## Fresno County Employees' Retirement Association

**Investment Performance Review** 

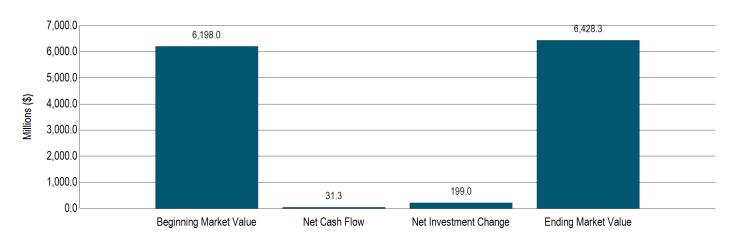
Period Ending: December 31, 2021



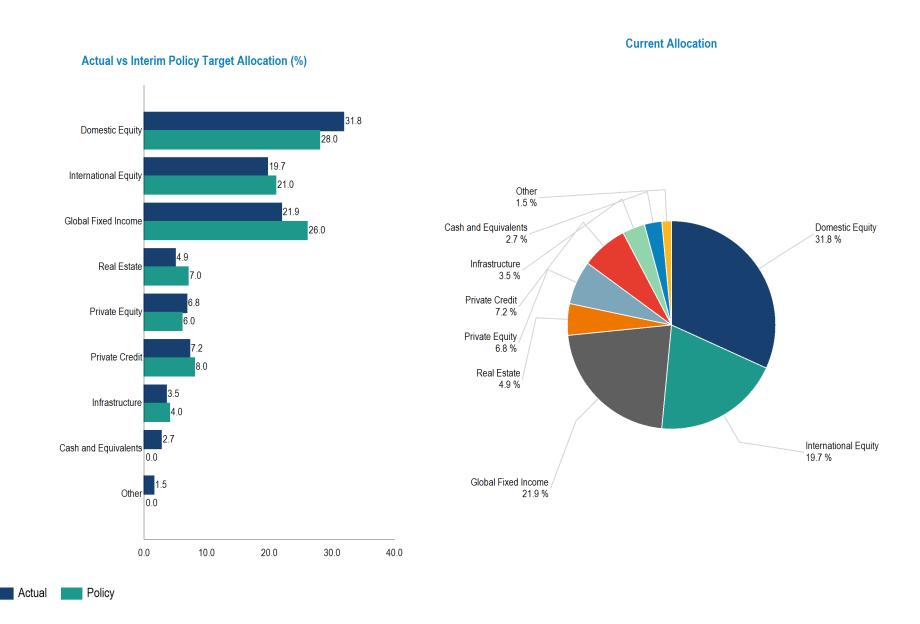
#### **Portfolio Reconciliation**

	Last Three Months	Year-To-Date
Beginning Market Value	\$6,198,012,697	\$5,715,934,728
Net Cash Flow	\$31,312,866	\$22,180,069
Net Investment Change	\$199,021,718	\$690,232,484
Ending Market Value	\$6,428,347,281	\$6,428,347,281

#### Change in Market Value Last Three Months

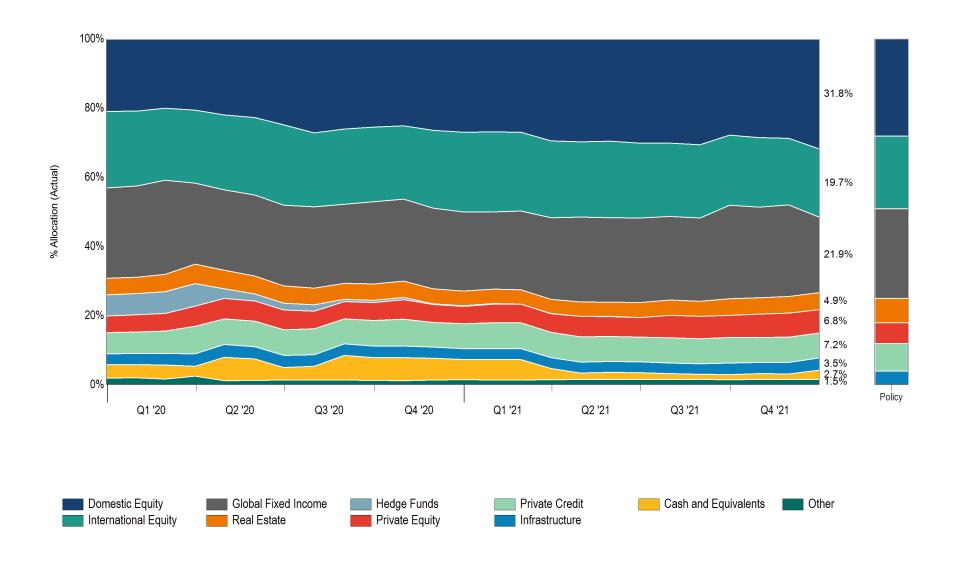






Other consists of cash held for the overlay program. The target allocation reflects the most recent asset allocation targets per Asset Allocation Glidepath in IPS.







	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	2021	2020	2019	2018	2017
Total Fund	6,428,347,281	100.0	3.6	3.7	12.6	13.1	9.9	8.5	6.5	12.6	10.4	16.4	-3.4	14.6
Interim Policy Index			4.6	5.8	15.3	13.7	10.3	8.6	6.2	15.3	11.6	14.4	-2.6	14.0
Total Equity	3,310,390,435	51.5	5.1	3.0	15.3	19.1	13.7	11.9		15.3	16.3	26.0	-9.5	24.2
MSCI ACWI IMI NR			6.1	4.9	18.2	20.2	14.1	11.8	7.2	18.2	16.3	26.4	-10.1	23.9
Total Domestic Equity	2,045,591,958	31.8	8.5	7.8	23.7	24.1	16.9	15.4		23.7	20.7	28.0	-5.1	20.2
MSCI USA			10.0	10.3	26.5	25.9	18.1	16.0	10.1	26.5	20.7	30.9	-5.0	21.2
Total International Equity	1,264,798,477	19.7	0.6	-3.4	4.8	13.5	10.2	7.9		4.8	12.3	24.2	-13.6	28.5
MSCI ACWI ex USA Gross			1.9	-1.1	8.3	13.7	10.1	7.8	4.2	8.3	11.1	22.1	-13.8	27.8
Total Fixed Income	1,407,139,379	21.9	-0.3	-1.2	-1.9	5.3	4.2	3.6		-1.9	7.4	11.0	-2.9	8.0
Fixed Income Custom Benchmark			-0.3	-0.5	-1.4	4.7	4.0	2.1	3.5	-1.4	9.1	6.8	-1.2	7.4
Bloomberg Global Aggregate TR			-0.7	-1.6	-4.7	3.6	3.4	1.8	3.3	-4.7	9.2	6.8	-1.2	7.4
Total Real Estate	316,083,603	4.9	6.5	13.1	19.3	7.8	7.8	9.3		19.3	-1.2	6.2	9.2	6.8
NCREIF ODCE Net			7.7	14.6	21.1	8.2	7.8	9.4	5.8	21.1	0.3	4.4	7.4	6.7
Total Infrastructure	224,549,872	3.5	3.7	8.7	17.6	11.5	14.7			17.6	2.9	14.6	20.1	19.0
NCREIF ODCE Net			7.7	14.6	21.1	8.2	7.8	9.4	5.8	21.1	0.3	4.4	7.4	6.7
Total Private Equity 1 Qtr Lagged	434,241,172	6.8	8.8	22.0	57.2	22.0	19.8	14.9	12.9	57.2	10.3	4.7	19.6	13.9
Russell 2000 1 Qtr Lagged			-4.4	-0.3	47.7	10.5	12.1	13.3	8.7	47.7	0.4	-8.9	15.2	13.7
Total Private Credit 1 Qtr Lagged	465,200,522	7.2	1.5	4.8	14.1	7.3	7.5	7.5	10.7	14.1	2.8	5.3	7.6	8.1
Bloomberg US Corp. High Yield 1 Qtr Lagged			0.9	3.7	11.3	6.9	6.1	6.8	7.0	11.3	3.3	6.4	3.0	7.0
Total Custodied Cash	160,407,164	2.5	0.0	0.0	0.0	0.9	1.0	0.6		0.0	0.4	2.1	1.8	8.0
91 Day T-Bills			0.0	0.0	0.0	0.8	1.1	0.6	0.8	0.0	0.5	2.1	1.9	0.9
Total County Cash	13,134,903	0.2	0.1	1.0	1.6	2.0	-	-		1.6	2.3	2.2	2.4	
91 Day T-Bills			0.0	0.0	0.0	0.8	1.1	0.6	0.8	0.0	0.5	2.1	1.9	0.9
Transition	31,296	0.0												
Total Parametric Overlay	97,168,935	1.5												

Policy Index (Floating policy weights updated as of 9/1/2021. See Data Sources and Methodology for monthly policy breakout): 28% MSCI USA, 26% Fixed Income Custom Benchmark, 21% MSCI ACWI ex US, 0.63% Bloomberg US Corp. High Yield, 6% Private Equity Neutralized, 7.37% Private Credit Neutralized, and 11% NCREIF ODCE Net. Composite total market values reflect manager exposures and any underlying cash balances. De-risking of the Plan commenced on April 30, 2014. Effective 1/01/2017, only traditional asset class (public equity, public fixed income, REITs) investment management fees will be included in the gross of fee return calculation. Parametric Overlay and Transition account values included in Total Fund value.

Fixed Income Custom Benchmark 9/1/2020: 38.5% Bloomberg U.S. Aggregate Index, 3.8% Bloomberg US Securitized Index, 30.8% 50% Bloomberg High Yield/50% S&P LSTA U.S. Leveraged Loan Index, 15.4% FTSE WGBI TR, 11.5% JP Morgan GBI EM Global.



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs	2021	2020	2019	2018	2017
Total Fund	6,428,347,281	100.0	3.7	3.8	12.9	13.3	10.1	8.8	6.8	7.7	12.9	10.6	16.6	-3.2	14.9
Interim Policy Index			4.6	5.8	15.3	13.7	10.3	8.6	6.2	6.9	15.3	11.6	14.4	-2.6	14.0
Total Equity	3,310,390,435	51.5	5.2	3.1	15.6	19.5	14.0	12.1			15.6	16.7	26.4	-9.3	24.5
MSCI ACWI IMI NR			6.1	4.9	18.2	20.2	14.1	11.8	7.2	8.3	18.2	16.3	26.4	-10.1	23.9
Total Domestic Equity	2,045,591,958	31.8	8.5	7.8	23.9	24.3	17.1	15.6	10.3	9.9	23.9	20.8	28.3	-4.9	20.3
MSCI USA			10.0	10.3	26.5	25.9	18.1	16.0	10.1	9.0	26.5	20.7	30.9	-5.0	21.2
Total International Equity	1,264,798,477	19.7	0.7	-3.1	5.3	14.0	10.7	8.3	5.1	7.2	5.3	12.8	24.8	-13.2	29.1
MSCI ACWI ex USA Gross			1.9	-1.1	8.3	13.7	10.1	7.8	4.2	7.3	8.3	11.1	22.1	-13.8	27.8
Total Fixed Income	1,407,139,379	21.9	-0.2	-1.1	-1.6	5.7	4.5	3.9	5.2	5.1	-1.6	7.8	11.4	-2.5	8.3
Fixed Income Custom Benchmark			-0.3	-0.5	-1.4	4.7	4.0	2.1	3.5	3.9	-1.4	9.1	6.8	-1.2	7.4
Bloomberg Global Aggregate TR			-0.7	-1.6	-4.7	3.6	3.4	1.8	3.3	4.4	-4.7	9.2	6.8	-1.2	7.4
Total Real Estate	316,083,603	4.9	6.5	13.1	19.3	7.8	7.8	9.6	6.5	9.1	19.3	-1.2	6.2	9.2	6.8
NCREIF ODCE Net			7.7	14.6	21.1	8.2	7.8	9.4	5.8		21.1	0.3	4.4	7.4	6.7
Total Infrastructure	224,549,872	3.5	3.7	8.7	17.6	11.5	14.7				17.6	2.9	14.6	20.1	19.0
NCREIF ODCE Net			7.7	14.6	21.1	8.2	7.8	9.4	5.8		21.1	0.3	4.4	7.4	6.7
Total Private Equity 1 Qtr Lagged	434,241,172	6.8	8.8	22.0	57.2	22.0	19.8	15.1	13.0		57.2	10.3	4.7	19.6	13.9
Russell 2000 1 Qtr Lagged			-4.4	-0.3	47.7	10.5	12.1	13.3	8.7	9.4	47.7	0.4	-8.9	15.2	13.7
Total Private Credit 1 Qtr Lagged	465,200,522	7.2	1.5	4.8	14.1	7.3	7.5	7.8	10.9		14.1	2.8	5.3	7.6	8.1
Bloomberg US Corp. High Yield 1 Qtr Lagged			0.9	3.7	11.3	6.9	6.1	6.8	7.0	7.8	11.3	3.3	6.4	3.0	7.0
Total Custodied Cash	160,407,164	2.5	0.0	0.0	0.0	0.9	1.0	0.6	1.1	1.5	0.0	0.4	2.1	1.8	0.8
91 Day T-Bills			0.0	0.0	0.0	0.8	1.1	0.6	0.8	1.2	0.0	0.5	2.1	1.9	0.9
Total County Cash	13,134,903	0.2	0.1	1.0	1.6	2.0					1.6	2.3	2.2	2.4	
91 Day T-Bills			0.0	0.0	0.0	0.8	1.1	0.6	0.8	1.2	0.0	0.5	2.1	1.9	0.9
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Fixed Income Custom Benchmark 9/1/2020: 38.5% Bloomberg U.S. Aggregate Index, 3.8% Bloomberg US Securitized Index, 30.8% 50% Bloomberg High Yield/50% S&P LSTA U.S. Leveraged Loan Index, 15.4% FTSE WGBI TR, 11.5% JP Morgan GBI EM Global.



Market \	/alue	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs		2021	2020	2019	2018	2017	Inception	Inception Date
Total Fund 6,428,34	7,281	100.0	3.6	12.6	13.1	9.9	8.5	6.5	12.6	10.4	16.4	-3.4	14.6	7.7	Jun-02
Interim Policy Index			4.6	15.3	13.7	10.3	8.6	6.2	15.3	11.6	14.4	-2.6	14.0	7.3	Jun-02
Total Fund Ex Parametric 6,331,17	8,345	98.5	3.6	12.5	13.0	9.8	-		12.5	11.0	15.3	-2.9	13.9	9.8	Dec-16
Interim Policy Index			4.6	15.3	13.7	10.3	8.6	6.2	15.3	11.6	14.4	-2.6	14.0	10.3	Dec-16
Total Equity 3,310,39	0,435	51.5	5.1	15.3	19.1	13.7	11.9		15.3	16.3	26.0	-9.5	24.2	-	
MSCI ACWI IMI NR	_		6.1	18.2	20.2	14.1	11.8	7.2	18.2	16.3	26.4	-10.1	23.9		
Total Domestic Equity 2,045,59	1,958	31.8	8.5	23.7	24.1	16.9	15.4		23.7	20.7	28.0	-5.1	20.2		Mar-97
MSCIUSA			10.0	26.5	25.9	18.1	16.0	10.1	26.5	20.7	30.9	-5.0	21.2	9.2	Mar-97
NT MSCI US Index 1,214,86	0,851	18.9	10.1	27.0					27.0					34.4	Jun-20
MSCI USA			10.0	26.5	25.9	18.1	16.0	10.1	26.5	20.7	30.9	-5.0	21.2	34.6	Jun-20
T. Rowe Price Large Cap Growth 215,65	2,706	3.4	11.9	27.4	32.2				27.4	40.0	29.5			29.6	Oct-18
Russell 1000 Growth			11.6	27.6	34.1	25.3	19.8	13.7	27.6	38.5	36.4	-1.5	30.2	31.0	Oct-18
PIMCO StocksPLUS Small Fund 413,13	7,085	6.4	1.4	14.5	22.3				14.5	23.6	29.3			13.6	Feb-18
Russell 2000			2.1	14.8	20.0	12.0	13.2	8.7	14.8	20.0	25.5	-11.0	14.6	12.3	Feb-18
MSCI Factor Mix Index 201,92	3,962	3.1	10.3											15.8	Mar-21
MSCI USA			10.0	26.5	25.9	18.1	16.0	10.1	26.5	20.7	30.9	-5.0	21.2	20.0	Mar-21
Total International Equity 1,264,79	8,477	19.7	0.6	4.8	13.5	10.2	7.9		4.8	12.3	24.2	-13.6	28.5	-	
MSCI ACWI ex USA Gross			1.9	8.3	13.7	10.1	7.8	4.2	8.3	11.1	22.1	-13.8	27.8		
NT MSCI World Ex-US Index 341,02	8,287	5.3	3.6	12.9					12.9					27.0	May-20
MSCI World ex USA			3.1	12.6	14.1	9.6	7.8	3.7	12.6	7.6	22.5	-14.1	24.2	26.3	May-20
Artisan International Growth 197,39	7,713	3.1	2.7	9.2	16.1	13.1			9.2	9.2	31.3	-10.2	31.5	8.0	Apr-13
MSCI EAFE			2.7	11.3	13.5	9.5	8.0	3.6	11.3	7.8	22.0	-13.8	25.0	6.6	Apr-13
Research Affiliates International Equity 188,26	4,093	2.9	0.3	11.5	10.3	7.4	7.8		11.5	2.1	17.9	-15.5	25.7	5.0	Apr-11
MSCI EAFE			2.7	11.3	13.5	9.5	8.0	3.6	11.3	7.8	22.0	-13.8	25.0	5.3	Apr-11
Mondrian International Small Cap 195,68	9,311	3.0	-2.7	4.5	13.0	10.3	8.9		4.5	10.3	25.1	-14.6	32.4	9.2	Nov-09
S&P Developed Ex-U.S. SmallCap			-0.3	8.8	15.6	10.8	10.2	5.5	8.8	13.7	24.7	-18.4	32.4	8.9	Nov-09
Mondrian Emerging Markets 173,55	0,258	2.7	-0.9	-4.9	9.1	7.3	4.0	4.1	-4.9	15.2	18.3	-13.8	27.2	5.6	Nov-05
MSCI Emerging Markets			-1.3	-2.5	10.9	9.9	5.5	4.4	-2.5	18.3	18.4	-14.6	37.3	6.3	Nov-05
MSCI Emerging Markets Value NR			-0.4	4.0	7.1	7.0	3.3	3.6	4.0	5.5	12.0	-10.7	28.1	5.5	Nov-05
Baillie Gifford Emerging Markets 168,86	8,815	2.6	-1.9	-9.1	14.7				-9.1	29.6	28.0			14.7	Dec-18
MSCI Emerging Markets			-1.3	-2.5	10.9	9.9	5.5	4.4	-2.5	18.3	18.4	-14.6	37.3	10.9	Dec-18
MSCI Emerging Markets Growth NR			-2.1	-8.4	14.6	12.5	7.5	5.1	-8.4	31.3	25.1	-18.3	46.8	14.6	Dec-18

Baillie Gifford Emerging Markets funded 12/10/2018. T. Rowe Price replaced Ivy on 10/18/2018. Systematic liquidated on 2/4/2019. Invesco Commodities liquidated 8/16/2019. SSGA S&P 500 Flagship Fund liquidated 12/2/2019. S&P 500 Index Fund transferred 6/1/2020 into NT MSCI US Index. MSCI EAFE liquidated into NT MSCI World Ex-US Index 5/28/2020. Aronson Johnson Ortiz was liquidated 8/16/2020 and a residual balance remains. MSCI Factor Mix Index funded 3/30/2021.



# Total Fund Performance Summary (Net of Fees)

#### Period Ending: December 31, 2021

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	2021	2020	2019	2018	2017	Inception	nception Date
Total Fixed Income	1,407,139,379	21.9	-0.3	-1.9	5.3	4.2	3.6		-1.9	7.4	11.0	-2.9	8.0		
Fixed Income Custom Benchmark			-0.3	-1.4	4.7	4.0	2.1	3.5	-1.4	9.1	6.8	-1.2	7.4		
Bloomberg Global Aggregate TR			-0.7	-4.7	3.6	3.4	1.8	3.3	-4.7	9.2	6.8	-1.2	7.4		
Western Asset Management Core Bond	764,520,778	11.9	-0.1	-1.6	7.4	5.3			-1.6	9.4	14.9	-2.3	6.8	4.7	Oct-14
Bloomberg US Aggregate Bond			0.0	-1.5	4.8	3.6	2.9	4.1	-1.5	7.5	8.7	0.0	3.5	3.1	Oct-14
RBC Access Capital	58,108,778	0.9	-0.5	-1.5	3.0				-1.5	4.3	6.4			3.7	Oct-18
Bloomberg US Securitized Index			-0.4	-1.1	3.1	2.6	2.4	3.7	-1.1	4.2	6.4	1.0	2.5	3.8	Oct-18
Loomis Sayles High Yield	195,033,041	3.0	-0.1	4.1	8.2	5.8			4.1	9.1	11.5	-2.3	7.1	5.1	Oct-14
Bloomberg US High Yield TR			0.7	5.3	8.8	6.3	6.8	7.1	5.3	7.1	14.3	-2.1	7.5	5.8	Oct-14
Eaton Vance Senior Loan Fund	201,707,162	3.1	0.5	4.4	4.3	3.5			4.4	1.1	7.5	0.7	4.0	3.6	Oct-14
S&P/LSTA Leveraged Loan Index			0.7	5.2	5.6	4.3	4.7	4.5	5.2	3.1	8.6	0.4	4.1	4.1	Oct-14
Brandywine Global Sovereign	1,376,051	0.0	-0.5	-6.2	2.6	2.9			-6.2	5.9	8.7	-4.7	11.9	1.0	Jan-15
FTSE WGBI TR			-1.1	-7.0	2.7	2.9	1.0	3.0	-7.0	10.1	5.9	-0.8	7.5	1.9	Jan-15
PIMCO Emerging Local Bond Ins	186,393,568	2.9	-1.9	-8.8	3.9	3.6			-8.8	4.9	17.3	-7.7	15.4	0.3	Jul-13
JP Morgan GBI EM Global Diversified TR USD			-2.5	-8.7	2.1	2.8	0.7	3.5	-8.7	2.7	13.5	-6.2	15.2	0.0	Jul-13
Total Real Estate	316,083,603	4.9	6.5	19.3	7.8	7.8	9.3		19.3	-1.2	6.2	9.2	6.8		
NCREIF ODCE Net			7.7	21.1	8.2	7.8	9.4	5.8	21.1	0.3	4.4	7.4	6.7		
Invesco Core Real Estate	205,610,066	3.2	5.6	20.1	7.4	7.6	9.2		20.1	-2.4	5.7	8.5	7.5	5.3	Oct-07
NCREIF ODCE Net			7.7	21.1	8.2	7.8	9.4	5.8	21.1	0.3	4.4	7.4	6.7	5.2	Oct-07
Closed End Real Estate 1 Qtr Lagged	110,473,537	1.7	8.5	18.6	10.1	9.7	-		18.6	2.4	9.9	14.1	4.3		
NCREIF ODCE Net 1 Qtr Lagged			6.4	13.6	6.1	6.2	8.6	5.3	13.6	0.5	4.6	7.7	4.7		
Total Infrastructure	224,549,872	3.5	3.7	17.6	11.5	14.7	-		17.6	2.9	14.6	20.1	19.0		
NCREIF ODCE Net			7.7	21.1	8.2	7.8	9.4	5.8	21.1	0.3	4.4	7.4	6.7		
IFM Infrastructure	224,549,872	3.5	3.7	17.6	11.5	14.7			17.6	2.9	14.6	20.1	19.0	12.4	May-15
NCREIF ODCE Net			7.7	21.1	8.2	7.8	9.4	5.8	21.1	0.3	4.4	7.4	6.7	8.6	May-15

RBC Access Capital funded 10/10/2018. Invesco Commodities liquidated 8/16/2019. SSgA TIPS liquadated 12/16/2019. Northern Trust Collective TIPS Index Fund liquidated 3/25/2019. Grosvenor liquidated 4/1/2020. Western Asset Management Agency MBS funded 9/2/2020. TCW TALF Opportunities Fund LP liquidated 2/3/2021. Eaton Vance Senior Loan Fund liquidated 1/3/2021. Ares US Real EState Opportunity Fund III was funded 6/22/2021. Western Asset Management Agency Treasuries and Western Asset Management Investment Grade Credit liquidated 4/23/2021.



	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	2021	2020	2019	2018	2017	Inception Inception Date
Total Private Equity 1 Qtr Lagged	434,241,172	6.8	8.8	57.2	22.0	19.8	14.9	12.9	57.2	10.3	4.7	19.6	13.9	
Russell 2000 1 Qtr Lagged			-4.4	47.7	10.5	12.1	13.3	8.7	47.7	0.4	-8.9	15.2	13.7	
Total Private Credit 1 Qtr Lagged	465,200,522	7.2	1.5	14.1	7.3	7.5	7.5	10.7	14.1	2.8	5.3	7.6	8.1	-
Bloomberg US Corp. High Yield 1 Qtr Lagged			0.9	11.3	6.9	6.1	6.8	7.0	11.3	3.3	6.4	3.0	7.0	<u> </u>
Total Custodied Cash	160,407,164	2.5	0.0	0.0	0.9	1.0	0.6		0.0	0.4	2.1	1.8	0.8	-
91 Day T-Bills			0.0	0.0	0.8	1.1	0.6	0.8	0.0	0.5	2.1	1.9	0.9	
Total County Cash	13,134,903	0.2	0.1	1.6	2.0	-	-		1.6	2.3	2.2	2.4		
91 Day T-Bills			0.0	0.0	0.8	1.1	0.6	0.8	0.0	0.5	2.1	1.9	0.9	
Transition	31,296	0.0												
Transition	31,296	0.0												
Total Parametric Overlay	97,168,935	1.5												
Parametric Overlay	97,168,935	1.5												

GCM Better Futures Fund liquidated 6/7/2021.



