	4.90	0.10	0.53	5.24	N/A	N/A	22.38	-14.16	24.15	2.66	-3.12
Benchmark	4.92	0.16	0.62	5.32	2.90	4.37	22.49	-14.09	24.21	2.75	-3.04
Difference	-0.02	-0.06	-0.09	-0.08	N/A	N/A	-0.11	-0.07	-0.06	-0.09	-0.08
Peer Group Median	7.39	7.48	3.03	6.26	3.40	4.65	25.94	-15.18	26.76	0.06	-0.98
Rank	76	73	70	61	N/A	N/A	72	38	70	16	78
Population	371	329	287	242	215	185	328	318	296	267	244



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Manager: QMA Int'l Sm Cap Equity (CF)
As of September 30, 2020
Benchmark: MSCI EAFE Sm Cap Index (USD) (Gross)
Peer Group: IM International Small Cap Core Equity (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	9.75	5.06	-1.71	4.69	5.35	N/A	23.52	-22.79	35.05	-0.81	11.09
Benchmark	10.34	7.21	1.78	7.77	6.08	7.71	25.47	-17.58	33.50	2.55	9.94
Difference	-0.59	-2.15	-3.49	-3.08	-0.73	N/A	-1.95	-5.21	1.55	-3.36	1.15
Peer Group Median	10.33	11.32	2.18	8.63	6.73	9.00	24.95	-17.84	35.19	2.58	9.95
Rank	71	76	92	98	74	N/A	60	99	53	88	41
Population	56	54	50	45	35	25	56	55	54	50	46



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

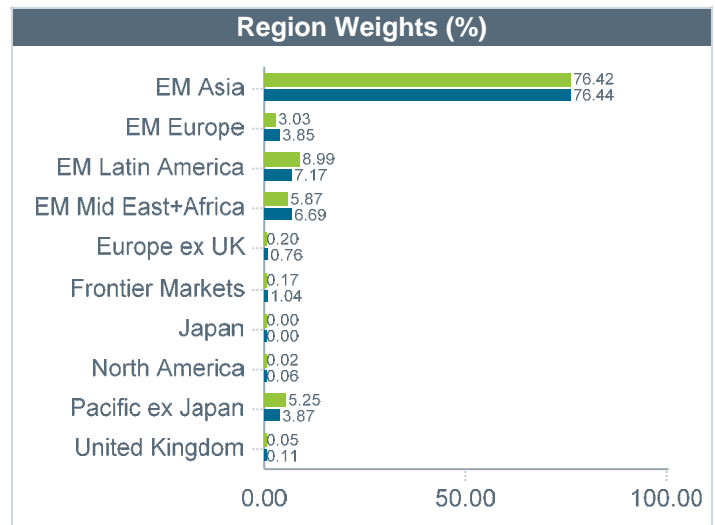
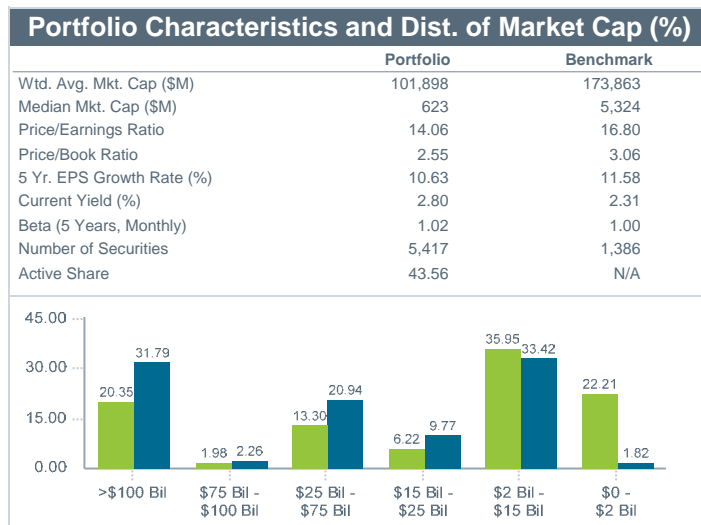
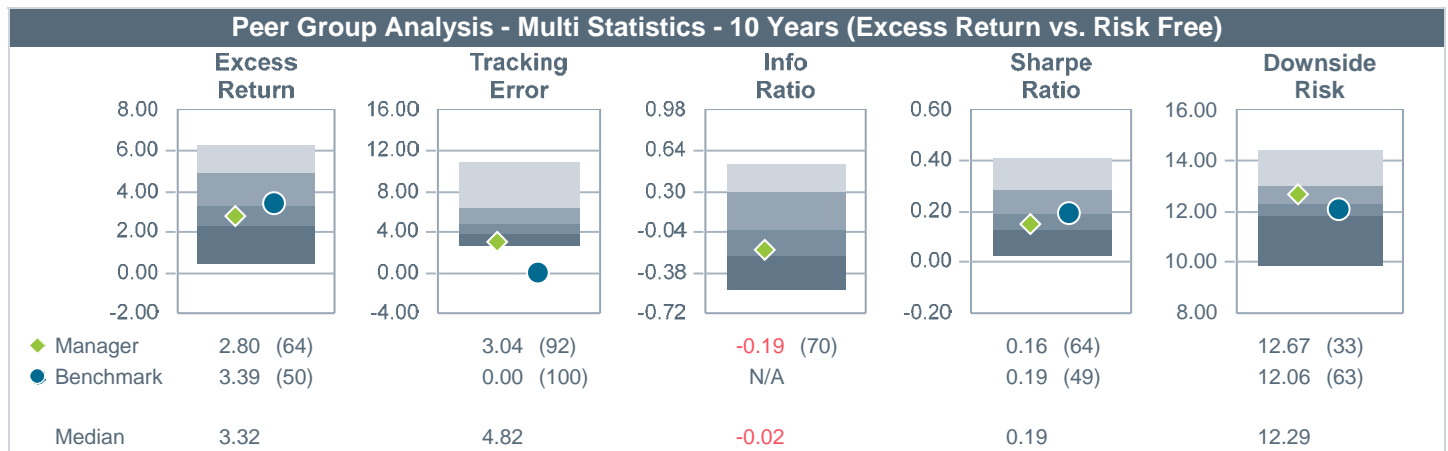
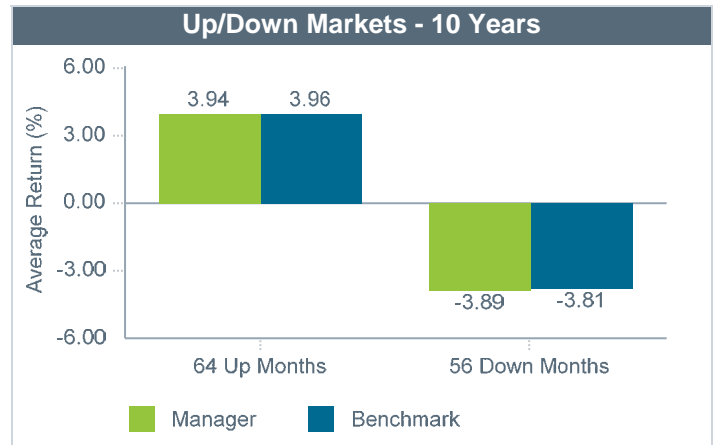
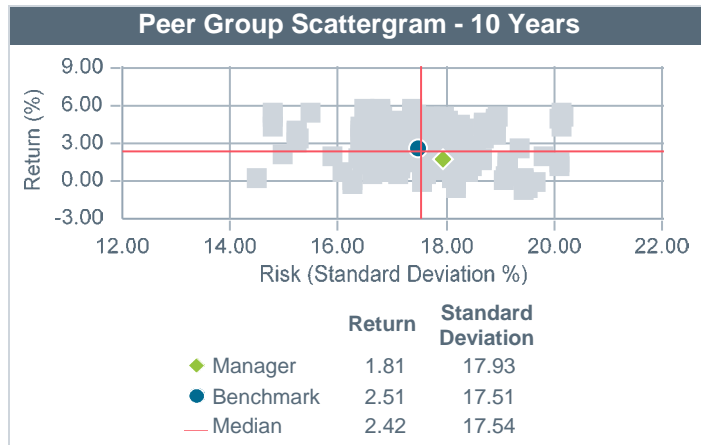
Manager: DFA Emg Mkts Core Eq;I (DFCEX)

As of September 30, 2020

Benchmark: MSCI Emg Mkts Index (USD) (Net)

Peer Group: IM Emerging Markets Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	8.48	3.82	-0.18	7.17	2.83	1.81	16.04	-15.25	36.55	12.35	-14.86
Benchmark	9.56	10.54	2.42	8.97	3.74	2.51	18.44	-14.58	37.28	11.19	-14.92
Difference	-1.08	-6.72	-2.60	-1.80	-0.91	-0.70	-2.40	-0.67	-0.73	1.16	0.06
Peer Group Median	9.39	10.12	2.02	8.12	3.69	2.42	20.06	-16.39	35.37	8.35	-13.66
Rank	63	78	73	63	66	64	77	40	45	21	63
Population	842	802	704	605	435	273	847	844	814	750	656



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

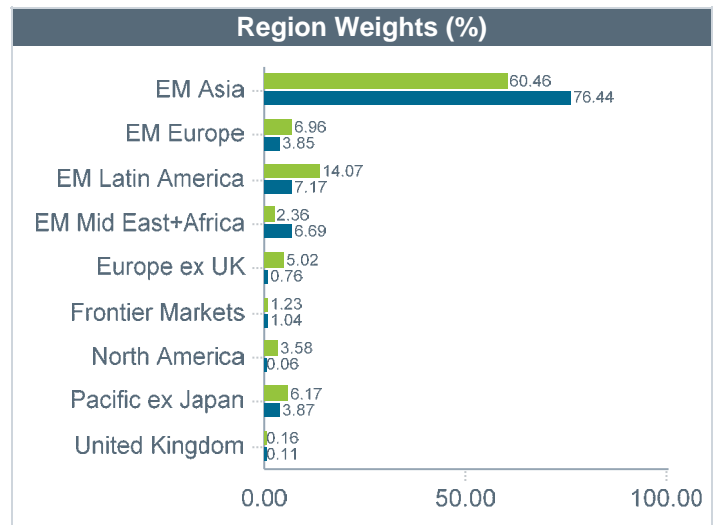
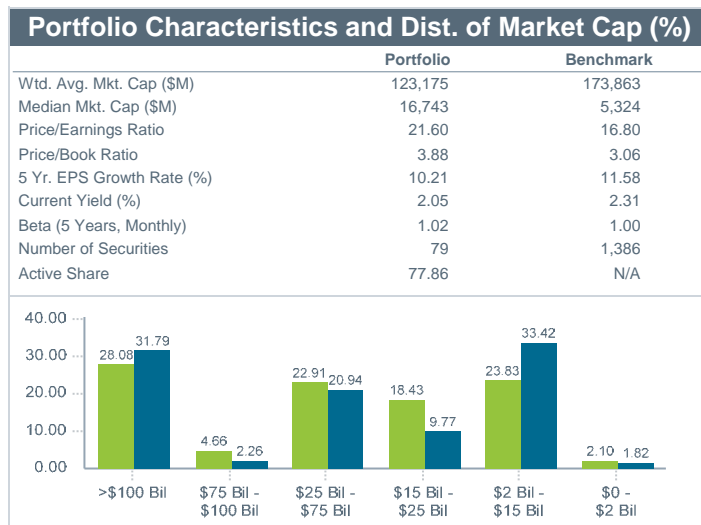
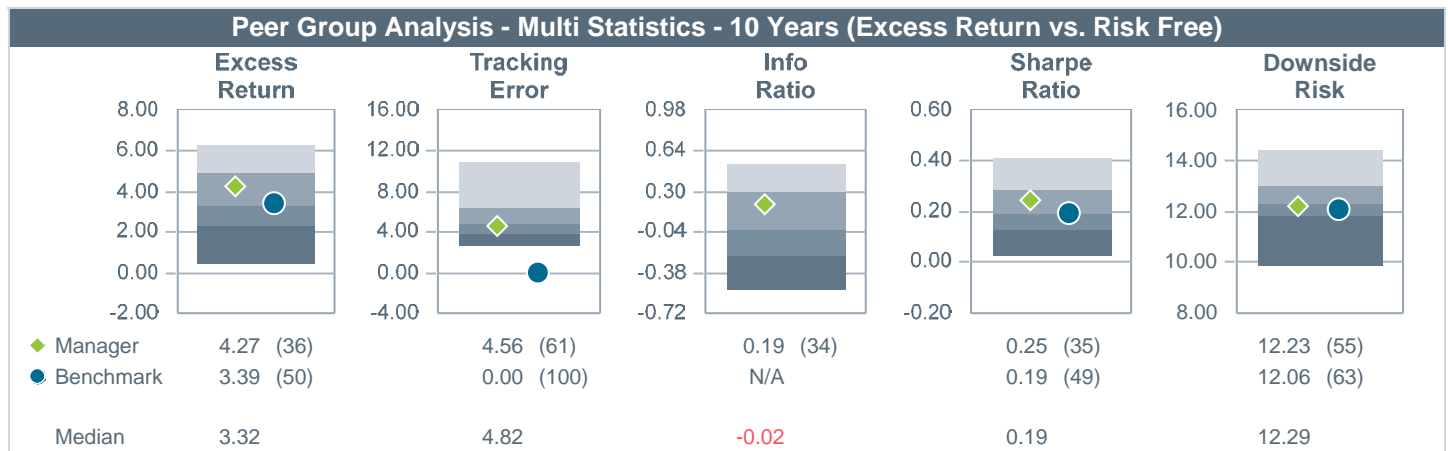
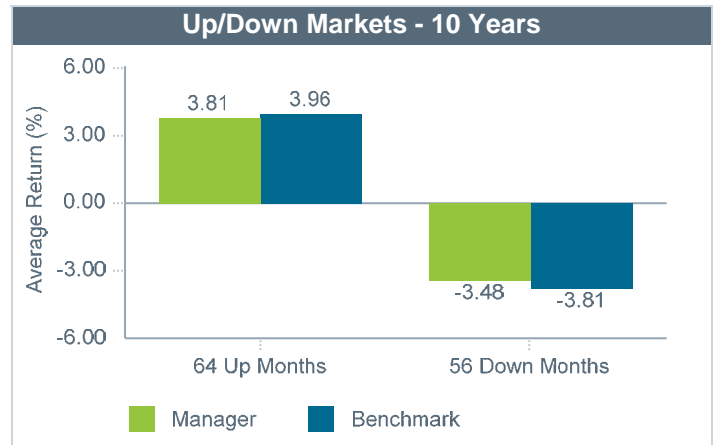
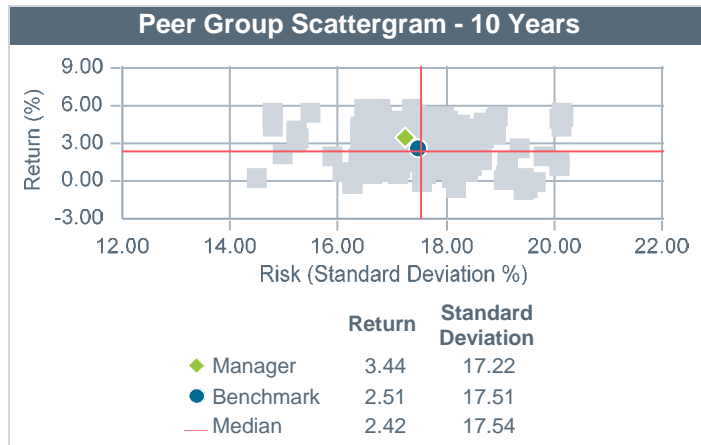
Manager: Harding Loevner: IEM; IZ (HLEZX)

As of September 30, 2020

Benchmark: MSCI Emg Mkts Index (USD) (Net)

Peer Group: IM Emerging Markets Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	9.26	4.34	0.33	8.17	3.97	3.44	25.97	-18.53	35.79	13.44	-13.31
Benchmark	9.56	10.54	2.42	8.97	3.74	2.51	18.44	-14.58	37.28	11.19	-14.92
Difference	-0.30	-6.20	-2.09	-0.80	0.23	0.93	7.53	-3.95	-1.49	2.25	1.61
Peer Group Median	9.39	10.12	2.02	8.12	3.69	2.42	20.06	-16.39	35.37	8.35	-13.66
Rank	52	76	68	50	42	35	22	71	49	15	47
Population	842	802	704	605	435	273	847	844	814	750	656



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

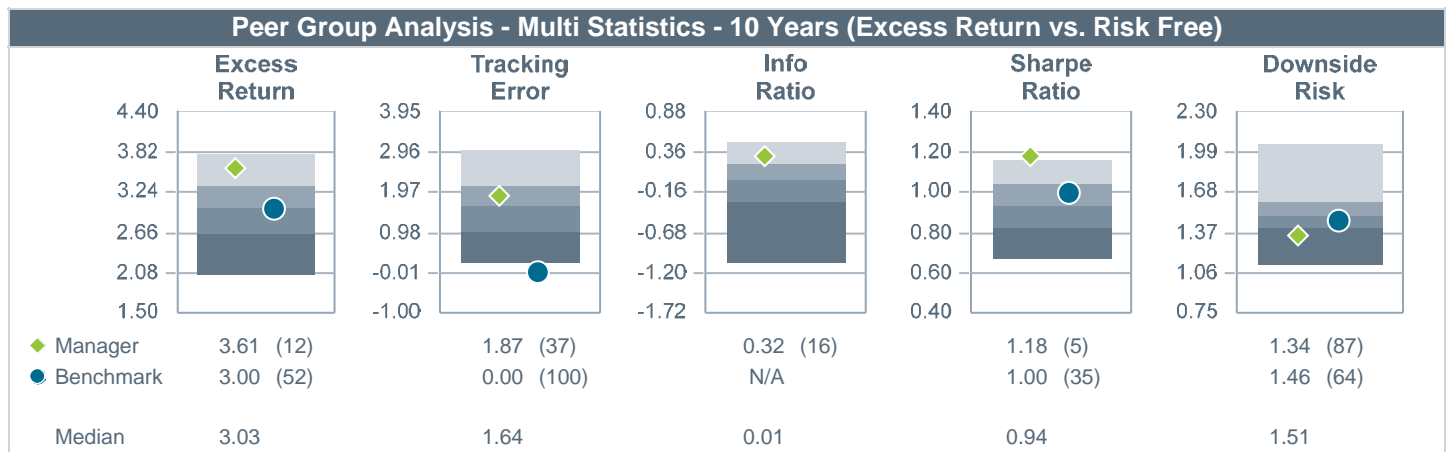
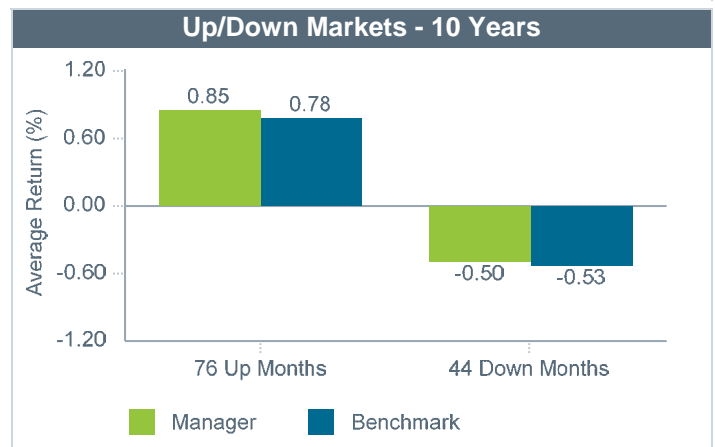
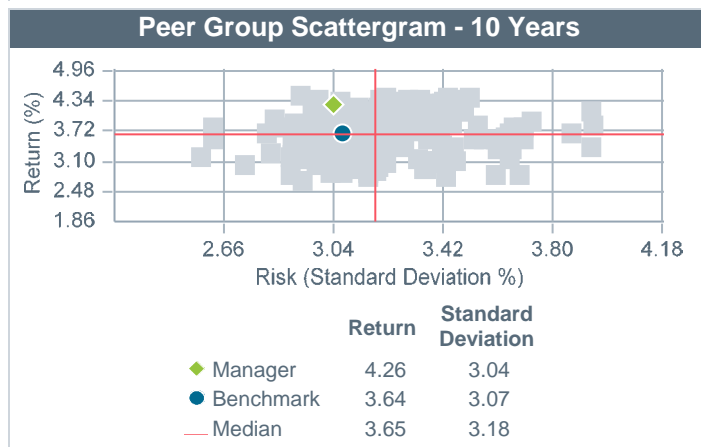
Manager: Payden & Rygel Long Term (SA)

As of September 30, 2020

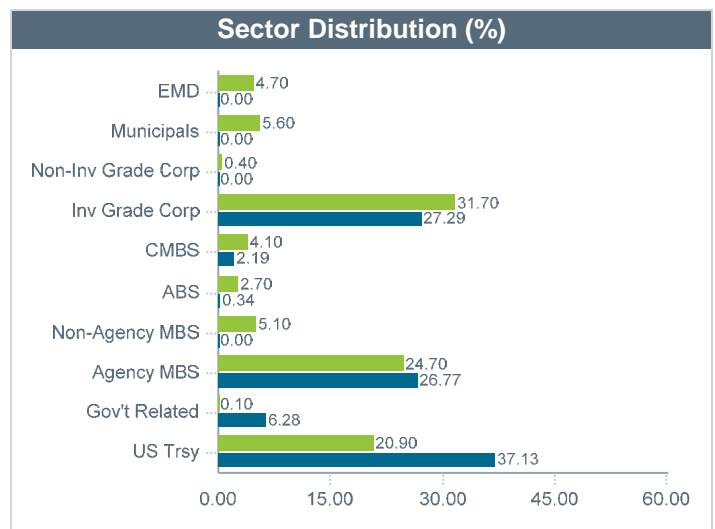
Benchmark: Bloomberg US Agg Bond Index

Peer Group: IM U.S. Broad Market Core Fixed Income (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	1.16	6.22	5.42	4.75	4.43	4.26	9.42	0.16	4.99	3.83	0.62
Benchmark	0.62	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	2.65	0.55
Difference	0.54	-0.76	0.18	0.57	0.46	0.62	0.70	0.15	1.45	1.18	0.07
Peer Group Median	1.19	6.96	5.03	4.16	3.88	3.65	8.76	-0.63	3.59	2.86	0.09
Rank	53	73	26	17	13	12	30	12	6	21	17
Population	500	494	455	402	342	297	511	506	498	469	433



