

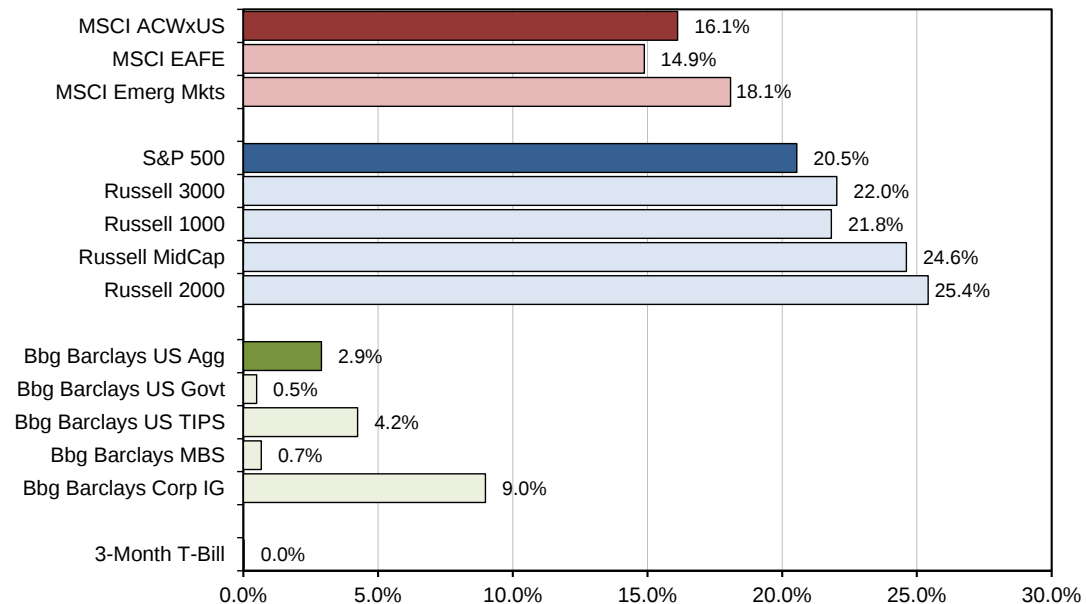
Investment Performance Review
Period Ending June 30, 2020

Butler County Employees Retirement Plan

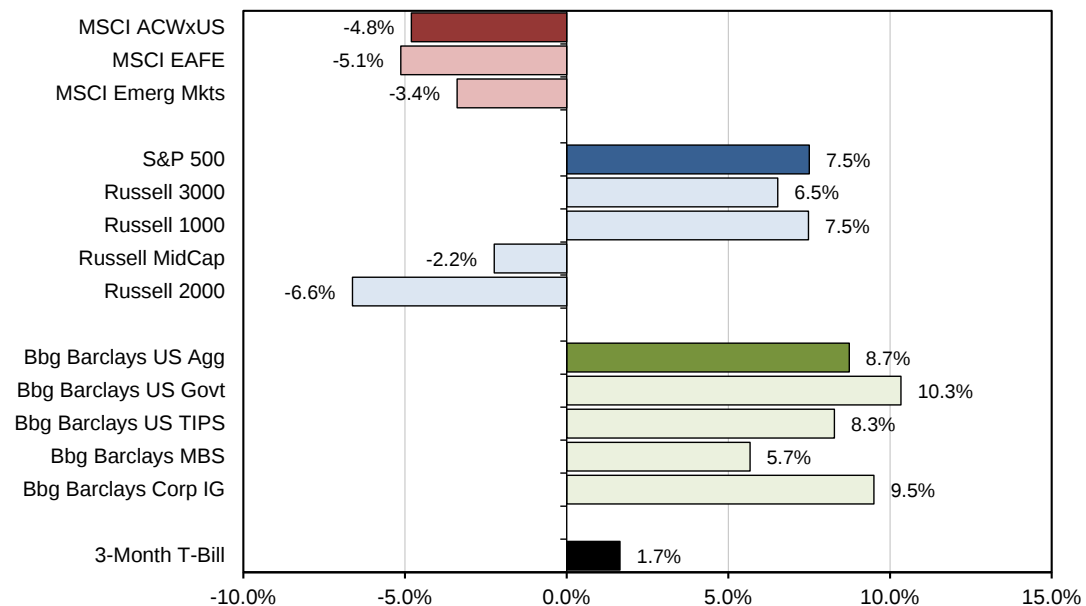


- Broad asset class returns rebounded sharply in the 2nd quarter following their harsh drawdown during the 1st quarter. The US government and Federal Reserve Bank (Fed) implemented a myriad of programs designed to provide the economy with liquidity while also mitigating the affects from the shelter-in-place response to the COVID-19 (Coronavirus) pandemic. Despite having officially entered a recession in February, US economic data began to show improvement in May with regards to manufacturing, housing and employment as many States began the process of re-opening. Geopolitical tensions rose during the quarter following the vote by China to impose security measures in Hong Kong. Despite these risks, markets reacted positively to continued monetary easing from the Fed which supported markets directly through bond purchases and a variety of lending facilities. Within domestic equity markets, higher beta small cap stocks outperformed large cap stocks during the quarter with the Russell 2000 Index returning 25.4% versus a 20.5% return for the S&P 500 Index. US stocks also outperformed international stocks during the period. US equity results over the trailing 1-year period tell a different story with large cap stocks, returning 7.5% while mid- and small cap stocks were negative, returning -2.2% and -6.6%, respectively.
- Broad international equity markets posted positive returns for the 2nd quarter. Similar to US markets, international markets benefited from coordinated central bank policies which provided liquidity following the onset of the pandemic and subsequent re-opening of local economies. International returns also benefited from a weakening US dollar (USD) which declined against both the Euro and British pound during the period. Emerging markets outperformed relative to developed markets during the period with the MSCI Emerging Market Index returning 18.1% compared to 14.9% for the MSCI EAFE Index. Both developed and emerging market indices were negative over the 1-year period with the developed market index returning -5.1% and the emerging market index returning -3.4%.
- Fixed income returns remained strong during the 2nd quarter as investors benefited from declining interest rates globally. The broad market Bloomberg Barclays (BB) Aggregate Index gained 2.9% for the quarter as the Fed ramped up its purchases of US Treasury and Agency securities to boost market liquidity. In addition, the Fed announced that it would begin purchasing US corporate bonds to keep borrowing costs low and further support liquidity. For the quarter, the BB Corporate Investment Grade Index returned 9.0% as investors continued to seek out higher yielding assets. Over the trailing 1-year period, the bond market outperformed stocks with the BB Aggregate posting a solid return of 8.7%, while corporate bonds posted a higher 9.5%. US TIPS, which have been a laggard for some time, posted a respectable 8.3% over the trailing 1-year period despite low expectations for inflation.

Quarter Performance



1-Year Performance



PLEASE NOTE ALL PERFORMANCE IN THIS REPORT IS NET OF FEES.



Comparative Performance Trailing Returns

	QTR		FYTD		1 YR		2 YR		3 YR		5 YR		10 YR		15 YR		Inception	Inception Date
Total Fund Performance	12.92		-5.25		0.84		3.62		4.70		5.40		8.40		6.36		5.94	01/01/2001
Total Fund Policy	13.79		-4.36		1.55		3.77		4.96		5.49		8.81		6.65		6.02	
Allocation Index	12.94		-5.23		0.65		3.26		4.54		5.00		N/A		N/A		N/A	
Domestic Equity																		
Total Fund Domestic Equity	20.38		-9.07		0.24		3.49		6.74		7.96		N/A		N/A		7.76	07/01/2014
Twin Capital Low Volatility	15.18	(90)	-10.43	(88)	-1.72	(88)	5.04	(70)	7.02	(76)	8.87	(64)	N/A		N/A		9.46	(81) 06/01/2013
S&P 500 Index	20.54	(44)	-3.08	(38)	7.51	(32)	8.95	(35)	10.73	(36)	10.73	(30)	13.99	(46)	8.83	(63)	11.76	(40)
IM U.S. Large Cap Core Equity (SA+CF) Median	20.19		-4.30		5.31		7.26		9.63		9.65		13.86		9.03		11.33	
Twin Capital Enhanced Index	19.42	(69)	-4.49	(50)	5.78	(49)	6.70	(53)	8.96	(54)	9.36	(54)	N/A		N/A		10.85	(58) 06/01/2013
S&P 500 Index	20.54	(56)	-3.08	(33)	7.51	(33)	8.95	(33)	10.73	(35)	10.73	(38)	13.99	(49)	8.83	(62)	11.76	(42)
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median	20.78		-4.50		5.66		7.18		9.14		9.63		13.93		9.09		11.39	
Vanguard Growth Index (VIGIX)	29.04	(30)	11.32	(37)	24.78	(18)	17.40	(29)	18.06	(50)	14.93	(41)	16.78	(29)	N/A		14.84	(28) 05/01/2010
Vanguard Growth Index Hybrid	29.06	(30)	11.36	(36)	24.84	(18)	17.43	(29)	18.08	(49)	14.97	(40)	16.85	(27)	11.10	(31)	14.91	(27)
Russell 1000 Growth Index	27.84	(46)	9.81	(57)	23.28	(26)	17.27	(31)	18.99	(37)	15.89	(24)	17.23	(21)	11.32	(24)	15.37	(18)
IM U.S. Large Cap Growth Equity (MF) Median	27.69		10.21		21.05		15.85		18.03		14.47		15.98		10.39		14.14	
Vanguard Value Index (VIVIX)	12.76	(91)	-15.42	(53)	-7.41	(47)	0.88	(32)	3.90	(21)	6.45	(11)	11.23	(13)	N/A		11.66	(12) 07/01/2009
Vanguard Value Index Hybrid	12.73	(91)	-15.46	(54)	-7.45	(47)	0.86	(32)	3.89	(22)	6.47	(11)	11.28	(12)	6.94	(18)	11.71	(10)
Russell 1000 Value Index	14.29	(68)	-16.26	(61)	-8.84	(65)	-0.56	(51)	1.82	(55)	4.64	(42)	10.41	(27)	6.24	(40)	10.99	(26)
IM U.S. Large Cap Value Equity (MF) Median	15.42		-15.32		-7.67		-0.48		2.13		4.28		9.72		5.86		10.11	
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	24.04	(30)	-12.81	(54)	-6.75	(53)	N/A		N/A		N/A		N/A		N/A		-1.57	(65) 12/01/2018
S&P MidCap 400 Index	24.07	(30)	-12.78	(54)	-6.70	(53)	-2.75	(63)	2.39	(50)	5.22	(26)	11.34	(15)	8.21	(12)	-1.51	(64)
IM U.S. Mid Cap Core Equity (MF) Median	20.77		-12.42		-6.15		-1.29		2.34		3.60		9.53		6.62		-0.45	
Vanguard Small-Cap 600 Index I (VSMSX)	22.08	(53)	-17.74	(52)	-11.16	(43)	N/A		N/A		N/A		N/A		N/A		-7.24	(57) 12/01/2018
S&P SmallCap 600 Index	21.94	(56)	-17.85	(54)	-11.29	(44)	-8.14	(52)	0.56	(35)	4.48	(16)	11.24	(7)	7.65	(8)	-7.30	(58)
IM U.S. Small Cap Core Equity (MF) Median	22.39		-17.68		-11.79		-8.07		-0.91		2.33		9.00		6.34		-6.55	

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.



Comparative Performance

Total Fund

As of June 30, 2020

	QTR	FYTD	1 YR	2 YR	3 YR	5 YR	10 YR	15 YR	Inception	Inception Date
International Equity										
Total Fund Performance - International Equity	19.40	-12.28	-5.87	-2.46	0.59	1.94	N/A	N/A	0.96	07/01/2014
Vanguard FTSE AW ex-US SC Index (VFSNX)	24.10 (13)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	24.10 (13)	04/01/2020
FTSE Global ex U.S. Small Cap Index (Net)	23.05 (23)	-13.46 (21)	-6.08 (28)	-6.41 (35)	-1.23 (32)	1.38 (53)	N/A	N/A	23.05 (23)	
IM International SMID Cap Core Equity (MF) Median	18.28	-15.84	-8.82	-8.27	-2.96	1.53	6.11	5.49	18.28	
Vanguard Developed Markets Index (VTMNX)	17.49 (47)	-10.74 (54)	-4.24 (52)	-2.14 (52)	0.92 (48)	2.49 (42)	6.13 (38)	N/A	6.01 (45)	07/01/2009
Vanguard Spliced Developed ex U.S. Index (Net)	16.40 (61)	-11.33 (62)	-4.71 (56)	-2.46 (56)	0.83 (49)	2.39 (44)	5.93 (44)	4.22 (48)	5.93 (47)	
MSCI EAFE (Net) Index	14.88 (81)	-11.34 (62)	-5.13 (60)	-2.08 (50)	0.81 (50)	2.05 (49)	5.73 (50)	4.09 (52)	5.75 (52)	
IM International Multi-Cap Equity (MF) Median	17.31	-10.49	-4.04	-2.10	0.77	1.99	5.70	4.15	5.83	
Vanguard Emerging Markets Index (VEMIX)	19.89 (53)	-9.56 (52)	-2.90 (50)	0.13 (41)	2.14 (42)	2.19 (57)	N/A	N/A	1.38 (55)	10/01/2010
FTSE Emerging Mkts All Cap China A Inclusion Index	19.11 (64)	-9.67 (54)	-2.86 (49)	0.20 (40)	2.37 (40)	2.17 (57)	3.60 (45)	N/A	1.91 (44)	
MSCI Emerging Markets (Net) Index	18.08 (75)	-9.78 (55)	-3.39 (53)	-1.12 (51)	1.90 (44)	2.86 (46)	3.27 (49)	6.33 (46)	1.62 (48)	
IM Emerging Markets Equity (MF) Median	20.27	-9.44	-3.04	-1.07	1.15	2.57	3.16	6.06	1.50	
Fixed Income										
Total Fund Performance - Fixed Income	4.39	3.01	5.75	6.72	4.46	3.96	N/A	N/A	3.33	07/01/2014
Vanguard Short Term Bond Index (VBITX)	1.79 (85)	4.07 (2)	5.41 (2)	5.33 (2)	3.45 (2)	2.58 (11)	N/A	N/A	2.10 (12)	04/01/2013
Bloomberg Barclays 1-5 Year Gov/Credit Idx	1.77 (86)	3.98 (3)	5.43 (2)	5.39 (1)	3.49 (1)	2.63 (10)	2.22 (23)	3.11 (10)	2.14 (11)	
IM U.S. Short Term Investment Grade (MF) Median	3.51	1.21	2.53	3.08	2.35	1.91	1.75	2.33	1.53	
Vanguard Total Bond Index (VBTIX)	2.98 (88)	6.36 (23)	N/A	N/A	N/A	N/A	N/A	N/A	5.76 (30)	09/01/2019
Blmbg. Barc. U.S. Aggregate Index	2.90 (90)	6.14 (32)	8.74 (28)	8.30 (27)	5.32 (24)	4.30 (30)	3.82 (51)	4.39 (34)	5.76 (30)	
IM U.S. Broad Market Core Fixed Income (MF) Median	4.97	5.56	8.07	7.82	4.91	4.05	3.83	4.24	5.20	
Vanguard High Yield Bond Fund (VWEAX)	8.04 (74)	-3.40 (17)	0.88 (11)	4.86 (4)	3.57 (7)	4.66 (7)	N/A	N/A	4.44 (6)	12/01/2014
Blmbg. Barc. U.S. Corp High Yield	10.18 (29)	-3.80 (24)	0.03 (22)	3.69 (19)	3.33 (12)	4.79 (6)	6.68 (4)	6.85 (3)	4.47 (5)	
IM U.S. High Yield Bonds (MF) Median	9.16	-4.86	-1.43	2.40	2.24	3.38	5.55	5.58	3.20	
Vanguard International Bond (VTIFX)	2.20 (79)	2.36 (4)	4.08 (8)	5.96 (9)	5.01 (7)	4.46 (7)	N/A	N/A	4.10 (4)	05/01/2015
Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)	2.31 (78)	2.53 (4)	4.34 (7)	6.17 (8)	5.21 (6)	4.66 (4)	N/A	N/A	4.08 (4)	
IM International Fixed Income (MF) Median	4.16	-0.99	-0.79	2.05	1.20	1.60	2.34	3.84	0.86	
REIT										
Vanguard Real Estate Index Fund (VGSNX)	13.44 (25)	-13.90 (44)	-6.93 (35)	2.22 (33)	2.24 (41)	5.38 (31)	N/A	N/A	8.61 (26)	10/01/2010
MSCI U.S. REIT Index	11.70 (56)	-18.45 (83)	-12.87 (82)	-1.63 (78)	0.08 (75)	4.08 (63)	9.06 (49)	5.99 (46)	7.93 (49)	
IM Real Estate Sector (MF) Median	11.87	-14.35	-8.09	1.18	1.88	4.63	8.98	5.89	7.85	

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.



Comparative Performance

Total Fund

As of June 30, 2020

	QTR	FYTD	1 YR	2 YR	3 YR	5 YR	10 YR	15 YR	Inception	Inception Date
Total Fund - Domestic Equity	20.38	-9.07	0.24	3.49	6.74	7.96	N/A	N/A	7.76	07/01/2014
Total Domestic Large Cap Equity	18.53	-5.99	3.74	7.07	9.05	9.73	N/A	N/A	9.43	06/01/2014
S&P 500 Index	20.54	-3.08	7.51	8.95	10.73	10.73	13.99	8.83	10.39	
Large Cap Growth	29.04	11.32	24.88	17.34	18.01	14.85	N/A	N/A	14.30	06/01/2014
Vanguard Growth Index Hybrid	29.06	11.36	24.84	17.43	18.08	14.97	16.85	11.10	14.31	
Russell 1000 Growth Index	27.84	9.81	23.28	17.27	18.99	15.89	17.23	11.32	15.13	
Large Cap Core	16.59	-8.49	0.71	5.61	7.67	8.98	N/A	N/A	8.55	06/01/2014
S&P 500 Index	20.54	-3.08	7.51	8.95	10.73	10.73	13.99	8.83	10.39	
Large Cap Value	12.76	-15.42	-7.41	0.84	3.87	6.44	N/A	N/A	6.61	06/01/2014
Vanguard Value Index Hybrid	12.73	-15.46	-7.45	0.86	3.89	6.47	11.28	6.94	6.55	
Russell 1000 Value Index	14.29	-16.26	-8.84	-0.56	1.82	4.64	10.41	6.24	4.94	
Mid Cap Equity	24.04	-12.81	-6.75	-2.00	2.49	4.58	N/A	N/A	5.69	06/01/2014
Mid Cap Hybrid Index	24.07	-12.78	-6.70	-2.11	2.42	4.56	N/A	N/A	5.68	
Small Cap Equity	22.08	-17.74	-11.16	-7.64	-0.20	2.83	N/A	N/A	4.02	06/01/2014
Small Cap Hybrid Index	21.94	-17.85	-11.29	-7.61	-0.19	2.83	10.20	N/A	4.00	
Total Fund - International Equity	19.40	-12.28	-5.87	-2.46	0.59	1.94	N/A	N/A	0.96	07/01/2014
Small Cap - International Equity	24.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	24.10	04/01/2020
FTSE Global ex U.S. Small Cap Index (Net)	23.05	-13.46	-6.08	-6.41	-1.23	1.38	N/A	N/A	23.05	
Developed Markets - International Equity	17.49	-9.50	-2.91	-1.46	1.39	2.77	N/A	N/A	1.73	06/01/2014
Vanguard Spliced Developed ex U.S. Index (Net)	16.40	-11.33	-4.71	-2.46	0.83	2.39	5.93	4.22	1.46	
Emerging Markets - International Equity	19.89	-9.56	-2.90	0.13	2.14	2.19	N/A	N/A	1.81	06/01/2014
FTSE Emerging Mkts All Cap China A Inclusion Index	19.11	-9.67	-2.86	0.20	2.37	2.17	3.60	N/A	2.52	
MSCI Emerging Markets (Net) Index	18.08	-9.78	-3.39	-1.12	1.90	2.86	3.27	6.33	1.90	

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Returns are expressed as percentages.



Comparative Performance

Total Fund

As of June 30, 2020

	QTR	FYTD	1 YR	2 YR	3 YR	5 YR	10 YR	15 YR	Inception	Inception Date
Total Fund - Fixed Income	4.39	3.01	5.75	6.72	4.46	3.96	N/A	N/A	3.33	07/01/2014
Short - Term Fixed Income	1.79	4.07	5.28	5.26	3.41	2.56	N/A	N/A	2.29	06/01/2014
Bloomberg Barclays 1-5 Year Gov/Credit Idx	1.77	3.98	5.43	5.39	3.49	2.63	2.22	3.11	2.37	
High Yield - Fixed Income	8.04	-3.40	0.88	4.86	3.57	4.49	N/A	N/A	4.40	11/01/2014
Blmbg. Barc. U.S. Corp High Yield	10.18	-3.80	0.03	3.69	3.33	4.79	6.68	6.85	4.27	
Non-US Fixed Income	2.20	2.36	4.08	5.96	5.01	4.46	N/A	N/A	4.20	05/01/2015
Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)	2.31	2.53	4.34	6.17	5.21	4.66	N/A	N/A	4.08	
Real Estate	13.44	-13.90	-6.93	2.22	2.24	5.38	N/A	N/A	5.05	06/01/2014
MSCI U.S. REIT Index	11.70	-18.45	-12.87	-1.63	0.08	4.08	9.06	5.99	4.20	

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.



Comparative Performance

Total Fund

As of June 30, 2020

Comparative Performance Trailing Returns		2019		2018		2017		2016		2015		2014		2013		2012		2011		2010	
Total Fund Performance		20.21		-5.76		13.91		8.58		-0.72		8.24		18.07		13.88		1.26		12.93	
Total Fund Policy		19.35		-4.87		13.67		8.48		-0.69		8.15		16.99		14.31		2.15		15.28	
Allocation Index		19.06		-5.06		13.50		7.04		-0.43		N/A		N/A		N/A		N/A		N/A	
Domestic Equity																					
Total Fund Domestic Equity		29.77		-7.16		20.07		13.45		-0.10		N/A		33.56		16.18		-0.54		17.92	
Twin Capital Low Volatility		29.24 (58)		-5.37 (54)		19.16 (79)		16.03 (10)		-1.31 (79)		12.91 (59)		N/A		N/A		N/A		N/A	
S&P 500 Index		31.49 (35)		-4.38 (37)		21.83 (51)		11.96 (34)		1.38 (52)		13.69 (44)		32.39 (59)		16.00 (46)		2.11 (50)		15.06 (45)	
IM U.S. Large Cap Core Equity (SA+CF) Median		29.97		-5.16		21.84		10.54		1.43		13.42		32.96		15.66		2.03		14.84	
Twin Capital Enhanced Index		29.73 (57)		-6.43 (66)		20.37 (75)		11.66 (60)		2.42 (22)		13.42 (65)		N/A		N/A		N/A		N/A	
S&P 500 Index		31.49 (33)		-4.38 (22)		21.83 (62)		11.96 (59)		1.38 (40)		13.69 (60)		32.39 (70)		16.00 (62)		2.11 (65)		15.06 (43)	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median		30.01		-5.35		22.45		12.45		0.94		14.12		33.43		16.52		2.86		14.74	
Vanguard Growth Index (VIGIX)		37.25 (13)		-3.32 (77)		27.82 (66)		6.11 (17)		3.23 (78)		13.70 (15)		32.44 (66)		16.99 (31)		1.80 (16)		N/A	
Vanguard Growth Index Hybrid		37.31 (13)		-3.34 (77)		27.86 (65)		6.16 (16)		3.38 (76)		13.69 (15)		32.51 (65)		17.14 (29)		1.95 (15)		17.27 (28)	
Russell 1000 Growth Index		36.39 (21)		-1.51 (58)		30.21 (41)		7.08 (8)		5.67 (54)		13.05 (22)		33.48 (55)		15.26 (46)		2.64 (11)		16.71 (33)	
IM U.S. Large Cap Growth Equity (MF) Median		33.38		-0.87		29.46		2.18		6.01		10.47		33.94		14.81		-1.76		15.15	
Vanguard Value Index (VIVIX)		25.83 (54)		-5.42 (13)		17.14 (37)		16.87 (22)		-0.81 (11)		13.20 (11)		33.01 (43)		15.12 (61)		1.17 (21)		14.45 (32)	
Vanguard Value Index Hybrid		25.85 (54)		-5.40 (13)		17.16 (36)		16.93 (21)		-0.86 (11)		13.29 (10)		33.20 (40)		15.22 (59)		1.26 (21)		14.54 (31)	
Russell 1000 Value Index		26.54 (45)		-8.27 (36)		13.66 (77)		17.34 (19)		-3.83 (58)		13.45 (9)		32.53 (48)		17.51 (28)		0.39 (28)		15.51 (21)	
IM U.S. Large Cap Value Equity (MF) Median		26.07		-9.08		16.29		13.82		-3.54		10.81		32.30		15.84		-2.20		13.00	
Vanguard Mid-Cap 400 Index Fund I (VSPMX)		26.13 (71)		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	
S&P MidCap 400 Index		26.20 (70)		-11.08 (42)		16.24 (42)		20.74 (10)		-2.18 (31)		9.77 (40)		33.50 (61)		17.88 (25)		-1.73 (28)		26.64 (10)	
IM U.S. Mid Cap Core Equity (MF) Median		28.08		-11.52		15.44		14.23		-3.40		8.91		35.08		15.84		-3.38		23.12	
Vanguard Small-Cap 600 Index I (VSMSX)		22.74 (62)		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	
S&P SmallCap 600 Index		22.78 (62)		-8.48 (10)		13.23 (40)		26.56 (14)		-1.97 (23)		5.76 (34)		41.31 (18)		16.33 (33)		1.02 (9)		26.31 (41)	
IM U.S. Small Cap Core Equity (MF) Median		23.87		-12.68		12.38		21.34		-4.34		4.65		36.88		14.57		-3.75		25.52	

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.



Comparative Performance

Total Fund

As of June 30, 2020

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
International Equity										
Total Fund Performance - International Equity	21.55	-14.50	28.00	5.26	-5.56	N/A	13.97	19.18	-16.04	7.09
Vanguard FTSE AW ex-US SC Index (VFSNX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE Global ex U.S. Small Cap Index (Net)	21.55 (32)	-18.91 (48)	29.78 (65)	3.93 (34)	-0.61 (85)	-4.34 (24)	N/A	N/A	N/A	N/A
IM International SMID Cap Core Equity (MF) Median	20.74	-19.09	32.40	-0.71	5.09	-6.28	24.95	20.35	-17.32	21.91
Vanguard Developed Markets Index (VTMNX)	22.14 (47)	-14.49 (36)	26.46 (46)	2.46 (31)	-0.19 (45)	-5.62 (55)	22.07 (36)	18.92 (29)	-12.54 (41)	8.51 (74)
Vanguard Spliced Developed ex U.S. Index (Net)	22.34 (45)	-14.79 (39)	26.31 (48)	2.29 (32)	-0.28 (46)	-4.85 (46)	22.71 (30)	17.32 (58)	-12.14 (34)	7.75 (79)
MSCI EAFE (Net) Index	22.01 (48)	-13.79 (25)	25.03 (64)	1.00 (47)	-0.81 (53)	-4.90 (46)	22.78 (29)	17.32 (58)	-12.14 (34)	7.75 (79)
IM International Multi-Cap Equity (MF) Median	21.83	-15.74	25.93	0.68	-0.67	-5.26	20.56	17.78	-13.47	10.93
Vanguard Emerging Markets Index (VEMIX)	20.37 (49)	-14.54 (30)	31.43 (70)	11.76 (26)	-15.39 (68)	0.72 (19)	-5.06 (79)	18.06 (57)	-18.73 (40)	N/A
FTSE Emerging Mkts All Cap China A Inclusion Index	20.81 (47)	-14.49 (30)	31.46 (70)	10.66 (34)	-13.28 (47)	2.96 (10)	-2.82 (60)	18.48 (54)	-19.81 (52)	20.03 (35)
MSCI Emerging Markets (Net) Index	18.44 (62)	-14.58 (31)	37.28 (42)	11.19 (30)	-14.92 (63)	-2.19 (43)	-2.60 (58)	18.23 (56)	-18.42 (36)	18.88 (44)
IM Emerging Markets Equity (MF) Median	20.08	-16.40	35.37	8.35	-13.66	-2.92	-1.42	18.78	-19.51	18.32
Fixed Income										
Total Fund Performance - Fixed Income	10.16	-0.71	3.82	4.79	-0.18	N/A	-3.65	7.39	12.20	6.03
Vanguard Short Term Bond Index (VBITX)	4.84 (24)	1.37 (42)	1.19 (72)	1.51 (60)	0.98 (9)	1.32 (12)	N/A	N/A	N/A	N/A
Bloomberg Barclays 1-5 Year Gov/Credit Idx	5.01 (18)	1.38 (41)	1.27 (67)	1.56 (56)	0.97 (9)	1.42 (10)	0.28 (64)	2.24 (70)	3.14 (4)	4.08 (36)
IM U.S. Short Term Investment Grade (MF) Median	4.12	1.25	1.47	1.69	0.28	0.67	0.48	3.12	1.08	3.51
Vanguard Total Bond Index (VBTIX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Aggregate Index	8.72 (53)	0.01 (18)	3.54 (54)	2.65 (61)	0.55 (20)	5.97 (26)	-2.02 (53)	4.21 (81)	7.84 (11)	6.54 (70)
IM U.S. Broad Market Core Fixed Income (MF) Median	8.76	-0.63	3.59	2.86	0.09	5.55	-1.98	5.99	6.65	7.25
Vanguard High Yield Bond Fund (VWEAX)	15.90 (8)	-2.87 (49)	7.13 (34)	11.27 (80)	-1.31 (17)	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Corp High Yield	14.32 (34)	-2.08 (28)	7.50 (24)	17.13 (7)	-4.47 (62)	2.45 (24)	7.44 (30)	15.81 (29)	4.98 (16)	15.12 (28)
IM U.S. High Yield Bonds (MF) Median	13.51	-2.91	6.65	13.49	-3.85	1.49	6.61	14.72	3.32	14.04
Vanguard International Bond (VTIFX)	7.89 (24)	3.00 (2)	2.43 (86)	4.69 (35)	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. Global Agg ex-USD Fit Adj RIC Cpd (H)	8.06 (24)	3.16 (1)	2.57 (82)	4.90 (33)	1.34 (3)	9.14 (9)	1.26 (16)	N/A	N/A	N/A
IM International Fixed Income (MF) Median	6.60	-2.68	9.80	3.34	-5.82	0.63	-3.74	7.43	2.56	7.26
REIT										
Vanguard Real Estate Index Fund (VGSNX)	29.02 (34)	-5.93 (54)	4.93 (56)	8.51 (19)	2.56 (58)	30.17 (35)	2.46 (28)	17.64 (32)	8.73 (35)	N/A
MSCI U.S. REIT Index	25.84 (64)	-4.57 (30)	5.07 (52)	8.60 (19)	2.52 (58)	30.38 (30)	2.47 (28)	17.78 (29)	8.68 (37)	28.47 (32)
IM Real Estate Sector (MF) Median	27.38	-5.75	5.20	6.17	2.91	29.43	1.64	16.89	7.86	27.46

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.



Comparative Performance

Total Fund

As of June 30, 2020

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Fund - Domestic Equity	29.77	-7.16	20.07	13.45	-0.10	N/A	33.56	16.18	-0.54	17.92
Total Domestic Large Cap Equity	30.31	-5.16	20.67	13.09	1.00	N/A	N/A	N/A	N/A	N/A
S&P 500 Index	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.06
Large Cap Growth	37.36	-3.51	27.82	5.87	3.78	N/A	N/A	N/A	N/A	N/A
Vanguard Growth Index Hybrid	37.31	-3.34	27.86	6.16	3.38	13.69	32.51	17.14	1.95	17.27
Russell 1000 Growth Index	36.39	-1.51	30.21	7.08	5.67	13.05	33.48	15.26	2.64	16.71
Large Cap Core	29.41	-5.71	19.57	14.29	0.18	N/A	N/A	N/A	N/A	N/A
S&P 500 Index	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.06
Large Cap Value	25.83	-5.50	17.14	16.87	-0.27	N/A	N/A	N/A	N/A	N/A
Vanguard Value Index Hybrid	25.85	-5.40	17.16	16.93	-0.86	13.29	33.20	15.22	1.26	14.54
Russell 1000 Value Index	26.54	-8.27	13.66	17.34	-3.83	13.45	32.53	17.51	0.39	15.51
Mid Cap Equity	26.13	-10.44	19.29	11.23	-1.31	N/A	N/A	N/A	N/A	N/A
Mid Cap Hybrid Index	26.20	-10.67	19.30	11.25	-1.28	13.83	35.21	16.04	-1.91	N/A
Small Cap Equity	22.74	-10.45	16.25	18.32	-3.63	N/A	N/A	N/A	N/A	N/A
Small Cap Hybrid Index	22.78	-10.32	16.24	18.26	-3.68	7.54	37.77	18.20	-2.75	27.82
Total Fund - International Equity	21.55	-14.50	28.00	5.26	-5.56	N/A	13.97	19.18	-16.04	7.09
Small Cap - International Equity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE Global ex U.S. Small Cap Index (Net)	21.55	-18.91	29.78	3.93	-0.61	-4.34	N/A	N/A	N/A	N/A
Developed Markets - International Equity	22.14	-14.49	26.46	2.46	-0.41	N/A	N/A	N/A	N/A	N/A
Vanguard Spliced Developed ex U.S. Index (Net)	22.34	-14.79	26.31	2.29	-0.28	-4.85	22.71	17.32	-12.14	7.75
Emerging Markets - International Equity	20.37	-14.54	31.43	11.76	-15.80	N/A	N/A	N/A	N/A	N/A
FTSE Emerging Mkts All Cap China A Inclusion Index	20.81	-14.49	31.46	10.66	-13.28	2.96	-2.82	18.48	-19.81	20.03
MSCI Emerging Markets (Net) Index	18.44	-14.58	37.28	11.19	-14.92	-2.19	-2.60	18.23	-18.42	18.88

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.



Comparative Performance

Total Fund

As of June 30, 2020

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Fund - Fixed Income	10.16	-0.71	3.82	4.79	-0.18	N/A	-3.65	7.39	12.20	6.03
Short - Term Fixed Income	4.71	1.37	1.19	1.51	0.98	N/A	N/A	N/A	N/A	N/A
Bloomberg Barclays 1-5 Year Gov/Credit Idx	5.01	1.38	1.27	1.56	0.97	1.42	0.28	2.24	3.14	4.08
High Yield - Fixed Income	15.90	-2.87	6.65	10.89	-1.28	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. U.S. Corp High Yield	14.32	-2.08	7.50	17.13	-4.47	2.45	7.44	15.81	4.98	15.12
Non-US Fixed Income	7.89	3.00	2.43	4.69	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)	8.06	3.16	2.57	4.90	1.34	9.14	1.26	N/A	N/A	N/A
Real Estate	29.02	-5.93	4.93	8.51	2.56	N/A	N/A	N/A	N/A	N/A
MSCI U.S. REIT Index	25.84	-4.57	5.07	8.60	2.52	30.38	2.47	17.78	8.68	28.47

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.