Fund	Inception Date	% of Portfolio	Total Commitment	Contributions	Distributions	Estimated Market Value	One Quarter Return	One Year Return	Three Years Return	Five Years Return	(IRR) Since Inception
Kennedy Wilson Real Estate Fund VI	2019	0.4%	\$30,000,000	\$29,634,259	\$11,119,578	\$25,828,103	15.3%	28.5%	N/A	N/A	16.9%
Invesco Value-Add Fund V	2017	0.4%	\$30,000,000	\$21,941,585	\$2,894,940	\$26,994,475	8.8%	31.2%	N/A	N/A	19.8%
Kennedy Wilson Real Estate Fund V	2016	0.1%	\$30,000,000	\$28,113,444	\$34,436,776	\$3,930,621	1.8%	-3.9%	4.4%	8.2%	12.2%
Gerding Edlen Green Cities III	2016	0.3%	\$20,000,000	\$19,412,739	\$4,675,596	\$19,361,251	1.0%	1.6%	2.8%	3.2%	5.0%
Ares US Real Estate Opportunity Fund III	2021	0.4%	\$75,000,000	\$26,291,809	-\$3,368,137	\$26,853,136	7.2%	N/A	N/A	N/A	N/A
Oaktree Real Estate Opportunities Fund VIII, L.P.	2021	0.1%	\$75,000,000	\$11,502,295	\$7,500,000	\$7,505,951	8.1%	N/A	N/A	N/A	N/A
Total		1.7%	\$260,000,000	\$136,896,131	\$57,258,753	\$110,473,537					



### Non Marketable Securities Overview

Private Equity								
Front .	Vintage Year	Commitment	Unfunded Commitment	Paid-In Capital	Capital Distributed	NAV*	TVPI	Since Inception IRR
Fund	Teal	Communent	Communent	Palu-III Capitai	Distributed	NAV	IVPI	inception ikk
Legacy Portfolio			0507.700		050 440 007	8005 500	0.4	00.000
Blackstone Capital Partners IV, L.P.	2003	\$20,000,000	\$597,726	\$22,648,846	\$53,149,007	\$305,568	2.4x	29.60%
Hamilton Lane Private Equity Fund IX L.P.	2016	\$100,000,000	\$9,951,676	\$90,048,324	\$61,485,822	\$101,805,946	1.8x	20.76%
Hamilton Lane Private Equity Fund VI, LP	2007	\$70,000,000	\$7,104,295	\$62,895,705	\$91,622,923	\$12,662,961	1.7x	9.18%
Horsley Bridge XI Growth Buyout L.P.	2016	\$30,000,000	\$5,167,347	\$24,832,653	\$15,453,243	\$34,245,205	2.0x	27.54%
Landmark Equity Partners XIV, L.P.	2009	\$30,000,000	\$810,190	\$29,191,971	\$36,118,004	\$3,430,562	1.4x	9.90%
New Mountain Partners III, L.P.	2007	\$15,000,000	\$1,839,884	\$15,429,351	\$37,809,673	-\$26,988	2.4x	14.64%
NMP III Continuation Fund, L.P.	2021	\$3,402,119	\$633,527	\$2,768,592	\$0	\$3,652,316	1.3x	32.01%
Warburg Pincus Equity Partners, L.P.	1998	\$34,000,000	\$0	\$20,000,000	\$33,046,892	\$78,485	1.7x	10.26%
Warburg Pincus Private Equity VIII, L.P.	2001	\$20,000,000	\$0	\$26,100,000	\$58,384,663	\$0	2.2x	14.50%
Warburg Pincus Private Equity X, L.P.	2007	\$25,000,000	\$0	\$25,046,896	\$44,312,076	\$623,361	1.8x	9.51%
Warburg Pincus Private Equity XII, L.P.	2015	\$25,000,000	\$459,000	\$33,558,364	\$17,958,382	\$47,429,585	1.9x	20.44%
Total Legacy Portfolio		\$372,402,119	\$26,563,645	\$352,520,702	\$449,340,685	\$204,207,001	1.9x	13.98%
Hamilton Lane Portfolio								
Altaris Health Partners V, L.P.	2020	\$10,000,000	\$7,577,437	\$2,422,563	\$0	\$2,421,050	1	(0.08%)
Aurora Equity Partners VI, L.P.	2019	\$10,000,000	\$7,239,699	\$2,761,502	\$1,720	\$2,488,991	0.9x	(19.88%)
Avista Capital Partners IV, L.P.	2018	\$10,000,000	\$1,607,793	\$12,012,382	\$16,434,271	\$5,831,071	1.9x	37.17%
Avista Capital Partners V, L.P.	2019	\$10,000,000	\$4,563,493	\$6,033,912	\$597,405	\$6,776,294	1.2x	28.14%
Bridgepoint Development Capital IV, L.P.	2020	\$10,767,450	\$10,809,642	\$0	\$0	-\$141,889	N/A	0.00%
Cinven Seventh Fund	2019	\$8,841,182	\$5,261,351	\$3,432,044	\$0	\$3,877,632	1.1x	20.13%
CVC Capital Partners VIII, L.P.	2020	\$10,581,275	\$8,342,495	\$2,002,671	\$0	\$2,051,552	1.00x	2.44%
Gridiron Capital Fund IV, L.P.	2019	\$10,000,000	\$3,298,790	\$7,198,966	\$518,442	\$10,053,023	1.5x	41.05%
H.I.G. Growth Buyouts & Equity Fund III, L.P.	2019	\$10,000,000	\$7,928,278	\$2,071,722	\$0	\$2,387,429	1.2x	17.25%
Hamilton Lane Secondary Fund IV, L.P.	2017	\$75,000,000	\$31,254,573	\$64,407,538	\$46,494,094	\$61,075,919	1.7x	23.42%
HGGC Fund IV, L.P.	2019	\$10,000,000	\$5,163,264	\$7,080,128	\$2,274,601	\$5,747,847	1.1x	21.08%
Insight Partners XI, L.P.	2019	\$10,000,000	\$503,185	\$9,500,000	\$17,768	\$15,980,481	1.7x	65.98%
JFL Equity Investors V, L.P.	2019	\$10,000,000	\$4,505,673	\$5,494,327	\$0	\$5,127,906	0.9x	-7.60%
K4 Private Investors, L.P.	2018	\$5,000,000	\$1,280,282	\$3,720,221	\$507	\$5,674,548	1.5x	18.32%
K5 Private Investors, L.P.	2020	\$10,000,000	\$7,522,497	\$2,477,503	\$0	\$2,243,141	0.9x	(21.84%)
Kelso Investment Associates X, L.P.	2018	\$7,500,000	\$1,942,140	\$5,607,497	\$52.086	\$8,384,191	1.5x	36.83%
NewQuest Asia Fund IV, L.P.	2019	\$10,000,000	\$4,337,787	\$5,662,213	\$180	\$5,975,856	1.1x	9.62%
Oak Hill Capital Partners V, L.P.	2019	\$10,000,000	\$2,965,680	\$7,034,320	\$3,504	\$7,619,756	1.10x	22.76%
•	2020						1.10x	27.72%
Platinum Equity Capital Partners V, L.P.		\$10,000,000	\$876,973	\$9,149,033	\$26,006	\$10,816,825		
Platinum Equity Small Cap Fund, L.P.	2018	\$7,500,000	\$3,403,986	\$4,655,619	\$1,273,747	\$3,842,247	1.1x	6.34%
SK Capital Partners Fund V, L.P.	2018	\$10,000,000	\$1,300,985	\$9,949,823	\$1,330,877	\$10,344,445	1.2x	15.01%
Sterling Group Partners V, L.P.	2020	\$10,000,000	\$9,062,347	\$937,653	\$0	\$1,447,142	1.5x	54.34%
STG VI, L.P.	2020	\$10,000,000	\$6,759,910	\$3,240,090	\$0	\$2,981,813	0.9x	(12.80%)
TCV XI, L.P.	2020	\$10,000,000	\$6,075,864	\$3,924,136	\$0	\$3,799,091	1.0x	(6.44%)
Thomas H. Lee Equity Fund VIII, L.P.	2019	\$7,500,000	\$1,899,418	\$6,371,560	\$2,525,304	\$9,796,534	1.9x	71.72%
TPG Partners VIII, L.P.	2019	\$10,000,000	\$5,625,647	\$5,674,107	\$1,429,336	\$5,675,586	1.3x	35.44%
Verdane Capital X AB	2019	\$7,577,799	\$1,942,808	\$5,616,937	\$114,313	\$9,321,387	1.7x	72.43%
ZMC III, L.P.	2019	\$6,764,374	\$4,921,458	\$1,842,916	\$2,118	\$1,630,523	0.9x	(9.34%)
Insight Partners XII, L.P.	2021	\$20,000,000	\$13,000,000	\$7,000,000	\$4,682	\$6,885,688	1.0x	(2.03%)
Keensight Nova VI SLP	2021	\$19,283,231	\$19,283,231	\$0	\$0	\$0	N/A	0.00%
SK Capital Partners VI, LP	2021	\$15,000,000	\$15,000,000	\$0	\$0	\$0	N/A	0.00%
STG Allegro Fund, L.P.	2021	\$15,000,000	\$15,000,000	\$0	\$0	\$0	N/A	0.00%
The Resolute Fund V, L.P.	2021	\$15,000,000	\$10,470,591	\$4,529,409	\$5,324	\$8,775,939	1.9x	117.66%
Total Hamilton Lane Portfolio		\$411,315,311	\$230,727,277	\$211,810,792	\$73,106,285	\$228,892,018	1.40x	26.33%

\*NAV provided by Hamilton Lane as of 6/30/2021 adjusted for cash flows that occured during Q3 2021. Cash flows shown are as of 9/30/2021.



Private Credit								
Fund	Vintage Year	Commitment	Unfunded	Paid-In Capital	Capital Distributed	NAV	TVPI	Since Inception IRF
Legacy Portfolio								
EQT European Special Situations Debt	2017	\$40,000,000	\$16,952,219	\$34,755,655	\$6,923,228	\$30,928,281	1.09	6.3%
OHA Strategic Credit Fund II	2016	\$40,000,000	\$14,000,000	\$26,000,000	\$4,547,582	\$30,981,536	1.37	17.6%
TSSP Adjacent Opportunities Partners	2016	\$30,000,000	\$10,911,621	\$49,699,064	\$31,662,913	\$26,296,511	1.17	11.1%
GSO European Senior Debt	2015	\$30,000,000	\$7,867,163	\$30,964,231	\$32,162,894	\$14,501,036	1.51	6.1%
CVI Credit Value Fund III	2015	\$30,000,000	\$1,500,000	\$28,500,000	\$28,315,922	\$8,632,860	1.30	8.0%
Colony Distressed Credit III	2014	\$20,000,000	\$2,734,614	\$21,939,049	\$24,673,663	\$4,171,324	1.31	6.0%
Oaktree Opportunities IX	2012	\$15,000,000	\$0	\$15,000,000	\$9,476,419	\$11,093,174	1.37	5.4%
KKR Mezzanine Partners	2010	\$30,000,000	\$944,937	\$38,353,339	\$38,067,300	\$7,809,073	1.20	6.9%
Angelo Gordon VII	2010	\$30,000,000	\$0	\$30,000,000	\$36,737,533	\$40,255	1.23	4.9%
Colony Distressed Credit I	2009	\$40,000,000	\$0	\$42,267,927	\$64,307,755	\$0	1.52	13.0%
Lone Star Fund IV	2002	\$20,000,000	\$954,801	\$19,045,199	\$44,404,793	\$65,640	2.33	30.7%
Total Legacy Portfolio		\$325,000,000	\$55,865,355	\$336,524,463	\$321,280,002	\$134,519,690	1.40	
Carlyle Portfolio								
TCG BDC II	2017	\$150,000,000	\$7,911,971	\$142,088,029	\$31,584,164	\$139,286,143	1.20	9.9%
CPC V	2017	\$150,000,000	\$20,748,975	\$192,740,235	\$63,489,210	\$156,125,640	1.14	8.8%
AlpInvest FC Credit Fund	2017	\$100,000,000	\$50,116,747	\$50,405,095	\$22,575,418	\$35,269,049	1.15	9.5%
Total Carlyle Portfolio		\$400,000,000	\$78,777,692	\$385,233,359	\$117,648,792	\$330,680,832	1.16	
Total Private Credit		\$725,000,000	\$134,643,047	\$721,757,822	\$438,928,793	\$465,200,522		



Name	Allocation Group	Verus Outlook	#1	#2	#3	#4	#5	#6	Verus Manager Research Views				
T. Rowe Price Large Cap Grow	th Domestic Equity Large Cap Growth	No Issues	✓	B	✓	✓	✓	-					
PIMCO StocksPLUS Small Fur	Domestic Equity Small Cap Core	No Issues	✓	✓	✓	B	✓	-					
Artisan International Growth	International Equity	No Issues	✓	✓	✓	R	✓	-					
Research Affiliates Internationa Equity	al International Equity	No Issues	B	B	B	R	B	-	Verus remains comfortable with the product in spite of performance headwinds, which are driven by value factor underperformance. Please refer to the October 2021 Underperforming Managers Memo.				
Mondrian International Small C	ap International Equity Small Cap	No Issues	B	B	✓	R	R	-	Verus remains comfortable with the product in spite of performance headwinds, which are driven by value factor underperformance. Please refer to the October 2021 Underperforming Managers Memo.				
Mondrian Emerging Markets	Emerging Markets Equity	Watch	B	R	✓	P	R	-	Watch status for concerns around style drift coupled with underperformance. Refer to memo from March 2021 meeting.				
Baillie Gifford Emerging Marke	ts Emerging Markets Equity	Watch	✓	✓	✓	✓	✓	-	Watch status for one quarter due to the departure of portfolio manager Ewan Markson-Brown. Although we remain comfortable with the team's diverse and cohesive structure, we believe the provisional status is warranted until we can reconfirm our conviction in a detailed follow up. Please refer to the memo from the August 2021 meeting.				
<u>Legend</u>				Mana	ger Re	view R	ules						
	Indicates Manager/Fund has ribed rule.	not met the						d the be	enchmark index more than half the time over the last 20 quarters.				
<b>√</b>	kmark indicates Manager/Furibed rule.	nd has met the		Rule 2 -	Equity ma	nager ha	s returned	less th	an 110% of the benchmark index for the three year period.				
	ot applicable to		Rule 3 - Manager has underperformed the 50th percentile in the appropriate style universe in more than two of the last five years of consecutive returns.										
	red cell indicates a change fr	om last quarter							an the 50th Percentile in an appropriate style universe for the five year period e]/[standard deviation]).				
			1	Rule 5 - ([excess	Manager's	s Informat er benchn	ion Ratio nark]/[trac	is worse king err	e than the 50th Percentile in an appropriate style universe for the five year period				
				drift exc	essive as	set arowth	change	in owne	ership and any other reason that raises concern				

drift, excessive asset growth, change in ownership and any other reason that raises concern.

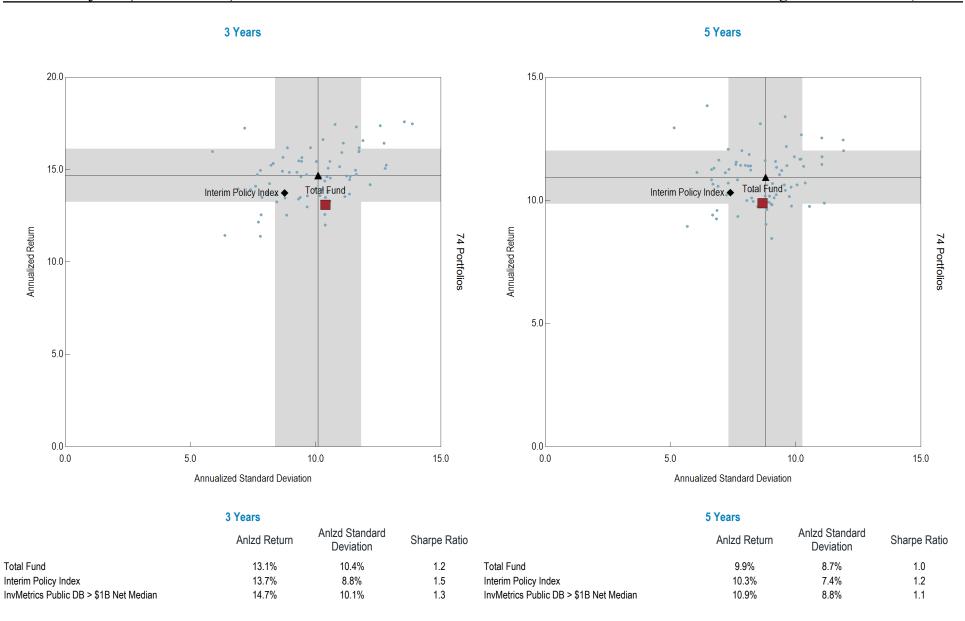


Name	Allocation Group	Verus Outlook	#1	#2	#3	#4	#5	#6	Verus Manager Research Views
Western Asset Investment Core Bond	Domestic Fixed Income	No Issues	<b>√</b>	✓	<b>√</b>	R	✓	B	Western Asset Core Plus: Franklin announced in February 2020 their intention to acquire 100% of Legg Mason for \$4.5 billion at \$50 per share of common stock in an all-cash deal. Given the complexity and large-scale nature of this change, we will continue to monitor for developments relating to Franklin Templeton and the affiliates. We will place a provisional flag on Franklin and each of the affiliates at the firm level to signify that a change has occurred, although we do not have serious concerns with the announcement at this time.
Loomis Sayles High Yield	Domestic Fixed Income High Yield	No Issues	B	R	B	B	R	-	Verus remains comfortable with the product in spite of performance headwinds, which are driven by relatively higher quality positioning. Please refer to the October 2021 Underperforming Managers Memo.
Eaton Vance Senior Loan Fund	Domestic Fixed Income Bank Loans	No Issues	B	B	B	✓	R	R	On October 8th, 2020, Morgan Stanley announced its intention to acquire Eaton Vance. The deal is set to close in 2Q 2021
Brandywine Global Sovereign	Global Fixed Income	Watch	✓	B	✓	B	B	R	Watch status for concerns around relative performance. Refer to memo in December 2020 meeting.
PIMCO Emerging Local Bond In	s Emerging Markets Fixed Income	No Issues	✓	✓	✓	✓	✓	R	Verus views PIMCO's EMD team as robust and well-resourced but we retain a provisional watch rating to monitor for further turnover following the departure of senior team members Mike Gomez and Francesc Balcells.
Legend				Manad	ger Rev	iew Ru	ıles		
Flag Inc describe	dicates Manager/Fund has	not met the						I the bei	nchmark index more than half the time over the last 20 quarters.
✓ Checkn describe	nark indicates Manager/Fu ed rule.	und has met the		Rule 2 -	Fixed Inco	me mana	ger has re	eturned	less than 105% of the benchmark index for the three year period.
	nark indicates the rule is no nager/Fund.	ot applicable to			Manager h		performed	the 50t	th percentile in the appropriate style universe in more than two of the last five years
Colored	l cell indicates a change fr	om last quarter							n the 50th Percentile in an appropriate style universe for the five year period ([five idard deviation]).
			•		Manager's return ove				than the 50th Percentile in an appropriate style universe for the five year period or]).

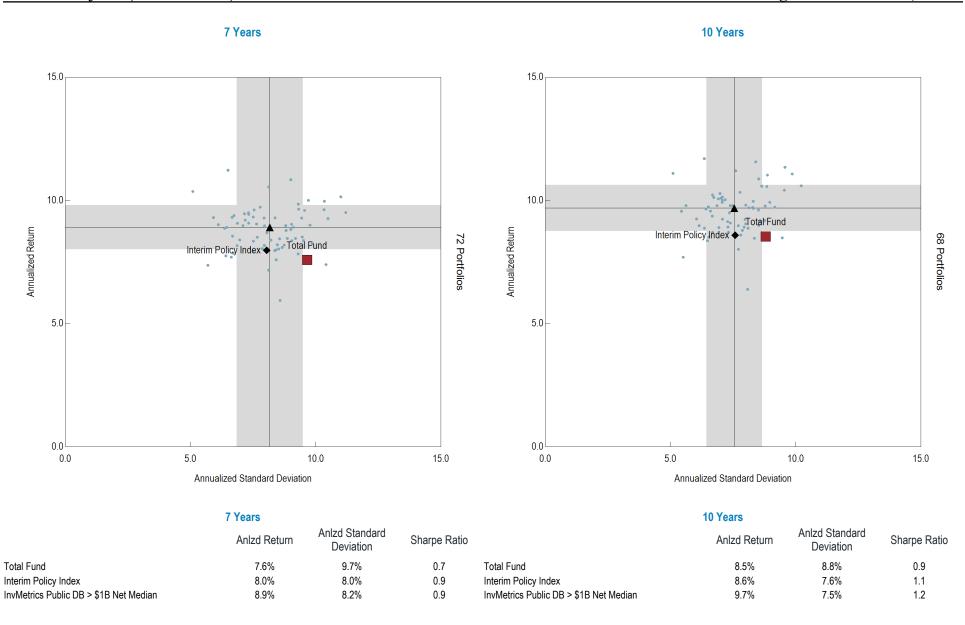


Rule 6 - Fund experiences non-performance related issues including personnel turnover, changes in investment philosophy or

drift, excessive asset growth, change in ownership and any other reason that raises concern.