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.12	6.12
Spread Duration	4.81	6.35
Avg. Maturity	8.59	8.18
Avg. Quality	Aa3	Aa1/Aa2
Yield To Maturity (%)	1.72	1.19
Coupon Rate (%)	3.24	2.90
Current Yield (%)	2.94	N/A
Holdings Count	274	11,912



Performance shown is net of fees and client specific. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

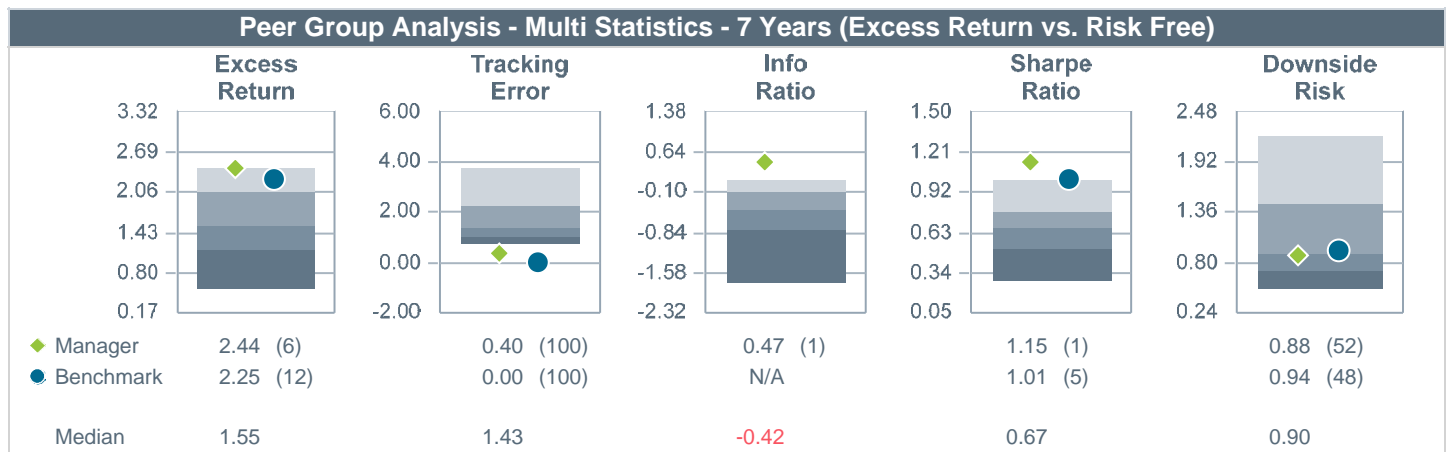
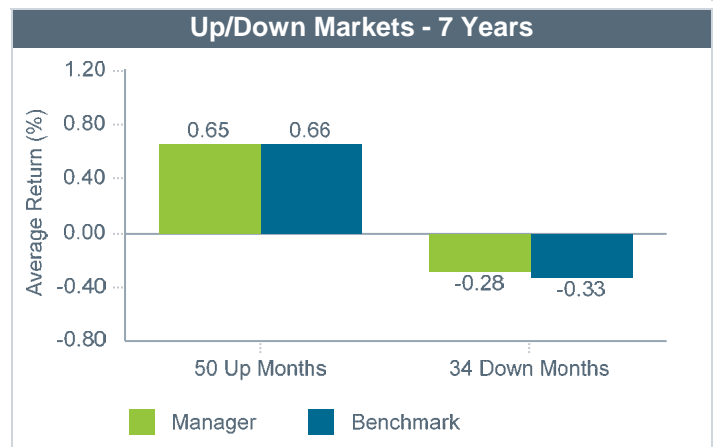
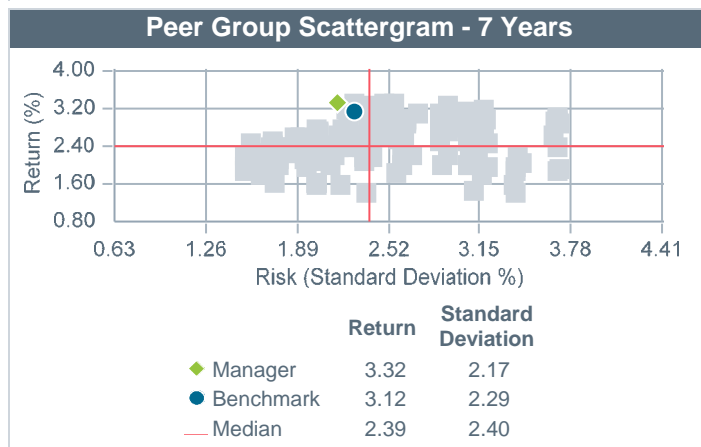
Manager: JP Morgan FI Intermediate Bond (SA)

As of September 30, 2020

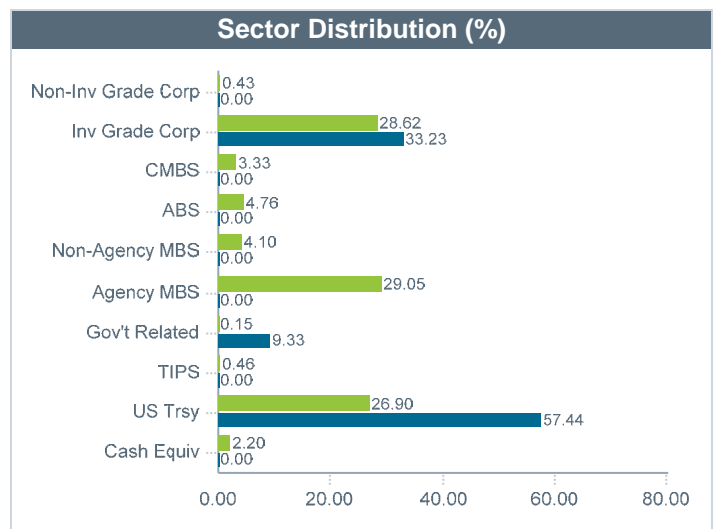
Benchmark: Bloomberg US Gov't Crdt Int Trm Bond Index

Peer Group: IM U.S. Intermediate Duration Fixed Income (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	0.84	5.98	4.48	3.47	3.32	N/A	6.70	1.01	2.71	1.88	1.42
Benchmark	0.61	6.32	4.43	3.39	3.12	2.91	6.80	0.88	2.14	2.08	1.07
Difference	0.23	-0.34	0.05	0.08	0.20	N/A	-0.10	0.13	0.57	-0.20	0.35
Peer Group Median	0.66	5.19	3.49	2.66	2.39	2.43	5.29	0.64	1.68	1.69	0.48
Rank	35	36	11	8	5	N/A	12	27	8	44	10
Population	243	242	219	201	175	123	244	229	220	215	204



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	3.75	4.11
Spread Duration	2.60	4.12
Avg. Maturity	4.66	4.46
Avg. Quality	Aa3	Aa2/Aa3
Yield To Maturity (%)	1.08	0.68
Coupon Rate (%)	3.00	2.34
Current Yield (%)	3.19	N/A
Holdings Count	483	5,282



Performance shown is net of fees and client specific. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

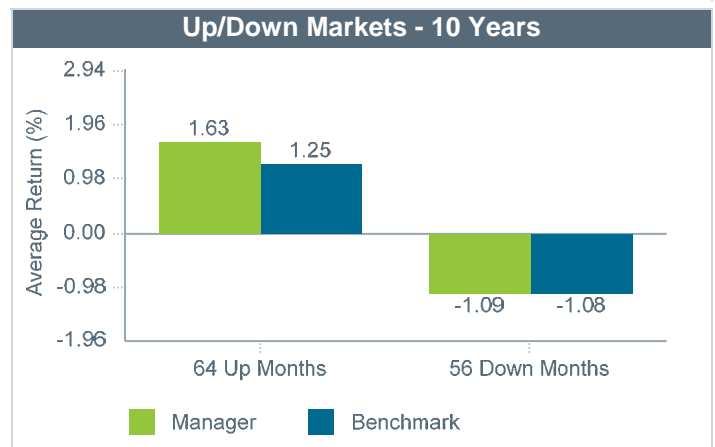
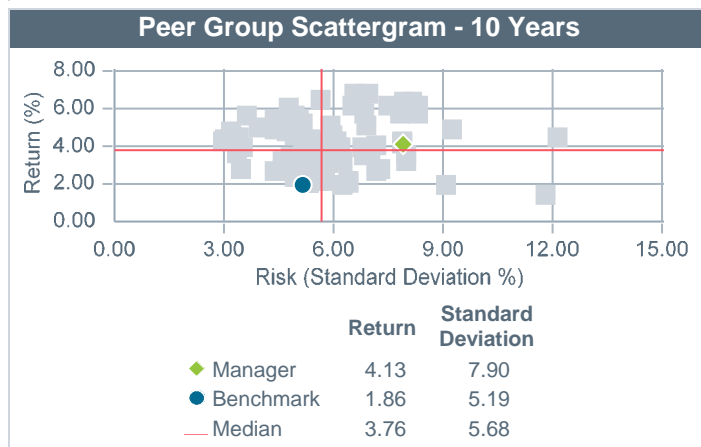
Manager: Brandywine Gbl Opp Fixed Income (CF)

As of September 30, 2020

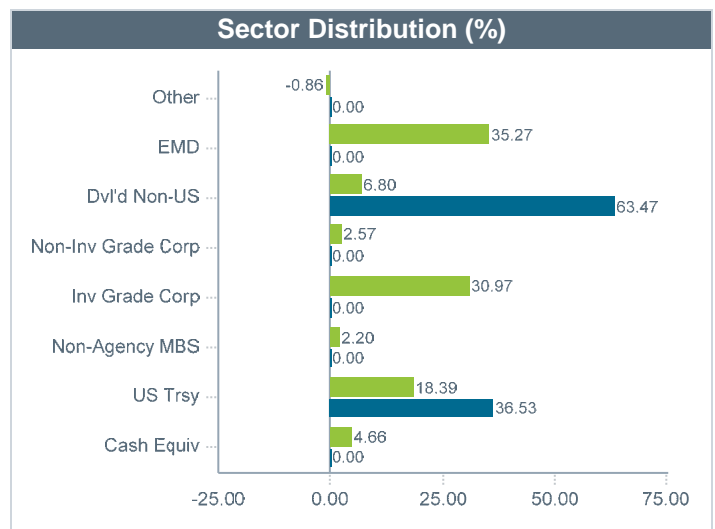
Benchmark: FTSE Wrld Gov't Bond Index

Peer Group: IM Global Fixed Income (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	3.56	5.71	1.87	4.83	3.21	4.13	9.73	-4.66	13.39	5.75	-8.02
Benchmark	2.94	6.77	4.37	3.95	2.22	1.86	5.90	-0.84	7.49	1.60	-3.57
Difference	0.62	-1.06	-2.50	0.88	0.99	2.27	3.83	-3.82	5.90	4.15	-4.45
Peer Group Median	3.48	4.82	4.29	4.98	3.93	3.82	9.48	-1.73	7.59	5.93	-2.27
Rank	50	42	87	60	65	45	48	88	4	53	92
Population	211	211	204	199	177	126	227	248	256	270	280

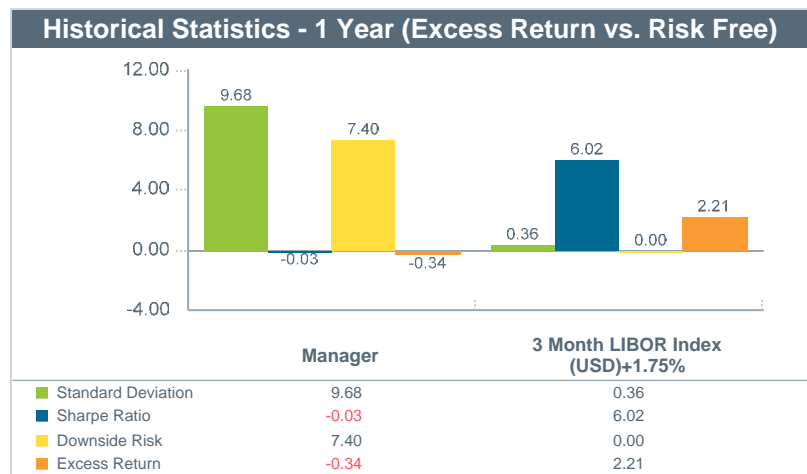


Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	5.64	8.86
Spread Duration	5.67	N/A
Avg. Maturity	13.52	9.40
Avg. Quality	A2	Aa2
Yield To Maturity (%)	3.22	0.26
Coupon Rate (%)	4.33	2.01
Current Yield (%)	3.91	N/A
Holdings Count	106	N/A



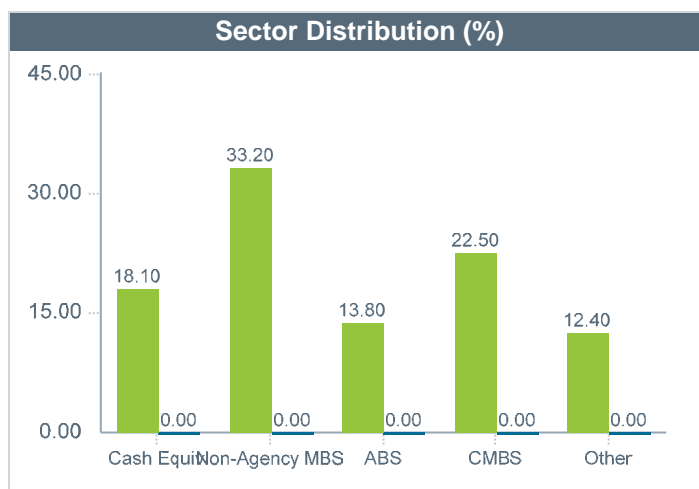
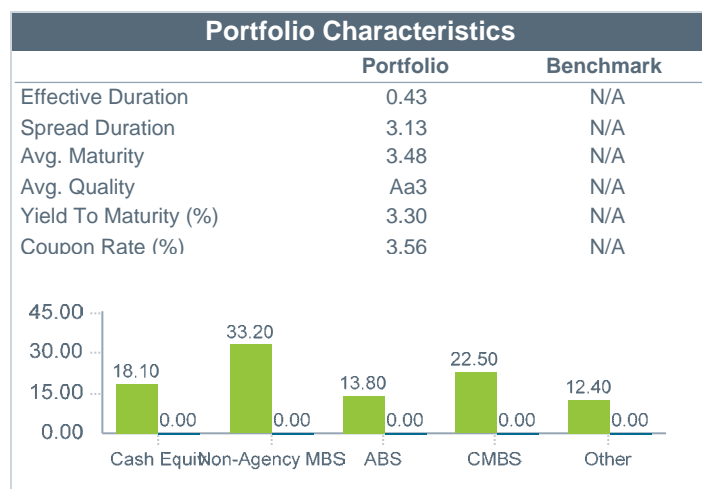
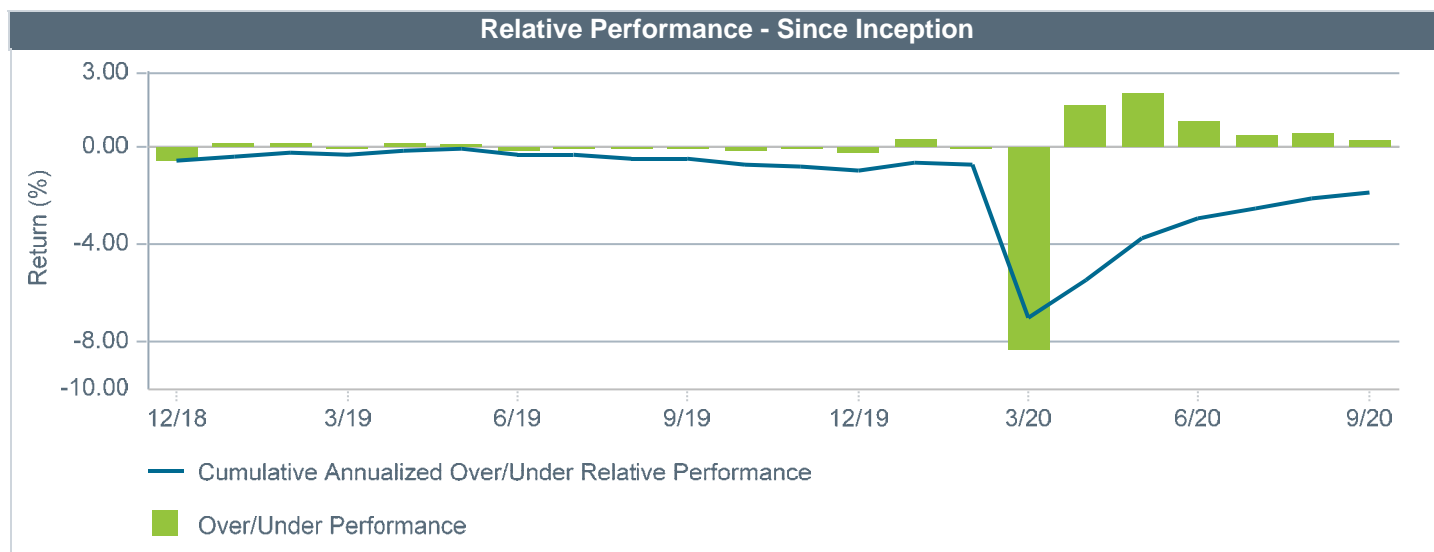
Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" consists of derivatives.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	1.74	0.29	N/A	N/A	N/A	N/A	3.85	N/A	N/A	N/A	N/A
Benchmark	0.52	3.35	3.78	3.28	2.91	2.67	4.39	3.86	2.88	2.42	1.99
Difference	1.22	-3.06	N/A	N/A	N/A	N/A	-0.54	N/A	N/A	N/A	N/A



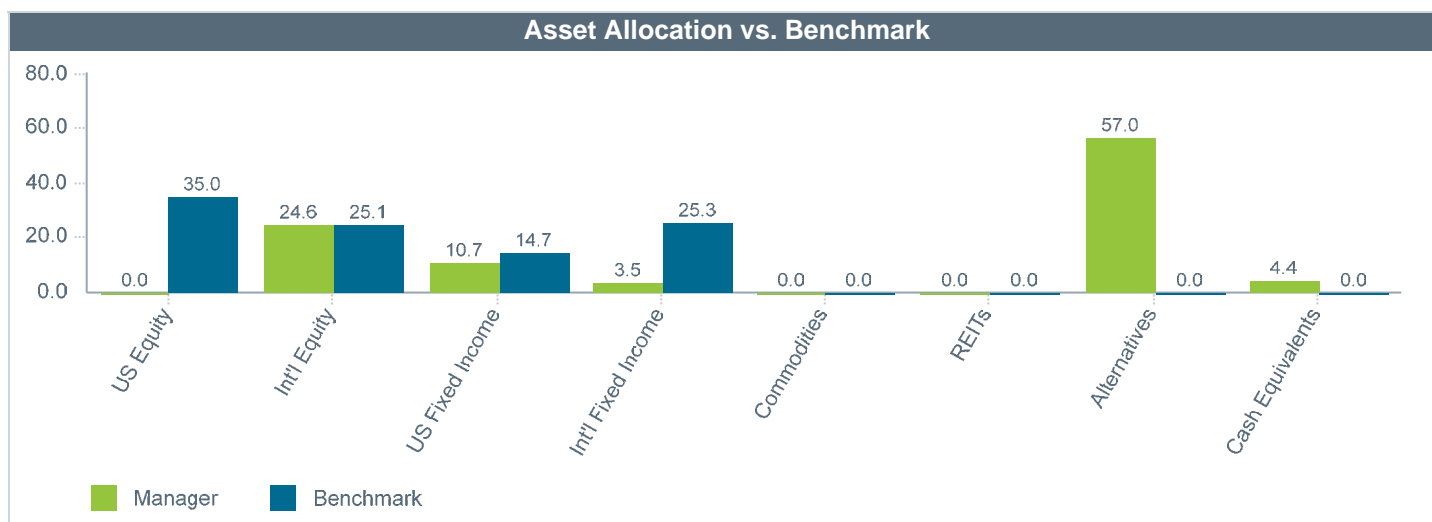
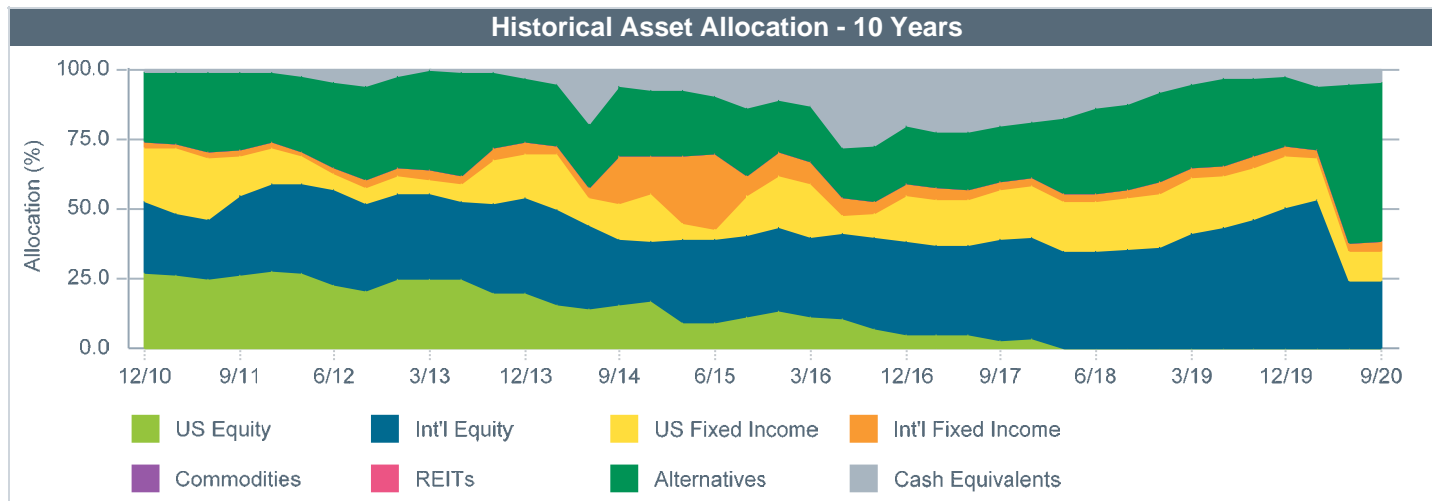
Actual Correlation - 1 Year

	Actual Correlation
3 Month LIBOR Index (USD)+1.75%	-0.28
Bloomberg US Agg Bond Index	-0.24
S&P 500 Index (Cap Wtd)	0.99



Performance shown is net of fees and client specific. Calculation is based on quarterly periodicity. Allocation to "Other" consists of CLOs.