Multi Timeperiod Statistics
Butler County Employees Retirement Plan
As of June 30, 2020

Multi Timeperiod Statistics

	3 YR Return		3 YR Standard Deviation		3 YR Sharpe Ratio		5 YR Return		5 YR Standard Deviation		5 YR Sharpe Ratio	
Total Fund Performance	4.70		11.44		0.31		5.40		9.87		0.46	
Total Fund Policy	4.96		11.11		0.33		5.49		9.71		0.48	
Twin Capital Enhanced Index	8.96	(54)	16.63	(86)	0.49	(53)	9.36	(54)	14.58	(85)	0.61	(52)
S&P 500 Index	10.73		16.71		0.59		10.73		14.63		0.69	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median	9.14		17.10		0.50		9.63		14.90		0.62	
Twin Capital Low Volatility	7.02	(76)	15.83	(75)	0.40	(73)	8.87	(63)	13.68	(79)	0.61	(57)
S&P 500 Index	10.73		16.71		0.59		10.73		14.63		0.69	
IM U.S. Large Cap Core Equity (SA+CF) Median	9.58		16.72		0.52		9.63		14.64		0.63	
Vanguard Growth Index (VIGIX)	18.06	(50)	17.57	(43)	0.93	(49)	14.93	(41)	15.71	(53)	0.89	(41)
Vanguard Growth Index Hybrid	18.08		17.58		0.93		14.97		15.69		0.90	
IM U.S. Large Cap Growth Equity (MF) Median	18.03		17.43		0.93		14.47		15.76		0.86	
Vanguard Value Index (VIVIX)	3.90	(21)	17.00	(71)	0.21	(21)	6.45	(11)	14.78	(84)	0.42	(10)
Vanguard Value Index Hybrid	3.89		17.00		0.21		6.47		14.77		0.42	
IM U.S. Large Cap Value Equity (MF) Median	2.13		17.92		0.11		4.28		15.67		0.27	
Vanguard S&P MC400;Inst (VSPMX) *	2.33	(51)	21.57	(25)	0.14	(49)	5.15	(27)	18.42	(30)	0.30	(27)
S&P MidCap 400 Index	2.39		21.57		0.14		5.22		18.42		0.31	
IM U.S. Mid Cap Core Equity (MF) Median	2.34		20.09		0.13		3.60		17.35		0.23	
Vanguard S&P SC600;Inst (VSMSX) *	0.59	(34)	23.07	(51)	0.07	(32)	4.51	(15)	20.16	(45)	0.27	(16)
S&P SmallCap 600 Index	0.56		23.07		0.07		4.48		20.17		0.26	
IM U.S. Small Cap Core Equity (MF) Median	-0.91		23.07		0.00		2.33		20.10		0.16	

* Mutual fund returns were used for this report if 3 & 5 year client specific results were not available.
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Multi Timeperiod Statistics
Butler County Employees Retirement Plan
As of June 30, 2020

	3 YR Return		3 YR Standard Deviation		3 YR Sharpe Ratio		5 YR Return		5 YR Standard Deviation		5 YR Sharpe Ratio	
Vanguard FTSEExUSSC;Ins (VFSNX) *	-0.80	(71)	19.34	(32)	-0.03	(71)	1.84	(76)	16.70	(44)	0.13	(76)
FTSE Global ex U.S. Small Cap Index (Net)	-1.23		19.20		-0.05		1.38		16.80		0.10	
IM International SMID Cap Growth Equity (MF) Median	2.35		18.65		0.13		3.99		16.64		0.26	
Vanguard Developed Markets Index (VTMNX)	0.92	(48)	15.99	(58)	0.03	(47)	2.49	(42)	14.59	(58)	0.16	(42)
Vanguard Spliced Developed ex U.S. Index (Net)	0.83		15.69		0.02		2.39		14.73		0.16	
IM International Multi-Cap Equity (MF) Median	0.77		16.29		0.02		1.99		14.78		0.13	
Vanguard Emerging Markets Index (VEMIX)	2.14	(42)	18.38	(67)	0.11	(43)	2.19	(57)	17.54	(59)	0.15	(58)
FTSE Emerging Mkts All Cap China A Inclusion Index	2.37		18.10		0.12		2.17		17.64		0.14	
IM Emerging Markets Equity (MF) Median	1.15		18.87		0.06		2.57		17.80		0.17	
Vanguard Short Term Bond Index (VBITX)	3.45	(2)	1.49	(77)	1.13	(1)	2.58	(11)	1.46	(71)	0.99	(3)
Bloomberg Barclays 1-5 Year Gov/Credit Idx	3.49		1.53		1.13		2.63		1.47		1.02	
IM U.S. Short Term Investment Grade (MF) Median	2.35		2.17		0.25		1.91		1.88		0.41	
Vanguard Tot Bd;Inst (VBTIX) *	5.36	(22)	3.27	(83)	1.08	(8)	4.33	(28)	3.16	(75)	1.00	(14)
Blmbg. Barc. U.S. Aggregate Index	5.32		3.23		1.09		4.30		3.05		1.03	
IM U.S. Broad Market Core Fixed Income (MF) Median	4.91		3.75		0.83		4.05		3.38		0.85	
Vanguard High Yield Bond Fund (VWEAX)	3.57	(7)	7.79	(76)	0.26	(7)	4.66	(7)	6.74	(80)	0.53	(5)
Vanguard High Yield Corporate Composite Index	4.13		7.62		0.34		4.89		6.79		0.56	
IM U.S. High Yield Bonds (MF) Median	2.24		8.64		0.10		3.38		7.66		0.32	
Vanguard Tot Intl BI;Inst (VTIFX) *	5.01	(7)	3.03	(96)	1.05	(2)	4.46	(7)	2.93	(98)	1.10	(3)
Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)	5.21		3.00		1.12		4.66		2.93		1.17	
IM International Fixed Income (MF) Median	1.20		6.24		-0.01		1.60		7.06		0.09	
Vanguard Real Estate Index Fund (VGSNX)	2.24	(41)	17.59	(31)	0.12	(41)	5.38	(31)	16.28	(26)	0.33	(34)
MSCI U.S. REIT Index	0.08		18.61		0.01		4.08		16.95		0.26	
IM Real Estate Sector (MF) Median	1.88		16.88		0.09		4.63		15.72		0.30	

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All performance is reported net of fees.



Multi Timeperiod Statistics
Butler County Employees Retirement Plan
As of June 30, 2020

Multi Timeperiod Statistics

	10 YR Return		10 YR Standard Deviation		10 YR Sharpe Ratio		15 YR Return		15 YR Standard Deviation		15 YR Sharpe Ratio	
Total Fund Performance	8.40		10.60		0.76		6.36		10.91		0.50	
Total Fund Policy	8.79		10.57		0.79		6.65		10.98		0.52	
Twin Capital Enhanced Index	N/A		N/A		N/A		N/A		N/A		N/A	
S&P 500 Index	13.99		14.84		0.93		8.83		16.30		0.52	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median	13.93		15.20		0.89		9.09		16.53		0.54	
Twin Capital Low Volatility	N/A		N/A		N/A		N/A		N/A		N/A	
S&P 500 Index	13.99		14.84		0.93		8.83		16.30		0.52	
IM U.S. Large Cap Core Equity (SA+CF) Median	13.86		15.15		0.90		9.03		16.36		0.54	
Vanguard Growth Index (VIGIX)	16.78	(29)	16.24	(65)	1.01	(20)	N/A		N/A		N/A	
Vanguard Growth Index Hybrid	16.85		16.27		1.01		11.10		17.33		0.62	
IM U.S. Large Cap Growth Equity (MF) Median	15.98		16.58		0.95		10.39		17.89		0.58	
Vanguard Value Index (VIVIX)	11.23	(13)	14.84	(87)	0.76	(10)	N/A		N/A		N/A	
Vanguard Value Index Hybrid	11.28		14.84		0.76		6.94		16.60		0.41	
IM U.S. Large Cap Value Equity (MF) Median	9.72		15.84		0.63		5.86		17.29		0.35	
Vanguard S&P MC400;Inst (VSPMX)	N/A		N/A		N/A		N/A		N/A		N/A	
S&P MidCap 400 Index	11.34		18.92		0.64		8.21		19.59		0.44	
IM U.S. SMID Cap Core Equity (MF) Median	9.36		19.68		0.55		6.89		20.23		0.37	
Vanguard S&P SC600;Inst (VSMSX)	N/A		N/A		N/A		N/A		N/A		N/A	
S&P SmallCap 600 Index	11.24		20.02		0.61		7.65		20.62		0.40	
IM U.S. Small Cap Core Equity (MF) Median	9.00		20.56		0.51		6.34		21.11		0.34	

The Vanguard Emerging Market Stock Index Fund performance shown may be different than actual performance as the client was invested in the ETF before transferring to the mutual fund.
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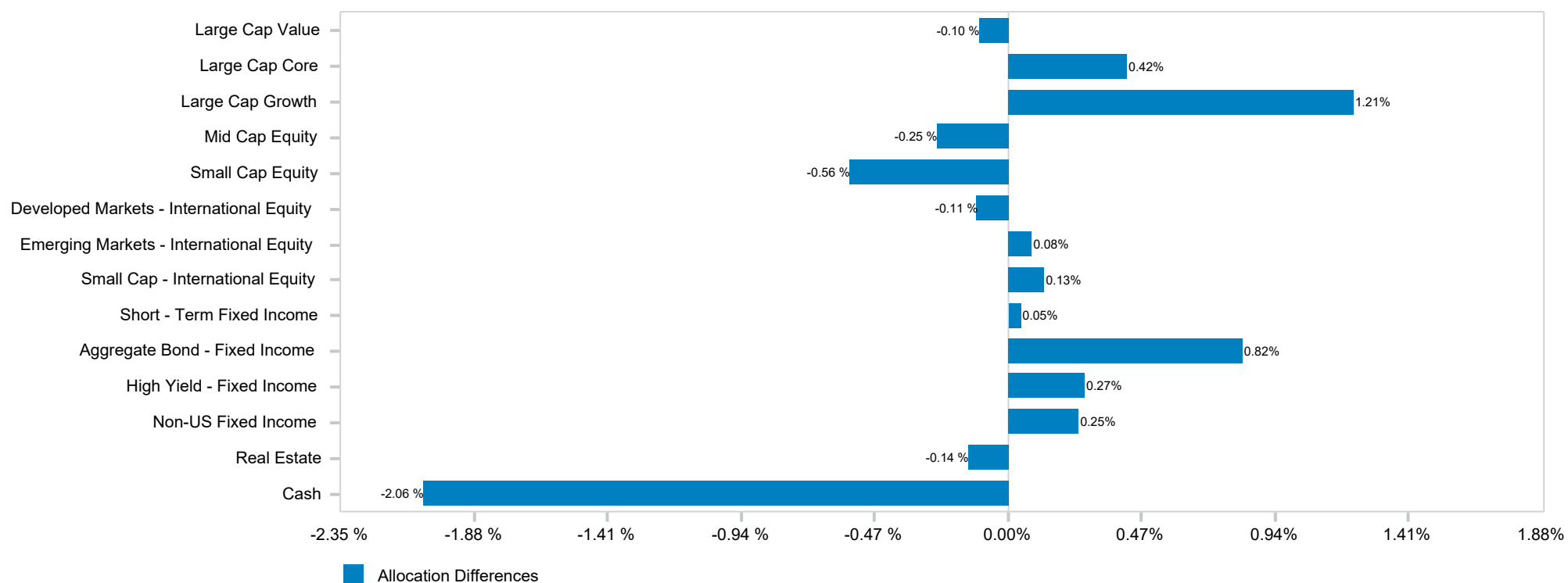


Multi Timeperiod Statistics
Butler County Employees Retirement Plan
As of June 30, 2020

	10 YR Return		10 YR Standard Deviation		10 YR Sharpe Ratio		15 YR Return		15 YR Standard Deviation		15 YR Sharpe Ratio	
Vanguard FTSExUSSC;Ins (VFSNX) *	5.51	(96)	19.81	(27)	0.34	(96)	N/A		N/A		N/A	
FTSE Global ex U.S. Small Cap Index (Net)	N/A		N/A		N/A		N/A		N/A		N/A	
IM International SMID Cap Growth Equity (MF) Median	8.11		19.45		0.48		6.46		22.25		0.35	
Vanguard Developed Markets Index (VTMNX)	6.13	(38)	16.67	(64)	0.41	(38)	N/A		N/A		N/A	
Vanguard Spliced Developed ex U.S. Index (Net)	5.93		16.28		0.40		4.22		18.92		0.25	
IM International Multi-Cap Equity (MF) Median	5.70		17.07		0.38		4.15		19.49		0.24	
Vanguard EM St I;Inst (VEMIX)	3.18	(50)	18.91	(67)	0.23	(50)	6.03	(51)	23.04	(63)	0.32	(51)
Vanguard Spliced Emerging Markets Index (Net)	3.11		18.43		0.23		6.07		22.88		0.32	
IM Emerging Markets Equity (MF) Median	3.16		19.30		0.23		6.06		23.35		0.32	
Vanguard Sh-Tm B;Inst (VBITX)	N/A		N/A		N/A		N/A		N/A		N/A	
Bloomberg Barclays 1-5 Year Gov/Credit Idx	2.22		1.49		1.13		3.11		1.95		0.96	
IM U.S. Short Term Investment Grade (MF) Median	1.75		1.73		0.65		2.33		2.41		0.43	
Vanguard Tot Bd;Inst (VBTIX)	3.79	(53)	3.22	(58)	1.00	(45)	4.40	(34)	3.32	(78)	0.92	(13)
Blmbg. Barc. U.S. Aggregate Index	3.82		3.11		1.05		4.39		3.24		0.94	
IM U.S. Broad Market Core Fixed Income (MF) Median	3.83		3.25		0.98		4.24		3.87		0.72	
Vanguard HY Corp;Adm (VWEAX)	6.45	(8)	6.63	(93)	0.88	(3)	6.01	(24)	8.42	(92)	0.57	(5)
Blmbg. Barc. U.S. Corp High Yield	6.68		7.94		0.77		6.85		11.08		0.53	
IM U.S. High Yield Bonds (MF) Median	5.55		7.94		0.64		5.58		10.29		0.45	
Vanguard Tot Intl BI;Inst (VTIFX)	N/A		N/A		N/A		N/A		N/A		N/A	
Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)	N/A		N/A		N/A		N/A		N/A		N/A	
IM International Fixed Income (MF) Median	2.34		7.44		0.26		3.84		8.05		0.32	
Vanguard RE Idx;Inst (VGSNX)	9.72	(29)	16.14	(25)	0.62	(34)	6.59	(25)	23.21	(32)	0.34	(26)
MSCI U.S. REIT Index	9.06		16.55		0.58		5.99		23.64		0.32	
IM Real Estate Sector (MF) Median	8.98		15.60		0.60		5.89		22.79		0.32	

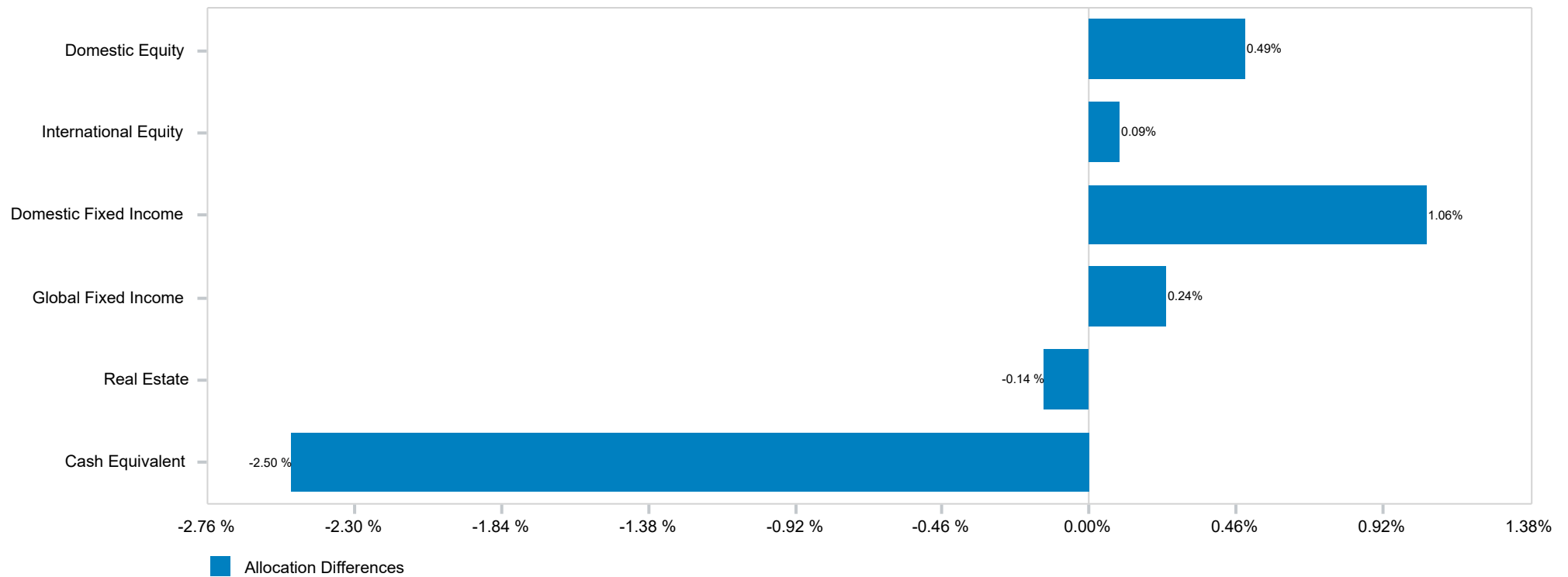
The Vanguard Emerging Market Stock Index Fund performance shown may be different than actual performance as the client was invested in the ETF before transferring to the mutual fund.
All performance is reported net of fees.





Asset Allocation Compliance

	Current Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)
Total Fund	100.00	100.00	N/A	N/A
Large Cap Value	4.90	5.00	0.00	10.00
Large Cap Core	15.42	15.00	10.00	20.00
Large Cap Growth	6.21	5.00	0.00	10.00
Mid Cap Equity	9.75	10.00	5.00	15.00
Small Cap Equity	4.44	5.00	0.00	10.00
Developed Markets - International Equity	7.39	7.50	5.00	15.00
Emerging Markets - International Equity	5.08	5.00	0.00	10.00
Small Cap - International Equity	2.63	2.50	0.00	5.00
Short - Term Fixed Income	2.55	2.50	0.00	5.00
Aggregate Bond - Fixed Income	20.82	20.00	10.00	30.00
High Yield - Fixed Income	10.27	10.00	5.00	15.00
Non-US Fixed Income	5.25	5.00	0.00	10.00
Real Estate	4.86	5.00	0.00	10.00
Cash	0.44	2.50	0.00	5.00



Asset Allocation Compliance

	Current Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)
Domestic Equity	40.49	40.00	15.00	65.00
International Equity	15.09	15.00	5.00	25.00
Domestic Fixed Income	33.56	32.50	15.00	50.00
Global Fixed Income	5.24	5.00	0.00	10.00
Real Estate	4.86	5.00	0.00	10.00
Cash Equivalent	0.00	2.50	0.00	5.00
Total Fund	100.00	100.00	N/A	N/A

1. Over most periods of time, the following investment managers have met performance expectations net of fees:

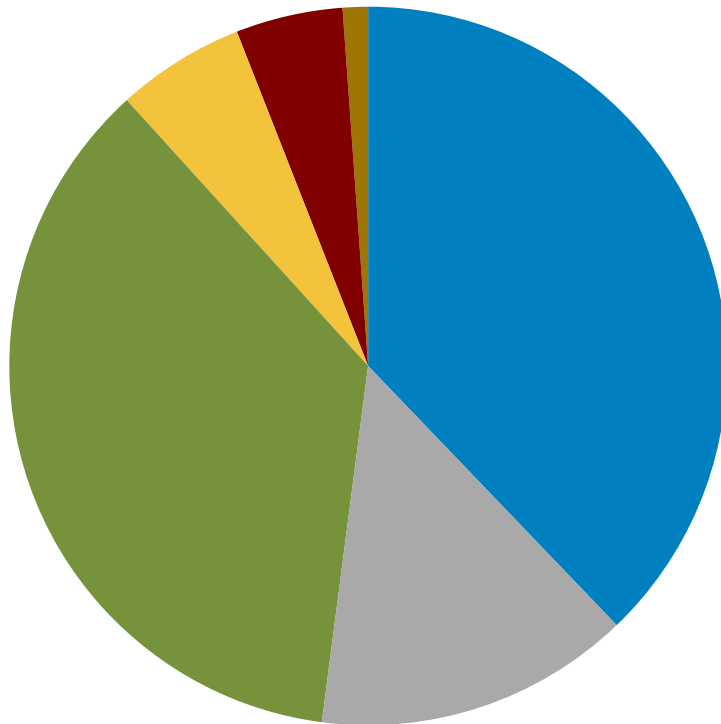
- Twin Capital Management Low Volatility.
- Vanguard Growth Index Mutual Fund.
- Vanguard Growth Index ETF.
- Vanguard Value Index Mutual Fund.
- Vanguard Mid Cap Index Mutual Fund.
- Vanguard Small Cap Index Mutual Fund.
- Vanguard Developed Markets Index Mutual Fund.
- Vanguard Emerging Markets Mutual Fund.
- Vanguard Total Return Bond Mutual Fund.
- Vanguard Short-Term Fixed Income Index Mutual Fund.
- Vanguard REIT Index Mutual Fund.

2. Over most periods of time, the following investment managers have trailed performance expectations net of fees:

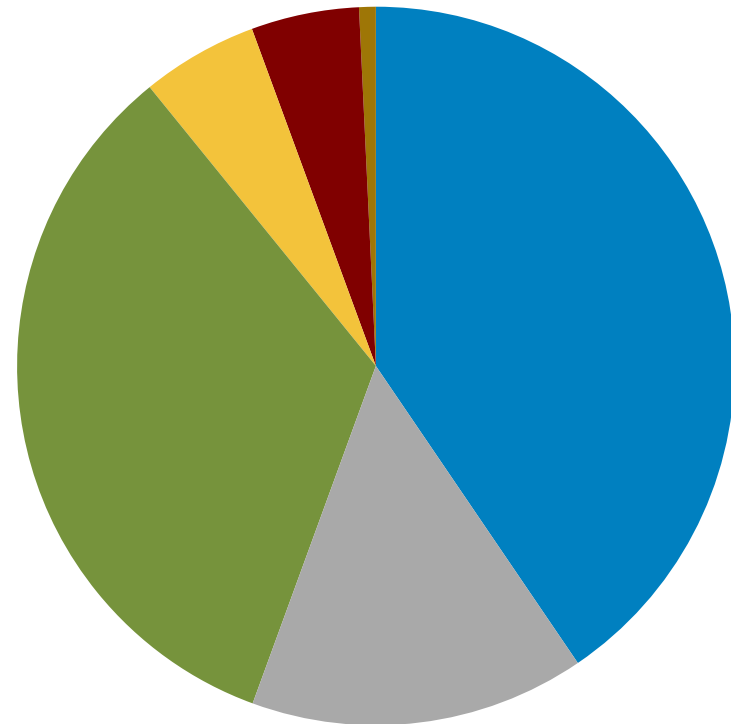
- Twin Capital Management Enhanced Index. The Board has communicated their expectations with Twin Capital Management. Twin presented to the Board in 2018. The Board should consider inviting Twin to the third quarter meeting.

3. **All performance in this report is Net of Fees.**

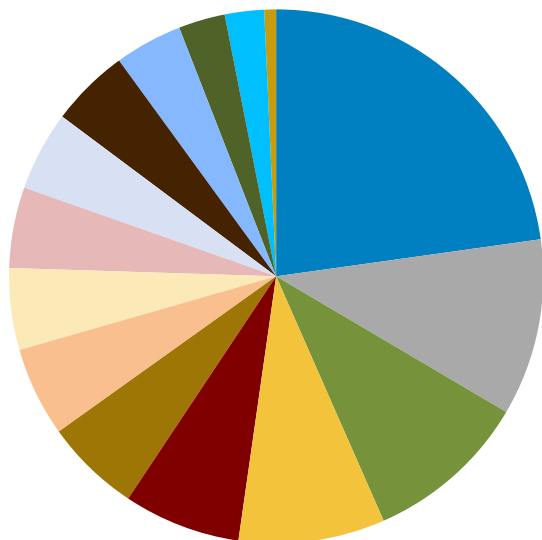
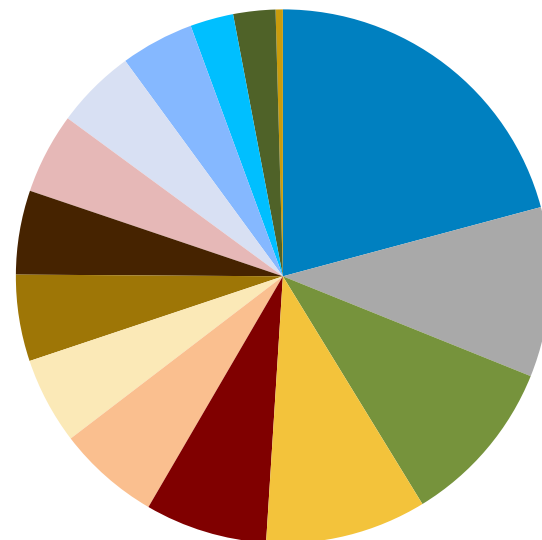
**Asset Allocation By Segment as of
March 31, 2020 : \$189,922,817**



**Asset Allocation By Segment as of
June 30, 2020 : \$213,897,373**



Allocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	71,843,313	37.8	Domestic Equity	86,607,682	40.5
International Equity	27,039,202	14.2	International Equity	32,285,572	15.1
Domestic Fixed Income	68,739,831	36.2	Domestic Fixed Income	71,776,163	33.6
Global Fixed Income	10,972,084	5.8	Global Fixed Income	11,214,313	5.2
Real Estate	9,163,037	4.8	Real Estate	10,394,421	4.9
Cash	2,165,349	1.1	Cash	1,619,221	0.8

Asset Allocation By Manager as of
March 31, 2020 : \$189,922,817Asset Allocation By Manager as of
June 30, 2020 : \$213,897,373

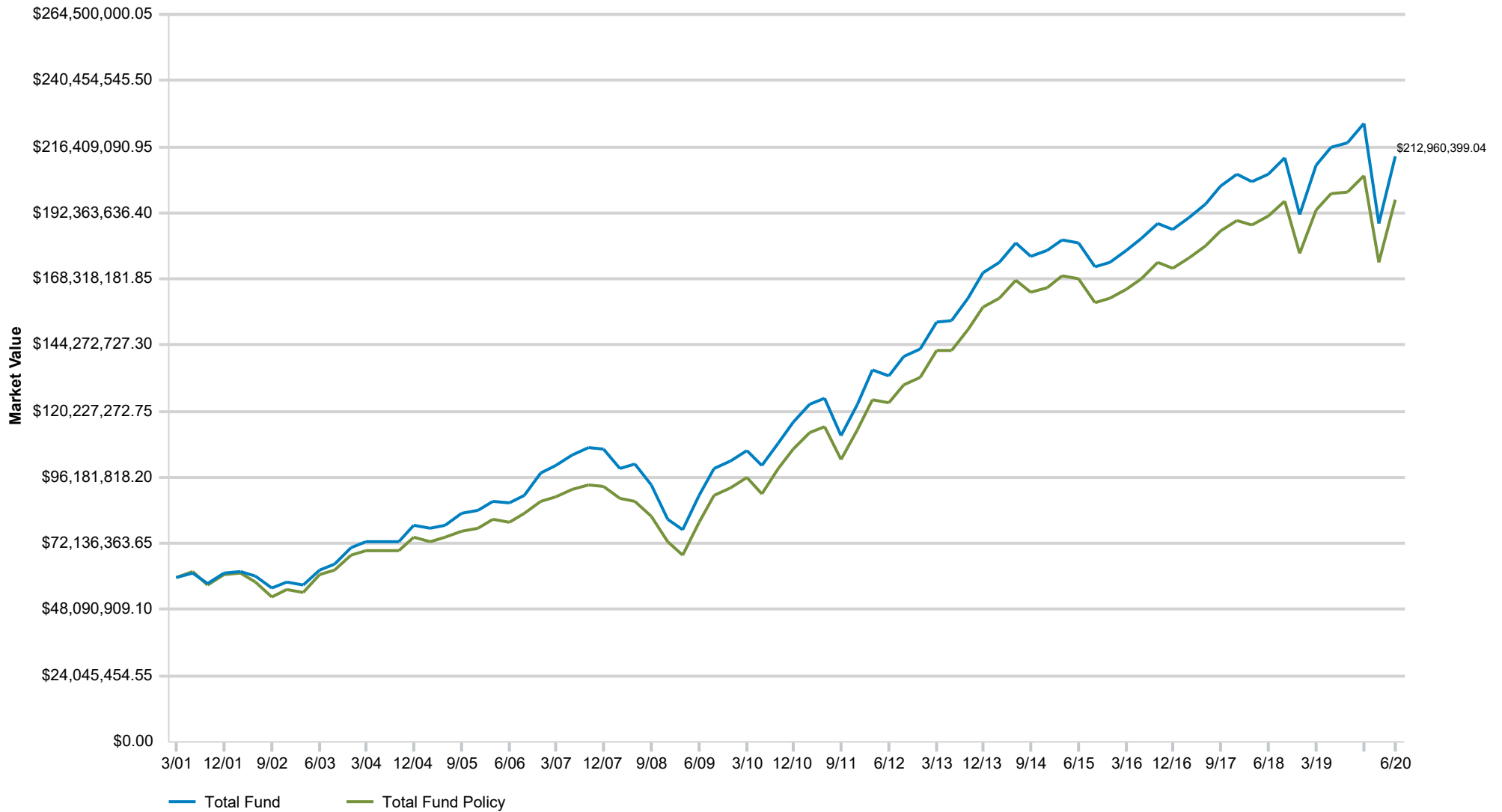
Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
Vanguard Total Bond Index (VBTIX)	43,252,170	22.8	Vanguard Total Bond Index (VBTIX)	44,541,994	20.8
Vanguard High Yield Bond Fund (VWEAX)	20,334,015	10.7	Vanguard High Yield Bond Fund (VWEAX)	21,968,102	10.3
Twin Capital Low Volatility	18,859,861	9.9	Twin Capital Low Volatility	21,741,529	10.2
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	16,813,409	8.9	Vanguard Mid-Cap 400 Index Fund I (VSPMX)	20,855,752	9.8
Vanguard Developed Markets Index (VTMNX)	13,447,374	7.1	Vanguard Developed Markets Index (VTMNX)	15,799,971	7.4
Vanguard International Bond (VTIFX)	10,981,953	5.8	Vanguard Growth Index (VIGIX)	13,289,539	6.2
Vanguard Growth Index (VIGIX)	10,298,847	5.4	Twin Capital Enhanced Index	11,239,684	5.3
Twin Capital Enhanced Index	9,403,515	5.0	Vanguard International Bond (VTIFX)	11,223,591	5.2
Vanguard Value Index (VIVIX)	9,287,435	4.9	Vanguard Emerging Markets Index (VEMIX)	10,869,787	5.1
Vanguard Real Estate Index Fund (VGSNX)	9,163,037	4.8	Vanguard Value Index (VIVIX)	10,472,769	4.9
Vanguard Emerging Markets Index (VEMIX)	9,066,767	4.8	Vanguard Real Estate Index Fund (VGSNX)	10,394,421	4.9
Vanguard Small-Cap 600 Index I (VSMSX)	7,777,179	4.1	Vanguard Small-Cap 600 Index I (VSMSX)	9,494,718	4.4
Vanguard Short Term Bond Index (VBITX)	5,352,302	2.8	Vanguard FTSE AW ex-US SC Index (VFSNX)	5,615,814	2.6
Vanguard FTSE AW ex-US SC Index (VFSNX)	4,525,062	2.4	Vanguard Short Term Bond Index (VBITX)	5,447,940	2.5
NMA	1,355,106	0.7	NMA	936,973	0.4
Cash	4,785	0.0	Cash	4,787	0.0

Asset Allocation Attributes

	Domestic Equity		International Equity		Domestic Fixed Income		Global Fixed Income		Real Estate		Cash		Total Fund	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Vanguard Value Index (VIVIX)	10,473	100.0	-	-	-	-	-	-	-	-	-	-	10,473	4.9
Vanguard Small-Cap 600 Index I (VSMX)	9,495	100.0	-	-	-	-	-	-	-	-	-	-	9,495	4.4
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	20,856	100.0	-	-	-	-	-	-	-	-	-	-	20,856	9.8
Vanguard Growth Index (VIGIX)	13,290	100.0	-	-	-	-	-	-	-	-	-	-	13,290	6.2
Twin Capital Low Volatility	21,412	98.5	-	-	-	-	-	-	-	-	329	1.5	21,742	10.2
Twin Capital Enhanced Index	11,083	98.6	-	-	-	-	-	-	-	-	157	1.4	11,240	5.3
Vanguard FTSE AW ex-US SC Index (VFSNX)	-	-	5,616	100.0	-	-	-	-	-	-	-	-	5,616	2.6
Vanguard Developed Markets Index (VTMNX)	-	-	15,800	100.0	-	-	-	-	-	-	-	-	15,800	7.4
Vanguard Emerging Markets Index (VEMIX)	-	-	10,870	100.0	-	-	-	-	-	-	-	-	10,870	5.1
Vanguard Short Term Bond Index (VBITX)	-	-	-	-	5,440	99.8	-	-	-	-	8	0.2	5,448	2.5
Vanguard Total Bond Index (VBTIX)	-	-	-	-	44,459	99.8	-	-	-	-	83	0.2	44,542	20.8
Vanguard International Bond (VTIFX)	-	-	-	-	-	-	11,214	99.9	-	-	9	0.1	11,224	5.2
Vanguard Real Estate Index Fund (VGSNX)	-	-	-	-	-	-	-	-	10,394	100.0	-	-	10,394	4.9
Cash	-	-	-	-	-	-	-	-	-	-	5	100.0	5	0.0
NMA	-	-	-	-	-	-	-	-	-	-	937	100.0	937	0.4
Total Fund	86,608	40.5	32,286	15.1	71,776	33.6	11,214	5.2	10,394	4.9	1,619	0.8	213,897	100.0



Schedule of Investable Assets



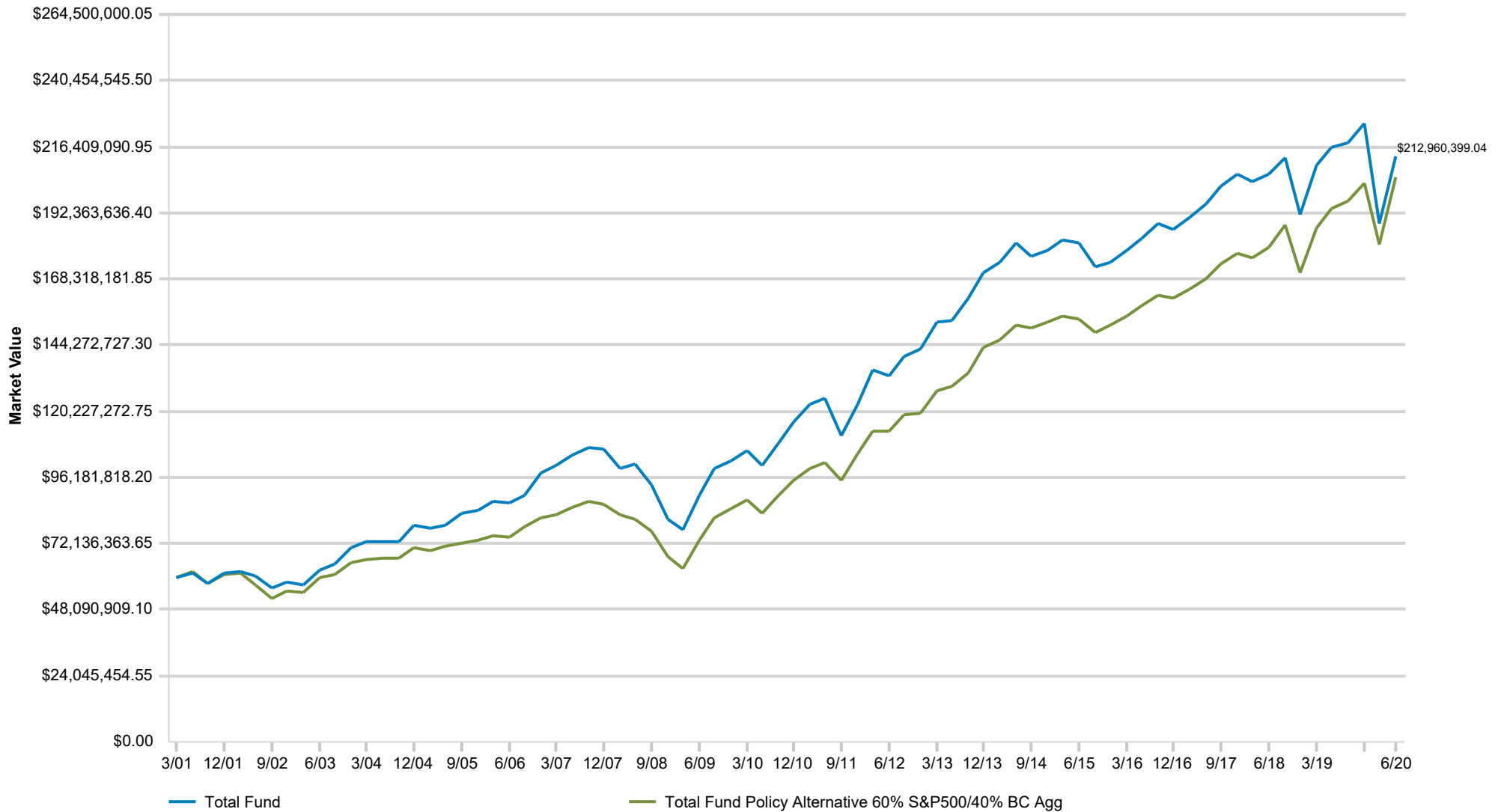
Schedule of Investable Assets

Periods Ending	Beginning Market Value \$	Net Cash Flow \$	Gain/Loss \$	Ending Market Value \$	%Return
Jan-2001 To Jun-2020	59,528,253	-10,993,579	164,425,725	212,960,399	221.75

Does not include Non-Measured Assets (NMA).