#### 3 Years

	Anlzd Standard Deviation	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio
Total Fund	10.39%	-3.00%	1.17	0.98	108.74%	125.40%	-0.29	2.22%	1.17	1.23
Total Equity	17.88%	-1.39%	1.02	0.99	96.31%	100.53%	-0.64	1.68%	1.02	1.23
Total Domestic Equity	18.62%	-2.76%	1.04	0.98	94.30%	100.91%	-0.62	2.99%	1.24	1.51
Total International Equity	17.77%	-0.73%	1.04	0.99	103.71%	103.99%	-0.10	1.96%	0.71	0.92
Total Domestic Fixed Income	6.20%	2.25%	0.84	0.21	122.89%	101.40%	0.27	5.53%	0.86	0.78
Total Real Estate	4.69%	2.68%	0.62	0.65	67.79%	192.75%	-0.13	3.64%	1.45	1.62
Total Infrastructure	6.36%	6.75%	0.58	0.32	113.48%	-38.47%	0.56	5.86%	1.66	3.73
Total Alternative Illiquids	9.18%	13.80%	-0.01	0.00	13.04%	-37.88%	-0.74	20.47%	1.38	12.45

#### 5 Years

	Anlzd Standard Deviation	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio
Total Fund	8.68%	-2.08%	1.16	0.97	109.45%	121.66%	-0.24	1.82%	1.01	1.14
Total Equity	15.30%	-0.49%	1.00	0.99	96.90%	99.59%	-0.30	1.47%	0.82	1.01
Total Domestic Equity	16.19%	-1.67%	1.02	0.98	93.10%	99.79%	-0.49	2.54%	0.97	1.15
Total International Equity	15.27%	-0.18%	1.02	0.99	103.59%	101.93%	0.03	1.82%	0.59	0.83
Total Domestic Fixed Income	4.94%	2.12%	0.68	0.18	103.17%	70.10%	0.22	4.58%	0.70	0.70
Total Real Estate	3.91%	2.93%	0.63	0.68	73.18%	192.75%	0.03	2.90%	1.72	1.64
Total Infrastructure	6.69%	9.17%	0.71	0.29	153.64%	-38.47%	1.19	5.83%	2.03	5.73
Total Alternative Illiquids	8.10%	13.74%	-0.03	0.00	13.54%	-43.89%	-0.42	18.30%	1.49	7.61



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	Anlzd Standard Deviation	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio
Total Fund	9.66%	-1.88%	1.19	0.98	105.62%	121.91%	-0.18	2.12%	0.70	0.70
Total Equity	16.83%	-1.00%	1.03	0.99	96.39%	102.72%	-0.53	1.32%	0.55	0.59
Total Domestic Equity	17.22%	-2.02%	1.07	0.98	96.74%	106.55%	-0.36	2.86%	0.73	0.74
Total International Equity	17.12%	-0.89%	1.04	0.98	99.59%	104.33%	-0.27	2.24%	0.33	0.41
Total Domestic Fixed Income	5.34%	2.43%	0.54	0.12	104.87%	45.13%	0.20	5.25%	0.60	0.99
Total Real Estate	3.70%	0.53%	0.96	0.85	104.54%	153.98%	0.11	1.46%	2.15	3.54
Total Alternative Illiquids	6.02%	10.87%	0.00	0.00	24.58%	-18.06%	-0.37	17.60%	1.66	4.63

#### 10 Years

	Anlzd Standard Deviation	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio
Total Fund	8.80%	-1.30%	1.15	0.97	106.04%	113.84%	-0.03	1.84%	0.90	0.94
Total Equity	15.18%	-0.35%	1.03	0.99	101.80%	101.48%	0.02	1.41%	0.74	0.78
Total Domestic Equity	15.50%	-1.79%	1.08	0.97	99.57%	106.86%	-0.20	2.77%	0.96	0.96
Total International Equity	15.69%	-0.15%	1.03	0.98	102.87%	101.10%	0.04	2.09%	0.46	0.58
Total Domestic Fixed Income	4.79%	2.44%	0.64	0.18	121.31%	51.16%	0.31	4.48%	0.77	1.12
Total Real Estate	3.21%	0.41%	0.94	0.81	99.56%	153.98%	-0.09	1.43%	2.71	3.75
Total Alternative Illiquids	5.91%	10.52%	0.04	0.01	21.13%	-18.32%	-0.51	15.24%	1.82	5.18



#### Total Fund vs. InvestorForce Public DB > \$1B Net Universe



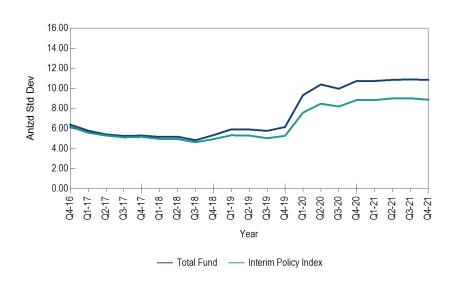


#### Total Fund vs. InvestorForce Public DB > \$1B Net Universe

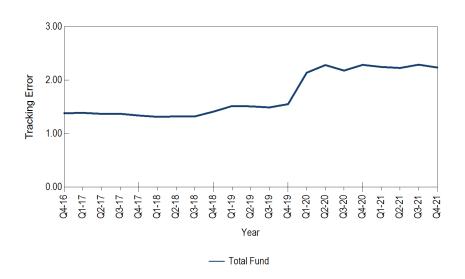




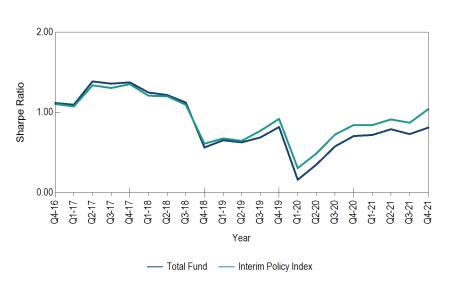
**Rolling 5 Year Annualized Standard Deviation** 



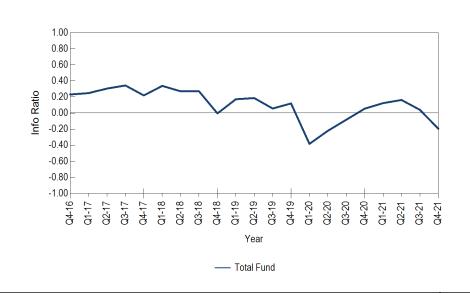
**Rolling 5 Year Tracking Error** 



**Rolling 5 Year Sharpe Ratio** 

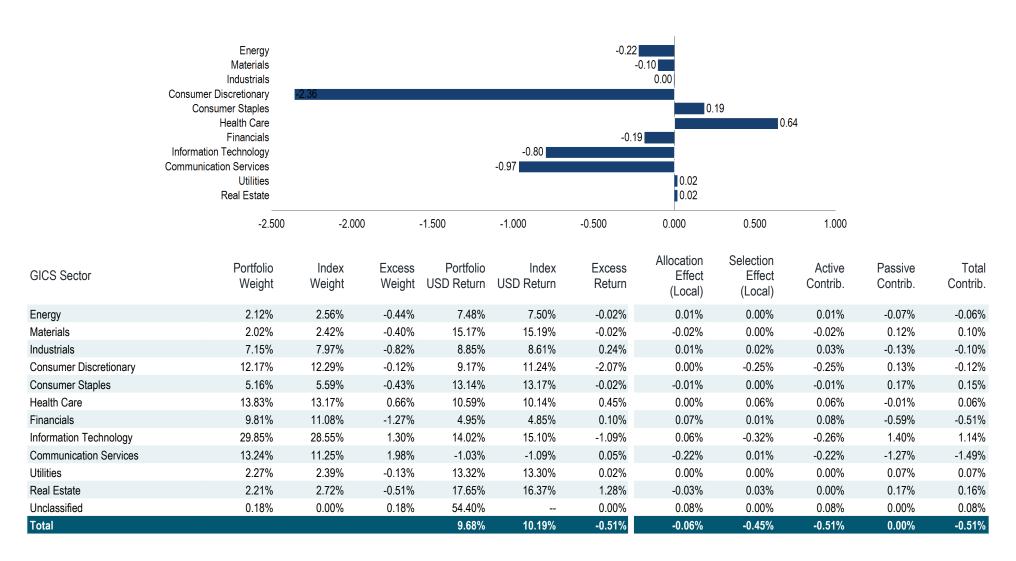


**Rolling 5 Year Information Ratio** 





### Total Domestic Equity vs. MSCI USA Current Quarter



Please note that attribution portfolio return is calculated based on portfolio holding returns and beginning of period portfolio weights, the effects of transactions during the period are not reflected in the return. The attribution portfolio return will vary from the composite return. PIMCO Stock Plus Small Fund is not included in holdings analysis.



Portfolio: Total Domestic Equity

**Active Currency Contributions** 

Benchmark: MSCI USA	
Portfolio Total Return	8.46%
Portfolio	Equity Only 6.74%
Benchmark	<u>10.19%</u>
Return From Active Mgmt	-3.45%
Local Returns	
Portfolio	6.74%
Benchmark	<u>10.19%</u>
Active Equity Return	-3.45%
Country Selection	-2.24%
Stock Selection	-1.21%
Currency Contributions	
Portfolio	0.00%
Benchmark	0.00%
Donominant	0.0070

Chart uses return-based methodology. PIMCO Stock Plus Small Fund is not included in holdings analysis.



0.00%

#### Total International Equity vs. MSCI ACWI ex USA

#### **Current Quarter**

	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Active Return	Allocation Effect (Local)	Selection Effect (Local)	Currency Effect
ARGENTINA	0.52%	0.05%	0.47%	-29.24%	7.80%	-37.04%	-0.14%	-0.01%	-0.13%	0.00%
AUSTRALIA	3.62%	4.39%	-0.77%	5.35%	1.94%	3.41%	0.10%	-0.01%	0.05%	0.05%
AUSTRIA	0.15%	0.14%	0.01%	-1.21%	5.19%	-6.40%	-0.02%	0.01%	-0.02%	0.00%
BELGIUM	0.84%	0.57%	0.27%	1.42%	1.93%	-0.52%	-0.04%	0.00%	-0.02%	-0.02%
BRAZIL	1.88%	1.32%	0.56%	-14.26%	-5.67%	-8.59%	-0.10%	-0.05%	-0.05%	0.01%
CANADA	5.25%	7.06%	-1.81%	4.74%	6.84%	-2.10%	-0.16%	-0.08%	-0.09%	0.01%
CHILE	0.00%	0.13%	-0.13%		-8.33%	8.33%	0.01%	0.01%	0.00%	0.01%
CHINA	6.17%	10.07%	-3.90%	3.61%	-6.06%	9.67%	0.98%	0.95%	0.03%	0.00%
COLOMBIA	0.00%	0.05%	-0.05%		-2.75%	2.75%	0.00%	0.00%	0.00%	0.00%
CZECH REPUBLIC	0.00%	0.04%	-0.04%		12.44%	-12.44%	0.00%	0.00%	0.00%	0.00%
DENMARK	1.41%	1.66%	-0.25%	0.13%	5.88%	-5.75%	-0.12%	-0.02%	-0.10%	0.00%
EGYPT	0.00%	0.02%	-0.02%		18.36%	-18.36%	0.00%	0.00%	0.00%	0.00%
FINLAND	0.50%	0.65%	-0.15%	2.55%	3.00%	-0.44%	0.00%	0.00%	0.01%	-0.01%
FRANCE	6.50%	7.12%	-0.62%	7.55%	7.12%	0.43%	0.05%	0.02%	0.04%	-0.02%
GERMANY	5.58%	5.74%	-0.16%	-2.30%	0.98%	-3.28%	-0.33%	-0.02%	-0.24%	-0.06%
GREECE	0.00%	0.05%	-0.05%		-2.81%	2.81%	0.00%	0.00%	0.00%	0.00%
HONG KONG	4.06%	1.88%	2.18%	0.39%	-3.60%	3.99%	0.20%	0.03%	0.16%	0.00%
HUNGARY	0.00%	0.08%	-0.08%		-9.86%	9.86%	0.01%	0.01%	0.00%	0.00%
INDIA	3.93%	3.61%	0.32%	-6.88%	-0.54%	-6.34%	-0.05%	0.02%	-0.05%	-0.02%
INDONESIA	0.52%	0.40%	0.12%	10.86%	6.30%	4.56%	0.03%	0.01%	0.02%	0.00%
IRELAND	0.98%	0.45%	0.53%	11.63%	0.61%	11.01%	0.18%	0.01%	0.16%	0.01%
ISRAEL	1.04%	0.39%	0.64%	7.45%	9.52%	-2.06%	0.13%	0.07%	0.06%	0.00%
ITALY	1.29%	1.56%	-0.26%	0.93%	5.79%	-4.86%	-0.09%	0.01%	-0.10%	0.00%
JAPAN	14.87%	15.35%	-0.48%	-4.93%	-4.01%	-0.92%	-0.18%	0.01%	-0.17%	-0.01%
KOREA	3.93%	3.74%	0.19%	-1.59%	-1.73%	0.14%	0.03%	-0.08%	0.06%	0.05%
KUWAIT	0.00%	0.18%	-0.18%		1.84%	-1.84%	0.00%	0.00%	0.00%	0.00%



	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Active Return	Allocation Effect (Local)	Selection Effect (Local)	Currency Effect
LUXEMBOURG	1.03%	0.00%	1.03%	1.25%	1.83%	-0.58%	-0.13%	0.00%	-0.09%	-0.04%
MALAYSIA	0.00%	0.39%	-0.39%		1.67%	-1.67%	0.00%	0.01%	0.00%	0.00%
MEXICO	0.81%	0.57%	0.24%	-14.61%	5.75%	-20.36%	-0.18%	0.01%	-0.19%	0.00%
NETHERLANDS	4.56%	3.07%	1.49%	3.18%	3.54%	-0.36%	-0.01%	-0.05%	0.09%	-0.05%
NEW ZEALAND	0.15%	0.15%	0.00%	-1.05%	-4.31%	3.27%	0.00%	0.00%	0.01%	0.00%
NORWAY	0.81%	0.42%	0.39%	5.15%	0.36%	4.80%	0.00%	0.00%	0.02%	-0.02%
Other Countries	0.04%	0.00%	0.04%	17.89%	12.83%	5.06%	0.10%	0.00%	0.08%	0.02%
PAKISTAN	0.00%	0.00%	0.00%		-2.23%	2.23%	0.00%	0.00%	0.00%	0.00%
PERU	0.00%	0.05%	-0.05%		10.44%	-10.44%	0.00%	0.00%	0.00%	0.00%
PHILIPPINES	0.00%	0.19%	-0.19%		2.99%	-2.99%	0.00%	0.00%	0.00%	0.00%
POLAND	0.08%	0.22%	-0.15%	-3.25%	-2.08%	-1.17%	0.01%	0.01%	-0.01%	0.00%
PORTUGAL	0.14%	0.12%	0.02%	4.57%	1.88%	2.69%	0.00%	0.00%	0.00%	0.00%
QATAR	0.00%	0.22%	-0.22%		3.18%	-3.18%	0.00%	0.00%	0.00%	0.00%
RUSSIA	1.30%	1.06%	0.24%	-4.22%	-7.98%	3.76%	-0.01%	-0.05%	0.00%	0.03%
SAUDI ARABIA	0.00%	0.99%	-0.99%		0.04%	-0.04%	0.03%	0.03%	0.00%	0.00%
SINGAPORE	1.49%	0.74%	0.75%	-1.49%	-1.13%	-0.36%	0.02%	0.05%	-0.03%	0.00%
SOUTH AFRICA	0.29%	0.94%	-0.65%	2.27%	-0.72%	2.99%	0.03%	-0.03%	0.01%	0.05%
SPAIN	1.63%	1.51%	0.12%	-2.47%	-1.26%	-1.21%	-0.09%	-0.07%	-0.01%	-0.02%
SWEDEN	1.44%	2.33%	-0.90%	6.66%	6.74%	-0.08%	-0.04%	-0.12%	0.00%	0.08%
SWITZERLAND	5.16%	6.04%	-0.88%	10.52%	12.83%	-2.31%	-0.12%	0.05%	-0.15%	-0.02%
TAIWAN	4.56%	4.36%	0.20%	6.62%	8.28%	-1.66%	-0.25%	-0.25%	0.03%	-0.02%
THAILAND	0.00%	0.48%	-0.48%		3.02%	-3.02%	0.00%	0.01%	0.00%	-0.01%
TURKEY	0.00%	0.08%	-0.08%		-10.62%	10.62%	0.01%	-0.02%	0.00%	0.03%
UNITED ARAB EMIRATES	0.00%	0.24%	-0.24%		10.73%	-10.73%	-0.02%	-0.02%	0.00%	0.00%
UNITED KINGDOM	10.56%	9.12%	1.44%	4.49%	5.45%	-0.97%	-0.10%	0.00%	-0.11%	0.00%
UNITED STATES	2.72%	0.00%	2.72%	6.71%	9.97%	-3.26%	0.13%	0.27%	-0.10%	-0.04%
	99.80%	100.00%	-0.20%	1.69%	1.83%	-0.14%	-0.14%	0.69%	-0.84%	0.01%



#### Total International Equity vs. MSCI ACWI ex USA

#### **Current Quarter**

Currency Name	Portfolio Weight	Index Weight	Excess Weight	Currency Return	Portfolio Contrib.	Index Contrib.	Active Contrib.	Currency Effect
	0.04%	0.00%	0.04%	-	0.00%	-0.98%	0.98%	0.02%
Argenintinian Nuevo Peso	0.52%	0.05%	0.47%	-4.74%	0.00%	0.00%	0.00%	0.00%
Australian Dollar	3.62%	4.39%	-0.77%	-1.85%	0.43%	0.40%	0.04%	0.05%
Baht	0.00%	0.48%	-0.48%	-2.84%	0.00%	1.28%	-1.28%	-0.01%
Canadian Dollar	5.25%	7.06%	-1.81%	-0.54%	-0.16%	-0.09%	-0.07%	0.01%
Chilean Peso	0.00%	0.13%	-0.13%	-9.88%	0.00%	-4.80%	4.80%	0.01%
Colombian Peso	0.00%	0.05%	-0.05%	-7.17%	0.00%	-6.74%	6.74%	0.00%
Cruzeiro Real	1.88%	1.32%	0.56%	-7.61%	-1.49%	-2.59%	1.10%	0.01%
Czech Koruna	0.00%	0.04%	-0.04%	-2.08%	0.00%	-0.20%	0.20%	0.00%
Danish Krone	1.41%	1.66%	-0.25%	-4.20%	-1.87%	-1.98%	0.11%	0.00%
Egytian Pound	0.00%	0.02%	-0.02%	0.05%	0.00%	0.12%	-0.12%	0.00%
Emirati dirham	0.00%	0.24%	-0.24%	0.00%	0.00%	0.00%	0.00%	0.00%
Euro	23.19%	20.98%	2.21%	-4.18%	-1.80%	-1.95%	0.15%	-0.21%
Forint	0.00%	0.08%	-0.08%	-9.45%	0.00%	-4.30%	4.30%	0.00%
Hong Kong Dollar	4.06%	1.88%	2.18%	-0.32%	-0.16%	-0.15%	-0.01%	0.00%
Indian Rupee	3.93%	3.61%	0.32%	-1.71%	-0.91%	-0.45%	-0.46%	-0.02%
Kuwaiti dinar	0.00%	0.18%	-0.18%	-0.53%	0.00%	-0.53%	0.53%	0.00%
Mexican New Peso	0.81%	0.57%	0.24%	-2.49%	-0.13%	-0.02%	-0.11%	0.00%
New Sol	0.00%	0.05%	-0.05%	2.78%	0.00%	0.00%	0.00%	0.00%
New Taiwan Dollar	4.56%	4.36%	0.20%	0.16%	0.48%	0.49%	-0.01%	-0.02%
New Zealand Dollar	0.15%	0.15%	0.00%	-3.81%	-1.01%	-1.01%	0.00%	0.00%
New Zloty	0.08%	0.22%	-0.15%	-5.71%	-0.56%	-1.56%	1.00%	0.00%
Norwegian Krone	0.81%	0.42%	0.39%	-1.99%	-1.03%	-0.98%	-0.05%	-0.02%
Pakistani Rupee	0.00%	0.00%	0.00%	-5.35%	0.00%	-3.34%	3.34%	0.00%
Philippines Peso	0.00%	0.19%	-0.19%	-2.28%	0.00%	-0.85%	0.85%	0.00%
Pound Sterling	10.56%	9.12%	1.44%	-2.09%	0.25%	0.30%	-0.05%	0.00%
Qatari rial	0.00%	0.22%	-0.22%	0.02%	0.00%	0.00%	0.00%	0.00%



# Total International Equity Performance Attribution by Currency (Net of Fees)

Period Ending: December 31, 2021

Currency Name	Portfolio Weight	Index Weight	Excess Weight	Currency Return	Portfolio Contrib.	Index Contrib.	Active Contrib.	Currency Effect
Rand	0.29%	0.94%	-0.65%	-9.83%	-1.64%	-6.34%	4.70%	0.05%
Ringgit (Malaysian Dollar)	0.00%	0.39%	-0.39%	-0.19%	0.00%	0.39%	-0.39%	0.00%
Rupiah	0.52%	0.40%	0.12%	0.14%	0.47%	0.28%	0.19%	0.00%
Russian Federation Rouble	1.30%	1.06%	0.24%	-2.97%	0.23%	-2.71%	2.94%	0.03%
Saudi Arabian Riyal	0.00%	0.99%	-0.99%	-0.10%	0.00%	-0.09%	0.09%	0.00%
Shekel	1.04%	0.39%	0.64%	3.10%	0.82%	2.58%	-1.76%	0.00%
Singapore Dollar	1.49%	0.74%	0.75%	-0.42%	0.50%	0.60%	-0.10%	0.00%
South Korean Won	3.93%	3.74%	0.19%	-2.30%	0.58%	-0.76%	1.34%	0.05%
Swedish Krona	1.44%	2.33%	-0.90%	-5.29%	-3.59%	-3.59%	0.00%	0.08%
Swiss Franc	5.16%	6.04%	-0.88%	0.35%	2.44%	2.60%	-0.16%	-0.02%
Turkish Lira	0.00%	0.08%	-0.08%	-37.67%	0.00%	-43.47%	43.47%	0.03%
US Dollar	2.72%	0.00%	2.72%	0.00%	-0.53%	-0.98%	0.45%	-0.04%
Yen	14.87%	15.35%	-0.48%	-4.50%	-3.06%	-3.09%	0.04%	-0.01%
Yuan Renminbi	6.17%	10.07%	-3.90%	1.38%	0.16%	0.10%	0.06%	0.00%
	99.80%	100.00%	-0.20%		-0.82%	-0.98%	0.16%	0.01%



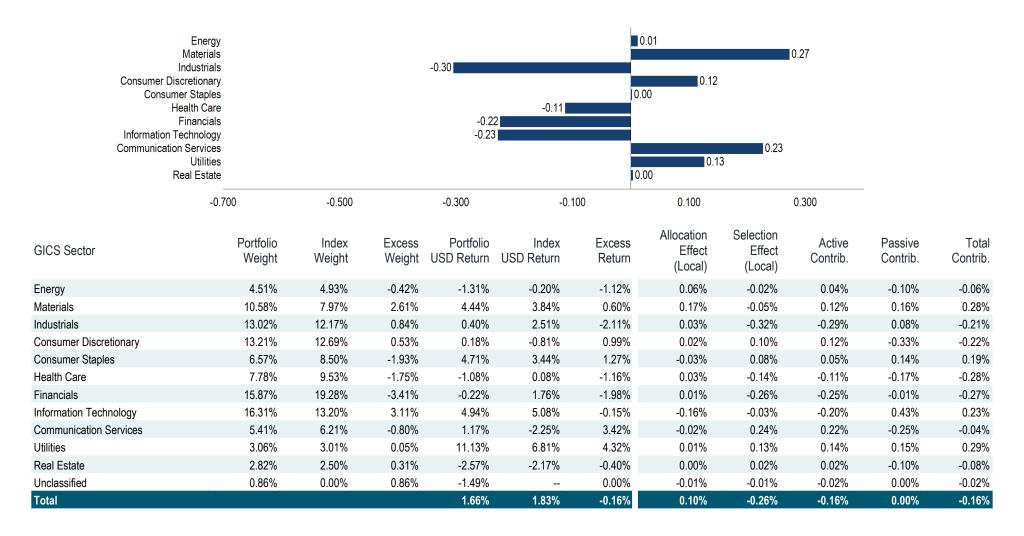
## Total International Equity vs. MSCI ACWI ex USA Current Quarter

Region	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Americas	11.18%	9.23%	1.95%	0.79%	4.74%	-3.94%	0.06%	-0.49%	-0.43%	0.27%	-0.16%
Europe	43.95%	41.95%	2.00%	3.41%	5.30%	-1.89%	0.33%	-1.20%	-0.87%	1.46%	0.59%
Asia/Pacific	43.31%	45.76%	-2.45%	-1.21%	-1.95%	0.74%	0.47%	0.41%	0.88%	-1.73%	-0.85%
Other	1.56%	3.06%	-1.50%	7.37%	2.04%	5.33%	0.01%	0.27%	0.28%	0.01%	0.29%
Total				1.69%	1.83%	-0.14%	0.87%	-1.01%	-0.14%	0.00%	-0.14%

Region	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Americas	11.18%	9.23%	1.95%	0.79%	4.74%	-3.94%	0.06%	-0.49%	-0.43%	0.27%	-0.16%
Europe	43.95%	41.95%	2.00%	3.41%	5.30%	-1.89%	0.33%	-1.20%	-0.87%	1.46%	0.59%
Asia/Pacific	43.31%	45.76%	-2.45%	-1.21%	-1.95%	0.74%	0.47%	0.41%	0.88%	-1.73%	-0.85%
Other	1.56%	3.06%	-1.50%	7.37%	2.04%	5.33%	0.01%	0.27%	0.28%	0.01%	0.29%
Total				1.69%	1.83%	-0.14%	0.87%	-1.01%	-0.14%	0.00%	-0.14%



## Total International Equity vs. MSCI ACWI ex USA Current Quarter





Portfolio: Total International Equity Benchmark: MSCI ACWI ex USA	
Portfolio Total Return	0.57%
Portfolio Benchmark Return From Active Mgmt	Equity Only 1.69% <u>1.83%</u> -0.14%
Local Returns Portfolio Benchmark Active Equity Return	2.69% <u>2.80%</u> -0.12%
Country Selection Stock Selection	0.69% -0.84%
Currency Contributions Portfolio Benchmark	-0.82% -0.98%