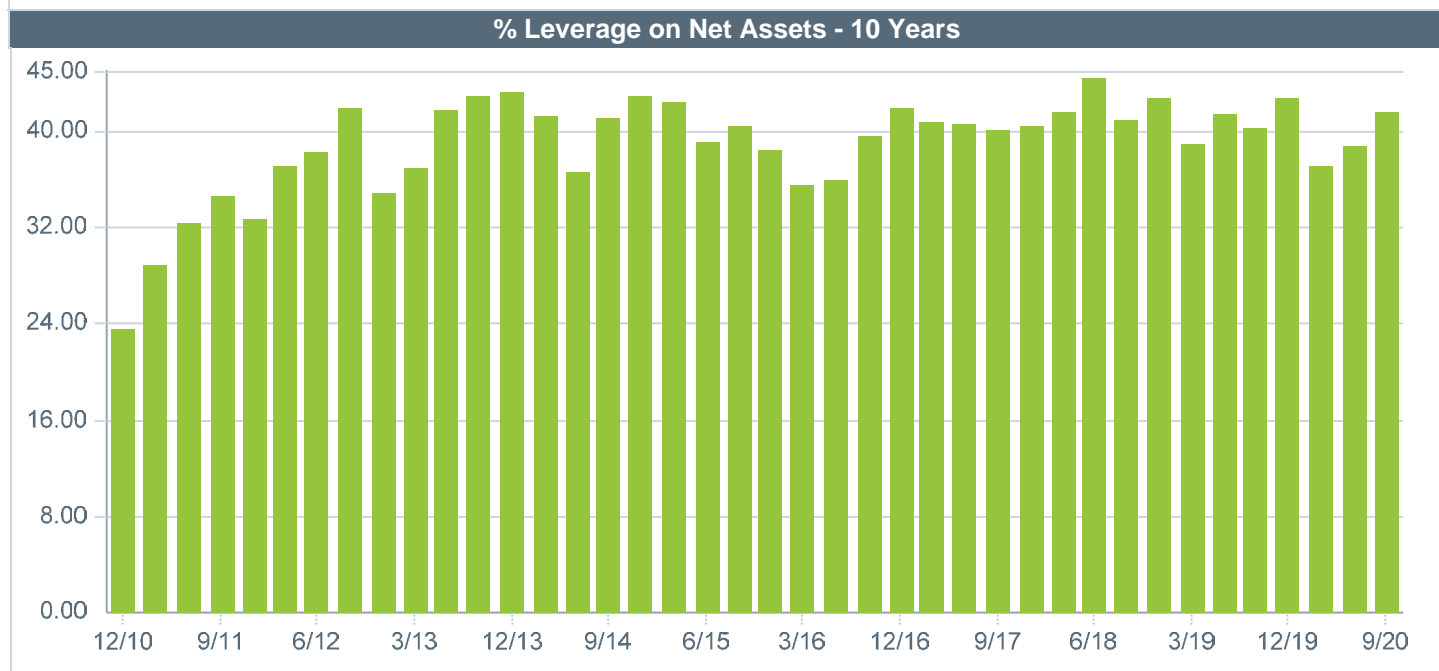
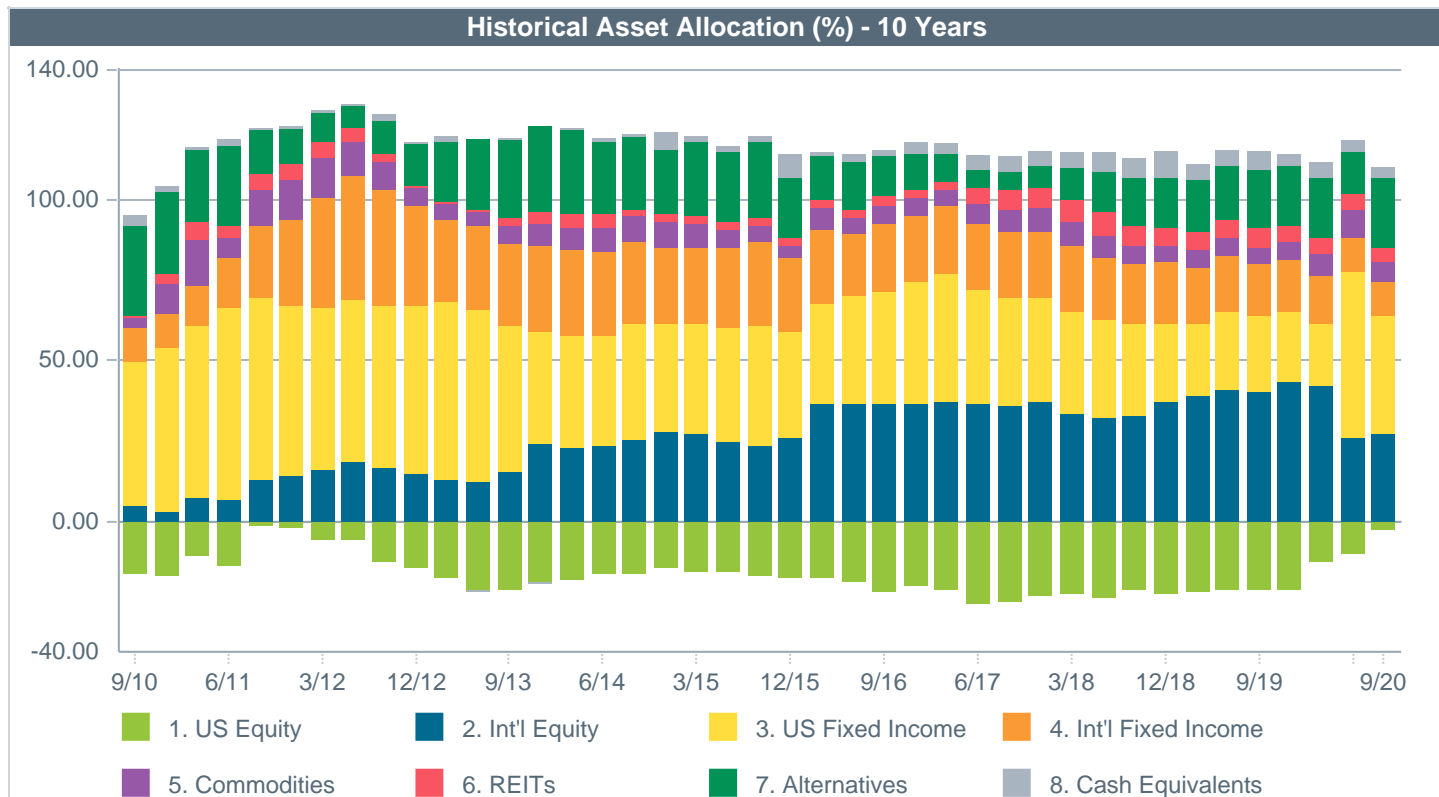
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	2.30	-2.34	0.22	3.07	2.03	3.75	11.64	-5.27	13.07	3.45	-4.23
Benchmark	5.97	9.26	6.22	7.96	5.88	6.24	18.55	-6.00	17.09	5.69	-2.47
Difference	-3.67	-11.60	-6.00	-4.89	-3.85	-2.49	-6.91	0.73	-4.02	-2.24	-1.76



Historical Statistics - 10 Years					Actual Correlation - 10 Years	
	Manager	Benchmark	S&P 500 Index (Cap Wtd)	Bloomberg US Agg Bond Index		Actual Correlation
Standard Deviation	7.31	9.02	13.19	2.95	60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx	0.90
Sharpe Ratio	0.45	0.65	1.00	1.02	S&P 500 Index (Cap Wtd)	0.83
Downside Risk	5.11	5.84	8.17	1.53	Russell 2000 Index	0.74
Excess Return	3.33	5.84	13.18	2.98	MSCI EAFE Index (USD) (Net)	0.86
					MSCI Emg Mkts Index (USD) (Net)	0.85
					Bloomberg US Agg Bond Index	0.08
					Bloomberg US Trsy US TIPS Index	0.26
					Wilshire US REIT Index	0.60
					HFRI FOF Comp Index	0.83
					Bloomberg Cmdty Index (TR)	0.57
					ICE BofAML 3 Mo US T-Bill Index	-0.21
					Cons Price Index (Unadjusted)	0.06

Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Allocation to Int'l Eq includes Emg Mkts. Allocation to US Fixed Inc includes ABS/Struct'd Products and Hi Yld/Distr'd Debt. Allocation to Int'l Fixed Inc includes Emg Debt. Allocation to Alts includes Merger Arbitrage, Systematic Global Macro, Relative Value Interest Rates & FX (Global); Emg Mkts, Cyclical Focus and Special Opp vs. S&P 500; US Small Value vs. Russell 2000; Dvlp'd ex-US, Dvlp'd ex-US Small Value and ACWI ex-US Equity Ext vs. EAFE.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	1.38	-4.21	-1.57	3.26	0.25	1.53	7.62	-6.14	12.04	13.73	-11.73
Benchmark	3.68	7.52	5.76	6.31	5.06	5.41	12.97	-1.62	8.94	6.47	-1.07
Difference	-2.30	-11.73	-7.33	-3.05	-4.81	-3.88	-5.35	-4.52	3.10	7.26	-10.66



Performance shown is net of fees and product specific. Manager may use leverage up to one-half of net assets. This is accomplished through a line of credit from external banks, the proceeds of which are used to gain incremental exposure to the desired underlying fund(s). Current gross exposures sum to 141.69% due to the use of 41.69% leverage on net assets. Historical Commodities and REITs allocations shown are available at a one-quarter lag due to the disclosure guidelines set by the investment manager for the underlying fund strategies. Please see the Addendum for custom index definition.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-9.69	-39.64	-16.05	-8.30	N/A	N/A	12.72	-13.63	-5.50	19.24	N/A
Benchmark	-14.31	-46.57	-18.92	-10.50	-10.61	-3.10	9.78	-11.67	-5.58	21.95	-35.07
Difference	4.62	6.93	2.87	2.20	N/A	N/A	2.94	-1.96	0.08	-2.71	N/A

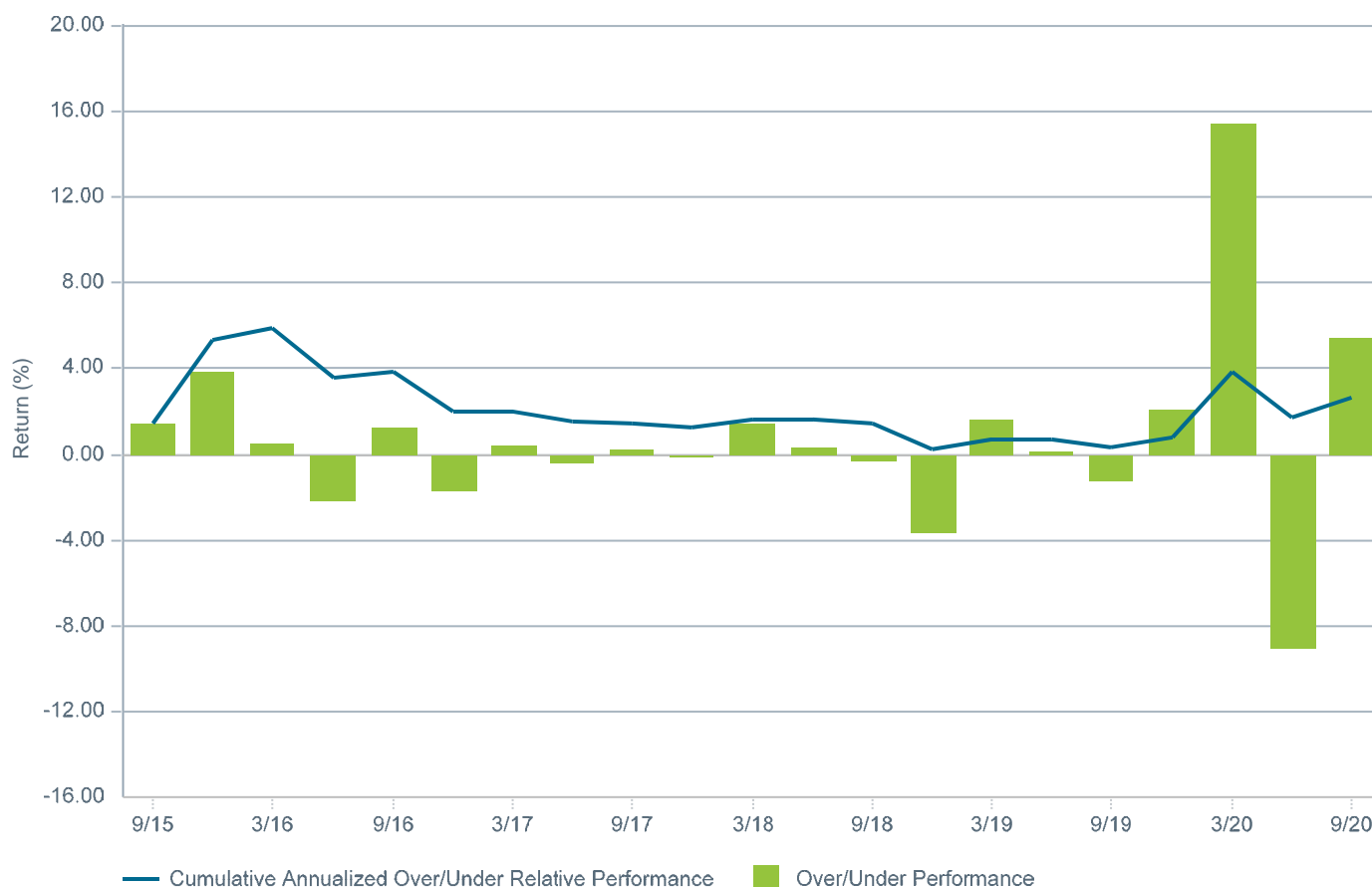
Historical Statistics - 5 Years (Excess Return vs. Risk Free)



Actual Correlation - 5 Years

	Actual Correlation
S&P MLP Index (TR)	0.99
S&P 500 Index (Cap Wtd)	0.85
Russell 2000 Index	0.90
MSCI EAFE Index (USD) (Net)	0.78
MSCI Emg Mkts Index (USD) (Net)	0.65
Bloomberg US Agg Bond Index	-0.02
Bloomberg US Trsy US TIPS Index	0.24
Wilshire US REIT Index	0.84
HFRI FOF Comp Index	0.81
Bloomberg Cmtty Index (TR)	0.74
ICE BofAML 3 Mo US T-Bill Index	-0.31
Cons Price Index (Unadjusted)	0.15

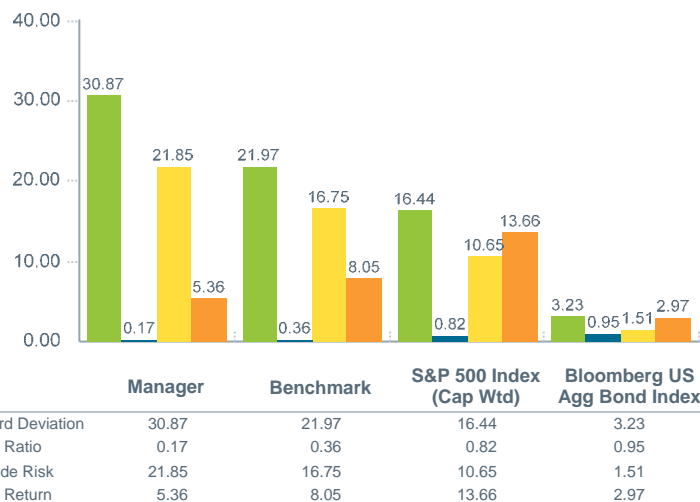
Relative Performance - Since Inception



Performance shown is net of fees and client specific. Calculation is based on quarterly periodicity.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	20.17	7.84	-4.44	1.39	N/A	N/A	12.89	-28.52	-0.55	44.23	N/A
Benchmark	2.13	-9.53	-2.78	6.67	-0.21	0.16	17.20	-12.57	22.66	32.28	-24.00
Difference	18.04	17.37	-1.66	-5.28	N/A	N/A	-4.31	-15.95	-23.21	11.95	N/A

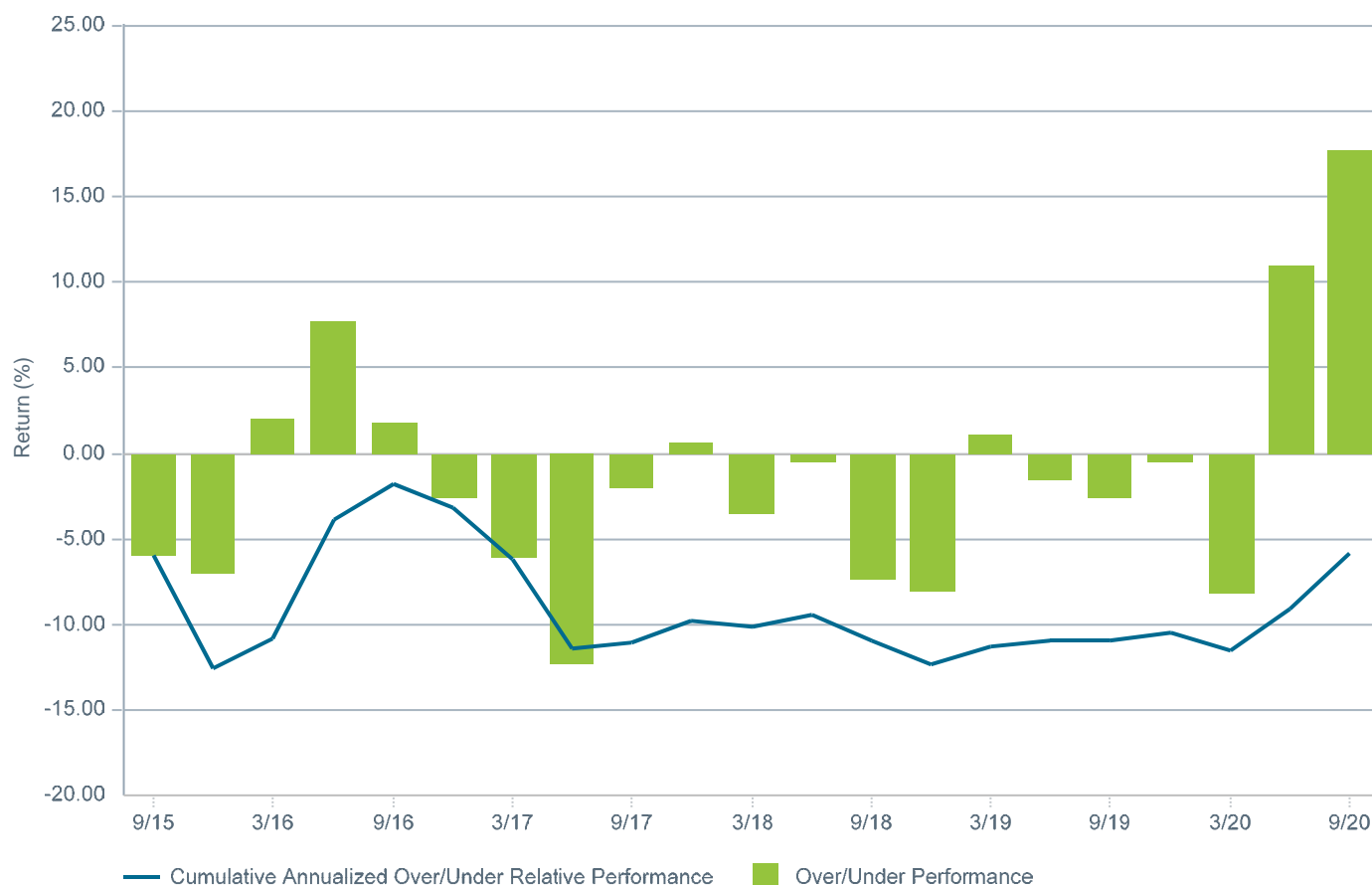
Historical Statistics - 5 Years (Excess Return vs. Risk Free)



Actual Correlation - 5 Years

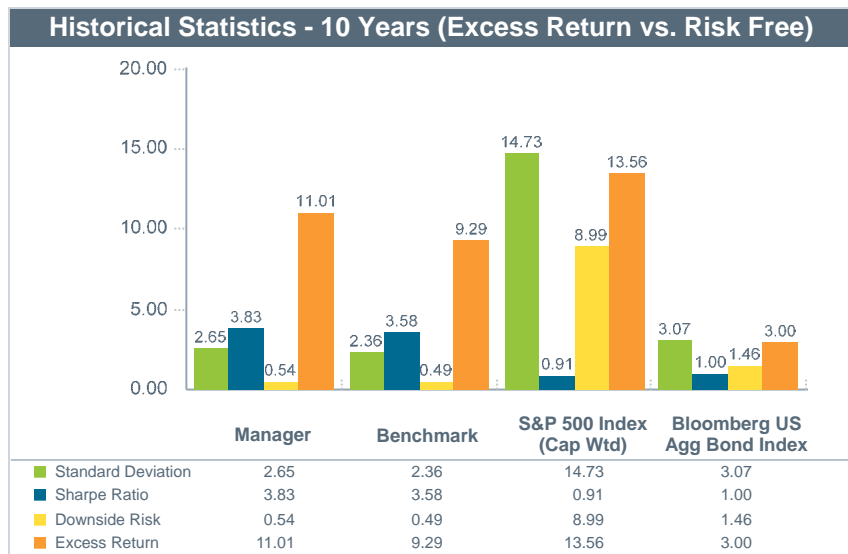
	Actual Correlation
S&P Gbl Ntrl Res Sect Index (TR)	0.91
S&P 500 Index (Cap Wtd)	0.84
Russell 2000 Index	0.87
MSCI EAFE Index (USD) (Net)	0.76
MSCI Emg Mkts Index (USD) (Net)	0.78
Bloomberg US Agg Bond Index	0.00
Bloomberg US Trsy US TIPS Index	0.49
Wilshire US REIT Index	0.69
HFRI FOF Comp Index	0.84
Bloomberg Cmtty Index (TR)	0.86
ICE BofAML 3 Mo US T-Bill Index	-0.50
Cons Price Index (Unadjusted)	0.20