Schedule of Investable Assets



Schedule of Investable Assets

Periods Ending	Beginning Market Value \$	Net Cash Flow \$	Gain/Loss \$	Ending Market Value \$	%Return
Jan-2001 To Jun-2020	59,528,253	-10,993,579	164,425,725	212,960,399	221.75

Does not include Non-Measured Assets (NMA).



Fee Analysis
Total Fund
As of June 30, 2020

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Twin Capital Enhanced Index	0.35	11,239,684	39,339	0.35 % of Assets
Twin Capital Low Volatility	0.35	21,741,529	76,095	0.35 % of Assets
Vanguard Growth Index (VIGIX)	0.05	13,289,539	6,645	0.05 % of Assets
Vanguard Value Index (VIVIX)	0.05	10,472,769	5,236	0.05 % of Assets
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	0.08	20,855,752	16,685	0.08 % of Assets
Vanguard Small-Cap 600 Index I (VSMSX)	0.08	9,494,718	7,596	0.08 % of Assets
Vanguard FTSE AW ex-US SC Index (VFSNX)	0.11	5,615,814	6,177	0.11 % of Assets
Vanguard Developed Markets Index (VTMNX)	0.06	15,799,971	9,480	0.06 % of Assets
Vanguard Emerging Markets Index (VEMIX)	0.11	10,869,787	11,957	0.11 % of Assets
Vanguard Short Term Bond Index (VBITX)	0.05	5,447,940	2,724	0.05 % of Assets
Vanguard Total Bond Index (VBTIX)	0.04	44,541,994	17,817	0.04 % of Assets
Vanguard High Yield Bond Fund (VWEAX)	0.13	21,968,102	28,559	0.13 % of Assets
Vanguard International Bond (VTIFX)	0.07	11,223,591	7,857	0.07 % of Assets
Vanguard Real Estate Index Fund (VGSNX)	0.10	10,394,421	10,394	0.10 % of Assets
Total Fund Performance	0.12	212,960,399	246,560	

Does not include Non-Measured Assets (NMA).



Financial Reconciliation
Total Fund
as of June 30, 2020

Quarter To Date	Market Value 04/01/2020	Management Fees	Net Flows	Return On Investment	Market Value 06/30/2020
Domestic Equity					
Vanguard Value Index (VIVIX)	9,287,435	-	-	1,185,334	10,472,769
Vanguard Small-Cap 600 Index I (VSMX)	7,777,179	-	-	1,717,539	9,494,718
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	16,813,409	-	-	4,042,343	20,855,752
Vanguard Growth Index (VIGIX)	10,298,847	-	-	2,990,693	13,289,539
Twin Capital Low Volatility	18,859,861	-18,769	-	2,881,668	21,741,529
Twin Capital Enhanced Index	9,403,515	-9,596	-	1,836,169	11,239,684
International Equity					
Vanguard FTSE AW ex-US SC Index (VFSNX)	4,525,062	-	-	1,090,752	5,615,814
Vanguard Developed Markets Index (VTMNX)	13,447,374	-	-	2,352,598	15,799,971
Vanguard Emerging Markets Index (VEMIX)	9,066,767	-	-	1,803,020	10,869,787
Fixed Income					
Vanguard Short Term Bond Index (VBITX)	5,352,302	-	-	95,638	5,447,940
Vanguard Total Bond Index (VBTIX)	43,252,170	-	-	1,289,825	44,541,994
Vanguard High Yield Bond Fund (VWEAX)	20,334,015	-	-	1,634,087	21,968,102
Vanguard International Bond (VTIFX)	10,981,953	-	-	241,638	11,223,591
REIT					
Vanguard Real Estate Index Fund (VGSNX)	9,163,037	-	-	1,231,383	10,394,421
Cash	4,785	-	-	2	4,787
Total Fund Performance	188,567,711	-28,365	-	24,392,688	212,960,399
NMA	1,355,106	-	-418,133	-	936,973
Total Fund	189,922,817	-28,365	-418,133	24,392,688	213,897,373



Financial Reconciliation
Total Fund
as of June 30, 2020

Year To Date					
	Market Value 01/01/2020	Management Fees	Net Flows	Return On Investment	Market Value 06/30/2020
Domestic Equity					
Vanguard Value Index (VIVIX)	12,382,180	-	-	-1,909,411	10,472,769
Vanguard Small-Cap 600 Index I (VSMX)	11,542,118	-	-	-2,047,400	9,494,718
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	23,919,895	-	-	-3,064,143	20,855,752
Vanguard Growth Index (VIGIX)	11,938,089	-	-	1,351,450	13,289,539
Twin Capital Low Volatility	24,226,691	-37,651	-	-2,485,162	21,741,529
Twin Capital Enhanced Index	11,746,396	-18,888	-	-506,713	11,239,684
International Equity					
Vanguard FTSE AW ex-US SC Index (VFSNX)	-	-	5,750,000	-134,186	5,615,814
Vanguard Developed Markets Index (VTMNX)	24,031,462	-	-5,750,000	-2,481,491	15,799,971
Vanguard Emerging Markets Index (VEMIX)	12,018,280	-	-	-1,148,493	10,869,787
Fixed Income					
Vanguard Short Term Bond Index (VBITX)	5,235,103	-	-	212,837	5,447,940
Vanguard Total Bond Index (VBTIX)	41,879,430	-	-	2,662,565	44,541,994
Vanguard High Yield Bond Fund (VWEAX)	22,741,691	-	-	-773,589	21,968,102
Vanguard International Bond (VTIFX)	10,964,684	-	-	258,907	11,223,591
REIT					
Vanguard Real Estate Index Fund (VGSNX)	12,072,800	-	-	-1,678,379	10,394,421
Cash	3,986	-	-	802	4,787
Total Fund Performance	224,702,804	-56,539	-	-11,742,405	212,960,399
NMA	2,608,862	-	-1,671,888	-	936,973
Total Fund	227,311,665	-56,539	-1,671,888	-11,742,405	213,897,373



Goals

- Maintain the actuarial soundness of the Plan in order to meet future obligations by preserving the inflation adjusted value of the Plan's assets after all investment expenses, administrative costs, benefit payments and refunds.
- Obtain an average annual rate of investment return equal to or greater than the actuarial assumed rate of 7.5% (net of fees), with an emphasis over a longer term (fifteen year) trailing period.

Asset Allocation Ranges (Based on IPS Second Addendum)

Asset Class	Minimum	Target	Maximum
Large Cap Core	10%	15%	20%
Large Cap Value	0%	5%	10%
Large Cap Growth	0%	5%	10%
Mid Cap Core	5%	10%	15%
Small Cap Core	0%	5%	10%
International Developed Markets	5%	7.5%	15%
International Emerging Markets	0%	5%	10%
All World ex US Small Cap	0%	2.5%	5%
Aggregate Fixed Income	10%	20%	30%
Short-Term Fixed Income	0%	2.5%	5%
High Yield Fixed Income	5%	10%	15%
Non-US Fixed Income	0%	5%	10%
Real Estate	0%	5%	10%
Cash	0%	2.5%	5%

Rebalancing Policy

The Investment Consultant will monitor the asset allocation policy and shall recommend any necessary rebalancing on a quarterly basis, or more frequently. At each quarterly Board meeting, the Investment Consultant will provide the Plan's actual and target allocations (including ranges). Upon any Board approval, the Investment Consultant will initiate rebalancing.

Other Portfolio Guidelines and Restrictions

- Additional investment policies and guidelines are contained in the formal Investment Policy Statement.

Portfolio Guidelines and Restrictions

Equity Guidelines

- Equity investment manager of a separate account should diversify their portfolio in an attempt to minimize the impact of a substantial loss in any specific sector, industry or company.
- No more than 5% of each manager's equity holdings shall be invested in the securities of any one company (valued at market).
- The economic sector weightings shall not exceed the greater of two and half times the appropriate benchmark, valued at market, or 15% of the equity portfolio.
- The market for individual security holdings in the equity portfolio shall be liquid enough to allow for easy monetization.

Fixed Income Guidelines

- A fixed income investment manager of a separate account should diversify their portfolio in an attempt to minimize the adverse effects of interest rate fluctuations and default risk.
- No more than 5% of the fixed income portfolio in any one issuer, excluding direct and/or indirect obligations of the US Government.
- The market for individual security holdings in the fixed income shall be liquid enough to allow for easy monetization.
- The minimum quality rating for any fixed income security is an "investment grade" rating as determined by at least one nationally recognized credit ratings agency. Bond held in the fixed income portfolio must be rated investment grade ("Baa/BBB") or better by at least one agency, with the exception of securities held in a high-yield bond fund.
- The duration of the bonds held in the portfolios are at the discretion of the investment manager(s). However, the effective duration of the fixed income security should be within +/-20% of the index.

Cash & Equivalents Restrictions

- Commercial paper must be rated A-1 or P-1 by at least one nationally recognized credit rating agency.

Permissible Investments

- Permissible investments include those identified in the Plan's Asset Allocation Policy, subject to state statute and local ordinance.

Prohibited Investments

- Prohibited investments include those not specifically identified in the Plan's Asset Allocation Policy without prior approval of the Board, upon recommendation of the Investment Consultant.



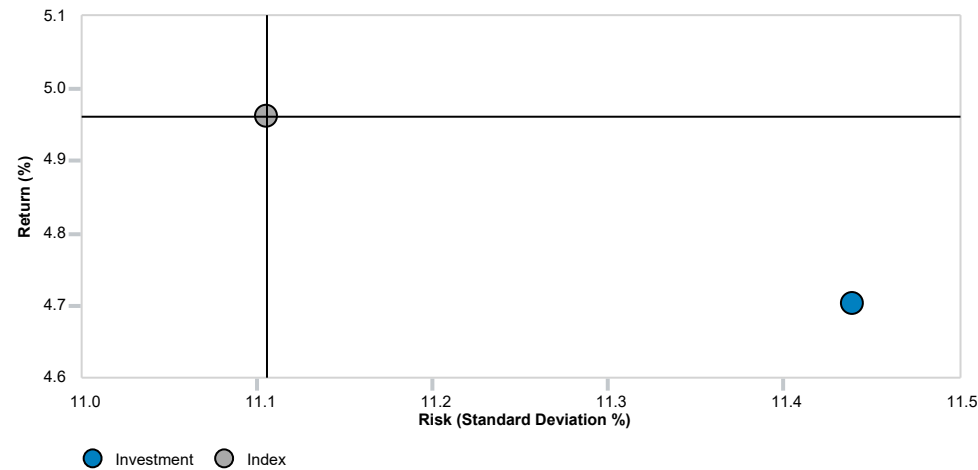
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.70	11.44	0.31	101.40	9	103.98	3
Index	4.96	11.11	0.33	100.00	9	100.00	3

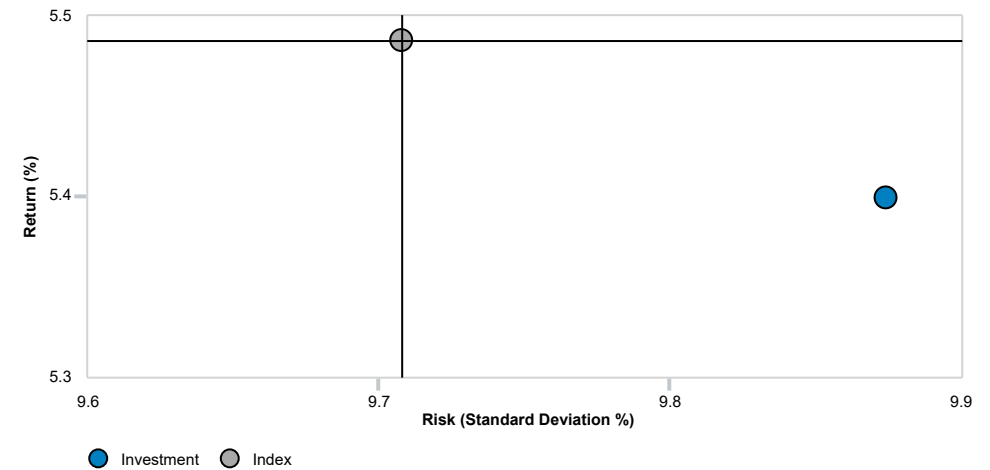
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.40	9.87	0.46	100.46	16	101.47	4
Index	5.49	9.71	0.48	100.00	16	100.00	4

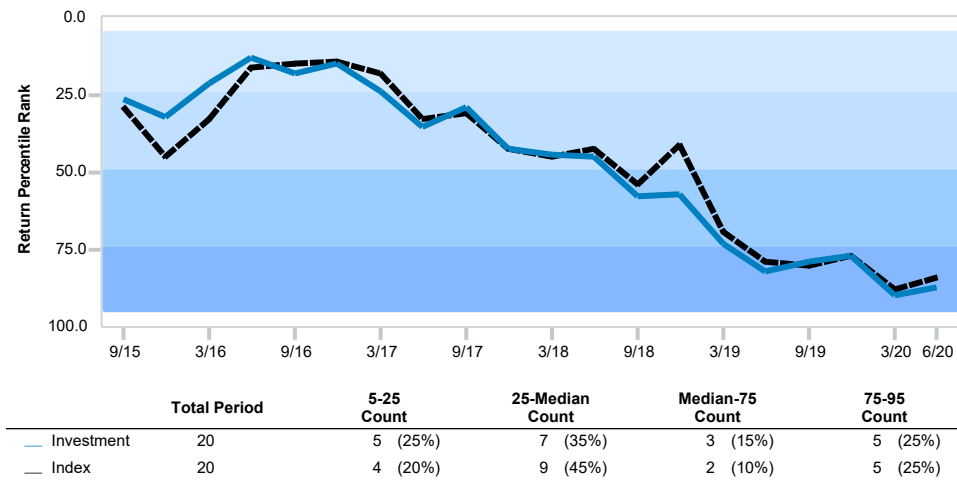
Risk and Return 3 Years



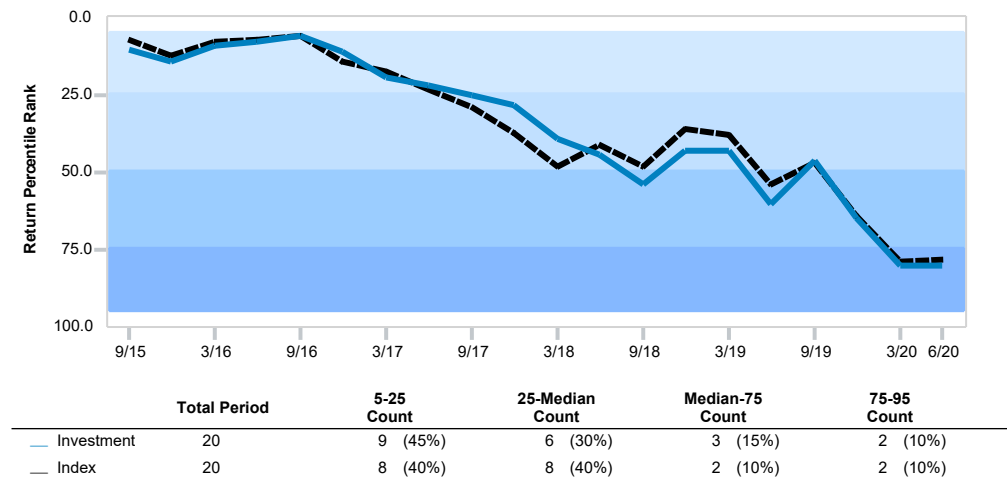
Risk and Return 5 Years



3 Year Rolling Percentile Rank All Public Plans-Total Fund



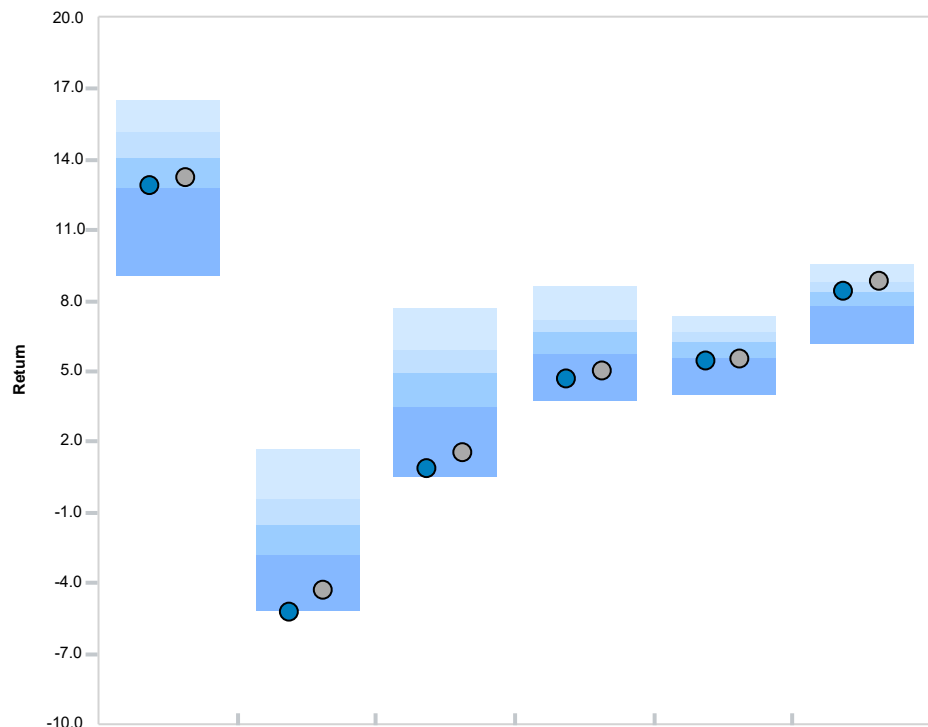
5 Year Rolling Percentile Rank All Public Plans-Total Fund



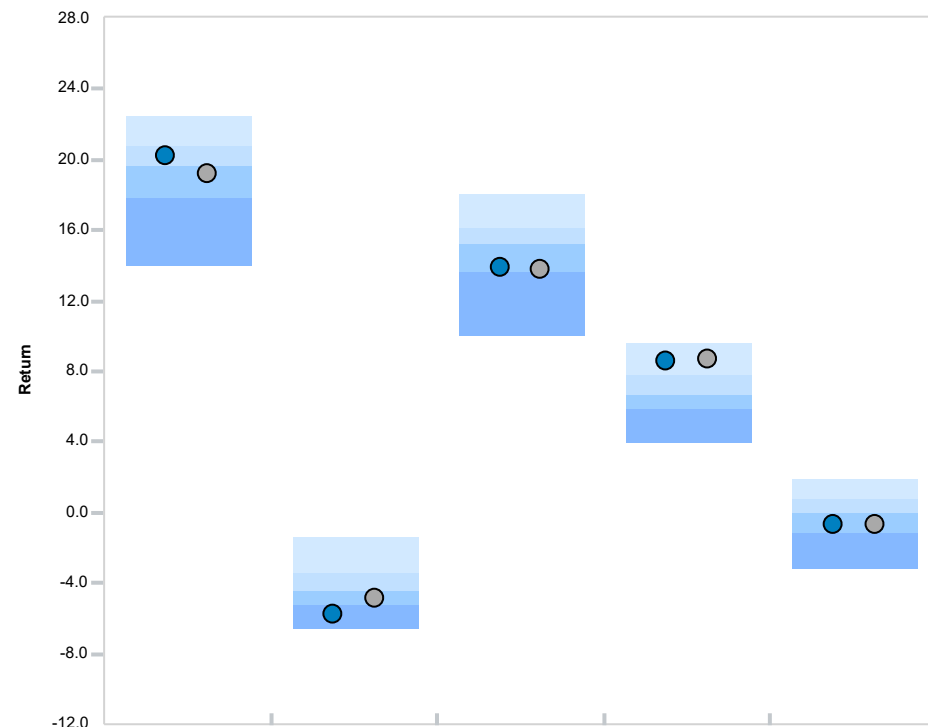
Does not include Non-Measured Assets (NMA).



Plan Sponsor Peer Group Analysis vs. All Public Plans-Total Fund



Plan Sponsor Peer Group Analysis vs. All Public Plans-Total Fund



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 04/01/2001	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	59,528,253	-11,700,443	165,132,589	212,960,399

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-16.09	4.99	1.37	3.12	9.54	-8.47
Index	-15.52	5.04	1.08	2.93	9.21	-8.12

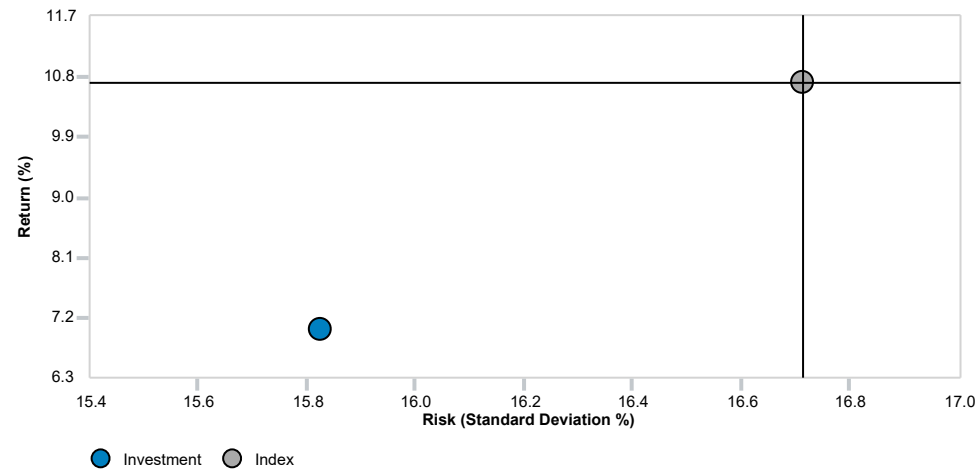
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.02	15.83	0.40	85.80	9	97.11	3
Index	10.73	16.71	0.59	100.00	9	100.00	3

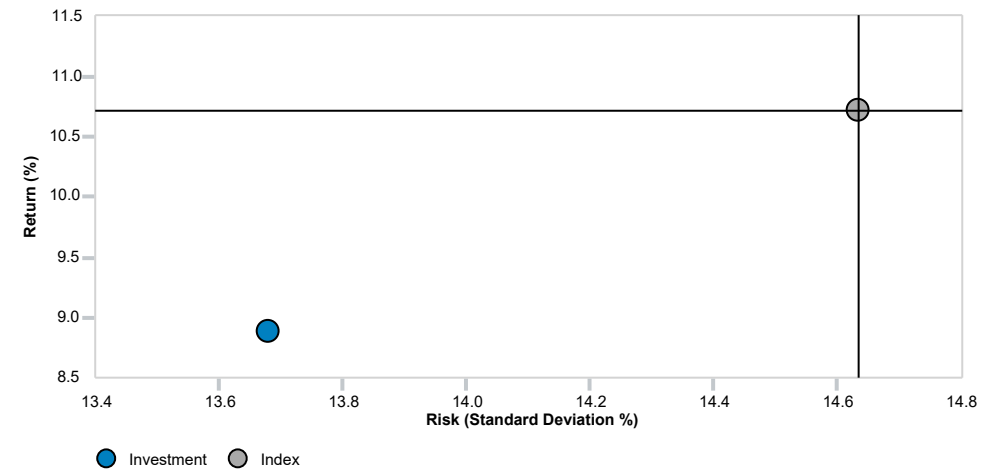
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.87	13.68	0.61	87.47	16	90.49	4
Index	10.73	14.63	0.69	100.00	16	100.00	4

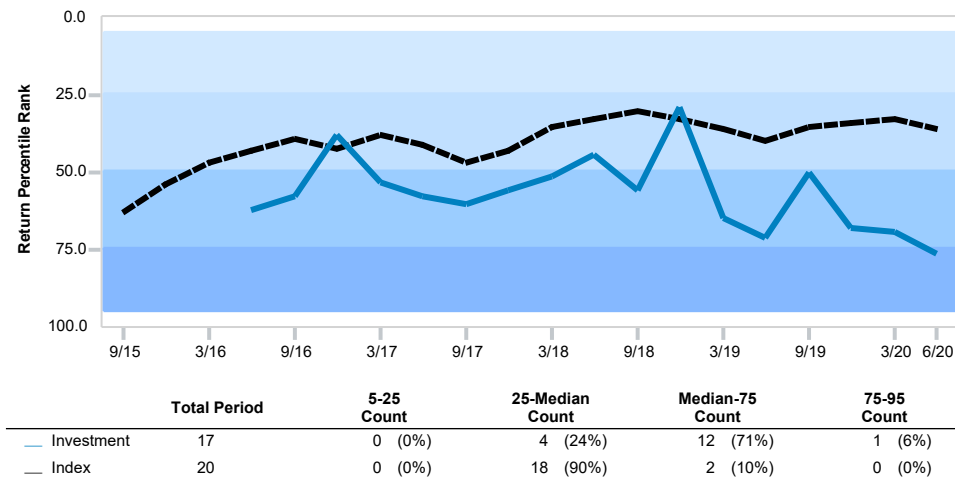
Risk and Return 3 Years



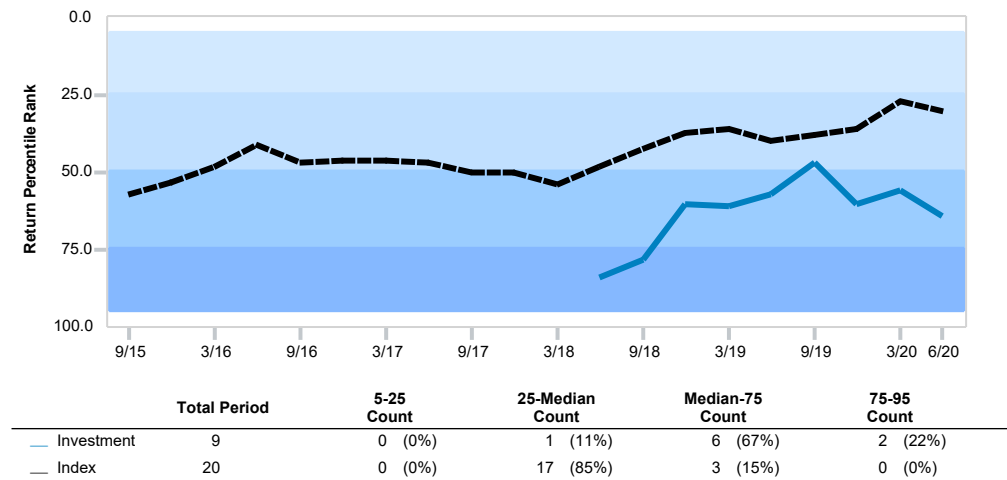
Risk and Return 5 Years



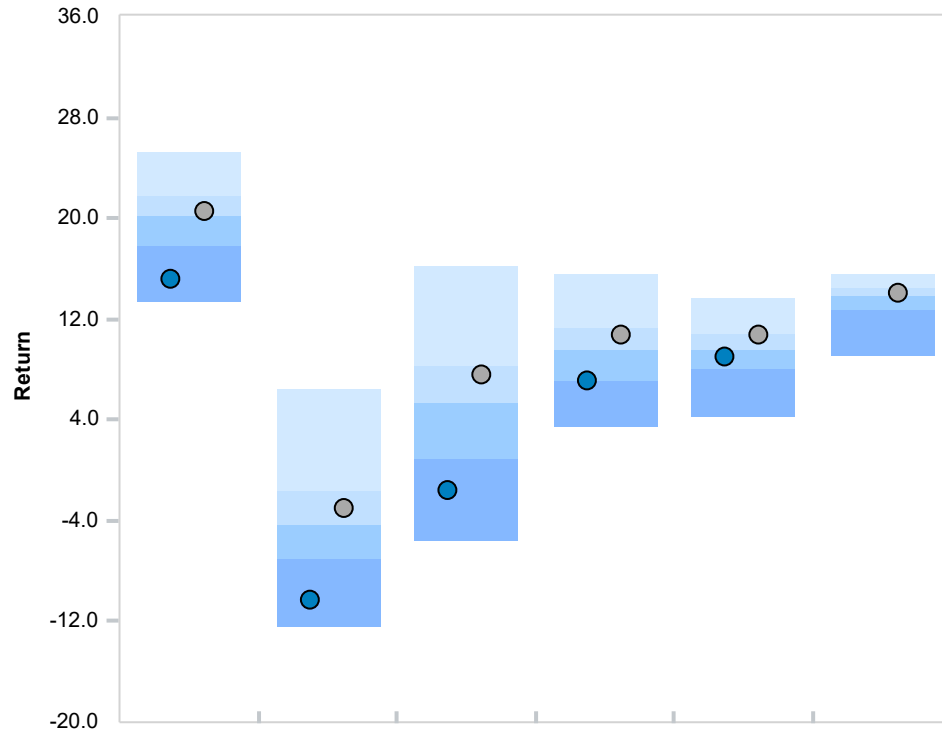
3 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)



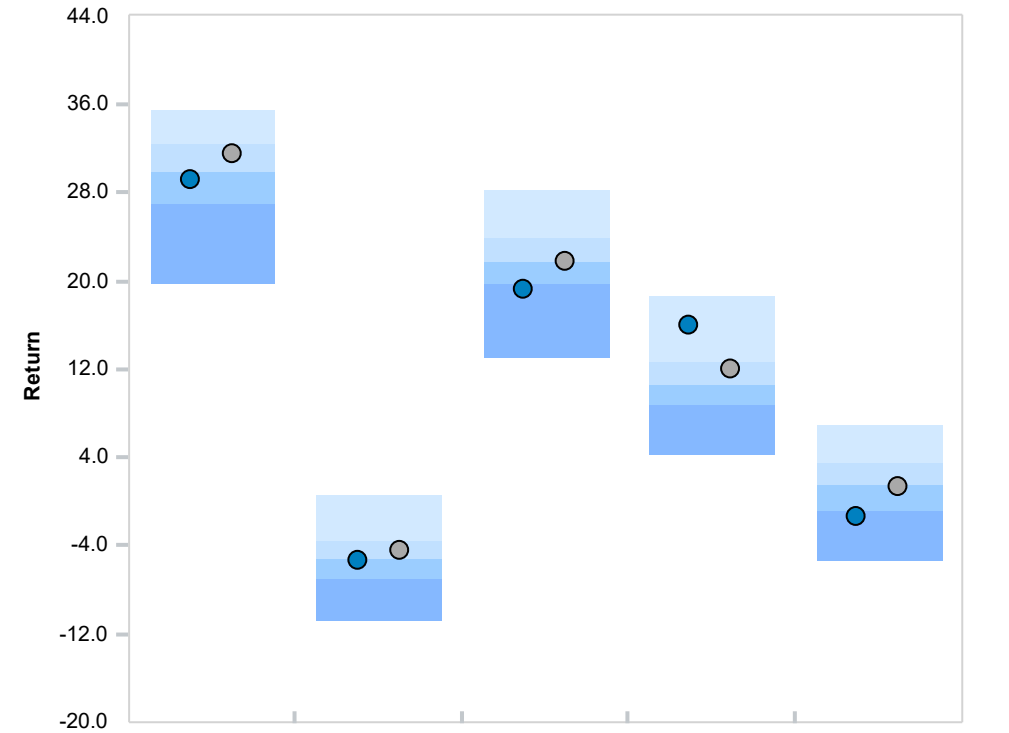
5 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)