**Active Currency Contributions** 

0.16%

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	2021	2020	2019	2018	2017
Total Fund	6,428,347,281	100.0	3.6	3.7	12.6	13.1	9.9	8.5	6.5	12.6	10.4	16.4	-3.4	14.6
Interim Policy Index			4.6	5.8	15.3	13.7	10.3	8.6	6.2	15.3	11.6	14.4	-2.6	14.0
InvMetrics Public DB > \$1B Net Rank			73	79	83	90	83	91	72	83	57	59	36	67
NT MSCI US Index	1,214,860,851	18.9	10.1	10.5	27.0					27.0				
MSCIUSA			10.0	10.3	26.5	25.9	18.1	16.0	10.1	26.5	20.7	30.9	-5.0	21.2
eV US Large Cap Core Equity Net Rank			50	45	48					48				
T. Rowe Price Large Cap Growth	215,652,706	3.4	11.9	11.3	27.4	32.2				27.4	40.0	29.5		
Russell 1000 Growth			11.6	12.9	27.6	34.1	25.3	19.8	13.7	27.6	38.5	36.4	-1.5	30.2
eV US Large Cap Growth Equity Net Rank			18	32	26	34				26	27	82		
PIMCO StocksPLUS Small Fund	413,137,085	6.4	1.4	-2.8	14.5	22.3				14.5	23.6	29.3		
Russell 2000			2.1	-2.3	14.8	20.0	12.0	13.2	8.7	14.8	20.0	25.5	-11.0	14.6
eV US Small Cap Core Equity Net Rank			94	96	93	43				93	23	15		
MSCI Factor Mix Index	201,923,962	3.1	10.3	10.2										
MSCI USA			10.0	10.3	26.5	25.9	18.1	16.0	10.1	26.5	20.7	30.9	-5.0	21.2
eV US All Cap Equity Net Rank			16	19										
NT MSCI World Ex-US Index	341,028,287	5.3	3.6	2.6	12.9					12.9				
MSCI World ex USA			3.1	2.5	12.6	14.1	9.6	7.8	3.7	12.6	7.6	22.5	-14.1	24.2
eV Global All Cap Core Eq Net Rank			89	83	85					85				
Artisan International Growth	197,397,713	3.1	2.7	2.8	9.2	16.1	13.1			9.2	9.2	31.3	-10.2	31.5
MSCI EAFE			2.7	2.2	11.3	13.5	9.5	8.0	3.6	11.3	7.8	22.0	-13.8	25.0
eV EAFE All Cap Growth Net Rank			46	43	42	97	69			42	92	32	7	45
Research Affiliates International Equity	188,264,093	2.9	0.3	-2.1	11.5	10.3	7.4	7.8		11.5	2.1	17.9	-15.5	25.7
MSCI EAFE			2.7	2.2	11.3	13.5	9.5	8.0	3.6	11.3	7.8	22.0	-13.8	25.0
eV EAFE All Cap Value Net Rank			96	99	44	54	33	41		44	63	56	50	28
Mondrian International Small Cap	195,689,311	3.0	-2.7	-3.1	4.5	13.0	10.3	8.9		4.5	10.3	25.1	-14.6	32.4
S&P Developed Ex-U.S. SmallCap			-0.3	-0.7	8.8	15.6	10.8	10.2	5.5	8.8	13.7	24.7	-18.4	32.4
eV EAFE Small Cap Value Net Rank			99	85	94	43	31	99		94	11	32	22	66
Mondrian Emerging Markets	173,550,258	2.7	-0.9	-10.9	-4.9	9.1	7.3	4.0	4.1	-4.9	15.2	18.3	-13.8	27.2
MSCI Emerging Markets			-1.3	-9.3	-2.5	10.9	9.9	5.5	4.4	-2.5	18.3	18.4	-14.6	37.3
MSCI Emerging Markets Value NR			-0.4	-5.5	4.0	7.1	7.0	3.3	3.6	4.0	5.5	12.0	-10.7	28.1
eV Emg Mkts All Cap Value Equity Net Rank			74	82	82	71	84	99	63	82	40	42	48	93
Baillie Gifford Emerging Markets	168,868,815	2.6	-1.9	-14.0	-9.1	14.7				-9.1	29.6	28.0		
MSCI Emerging Markets			-1.3	-9.3	-2.5	10.9	9.9	5.5	4.4	-2.5	18.3	18.4	-14.6	37.3
MSCI Emerging Markets Growth NR			-2.1	-12.8	-8.4	14.6	12.5	7.5	5.1	-8.4	31.3	25.1	-18.3	46.8
Diversified Emerging Mkts MStar MF Rank			61	91	88	30				88	18	14		



8 8										<u> </u>				
	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	2021	2020	2019	2018	2017
RBC Access Capital	58,108,778	0.9	-0.5	-0.3	-1.5	3.0				-1.5	4.3	6.4		
Bloomberg US Securitized Index			-0.4	-0.3	-1.1	3.1	2.6	2.4	3.7	-1.1	4.2	6.4	1.0	2.5
eV US Securitized Fixed Inc Net Rank			60	56	89	70				89	36	54		-
Loomis Sayles High Yield	195,033,041	3.0	-0.1	0.2	4.1	8.2	5.8			4.1	9.1	11.5	-2.3	7.1
Bloomberg US High Yield TR			0.7	1.6	5.3	8.8	6.3	6.8	7.1	5.3	7.1	14.3	-2.1	7.5
eV US High Yield Fixed Inc Net Rank			98	98	76	53	53			76	8	72	52	47
Eaton Vance Senior Loan Fund	201,707,162	3.1	0.5	1.7	4.4	4.3	3.5			4.4	1.1	7.5	0.7	4.0
S&P/LSTA Leveraged Loan Index			0.7	1.9	5.2	5.6	4.3	4.7	4.5	5.2	3.1	8.6	0.4	4.1
eV US Float-Rate Bank Loan Fixed Inc Net Rank			76	39	54	84	66			54	75	80	16	40
Brandywine Global Sovereign	1,376,051	0.0	-0.5	-3.5	-6.2	2.6	2.9			-6.2	5.9	8.7	-4.7	11.9
FTSE WGBI TR			-1.1	-2.3	-7.0	2.7	2.9	1.0	3.0	-7.0	10.1	5.9	-0.8	7.5
eV Global Government Fixed Inc Net Rank			24	81	38	72	61			38	72	1	92	4
PIMCO Emerging Local Bond Ins	186,393,568	2.9	-1.9	-6.5	-8.8	3.9	3.6			-8.8	4.9	17.3	-7.7	15.4
JP Morgan GBI EM Global Diversified TR USD			-2.5	-5.6	-8.7	2.1	2.8	0.7	3.5	-8.7	2.7	13.5	-6.2	15.2
eV Emg Mkts Fixed Inc - Local Currency Net Rank			44	98	65	4	7			65	10	3	54	39
Invesco Core Real Estate	205,610,066	3.2	5.6	13.4	20.1	7.4	7.6	9.2		20.1	-2.4	5.7	8.5	7.5
NCREIF ODCE Net			7.7	14.6	21.1	8.2	7.8	9.4	5.8	21.1	0.3	4.4	7.4	6.7
IFM Infrastructure	224,549,872	3.5	3.7	8.7	17.6	11.5	14.7			17.6	2.9	14.6	20.1	19.0
NCREIF ODCE Net			7.7	14.6	21.1	8.2	7.8	9.4	5.8	21.1	0.3	4.4	7.4	6.7
Transition	31,296	0.0												
Parametric Overlay	97,168,935	1.5												



Account	Fee Schedule	Market Value As of 12/31/2021	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
NT MSCI US Index	0.01% of Assets	\$1,214,860,851	\$121,486	0.01%
T. Rowe Price Large Cap Growth	0.35% of Assets	\$215,652,706	\$754,784	0.35%
PIMCO StocksPLUS Small Fund	0.50% of First 150.0 Mil, 0.45% Thereafter	\$413,137,085	\$1,934,117	0.47%
MSCI Factor Mix Index	0.05% of First 50.0 Mil, 0.04% of Next 50.0 Mil, 0.02% Thereafter	\$201,923,962	\$65,385	0.03%
NT MSCI World Ex-US Index	0.25% of Assets	\$341,028,287	\$852,571	0.25%
Artisan International Growth	0.30% of Assets	\$197,397,713	\$592,193	0.30%
Research Affiliates International Equity	0.12% of Assets	\$188,264,093	\$225,917	0.12%
Mondrian International Small Cap	0.85% of First 25.0 Mil, 0.65% of Next 50.0 Mil, 0.63% of Next 50.0 Mil, 0.60% Thereafter	\$195,689,311	\$1,274,136	0.65%
Mondrian Emerging Markets	1.00% of First 25.0 Mil, 0.75% of Next 50.0 Mil, 0.60% Thereafter	\$173,550,258	\$1,216,302	0.70%
Baillie Gifford Emerging Markets	0.85% of Assets	\$168,868,815	\$1,435,385	0.85%
RBC Access Capital	0.30% of First 100.0 Mil, 0.20% Thereafter	\$58,108,778	\$174,326	0.30%
Loomis Sayles High Yield	0.50% of Assets	\$195,033,041	\$975,165	0.50%
Eaton Vance Senior Loan Fund	0.55% of First 50.0 Mil, 0.50% of Next 50.0 Mil, 0.40% Thereafter	\$201,707,162	\$931,829	0.46%
Brandywine Global Sovereign	0.36% of Assets	\$1,376,051	\$4,954	0.36%
PIMCO Emerging Local Bond Ins	0.50% of First 100.0 Mil, 0.45% Thereafter	\$186,393,568	\$888,771	0.48%

This fee analysis only reflects base fees for investment management, does not incorporate performance-based fees, and excludes fees paid to closed end real estate managers, private equity managers and GCM Better Futures Fund. Closed end real estate and private equity fees have other components which cannot be easily captured in this simplified format.

\* Managers with incentive fee include: Ivy, Research Affiliates, Western Asset, Artisan, Brandywine, and Invesco Commodities. Performance based fees are not included in the fee analysis. AJO has performance based fees.

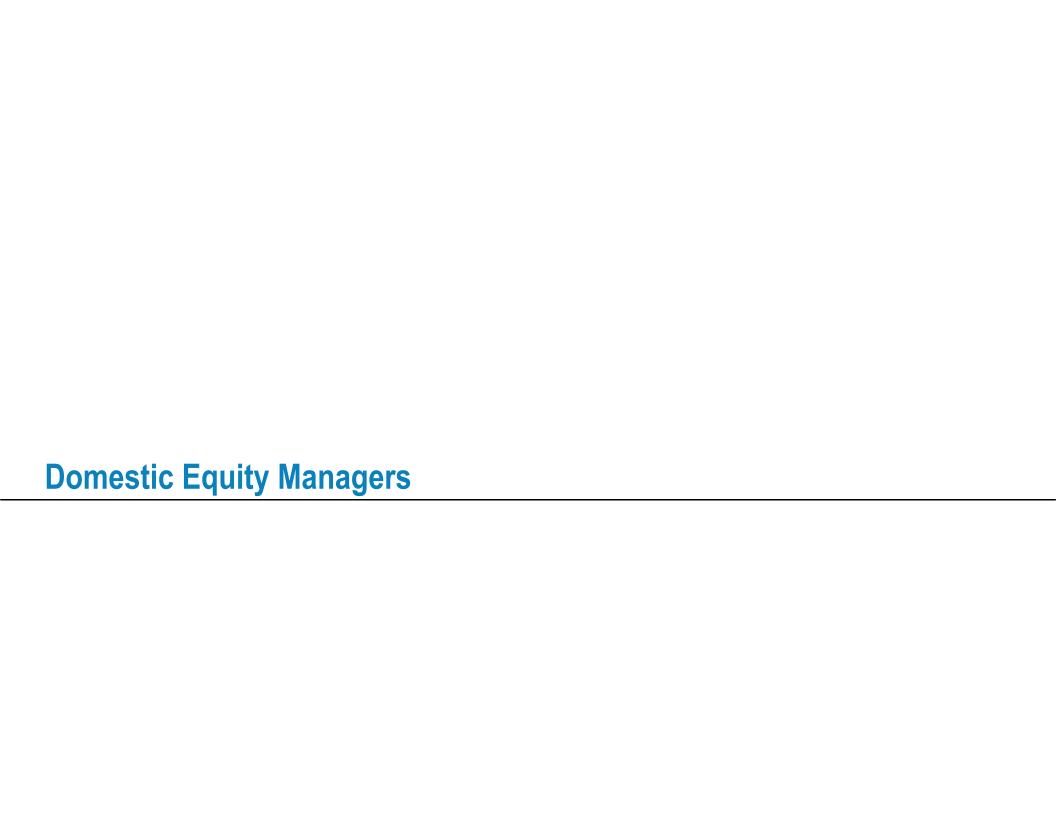


Account	Fee Schedule	Market Value As of 12/31/2021	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Invesco Core Real Estate	0.90% of First 75.0 Mil, 0.80% Thereafter	\$205,610,066	\$1,719,881	0.84%
IFM Infrastructure	0.97% of Assets	\$224,549,872	\$2,178,134	0.97%
Parametric Overlay	0.15% of First 25.0 Mil, 0.10% of Next 75.0 Mil, 0.04% Thereafter	\$97,168,935	\$109,669	0.11%
Investment Management Fee		\$4,480,320,555	\$15,455,004	0.34%

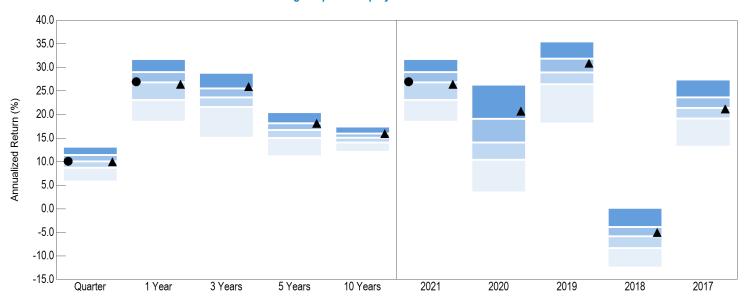
This fee analysis only reflects base fees for investment management, does not incorporate performance-based fees, and excludes fees paid to closed end real estate managers, private equity managers and GCM Better Futures Fund. Closed end real estate and private equity fees have other components which cannot be easily captured in this simplified format.

<sup>\*</sup> Managers with incentive fee include: Ivy, Research Affiliates, Western Asset, Artisan, Brandywine, and Invesco Commodities TCW TALF Opportunities Fund LP. Performance based fees are not included in the fee analysis. AJO has performance based fees.





#### NT MSCI US Index vs. eV US Large Cap Core Equity Net Universe

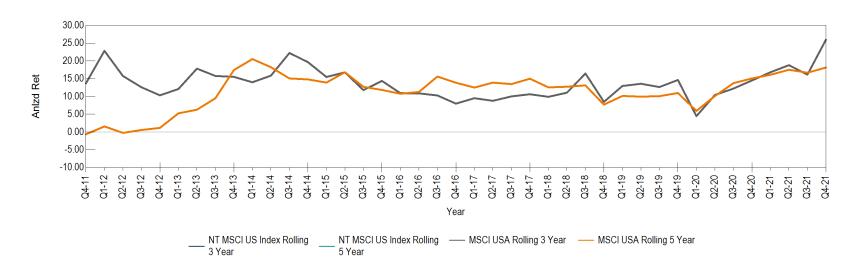


5th Percentile 25th Percentile Median 75th Percentile 95th Percentile
# of Portfolios

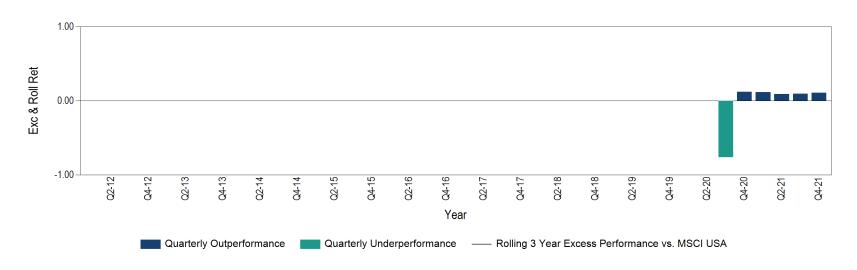
NT MSCI US IndexMSCI USA

Return (	Rank)																		
13.2		31.8		28.8		20.5		17.4		31.8		26.4		35.5		0.1		27.4	
11.4		29.0		25.6		18.1		16.0		29.0		19.1		31.9		-3.8		23.7	
10.1		26.9		23.7		16.7		15.1		26.9		14.1		28.9		-5.8		21.4	
8.8		23.1		21.7		15.1		14.1		23.1		10.4		26.5		-8.3		19.2	
5.8		18.5		15.1		11.2		12.1		18.5		3.5		18.1		-12.5		13.2	
217		217		207		194		151		217		216		203		189		188	
10.1	(50)	27.0	(48)		()		()		()	27.0	(48)		()		()		()		()
10.0	(52)	26.5	(56)	25.9	(23)	18.1	(26)	16.0	(27)	26.5	(56)	20.7	(20)	30.9	(33)	-5.0	(40)	21.2	(54)

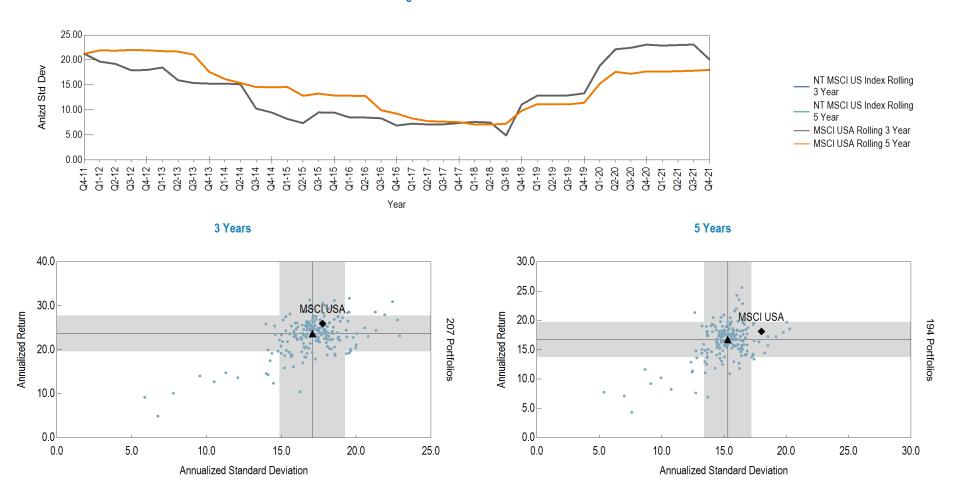




### **Rolling Annualized Excess Performance**





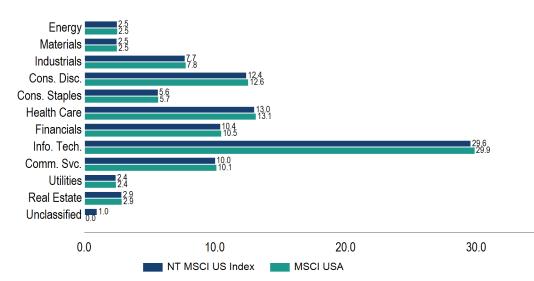


# Manager Portfolio Overview (Net of Fees)

### Characteristics

	Portfolio	MSCI USA
Number of Holdings	632	627
Weighted Avg. Market Cap. (\$B)	635.97	636.35
Median Market Cap. (\$B)	28.71	29.82
Price To Earnings	26.14	26.16
Price To Book	5.05	5.06
Price To Sales	3.90	3.90
Return on Equity (%)	28.77	29.04
Yield (%)	1.27	1.27
Beta		1.00

# Sector Allocation (%) vs MSCI USA



**Largest Holdings** 

**Top Contributors** 

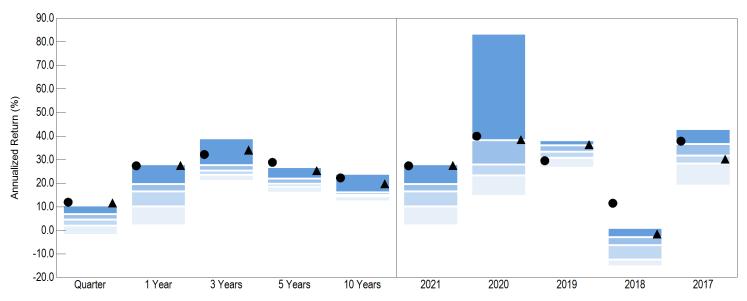
#### **Bottom Contributors**

3-3-										
	<b>End Weight</b>	Return		<b>End Weight</b>	Return	Contribution	n	<b>End Weight</b>	Return	Contribution
APPLE INC	6.75	25.67	APPLE INC	6.75	25.67	1.73	PAYPAL HOLDINGS INC	0.48	-27.53	-0.13
MICROSOFT CORP	5.52	19.51	MICROSOFT CORP	5.52	19.51	1.08	MODERNA INC	0.20	-34.01	-0.07
AMAZON.COM INC	3.49	1.50	TESLA INC	2.04	36.27	0.74	WALT DISNEY CO (THE)	0.65	-8.44	-0.05
TESLA INC	2.04	36.27	<b>NVIDIA CORPORATION</b>	1.69	41.99	0.71	MEDTRONIC PLC	0.32	-16.96	-0.05
ALPHABET INC	2.01	8.36	UNITEDHEALTH GROUP	1.09	28.92	0.31	COMCAST CORP	0.53	-9.62	-0.05
ALPHABET INC	1.92	8.57	INC	1.09	20.32	0.51	BLOCK INC	0.15	-32.66	-0.05
META PLATFORMS INC	1.84	-0.90	PFIZER INC	0.76	38.51	0.29	SNAP INC	0.11	-36.33	-0.04
NVIDIA CORPORATION	1.69	41.99	HOME DEPOT INC. (THE)	1.01	26.95	0.27	CITIGROUP INC	0.28	-13.32	-0.04
UNITEDHEALTH GROUP INC	1.09	28.92	BROADCOM INC	0.63	38.09	0.24	SALESFORCE.COM INC	0.57	-6.30	-0.04
JPMORGAN CHASE & CO	1.09	-2.69	QUALCOMM INC.	0.47	42.33	0.20	JPMORGAN CHASE & CO	1.09	-2.69	-0.03
			ACCENTURE PLC	0.60	29.96	0.18				

Unclassified sector allocation includes cash allocations.



# T. Rowe Price Large Cap Growth vs. eV Global Large Cap Growth Eq Net Universe



	5th Percentile
	25th Percentile
	Median
	75th Percentile
	95th Percentile
	# of Portfolios
D	T. Rowe Price Lard

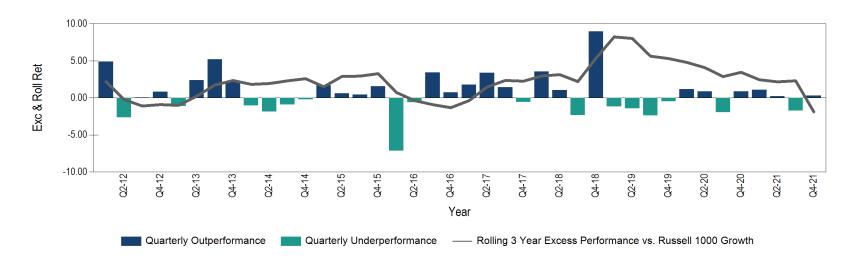
T. Rowe Price Large Cap Growth Russell 1000 Growth

Retu	ırn (Ran	ık)																			
10	0.5		28.0		39.0		26.8		23.9		28.0		83.4		38.1		1.0		43.0		
7	7.0		19.7		27.7		22.0		16.2		19.7		38.3		36.2		-2.8		36.7		
4	4.7		16.7		25.4		19.8		15.1		16.7		28.0		33.4		-6.3		31.8		
2	2.0		10.2		23.6		18.7		14.4		10.2		23.4		30.9		-12.4		28.4		
-	1.9		2.2		21.1		16.0		12.3		2.2		14.7		26.6		-15.1		19.1		
	49		48		40		36		21		48		46		34		31		34		
	1.9 (4 1.6 (4	4) 4)	27.4 27.6	(6) (6)	32.2 34.1	(10) (9)	28.8 25.3	(5) (6)	22.3 19.8	(7) (9)	27.4 27.6	(6) (6)	40.0 38.5	(24) (25)	29.5 36.4	(86) (21)	11.5 -1.5	(1) (18)	37.8 30.2	(15) (62)	
		.,		(3)		(5)	_3.0	(3)	. 3.0	(3)		(3)	20.0	(=0)	20.1	()		( . •)		(/	

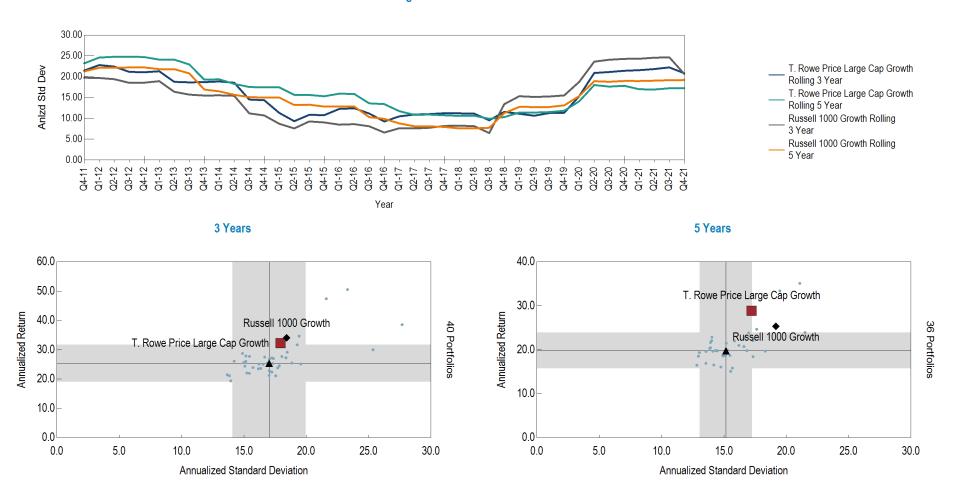




#### **Rolling Annualized Excess Performance**



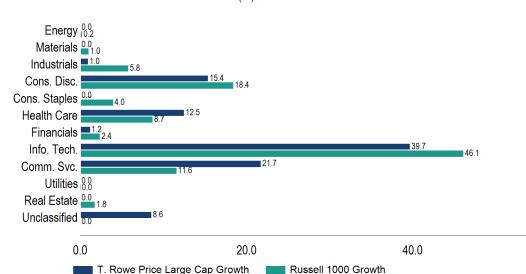




# Characteristics

	Portfolio	Russell 1000 Growth
Number of Holdings	68	503
Weighted Avg. Market Cap. (\$B)	937.85	992.27
Median Market Cap. (\$B)	61.69	20.33
Price To Earnings	36.78	36.05
Price To Book	8.08	13.39
Price To Sales	5.83	6.57
Return on Equity (%)	32.91	42.34
Yield (%)	0.34	0.69
Beta	1.00	1.00

# Sector Allocation (%) vs Russell 1000 Growth



Largest Holdings Top Contributors

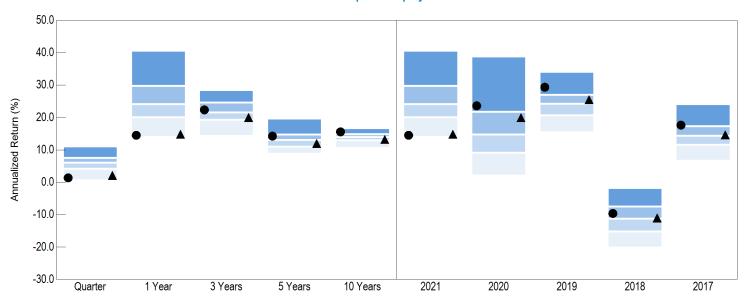
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RO.	ttom.	Con	trik	outors	

	<b>End Weight</b>	Return		<b>End Weight</b>	Return	Contributio	n	<b>End Weight</b>	Return	Contribution
MICROSOFT CORP	10.30	19.51	MICROSOFT CORP	10.30	19.51	2.01	SNAP INC	1.27	-36.33	-0.46
AMAZON.COM INC	7.76	1.50	APPLE INC	5.39	25.67	1.38	GLOBAL PAYMENTS INC	1.39	-14.05	-0.19
ALPHABET INC	7.54	8.36	UNITEDHEALTH GROUP	2.50	28.92	0.72	PAYPAL HOLDINGS INC	0.68	-27.53	-0.19
APPLE INC	5.39	25.67	INC	2.50	20.32	0.72	CARVANA CO	0.57	-23.13	-0.13
META PLATFORMS INC	5.18	-0.90	INTUIT INC.	3.49	19.37	0.68	PELOTON INTERACTIVE	0.22	-58.92	-0.13
INTUIT INC.	3.49	19.37	ALPHABET INC	7.54	8.36	0.63	INC	0.22	-30.92	-0.13
ALPHABET INC	2.90	8.57	NVIDIA CORPORATION	1.50	41.99	0.63	SALESFORCE.COM INC	1.96	-6.30	-0.12
UNITEDHEALTH GROUP INC	2.50	28.92	PROSHARES ULTRA	0.97	54.40	0.53	MATCH GROUP INC	0.74	-15.76	-0.12
SALESFORCE.COM INC	1.96	-6.30	SEMICONDUCTORS				SPLUNK INC	0.52	-20.03	-0.10
INTUITIVE SURGICAL INC	1.90	8.43	FORTINET INC	1.49	23.06	0.34	ZOOM VIDEO	0.34	-29.67	-0.10
			ADVANCED MICRO	0.78	39.85	0.31	COMMUNICATIONS INC		20.01	
			DEVICES INC				DRAFTKINGS INC	0.22	-42.96	-0.10
			CIGNA CORP	1.86	15.28	0.28				

Unclassified sector allocation includes cash allocations.