Relative Performance - Since Inception



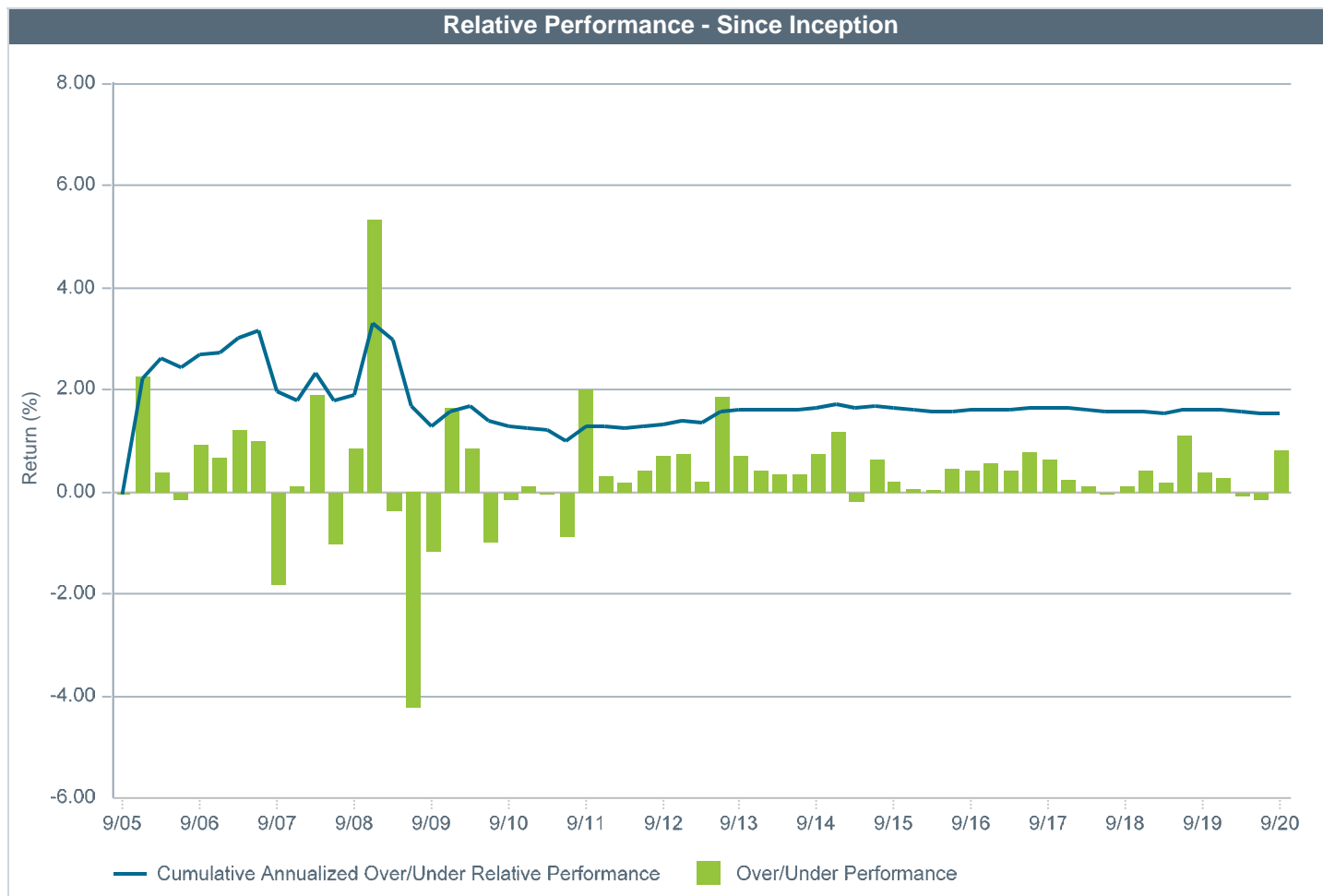
Performance shown is net of fees and client specific. Calculation is based on quarterly periodicity.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	1.30	2.28	6.36	8.07	10.23	12.13	7.40	8.99	9.84	10.38	15.86
Benchmark	0.48	1.39	5.18	6.64	8.60	10.27	5.34	8.35	7.62	8.77	15.02
Difference	0.82	0.89	1.18	1.43	1.63	1.86	2.06	0.64	2.22	1.61	0.84



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.92
S&P 500 Index (Cap Wtd)	-0.22
Russell 2000 Index	-0.14
MSCI EAFE Index (USD) (Net)	-0.20
MSCI Emg Mkts Index (USD) (Net)	-0.34
Bloomberg US Agg Bond Index	-0.33
Bloomberg US Trsy US TIPS Index	-0.40
Wilshire US REIT Index	-0.08
HFRI FOF Comp Index	-0.22
Bloomberg Cmtty Index (TR)	-0.15
ICE BofAML 3 Mo US T-Bill Index	-0.49
Cons Price Index (Unadjusted)	-0.06



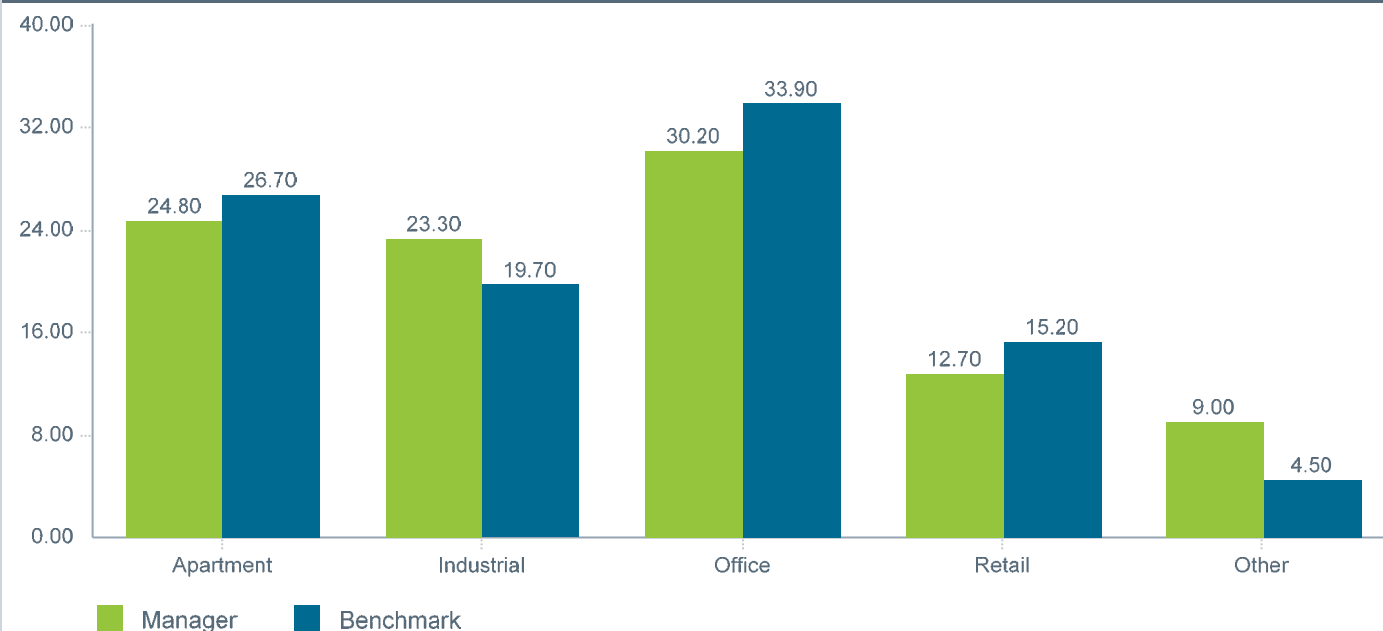
Investment Strategy

The Fund pursues a diversified core real estate strategy that invests in assets with stable, highly predictable cash flow returns. The Fund targets high quality office, Class A multifamily, warehouse distribution, and top-tier super regional malls in addition to storage facilities in targeted primary markets. The Fund favors investing in major metropolitan markets and secondary markets expected to achieve above-average economic performance and believes that those cities offer better liquidity, more diverse tenant bases, and stronger resilience to market cycles. It operates with leverage of 50% or less and may invest up to 15% of its gross assets in higher-risk, value-added real estate investment opportunities.

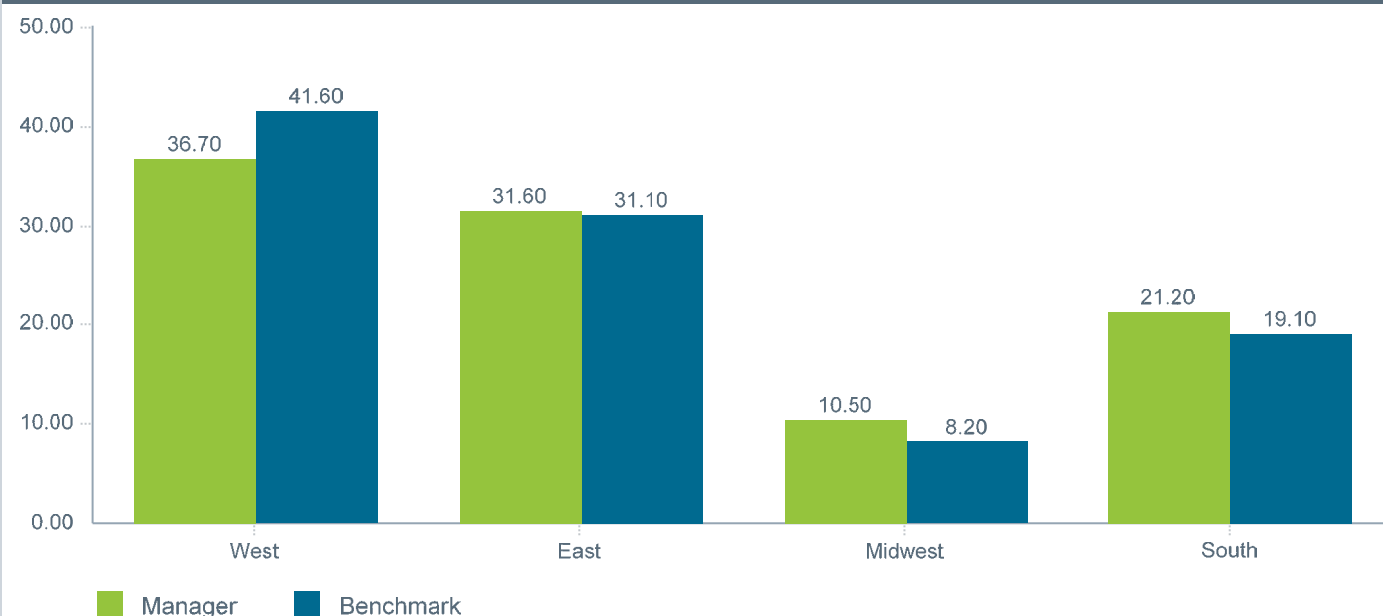
Investment Profile

Fund Inception	1973
Legal Structure	LLC
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	31,584
Fund Leverage %	17.20
Portfolio Occupancy %	92.70
Cash Reserve %	2.00
Number of Investments	446
Number of Limited Partners	411

Property Type Allocation (%)

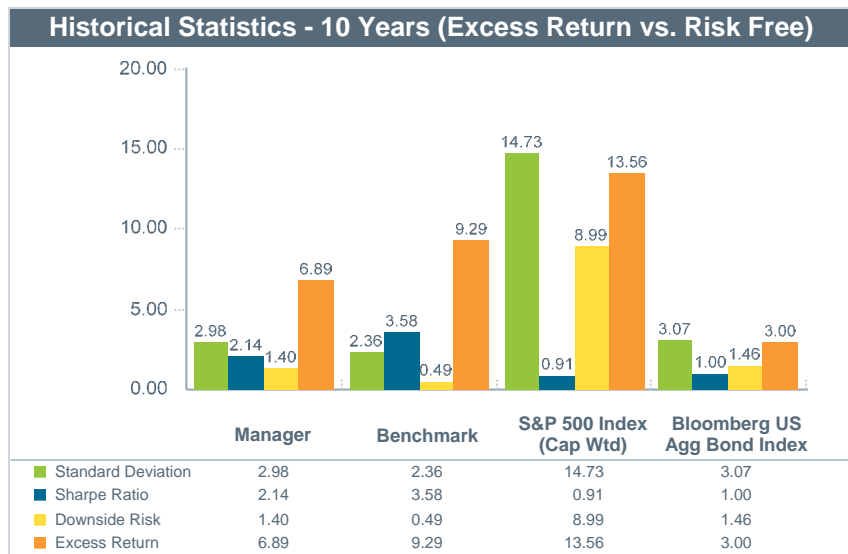


Geographic Allocation (%)



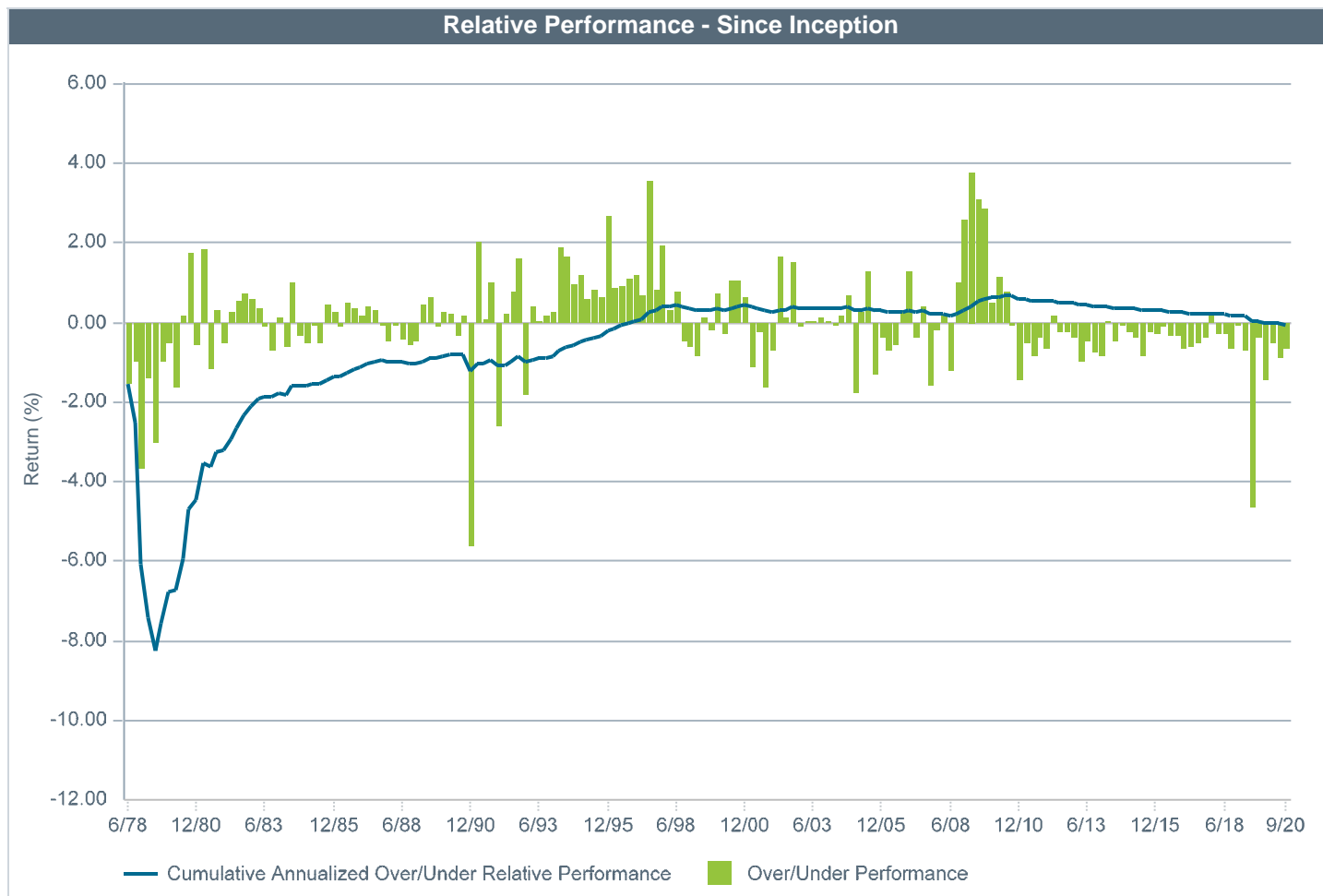
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of health care land held for potential development, and hotel. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-0.18	-2.13	1.59	3.76	6.03	7.69	-2.10	6.99	6.30	7.21	12.94
Benchmark	0.48	1.39	5.18	6.64	8.60	10.27	5.34	8.35	7.62	8.77	15.02
Difference	-0.66	-3.52	-3.59	-2.88	-2.57	-2.58	-7.44	-1.36	-1.32	-1.56	-2.08



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.87
S&P 500 Index (Cap Wtd)	-0.21
Russell 2000 Index	-0.15
MSCI EAFE Index (USD) (Net)	-0.20
MSCI Emg Mkts Index (USD) (Net)	-0.26
Bloomberg US Agg Bond Index	-0.31
Bloomberg US Trsy US TIPS Index	-0.31
Wilshire US REIT Index	0.03
HFRI FOF Comp Index	-0.26
Bloomberg Cmnty Index (TR)	-0.15
ICE BofAML 3 Mo US T-Bill Index	-0.55
Cons Price Index (Unadjusted)	-0.02



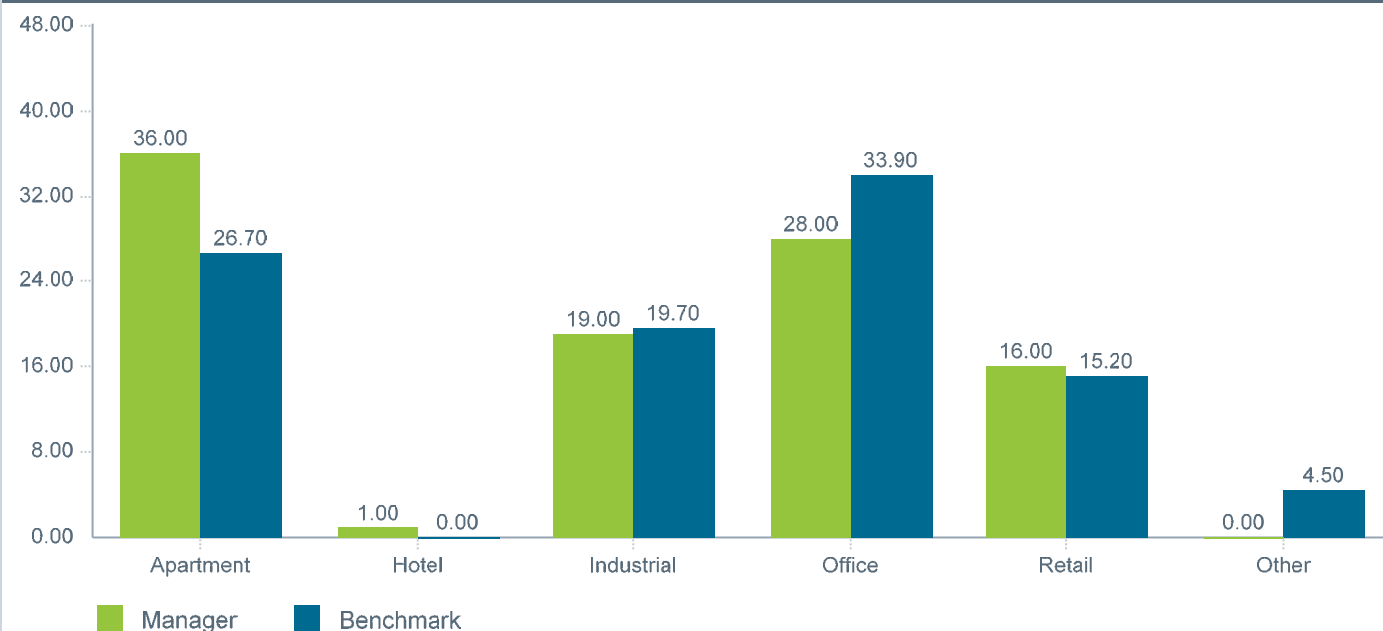
Investment Strategy

The Fund pursues a diversified core real estate strategy that seeks to produce attractive risk-adjusted returns by focusing on selective acquisitions, diversification, active portfolio management, and asset management. The Fund invests in well-leased, stabilized assets in major US metropolitan markets and receives the majority of its return from the income component. Diversification for the Fund is consistently pursued on many levels, including geographic region, property type, and economic sector. The Fund has historically maintained a leverage ratio significantly lower than the NCREIF ODCE Index and invests 5-15% of its gross assets in value-added type real estate investment opportunities.