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



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



Financial Reconciliation Since Inception Ending June 30, 2020

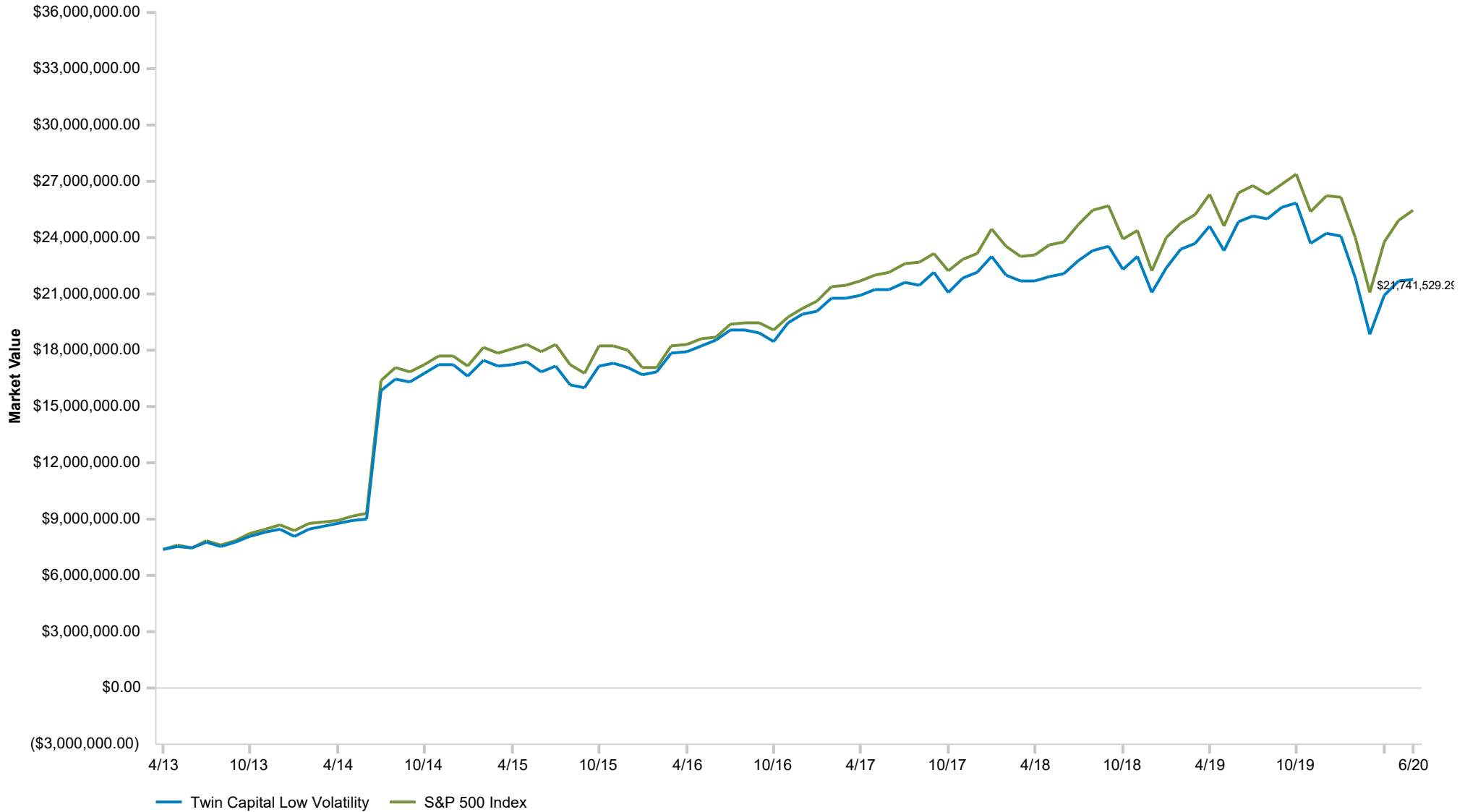
	Market Value 06/01/2013	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	7,513,518	2,702,213	11,525,799	21,741,529

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-22.23	6.58	2.94	4.66	12.56	-10.55
Index	-19.60	9.07	1.70	4.30	13.65	-13.52

Schedule of Investable Assets
Twin Capital Low Volatility
Since Inception Ending June 30, 2020

Schedule of Investable Assets



Schedule of Investable Assets

Periods Ending	Beginning Market Value \$	Net Cash Flow \$	Gain/Loss \$	Ending Market Value \$	%Return	Unit Value
Inception	7,411,166	3,145,858	11,184,505	21,741,529	89.67	189.7



Portfolio Characteristics (Benchmark: S&P 500 Index)		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	222,319,332,023	383,281,861,830
Median Mkt. Cap (\$)	59,966,798,950	21,806,110,000
Price/Earnings ratio	19.6	23.2
Price/Book ratio	3.7	4.0
5 Yr. EPS Growth Rate (%)	7.7	12.2
Current Yield (%)	2.6	1.8
Beta (5 Years, Monthly)	0.91	1.00
Number of Stocks	97	505

Top Ten Equity Holdings (Benchmark: S&P 500 Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Microsoft Corp	6.1	6.0	0.1	29.4
Johnson & Johnson	3.3	1.4	1.9	8.0
Procter & Gamble Co (The)	3.2	1.2	2.0	9.4
Mastercard Inc	2.7	1.0	1.7	22.6
Intel Corp	2.5	1.0	1.5	11.2
AT&T Inc	2.3	0.8	1.5	5.5
Merck & Co Inc.	2.1	0.8	1.3	1.3
JPMorgan Chase & Co	2.1	1.1	1.0	5.6
PepsiCo Inc	2.0	0.7	1.3	11.0
Verizon Communications Inc	1.9	0.9	1.0	3.7

Ten Best Performers (Benchmark: S&P 500 Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
D.R. Horton Inc.	0.8	0.1	0.7	63.7
Lowe's Cos Inc	0.6	0.4	0.2	58.0
Microchip Technology Inc	1.0	0.1	0.9	55.9
Best Buy Co Inc	1.2	0.1	1.1	54.1
Whirlpool Corp	0.3	0.0	0.3	52.6
Ameriprise Financial Inc	1.2	0.1	1.1	47.7
Morgan Stanley	0.5	0.2	0.3	43.3
Discover Financial Services	0.6	0.1	0.5	41.9
Stanley Black & Decker Inc	0.6	0.1	0.5	40.1
Darden Restaurants Inc.	0.4	0.0	0.4	39.1

Ten Worst Performers (Benchmark: S&P 500 Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Cincinnati Financial Corp	0.2	0.0	0.2	-14.3
Consolidated Edison Inc.	0.8	0.1	0.7	-6.8
Walgreens Boots Alliance Inc	0.3	0.1	0.2	-6.3
Southern Co (The)	0.8	0.2	0.6	-3.1
Pinnacle West Capital Corp	0.4	0.0	0.4	-2.3
Hershey Co (The)	0.6	0.1	0.5	-1.6
WEC Energy Group Inc	1.5	0.1	1.4	0.2
NextEra Energy Inc	1.4	0.5	0.9	0.4
American Electric Power Co Inc	0.8	0.2	0.6	0.5
Omnicom Group Inc.	0.7	0.0	0.7	0.6

Buy and Hold Sector Attribution (Benchmark: S&P 500 Index)								Portfolio Comparison	
	Allocation		Performance		Stock	Attribution		Twin Capital Low Volatility	
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total	Market Capitalization (%)	
Communication Services	8.9	10.9	9.37	20.17	-0.96	-0.01	-0.97	Greater than 25000M	81.4
Consumer Discretionary	8.3	10.3	33.77	32.83	0.01	-0.23	-0.22	16000M To 25000M	8.9
Consumer Staples	11.4	7.4	9.09	8.12	0.12	-0.52	-0.41	12000M To 16000M	4.9
Energy	2.4	2.9	28.24	30.54	-0.04	0.07	0.03	8000M To 12000M	3.4
Financials	10.3	10.7	20.95	12.20	0.91	0.04	0.95	5000M To 8000M	1.3
Health Care	16.2	15.3	8.53	13.60	-0.86	-0.07	-0.93		
Industrials	8.2	8.0	14.99	20.51	-0.47	0.00	-0.48		
Information Technology	24.5	25.8	23.37	30.52	-1.69	-0.11	-1.80		
Materials	2.4	2.5	20.70	26.02	-0.13	0.00	-0.13		
Real Estate	0.4	2.9	5.18	13.23	-0.03	0.19	0.15		
Utilities	7.1	3.4	-0.07	2.72	-0.22	-0.70	-0.92		
Total	100.0	100.0	16.10	20.83	-3.38	-1.35	-4.73		



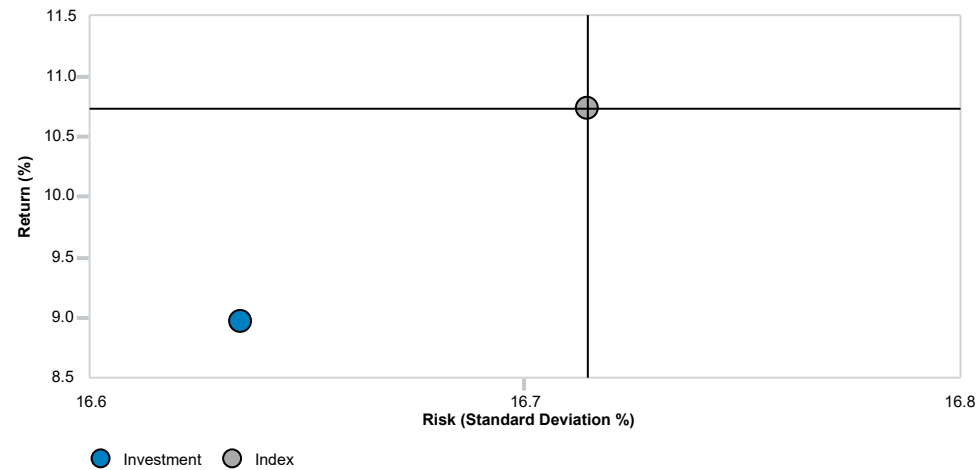
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.96	16.63	0.49	95.16	9	101.51	3
Index	10.73	16.71	0.59	100.00	9	100.00	3

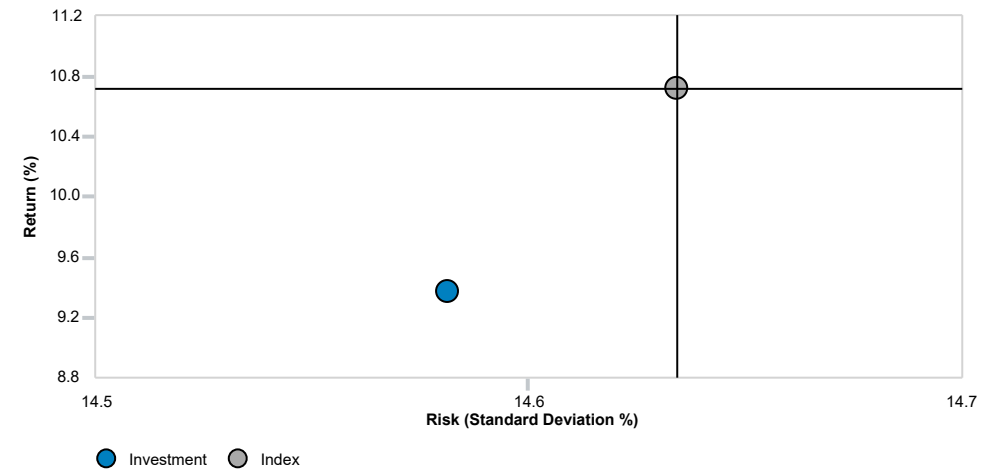
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.36	14.58	0.61	95.22	16	100.51	4
Index	10.73	14.63	0.69	100.00	16	100.00	4

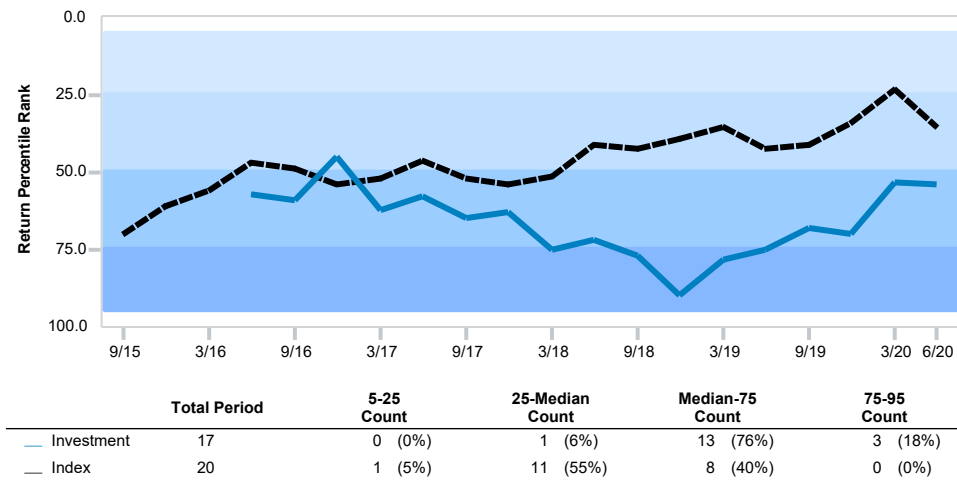
Risk and Return 3 Years



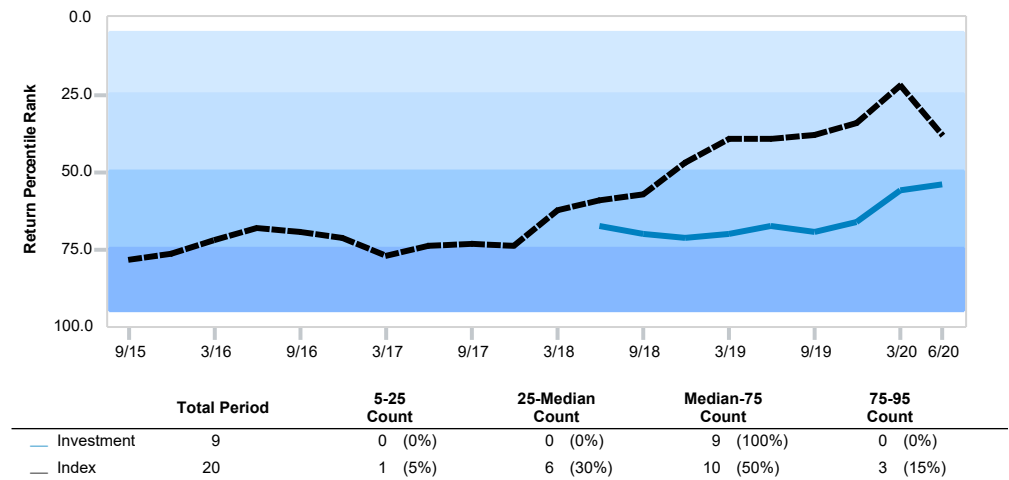
Risk and Return 5 Years



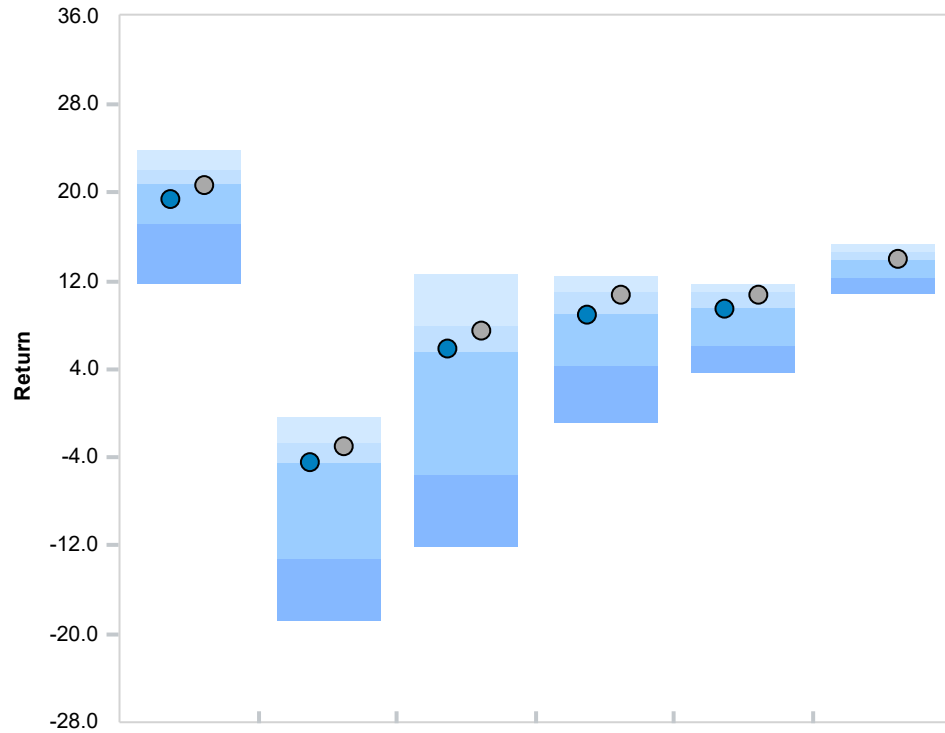
3 Year Rolling Percentile Rank IM U.S. Large Cap Enhanced Index Equity (SA+CF)



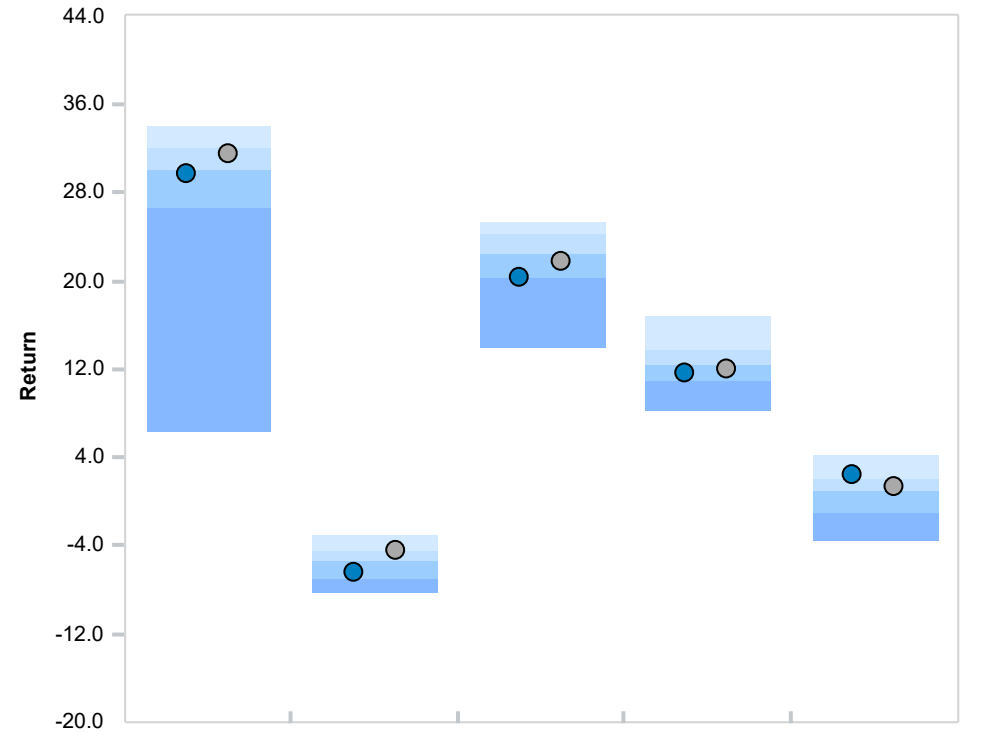
5 Year Rolling Percentile Rank IM U.S. Large Cap Enhanced Index Equity (SA+CF)



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



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



Financial Reconciliation Since Inception Ending June 30, 2020

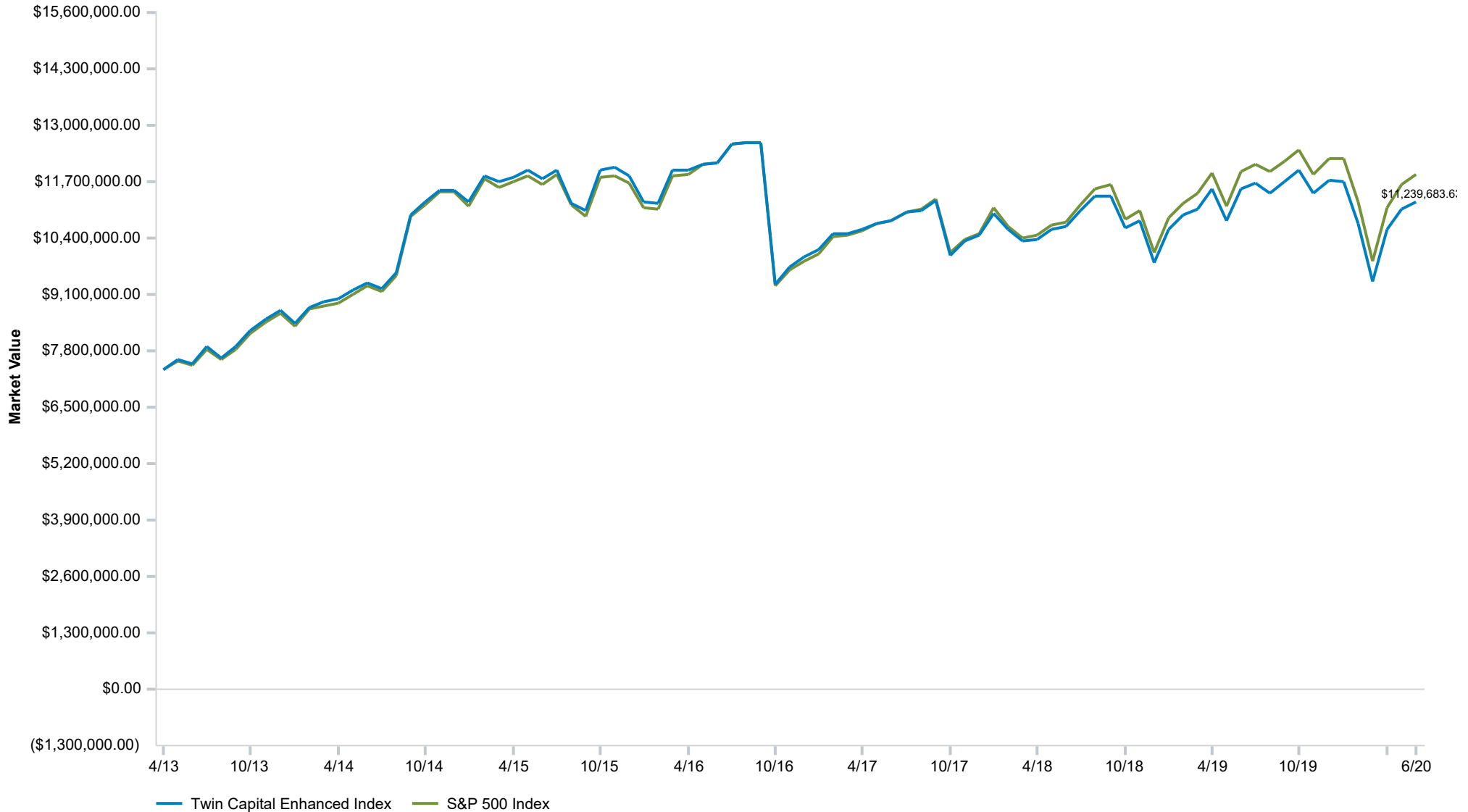
	Market Value 06/01/2013	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	7,598,363	-4,070,135	7,711,455	11,239,684

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-20.02	9.23	1.40	3.84	12.80	-13.81
Index	-19.60	9.07	1.70	4.30	13.65	-13.52

Schedule of Investable Assets
Twin Capital Enhanced Index
Since Inception Ending June 30, 2020

Schedule of Investable Assets



Schedule of Investable Assets

Periods Ending	Beginning Market Value \$	Net Cash Flow \$	Gain/Loss \$	Ending Market Value \$	%Return	Unit Value
Inception	7,380,915	-3,821,515	7,680,284	11,239,684	107.49	207.5



Portfolio Characteristics (Benchmark: S&P 500 Index)		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	399,228,716,856	383,281,861,830
Median Mkt. Cap (\$)	44,507,356,200	21,806,110,000
Price/Earnings ratio	22.0	23.2
Price/Book ratio	4.0	4.0
5 Yr. EPS Growth Rate (%)	11.8	12.2
Current Yield (%)	1.9	1.8
Beta (5 Years, Monthly)	0.99	1.00
Number of Stocks	165	505

Top Ten Equity Holdings (Benchmark: S&P 500 Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Apple Inc	5.8	5.8	0.0	43.8
Microsoft Corp	5.7	6.0	-0.3	29.4
Amazon.com Inc	5.5	4.5	1.0	41.5
Alphabet Inc	2.6	1.7	0.9	22.0
Facebook Inc	2.3	2.1	0.2	36.1
Johnson & Johnson	1.6	1.4	0.2	8.0
JPMorgan Chase & Co	1.5	1.1	0.4	5.6
Procter & Gamble Co (The)	1.5	1.2	0.3	9.4
Intel Corp	1.4	1.0	0.4	11.2
Alphabet Inc	1.4	1.6	-0.2	21.6

Ten Best Performers (Benchmark: S&P 500 Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
PayPal Holdings Inc	0.7	0.8	-0.1	82.0
Lowe's Cos Inc	0.3	0.4	-0.1	58.0
Best Buy Co Inc	0.8	0.1	0.7	54.1
PulteGroup Inc	0.4	0.0	0.4	53.0
Ameriprise Financial Inc	0.2	0.1	0.1	47.7
BorgWarner Inc	0.2	0.0	0.2	45.6
Cadence Design Systems Inc	0.6	0.1	0.5	45.3
NVIDIA Corporation	1.0	0.9	0.1	44.2
Apple Inc	5.8	5.8	0.0	43.8
EOG Resources Inc.	0.3	0.1	0.2	42.4

Ten Worst Performers (Benchmark: S&P 500 Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Biogen Inc	0.4	0.2	0.2	-15.4
Wells Fargo & Co	0.3	0.4	-0.1	-9.0
Walgreens Boots Alliance Inc	0.2	0.1	0.1	-6.3
CME Group Inc	0.4	0.2	0.2	-5.6
Southwest Airlines Co.	0.2	0.1	0.1	-4.0
J.M. Smucker Co (The)	0.3	0.0	0.3	-3.9
Huntington Ingalls Industries Inc	0.4	0.0	0.4	-3.7
Public Storage	0.5	0.1	0.4	-2.4
Berkshire Hathaway Inc	1.0	1.4	-0.4	-2.4
FirstEnergy Corp.	0.6	0.1	0.5	-2.3

Buy and Hold Sector Attribution (Benchmark: S&P 500 Index)								Portfolio Comparison	
	Allocation		Performance		Stock	Attribution		Twin Capital Enhanced Index	
	Portfolio	Benchmark	Portfolio	Benchmark		Sector	Total	Market Capitalization (%)	
Communication Services	11.5	10.9	19.35	20.17	-0.09	0.00	-0.10	Greater than 25000M	83.3
Consumer Discretionary	10.9	10.3	34.47	32.83	0.17	0.06	0.23	16000M To 25000M	8.4
Consumer Staples	7.9	7.4	11.01	8.12	0.25	-0.07	0.18	12000M To 16000M	3.3
Energy	2.9	2.9	27.79	30.54	-0.07	0.01	-0.07	8000M To 12000M	2.5
Financials	9.4	10.7	13.09	12.20	0.10	0.11	0.21	5000M To 8000M	2.4
Health Care	15.1	15.3	11.20	13.60	-0.38	0.01	-0.37	1000M To 3000M	0.1
Industrials	7.8	8.0	17.29	20.51	-0.25	0.00	-0.24		
Information Technology	25.5	25.8	29.69	30.52	-0.20	-0.03	-0.23		
Materials	2.2	2.5	24.38	26.02	-0.03	-0.02	-0.05		
Real Estate	3.1	2.9	12.29	13.23	-0.03	-0.01	-0.04		
Utilities	3.9	3.4	2.33	2.72	-0.02	-0.10	-0.12		
Total	100.0	100.0	20.24	20.83	-0.55	-0.04	-0.60		



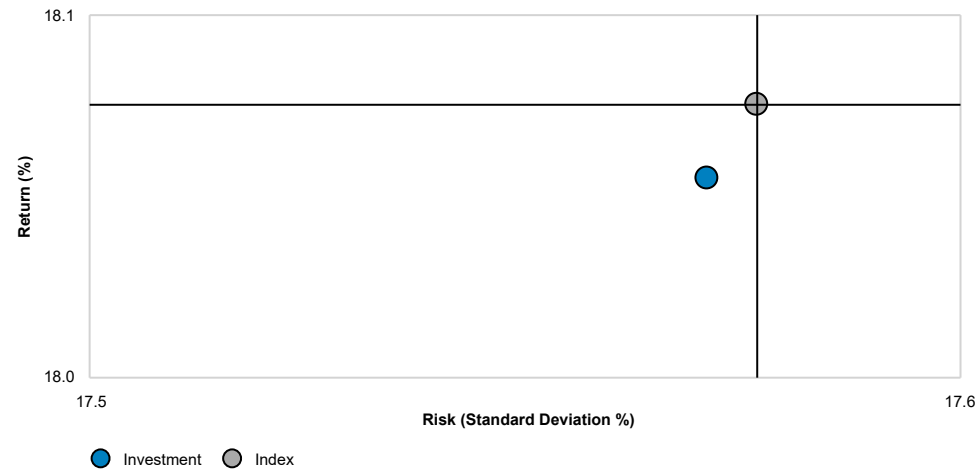
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	18.06	17.57	0.93	99.95	10	100.01	2
Index	18.08	17.58	0.93	100.00	10	100.00	2

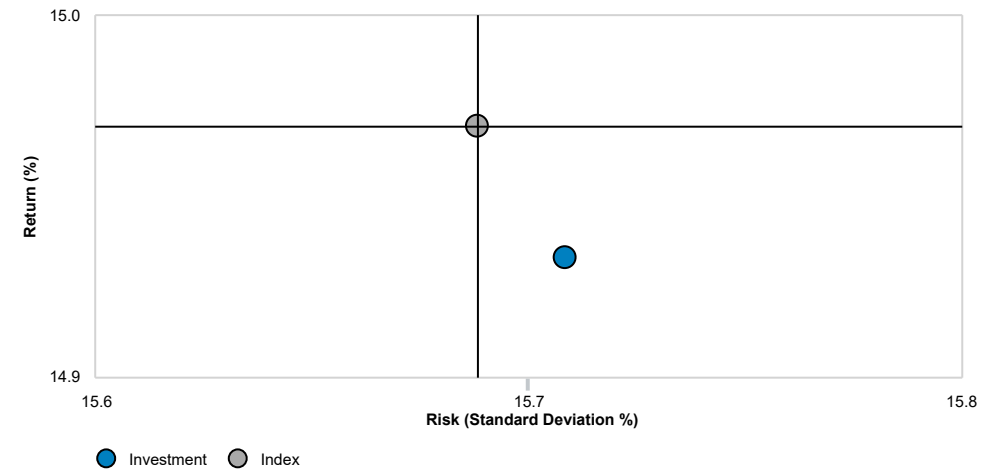
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	14.93	15.71	0.89	100.03	16	100.28	4
Index	14.97	15.69	0.90	100.00	16	100.00	4

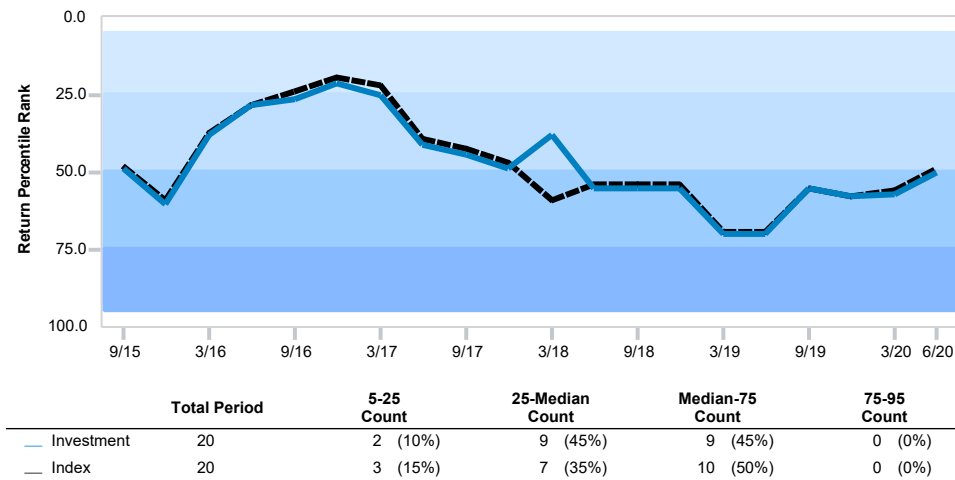
Risk and Return 3 Years



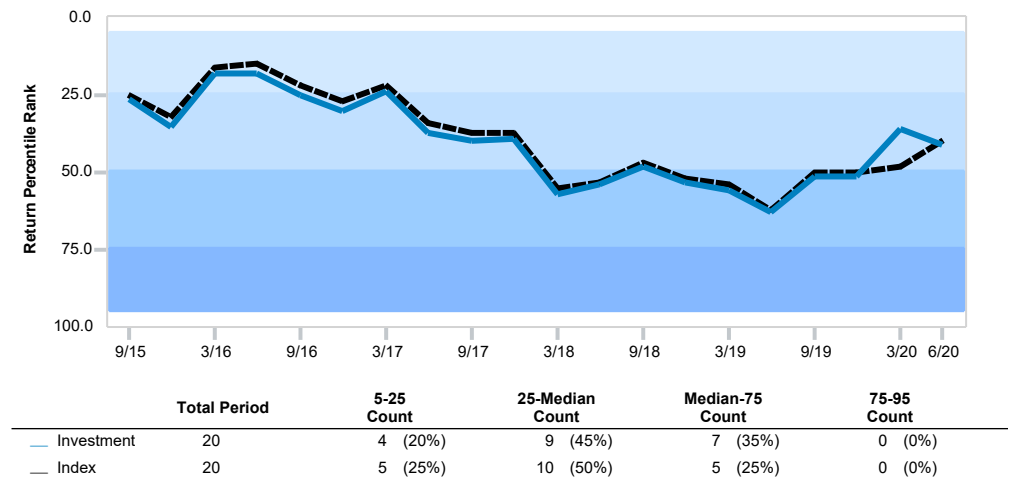
Risk and Return 5 Years



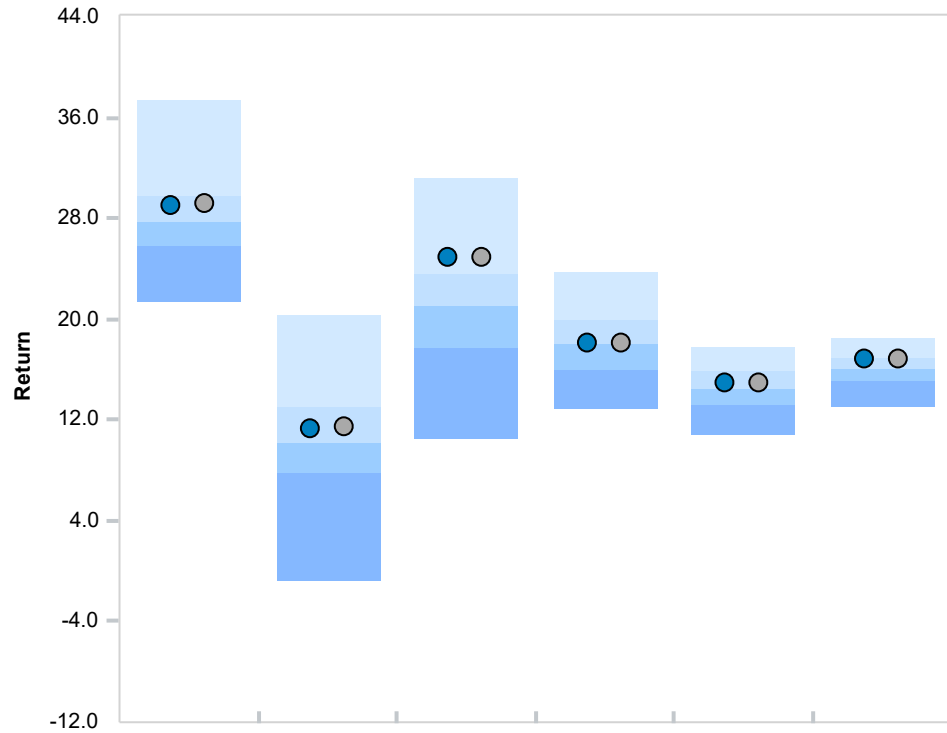
3 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (MF)