# PIMCO StocksPLUS Small Fund vs. eV US Small Cap Core Equity Net Universe



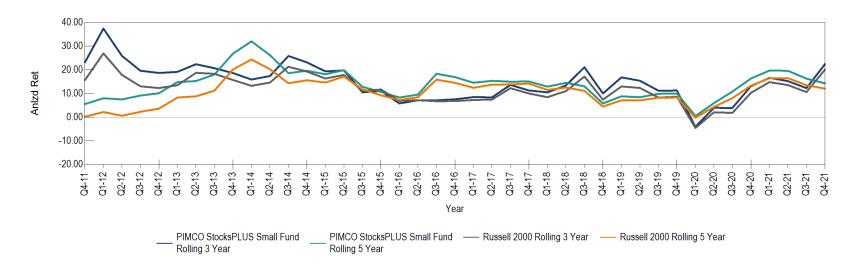
5th Percentile
25th Percentile
Median 75th Percentile
95th Percentile
# of Portfolios

PIMCO StocksPLUS Small Fund

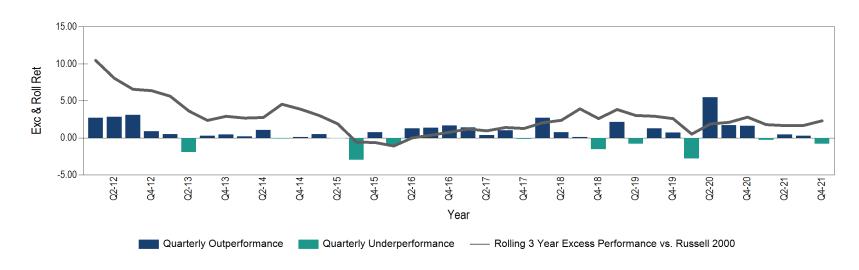
Russell 2000

Return (Rar	ık)																	
11.0	40.6		28.4		19.7		16.7		40.6		38.8		34.1		-1.8		24.1	
7.6	29.8		24.7		14.8		14.9		29.8		21.8		27.0		-7.5		17.3	
6.1	24.1		21.6		13.1		14.0		24.1		14.8		24.3		-11.1		14.4	
4.2	20.1		19.3		11.0		13.0		20.1		9.1		20.7		-15.1		11.6	
0.7	14.0		14.4		8.9		10.6		14.0		2.1		15.5		-20.1		6.7	
118	118		115		112		89		118		113		112		113		106	
1.4 (9	4) 14.5	(93)	22.3	(43)	14.2	(32)	15.6	(16)	14.5	(93)	23.6	(23)	29.3	(15)	-9.6	(37)	17.6	(23)
2.1 (9	1) 14.8	(92)	20.0	(67)	12.0	(67)	13.2	(68)	14.8	(92)	20.0	(30)	25.5	(41)	-11.0	(50)	14.6	(46)

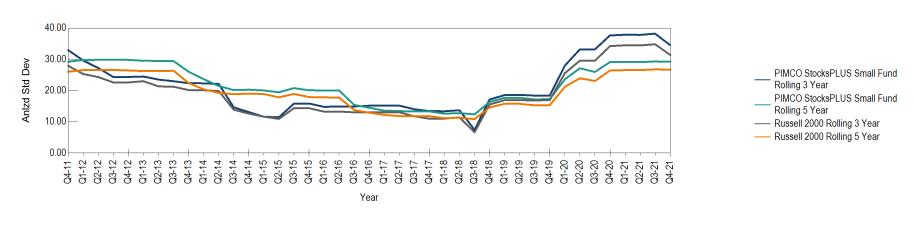


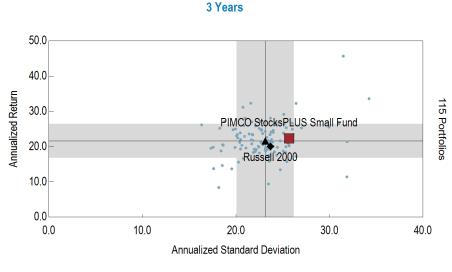


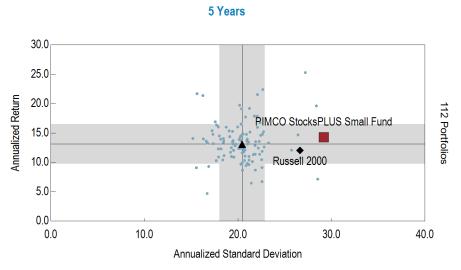
#### **Rolling Annualized Excess Performance**



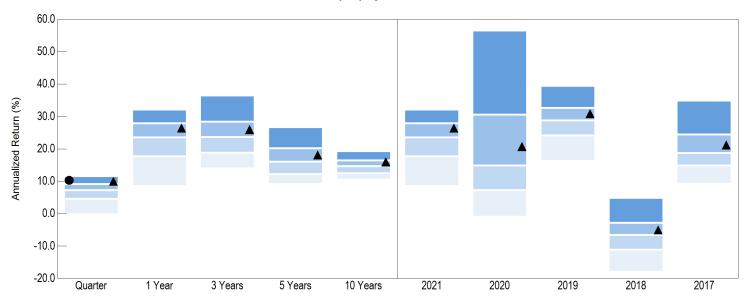








# MSCI Factor Mix Index vs. eV US All Cap Equity Net Universe



5th Percentile	
25th Percentile	
Median	
75th Percentile	
95th Percentile	
# of Portfolios	

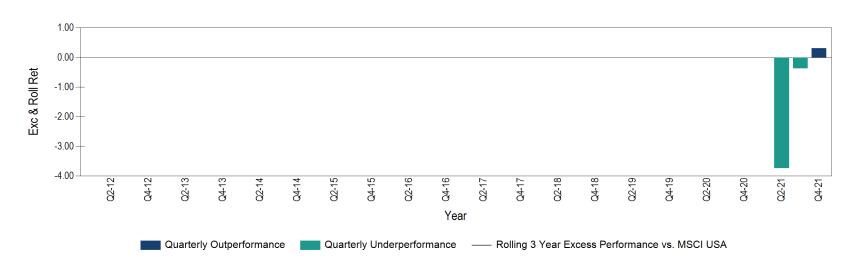
MSCI Factor Mix Index
MSCI USA

Return (F	Rank)																		
11.6		32.1		36.5		26.6		19.3		32.1		56.6		39.4		4.9		34.9	
9.2		28.0		28.5		20.3		16.5		28.0		30.7		32.7		-2.8		24.5	
7.3		23.6		23.7		16.1		14.7		23.6		14.9		28.8		-6.5		18.8	
4.6		17.7		18.9		12.3		12.6		17.7		7.3		24.2		-11.0		14.9	
-0.1		8.6		14.1		9.2		10.6		8.6		-0.9		16.3		-17.9		9.3	
225		225		209		199		166		225		229		226		227		219	
10.3	(16)		()		()		()		()		()		()		()		()		()
10.0	(18)	26.5	(33)	25.9	(38)	18.1	(36)	16.0	(33)	26.5	(33)	20.7	(42)	30.9	(39)	-5.0	(40)	21.2	(39)

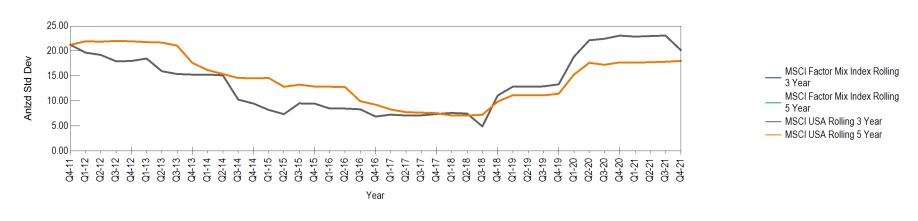


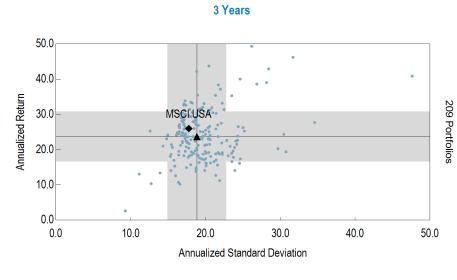


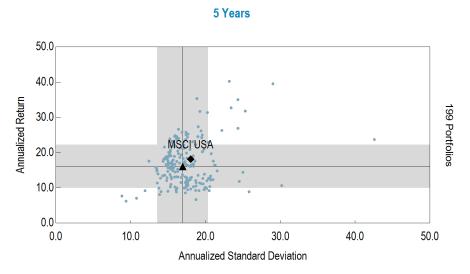
### **Rolling Annualized Excess Performance**







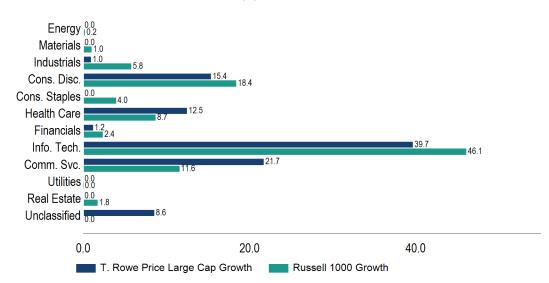




#### Characteristics

	Portfolio	
Number of Holdings	601	
Weighted Avg. Market Cap. (\$B)	382.05	
Median Market Cap. (\$B)	30.49	
Price To Earnings	23.86	
Price To Book	4.67	
Price To Sales	3.30	
Return on Equity (%)	29.79	
Yield (%)	1.49	
Beta		

# Sector Allocation (%) vs Russell 1000 Growth

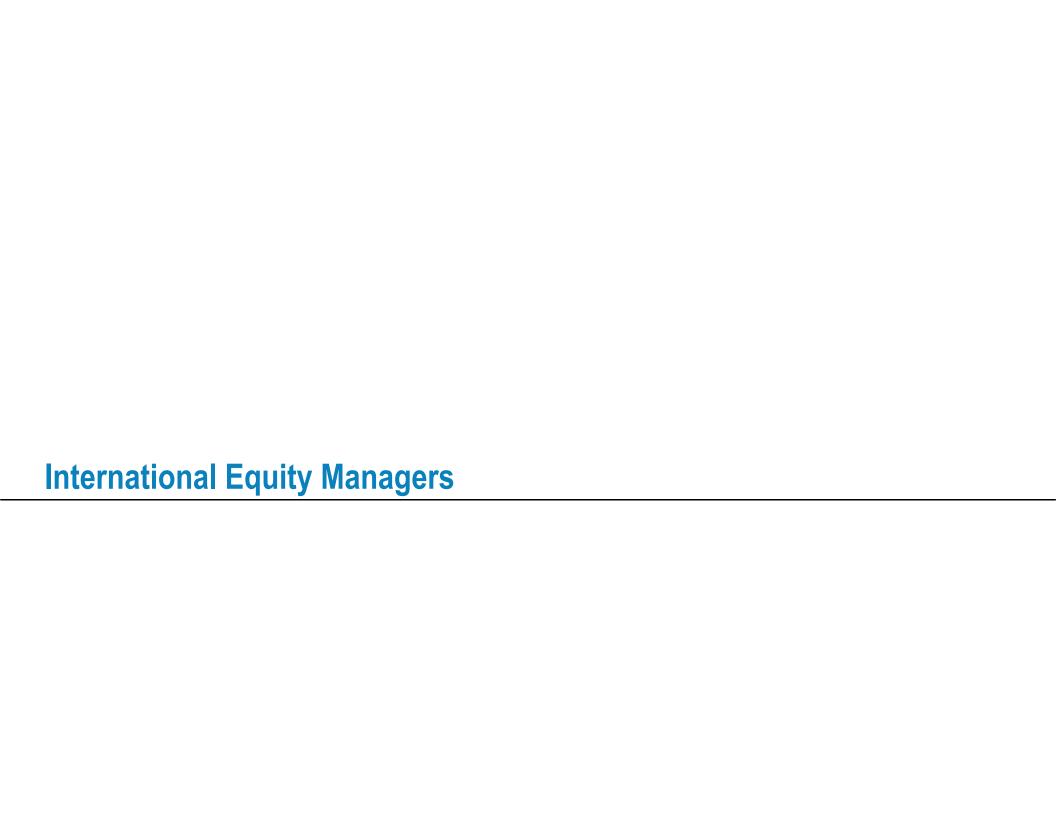


Largest Holdings Top Contributors Bottom Contributors

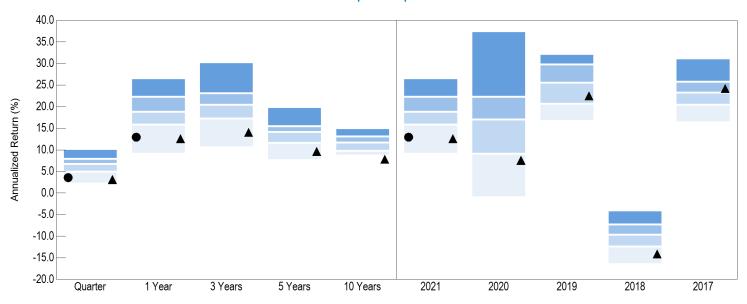
	End Weight	Return		End Weight	Return	Contributio	on	End Weight	Return	Contribution
MICROSOFT CORP	10.30	19.51	APPLE INC	2.98	25.67	0.77	PAYPAL HOLDINGS INC	0.60	-27.53	-0.17
AMAZON.COM INC	7.76	1.50	<b>NVIDIA CORPORATION</b>	1.58	41.99	0.66	MODERNA INC	0.32	-34.01	-0.11
ALPHABET INC	7.54	8.36	UNITEDHEALTH GROUP	1.95	28.92	0.56	CITIGROUP INC	0.51	-13.32	-0.07
APPLE INC	5.39	25.67	INC	1.95	20.32	0.50	AT&T INC	0.76	-7.17	-0.05
META PLATFORMS INC	5.18	-0.90	MICROSOFT CORP	2.86	19.51	0.56	T-MOBILE US INC	0.53	-9.22	-0.05
INTUIT INC.	3.49	19.37	ACCENTURE PLC	1.49	29.96	0.45	MEDTRONIC PLC	0.28	-16.96	-0.05
ALPHABET INC	2.90	8.57	QUALCOMM INC.	0.72	42.33	0.31	COMCAST CORP	0.48	-9.62	-0.05
UNITEDHEALTH GROUP INC	2.50	28.92	CISCO SYSTEMS INC	1.54	17.22	0.27	ACTIVISION BLIZZARD	0.29	14.02	-0.04
SALESFORCE.COM INC	1.96	-6.30	PFIZER INC	0.67	38.51	0.26	INC	0.29	-14.03	-0.04
INTUITIVE SURGICAL INC	1.90	8.43	COSTCO WHOLESALE	0.95	26.54	0.25	VISA INC	1.59	-2.54	-0.04
			CORP	0.55		0.20	WALT DISNEY CO (THE)	0.45	-8.44	-0.04
			FILLILLY AND CO	1.10	19.94	0.22				

Unclassified sector allocation includes cash allocations.





# NT MSCI World Ex-US Index vs. eV Global All Cap Core Eq Net Universe



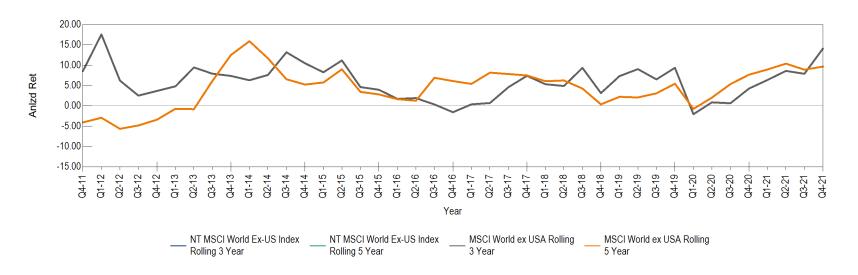
5th Percentile 25th Percentile Median 75th Percentile 95th Percentile	
# of Portfolios	

NT MSCI World Ex-US Index

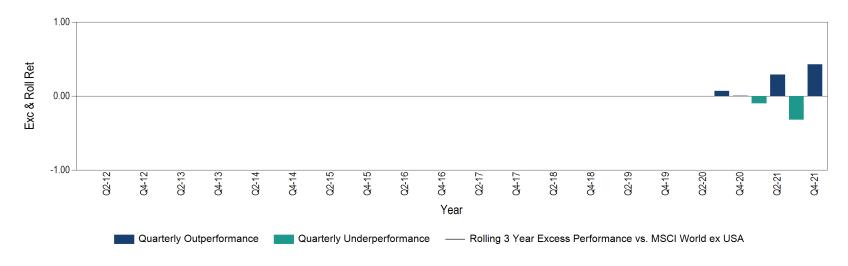
MSCI World ex USA

Return (F	Rank)																		
10.2		26.6		30.2		19.9		15.0		26.6		37.4		32.2		-4.0		31.2	
8.0		22.3		23.2		15.5		13.1		22.3		22.4		29.8		-7.2		25.8	
6.8		18.9		20.5		14.2		11.8		18.9		17.1		25.6		-9.6		23.3	
5.0		15.9		17.3		11.7		9.8		15.9		9.2		20.7		-12.3		20.5	
2.3		9.1		10.6		7.7		8.7		9.1		-0.9		16.7		-16.4		16.4	
105		104		91		78		47		104		93		83		73		66	
3.6	(89)	12.9	(85)		()		()		()	12.9	(85)		()		()		()		()
3 1	(91)	126	(87)	14 1	(83)	96	(88)	7.8	(98)	126	(87)	76	(80)	22.5	(65)	-14.1	(91)	24.2	(46)

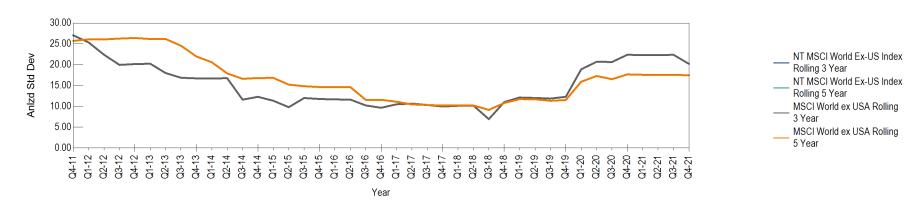


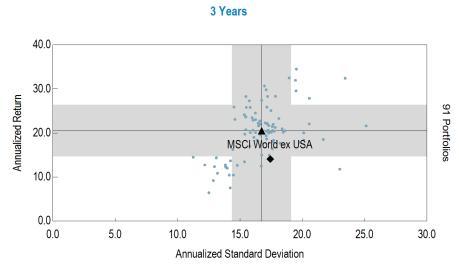


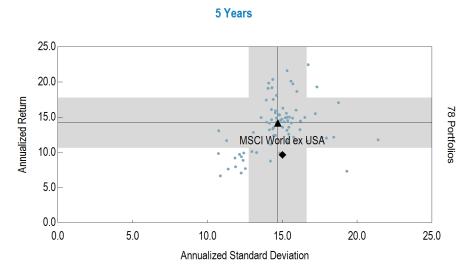
# **Rolling Annualized Excess Performance**









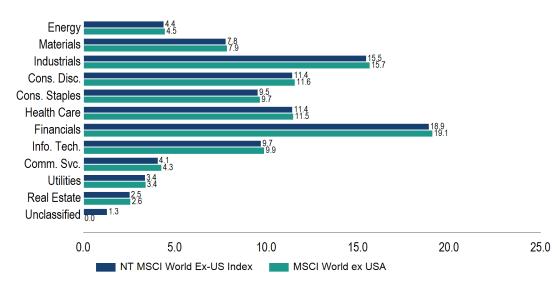




#### Characteristics

	Portfolio	MSCI World ex USA
Number of Holdings	1,003	917
Weighted Avg. Market Cap. (\$B)	84.23	83.51
Median Market Cap. (\$B)	13.64	14.67
Price To Earnings	17.15	17.08
Price To Book	2.79	2.72
Price To Sales	1.74	1.68
Return on Equity (%)	14.61	14.58
Yield (%)	2.62	2.70
Beta		1.00

# Sector Allocation (%) vs MSCI World ex USA



**Largest Holdings** 

# **Top Contributors**

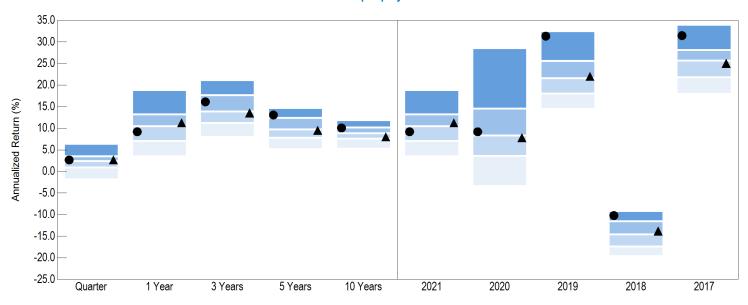
#### **Bottom Contributors**

3											
	<b>End Weight</b>	Return		<b>End Weight</b>	Return	Contribution	1	<b>End Weight</b>	Return	Contribution	
NESTLE SA, CHAM UND VEVEY	2.06	15.75	NESTLE SA, CHAM UND	2.06	15.75	0.32	AIA GROUP LTD	0.62	-12.76	-0.08	
ASML HOLDING NV	1.69	7.63	VEVEY			0.02	SOFTBANK GROUP CORP	0.29	-18.76	-0.05	
ROCHE HOLDING AG	1.53	13.48	ROCHE HOLDING AG	1.53	13.48	0.21	SEA LTD	0.16	-29.81	-0.05	
LVMH MOET HENNESSY LOUIS VUITTON SE	1.17	15.54	LVMH MOET HENNESSY LOUIS VUITTON SE	1.17	15.54	0.18	WESTPAC BANKING CORP	0.29	-15.37	-0.04	
NOVARTIS AG	1.03	6.96	CIE FINANCIERE RICHEMONT AG, ZUG	0.40	43.90	0.18	TAKEDA	0.00	47.04	0.04	
TOYOTA MOTOR CORP	0.99	1.99	NOVO NORDISK 'B'	0.98	16.11	0.16	PHARMACEUTICAL CO LTD	0.22	-17.84	-0.04	
NOVO NORDISK 'B'	0.98	16.11	ASML HOLDING NV	1.69	7.63	0.13	FAST RETAILING CO LTD	0.17	-23.29	-0.04	
ASTRAZENECA PLC	0.93	-2.85						0.17	-23.23	-0.04	
SONY GROUP CORPORATION	0.81	12.59	TOKYO ELECTRON LTD	0.43	29.27	0.13	VESTAS WIND SYSTEMS A/S	0.15	-23.76	-0.04	
SHOPIFY INC	0.79	1.22	TORONTO-DOMINION BANK (THE)	0.71	16.63	0.12	M3 INC	0.11	-29.78	-0.03	
			SONY GROUP	0.81	12.59	0.10	KDDI CORP	0.24	-11.76	-0.03	
			CORPORATION	0.01	12.00	0.10	KONINKLIJKE PHILIPS NV	0.17	-16.14	-0.03	
			SCHNEIDER ELECTRIC SA	0.54	17.60	0.10					

Unclassified sector allocation includes cash allocations.