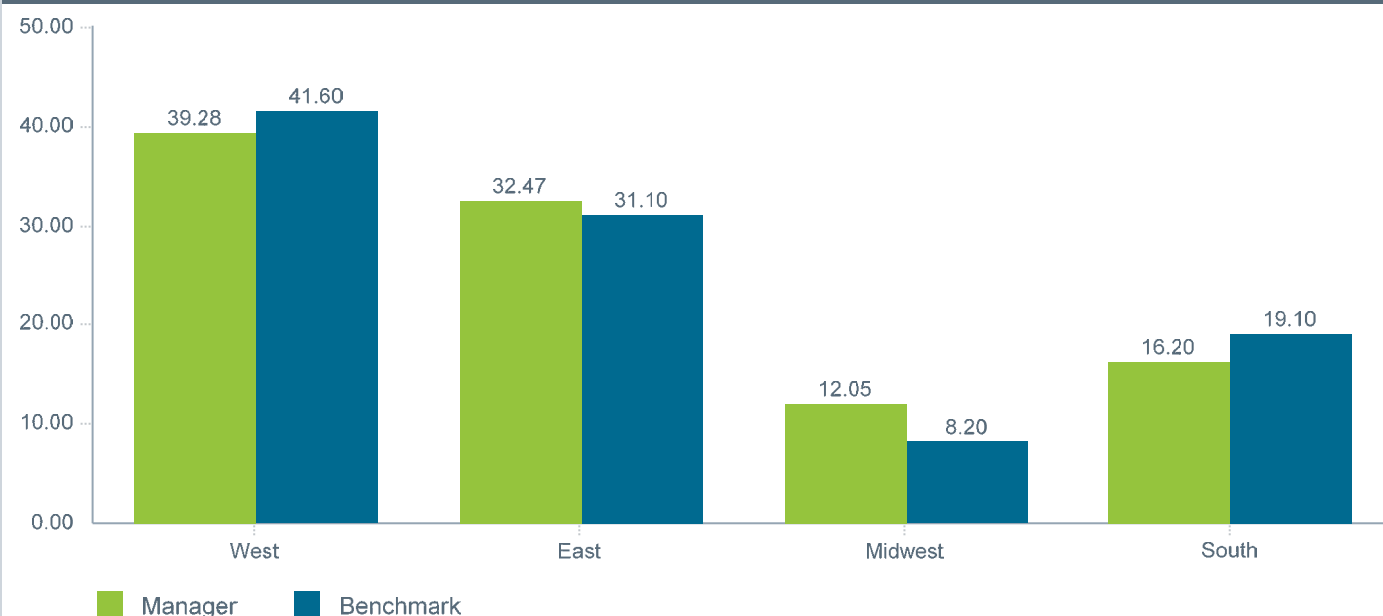
Investment Profile

Fund Inception	1978
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	18,694
Fund Leverage %	18.20
Portfolio Occupancy %	91.90
Cash Reserve %	0.80
Number of Investments	184
Number of Limited Partners	446

Property Type Allocation (%)



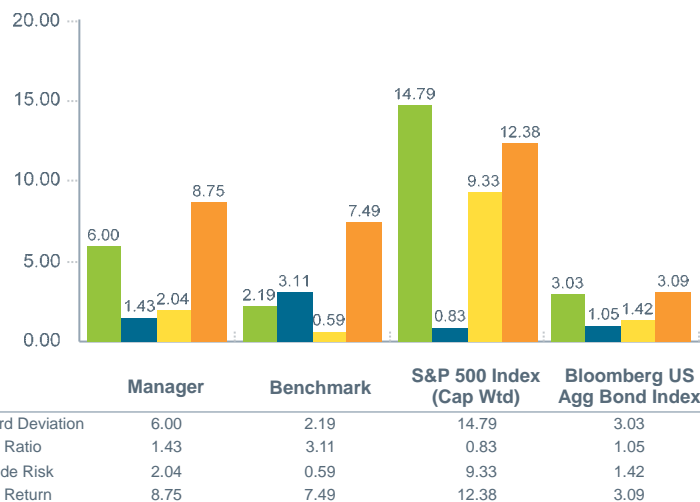
Geographic Allocation (%)



Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	-3.58	-7.82	4.79	6.56	9.78	N/A	3.03	9.71	18.00	6.60	22.42
Benchmark	0.48	1.39	5.18	6.64	8.60	10.27	5.34	8.35	7.62	8.77	15.02
Difference	-4.06	-9.21	-0.39	-0.08	1.18	N/A	-2.31	1.36	10.38	-2.17	7.40

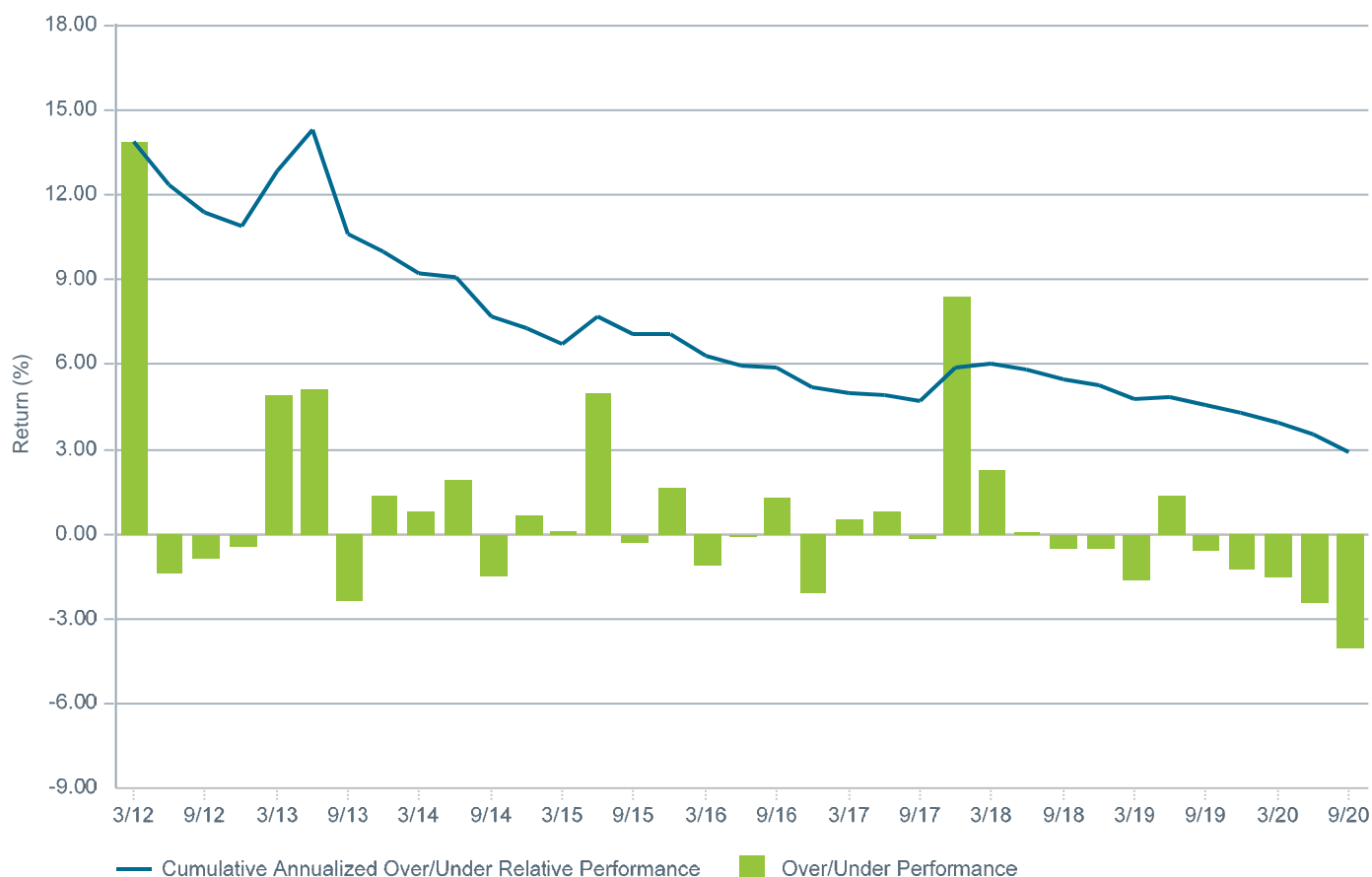
Historical Statistics - 7 Years (Excess Return vs. Risk Free)



Actual Correlation - 7 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.70
S&P 500 Index (Cap Wtd)	-0.12
Russell 2000 Index	-0.09
MSCI EAFE Index (USD) (Net)	-0.02
MSCI Emg Mkts Index (USD) (Net)	-0.08
Bloomberg US Agg Bond Index	-0.34
Bloomberg US Trsy US TIPS Index	-0.34
Wilshire US REIT Index	-0.06
HFRI FOF Comp Index	-0.10
Bloomberg Cmtty Index (TR)	-0.05
ICE BofAML 3 Mo US T-Bill Index	-0.21
Cons Price Index (Unadjusted)	-0.07

Relative Performance - Since Inception



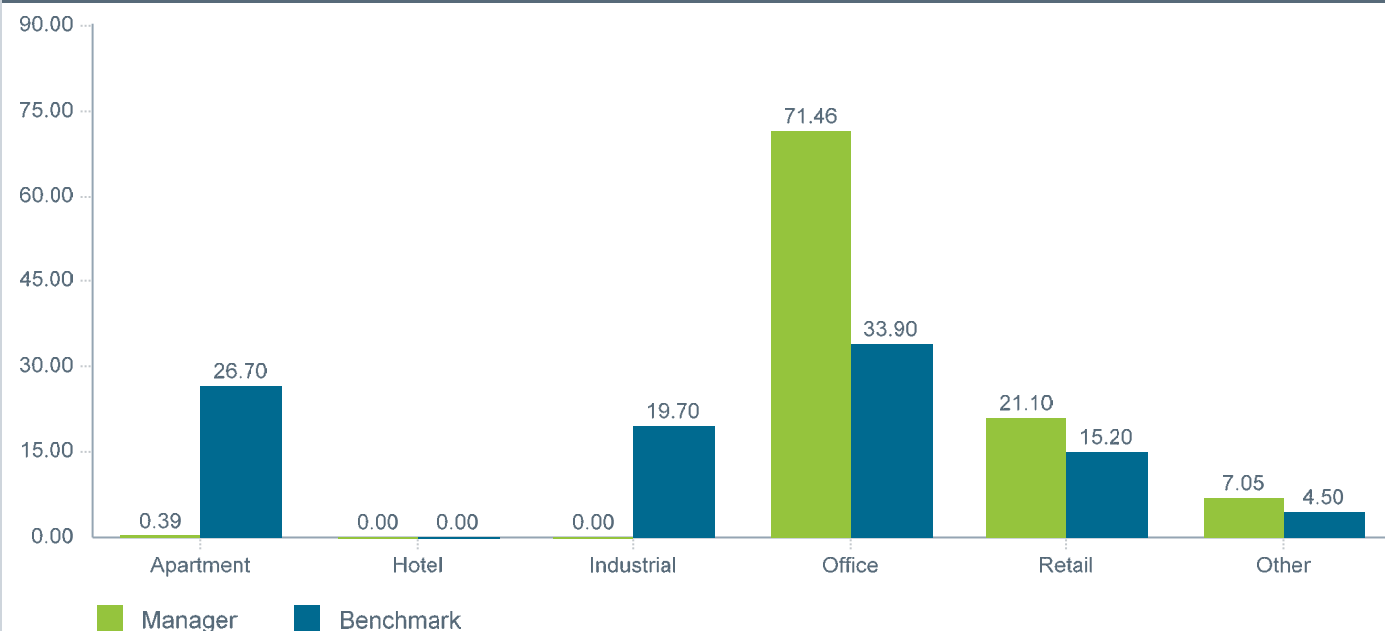
Investment Strategy

The Fund pursues a concentrated core-plus real estate strategy that acquires, manages and enhances the value of core and core-plus office, retail and mixed-used assets in major metropolitan markets. Target assets are stabilized or nearly stabilized core properties with high-quality, creditworthy and diversified tenant rosters producing predictable and growing income, with the potential for operational improvements to enhance NOI and drive capital appreciation. Additionally, the Fund also targets assets that are moderately- to substantially-leased but could benefit from repositioning. It operates with leverage of 50% or less and may invest up to 20% of its gross assets in higher-risk, non-core real estate investment opportunities.

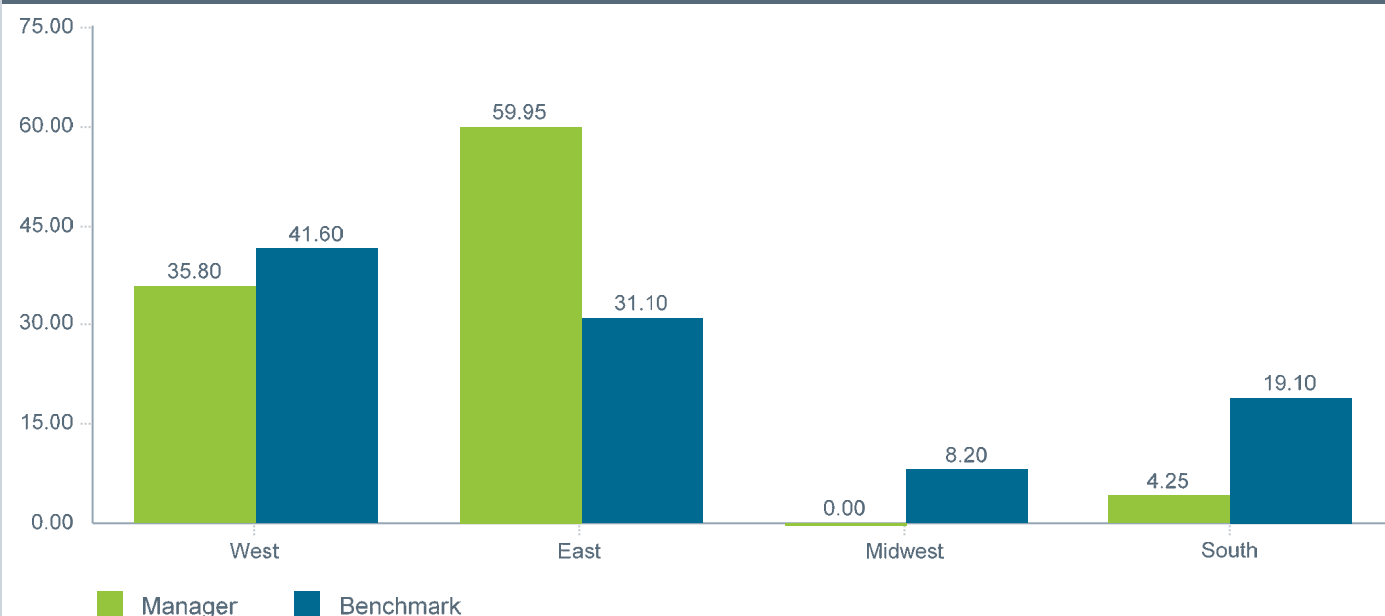
Investment Profile

Fund Inception	2011
Legal Structure	REIT
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	4,335
Fund Leverage %	44.04
Portfolio Occupancy %	81.85
Cash Reserve %	3.53
Number of Investments	25
Number of Limited Partners	49

Property Type Allocation (%)

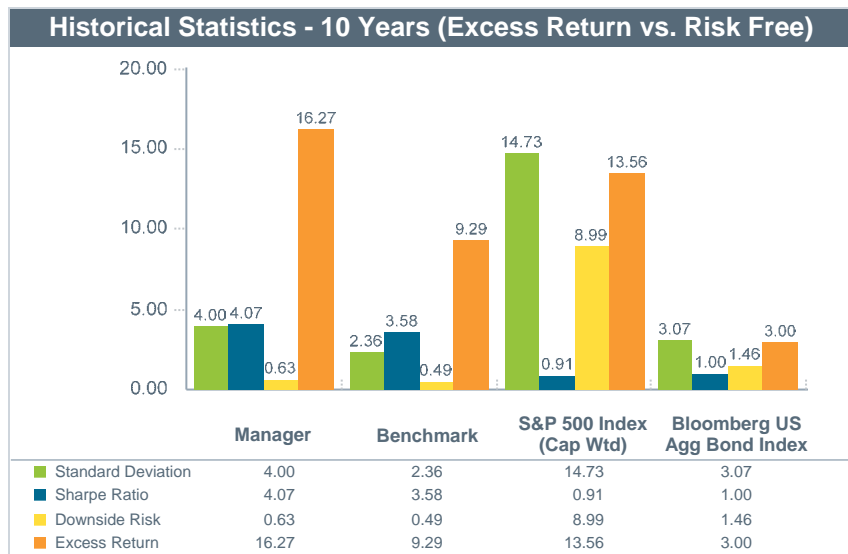


Geographic Allocation (%)



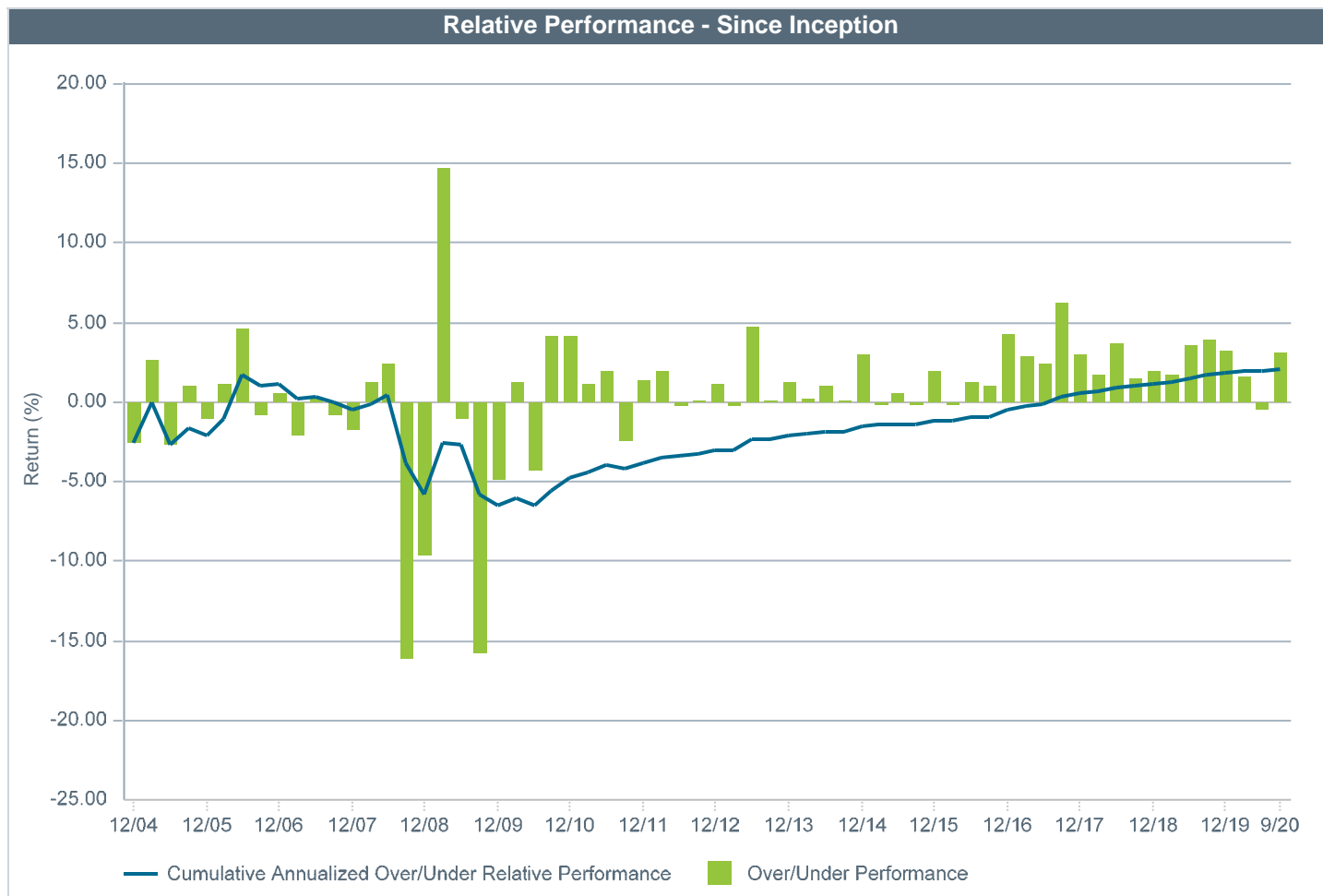
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of One Times Square. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	3.60	9.13	15.47	17.32	17.26	17.92	18.88	18.19	24.16	16.08	17.76
Benchmark	0.48	1.39	5.18	6.64	8.60	10.27	5.34	8.35	7.62	8.77	15.02
Difference	3.12	7.74	10.29	10.68	8.66	7.65	13.54	9.84	16.54	7.31	2.74



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.50
S&P 500 Index (Cap Wtd)	0.09
Russell 2000 Index	0.15
MSCI EAFE Index (USD) (Net)	0.10
MSCI Emg Mkts Index (USD) (Net)	0.01
Bloomberg US Agg Bond Index	-0.55
Bloomberg US Trsy US TIPS Index	-0.52
Wilshire US REIT Index	0.12
HFRI FOF Comp Index	0.05
Bloomberg Cmtty Index (TR)	0.09
ICE BofAML 3 Mo US T-Bill Index	0.05
Cons Price Index (Unadjusted)	-0.03



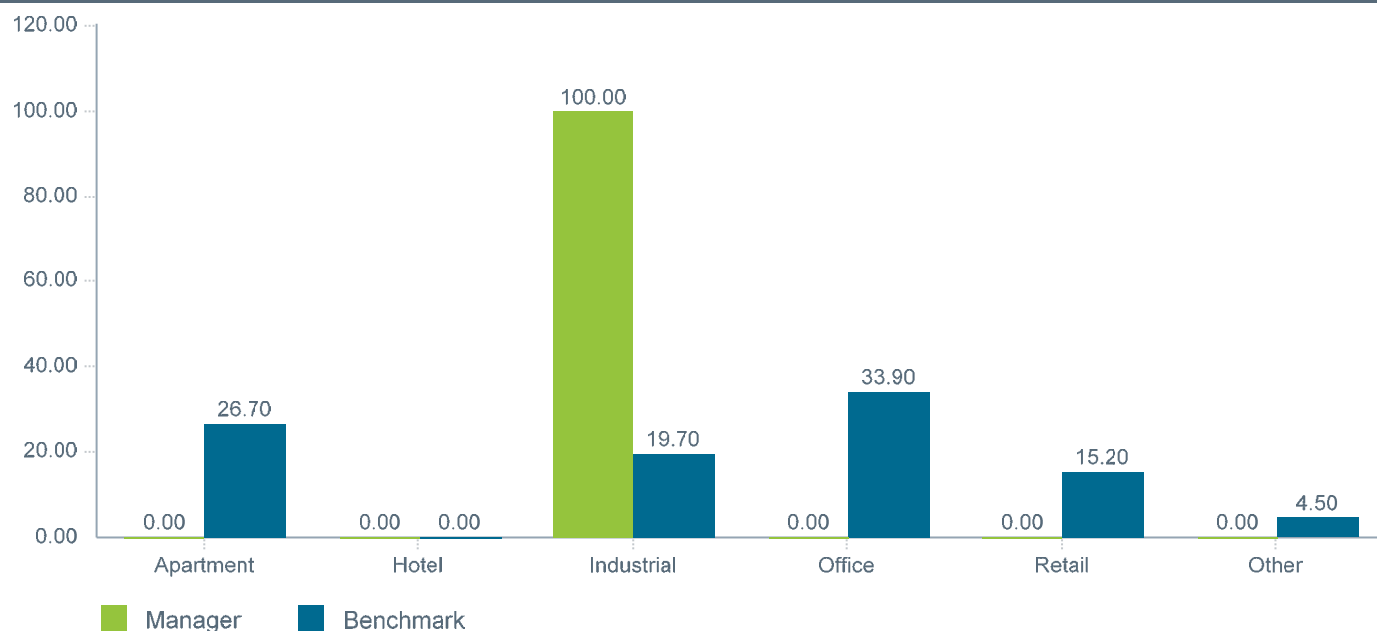
Investment Strategy

The Fund pursues a concentrated core-plus real estate investment strategy focusing on the industrial sector and seeks to combine attractive current income with long-term capital growth by acquiring, operating, renovating and disposing of assets located in the US. The Fund's investment activities focus on properties near key passenger and cargo airports, seaports, and ground transportation systems in major metropolitan areas. It operates with a leverage limit of 45% and does not invest in "value-added" real estate investment opportunities.