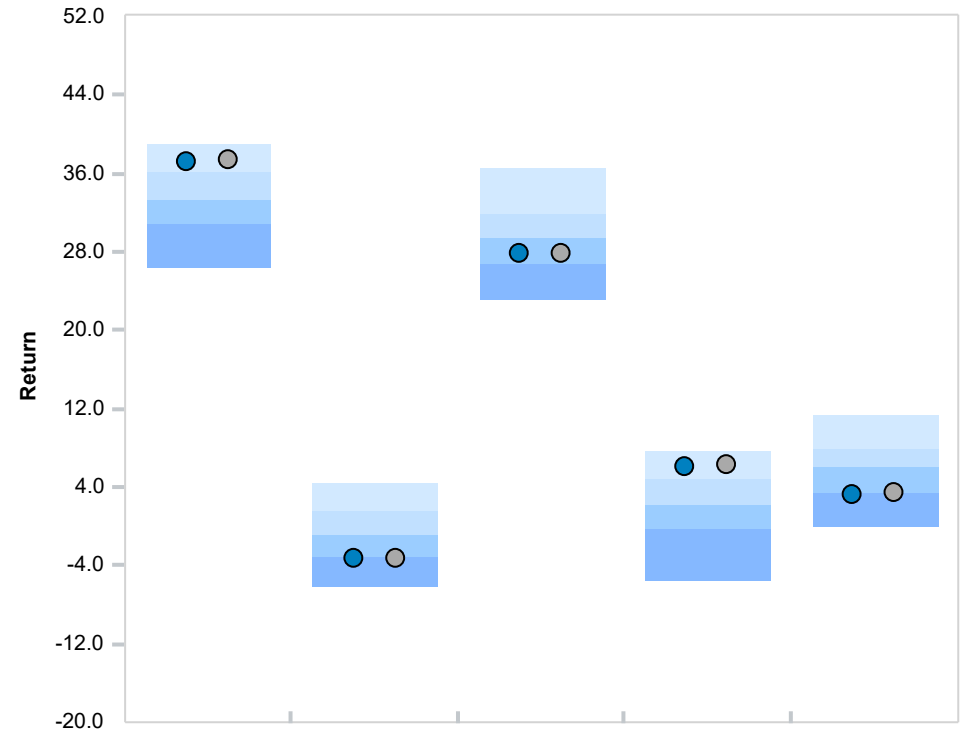
5 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (MF)



Peer Group Analysis - IM U.S. Large Cap Growth Equity (MF)



Peer Group Analysis - IM U.S. Large Cap Growth Equity (MF)



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 05/01/2010	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	16,642,537	-22,444,975	19,091,978	13,289,539

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-13.73	9.91	1.99	4.75	16.89	-16.31
Index	-13.72	9.91	2.01	4.76	16.92	-16.32

June 30, 2020

Fund Information

Fund Name : Vanguard Index Funds: Vanguard Growth Index Fund; Institutional Class Shares
Fund Family : Vanguard Group Inc
Ticker : VIGIX
Inception Date : 05/14/1998
Fund Assets : \$17,810 Million
Portfolio Turnover : 11%

Portfolio Assets : \$117,191 Million
Portfolio Manager : O'Reilly/Nejman
PM Tenure : 2000--2016
Fund Style : IM U.S. Large Cap Growth Equity (MF)
Style Benchmark : CRSP U.S. Large Cap Growth TR Index

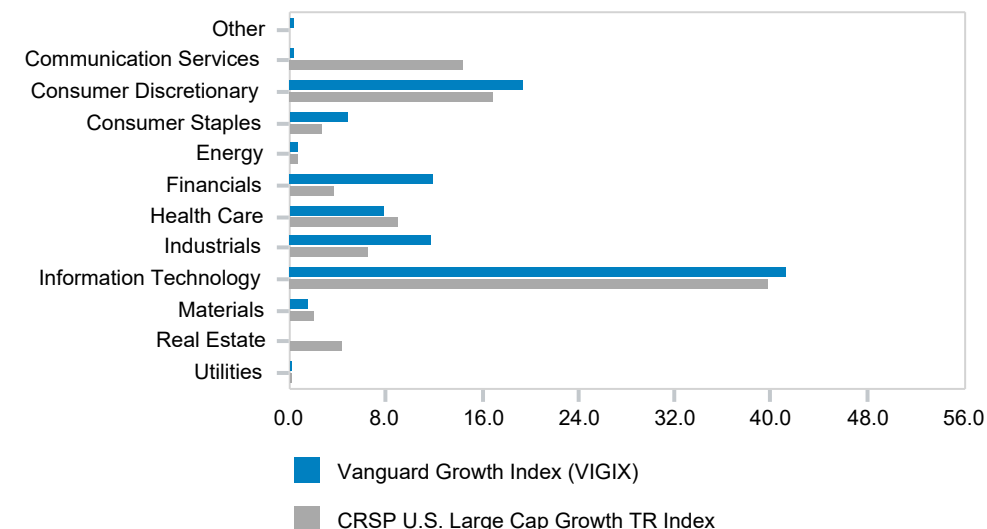
Portfolio Characteristics As of 05/31/2020

	Portfolio	Benchmark
Total Securities	278	273
Avg. Market Cap (\$)	477,706,732,580	22,501,540,800
Price/Earnings (P/E)	38.00	32.53
Price/Book (P/B)	12.17	6.82
Dividend Yield	1.48	0.91
Annual EPS	11.67	10.39
5 Yr EPS	18.13	17.79
3 Yr EPS Growth	23.58	N/A
Beta (5 Years, Monthly)	1.00	1.00

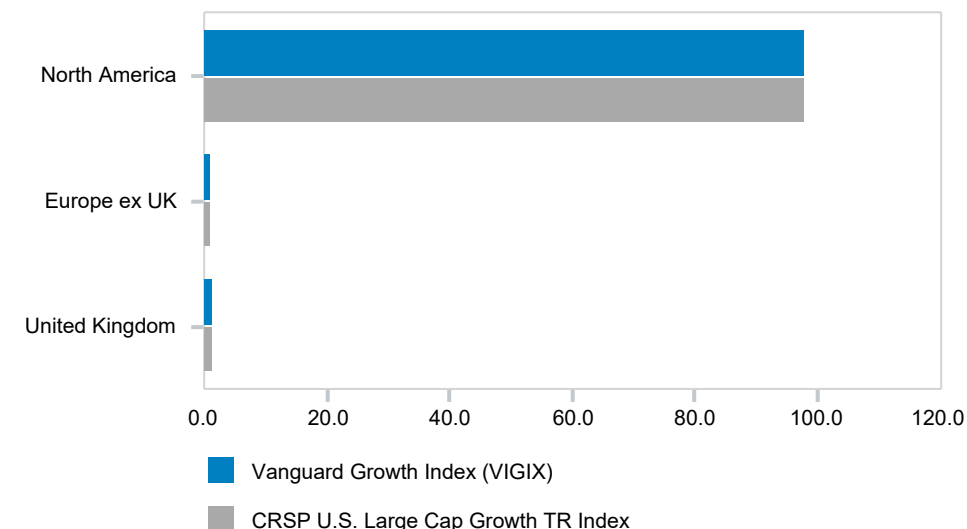
Top Ten Securities As of 05/31/2020

Microsoft Corp ORD	9.7 %
Apple Inc ORD	8.8 %
Amazon.com Inc ORD	7.2 %
Facebook Inc ORD	3.8 %
Alphabet Inc ORD 1	3.0 %
Alphabet Inc ORD 2	2.9 %
Visa Inc ORD	2.3 %
Home Depot Inc ORD	1.9 %
Mastercard Inc ORD	1.9 %
NVIDIA Corp ORD	1.4 %

Sector Weights As of 05/31/2020



Region Weights As of 05/31/2020



Statistics provided by Lipper. Most recent available data shown.



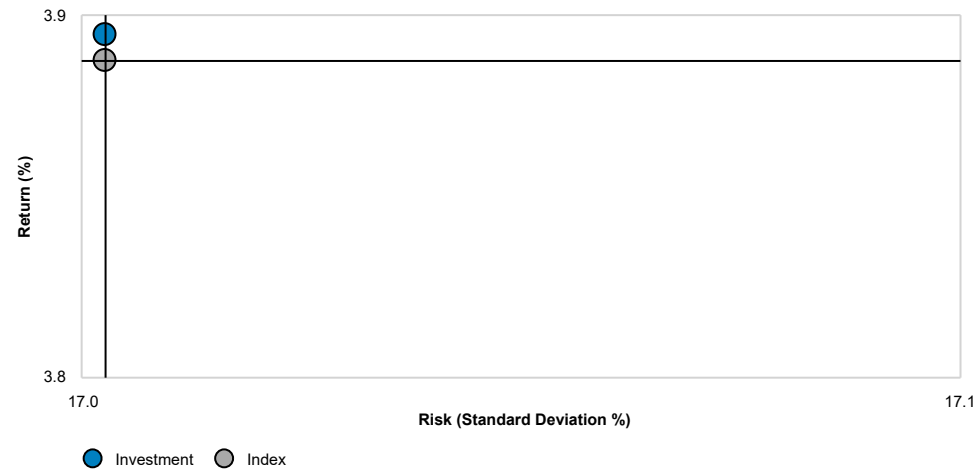
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.90	17.00	0.21	100.09	9	100.08	3
Index	3.89	17.00	0.21	100.00	9	100.00	3

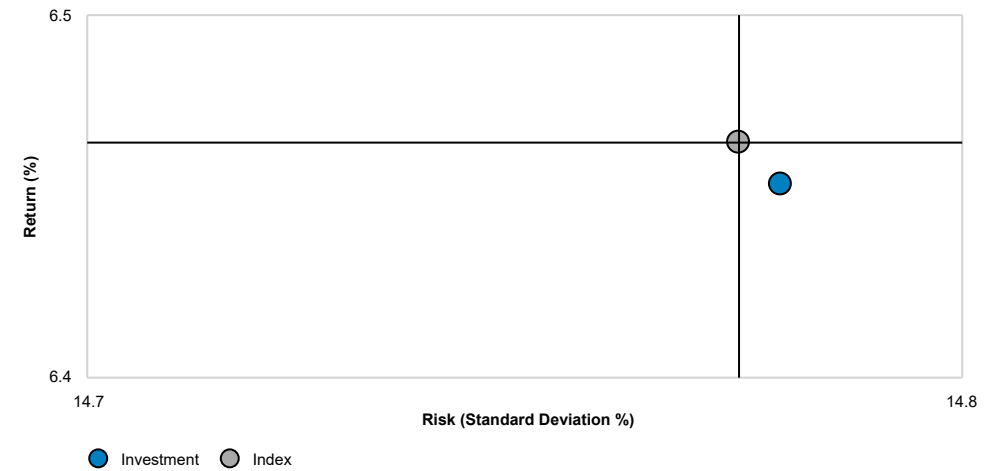
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.45	14.78	0.42	100.03	16	100.12	4
Index	6.47	14.77	0.42	100.00	16	100.00	4

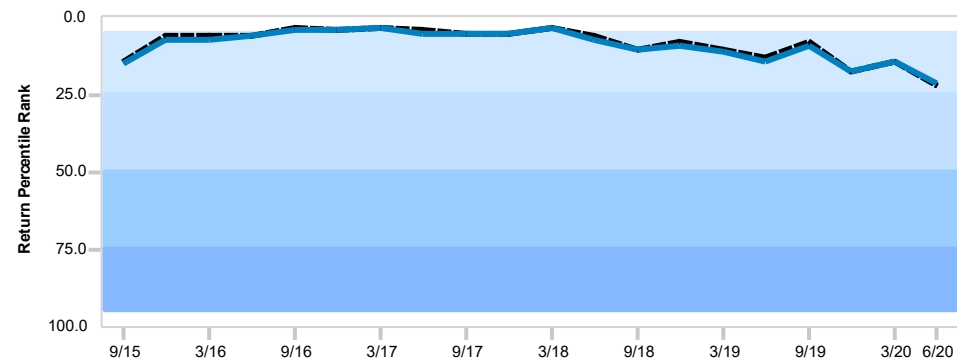
Risk and Return 3 Years



Risk and Return 5 Years

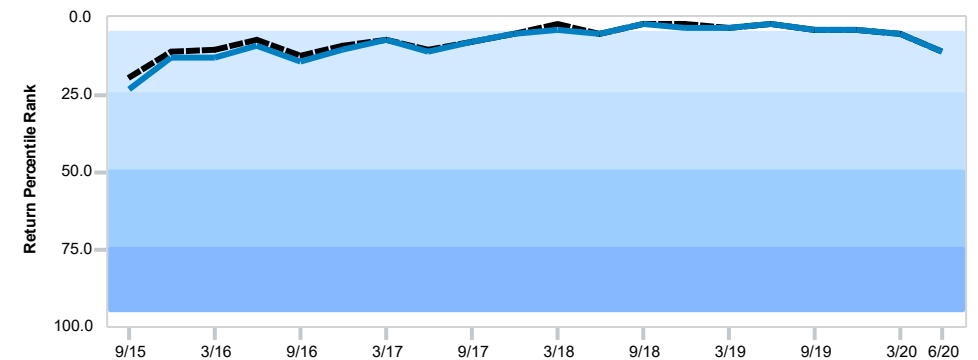


3 Year Rolling Percentile Rank IM U.S. Large Cap Value Equity (MF)



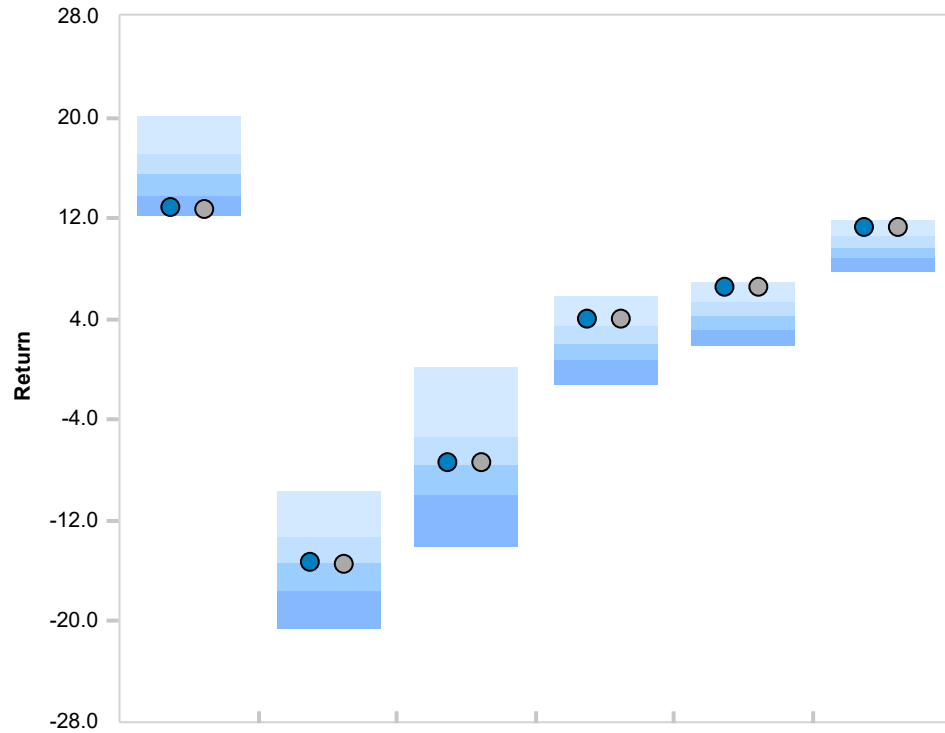
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)

5 Year Rolling Percentile Rank IM U.S. Large Cap Value Equity (MF)

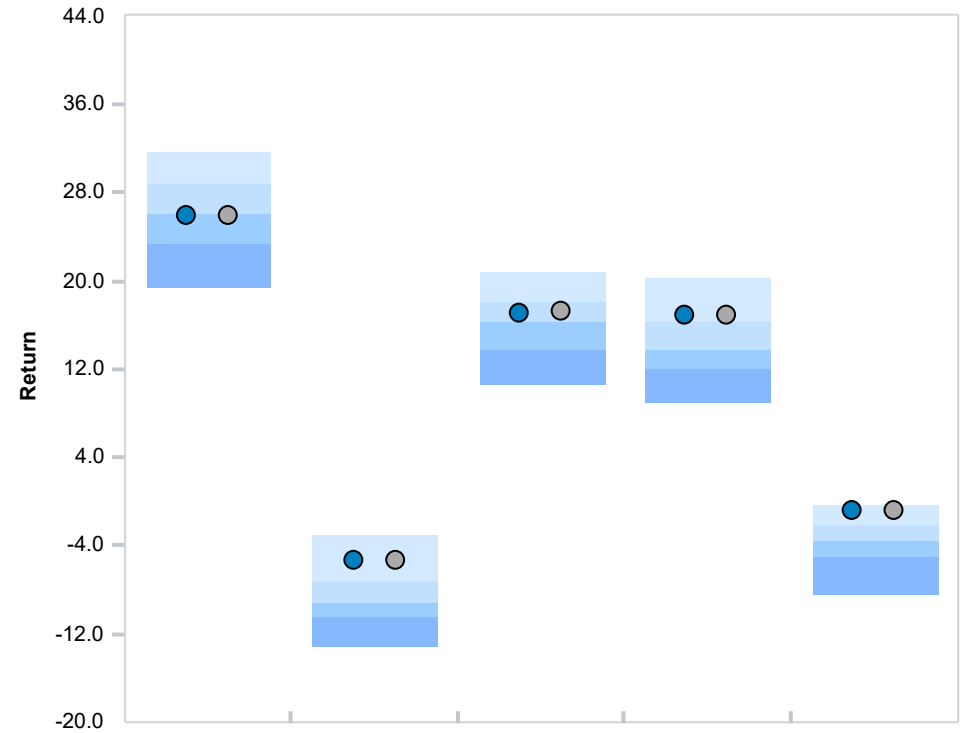


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)

Peer Group Analysis - IM U.S. Large Cap Value Equity (MF)



Peer Group Analysis - IM U.S. Large Cap Value Equity (MF)



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 07/01/2009	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	1,021,656	536,436	8,914,677	10,472,769

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-24.99	8.26	1.12	3.78	10.76	-10.93
Index	-25.01	8.25	1.13	3.79	10.76	-10.91



Fund Information

Fund Name : Vanguard Index Funds: Vanguard Value Index Fund; Institutional Shares
 Fund Family : Vanguard Group Inc
 Ticker : VIVIX
 Inception Date : 07/02/1998
 Fund Assets : \$10,716 Million
 Portfolio Turnover : 12%

Portfolio Assets : \$79,111 Million
 Portfolio Manager : O'Reilly/Nejman
 PM Tenure : 1998--2016
 Fund Style : IM U.S. Large Cap Value Equity (MF)
 Style Benchmark : CRSP U.S. Large Cap Value TR Index

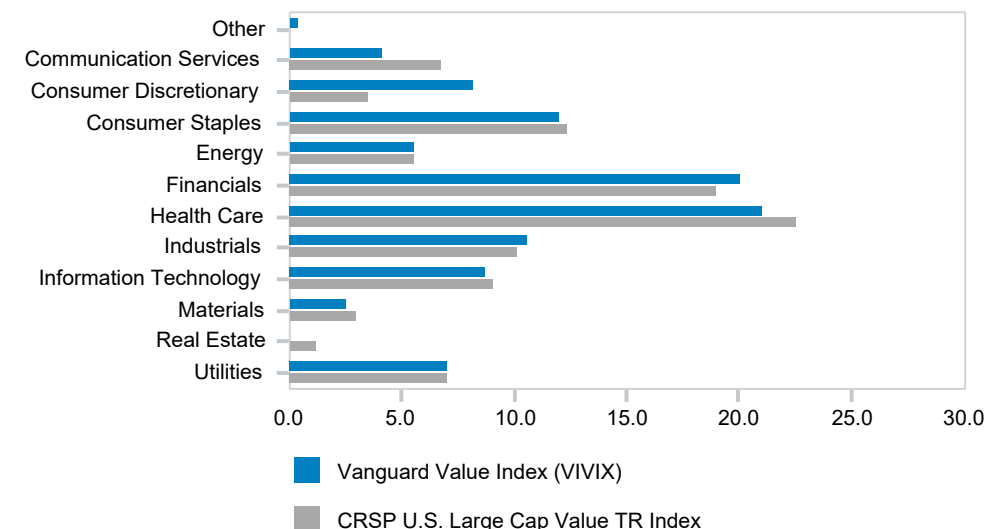
Portfolio Characteristics As of 05/31/2020

	Portfolio	Benchmark
Total Securities	337	328
Avg. Market Cap (\$)	127,502,288,752	17,088,423,795
Price/Earnings (P/E)	22.05	16.66
Price/Book (P/B)	4.45	2.57
Dividend Yield	3.34	3.06
Annual EPS	11.43	511.78
5 Yr EPS	7.64	5.66
3 Yr EPS Growth	12.19	N/A
Beta (5 Years, Monthly)	1.00	1.00

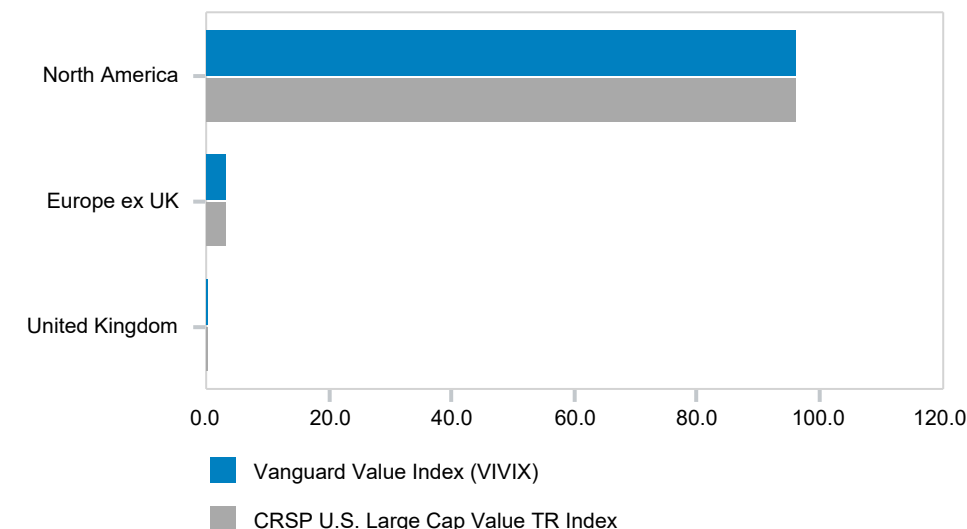
Top Ten Securities As of 05/31/2020

Johnson & Johnson ORD	3.4 %
Berkshire Hathaway Inc ORD	3.1 %
JPMorgan Chase & Co ORD	2.5 %
Procter & Gamble Co ORD	2.5 %
UnitedHealth Group Inc ORD	2.5 %
Intel Corp ORD	2.4 %
Verizon Communications Inc ORD	2.0 %
AT&T Inc ORD	1.9 %
Walt Disney Co ORD	1.8 %
Pfizer Inc ORD	1.8 %

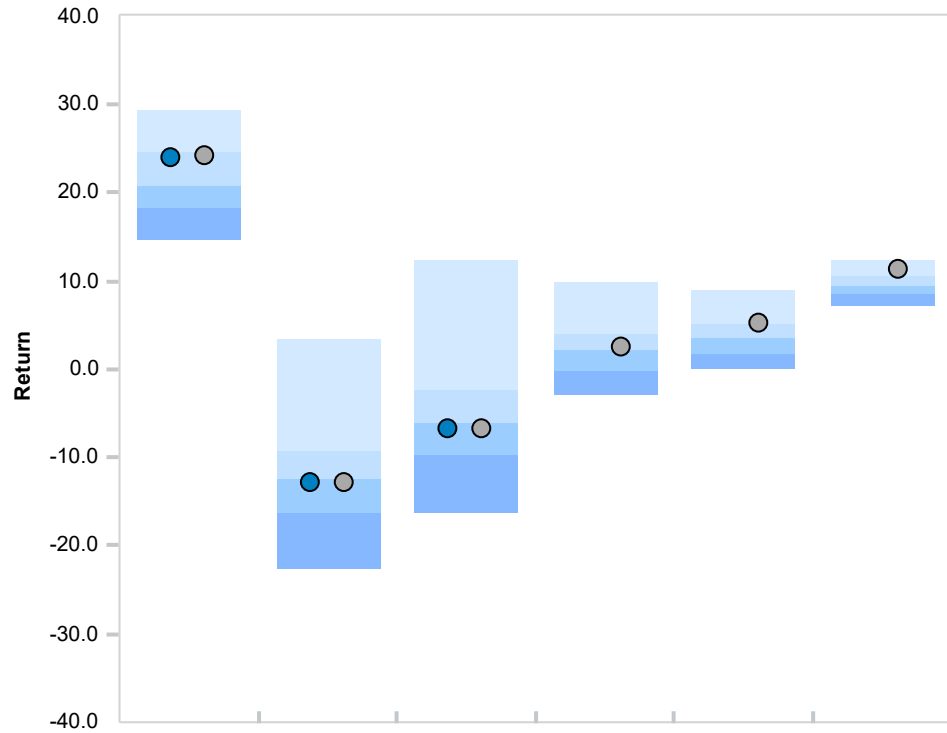
Sector Weights As of 05/31/2020



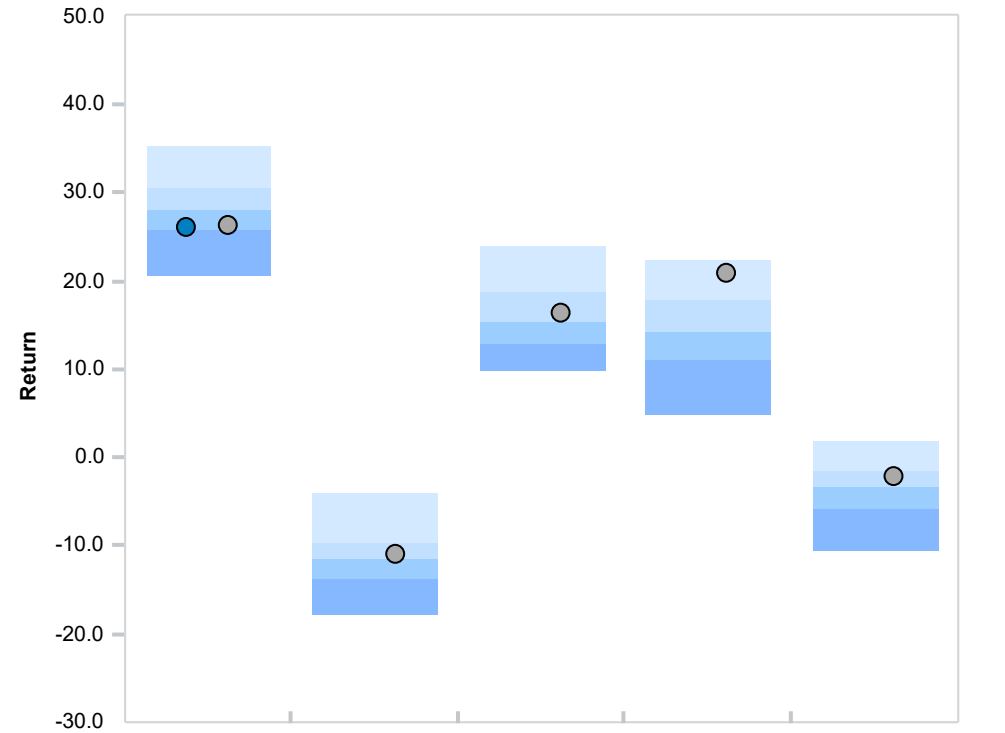
Region Weights As of 05/31/2020



Peer Group Analysis - IM U.S. Mid Cap Core Equity (MF)



Peer Group Analysis - IM U.S. Mid Cap Core Equity (MF)



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 12/01/2018	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	21,384,601	-	-528,849	20,855,752

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-29.71 (70)	7.05 (43)	-0.10 (75)	3.03 (71)	14.46 (55)	N/A
Index	-29.70 (70)	7.06 (43)	-0.09 (75)	3.05 (70)	14.49 (53)	-17.28 (73)
Median	-28.30	6.85	0.98	4.14	14.57	-15.85

Inception date for VSPMX is 12/1/2018. Manager Returns for VSPMX have been used for this report.



Fund Information

Fund Name : Vanguard Admiral Funds: Vanguard S&P Mid-Cap 400 Index Fund; Institutional Shares
Fund Family : Vanguard Group Inc
Ticker : VSPMX
Inception Date : 12/15/2010
Fund Assets : \$1,106 Million
Portfolio Turnover : 10%

Portfolio Assets : \$1,961 Million
Portfolio Manager : Coleman/Khan
PM Tenure : 2015--2017
Fund Style : IM U.S. SMID Cap Core Equity (MF)
Style Benchmark : S&P MidCap 400 Index

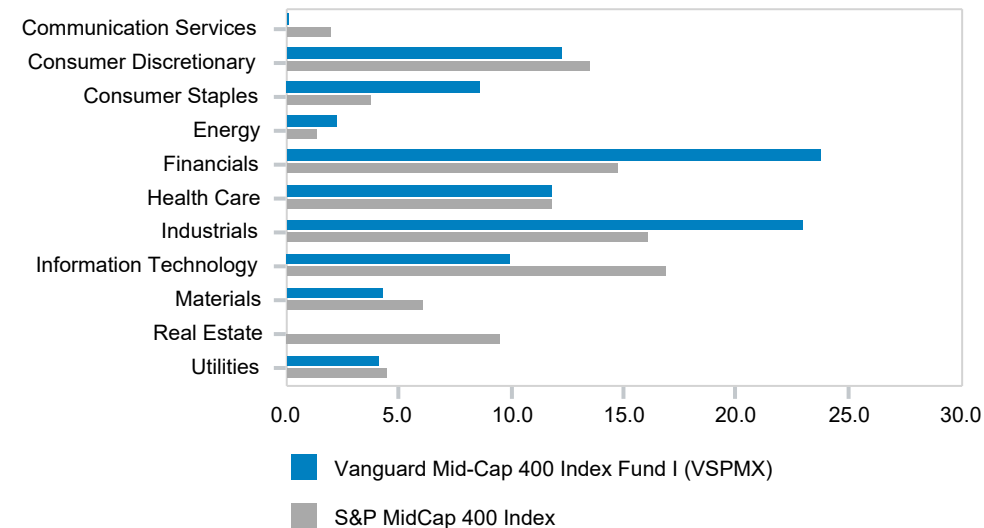
Portfolio Characteristics As of 05/31/2020

	Portfolio	Benchmark
Total Securities	404	400
Avg. Market Cap (\$)	5,671,522,256	3,509,986,030
Price/Earnings (P/E)	29.71	20.06
Price/Book (P/B)	4.57	2.68
Dividend Yield	2.98	1.70
Annual EPS	11.03	4.04
5 Yr EPS	11.85	11.22
3 Yr EPS Growth	15.47	N/A
Beta	N/A	1.00

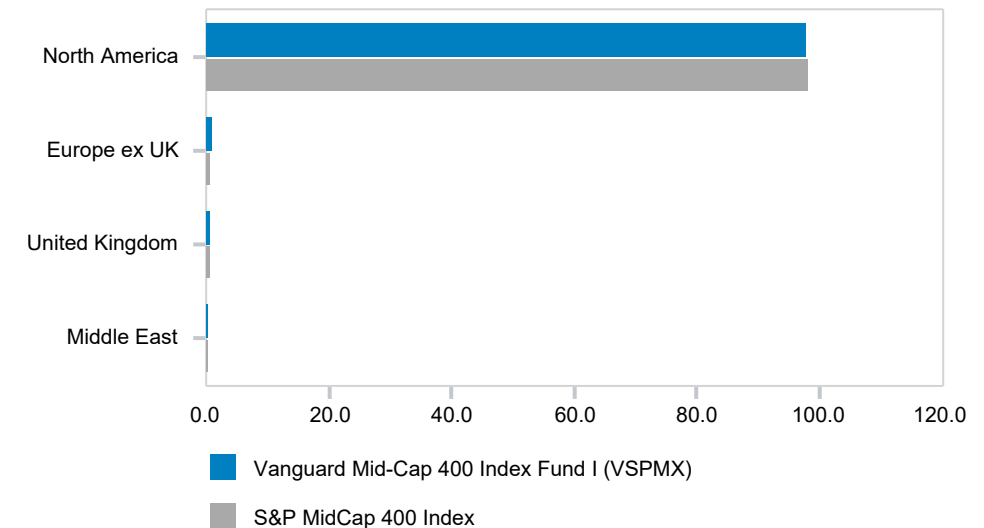
Top Ten Securities As of 05/31/2020

Tyler Technologies Inc ORD	0.9 %
Teledyne Technologies Inc ORD	0.9 %
Catalent Inc ORD	0.8 %
Masimo Corp ORD	0.8 %
Factset Research Systems Inc ORD	0.8 %
Fair Isaac Corp ORD	0.8 %
Molina Healthcare Inc ORD	0.8 %
Teradyne Inc ORD	0.7 %
Pool Corp ORD	0.7 %
Bio Rad Laboratories Inc ORD	0.7 %

Sector Weights As of 05/31/2020



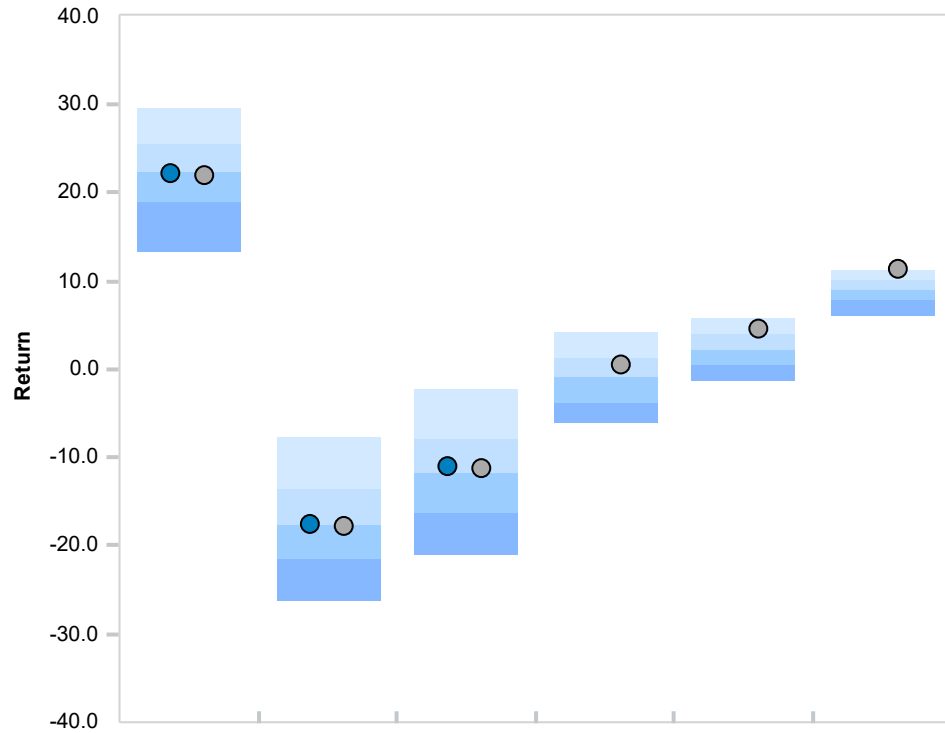
Region Weights As of 05/31/2020



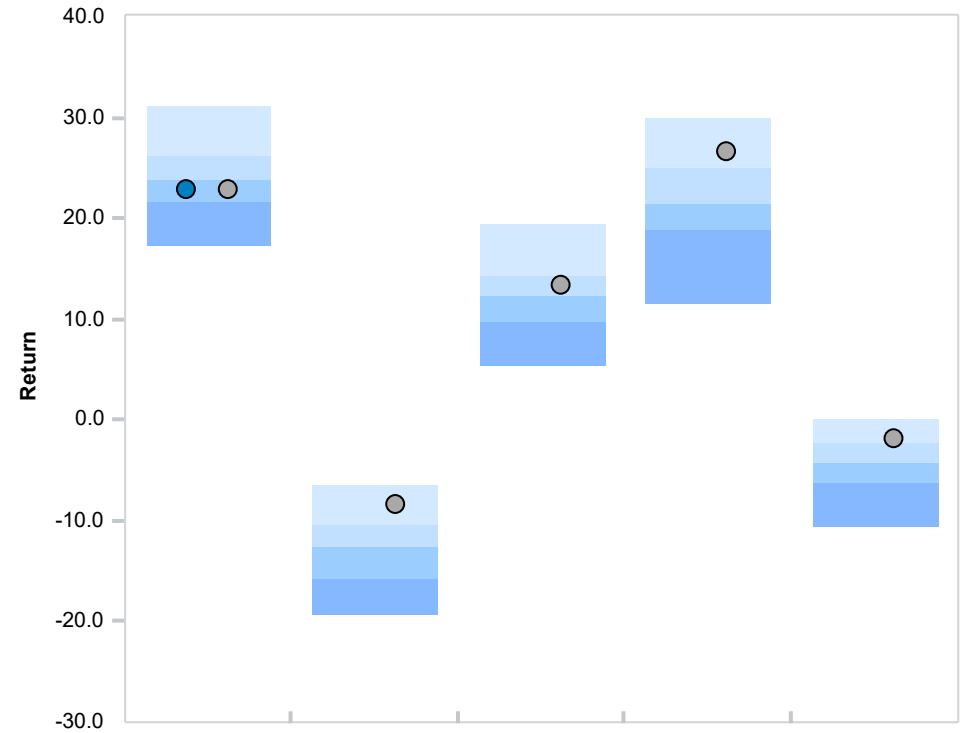
Statistics provided by Lipper. Most recent available data shown.