# Artisan International Growth vs. eV EAFE All Cap Equity Net Universe



5th Percentile 25th Percentile
Median
75th Percentile 95th Percentile
# of Portfolios

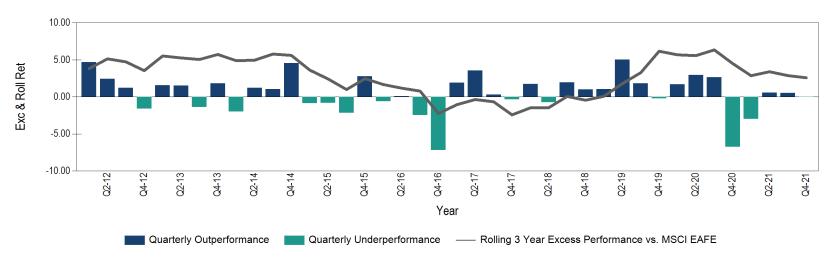
Artisan International GrowthMSCI EAFE

Return (	(Rank)																		
6.4	-	18.8		21.2		14.7		11.9		18.8		28.5		32.5		-9.2		33.9	
3.6		13.3		17.7		12.4		10.3		13.3		14.6		25.6		-11.5		28.1	
2.5		10.5		13.9		9.8		8.9		10.5		8.4		21.6		-14.6		25.7	
0.9		7.1		11.2		7.9		7.6		7.1		3.6		18.1		-17.4		21.8	
-1.7		3.6		8.0		5.2		5.3		3.6		-3.3		14.5		-19.6		18.0	
77		77		75		72		52		77		77		77		72		70	
2.7 2.7	(46) (45)	9.2 11.3	(63) (46)	16.1 13.5	(34) (54)	13.1 9.5	(22) (55)	10.1 8.0	(29) (69)	9.2 11.3	(63) (46)	9.2 7.8	(46) (56)	31.3 22.0	(9) (48)	-10.2 -13.8	(13) (47)	31.5 25.0	(13) (59)

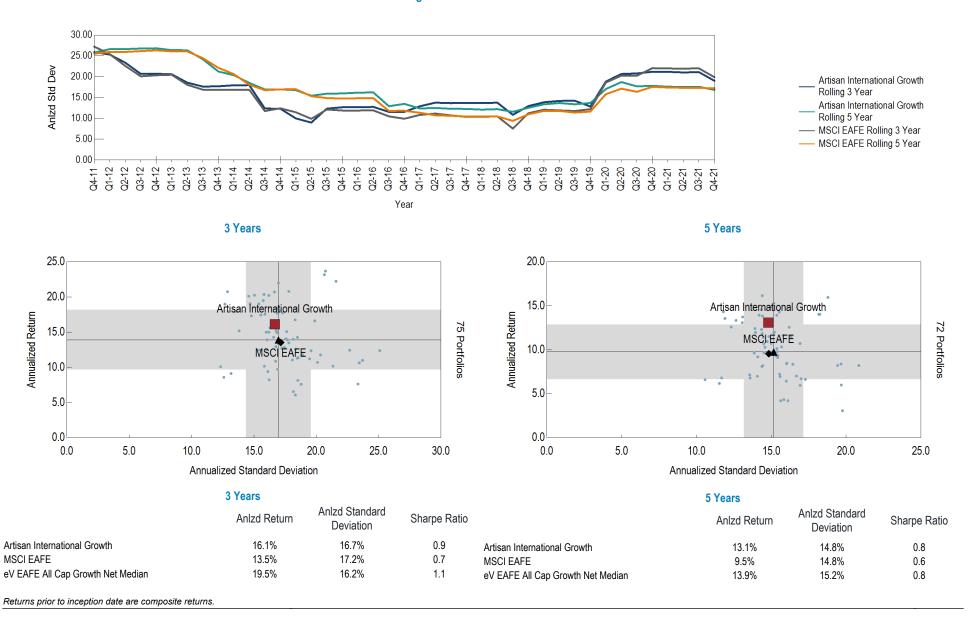




# **Rolling Annualized Excess Performance**



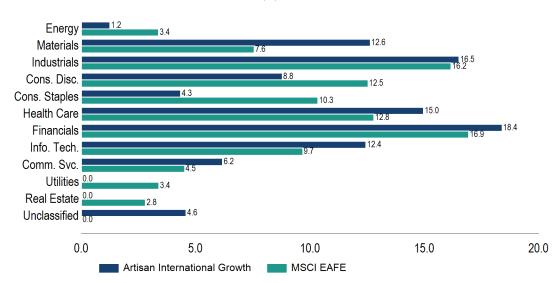




#### **Characteristics**

	Portfolio	MSCI EAFE
Number of Holdings	69	828
Weighted Avg. Market Cap. (\$B)	213.01	85.51
Median Market Cap. (\$B)	52.30	14.67
Price To Earnings	20.90	17.12
Price To Book	4.94	2.79
Price To Sales	2.59	1.61
Return on Equity (%)	14.30	14.64
Yield (%)	1.60	2.70
Beta	0.91	1.00

# Sector Allocation (%) vs MSCI EAFE



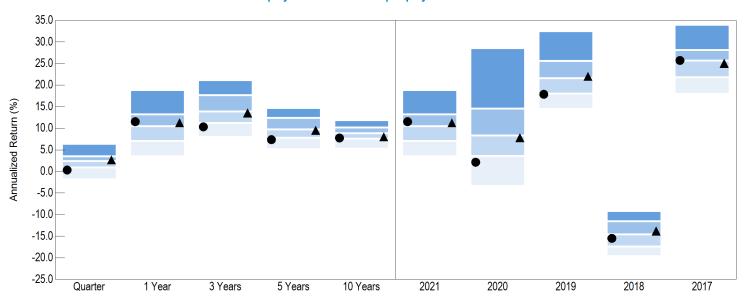
Largest Holdings Top Contributors Bottom Contributors

	End Weight	Return		<b>End Weight</b>	Return	Contribution	1	<b>End Weight</b>	Return	Contribution
LINDE PLC	4.33	17.63	LINDE PLC	4.33	17.63	0.76	INTERNATIONAL			
CAPGEMINI SE	3.92	17.38	CAPGEMINI SE	3.92	17.38	0.68	CONSOLIDATED	1.20	-19.95	-0.24
KONINKLIJKE DSM NV	3.87	12.47	KONINKLIJKE DSM NV	3.87	12.47	0.48	AIRLINES GROUP SA	4 =0	4-00	
NICE LTD	3.52	6.89	ARGEN-X SE	2.28	15.96	0.36	ASCENDIS PHARMA AS	1.53	-15.60	-0.24
BNP PARIBAS	3.40	7.56	ACCENTURE PLC	1.20	29.96	0.36	DEUTSCHE TELEKOM AG	2.79	-8.06	-0.22
DEUTSCHE BOERSE AG	3.19	2.73	ICON PLC	1.79	18.20	0.33	SBERBANK OF RUSSIA OJSC	1.22	-14.72	-0.18
AMAZON.COM INC	3.16	1.50	NESTLE SA, CHAM UND	2.06	15.75	0.32	VOLKSWAGEN AG	1.73	-10.06	-0.17
DEUTSCHE POST AG	3.14	1.83	VEVEY				KONINKLIJKE PHILIPS NV		-16.14	-0.14
L'AIR LIQUIDE SA	2.88	8.56	ROCHE HOLDING AG	2.38	13.48	0.32	MTU AERO ENGINES AG	0.86	-9.91	-0.08
DEUTSCHE TELEKOM AG	2.79	-8.06	CANADIAN PACIFIC RAILWAY LTD	2.77	10.13	0.28	RELIANCE INDUSTRIES	1.24	-6.09	-0.08
			SONY GROUP CORPORATION	2.20	12.59	0.28	HOYA CORP	1.45	-5.15	-0.07
							AIRBUS SE	1.50	-4.21	-0.06

Unclassified sector allocation includes cash, dervatives and preferred stock allocations.



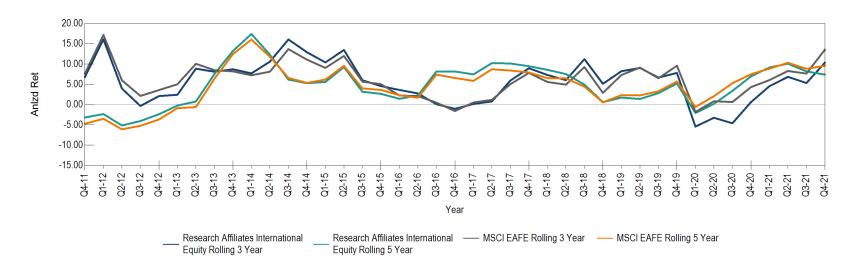
# Research Affiliates International Equity vs. eV EAFE All Cap Equity Net Universe



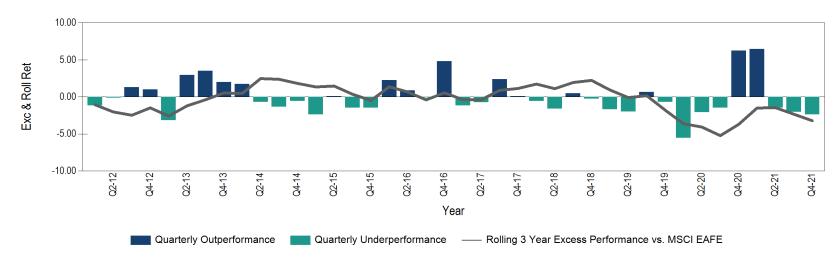
	5th Percentile
	25th Percentile
	Median
	75th Percentile
	95th Percentile
	# of Portfolios
•	Research Affiliates International Equity
•	MSCIEAFE

Return (	Rank)																		
6.4		18.8		21.2		14.7		11.9		18.8		28.5		32.5		-9.2		33.9	
3.6		13.3		17.7		12.4		10.3		13.3		14.6		25.6		-11.5		28.1	
2.5		10.5		13.9		9.8		8.9		10.5		8.4		21.6		-14.6		25.7	
0.9		7.1		11.2		7.9		7.6		7.1		3.6		18.1		-17.4		21.8	
-1.7		3.6		8.0		5.2		5.3		3.6		-3.3		14.5		-19.6		18.0	
77		77		75		72		52		77		77		77		72		70	
0.3	(86)	11.5	(43)	10.3	(84)	7.4	(76)	7.8	(73)	11.5	(43)	2.1	(80)	17.9	(79)	-15.5	(57)	25.7	(51)
2.7	(45)	11.3	(46)	13.5	(54)	9.5	(55)	8.0	(69)	11.3	(46)	7.8	(56)	22.0	(48)	-13.8	(47)	25.0	(59)





# **Rolling Annualized Excess Performance**



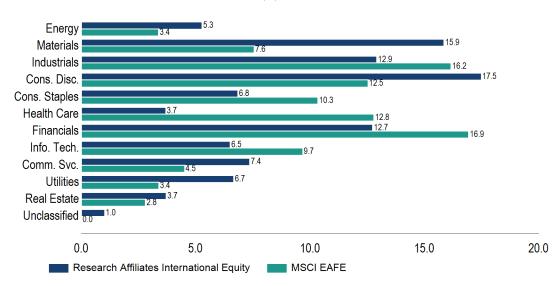




#### **Characteristics**

Portfolio	MSCI EAFE
437	828
37.17	85.51
8.70	14.67
10.54	17.12
1.85	2.79
0.60	1.61
12.03	14.64
3.71	2.70
1.18	1.00
	437 37.17 8.70 10.54 1.85 0.60 12.03 3.71

# Sector Allocation (%) vs MSCI EAFE



	aes			

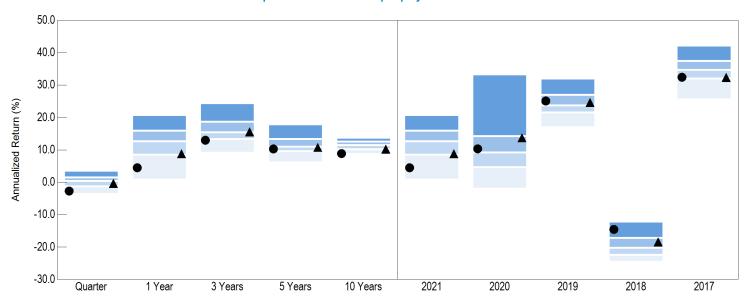
# **Top Contributors**

#### **Bottom Contributors**

	<b>End Weight</b>	Return		<b>End Weight</b>	Return	Contributio	n	<b>End Weight</b>	Return	Contribution
ARCELORMITTAL SA	3.87	4.37	CENTRICA PLC	1.33	26.51	0.35	PANASONIC CORP	1.87	-11.83	-0.22
MAGNA INTERNATIONAL INC	2.51	7.81	ROYAL MAIL HOLDINGS	0.87	27.14	0.24	JAPAN POST HOLDINGS	1.49	-8.02	-0.12
RIO TINTO GROUP	2.46	-0.15	PLC				COLTD	0.50	00.47	0.40
KONINKLIJKE AHOLD DELHAIZE	2.17	2.90	NATURGY ENERGY GROUP SA	0.71	31.44	0.22	JAPAN AIRLINES CO LTD	0.58	-20.17	-0.12
NV TELEFONICA SA	1.94	-3.00	MAGNA INTERNATIONAL	2.51	7.81	0.20	TEVA PHARMACEUTICAL INDUSTRIES LTD	0.65	-17.76	-0.12
PANASONIC CORP	1.87	-11.83	INC	2.01	7.01	0.20	BANCO DE SABADELL SA	0.42	-19.97	-0.08
NIPPON TELEGRAPH & TELEPHONE CORP NTT	1.53	-1.08	NESTLE SA, CHAM UND VEVEY	1.19	15.75	0.19	METRO WHOLE FOOD ORD	0.36	-19.51	-0.07
SHELL PLC	1.50	-1.45	TOKYO ELECTRON LTD	0.58	29.27	0.17	BRIDGESTONE CORP	0.86	-8.09	-0.07
JAPAN POST HOLDINGS CO LTD	1.49	-8.02	ARCELORMITTAL SA	3.87	4.37	0.17	HITACHI LTD	0.74	-9.10	-0.07
CENTRICA PLC	1.33	26.51	SKYWORTH GROUP LTD	0.12	132.96	0.16	FUJITSU LTD	1.07	-5.89	-0.06
OLIVINIO/VI EO	1.00	20.01	MARKS AND SPENCER GROUP PLC	0.57	26.47	0.15	SIGNIFY NV	0.84	-7.27	-0.06
Unclassified sector allocation includes ca	sh, dervatives and pi	referred stock all	BEZEQ THE ISRAEL TELECOMMUNICATION CORP LTD	0.38	38.69	0.15				



#### Mondrian International Small Cap vs. eV EAFE Small Cap Equity Net Universe

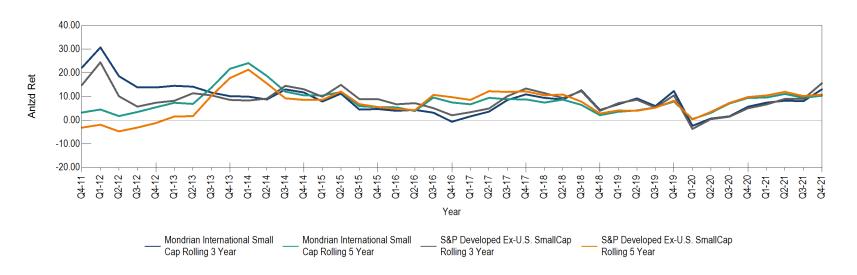


5th Percentile 25th Percentile
Median
75th Percentile
95th Percentile
# of Portfolios

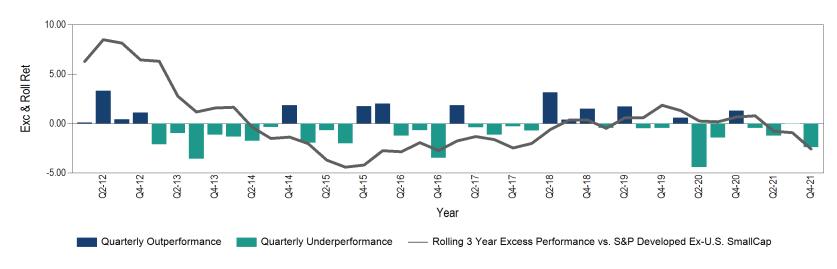
Mondrian International Small Cap S&P Developed Ex-U.S. SmallCap

Return (	Rank)																		
3.5		20.7		24.4		17.9		13.7		20.7		33.3		32.0		-12.1		42.2	
1.6		15.9		18.7		13.4		12.6		15.9		14.3		27.1		-17.1		37.6	
0.4		12.7		15.5		11.0		11.5		12.7		9.3		23.8		-20.2		34.8	
-1.2		8.5		13.4		9.6		10.3		8.5		4.7		21.7		-22.3		32.1	
-3.6		0.9		9.2		6.2		8.8		0.9		-1.9		17.1		-24.6		25.7	
62		62		59		55		31		62		63		58		57		52	
-2.7	(92)	4.5	(88)	13.0	(85)	10.3	(61)	8.9	(95)	4.5	(88)	10.3	(47)	25.1	(40)	-14.6	(11)	32.4	(74)
-0.3	(65)	8.8	(73)	15.6	(50)	10.8	(57)	10.2	(76)	8.8	(73)	13.7	(33)	24.7	(43)	-18.4	(29)	32.4	(74)

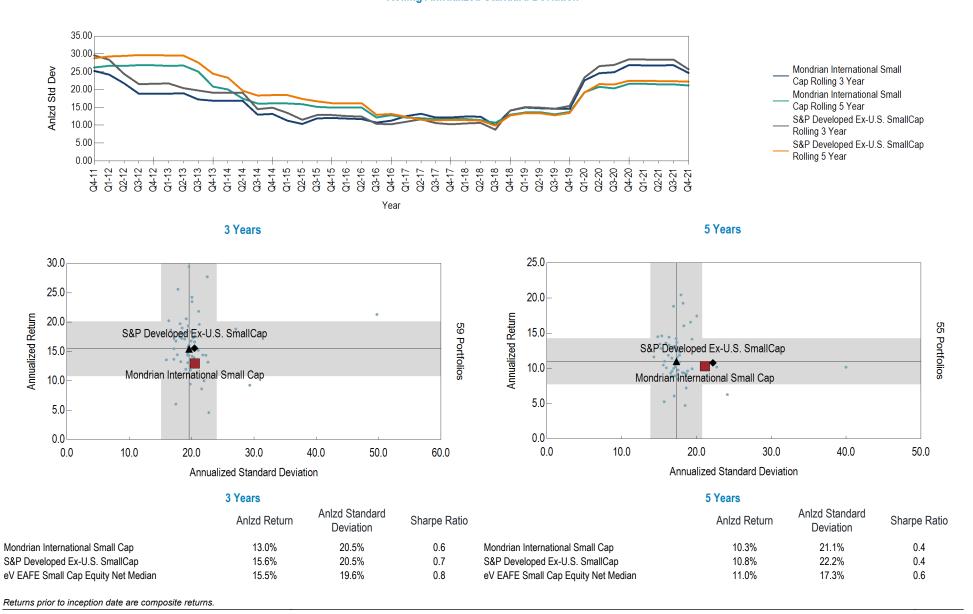




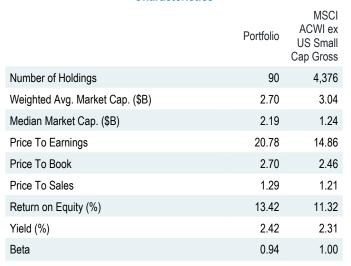
# **Rolling Annualized Excess Performance**



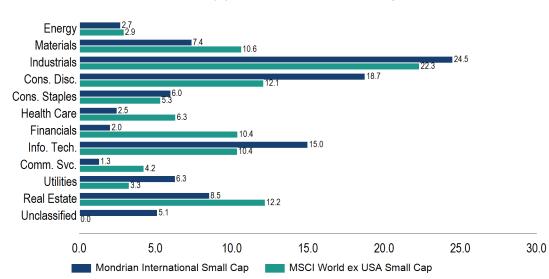




#### **Characteristics**



# Sector Allocation (%) vs MSCI World ex USA Small Cap



**Largest Holdings** 

# **Top Contributors**

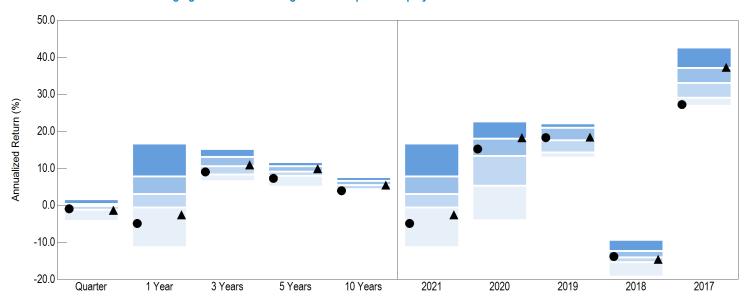
#### **Bottom Contributors**

	<b>End Weight</b>	Return		<b>End Weight</b>	Return	Contribution	n	<b>End Weight</b>	Return	Contribution
INCHCAPE	2.52	12.47	GAZTRANSPORT ET	1.46	27.15	0.40	SYSTENA CORP	2.07	-26.34	-0.54
COATS GROUP PLC	2.08	3.64	TECHNIGAZ	1.40	27.10	0.70	EN-JAPAN INC	1.60	-22.55	-0.36
SYSTENA CORP	2.07	-26.34	TRITAX BIG BOX REIT PLC	1.75	18.29	0.32	BAYCURRENT CONSULTING INC	1.45	-24.10	-0.35
BODYCOTE	1.97	-0.33	INCHCAPE	2.52	12.47	0.31	FRIEDRICH VORWERK			
NIFCO INC	1.82	0.35	APPEN LTD	1.22	25.03	0.31	NPV	0.87	-36.15	-0.31
VICTREX PLC PALTAC CORP	1.81 1.79	2.90 -9.16	GESTAMP AUTOMOCION SA	0.93	30.19	0.28	MATSUMOTOKIYOSHI HDG.	1.30	-18.28	-0.24
FIELMANN AG, HAMBURG	1.79	0.68	DIPLOMA	1.42	19.06	0.27	WOOD GROUP (JOHN)	1.24	-16.71	-0.21
KORIAN TRITAX BIG BOX REIT PLC	1.75 1.75	-9.78 18.29	BURCKHARDT COMPRESSION HOLDING	1.42	17.16	0.24	INVINCIBLE INVESTMENT CORP	1.06	-19.49	-0.21
			AG COMTURE CORP	1.62	12.74	0.21	YUE YUEN INDUSTRIAL (HOLDINGS) LTD	1.17	-17.29	-0.20
			ALTIUM	0.74	27.72	0.20	RUBIS SA, PARIS	1.40	-13.79	-0.19
			SPIN MASTER CORP	1.24	16.51	0.20	GLANBIA PLC	1.16	-15.24	-0.18

Unclassified sector allocation includes cash, dervatives and preferred stock allocations.