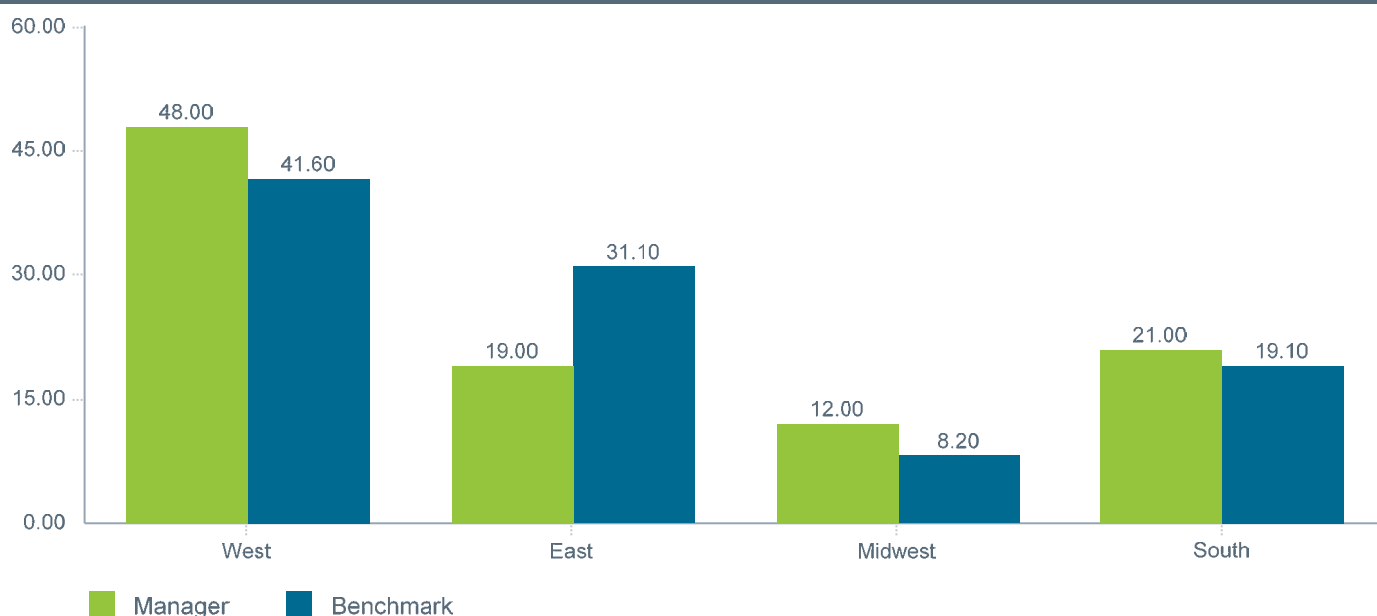
Investment Profile

Fund Inception	2004
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	15,241
Fund Leverage %	19.10
Portfolio Occupancy %	93.50
Cash Reserve %	1.00
Number of Investments	716
Number of Limited Partners	98

Property Type Allocation (%)

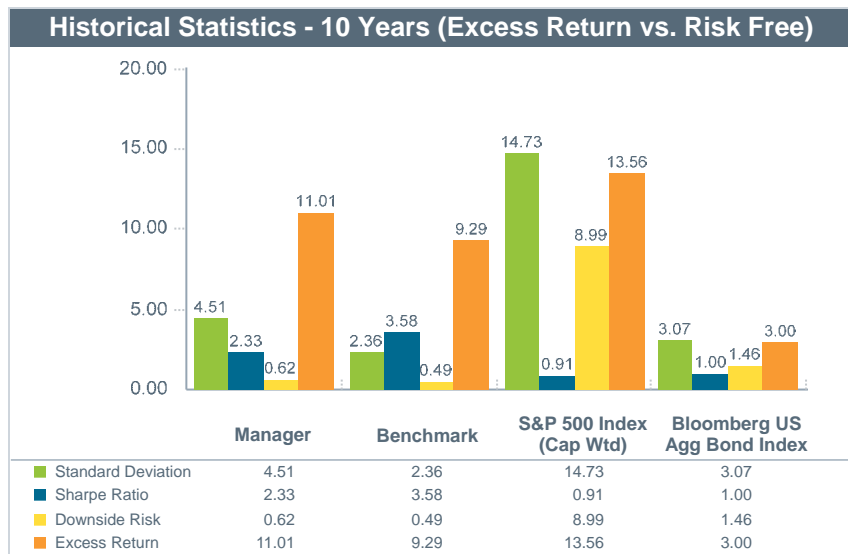


Geographic Allocation (%)



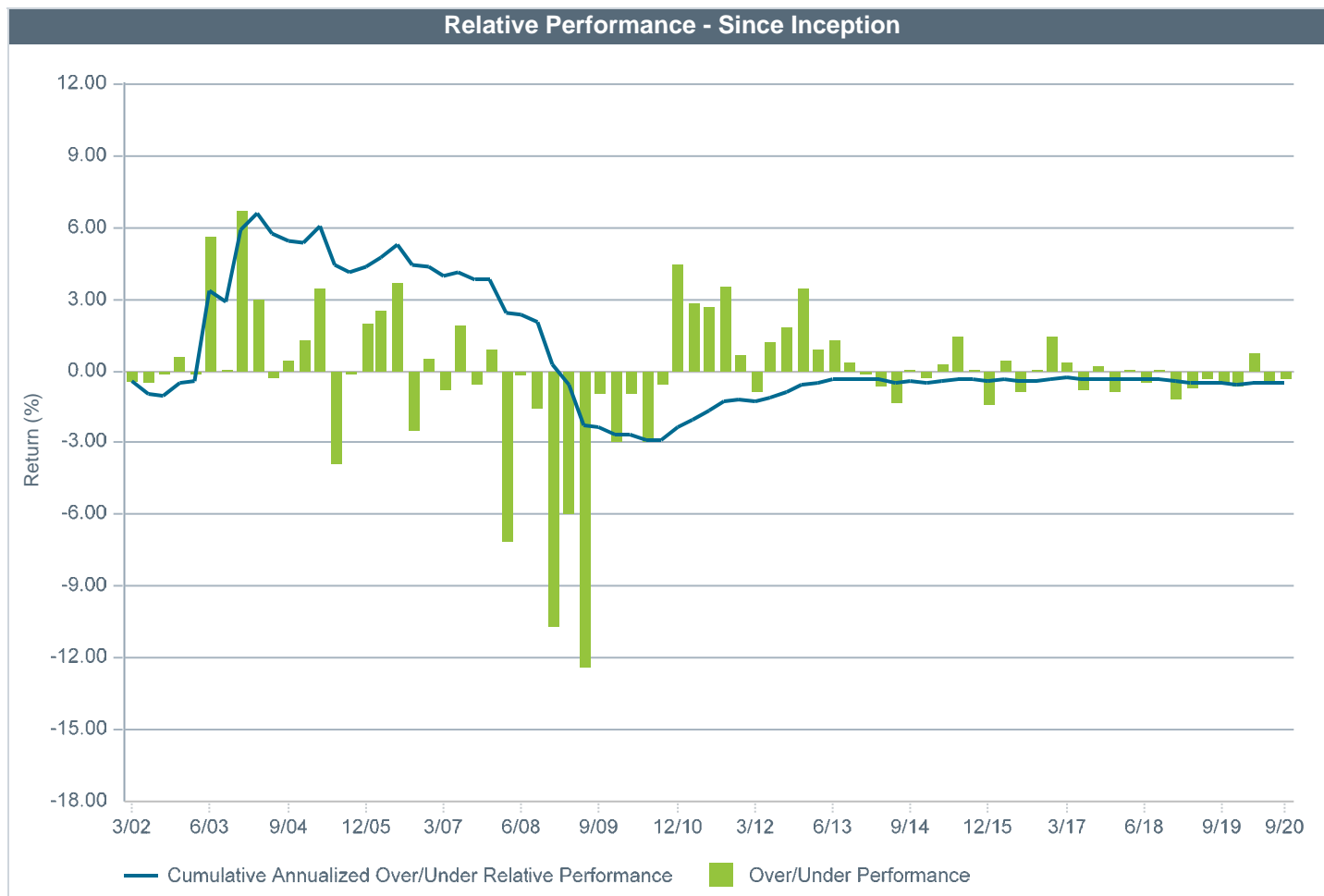
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	2016	2015
Manager	0.15	0.71	3.52	5.51	7.69	12.06	3.01	6.59	6.50	9.90	15.34
Benchmark	0.48	1.39	5.18	6.64	8.60	10.27	5.34	8.35	7.62	8.77	15.02
Difference	-0.33	-0.68	-1.66	-1.13	-0.91	1.79	-2.33	-1.76	-1.12	1.13	0.32



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.84
S&P 500 Index (Cap Wtd)	-0.19
Russell 2000 Index	-0.08
MSCI EAFE Index (USD) (Net)	-0.15
MSCI Emg Mkts Index (USD) (Net)	-0.27
Bloomberg US Agg Bond Index	-0.27
Bloomberg US Trsy US TIPS Index	-0.17
Wilshire US REIT Index	-0.12
HFRI FOF Comp Index	-0.20
Bloomberg Cmtty Index (TR)	-0.03
ICE BofAML 3 Mo US T-Bill Index	-0.47
Cons Price Index (Unadjusted)	0.05



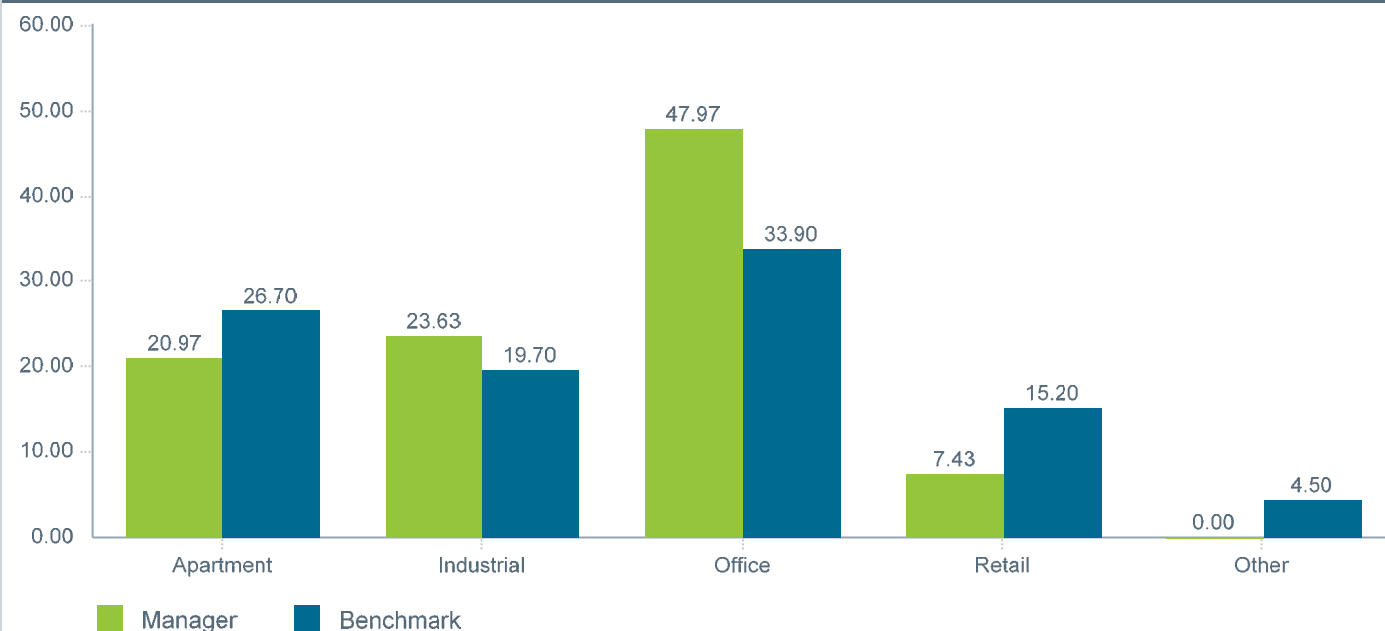
Investment Strategy

The Fund pursues a core-plus real estate strategy and focuses on producing high income returns with the potential for capital appreciation. The Fund's broad investment scope allows it to participate in market opportunities across private equity and debt markets, as well as all property sectors and US geographic regions. It invests primarily in leveraged direct core real estate and may dedicate up to 25% of its gross asset value to non-core investments, including up to 15% in mezzanine debt and up to 10% in build-to-core opportunities. Investments are concentrated in the four primary property types, while volatile and/or specialized sectors such as hotels and self-storage investments are avoided. The Fund operates with leverage of 40% or less.

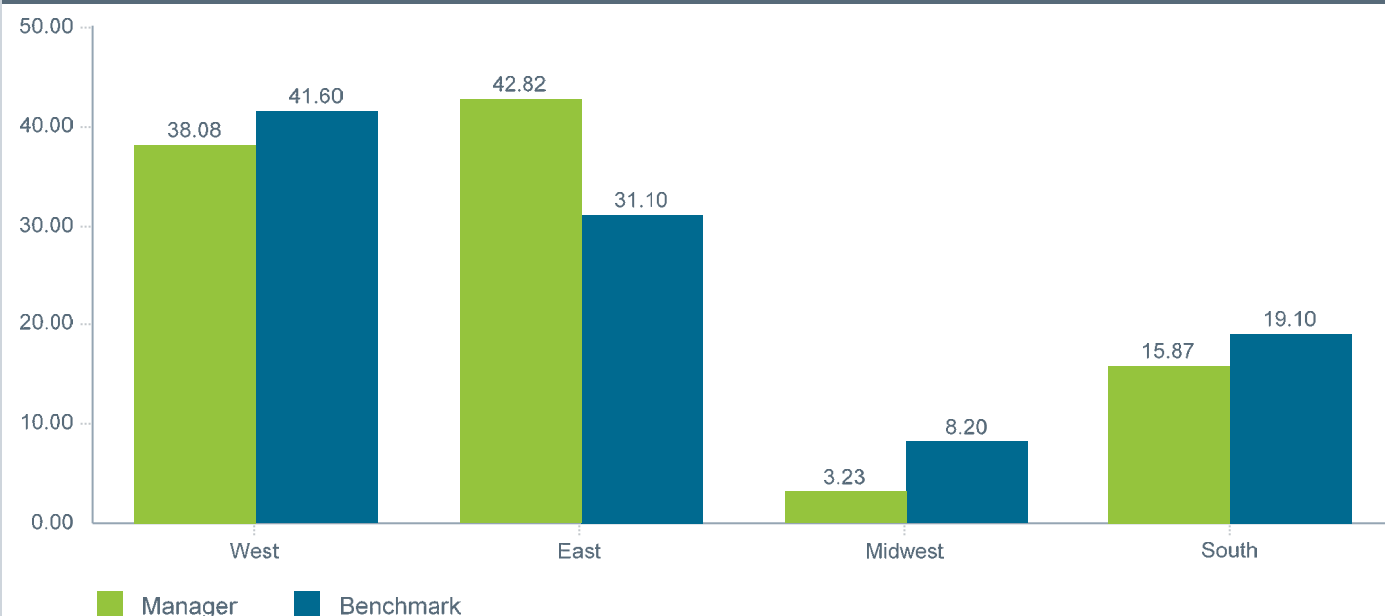
Investment Profile

Fund Inception	2002
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	3,897
Fund Leverage %	38.83
Portfolio Occupancy %	91.80
Cash Reserve %	10.00
Number of Investments	64
Number of Limited Partners	51

Property Type Allocation (%)



Geographic Allocation (%)



Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

Addendum & Glossary



Asset Allocation							
Asset Class	Market Value	Within Target Range?		Current (%)	Targets		
		Yes	No		Min.	Target	Max.
Broad US Equity	\$ 957,303,444	✓		19.15%	14.0%	19.0%	24.0%
Broad International Equity	\$ 944,904,312	✓		18.90%	14.0%	19.0%	24.0%
Fixed Income	\$ 1,109,808,834	✓		22.20%	17.0%	22.0%	27.0%
Absolute Return	\$ 740,465,957	✓		14.81%	10.0%	15.0%	20.0%
Diversified Inflation Strategies	\$ 125,973,913		✓	2.52%	0.0%	0.0%	0.0%
Real Estate	\$ 731,764,330	✓		14.64%	10.0%	15.0%	20.0%
Private Equity	-	✓		0.00%	0.0%	5.0%	10.0%
Private Infrastructure	-	✓		0.00%	0.0%	5.0%	10.0%
Opportunistic Investments	\$ 13,898,700	✓		0.28%	0.0%	0.0%	5.0%
Transition Account	\$ 375,385,078		✓	7.51%	0.0%	0.0%	0.0%
Total Fund	\$ 4,999,504,568			100.00%			

Monitoring Guideline (Over a Full Market Cycle of 5 Years)				Explanation
Total Fund		Yes	No	
Total Fund returns exceed the Target Allocation Index over a 5-year period.			✓	The Total Fund returned 5.57% vs. 7.03% for the index.
Broad US Equity		Yes	No	
The composite returns exceed the Russell 3000 Index over a 5 year period.			✓	The composite returned 13.44% vs. 13.69% for the index. Includes managers which are no longer in the portfolio.
Rank above the IM U.S. Equity Median.		✓		The composite has a ranking of 30. Includes managers which are no longer in the portfolio.
State Street Russell 1000 Index SL (CF)		Yes	No	
The fund returns are in line with the Russell 1000 Index over a 5 year period.				5 year data is unavailable.
Rank above the IM U.S. Large Cap Equity Median.				5 year data is unavailable.
State Street Russell Mid Cap Index (SA)		Yes	No	
The fund returns are in line with the Russell Mid Cap Index over a 5 year period.				5 year data is unavailable.
Rank above the IM U.S. Mid Cap Equity Median.				5 year data is unavailable.
NT Small Cap Core (CF)		Yes	No	
The fund returns exceed the Russell 2000 Index over a 5 year period.		✓		The fund returned 10.18% vs. 8.00% for the index.
Rank above the IM U.S. Small Cap Core Equity Median.		✓		The fund has a ranking of 3.
Broad International Equity		Yes	No	
The composite returns exceed the MSCI ACW Ex US Index (USD) (Net) over a 5 year period.			✓	The composite returned 5.30% vs. 6.23% for the index. Includes managers which are no longer in the portfolio. Current managers added 07/2014 and 02/2018.
Rank above the IM International Large Cap Equity Median.			✓	The composite has a ranking of 60. Includes managers which are no longer in the portfolio. Current managers added 07/2014 and 02/2018.
State Street World Ex US Index (CF)		Yes	No	
The fund returns are in line with the MSCI Wrld Ex US Index (USD) (Net) over a 5 year period.		✓		The fund returned 5.24% vs. 5.32% for the index.
Rank above the IM International Large Cap Equity Median.			✓	The fund has a ranking of 61.
QMA International Small Cap Equity (CF)		Yes	No	
The fund returns exceed the MSCI EAFE Sm Cap Index (USD) (Net) over a 5 year period.				5 year data is unavailable.
Rank above the IM International SMID Cap Core Equity Median.				5 year data is unavailable.
DFA Emg Mkts Core Eq;I (DFCEX)		Yes	No	
The fund returns exceed the MSCI Emg Mkts Index (USD) (Net) over a 5 year period.			✓	The fund returned 7.17% vs. 8.97% for the index.
Rank above the IM Emerging Markets Equity Median.			✓	The fund has a ranking of 63.
Harding Loevner: IEM;IZ (HLEZX)		Yes	No	
The fund returns exceed the MSCI Emg Mkts Index (USD) (Net) over a 5 year period.			✓	The fund returned 8.17% vs. 8.97% for the index.
Rank above the IM Emerging Markets Equity Median.		✓		The fund has a ranking of 50.
Fixed Income		Yes	No	
The composite returns exceed the Global Fixed Income Custom Index over a 5 year period.			✓	The composite returned 3.97% vs. 4.53% for the index.
Rank above the IM Global Fixed Income Median.		✓		The composite has a ranking of 47.
Payden & Rygel Long Term (SA)		Yes	No	
The fund returns exceed the Bloomberg US Agg Bond Index over a 5 year period.		✓		The fund returned 4.75% vs. 4.18% for the index.
Rank above the IM U.S. Broad Market Core Fixed Income Median.		✓		The fund has a ranking of 17.
JP Morgan FI Intermediate Bond (SA)		Yes	No	
The fund returns exceed the Bloomberg US Gov't Crdt Int Trm Bond Index over a 5 year period.		✓		The fund returned 3.47% vs. 3.39% for the index.
Rank above the IM U.S. Intermediate Duration Fixed Income Median.		✓		The fund has a ranking of 8.