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



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



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 12/01/2018	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	10,695,104	-	-1,200,386	9,494,718

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-32.62 (49)	8.20 (47)	-0.19 (31)	1.84 (65)	11.59 (81)	N/A
Index	-32.64 (49)	8.21 (47)	-0.20 (31)	1.87 (63)	11.61 (80)	-20.10 (56)
Median	-32.66	8.12	-1.09	2.19	13.13	-19.89

Inception date for VSMX is 12/1/2018. Manager Returns for VSMX have been used for this report.



Fund Information

Fund Name :	Vanguard Admiral Funds: Vanguard S&P Small-Cap 600 Index Fund; Institutional Shares	Portfolio Assets :	\$2,028 Million
Fund Family :	Vanguard Group Inc	Portfolio Manager :	Coleman/Butler
Ticker :	VSMX	PM Tenure :	2013--2015
Inception Date :	12/15/2010	Fund Style :	IM U.S. Small Cap Core Equity (MF)
Fund Assets :	\$1,110 Million	Style Benchmark :	S&P SmallCap 600 Index
Portfolio Turnover :	9%		

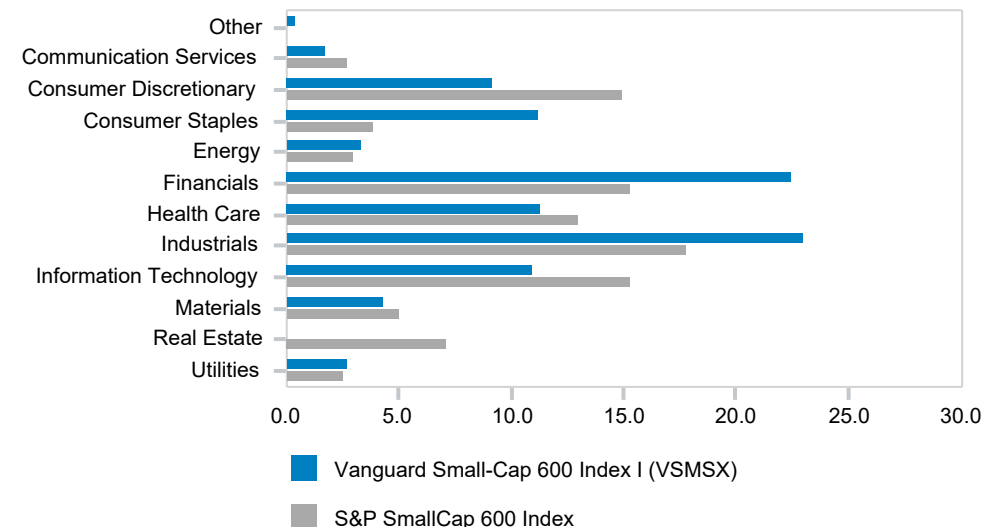
Portfolio Characteristics As of 05/31/2020

	Portfolio	Benchmark
Total Securities	609	601
Avg. Market Cap (\$)	1,772,035,411	888,280,820
Price/Earnings (P/E)	28.15	16.69
Price/Book (P/B)	3.02	2.28
Dividend Yield	3.75	1.58
Annual EPS	14.02	1.84
5 Yr EPS	11.17	11.56
3 Yr EPS Growth	14.23	N/A
Beta	N/A	1.00

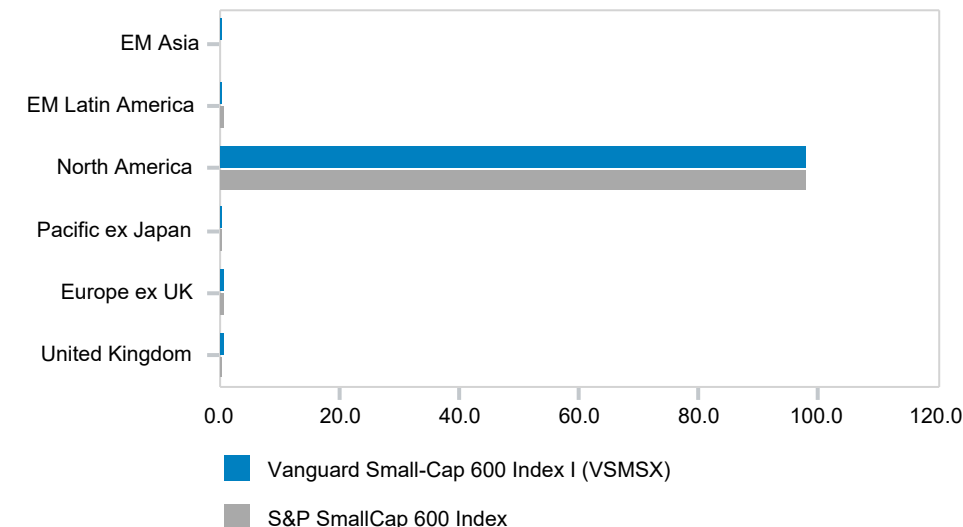
Top Ten Securities As of 05/31/2020

TopBuild Corp ORD	0.6 %
Exponent Inc ORD	0.6 %
Qualys Inc ORD	0.6 %
Neogen Corp ORD	0.6 %
Strategic Education Inc ORD	0.6 %
Emergent BioSolutions Inc ORD	0.6 %
Wingstop Inc ORD	0.6 %
Momenta Pharmaceuticals Inc ORD	0.6 %
Glacier Bancorp Inc ORD	0.6 %
Proto Labs Inc ORD	0.5 %

Sector Weights As of 05/31/2020



Region Weights As of 05/31/2020



Statistics provided by Lipper. Most recent available data shown.



Strategy Review
Vanguard Developed Markets Index (VTMNX) | Vanguard Spliced Developed ex U.S. Index (Net)
As of June 30, 2020

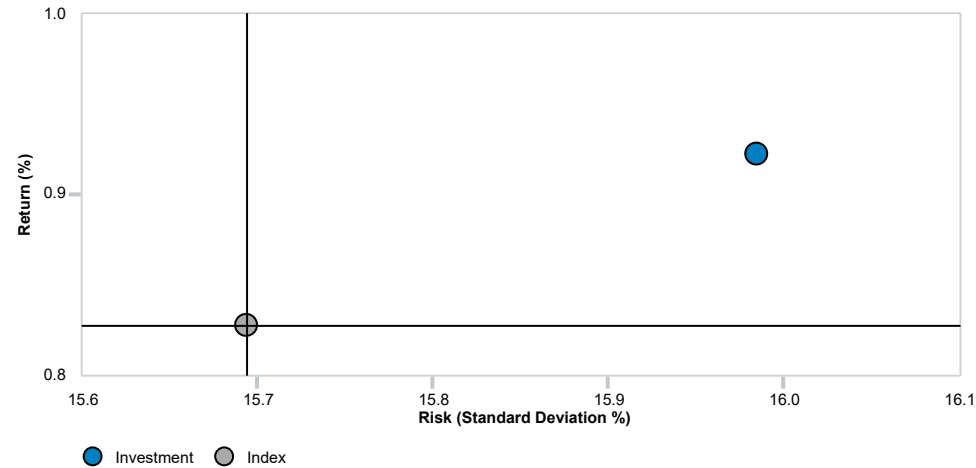
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	0.92	15.99	0.03	101.01	7	100.38	5
Index	0.83	15.69	0.02	100.00	7	100.00	5

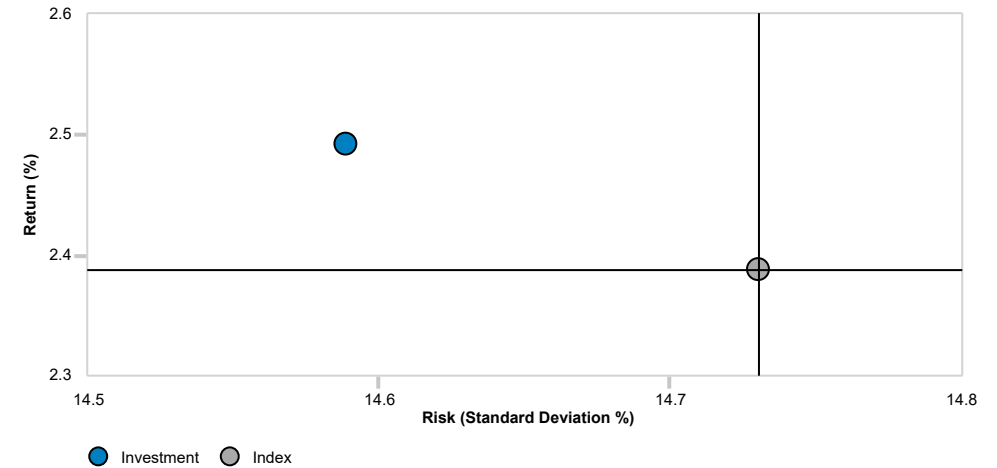
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.49	14.59	0.16	98.60	11	97.87	9
Index	2.39	14.73	0.16	100.00	11	100.00	9

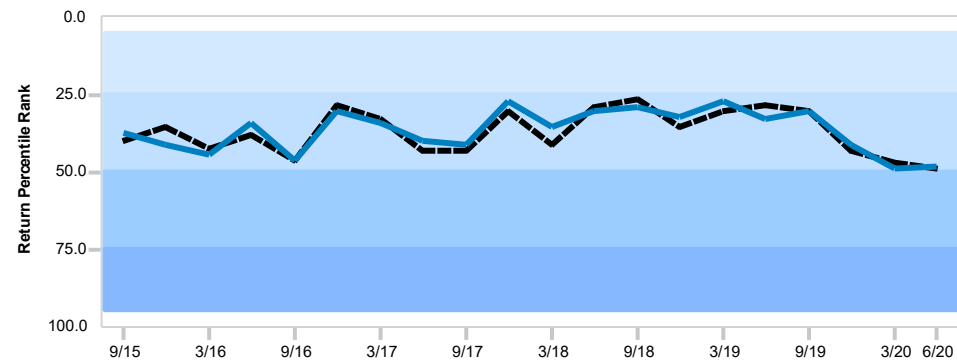
Risk and Return 3 Years



Risk and Return 5 Years

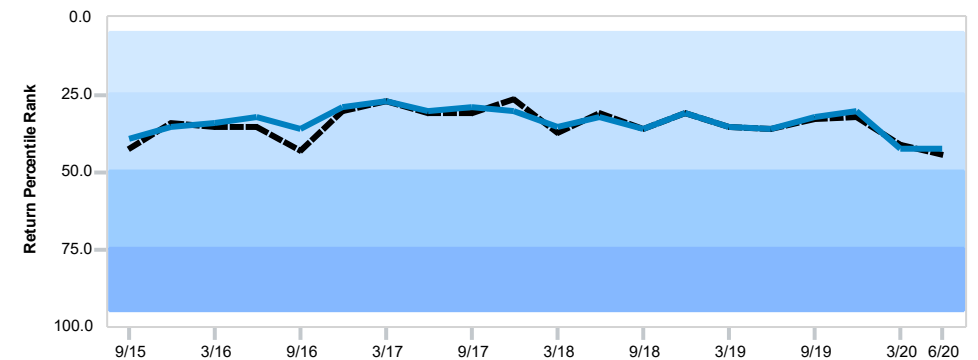


3 Year Rolling Percentile Rank IM International Multi-Cap Equity (MF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)
Index	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)

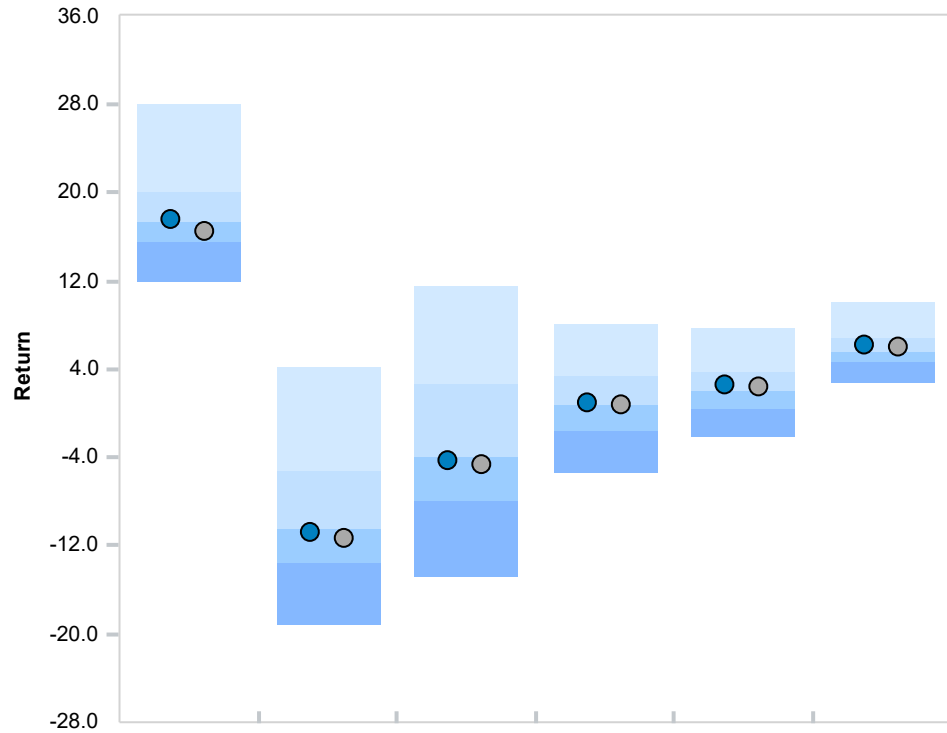
5 Year Rolling Percentile Rank IM International Multi-Cap Equity (MF)



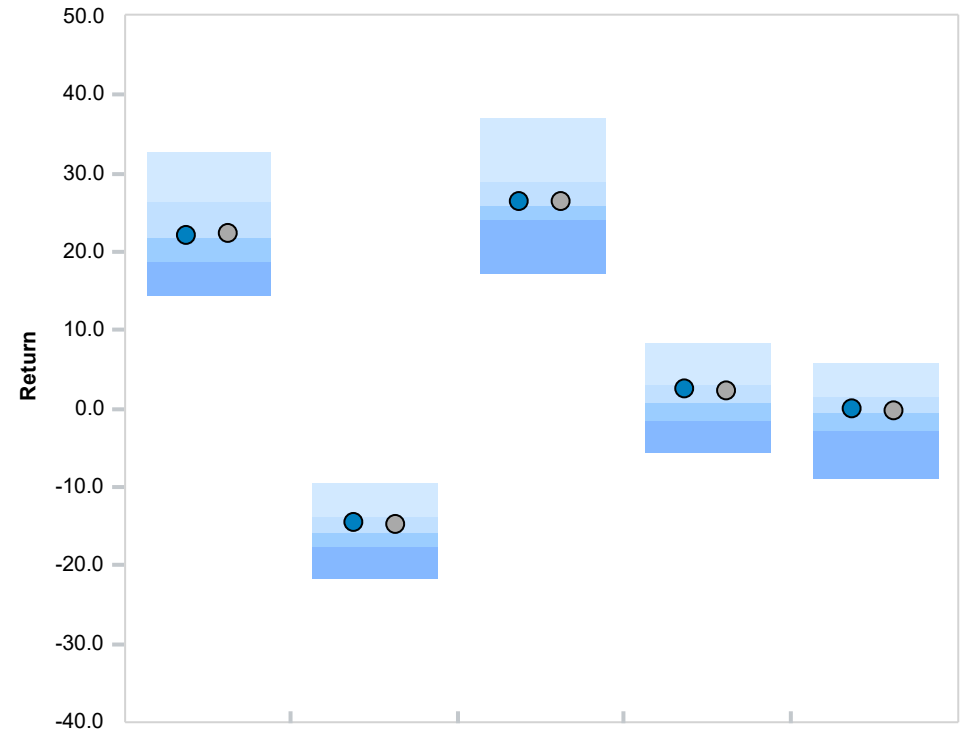
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)
Index	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)



Peer Group Analysis - IM International Multi-Cap Equity (MF)



Peer Group Analysis - IM International Multi-Cap Equity (MF)



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 07/01/2009	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	253,831	11,045,927	4,500,212	15,799,971

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-24.03	8.35	-0.98	3.27	10.25	-13.11
Index	-23.82	8.62	-1.07	3.34	10.16	-13.22

June 30, 2020

Fund Information

Fund Name : Vanguard Tax-Managed Funds: Vanguard Developed Markets Index Fund; Institutional Shares
Fund Family : Vanguard Group Inc
Ticker : VTMNX
Inception Date : 01/04/2001
Fund Assets : \$11,121 Million
Portfolio Turnover : 2%

Portfolio Assets : \$110,758 Million

Portfolio Manager : Franquin/Perre

PM Tenure : 2013--2017

Fund Style : IM International Multi-Cap Core Equity (MF)

Style Benchmark : FTSE Developed x North America Index (Net)

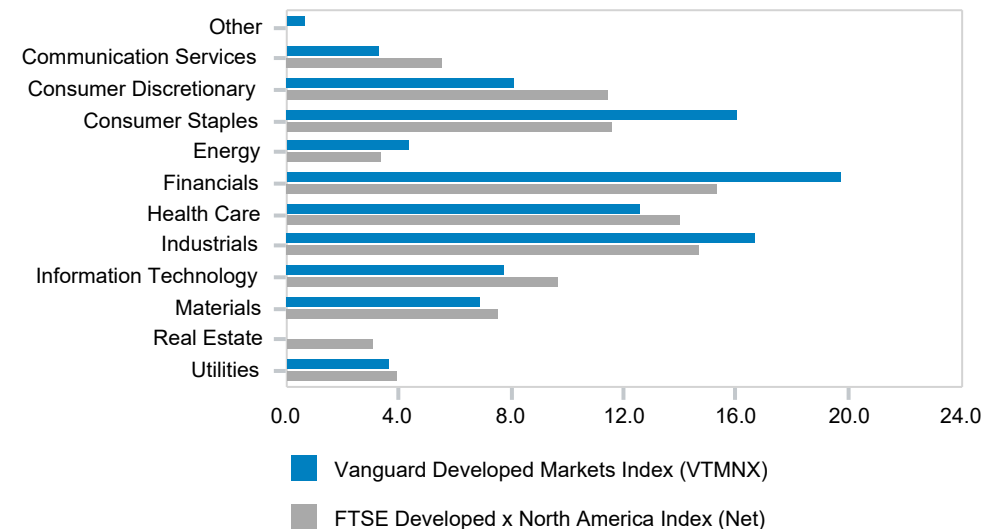
Portfolio Characteristics As of 05/31/2020

	Portfolio	Benchmark
Total Securities	3,927	1
Avg. Market Cap (\$)	52,751,387,321	-
Price/Earnings (P/E)	23.99	N/A
Price/Book (P/B)	3.63	N/A
Dividend Yield	3.36	N/A
Annual EPS	2.46	N/A
5 Yr EPS	6.46	N/A
3 Yr EPS Growth	10.00	N/A
Beta (5 Years, Monthly)	1.00	1.00

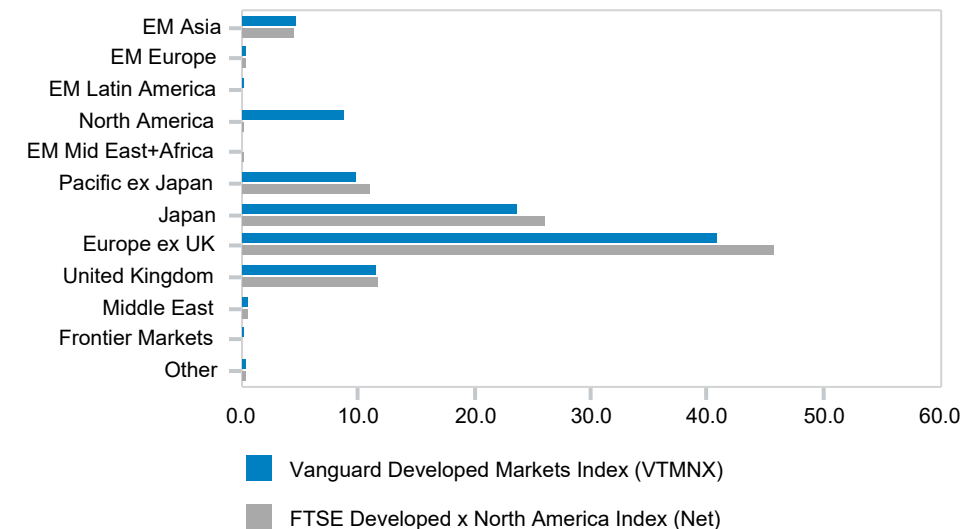
Top Ten Securities As of 05/31/2020

Nestle SA ORD	1.9 %
Roche Holding AG Par	1.4 %
Novartis AG ORD	1.1 %
Samsung Electronics Co Ltd ORD	1.1 %
Toyota Motor Corp ORD	0.9 %
AstraZeneca PLC ORD	0.8 %
ASML Holding NV ORD	0.8 %
SAP SE ORD	0.7 %
Novo Nordisk A/S ORD	0.6 %
Sanofi SA ORD	0.6 %

Sector Weights As of 05/31/2020



Region Weights As of 05/31/2020



Statistics provided by Lipper. Most recent available data shown.



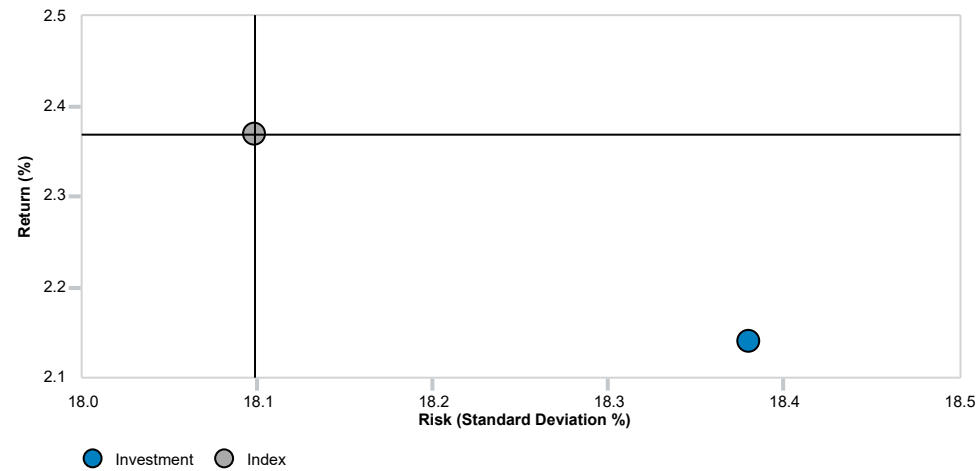
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.14	18.38	0.11	101.04	7	101.95	5
Index	2.37	18.10	0.12	100.00	7	100.00	5

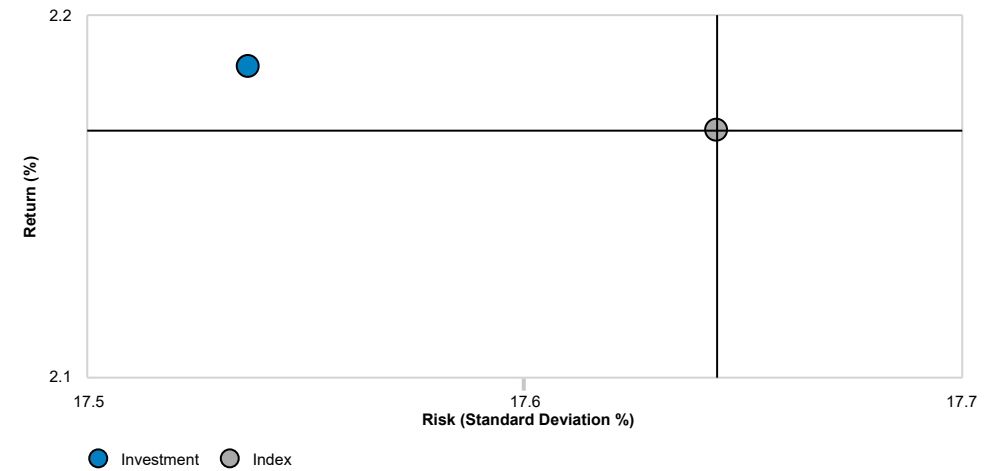
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.19	17.54	0.15	99.06	12	98.90	8
Index	2.17	17.64	0.14	100.00	13	100.00	7

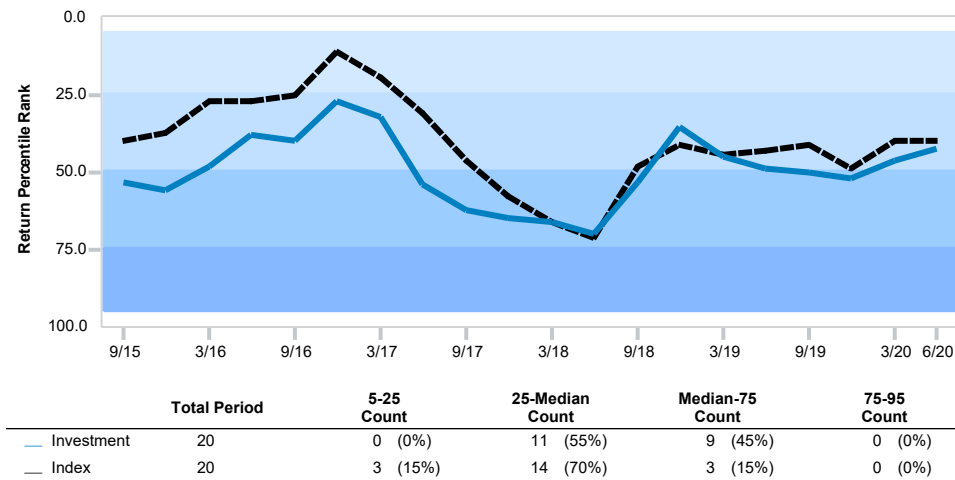
Risk and Return 3 Years



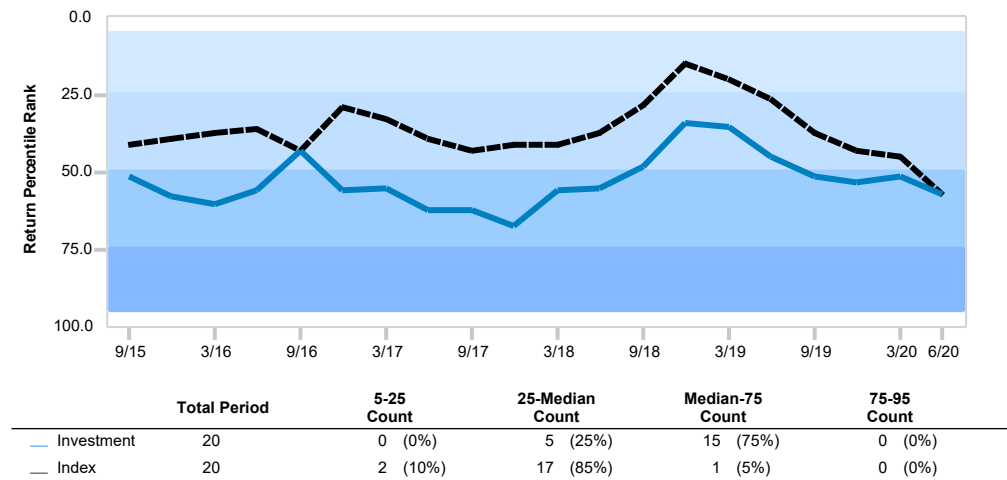
Risk and Return 5 Years



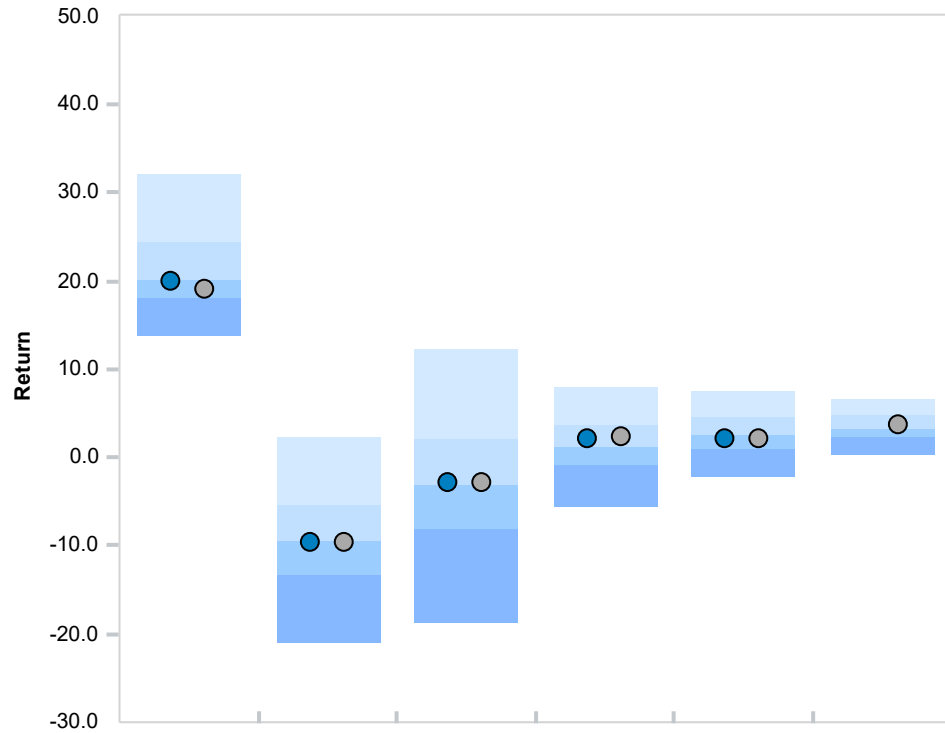
3 Year Rolling Percentile Rank IM Emerging Markets Equity (MF)



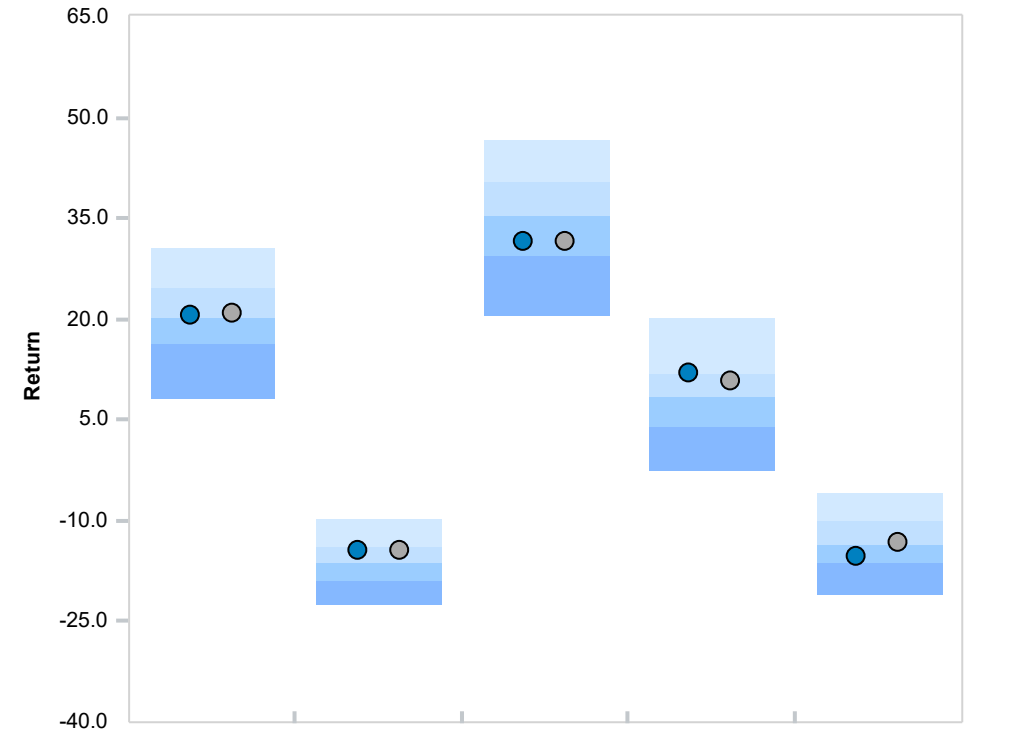
5 Year Rolling Percentile Rank IM Emerging Markets Equity (MF)



Peer Group Analysis - IM Emerging Markets Equity (MF)