# Mondrian Emerging Markets vs. eV Emg Mkts All Cap Value Equity Net Universe

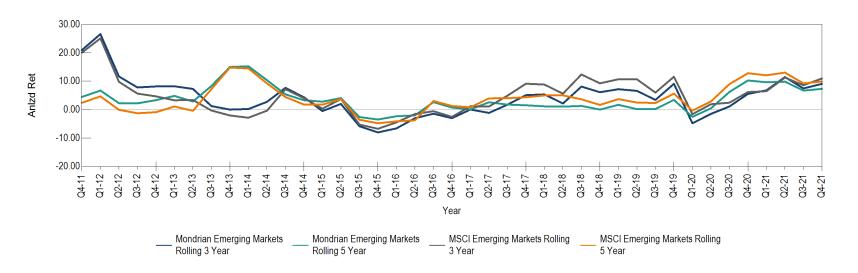


5th Percentile 25th Percentile Median 75th Percentile 95th Percentile	
# of Portfolios	

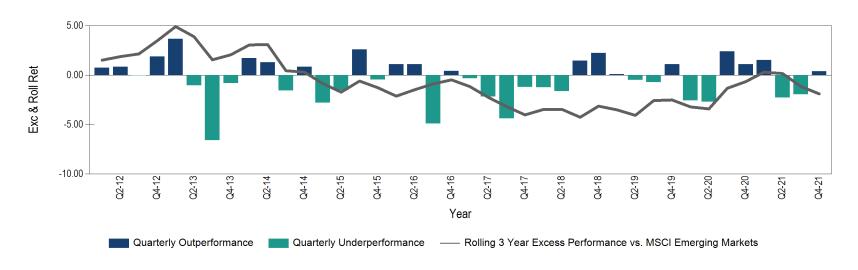
Mondrian Emerging MarketsMSCI Emerging Markets

Return (	(Rank)																		
1.6		16.7		15.2		11.6		7.6		16.7		22.6		22.2		-9.4		42.6	
0.5		7.8		13.1		10.6		6.7		7.8		18.1		21.0		-12.3		37.2	
-0.1		3.1		10.6		9.2		5.5		3.1		13.4		17.7		-14.0		33.1	
-1.1		-0.5		8.4		8.1		4.4		-0.5		5.4		14.4		-15.3		29.1	
-4.1		-11.3		6.6		5.1		4.1		-11.3		-4.0		12.9		-19.2		26.9	
24		24		22		18		10		24		24		22		25		22	
-0.9	(74)	-4.9	(82)	9.1	(71)	7.3	(84)	4.0	(99)	-4.9	(82)	15.2	(40)	18.3	(42)	-13.8	(48)	27.2	(93)
-1.3	(77)	-2.5	(78)	10.9	(49)	9.9	(45)	5.5	(51)	-2.5	(78)	18.3	(21)	18.4	(42)	-14.6	(59)	37.3	(20)

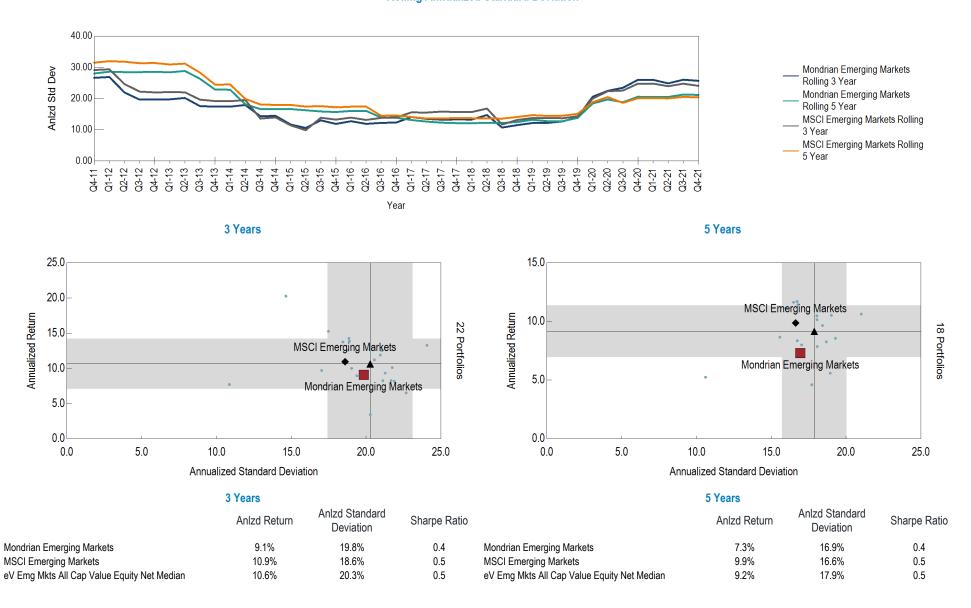




#### **Rolling Annualized Excess Performance**







**Bottom Contributors** 

2.47

1.49

3.22

1.50

2.84

1.34

1.62

-9.46

-14.71

-6.52

-13.51

-6.42

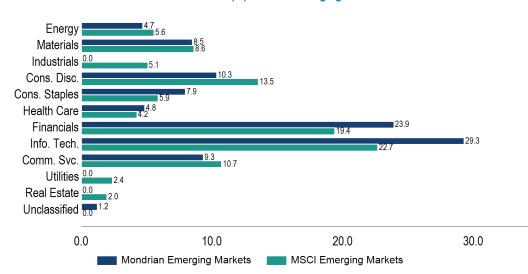
-12.03

-9.62

#### **Characteristics**

#### **MSCI** Portfolio Emerging Markets Number of Holdings 1,413 55 Weighted Avg. Market Cap. (\$B) 160.22 139.67 Median Market Cap. (\$B) 36.05 7.24 13.38 12.25 Price To Earnings Price To Book 2.37 2.78 Price To Sales 1.17 1.44 Return on Equity (%) 16.63 14.60 Yield (%) 2.45 2.44 Beta 1.06 1.00

#### Sector Allocation (%) vs MSCI Emerging Markets



#### **Largest Holdings End Weight** Return Contribution **End Weight** Return **End Weight** Return **TAIWAN** ALIBABA GROUP 5.36 -16.52**SEMICONDUCTOR** TAIWAN SEMICONDUCTOR HOLDING LTD 0.61 8.74 7.00 8.74 7.00 MANUFACTURING CO LTD MANUFACTURING CO **AUTOHOME INC** 1.76 -37.18LTD PING AN INSURANCE GROUP 5.38 5.27 LG CHEM LTD 1.19 -24.16

**Top Contributors** 

2.13

1.42

9.62

13.83

0.21

0.20

SHINHAN FINANCIAL

**GROUP CO LTD** 

SK HYNIX INC 2.25 26.20 0.59 ALIBABA GROUP HOLDING LTD 5.36 -16.52 CSPC PHARMACEUTICAL **MEDIATEK** SAMSUNG ELECTRONICS CO **GROUP LTD** 1.17 32.08 0.38 3.79 4.85 INCORPORATION I TD SAMSUNG FIRE & TINGYI (CAYMAN ISLAND) HON HAI PRECISION INDUSTRY MARINE INSURANCE CO 2.09 14.38 0.30 3.72 -0.51 HOLDING CORP CO LTD LTD PING AN INSURANCE HOUSING DEVELOPMENT HOUSING DEVELOPMENT 5.38 5.27 0.28 3.22 -6.52 **GROUP** FINANCE CORP LTD FINANCE CORP LTD NETEASE INC 1.26 19.83 0.25 HYPERMARCAS ON TENCENT HOLDINGS LTD 3.21 -1.16 2.43 CREDICORP LTD 10.03 0.24 RELIANCE INDUSTRIES BAIDU INC 3.09 -3.23MIDEA GROUP CO LTD 2.98 7.58 0.23 LTD MIDEA GROUP CO LTD 2.98 7.58 **DELTA ELECTRONICS** WH GROUP LTD

CTBC FINANCIAL

HOLDING CO LTD

INC

Unclassified sector allocation includes currency allocations.

2.95

-2.58



CHINA MERCHANTS BANK CO

LTD

Contribution

-0.89

-0.65

-0.29

-0.23

-0.22

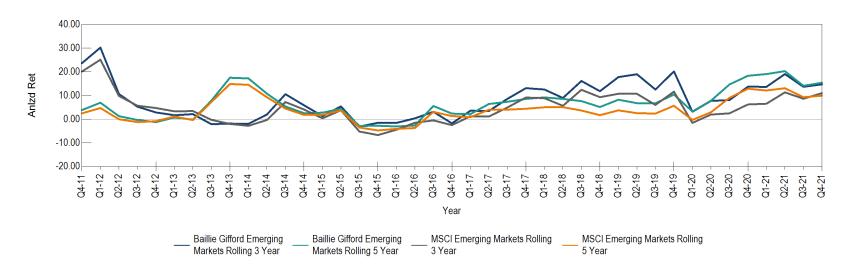
-0.21

-0.20

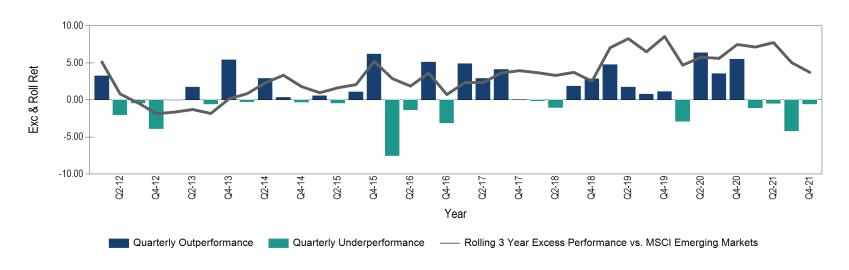
-0.18

-0.16

-0.16

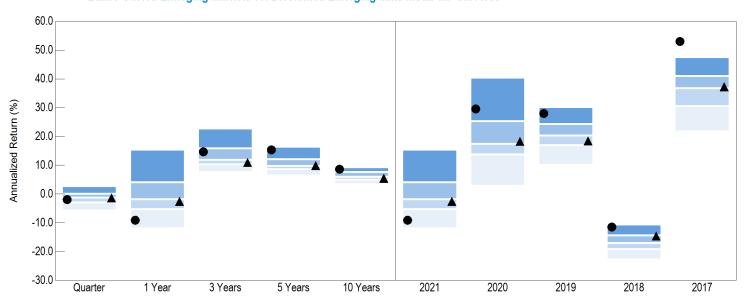


#### **Rolling Annualized Excess Performance**





### Baillie Gifford Emerging Markets vs. Diversified Emerging Mkts MStar MF Universe



	5th Percentile
	25th Percentile
	Median
	75th Percentile
	95th Percentile
	# of Portfolios
_	D-1111 - O'ff 1 E

Baillie Gifford Emerging Markets MSCI Emerging Markets

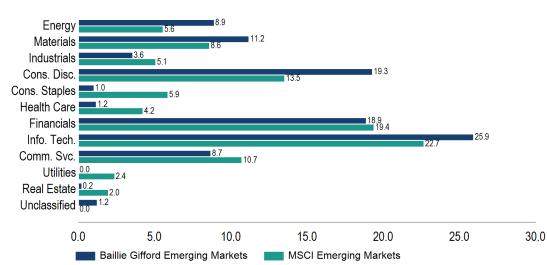
Return (F	Rank)																		
2.7	-	15.3		22.7		16.4		9.3		15.3		40.4		30.2		-10.6		47.5	
0.2		4.1		15.9		12.2		7.7		4.1		25.4		24.4		-14.3		41.1	
-1.1		-1.7		12.0		9.8		6.1		-1.7		17.5		20.4		-17.0		36.8	
-2.8		-5.1		10.3		8.7		5.0		-5.1		13.8		17.0		-19.1		30.6	
-5.6		-11.9		7.7		6.6		3.5		-11.9		3.0		10.1		-22.6		21.8	
229		225		208		190		135		225		224		231		227		220	
-1.9 -1.3	(61) (54)	-9.1 -2.5	(88) (58)	14.7 10.9	(30) (65)	15.4 9.9	(8) (50)	8.6 5.5	(8) (62)	-9.1 -2.5	(88) (58)	29.6 18.3	(18) (45)	28.0 18.4	(14) (64)	-11.5 -14.6	(8) (28)	53.0 37.3	(1) (49)



### Characteristics

	Portfolio	MSCI Emerging Markets
Number of Holdings	72	1,413
Weighted Avg. Market Cap. (\$B)	186.82	139.67
Median Market Cap. (\$B)	29.15	7.24
Price To Earnings	14.19	12.25
Price To Book	2.75	2.78
Price To Sales	1.84	1.44
Return on Equity (%)	15.25	14.60
Yield (%)	2.69	2.44
Beta	1.23	1.00

# Sector Allocation (%) vs MSCI Emerging Markets



Largest Holdings Top Contributors

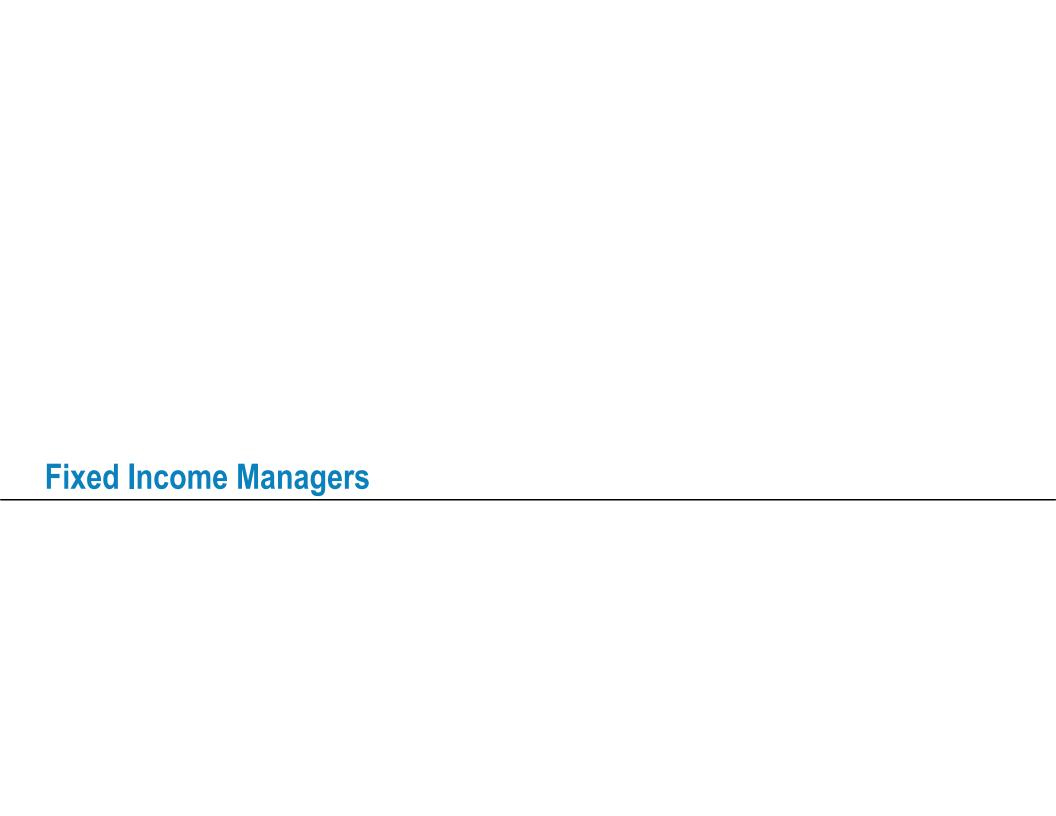
Bottom Contributors

End Weight B

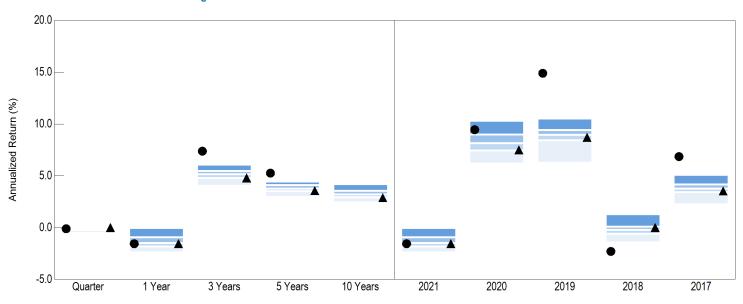
	<b>End Weight</b>	Return		End Weight	Return	Contribution		End Weight	Return	Contribution
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	9.84	7.00	MEDIATEK INCORPORATION	2.83	32.08	0.91	ALIBABA GROUP HOLDING LTD	3.72	-16.52	-0.62
TENCENT HOLDINGS LTD	6.02	-1.16	TAIWAN				SBERBANK OF RUSSIA OJSC	3.23	-14.72	-0.47
SAMSUNG ELECTRONICS CO LTD	4.77	4.85	SEMICONDUCTOR MANUFACTURING CO	9.84	7.00	0.69	MERCADOLIBRE INC	1.94	-19.71	-0.38
ALIBABA GROUP HOLDING LTD	3.72	-16.52	LTD				SEA LTD	1.15	-29.81	-0.34
PETROLEO BRASILEIRO S.A			FIRST QUANTUM	2.22	28.97	0.64	LG CHEM LTD	1.24	-21.36	-0.26
PETROBRAS	3.61	17.71	MINERALS LTD	L.LL	20.51	0.04	RELIANCE INDUSTRIES	2 50	-6.42	0.00
RELIANCE INDUSTRIES LTD	3.58	-6.42	PETROLEO BRASILEIRO	3.61	17.71	0.64	LTD	3.58	-0.42	-0.23
SBERBANK OF RUSSIA OJSC	3.23	-14.72	S.A PETROBRAS			0.0.	MEITUAN DIANPING			
			TECH MAHINDRA LTD	1.79	30.41	0.54	USD0.00001 A B CLASS	2.38	-8.75	-0.21
MEDIATEK INCORPORATION	2.83	32.08	SK HYNIX INC	1.40	26.20	0.37	ISIN KYG596691041			
MINING AND METALLURGIAL CO NORILSK NICKEL PJSC	2.75	3.34	CONTEMPORARY AMPEREX TECHNOLOGY	2.21	13.46	0.30	OZON HOLDINGS PLC ADR	0.47	-41.31	-0.20
CHINA MERCHANTS BANK CO	2.45	-2.58	COLTD				ALLEGRO.EU PLN0.01	0.55	-33.88	-0.19
LTD			MINTH GROUP LTD	0.84	28.93	0.24	ZAI LAB LIMITED	0.45	-40.36	-0.18
Harlaniff along the order of the	ala alla anticon		SAMSUNG ELECTRONICS CO LTD	4.77	4.85	0.23				
Unclassified sector allocation includes ca	sn allocations.									



Cantuibution



### Western Asset Management Core Bond vs. eV US Core Fixed Inc Net Universe

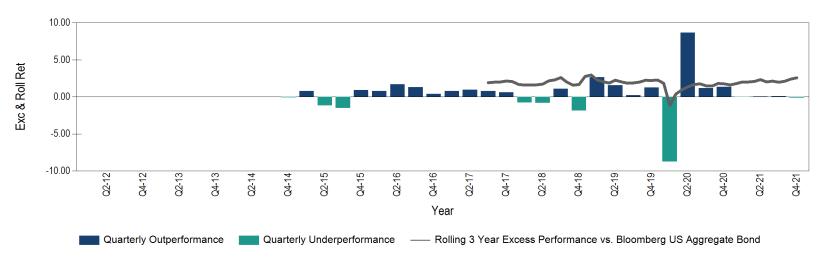


	Return (Rank)									
5th Percentile	0.2	-0.1	6.1	4.4	4.2	-0.1	10.3	10.5	1.3	5.1
25th Percentile	0.0	-0.9	5.5	4.1	3.6	-0.9	9.0	9.4	0.1	4.2
Median	-0.1	-1.5	5.2	3.8	3.2	-1.5	8.2	9.0	-0.2	3.8
75th Percentile	-0.2	-1.8	4.8	3.5	2.9	-1.8	7.4	8.4	-0.6	3.4
95th Percentile	-0.5	-2.4	4.1	3.0	2.4	-2.4	6.2	6.3	-1.4	2.3
# of Portfolios	150	149	143	140	131	149	149	146	150	141
<ul> <li>Western Asset Management Core Bond</li> <li>Bloomberg US Aggregate Bond</li> </ul>	-0.1 (50) 0.0 (22)	-1.6 (53) -1.5 (52)	7.4 (1) 4.8 (76)	5.3 (1) 3.6 (73)	() 2.9 (80)	-1.6 (53) -1.5 (52)	9.4 (14) 7.5 (75)	14.9 (1) 8.7 (68)	-2.3 (99) 0.0 (37)	6.8 (2) 3.5 (66)

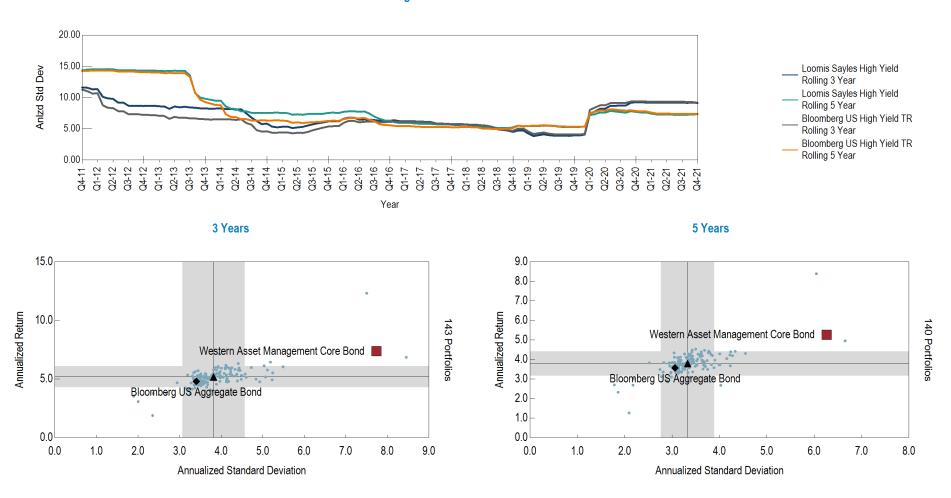




#### **Rolling Annualized Excess Performance**

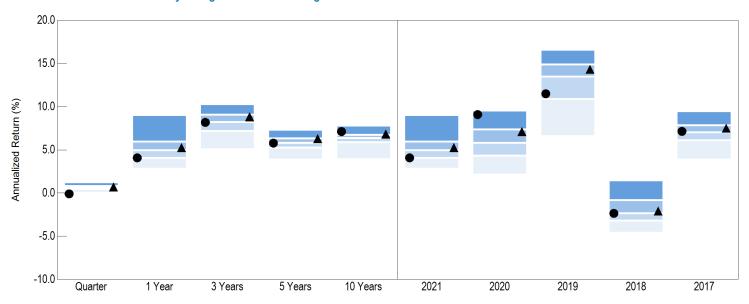








### Loomis Sayles High Yield vs. eV US High Yield Fixed Inc Net Universe



5th Percentile
Median
75th Percentile 95th Percentile
# of Portfolios

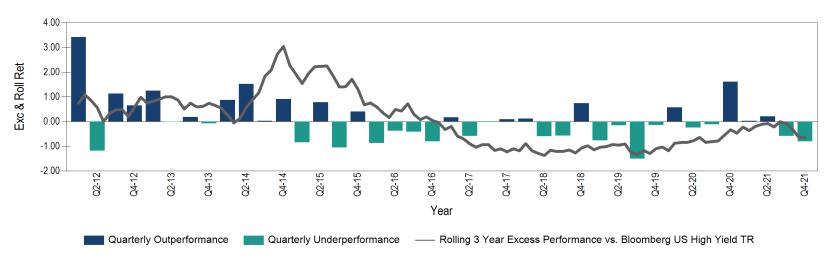
Loomis Sayles High Yield
Bloomberg US High Yield TR

Return (R	ank)																		
1.2		9.0		10.3		7.3		7.8		9.0		9.5		16.6		1.4		9.5	
8.0		6.0		9.1		6.4		6.8		6.0		7.4		14.9		-0.8		7.9	
0.6		5.0		8.2		5.8		6.4		5.0		5.8		13.5		-2.3		7.1	
0.5		4.1		7.2		5.3		5.9		4.1		4.4		10.9		-3.2		6.1	
0.0		2.8		5.1		3.9		3.9		2.8		2.2		6.6		-4.6		3.9	
145		145		141		136		96		145		147		144		136		129	
-0.1	(98)	4.1	(76)	8.2	(53)	5.8	(53)	7.1	(16)	4.1	(76)	9.1	(8)	11.5	(72)	-2.3	(52)	7.1	(47)
0.7	(42)	5.3	(40)	8.8	(31)	6.3	(28)	6.8	(22)	5.3	(40)	7.1	(28)	14.3	(37)	-2.1	(46)	7.5	(39)

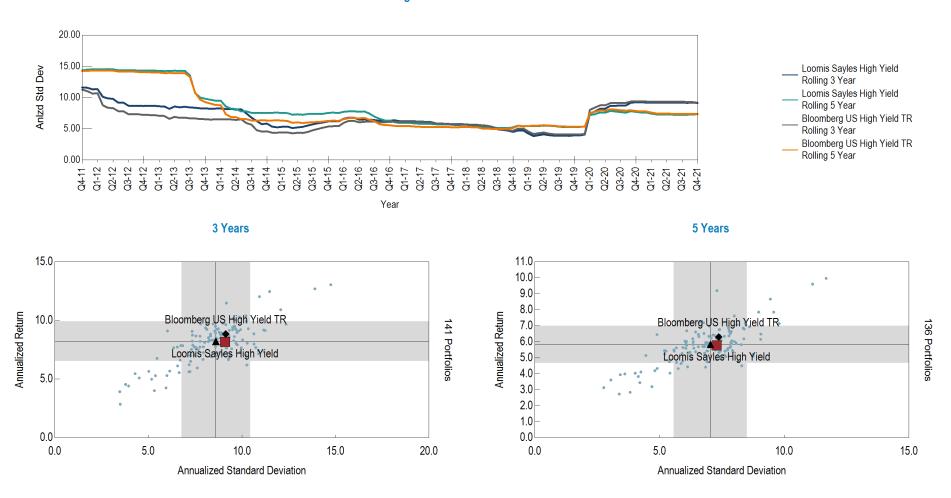




# **Rolling Annualized Excess Performance**

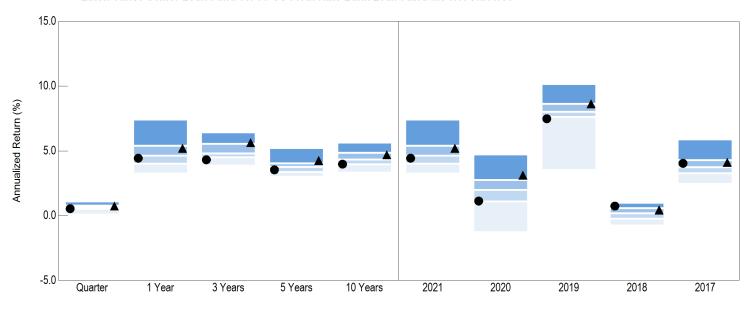








#### Eaton Vance Senior Loan Fund vs. eV US Float-Rate Bank Loan Fixed Inc Net Universe



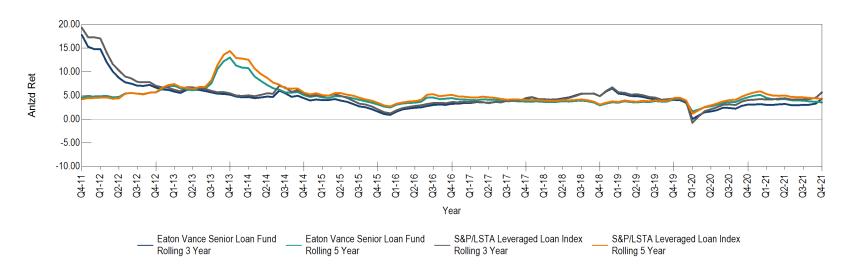
5th Percentile
25th Percentile
Median
75th Percentile
95th Percentile
# of Portfolios