North Dakota Board of University and School Lands Long-Term Monitoring Tool

As of September 30, 2020

Fixed Income (Continued)		
Brandywine Gbl Opp FI (CF)	Yes	No
The fund returns exceed the FTSE Wrld Gov't Bond Index over a 5 year period.	✓	
Rank above the IM Global Fixed Income Median.	✓	
The fund returned 4.37% vs. 3.95% for the index.		
The fund has a ranking of 32.		
AG Direct Lending Fund III, LP	Yes	No
The fund returns exceed the Credit Suisse Leverage Loan Index over a 5 year period.		
Rank above the IM U.S. Intermediate Duration (MF) Median.		
5 year data is unavailable.		
5 year data is unavailable.		
Schroders Securitized Credit (SA)	Yes	No
The fund returns exceed the FTSE Wrld Gov't Bond Index over a 5 year period.		
5 year data is unavailable		
ND Land - PTF Cash (SA)	Yes	No
The fund returns exceed the BofA ML 3 Mo US T-Bill Index over a 5 year period.		
5 year data is unavailable.		
Absolute Return	Yes	No
The composite returns exceed the Absolute Return Custom Index over a 5 year period.		✓
The composite returned 3.49% vs. 7.92% for the index.		
GMO:Bchmk-Fr All;IV (GBMBX)	Yes	No
The fund returns exceed the 60% MSCI ACWI (Net)/40% B Gbl Agg Idx over a 5 year period.		✓
The fund returned 3.07% vs. 7.96% for the index.		
PIMCO:All Ast Ath;Inst (PAUIX)	Yes	No
The fund returns exceed the All Asset Custom Index (EqI Wtd) over a 5 year period.		✓
The fund returned 3.26% vs. 6.31% for the index.		
Diversified Inflation Strategies	Yes	No
The composite returns exceed the DIS Custom Index over a 5 year period.		✓
The composite returned -2.50% vs. -1.78% for the index.		
Harvest MLP (SA)	Yes	No
The fund returns exceed the S&P MLP Index Index (TR) over a 5 year period.	✓	
The fund returned -8.30% vs. -10.50% for the index.		
Van Eck NR Equities (SA)	Yes	No
The fund returns exceed the S&P Gbl Natural Res Sect Index (TR) Index over a 5 year period.		✓
The fund returned 1.39% vs. 6.67% for the index.		
Real Estate	Yes	No
The composite returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.	✓	
The composite returned 6.54% vs. 5.69% for the index.		
Morgan Stanley Prime Property Fund (CF)	Yes	No
The fund returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.	✓	
The fund returned 6.97% vs. 5.69% for the index.		
UBS Trumbull Property Fund, LP (CF)	Yes	No
The fund returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.		✓
The fund returned 2.91% vs. 5.69% for the index.		
Jamestown Premier Property Fund (CF)	Yes	No
The fund returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.		✓
The fund returned 4.84% vs. 5.69% for the index.		
Prologis USLF (CF)	Yes	No
The fund returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.		
5 year data is unavailable.		
JP Morgan US Real Estate Income and Growth, LP (CF)	Yes	No
The fund returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.		
5 year data is unavailable.		
Color Key		
Performance:		
Green: Manager outperformed benchmark.		
Yellow: Manager underperformed benchmark by 100 basis points or less.		
Red: Manager underperformed benchmark by more than 100 basis points.		
Peer Group Ranks:		
Green: Manager ranks in the top 50th percentile compared to its peers.		
Yellow: Manager ranks between the 51st and 64th percentile compared to its peers.		
Red: Manager ranks in the 65th percentile or lower compared to its peers.		

North Dakota Board of University and School Lands
Comparative Performance - Gross

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund	3.75	3.75	-2.41	2.40	3.47	6.09	4.81	6.12	7.39	07/01/2009
Target Allocation Index (Gross)	4.17	4.17	1.63	6.39	5.33	7.17	5.99	6.98	8.41	
Difference	-0.42	-0.42	-4.04	-3.99	-1.86	-1.08	-1.18	-0.86	-1.02	
Broad US Equity	8.67	8.67	4.27	13.40	11.08	13.56	11.63	12.51	14.01	07/01/2009
Russell 3000 Index	9.21	9.21	5.41	15.00	11.65	13.69	12.11	13.48	14.47	
Difference	-0.54	-0.54	-1.14	-1.60	-0.57	-0.13	-0.48	-0.97	-0.46	
Broad International Equity	6.57	6.57	-6.94	1.68	-0.03	5.55	2.98	4.49	5.92	07/01/2009
MSCI ACW Ex US Index (USD) (Net)	6.25	6.25	-5.44	3.00	1.16	6.23	3.18	4.00	5.90	
Difference	0.32	0.32	-1.50	-1.32	-1.19	-0.68	-0.20	0.49	0.02	
Fixed Income	1.80	1.80	4.42	5.66	4.22	4.22	3.86	4.04	4.87	07/01/2009
Global Fixed Income Custom Index	0.99	0.99	6.20	6.68	5.08	4.53	3.87	3.64	4.41	
Difference	0.81	0.81	-1.78	-1.02	-0.86	-0.31	-0.01	0.40	0.46	
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	4.29	
Difference	1.18	1.18	-2.37	-1.32	-1.02	0.04	-0.11	0.40	0.58	
Absolute Return	2.06	2.06	-6.93	-2.52	0.87	4.33	N/A	N/A	1.84	07/01/2014
Absolute Return Custom Index	5.13	5.13	3.59	9.22	6.38	7.92	6.39	6.78	5.58	
Difference	-3.07	-3.07	-10.52	-11.74	-5.51	-3.59	N/A	N/A	-3.74	
Consumer Price Index+5%	2.20	2.20	5.06	6.44	6.87	6.90	6.60	6.86	6.49	
Difference	-0.14	-0.14	-11.99	-8.96	-6.00	-2.57	N/A	N/A	-4.65	
Diversified Inflation Strategies	-2.58	-2.58	-19.90	-17.01	-6.65	-1.94	N/A	N/A	-3.02	04/01/2014
DIS Custom Index	-9.66	-9.66	-22.84	-21.06	-7.38	-1.78	-2.63	0.32	-3.08	
Difference	7.08	7.08	2.94	4.05	0.73	-0.16	N/A	N/A	0.06	
Real Estate	0.72	0.72	-0.41	1.19	6.14	7.83	N/A	N/A	8.21	07/01/2015
NCREIF ODCE Index (AWA) (Gross)	0.48	0.48	-0.11	1.39	5.18	6.64	8.60	10.27	7.05	
Difference	0.24	0.24	-0.30	-0.20	0.96	1.19	N/A	N/A	1.16	
Opportunistic Investments	12.35	12.35	N/A	N/A	N/A	N/A	N/A	N/A	12.35	07/01/2020

Performance shown is gross of fees except where noted, and annualized for periods greater than one year. Composite inception dates are based on availability of data for each asset class. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.

North Dakota Board of University and School Lands
Comparative Performance - Gross

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Broad US Equity													
State Street Russell 1000 Index SL (CF)	9.43	9.43	6.35	15.96	12.36	N/A	N/A	N/A	31.40	-4.77	N/A	12.75	06/01/2017
Russell 1000 Index	9.47	9.47	6.40	16.01	12.38	14.09	12.54	13.76	31.43	-4.78	21.69	12.78	
Difference	-0.04	-0.04	-0.05	-0.05	-0.02	N/A	N/A	N/A	-0.03	0.01	N/A	-0.03	
IM U.S. Large Cap Equity (SA+CF) Median	8.41	8.41	3.97	13.02	10.93	13.11	12.05	13.46	30.25	-5.09	21.73	11.71	
Rank	35	35	39	38	38	N/A	N/A	N/A	40	47	N/A	39	
State Street Russell Mid Cap Index (SA)													
State Street Russell Mid Cap Index (SA)	7.45	7.45	-2.33	4.55	7.15	N/A	N/A	N/A	30.42	-8.94	N/A	7.83	06/01/2017
Russell Mid Cap Index	7.46	7.46	-2.35	4.55	7.13	10.13	9.37	11.76	30.54	-9.06	18.52	7.81	
Difference	-0.01	-0.01	0.02	0.00	0.02	N/A	N/A	N/A	-0.12	0.12	N/A	0.02	
IM U.S. Mid Cap Equity (SA+CF) Median	6.78	6.78	-2.66	4.10	6.61	9.70	9.12	11.74	30.07	-9.08	19.38	7.07	
Rank	45	45	50	49	47	N/A	N/A	N/A	48	49	N/A	47	
NT Small Cap Core (CF)													
NT Small Cap Core (CF)	4.79	4.79	-4.00	3.95	5.74	10.95	8.06	11.02	23.98	-6.97	22.66	6.94	07/01/2014
Russell 2000 Index	4.93	4.93	-8.69	0.39	1.77	8.00	6.42	9.85	25.53	-11.01	14.65	5.27	
Difference	-0.14	-0.14	4.69	3.56	3.97	2.95	1.64	1.17	-1.55	4.04	8.01	1.67	
IM U.S. Small Cap Core Equity (SA+CF) Median	4.78	4.78	-9.98	-2.30	2.17	8.29	7.68	11.11	25.11	-10.69	15.13	6.50	
Rank	50	50	24	27	22	20	38	52	59	24	9	41	

Performance shown is gross of fees, except for FLP & ECLP Bank Loans which are shown net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30. During 07/2020, Varde Dislocation Fund, LP was funded and Gresham Commodities (SA) was liquidated. During 09/2020, Apollo Accord Fund IV, LP was funded.

North Dakota Board of University and School Lands
Comparative Performance - Gross

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Broad International Equity													
State Street World Ex US Index (CF)	4.90	4.90	-7.17	0.12	0.55	5.26	N/A	N/A	22.40	-14.14	24.17	1.45	07/01/2014
MSCI Wrld Ex US Index (USD) (Net)	4.92	4.92	-7.13	0.16	0.62	5.32	2.90	4.37	22.49	-14.09	24.21	1.50	
Difference	-0.02	-0.02	-0.04	-0.04	-0.07	-0.06	N/A	N/A	-0.09	-0.05	-0.04	-0.05	
IM International Large Cap Equity (SA+CF) Median	6.94	6.91	-3.43	5.14	2.32	6.59	4.46	6.21	23.96	-14.21	27.64	3.21	
Rank	72	72	65	69	64	68	N/A	N/A	60	49	78	76	
QMA International Small Cap Equity (CF)													
MSCI EAFE Sm Cap Index (USD) (Gross)	10.34	10.34	-3.90	7.21	1.78	7.77	6.08	7.71	25.47	-17.58	33.50	-2.08	
Difference	-1.05	-1.05	-2.44	-2.33	N/A	N/A	N/A	N/A	-2.18	N/A	N/A	-4.41	
IM International Small Cap Core Equity (SA+CF) Median	10.33	10.33	-0.86	11.32	2.18	8.63	6.73	9.00	24.95	-17.84	35.19	-1.72	
Rank	84	84	78	78	N/A	N/A	N/A	N/A	61	N/A	N/A	100	
DFA Emg Mkts Core Eq;I (DFCEX)													
MSCI Emg Mkts Index (USD) (Net)	9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	18.44	-14.58	37.28	2.92	
Difference	-0.96	-0.96	-4.59	-6.21	-2.07	-1.19	N/A	N/A	-1.80	-0.19	0.08	-0.61	
IM Emerging Markets Equity (SA+CF) Median	9.88	9.88	-1.21	9.77	2.44	8.83	4.29	4.07	19.46	-15.23	36.79	3.27	
Rank	66	66	72	72	66	63	N/A	N/A	70	45	44	66	
Harding Loevner:IEM;IZ (HLEZX)													
MSCI Emg Mkts Index (USD) (Net)	9.56	9.56	-1.16	10.54	2.42	8.97	3.74	2.51	18.44	-14.58	37.28	2.92	
Difference	-0.01	-0.01	-5.09	-5.04	-0.97	0.41	N/A	N/A	8.91	-3.03	0.01	0.73	
IM Emerging Markets Equity (SA+CF) Median	9.88	9.88	-1.21	9.77	2.44	8.83	4.29	4.07	19.46	-15.23	36.79	3.27	
Rank	55	55	73	69	57	43	N/A	N/A	16	76	45	45	

Performance shown is gross of fees, except for FLP & ECLP Bank Loans which are shown net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30. During 07/2020, Varde Dislocation Fund, LP was funded and Gresham Commodities (SA) was liquidated. During 09/2020, Apollo Accord Fund IV, LP was funded.

**North Dakota Board of University and School Lands
Comparative Performance - Gross**

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Fixed Income													
Payden & Rygel Long Term (SA)	1.21	1.21	6.07	6.41	5.62	4.95	4.64	4.45	9.64	0.36	5.20	6.07	08/01/1995
Bloomberg US Agg Bond Index	0.62	0.62	6.79	6.98	5.24	4.18	3.97	3.64	8.72	0.01	3.54	5.36	
Difference	0.59	0.59	-0.72	-0.57	0.38	0.77	0.67	0.81	0.92	0.35	1.66	0.71	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	1.11	1.11	7.31	7.53	5.64	4.70	4.44	4.16	9.18	0.06	4.03	5.74	
Rank	37	37	87	88	51	24	33	25	26	27	7	18	
JP Morgan FI Intermediate Bond (SA)	0.87	0.87	5.82	6.07	4.59	3.57	3.42	N/A	6.80	1.11	2.81	2.94	08/01/2012
Bloomberg US Gov't Crdt Int Trm Bond Index	0.61	0.61	5.92	6.32	4.43	3.39	3.12	2.91	6.80	0.88	2.14	2.66	
Difference	0.26	0.26	-0.10	-0.25	0.16	0.18	0.30	N/A	0.00	0.23	0.67	0.28	
IM U.S. Intermediate Duration (SA+CF) Median	0.83	0.83	6.00	6.47	4.61	3.67	3.43	3.27	6.93	0.93	2.55	3.00	
Rank	47	47	61	69	53	65	53	N/A	60	38	31	57	
Brandywine Gbl Opp FI (CF)	3.55	3.55	1.36	5.66	1.83	4.78	N/A	N/A	9.74	-4.71	13.33	2.46	11/01/2014
FTSE Wrld Gov't Bond Index	2.94	2.94	7.14	6.77	4.37	3.95	2.22	1.86	5.90	-0.84	7.49	2.69	
Difference	0.61	0.61	-5.78	-1.11	-2.54	0.83	N/A	N/A	3.84	-3.87	5.84	-0.23	
IM Global Fixed Income (SA+CF) Median	3.48	3.42	2.93	4.82	4.29	4.98	3.93	3.82	9.48	-1.73	7.59	3.70	
Rank	50	48	64	42	88	61	N/A	N/A	48	90	4	83	
AG Direct Lending III LP	3.25	3.25	4.68	7.41	N/A	N/A	N/A	N/A	11.14	N/A	N/A	8.77	09/01/2018
CS Lvg'd Loan Index	4.13	4.13	-0.83	0.83	3.16	4.03	3.67	4.44	8.17	1.14	4.25	2.22	
Difference	-0.88	-0.88	5.51	6.58	N/A	N/A	N/A	N/A	2.97	N/A	N/A	6.55	
IM U.S. Intermediate Duration Fixed Income (MF) Median	1.01	0.80	5.43	6.09	4.14	3.44	3.11	3.22	6.06	1.27	2.56	5.94	
Rank	4	2	58	18	N/A	N/A	N/A	N/A	1	N/A	N/A	1	
Schroders Securitized Credit (SA)	1.83	1.83	0.12	0.64	N/A	N/A	N/A	N/A	4.22	N/A	N/A	2.27	12/01/2018
3 Month LIBOR Index (USD)+1.75%	0.52	0.52	2.35	3.35	3.78	3.28	2.91	2.67	4.39	3.86	2.88	3.89	
Difference	1.31	1.31	-2.23	-2.71	N/A	N/A	N/A	N/A	-0.17	N/A	N/A	-1.62	
ND Land - PTF Cash (SA)	0.13	0.13	0.60	1.07	1.71	N/A	N/A	N/A	2.56	1.71	N/A	1.70	07/01/2017
ICE BofAML 3 Mo US T-Bill Index	0.04	0.04	0.64	1.10	1.69	1.20	0.86	0.64	2.28	1.87	0.86	1.64	
Difference	0.09	0.09	-0.04	-0.03	0.02	N/A	N/A	N/A	0.28	-0.16	N/A	0.06	
FLP (Loans)	1.22	1.22	3.08	4.30	5.24	5.57	5.71	5.76	4.86	6.15	6.16	7.05	08/01/1995
ECLP (Loans)	1.14	1.14	3.49	4.64	4.57	4.60	4.74	N/A	4.49	4.58	4.25	5.00	11/01/2010

Performance shown is gross of fees, except for FLP & ECLP Bank Loans which are shown net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30. During 07/2020, Varde Dislocation Fund, LP was funded and Gresham Commodities (SA) was liquidated. During 09/2020, Apollo Accord Fund IV, LP was funded.

North Dakota Board of University and School Lands
Comparative Performance - Gross

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Absolute Return													
GMO:Bchmk-Fr All;IV (GBMBX)	2.51	2.51	-6.75	-1.49	1.08	3.96	N/A	N/A	12.59	-4.46	14.07	1.83	07/01/2014
60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx	5.97	5.97	3.56	9.26	6.22	7.96	5.88	6.24	18.55	-6.00	17.09	4.97	
Difference	-3.46	-3.46	-10.31	-10.75	-5.14	-4.00	N/A	N/A	-5.96	1.54	-3.02	-3.14	
Consumer Price Index+5%	2.20	2.20	5.06	6.44	6.87	6.90	6.60	6.86	7.40	7.01	7.21	6.49	
Difference	0.31	0.31	-11.81	-7.93	-5.79	-2.94	N/A	N/A	5.19	-11.47	6.86	-4.66	
PIMCO:All Ast Ath;Inst (PAUIX)													
All Asset Custom Index (EqI Wtd)	1.62	1.62	-6.86	-3.30	-0.63	4.24	N/A	N/A	8.63	-5.22	13.09	0.38	07/01/2014
All Asset Custom Index (EqI Wtd)	3.68	3.68	4.30	7.52	5.76	6.31	5.06	5.41	12.97	-1.62	8.94	4.56	
Difference	-2.06	-2.06	-11.16	-10.82	-6.39	-2.07	N/A	N/A	-4.34	-3.60	4.15	-4.18	
Consumer Price Index+5%	2.20	2.20	5.06	6.44	6.87	6.90	6.60	6.86	7.40	7.01	7.21	6.49	
Difference	-0.58	-0.58	-11.92	-9.74	-7.50	-2.66	N/A	N/A	1.23	-12.23	5.88	-6.11	
Diversified Inflation Strategies (DIS)													
Harvest MLP (SA)	-9.51	-9.51	-38.56	-39.12	-15.40	-7.60	N/A	N/A	13.54	-12.98	-4.81	-11.74	07/01/2015
S&P MLP Index (TR)	-14.31	-14.31	-44.87	-46.57	-18.92	-10.50	-10.61	-3.10	9.78	-11.67	-5.58	-14.66	
Difference	4.80	4.80	6.31	7.45	3.52	2.90	N/A	N/A	3.76	-1.31	0.77	2.92	
Van Eck NR Equities (SA)													
S&P Gbl Ntrl Res Sect Index (TR)	20.40	20.40	-0.26	8.80	-3.74	2.10	N/A	N/A	13.59	-28.04	0.09	-3.94	07/01/2015
S&P Gbl Ntrl Res Sect Index (TR)	2.13	2.13	-17.42	-9.53	-2.78	6.67	-0.21	0.16	17.20	-12.57	22.66	1.30	
Difference	18.27	18.27	17.16	18.33	-0.96	-4.57	N/A	N/A	-3.61	-15.47	-22.57	-5.24	
S&P N Amer Ntrl Res Index	-7.56	-7.56	-31.90	-26.81	-12.51	-3.83	-6.98	-2.63	17.63	-21.07	1.23	-7.56	
Difference	27.96	27.96	31.64	35.61	8.77	5.93	N/A	N/A	-4.04	-6.97	-1.14	3.62	

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North Dakota Board of University and School Lands
Comparative Performance - Gross

As of September 30, 2020

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2019	2018	2017	Since Incep.	Inception Date
Real Estate													
Morgan Stanley Prime Property (CF)	1.27	1.27	0.42	2.21	6.36	8.08	N/A	N/A	7.38	9.05	9.86	8.47	07/01/2015
NCREIF ODCE Index (AWA) (Gross)	0.48	0.48	-0.11	1.39	5.18	6.64	8.60	10.27	5.34	8.35	7.62	7.05	
Difference	0.79	0.79	0.53	0.82	1.18	1.44	N/A	N/A	2.04	0.70	2.24	1.42	
UBS Trumbull Property LP (CF)	-0.18	-0.18	-2.22	-2.18	1.58	3.75	N/A	N/A	-2.11	6.98	6.30	4.24	07/01/2015
NCREIF ODCE Index (AWA) (Gross)	0.48	0.48	-0.11	1.39	5.18	6.64	8.60	10.27	5.34	8.35	7.62	7.05	
Difference	-0.66	-0.66	-2.11	-3.57	-3.60	-2.89	N/A	N/A	-7.45	-1.37	-1.32	-2.81	
Jamestown Premier Property (CF)	-3.39	-3.39	-7.82	-7.75	4.93	6.64	N/A	N/A	3.02	9.96	18.00	6.99	07/01/2015
NCREIF ODCE Index (AWA) (Gross)	0.48	0.48	-0.11	1.39	5.18	6.64	8.60	10.27	5.34	8.35	7.62	7.05	
Difference	-3.87	-3.87	-7.71	-9.14	-0.25	0.00	N/A	N/A	-2.32	1.61	10.38	-0.06	
Prologis USLF (CF)	3.60	3.60	4.18	9.31	15.81	N/A	N/A	N/A	19.51	18.56	24.22	17.73	04/01/2016
NCREIF ODCE Index (AWA) (Gross)	0.48	0.48	-0.11	1.39	5.18	6.64	8.60	10.27	5.34	8.35	7.62	6.11	
Difference	3.12	3.12	4.29	7.92	10.63	N/A	N/A	N/A	14.17	10.21	16.60	11.62	
JP Morgan US Real Estate Income and Growth LP (CF)	0.17	0.17	-0.04	0.91	3.73	N/A	N/A	N/A	3.21	6.75	6.83	5.29	07/01/2016
NCREIF ODCE Index (AWA) (Gross)	0.48	0.48	-0.11	1.39	5.18	6.64	8.60	10.27	5.34	8.35	7.62	5.95	
Difference	-0.31	-0.31	0.07	-0.48	-1.45	N/A	N/A	N/A	-2.13	-1.60	-0.79	-0.66	
Opportunistic Investments													
Varde Dislocation Fund, LP	9.99	9.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.99	07/01/2020
Apollo Accord Fund IV, LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10/01/2020
Transition Account													
NT STIF (Transition Account)	0.09	0.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.14	06/01/2020
ICE BofAML 3 Mo US T-Bill Index	0.04	0.04	0.64	1.10	1.69	1.20	0.86	0.64	2.28	1.87	0.86	0.05	
Difference	0.05	0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.09	

Performance shown is gross of fees, except for FLP & ECLP Bank Loans which are shown net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30. During 07/2020, Varde Dislocation Fund, LP was funded and Gresham Commodities (SA) was liquidated. During 09/2020, Apollo Accord Fund IV, LP was funded.