Peer Group Analysis - IM Emerging Markets Equity (MF)



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 10/01/2010	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	5,147,163	4,164,289	1,558,335	10,869,787

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-24.56	11.33	-3.57	0.73	11.32	-6.30
Index	-24.16	11.43	-3.49	0.95	11.28	-6.40



Fund Information

Fund Name : Vanguard International Equity Index Funds: Vanguard Emerging Markets Stock Index Fund; Instl Class Shares
Fund Family : Vanguard Group Inc
Ticker : VEMIX
Inception Date : 06/22/2000
Fund Assets : \$5,672 Million
Portfolio Turnover : 9%

Portfolio Assets : \$78,935 Million

Portfolio Manager : Perre/Miller
PM Tenure : 2008--2016
Fund Style : IM Emerging Markets Equity (MF)
Style Benchmark : FTSE Emerging Mkts All Cap China A Inclusion Index

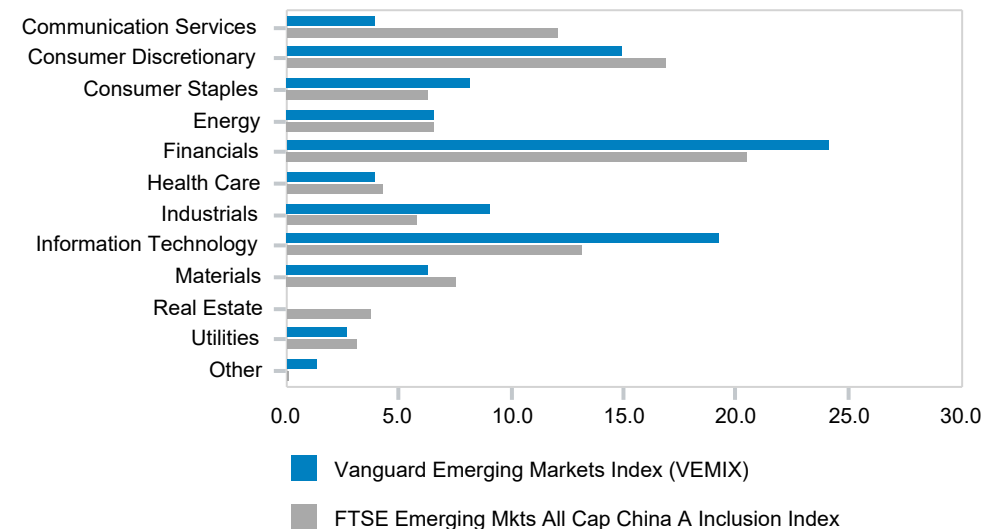
Portfolio Characteristics As of 05/31/2020

	Portfolio	Benchmark
Total Securities	4,198	1
Avg. Market Cap (\$)	114,231,945,973	-
Price/Earnings (P/E)	23.50	N/A
Price/Book (P/B)	3.91	N/A
Dividend Yield	3.66	N/A
Annual EPS	17.40	N/A
5 Yr EPS	15.24	N/A
3 Yr EPS Growth	18.99	N/A
Beta (5 Years, Monthly)	0.99	1.00

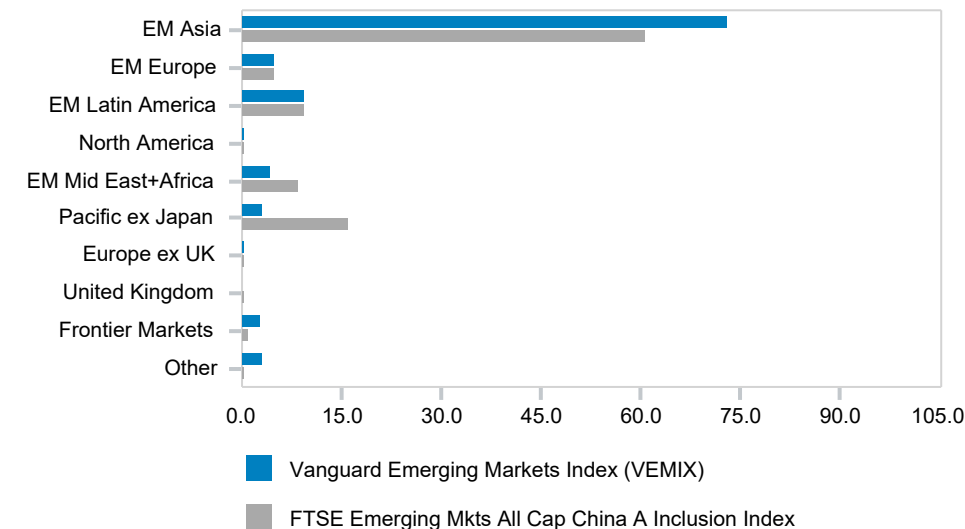
Top Ten Securities As of 05/31/2020

Alibaba Group Holding Ltd DR	6.9 %
Tencent Holdings Ltd ORD	5.8 %
Taiwan Semiconductor Manufacturing	2.9 %
Taiwan Semiconductor Manufacturing	1.6 %
China Construction Bank Corp ORD	1.4 %
Naspers Ltd ORD	1.3 %
Meituan Dianping ORD	1.2 %
Reliance Industries Ltd ORD	1.1 %
Ping An Insurance Group Co of China	1.0 %
Industrial and Commercial Bank	1.0 %

Sector Weights As of 05/31/2020



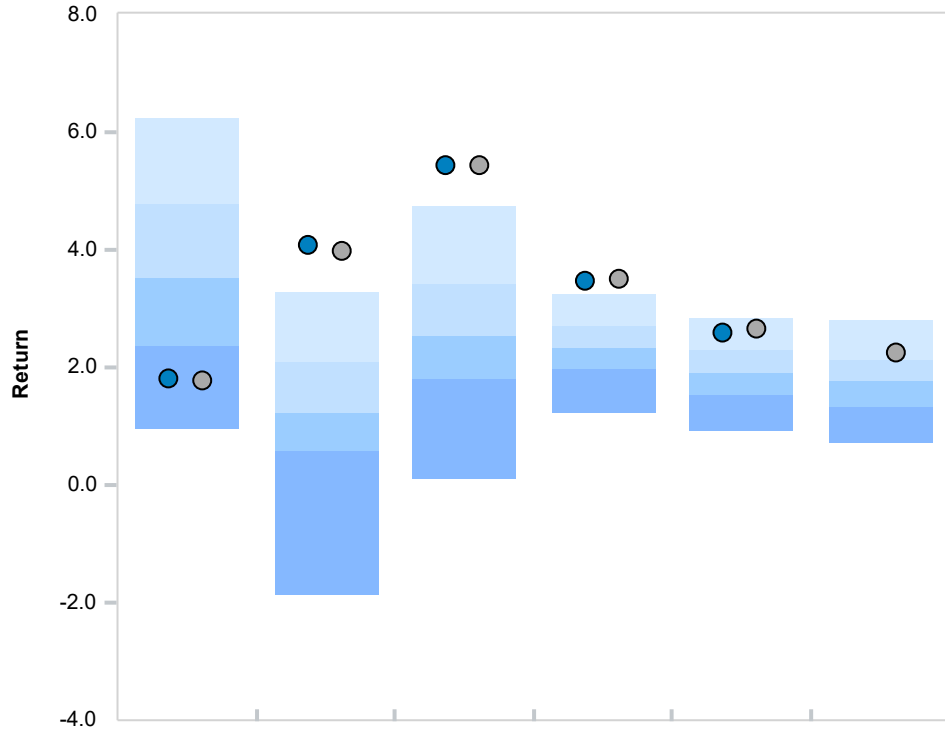
Region Weights As of 05/31/2020



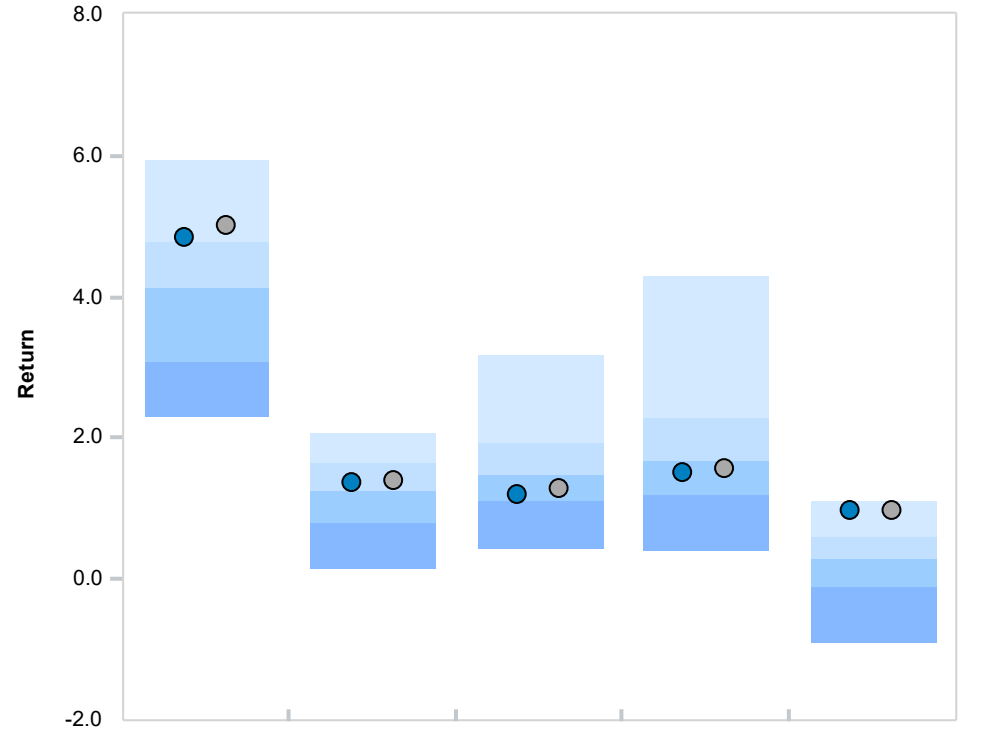
Statistics provided by Lipper. Most recent available data shown.



Peer Group Analysis - IM U.S. Short Term Investment Grade (MF)



Peer Group Analysis - IM U.S. Short Term Investment Grade (MF)



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 04/01/2013	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	10,001,804	-6,319,350	1,765,486	5,447,940

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	2.24	0.34	0.95	1.83	1.64	1.45
Index	2.17	0.50	0.89	1.92	1.62	1.46

Fund Information

Fund Name :	Vanguard Bond Index Funds: Vanguard Short-Term Bond Index Fund; Institutional Class Shares	Portfolio Assets :	\$58,597 Million
Fund Family :	Vanguard Group Inc	Portfolio Manager :	Joshua C. Barrickman
Ticker :	VBIX	PM Tenure :	2013
Inception Date :	09/27/2011	Fund Style :	IM U.S. Short Term Investment Grade (MF)
Fund Assets :	\$5,424 Million	Style Benchmark :	Bloomberg Barclays U.S. Aggregate 1-3 Yrs
Portfolio Turnover :	44%		

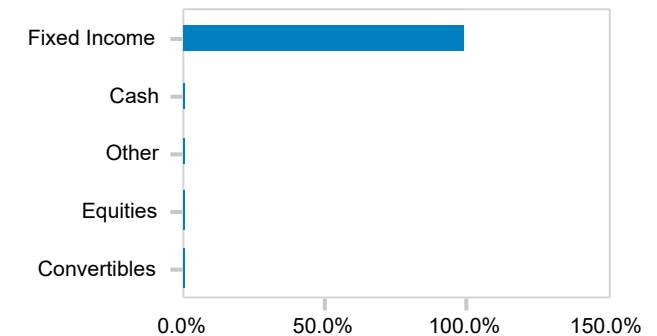
Fund Characteristics As of 03/31/2020

Avg. Coupon	2.35 %
Nominal Maturity	N/A
Effective Maturity	2.79 Years
Duration	2.67 Years
SEC 30 Day Yield	N/A
Avg. Credit Quality	AA

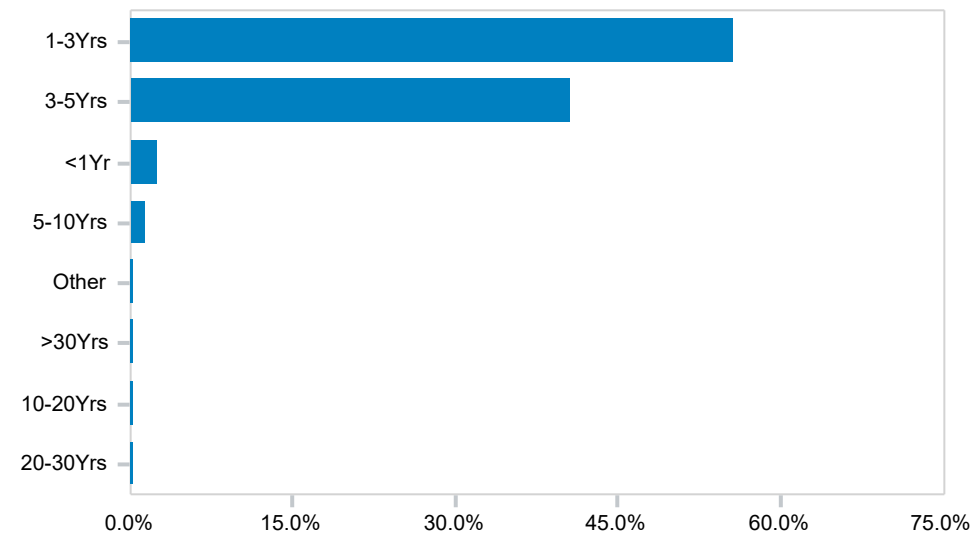
Top Ten Securities As of 03/31/2020

Treasury Notes/Bonds	64.0 %
Corporate Notes/Bonds	28.8 %
Government Agency Securities	4.5 %
US\$ Denominated Fgn. Gvt.	2.1 %
Fgn. Currency Denominated Bonds	0.1 %

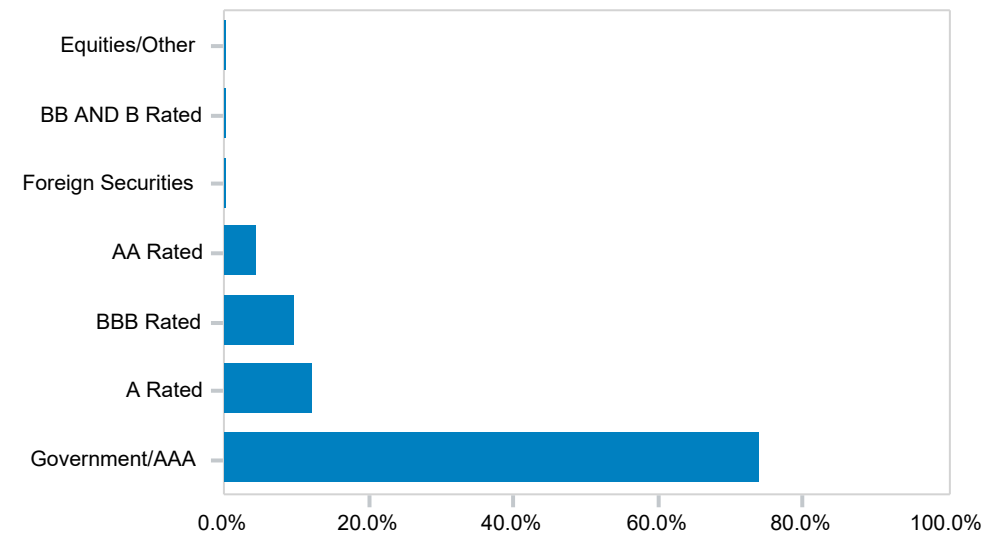
Asset Allocation As of 03/31/2020



Maturity Distribution As of 03/31/2020



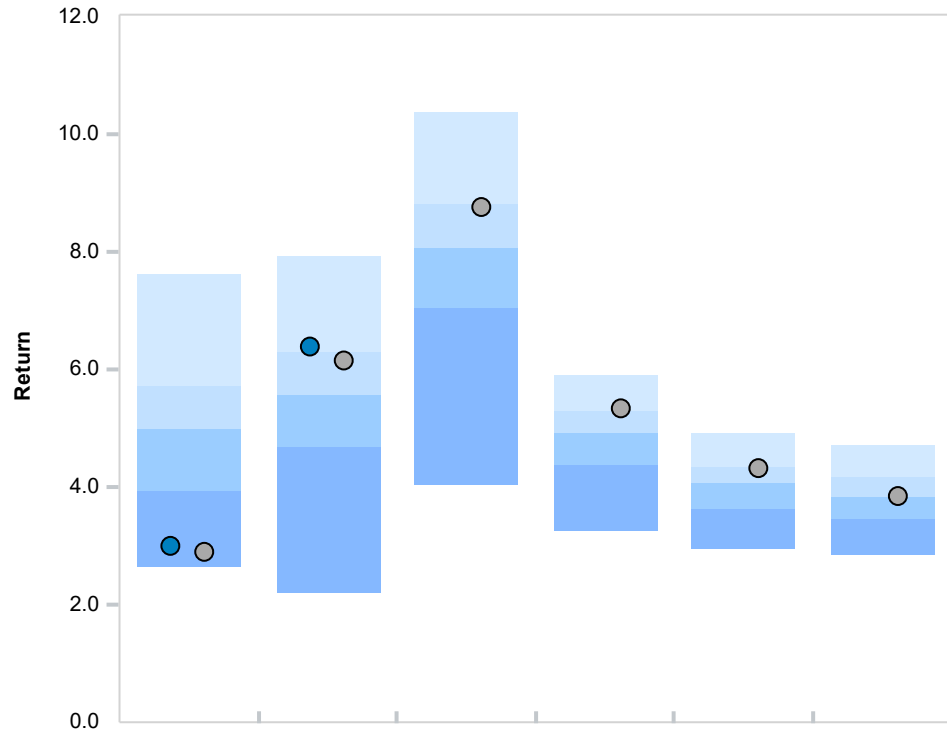
Sector/Quality Allocation As of 03/31/2020



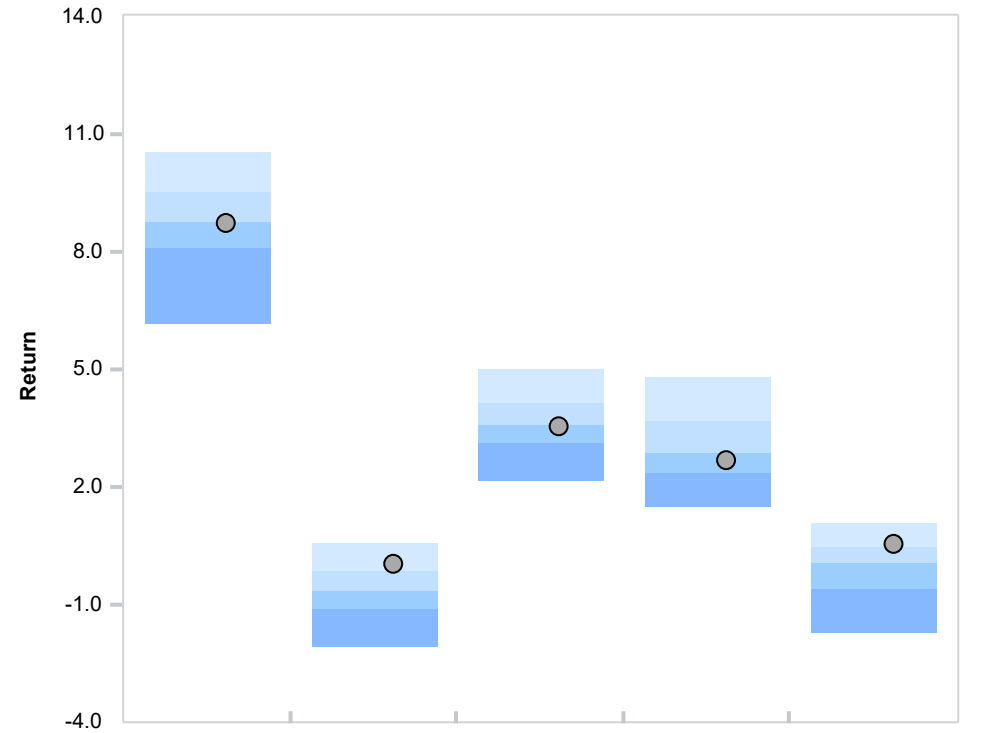
Statistics provided by Lipper. Most recent available data shown.



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



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



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 09/01/2019	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	5,041,017	36,803,437	2,697,541	44,541,994

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	3.28 (13)	0.02 (72)	N/A	N/A	N/A	N/A
Index	3.15 (16)	0.18 (51)	2.27 (34)	3.08 (42)	2.94 (72)	1.64 (11)
Median	0.56	0.18	2.16	3.04	3.23	0.99

Fund Information

Fund Name :	Vanguard Bond Index Funds: Vanguard Total Bond Market Index Fund; Institutional Shares	Portfolio Assets :	\$275,723 Million
Fund Family :	Vanguard Group Inc	Portfolio Manager :	Joshua C. Barrickman
Ticker :	VBTIX	PM Tenure :	2013
Inception Date :	09/18/1995	Fund Style :	IM U.S. Broad Market Core Fixed Income (MF)
Fund Assets :	\$50,203 Million	Style Benchmark :	Bloomberg Barclays U.S. Aggregate
Portfolio Turnover :	31%		

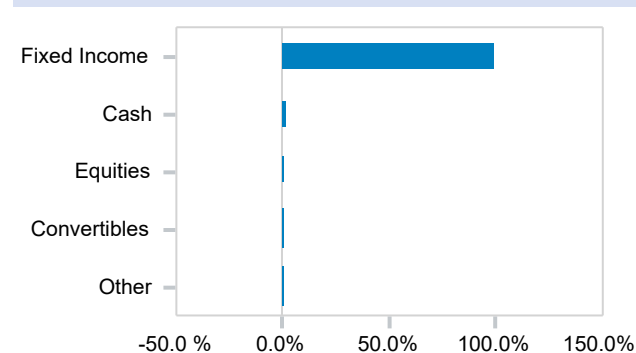
Fund Characteristics As of 03/31/2020

Avg. Coupon	3.13 %
Nominal Maturity	N/A
Effective Maturity	8.02 Years
Duration	5.98 Years
SEC 30 Day Yield	2.7
Avg. Credit Quality	AA

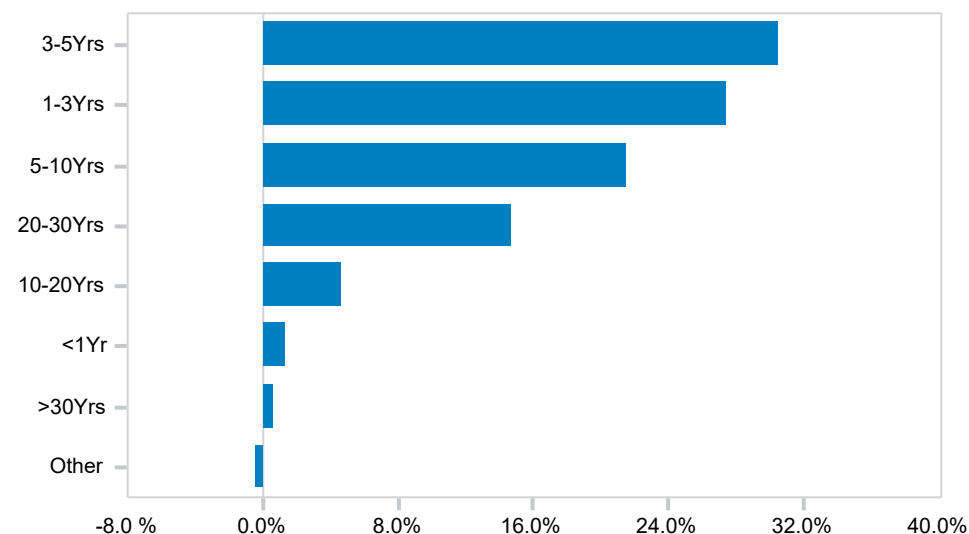
Top Ten Securities As of 03/31/2020

Treasury Notes/Bonds	42.7 %
Corporate Notes/Bonds	28.2 %
GNMA and Other Mtg Backed	24.3 %
Government Agency Securities	2.4 %
US\$ Denominated Fgn. Gvt.	1.2 %
Asset Backed Securities	0.4 %
Fgn. Currency Denominated Bonds	0.1 %

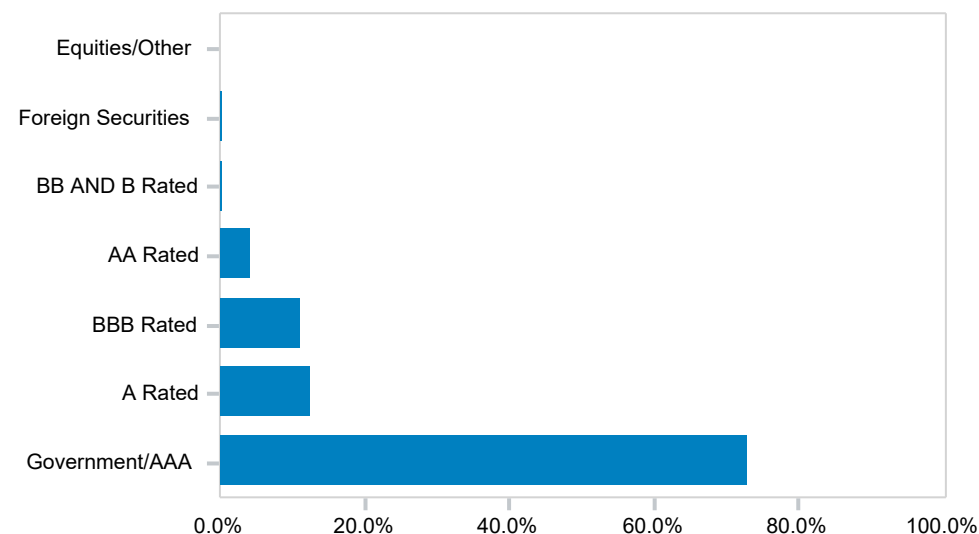
Asset Allocation As of 03/31/2020



Maturity Distribution As of 03/31/2020



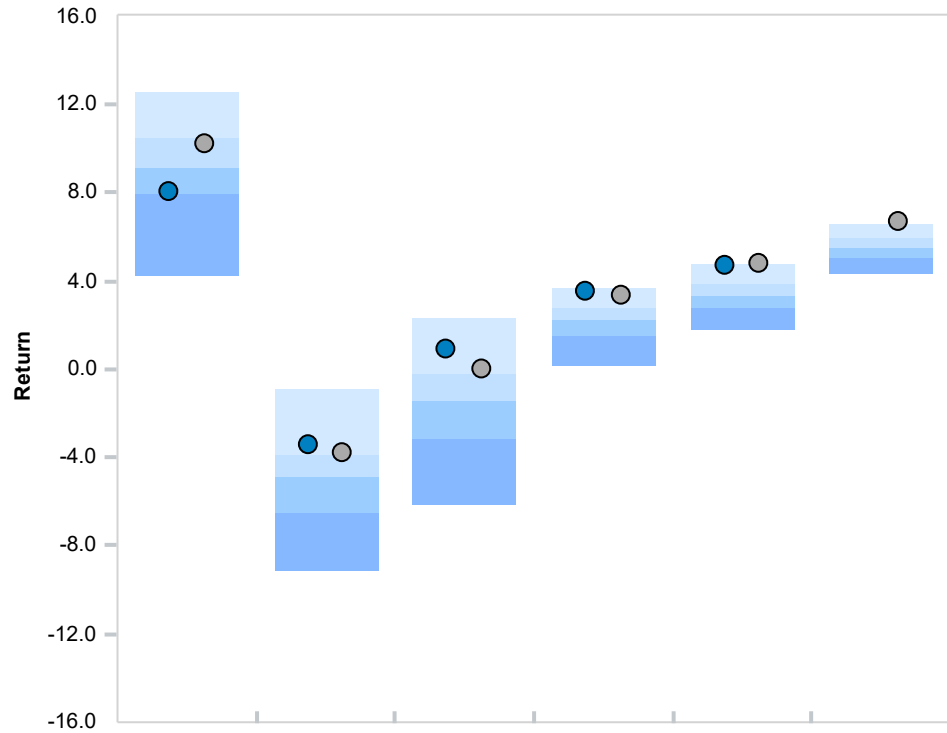
Sector/Quality Allocation As of 03/31/2020



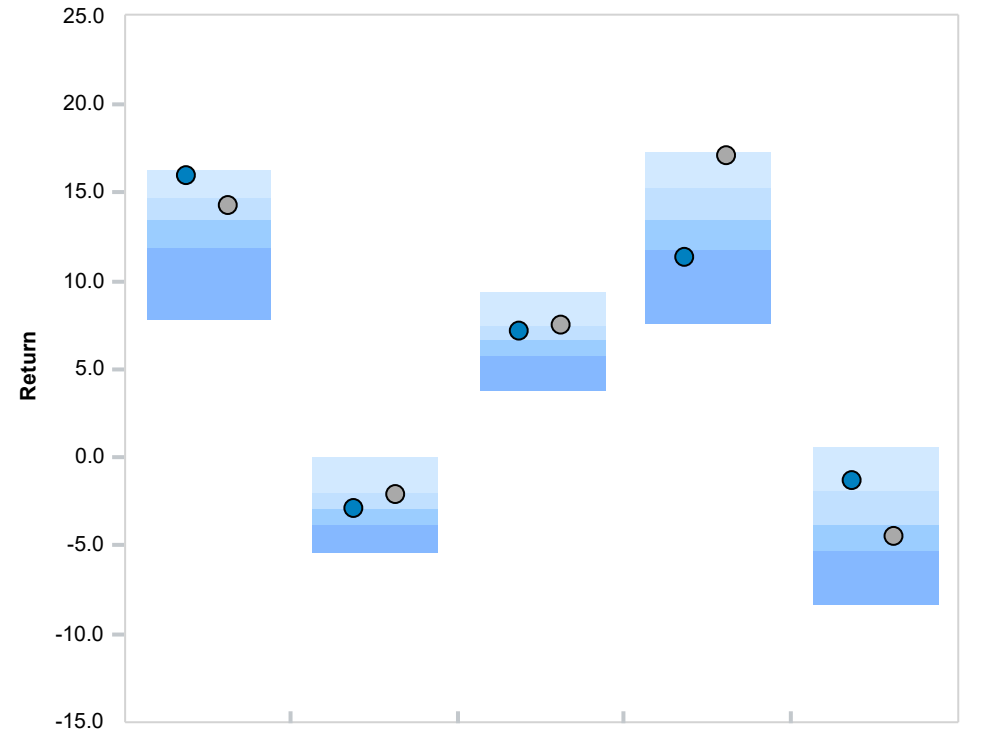
Statistics provided by Lipper. Most recent available data shown.



Peer Group Analysis - IM U.S. High Yield Bonds (MF)



Peer Group Analysis - IM U.S. High Yield Bonds (MF)



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 12/01/2014	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	12,642,764	4,850,000	4,475,338	21,968,102

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-10.59	2.52	1.86	3.15	7.59	-4.36
Index	-12.68	2.61	1.33	2.50	7.26	-4.53

Fund Information

Fund Name :	Vanguard Fixed Income Securities Funds: Vanguard High-Yield Corporate Fund; Admiral Shares	Portfolio Assets :	\$24,635 Million
Fund Family :	Vanguard Group Inc	Portfolio Manager :	Michael L. Hong
Ticker :	VWEAX	PM Tenure :	2008
Inception Date :	11/12/2001	Fund Style :	IM U.S. High Yield Bonds (MF)
Fund Assets :	\$21,044 Million	Style Benchmark :	FTSE High Yield Market Index
Portfolio Turnover :	28%		

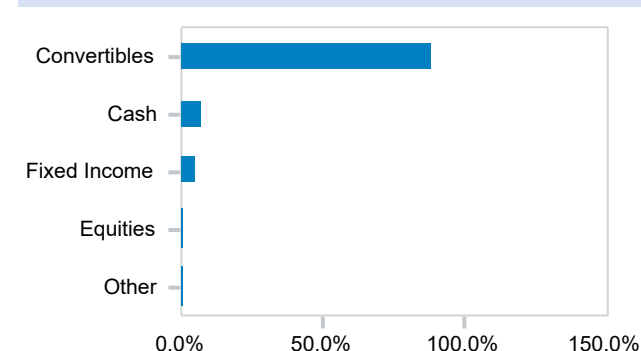
Fund Characteristics As of 03/31/2020

Avg. Coupon	5.26 %
Nominal Maturity	6.60 Years
Effective Maturity	6.27 Years
Duration	4.07 Years
SEC 30 Day Yield	6.5
Avg. Credit Quality	BB

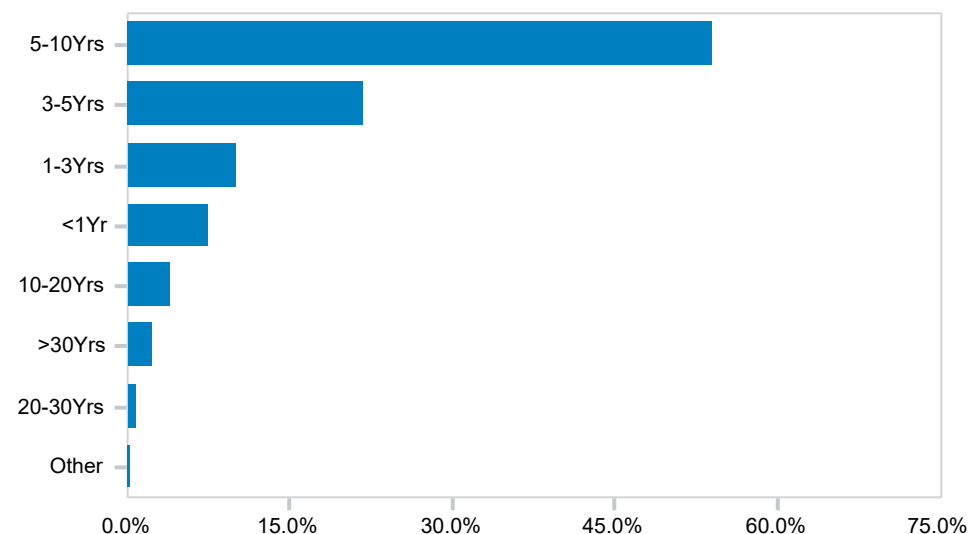
Top Ten Securities As of 03/31/2020

Convertible Securities	88.2 %
Government Agency Securities	4.6 %
Fgn. Currency Denominated Bonds	3.9 %
Common Stock	0.1 %

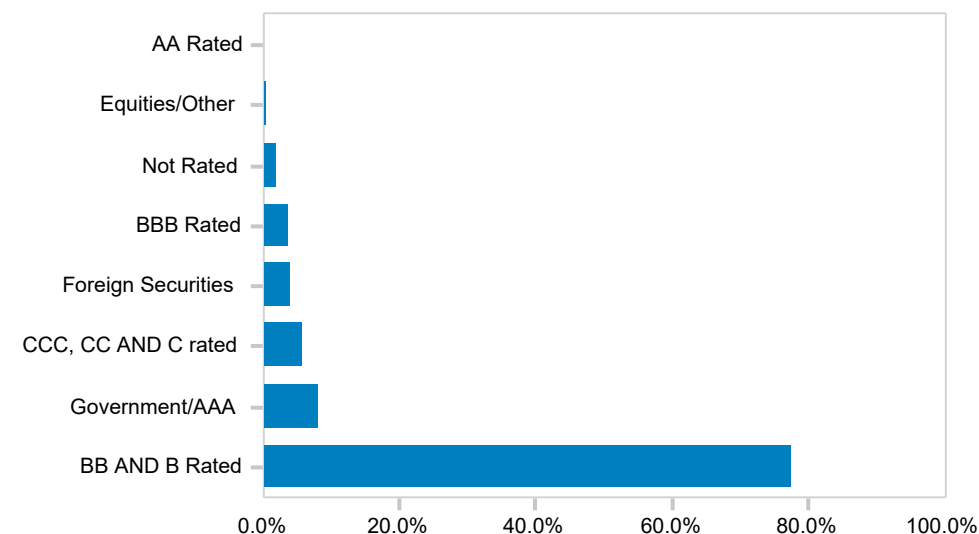
Asset Allocation As of 03/31/2020



Maturity Distribution As of 03/31/2020



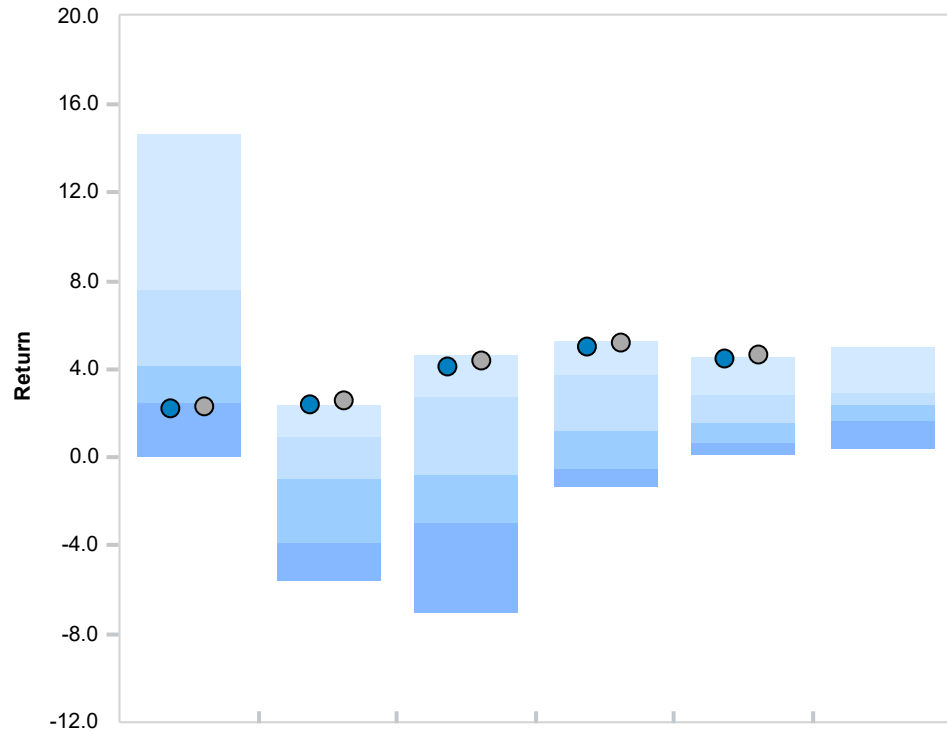
Sector/Quality Allocation As of 03/31/2020



Statistics provided by Lipper. Most recent available data shown.