Performance Related Comments

- Manager inception dates shown represent the first full month following initial funding.
- RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Prior historical data was provided by North Dakota Board of University and School Lands.
- Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark.
- Historical gross performance for composites was calculated by aggregating gross performance for each of the composites' underlying managers. Managers' gross performance was provided by North Dakota Board of University and School Lands. As of 07/2014, composite and manager performance is provided and calculated by RVK.
- During 07/2020, Varde Dislocation Fund, LP was funded and Gresham Commodities (SA) was liquidated.
- During 09/2020, Apollo Accord Fund IV, LP was funded.

Index Comments

- The Target Allocation Index (Net) is a static custom index that is calculated monthly and consists of:
 - From 05/2020 through present: 19% Russell 3000 Index, 19% MSCI ACW Ex US Index (USD) (Net), 22% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 15% Absolute Return Index, 5% Cambridge US Private Equity Index, and 5% MSCI World Infrastructure Index.
 - From 07/2019 through 04/2020: 18.5% Russell 3000 Index, 18.5% MSCI ACW Ex US Index (USD) (Net), 23% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 15% Absolute Return Custom Index, and 10% DIS Custom Index.
 - From 02/2018 through 06/2019: 17% Russell 3000 Index, 17% MSCI ACW Ex US Index (USD) (Net), 21% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 20% Absolute Return Custom Index, and 10% DIS Custom Index.
 - From 07/2016 through 01/2018: 17% Russell 3000 Index, 15% MSCI ACW Ex US Index (USD) (Net), 23% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 20% Absolute Return Custom Index, and 10% DIS Custom Index.
 - From 04/2016 through 06/2016: 17.6% Russell 3000 Index, 15.5% MSCI ACW Ex US Index (USD) (Net), 23.8% Global Fixed Income Custom Index, 12% NCREIF ODCE Index (AWA) (Net), 20.7% Absolute Return Custom Index, and 10.4% DIS Custom Index.
 - From 01/2016 through 03/2016: 17.7% Russell 3000 Index, 15.6% MSCI ACW Ex US Index (USD) (Net), 25.3% Global Fixed Income Custom Index, 10% NCREIF ODCE Index (AWA) (Net), 21% Absolute Return Custom Index, and 10.4% DIS Custom Index.
 - From 10/2015 through 12/2015: 17.9% Russell 3000 Index, 15.9% MSCI ACW Ex US Index (USD) (Net), 25.5% Global Fixed Income Custom Index, 9% NCREIF ODCE Index (AWA) (Net), 21.1% Absolute Return Custom Index, and 10.6% DIS Custom Index.
 - From 07/2015 through 09/2015: 19.5% Russell 3000 Index, 17.4% MSCI ACW Ex US Index (USD) (Net), 26.2% Global Fixed Income Custom Index, 4.1% NCREIF ODCE Index (AWA) (Net), 22% Absolute Return Custom Index, and 10.8% DIS Custom Index.
 - From 07/2014 through 06/2015: The index was calculated monthly using beginning of month asset class weights applied to each corresponding primary benchmark return.
 - From 01/2013 through 06/2014: 18.7% Russell 1000 Index, 12.4% Russell 2500 Index, 7.5% FTSE EPRA/NAREIT US Index, 12.4% MSCI EAFE Index (USD) (Net), 33.3% Bloomberg US Agg Bond Index, 0.70% CS Lvg'd Loan Index, 10% Bloomberg US Corp Hi Yld Index, and 5% Bloomberg Gbl Agg Ex USD Index (Hedged).
 - From 07/2009 through 12/2012: 15% Russell 1000 Index, 10% Russell 2500 Index, 6% FTSE EPRA/NAREIT US Index, 10% MSCI EAFE Index (USD) (Net), 32.3% Bloomberg US Agg Bond Index, 1.70% CS Lvg'd Loan Index, 10% Bloomberg US Corp Hi Yld Index, 5% Bloomberg Gbl Agg Ex USD Index (Hedged), and 10% ICE BofAML Cnvt Bonds Index (All Qual).

Addendum

Index Comments Cont.

- The Target Allocation Index (Gross) is a static custom index that is calculated monthly and consists of:
 - From 05/2020 through present: 19% Russell 3000 Index, 19% MSCI ACW Ex US Index (USD) (Net), 22% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Gross), 15% Absolute Return Index, 5% Cambridge US Private Equity Index, and 5% MSCI World Infrastructure Index.
 - From 07/2019 through 04/2020: 18.5% Russell 3000 Index, 18.5% MSCI ACW Ex US Index (USD) (Net), 23% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Gross), 15% Absolute Return Custom Index, and 10% DIS Custom Index.
 - From 02/2018 through 06/2019: 17% Russell 3000 Index, 17% MSCI ACW Ex US Index (USD) (Net), 21% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Gross), 20% Absolute Return Custom Index, and 10% DIS Custom Index.
 - From 07/2016 through 01/2018: 17% Russell 3000 Index, 15% MSCI ACW Ex US Index (USD) (Net), 23% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Gross), 20% Absolute Return Custom Index, and 10% DIS Custom Index.
 - From 04/2016 through 06/2016: 17.6% Russell 3000 Index, 15.5% MSCI ACW Ex US Index (USD) (Net), 23.8% Global Fixed Income Custom Index, 12% NCREIF ODCE Index (AWA) (Gross), 20.7% Absolute Return Custom Index, and 10.4% DIS Custom Index.
 - From 01/2016 through 03/2016: 17.7% Russell 3000 Index, 15.6% MSCI ACW Ex US Index (USD) (Net), 25.3% Global Fixed Income Custom Index, 10% NCREIF ODCE Index (AWA) (Gross), 21% Absolute Return Custom Index, and 10.4% DIS Custom Index.
 - From 10/2015 through 12/2015: 17.9% Russell 3000 Index, 15.9% MSCI ACW Ex US Index (USD) (Net), 25.5% Global Fixed Income Custom Index, 9% NCREIF ODCE Index (AWA) (Gross), 21.1% Absolute Return Custom Index, and 10.6% DIS Custom Index.
 - From 07/2015 through 09/2015: 19.5% Russell 3000 Index, 17.4% MSCI ACW Ex US Index (USD) (Net), 26.2% Global Fixed Income Custom Index, 4.1% NCREIF ODCE Index (AWA) (Gross), 22% Absolute Return Custom Index, and 10.8% DIS Custom Index.
 - From 07/2014 through 06/2015: The index was calculated monthly using beginning of month asset class weights applied to each corresponding primary benchmark return.
 - From 01/2013 through 06/2014: 18.7% Russell 1000 Index, 12.4% Russell 2500 Index, 7.5% FTSE EPRA/NAREIT US Index, 12.4% MSCI EAFE Index (USD) (Net), 33.3% Bloomberg US Agg Bond Index, 0.70% CS Lvg'd Loan Index, 10% Bloomberg US Corp Hi Yld Index, and 5% Bloomberg Gbl Agg Ex USD Index (Hedged).
 - From 07/2009 through 12/2012: 15% Russell 1000 Index, 10% Russell 2500 Index, 6% FTSE EPRA/NAREIT US Index, 10% MSCI EAFE Index (USD) (Net), 32.3% Bloomberg US Agg Bond Index, 1.70% CS Lvg'd Loan Index, 10% Bloomberg US Corp Hi Yld Index, 5% Bloomberg Gbl Agg Ex USD Index (Hedged), and 10% ICE BofAML Cnvt Bonds Index (All Qual).
- The Global Fixed Income Custom Index consists of the Bloomberg US Unv Bond Index. Prior to 03/2019, the index consisted of 75% Bloomberg US Unv Bond Index and 25% Bloomberg Multiverse Index.
- The Absolute Return Custom Index consists of 60% MSCI ACW IM Index (USD) (Net) and 40% Bloomberg US Agg Bond Index.
- The DIS Custom Index consists of 50% Bloomberg US Trsy US TIPS Index and 50% FTSE EPRA/NAREIT Dvl'd Index (Gross) through 06/2015, and 20% Bloomberg US Trsy US TIPS Index, 30% Bloomberg Cmdty Ex Energy Index (TR), 30% S&P MLP Index (TR), and 20% S&P Gbl Natural Res Sect Index (TR) through 04/2020. Starting in 05/2020, the DIS Custom Index return is calculated using benchmark returns of the underlying DIS managers, given their respective weights, adjusted on days of major liquidating cash flows.

The All Asset Custom Index (Eq'l Wtd) is an equal-weighted hybrid created independently by RVK specifically for PIMCO's All Asset strategies, and it consists of the following benchmarks:

1. Short Term Strategies: ICE BofAML 1 Yr T-Bill Index
2. US Core and Long Maturity Bond Strategies: Bloomberg US Agg Bond Index
3. EM and Gbl Bond Strategies: PIMCO GLADI Index*
4. Crdt Strategies: ICE BofAML US Hi Yld Master II Index
5. Inflation Related Strategies: Bloomberg US Trsy US TIPS Index
6. US Equity Strategies: Russell 3000 Index
7. Global Equity Strategies: MSCI ACW Index (USD) (Net)
8. Alternative Strategies: ICE BofAML 3 Mo US T-Bill Index + 3%

*Performance for the PIMCO Gbl Advantage Bond Index (London Close) prior to 01/01/2004 consists of the JPM EMBI Gbl Dvf'd Index (TR).

Peer Groups

- Total Fund - All Master Trust Universe
- US Equity - IM US Equity (MF)
- International Equity - IM International Large Cap Equity (MF)
- Fixed Income - IM Global Fixed Income (MF)

Glossary

Active Return - The difference between the investment manager/composite performance relative to the performance of an appropriate market benchmark.

Active Share - Measures the degree to which the holdings of a fund differ from the holdings of the benchmark. Active share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in the fund versus the weight of each holding in the benchmark and dividing by two.

Alpha - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

Alpha Ratio - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

Average Quality - Bond quality ratings are reported using the investment managers' and the index providers' preferred rating agency. *Average Quality for managers unable to provide this statistic is instead provided by Morningstar; if unavailable on Morningstar, it has been estimated using a credit quality distribution provided by the manager.* There are two primary rating agencies in the US. *Moody's* assigns ratings on a system that employs up to four symbols (consisting of letters and numbers), such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. *Standard & Poor's (S&P)* employs a system that uses + and - along with letters, such as AAA, AA+, etc. The two rating agencies' systems are summarized below:

<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>
Higher Credit Quality – Investment Grade			Lower Credit Quality – Below Investment Grade		
AAA	Aaa	Prime/Highest credit quality	BB+	Ba1	Speculative/Low credit quality
AA+	Aa1	High credit quality	BB	Ba2	
AA	Aa2		BB-	Ba3	
AA-	Aa3		B+	B1	Highly speculative
A+	A1	Upper-medium credit quality	B	B2	
A	A2		B-	B3	
A-	A3		CCC+	Caa1	Substantial credit/default risk
BBB+	Baa1	Lower-medium credit quality	CCC	Caa2	Extremely speculative
BBB	Baa2		CCC-	Caa3	
BBB-	Baa3		CC	Ca	Vulnerable to default
			C	Ca	
			D	C	In default

Benchmark Effect - The difference between the blended return of each respective managers' benchmark within a composite and the composite's benchmark return.

Beta - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

Box Plots - A graphical representation of the distribution of observations. From top to bottom, the four boxes represent the spread between the maximum value and the minimum value in each quartile. A quartile represents the values that divide the observations into four quarters (i.e., 1st quartile, 2nd quartile, 3rd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3rd quartile meet.

Buy and Hold Attribution - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

Sector - Attribution is calculated using the Global Industry Classification Standard (GICS), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector as defined by S&P Capital IQ data.

Country/Region - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S&P Capital IQ data, and thus may differ from the classification of the investment manager and/or index provider.

Style - Stocks are classified into the following style boxes: large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by S&P Capital IQ. Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio; names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, and names that make up the subsequent 1/3 of the total market capitalization are assigned to the neutral category, while the balance of the names are assigned to the value category. Stocks are unclassified when there is not enough data to determine a size and style metric.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.

Capital Markets Review -

Breakeven Inflation - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflation-linked maturity curve and the yield of the closest nominal Treasury maturity.

Consumer Confidence - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

Consumer Price Index (CPI) - Measures the change in the price level of consumer goods and services.

Glossary

- Federal Funds Rate** - The interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the US economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.
- Option-Adjusted Spread** - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.
- Purchasing Managers Index (PMI)** - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.
- Real Gross Domestic Product (Real GDP)** - An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year.
- Unemployment Rate** - The percentage of the total labor force that is unemployed but actively seeking employment.
- US Dollar Total Weighted Index** - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.
- VIX** - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."
- Cash Flow Effect** - The composite's active return minus the sum of each managers' active return minus the benchmark effect.
- Consistency** - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.
- Convexity** - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.
- Correlation** - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation; that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.
- Coupon Rate** - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.
- Current Yield** - The annual income of a security divided by the security's current price.
- Down Market Capture** - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.
- Downside Risk** - A measure similar to standard deviation that focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative returns for the selected periodicity. The higher the factor, the riskier the product.
- Earnings Per Share** - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.
- Effective Duration** - The approximate percentage change in a bond's price for a 100 basis point change in yield.
- Excess Return vs. Market** - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.
- Excess Return vs. Risk Free** - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.
- Excess Risk** - A measure of the standard deviation of a portfolio's performance relative to the risk-free return.
- Expense Ratios** - Morningstar is the source for mutual fund expense ratios.
- Gain/Loss** - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.
- Indices** - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used, or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability, and/or completeness.
- Information Ratio** - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.
- Liability Driven Investing (LDI)** - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. RVK is not an actuarial firm, and does not have actuarial expertise.
- Estimated Funded Status** - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded.
- Estimated PV of Liabilities** - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report.
- Duration of Liabilities** - The sensitivity of the value of a Plan's liabilities to changes in interest rates, as calculated by the Plan's actuary.
- Duration of Assets** - The dollar-weighted average duration of all the individual Plan assets.
- Estimated Plan Hedge Ratio** - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and

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multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

Modified Duration - The approximate percentage change in a bond's price for a 100 basis point change in yield, assuming the bonds' expected cash flows do not change.

Mutual Fund Performance - Whenever possible, manager performance is extended for any share class that does not have 10 years of history. Using Morningstar's methodology, a single ticker within the same fund family (often the oldest share class) is chosen to append historical performance.

Net Cash Flow - The sum, in dollars, of a portfolio's contributions and withdrawals. This includes all management fees and expenses only when performance shown is gross of fees.

Peer Groups -

Plan Sponsor Peer Groups - RVK utilizes the Mellon Analytical Solutions Trust Universe along with the Investment Metrics Plan Sponsor Universe. The combined Mellon Analytical Solutions Trust Universe and Investment Metrics Plan Sponsor Universe is used for comparison of total fund composite results and utilizes actual client performance compiled from consultant and custodian data. The Plan Sponsor Peer Group database includes performance and other quantitative data for over 2,100 plans which include corporate, endowment, foundation, public, and Taft Hartley plans. Plan Sponsor Peer Groups are gross of fees.

Investment Manager Peer Groups - RVK utilizes Investment Metrics' Peer Groups for investment manager peer comparison and ranking. The Investment Metrics Peer Group database includes performance and other quantitative data for over 840 investment management firms and 29,000 investments products, across more than 160 standard peer groups. Mutual Fund Peer Groups are net of fees.

Percentile Rankings - Percentile rank compares an individual fund's performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund's peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund's ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical Value

100 - Lowest Statistical Value

Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4th percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.

Performance Methodology - RVK calculates performance for investment managers and composites using different methodologies.

Investment Managers - Performance is calculated for interim periods between all large external cash flows for a given month and geometrically linked to calculate period returns. An external cash flow is defined as cash, securities, or assets that enter or exit a portfolio. RVK defines a "large cash flow" as a net aggregate cash flow of $\geq 10\%$ of the beginning-period portfolio market value or any cash flow that causes RVK calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

Composites - The Modified Dietz methodology is utilized to calculate asset class, sub-asset class, and total fund composite performance. The Modified Dietz method calculates a time-weighted total rate of return that considers the timing of external cash flows; however, it does not utilize interim period performance to mitigate the impact of significant cash in- and outflows to the composite.

RVK calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to RVK using the first full month of returns as the inception date. Performance for both managers and composites is annualized for periods greater than one year.

Portfolio Characteristics - Due to disclosure guidelines set by each investment manager, portfolio characteristics shown are as of the most recent date available.

Price to Earnings Ratio - The ratio valuing a company's current share price relative to its trailing 12-month per-share earnings (EPS).

Private Equity Quartile Ranks - Private Equity quartile ranks are generated using vintage year peer group data provided by Thomson Reuters, and are based on each fund's annualized, since inception internal rate of return (IRR). Three Private Equity peer groups are available via Thomson Reuters: Buyout, Venture, and All Private Equity. Ranks are available quarterly, at a one-quarter lag.

R-Squared - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

Return - Compounded rate of return for the period.

% Return - The time-weighted rate of return of a portfolio for a given period.

Risk Free Benchmark - ICE BofAML 3 Mo US T-Bill Index unless specified otherwise.

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RVK Liquidity Rating - A qualitative method for determining the relative amount of liquidity in a portfolio. The characteristics considered when determining relative liquidity include trading volume, gates for redemption, leverage, nature of transactions, and pricing mechanisms. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating.

<u>Asset Class</u>	<u>RVK Liquidity Rating</u>	<u>Asset Class</u>	<u>RVK Liquidity Rating</u>
<u>Liquid Investments</u>		<u>Less Liquid Investments</u>	
T-Bills and Treasuries	100	Fixed Income Plus Sector	50
Cash Equivalents	98	Stable Value (Plan Sponsor Directed)	50
TIPS	95	Hedge Funds of Funds	35
US Large Cap Equity	95		
Diversified Real Return	93		
Stable Value (Participant Directed)	91		
Global Equity	90	<u>Not Liquid Investments</u>	
Non-US Large Cap Equity	90	Core Real Estate	25
Global Tactical Asset Allocation	88	Core Plus Real Estate	15
MLPs	85	Non-Core Real Estate	5
US Mid Cap Equity	85	Private Equity Funds of Funds	5
US SMid Cap Equity	85		
US Small Cap Equity	85		
REITs	85		
Non-US Small Cap Equity	85		
Emerging Markets Equity	85		
Core Fixed Income	85		
Core Plus Fixed Income	80		

Sector Allocation - Negative fixed income sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps.

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return to the risk free asset. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

Simple Alpha - The difference between the manager's return and the benchmark's return.

Spread Duration - The approximate percentage change in a bond's price for a 100 basis point change in its spread over a Treasury of the same maturity.

Standard Deviation - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period.

Thematic Classification - Represents dedicated manager allocations; as such, thematic allocations are approximations. RVK categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation:

<u>Alpha</u>	<u>Capital Appreciation</u>	<u>Capital Preservation</u>	<u>Inflation</u>
Absolute Return Strategies	Public Equity	Core Fixed Income	TIPS
Currency Overlay	Private Equity	CMBS Fixed Income	Bank Loans
	Preferred Securities	Asset Backed Fixed Income	Core Real Estate
	High Yield	Domestic Core Plus Fixed Income	Real Return
	Convertible Fixed Income	Mortgage Backed Fixed Income	Inflation Hedges
	TALF Funds	International Developed Fixed Income	REITs
	Distressed Debt	Cash Equivalents	Commodities
	Emerging Market Fixed Income	Stable Value	
	Value Added Real Estate		
	Opportunistic Real Estate		

Time Period Abbreviations - **QTD** - Quarter-to-Date. **CYTD** - Calendar Year-to-Date. **FYTD** - Fiscal Year-to-Date. **YOY** - Year Over Year.

Total Fund Attribution - The Investment Decision Process (IDP) model provides an approach to evaluating investment performance that applies to all asset classes and investment styles. The IDP model is based on a top-down hierarchy framework of investment decisions, with each decision contributing to the overall profit or loss. The IDP approach starts from the strategic asset allocation and follows the flow of the investments down to the manager's skill.

Strategic Asset Allocation (SAA) - The percentage return gained or lost from the long-term strategic asset allocation decision, the most significant determinant of long-term performance. SAA is the product of the target asset allocation multiplied by the corresponding benchmark returns.

Tactical Asset Allocation (TAA) - The percentage return gained or lost from not having been precisely allocated at the target asset allocation mix, whether by deviations that are tactical in nature or a by-product of moving towards the target mix. TAA is the product of the actual asset allocation multiplied by the broad asset class benchmarks, less the SAA.

Style Selection (SS) - The percentage return gained or lost from intentional style biases within each asset class (e.g. value rather than core or overweight to emerging markets relative to benchmark). SS is the product of the actual manager allocation within each asset class multiplied by their specific benchmark, less TAA.

Manager's Skill (MS) - The percentage return gained or lost from manager value added relative to their specific benchmark. MS is the product of the actual manager allocation multiplied by their achieved excess return.

Total Fund Beta - Total Fund Beta is calculated using the S&P 500 as the benchmark. It represents a measure of the sensitivity of the total fund to movements in the S&P 500 and is a measure of the Total Fund's non-diversifiable or systematic risk.

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Tracking Error - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

Treynor Ratio - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better historical risk-adjusted performance.

Unit Value - The dollar value of a portfolio, assuming an initial nominal investment of \$100, growing at the compounded rate of %Return for a given period.

Up Market Capture - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolio's return over the benchmark during the up market period. The higher the value of the up market capture the better the product's performance.

Yield to Maturity - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return. The 30-Day SEC Yield is similar to the Yield to Maturity and is reported for mutual funds.

Yield to Worst - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.

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