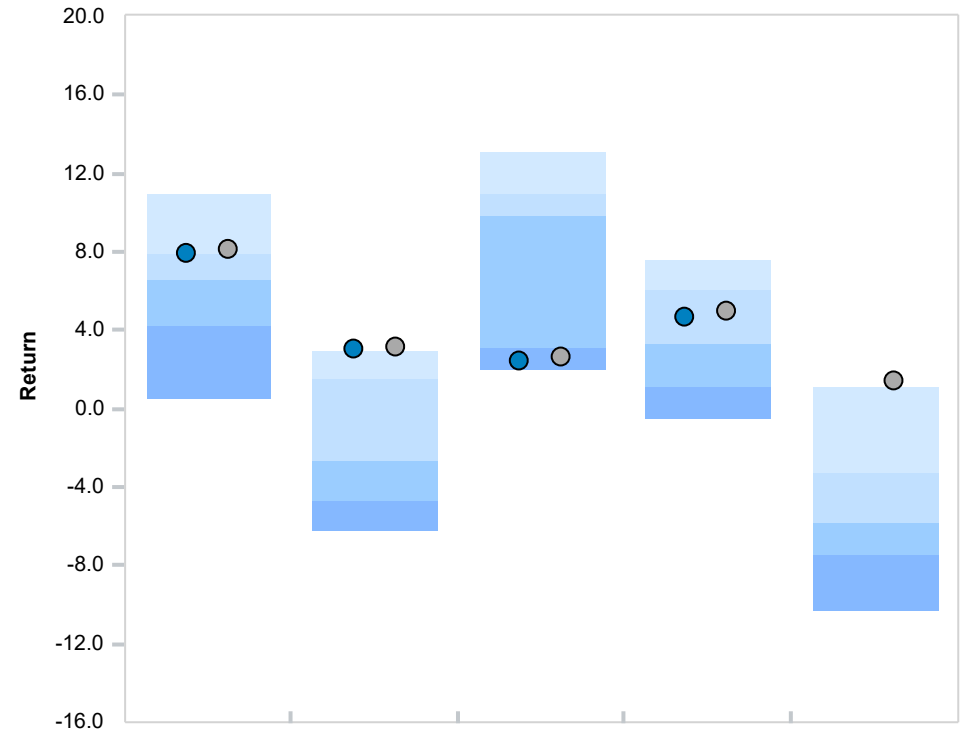


Peer Group Analysis - IM International Fixed Income (MF)



	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Investment	2.20 (79)	2.36 (4)	4.08 (8)	5.01 (7)	4.46 (7)	N/A
Index	2.31 (78)	2.53 (4)	4.34 (7)	5.21 (6)	4.66 (4)	N/A
Median	4.16	-0.99	-0.79	1.20	1.60	2.34

Peer Group Analysis - IM International Fixed Income (MF)



	2019	2018	2017	2016	2015
Investment	7.89 (24)	3.00 (2)	2.43 (86)	4.69 (35)	N/A
Index	8.06 (24)	3.16 (1)	2.57 (82)	4.90 (33)	1.34 (3)
Median	6.60	-2.68	9.80	3.34	-5.82

Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 06/01/2015	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	9,329,282	-175,000	2,069,309	11,223,591

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	0.16	-1.30	3.02	2.95	3.06	1.87
Index	0.21	-1.25	3.05	2.97	3.12	1.87
Median	0.21	-1.25	3.05	2.97	3.12	1.87

Fund Information

Fund Name : Vanguard Charlotte Funds: Vanguard Total International Bond Index Fund; Institutional Class Shares	Portfolio Assets : \$143,776 Million
Fund Family : Vanguard Group Inc	Portfolio Manager : Joshua C. Barrickman
Ticker : VTIFX	PM Tenure : 2013
Inception Date : 05/31/2013	Fund Style : IM International Fixed Income (MF)
Fund Assets : \$36,140 Million	Style Benchmark : FTSE Non-U.S. World Government Bond
Portfolio Turnover : 26%	

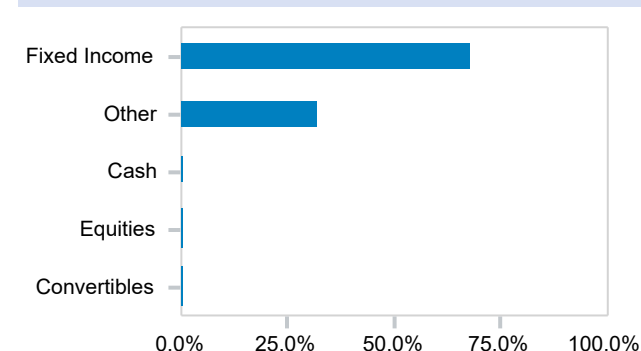
Fund Characteristics As of 03/31/2020

Avg. Coupon	1.84 %
Nominal Maturity	N/A
Effective Maturity	9.82 Years
Duration	8.19 Years
SEC 30 Day Yield	N/A
Avg. Credit Quality	N/A

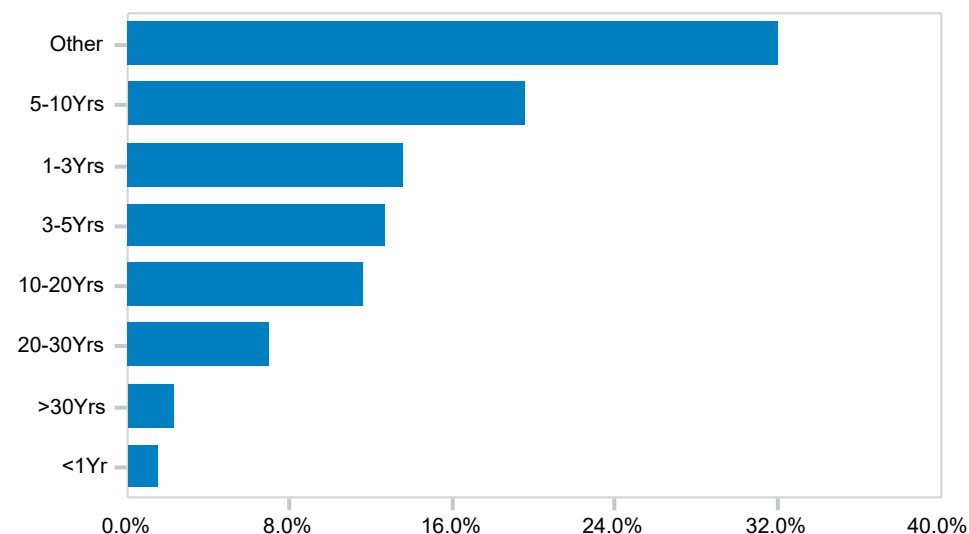
Top Ten Securities As of 03/31/2020

US\$ Denominated Fgn. Gvt.	63.7 %
Corporate Notes/Bonds	1.9 %
Government Agency Securities	1.2 %
Asset Backed Securities	1.1 %

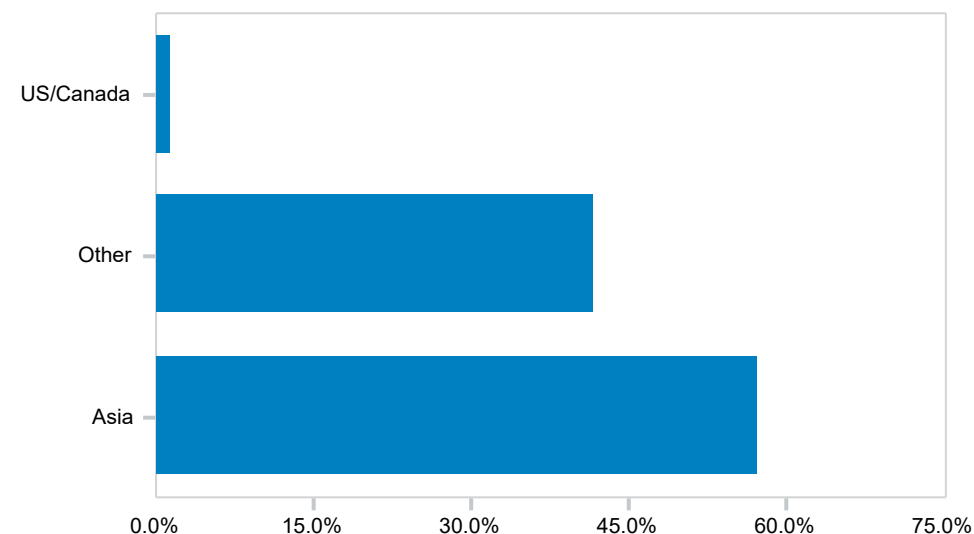
Asset Allocation As of 03/31/2020



Maturity Distribution As of 03/31/2020



Sector/Quality Allocation As of 03/31/2020



Statistics provided by Lipper. Most recent available data shown.



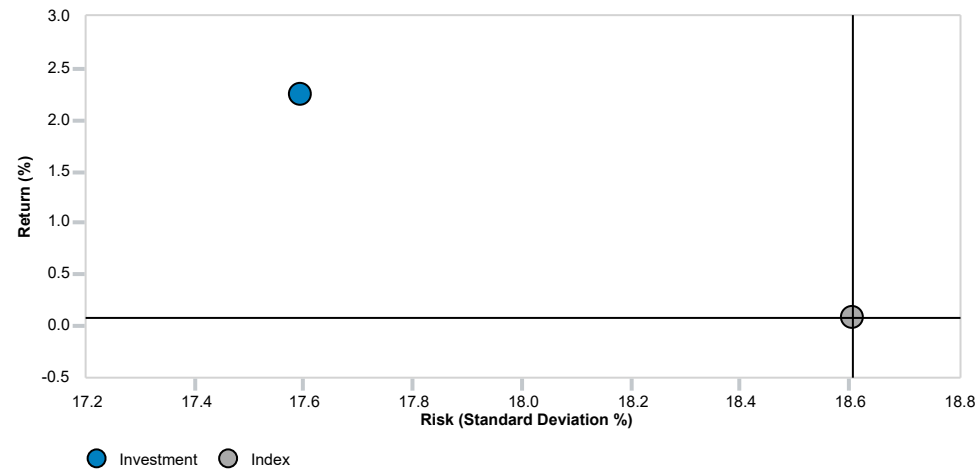
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.24	17.59	0.12	100.54	9	90.89	3
Index	0.08	18.61	0.01	100.00	8	100.00	4

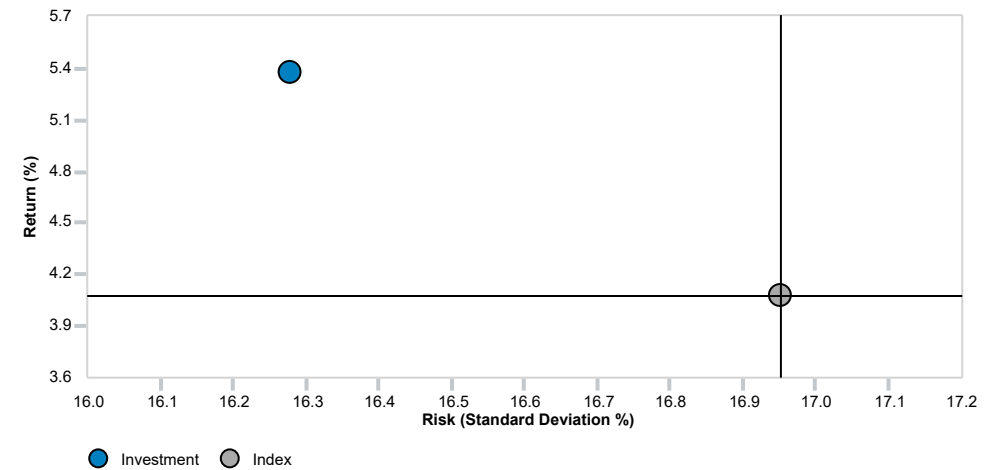
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.38	16.28	0.33	100.31	15	94.10	5
Index	4.08	16.95	0.26	100.00	14	100.00	6

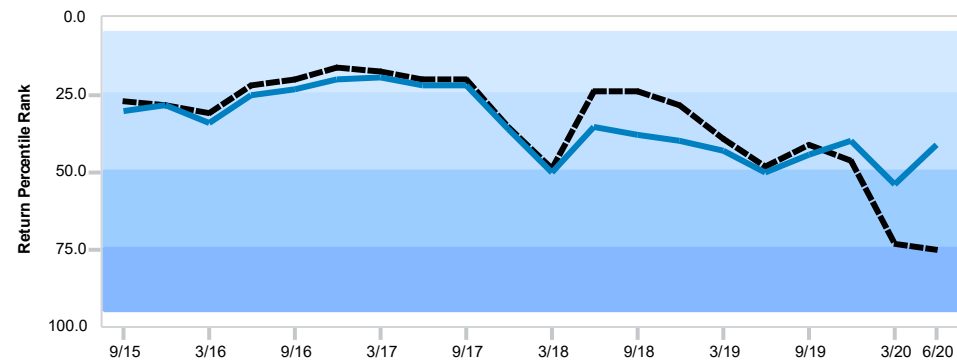
Risk and Return 3 Years



Risk and Return 5 Years

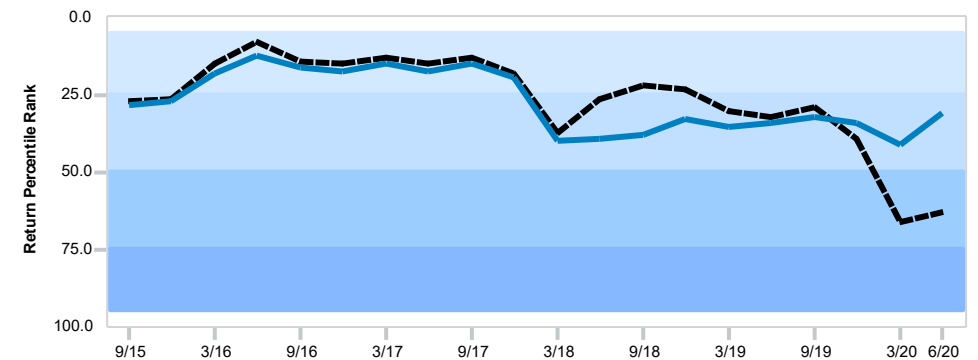


3 Year Rolling Percentile Rank IM Real Estate Sector (MF)



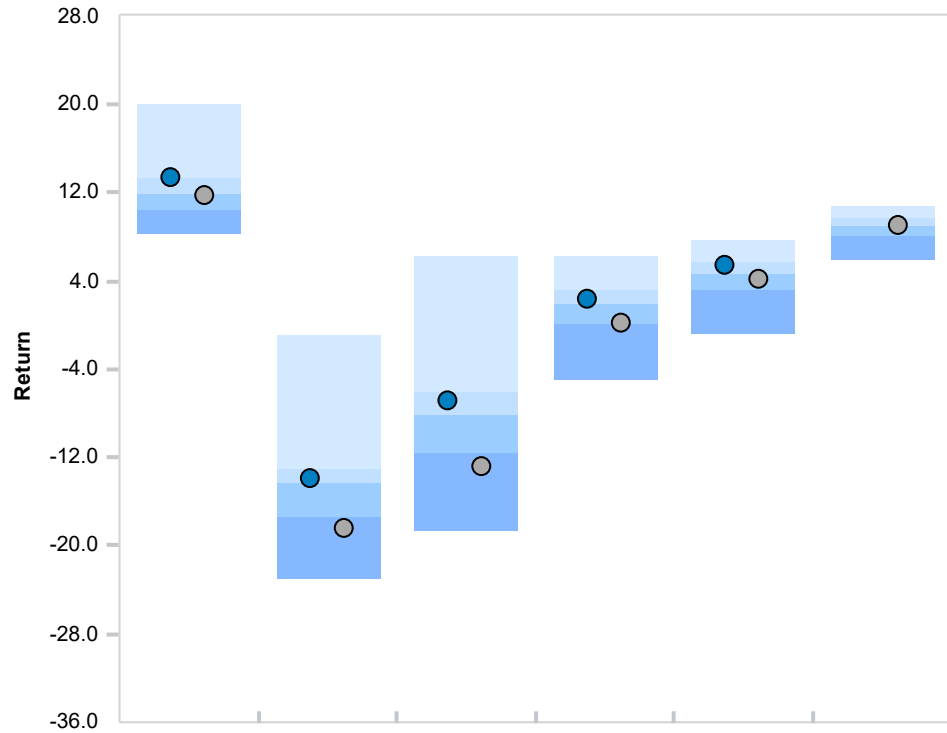
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	6 (30%)	13 (65%)	1 (5%)	0 (0%)
Index	20	8 (40%)	10 (50%)	2 (10%)	0 (0%)

5 Year Rolling Percentile Rank IM Real Estate Sector (MF)

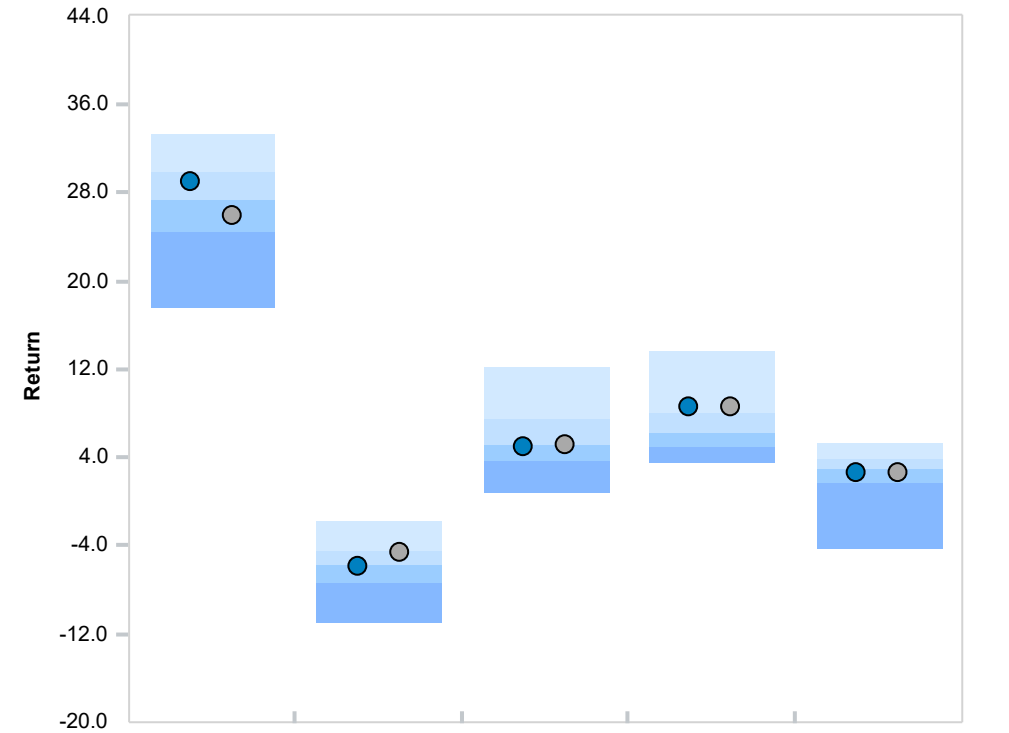


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	8 (40%)	12 (60%)	0 (0%)	0 (0%)
Index	20	10 (50%)	8 (40%)	2 (10%)	0 (0%)

Peer Group Analysis - IM Real Estate Sector (MF)



Peer Group Analysis - IM Real Estate Sector (MF)



Financial Reconciliation Since Inception Ending June 30, 2020

	Market Value 10/01/2010	Net Flows	Return On Investment	Market Value 06/30/2020
Investment	4,801,552	-2,276,630	7,869,499	10,394,421

Comparative Performance

	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018
Investment	-24.10 (58)	0.63 (29)	7.42 (48)	1.76 (60)	17.28 (16)	-6.46 (32)
Index	-26.99 (80)	-0.78 (80)	7.69 (37)	1.29 (73)	16.27 (54)	-6.72 (47)
Median	-23.52	0.14	7.38	2.06	16.38	-6.78



Fund Information

Fund Name :	Vanguard Specialized Funds: Vanguard Real Estate Index Fund; Institutional Class Shares	Portfolio Assets :	\$56,860 Million
Fund Family :	Vanguard Group Inc	Portfolio Manager :	O'Reilly/Nejman
Ticker :	VGSNX	PM Tenure :	2003--2016
Inception Date :	12/02/2003	Fund Style :	IM Real Estate Sector (MF)
Fund Assets :	\$8,362 Million	Style Benchmark :	MSCI U.S. REIT Index
Portfolio Turnover :	6%		

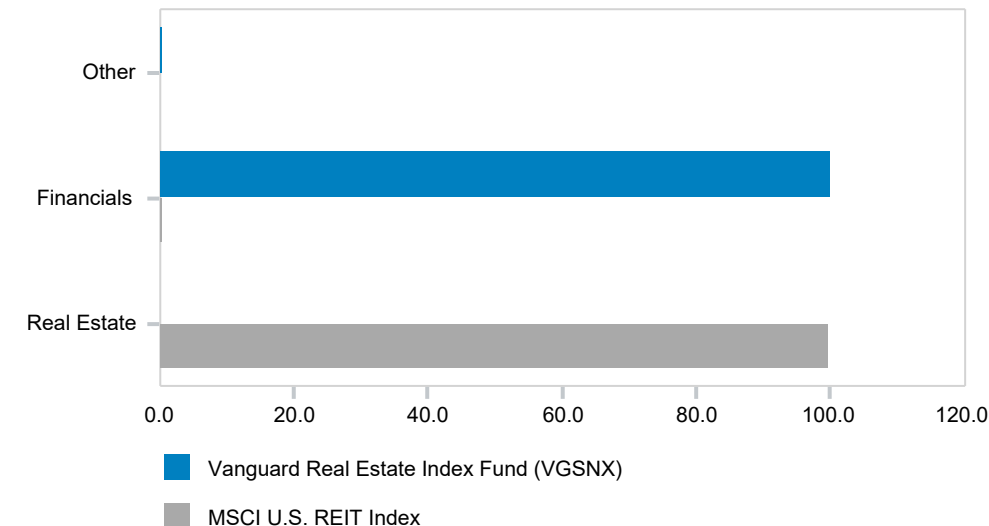
Portfolio Characteristics As of 05/31/2020

	Portfolio	Benchmark
Total Securities	185	1
Avg. Market Cap (\$)	38,293,761,738	-
Price/Earnings (P/E)	45.66	N/A
Price/Book (P/B)	6.38	N/A
Dividend Yield	4.85	N/A
Annual EPS	24.73	N/A
5 Yr EPS	15.24	N/A
3 Yr EPS Growth	14.62	N/A
Beta (5 Years, Monthly)	0.96	1.00

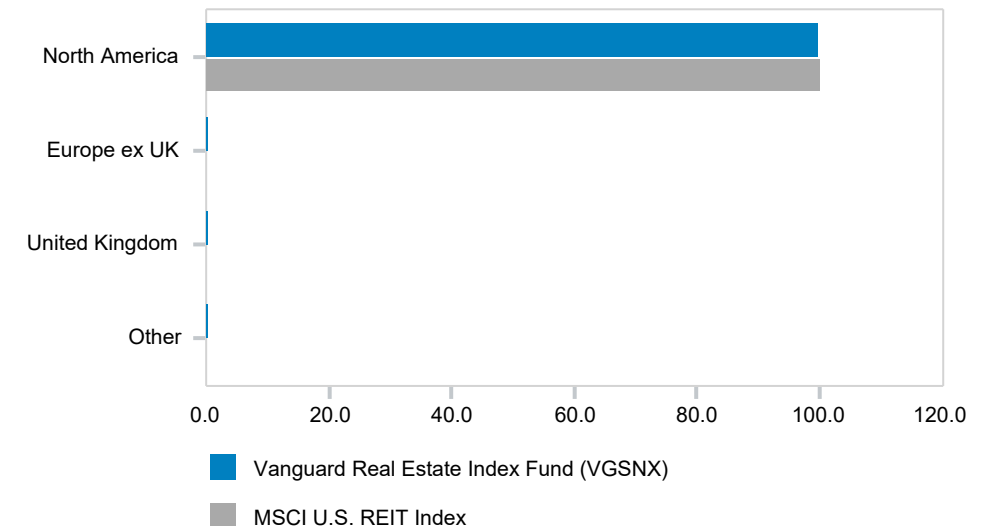
Top Ten Securities As of 05/31/2020

Vanguard Real Estate II Index Fund;Insti	12.1 %
American Tower Corp ORD	9.4 %
Crown Castle International Corp	5.9 %
Prologis Inc ORD	5.6 %
Equinix Inc ORD	4.9 %
Digital Realty Trust Inc ORD	2.9 %
SBA Communications Corp ORD	2.9 %
Public Storage ORD	2.6 %
Equity Residential ORD	1.9 %
Avalonbay Communities Inc ORD	1.8 %

Sector Weights As of 05/31/2020



Region Weights As of 05/31/2020



Statistics provided by Lipper. Most recent available data shown.



Total Fund Policy			
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1979		Jul-2014	
Russell 1000 Growth Index	20.00	CRSP U.S. Large Cap Value TR Index	8.00
Russell 1000 Value Index	20.00	CRSP U.S. Large Cap Growth TR Index	8.00
MSCI EAFE (Net) Index	10.00	CRSP U.S. Mid Cap TR Index	10.00
Bloomberg Barclays Intermediate US Govt/Credit Idx	40.00	CRSP U.S. Small Cap TR Index	5.00
Russell 2000 Index	10.00	Vanguard Spliced Emerging Markets Index (Net)	4.00
90 Day U.S. Treasury Bill	0.00	Vanguard Spliced Developed ex U.S. Index (Net)	9.00
Jun-2010		Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr	7.50
Russell 1000 Value Index	15.00	Bloomberg Barclays U.S. TIPS Index	7.50
MSCI US Prime Market Growth	15.00	Bloomberg Barclays 1-5 Year Gov/Credit Idx	7.50
MSCI US Mid Cap 450 Index	10.00	Bloomberg Barclays US TIPS 0-5 Year Index	7.50
Russell 2000 Index	10.00	MSCI U.S. REIT Index	10.00
MSCI EAFE (Net) Index	10.00	90 Day U.S. Treasury Bill	1.00
MSCI Emerging Markets (Net) Index	5.00	S&P 500 Index	15.00
Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr	15.00	Nov-2014	
Bloomberg Barclays U.S. TIPS Index	15.00	CRSP U.S. Large Cap Value TR Index	8.00
MSCI U.S. REIT Index	5.00	CRSP U.S. Large Cap Growth TR Index	8.00
Jun-2013		CRSP U.S. Mid Cap TR Index	10.00
CRSP U.S. Large Cap Value TR Index	15.00	CRSP U.S. Small Cap TR Index	5.00
CRSP U.S. Large Cap Growth TR Index	15.00	Vanguard Spliced Emerging Markets Index (Net)	4.00
CRSP U.S. Mid Cap TR Index	10.00	Vanguard Spliced Developed ex U.S. Index (Net)	9.00
CRSP U.S. Small Cap TR Index	10.00	Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr	7.00
Vanguard Spliced Emerging Markets Index (Net)	5.00	Bloomberg Barclays U.S. TIPS Index	7.00
Vanguard Spliced Developed ex U.S. Index (Net)	10.00	Bloomberg Barclays 1-5 Year Gov/Credit Idx	7.00
Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr	7.50	Bloomberg Barclays US TIPS 0-5 Year Index	7.00
Bloomberg Barclays U.S. TIPS Index	7.50	MSCI U.S. REIT Index	5.00
Bloomberg Barclays 1-5 Year Gov/Credit Idx	7.50	90 Day U.S. Treasury Bill	1.00
Bloomberg Barclays US TIPS 0-5 Year Index	7.50	S&P 500 Index	15.00
MSCI U.S. REIT Index	4.00	Blmbg. Barc. U.S. Corp High Yield	7.00
90 Day U.S. Treasury Bill	1.00		

Benchmark History
Investment Policy Benchmarks
As of June 30, 2020

Allocation Mandate	Weight (%)
Jun-2015	
CRSP U.S. Large Cap Value TR Index	5.00
CRSP U.S. Large Cap Growth TR Index	5.00
CRSP U.S. Mid Cap TR Index	10.00
CRSP U.S. Small Cap TR Index	5.00
Vanguard Spliced Emerging Markets Index (Net)	5.00
Vanguard Spliced Developed ex U.S. Index (Net)	10.00
Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr	7.50
Bloomberg Barclays U.S. TIPS Index	5.00
Bloomberg Barclays 1-5 Year Gov/Credit Idx	7.50
Bloomberg Barclays US TIPS 0-5 Year Index	5.00
MSCI U.S. REIT Index	5.00
90 Day U.S. Treasury Bill	2.50
S&P 500 Index	15.00
Blmbg. Barc. U.S. Corp High Yield	7.50
Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)	5.00
Dec-2018	
CRSP U.S. Large Cap Value TR Index	5.00
CRSP U.S. Large Cap Growth TR Index	5.00
S&P MidCap 400 Index	10.00
S&P SmallCap 600 Index	5.00
Vanguard Spliced Emerging Markets Index (Net)	5.00
Vanguard Spliced Developed ex U.S. Index (Net)	10.00
Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr	7.50
Bloomberg Barclays U.S. TIPS Index	5.00
Bloomberg Barclays 1-5 Year Gov/Credit Idx	7.50
Bloomberg Barclays US TIPS 0-5 Year Index	5.00
MSCI U.S. REIT Index	5.00
90 Day U.S. Treasury Bill	2.50
S&P 500 Index	15.00
Blmbg. Barc. U.S. Corp High Yield	7.50
Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)	5.00

Allocation Mandate	Weight (%)
Oct-2019	
S&P 500 Index	15.00
CRSP U.S. Large Cap Value TR Index	5.00
CRSP U.S. Large Cap Growth TR Index	5.00
S&P MidCap 400 Index	10.00
S&P SmallCap 600 Index	5.00
FTSE Developed All Cap ex-U.S. Index	10.00
FTSE Emerging Mkts All Cap China A Inclusion Index	5.00
Blmbg. Barc. U.S. Aggregate Index	20.00
Bloomberg Barclays 1-5 Year Gov/Credit Idx	2.50
Blmbg. Barc. U.S. Corp High Yield	10.00
Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)	5.00
MSCI U.S. REIT Index	5.00
90 Day U.S. Treasury Bill	2.50
Mar-2020	
S&P 500 Index	15.00
CRSP U.S. Large Cap Value TR Index	5.00
CRSP U.S. Large Cap Growth TR Index	5.00
S&P MidCap 400 Index	10.00
S&P SmallCap 600 Index	5.00
FTSE Developed All Cap ex-U.S. Index	7.50
FTSE Emerging Mkts All Cap China A Inclusion Index	5.00
FTSE Global ex U.S. Small Cap Index (Net)	2.50
Blmbg. Barc. U.S. Aggregate Index	20.00
Bloomberg Barclays 1-5 Year Gov/Credit Idx	2.50
Blmbg. Barc. U.S. Corp High Yield	10.00
Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)	5.00
MSCI U.S. REIT Index	5.00
90 Day U.S. Treasury Bill	2.50



Mid Cap Index Policy	
Allocation Mandate	Weight (%)
Oct-2010	
Vanguard Spliced Mid Cap Index	100.00
Dec-2018	
S&P MidCap 400 Index	100.00

Small Cap Index Policy	
Allocation Mandate	Weight (%)
Jul-2009	
Vanguard Spliced Small Cap Index	100.00
Dec-2018	
S&P SmallCap 600 Index	100.00

Active Return	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
Alpha	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
Beta	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
Consistency	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
Distributed to Paid In (DPI)	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
Down Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
Downside Risk	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
Excess Return	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
Excess Risk	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
Information Ratio	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
Public Market Equivalent (PME)	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
R-Squared	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
Return	- Compounded rate of return for the period.
Sharpe Ratio	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
Standard Deviation	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
Total Value to Paid In (TVPI)	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
Tracking Error	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
Treynor Ratio	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
Up Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

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