Eaton Vance Senior Loan Fund

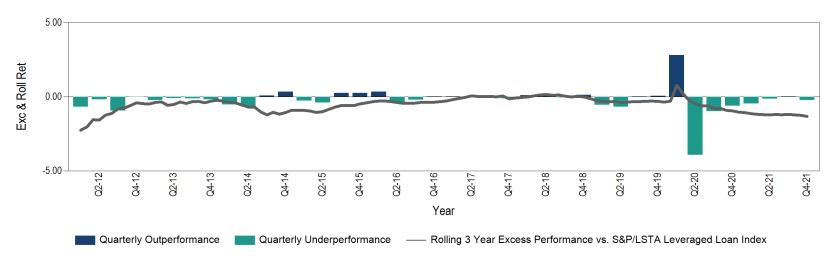
	Euton vanoc ocinor Eouiri ana
<b>A</b>	S&P/LSTA Leveraged Loan Index

1.1	7.4		6.4		5.2		5.6		7.4		4.7		10.1		1.0		5.9	
8.0	5.4		5.5		4.0		4.9		5.4		2.8		8.7		0.6		4.3	
0.6	4.6		4.8		3.8		4.3		4.6		2.0		8.0		0.2		3.8	
0.5	4.0		4.5		3.4		4.0		4.0		1.1		7.6		-0.2		3.3	
0.1	3.2		3.9		3.0		3.3		3.2		-1.3		3.5		-0.8		2.5	
51	51		51		47		41		51		54		50		47		48	
0.5 (76)	4.4	(54)	4.3	(84)	3.5	(66)	4.0	(76)	4.4	(54)	1.1	(75)	7.5	(80)	0.7	(16)	4.0	(40)
0.7 (30	5.2	(29)	5.6	(22)	4.3	(18)	4.7	(30)	5.2	(29)	3.1	(21)	8.6	(26)	0.4	(36)	4.1	(35)

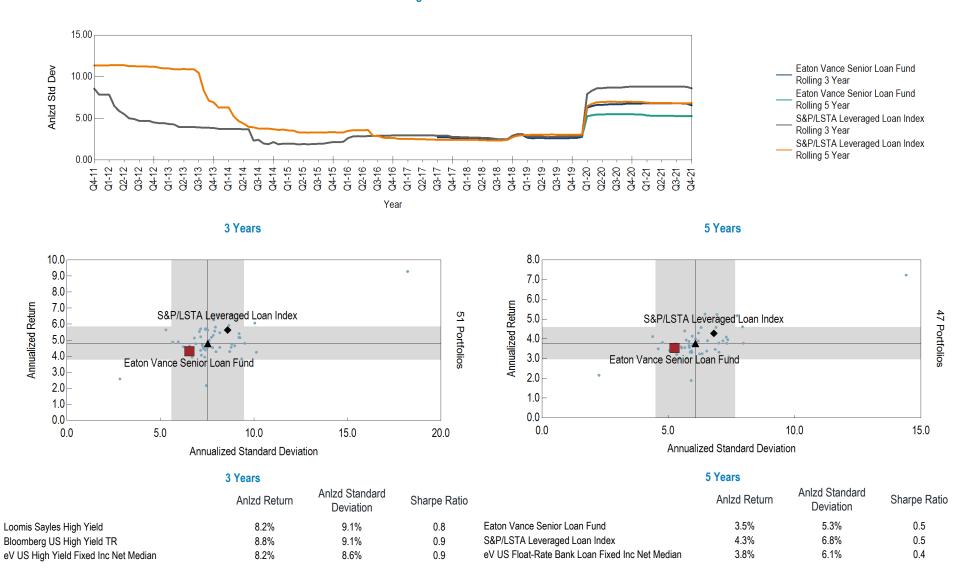




#### **Rolling Annualized Excess Performance**

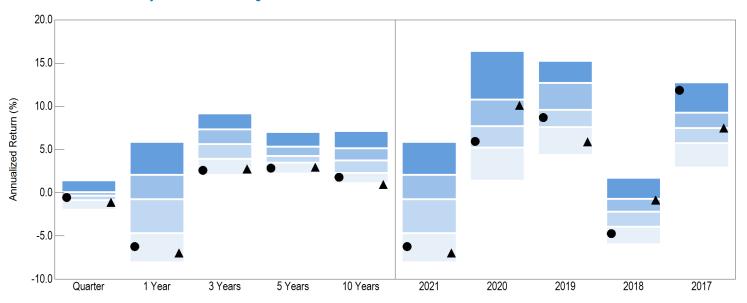








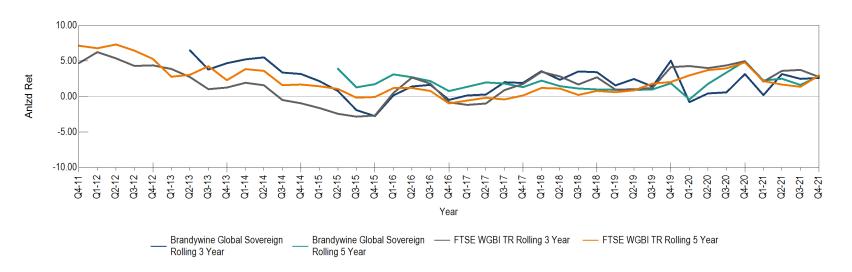
# Brandywine Global Sovereign vs. eV All Global Fixed Inc Net Universe



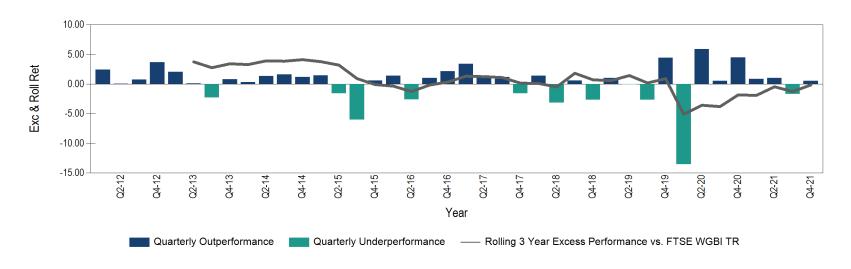
Brandywine Global Sovereign
FTSE WGBI TR

Return (	Rank)																		
1.4	,	5.9		9.2		7.0		7.1		5.9		16.4		15.2		1.7		12.8	
0.1		2.1		7.3		5.3		5.2		2.1		10.8		12.7		-0.7		9.3	
-0.3		-0.7		5.6		4.3		3.7		-0.7		7.7		9.6		-2.2		7.5	
-0.8		-4.7		3.9		3.5		2.3		-4.7		5.3		7.6		-3.9		5.8	
-2.0		-8.0		2.1		2.2		1.1		-8.0		1.4		4.4		-6.0		2.9	
259		257		242		225		158		257		252		239		218		214	
-0.5	(63)	-6.2	(86)	2.6	(93)	2.9	(89)	1.8	(84)	-6.2	(86)	5.9	(70)	8.7	(60)	-4.7	(87)	11.9	(6)
-1.1	(83)	-7.0	(92)	2.7	(93)	2.9	(86)	1.0	(98)	-7.0	(92)	10.1	(33)	5.9	(87)	-0.8	(27)	7.5	(51)

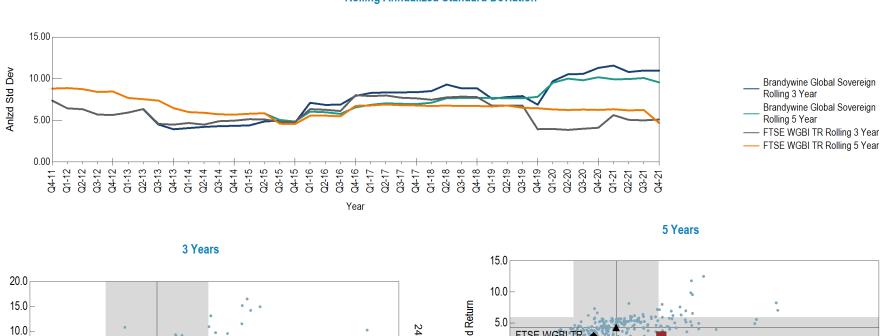


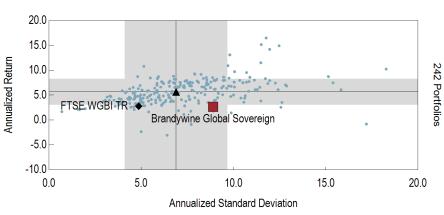


# **Rolling Annualized Excess Performance**

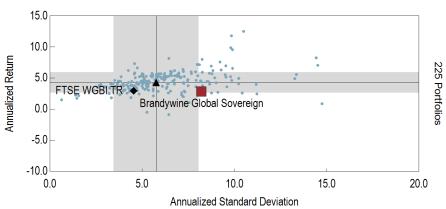








2 Voore

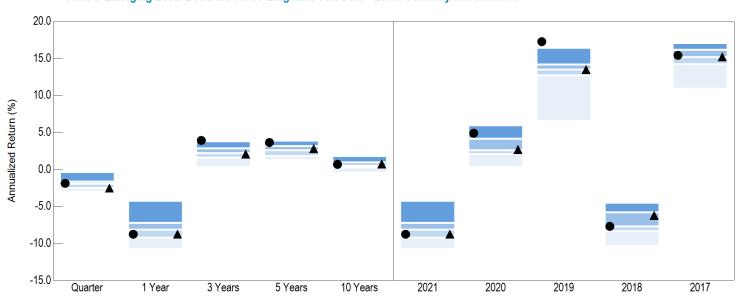


5 Voore

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio		Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Brandywine Global Sovereign	2.6%	8.9%	0.2	Brandywine Global Sovereign	2.9%	8.2%	0.2
FTSE WGBI TR	2.7%	4.9%	0.4	FTSE WGBI TR	2.9%	4.5%	0.4
eV All Global Fixed Inc Net Median	5.6%	6.9%	0.7	eV All Global Fixed Inc Net Median	4.3%	5.8%	0.6

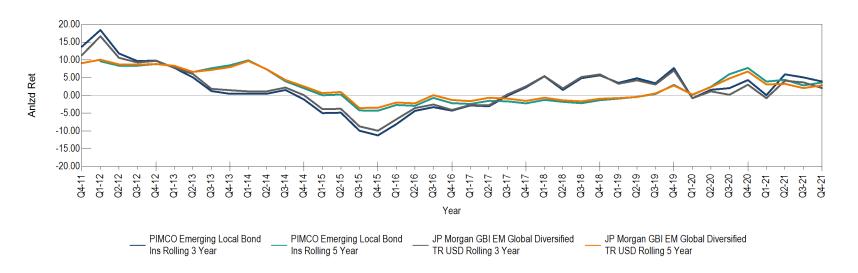


PIMCO Emerging Local Bond Ins vs. eV Emg Mkts Fixed Inc - Local Currency Net Universe



	Return (Rank	)									
5th Percentile	-0.4	-4.3	3.8	3.9	1.8	-4.3	6.0	16.4	-4.5	17.0	
25th Percentile	-1.6	-7.2	2.9	3.2	1.0	-7.2	4.2	14.2	-5.8	16.2	
Median	-1.9	-8.1	2.2	2.6	0.5	-8.1	2.6	13.5	-7.7	15.2	
75th Percentile	-2.5	-9.2	1.6	1.8	0.3	-9.2	2.1	12.7	-8.3	14.2	
95th Percentile	-3.0	-10.7	0.3	1.3	-0.4	-10.7	0.3	6.5	-10.3	11.0	
# of Portfolios	35	35	33	31	21	35	33	35	33	31	
<ul> <li>PIMCO Emerging Local Bond Ins</li> <li>JP Morgan GBI EM Global Diversified TR USD</li> </ul>	-1.9 (44) -2.5 (77)	-8.8 (65 -8.7 (65	,	(4) 3.6 (53) 2.8	(7) 0.7 (41) 0.7	(41) -8.8 (39) -8.7	(65) 4.9 (65) 2.7	(10) 17.3 (49) 13.5	(3) -7.7 (51) -6.2	(54) 15.4 (39) (33) 15.2 (47)	

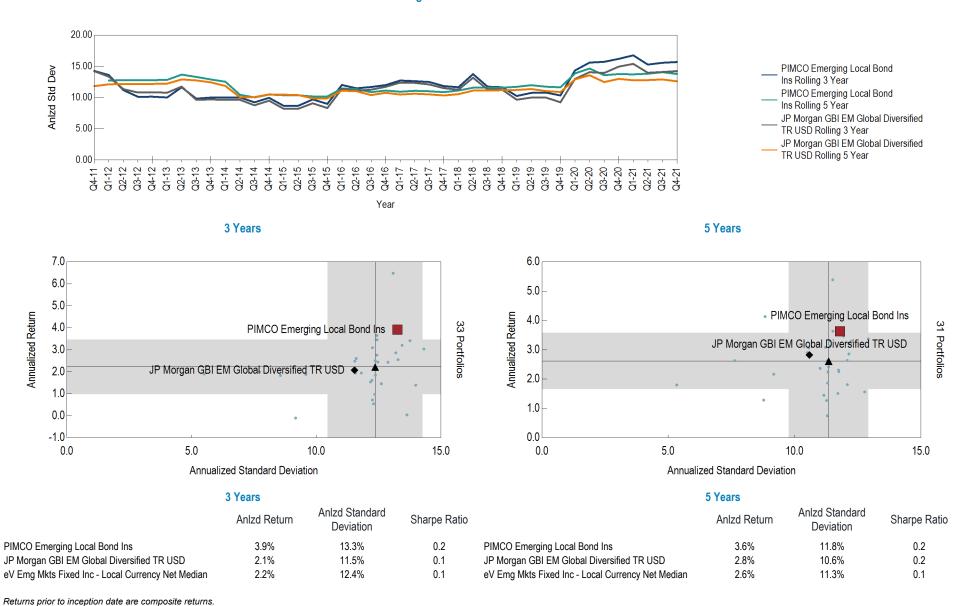




#### **Rolling Annualized Excess Performance**







#### Performance Return Calculations

Performance is calculated using Modified Dietz and for time periods with large cash flow (generally greater than 10% of portfolio value), Time Weighted Rates of Return (TWRR) methodologies. Monthly returns are geometrically linked and annualized for periods longer than one year.

#### Data Source

Verus is an independent third party consulting firm and calculates returns from best source book of record data. Returns calculated by Verus may deviate from those shown by the manager in part, but not limited to, differences in prices and market values reported by the custodian and manager, as well as significant cash flows into or out of an account. It is the responsibility of the manager and custodian to provide insight into the pricing methodologies and any difference in valuation.

#### Illiquid Alternatives

Due to the inability to receive final valuation prior to report production, closed end funds (including but are not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit) performance is typically reported at a one-quarter lag. Valuation is reported at a one-quarter lag, adjusted for current quarter flow (cash flows are captured real time). Closed end fund performance is calculated using a time-weighted return methodology consistent with all portfolio and total fund performance calculations. For Private Markets, performance reports also include Verus-calculated multiples based on flows and valuations (e.g. DPI and TVPI) and manager-provided IRRs.

Manager Line Up					
Manager	Fund_Incepted	Data_Source	<u>Manager</u>	Fund_Incepted	Data Source
Benefits Payment Cash	N/A	Northern Trust	Hamilton Lane PE Fund IX	2016	Hamilton Lane
Custodied	N/A	Northern Trust	Kennedy Wilson Real Estate V	2016	Kennedy Wilson
County Cash	N/A	FCERA	TSSP Adjacent Opportunities	2016	Carlyle
Warburg Pincus	1998	Hamilton Lane	OHA Strategic Credit Fund II, L.P.	2016	Carlyle
TCW Shop III	1998	Carlyle	Horsley Bridge XI GBO	2016	Hamilton Lane
Warburg Pincus VIII	2001	Hamilton Lane	Parametric Overlay	2016	Northern Trust
Blackstone IV	2002	Hamilton Lane	EQT European S. Situations Debt	2017	Carlyle
Lonestar IV	2002	Carlyle	Eaton Vance Ins. Sr Loan Plus	2017	Eaton Vance
TCW Shop IV	2002	Carlyle	PIMCO StocksPLUS Small Fund	4/31/2018	PIMCO
Mondrian Emerging Markets	11/17/2005	Mondrian	Hamilton Lane Secondary Fund IV	2017	Hamilton Lane
Invesco Core Real Estate	10/1/2007	Invesco	TCG BDC II	2017	Carlyle
New Mountain III	2007	Hamilton Lane	AlpInvest FC Credit Fund, L.P.	2017	Carlyle
Hamilton Lane VI	2007	Hamilton Lane	CPC V, L.P.	2017	Carlyle
Warburg Pincus X	2007	Hamilton Lane	Kelso Investment Associates X, L.P	2018	Hamilton Lane
Landmark Equity Partners XIV	2008	Hamilton Lane	Avista Capital Partners IV	2018	Hamilton Lane
Mondrian Int'l Small Cap	11/2/2009	Mondrian	Platinum Equity Small Cap Fund	2018	Hamilton Lane
Colony Distressed Credit I	2009	Carlyle	T. Rowe Price Large Cap Growth	10/23/2018	Northern Trust
TA Associates Realty 9	2009	TA Associates	Baillie Gifford Emerging Markets	12/10/2018	Baillie Gifford
Systematic Small/Mid Value	10/8/2010	Northern Trust	K4 Private Investors, L.P.	2018	Hamilton Lane
KKR Mezzanine Partners I	2010	Carlyle	SK Capital Partners Fund V, L.P.	2018	Hamilton Lane
Angelo Gordon Cap. Recov. VII	2010	Carlyle	Thomas H. Lee Equity Fund VIII, L.P.	2019	Hamilton Lane
RAFI International Equity	4/30/2011	Northern Trust	H.I.G. Growth Buyouts & Equity Fund III	2019	Hamilton Lane
Oaktree Opportunities Fund IX	2012	Carlyle	RBC Access Capital	10/10/2018	Northern Trust
Artisan International Growth	4/1/2013	Northern Trust	Invesco US Value-Add Fund V	2/20/2019	Invesco
PIMCO Emerging Local Bond	7/31/2013	Northern Trust	NT MSCI US Index	6/2/2020	Nothern Trust
WAMCO Credit Index	10/1/2014	Northern Trust	NT MSCI World Ex-US Index Fund	5/28/2020	Northern Trust
Loomis Sayles High Yield	10/1/2014	Northern Trust	JFL Equity Investors V, L.P.	2019	Hamilton Lane
Eaton Vance Senior Loan	10/1/2014	Eaton Vance	Insight Partners XI, L.P.	2019	Hamilton Lane
Colony Distressed Credit III	2014	Carlyle	HGGC Fund IV, L.P.	2019	Hamilton Lane
Brandywine Global Sovereign	1/31/2015	Northern Trust	Western Asset Management Core Bond	10/1/2014	Northern Trust
IFM Global Infrastructure	5/1/2015	IFM	STG VI, L.P.	2020	Hamilton Lane
GSO European Senior Debt	2015	Carlyle	TCV XI, L.P.	2020	Hamilton Lane
CVI Credit Value Fund III	2015	Carlyle	Oak Hill Capital Partners V, L.P.	2020	Hamilton Lane
Warburg Pincus XII	2015	Hamilton Lane	MSCI Factor Mix Index	3/30/2021	Northern Trust
Gerding Edlen Green Cities III	2016	Gerding Edlen	Oaktree Real Estate Opportunities Fund VII	3/31/2021	Northern Trust
		_	Ares US Real Estate	6/22/2021	Northern Trust



Floating Policy Index

(9/1/2021-9/30/2021)	28% MSCI USA, 26% Fixed Income Custom Benchmark, 21% MSCI ACWI ex US, 0.00% Russell 2000, 0.63% Bloomberg US Corp. High Yield, 6.00% Private Equity Neutralized, 7.37% Private Credit Neutralized, & 11% NCREIF ODCE Net.
(8/1/2021-8/31/2021)	28% MSCI USA, 26% Fixed Income Custom Benchmark, 21% MSCI ACWI ex US, 0.00% Russell 2000, 0.81% Bloomberg US Corp. High Yield, 6.00% Private Equity Neutralized, 7.19% Private Credit Neutralized, & 11% NCREIF ODCE Net.
(7/1/2021-7/31/2021)	28% MSCI USA, 26% Fixed Income Custom Benchmark, 21% MSCI ACWI ex US, 0.00% Russell 2000, 0.72% Bloomberg US Corp. High Yield, 6.00% Private Equity Neutralized, 7.28% Private Credit Neutralized, & 11% NCREIF ODCE Net.
Fixed Income Custom Benchmark (9/1/2020- Present)	38.5% BgBarc U.S. Aggregate Index, 3.8% Bloomberg US Securitized Index, 30.8% 50% BBgBarc High Yield/50% S&P LSTA U.S. Leveraged Loan Index, 15.4% FTSE WGBI TR, 11.5% JP Morgan GBI EM Global

(4/1/2014-9/1/2020) 100% Bloomberg Global Aggregate Index

Before 4/1/2014 100% Bloomberg U.S. Aggregate Index

#### Other Disclosures

Fresno Country Employees' Retirement Association fiscal year end is June 30.



<sup>\*\*</sup>The term neutralized indicates that the benchmark performance was set equal to the asset class composite.

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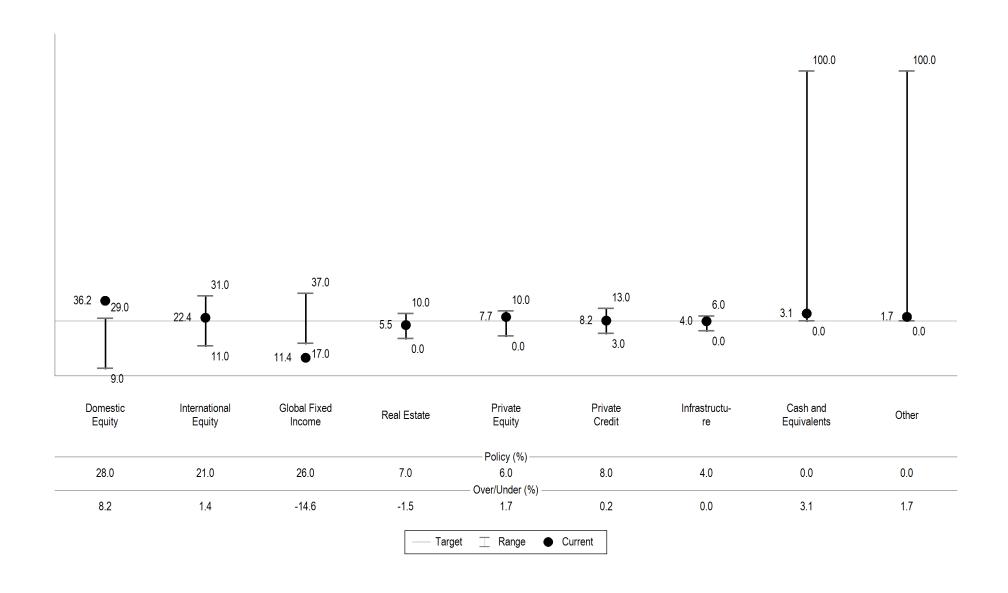
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The information presented may be deemed to contain forward-looking information. Examples of forward looking information include, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking information can be identified by the use of forward looking terminology such as believes, expects, may, will, should, anticipates, or the negative of any of the foregoing or other variations thereon comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward-looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. The findings, rankings, and opinions expressed herein are the intellectual property of Verus and are subject to change without notice. The information presented does not claim to be all-inclusive, nor does it contain all information that clients may desire for their purposes. The information presented should be read in conjunction with any other material provided by Verus, investment managers, and custodians.

Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Verus receives universe data from InvestorForce, eVestment Alliance and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.







# Ending December 31, 2021

2021	2021	2021	2021	2020	2020	2020	2020	2019	2019	2019	2019
Q4 Perf	Q3 Perf	Q2 Perf	Q1 Perf	Q4 Perf	Q3 Perf	Q2 Perf	Q1 Perf	Q4 Perf	Q3 Perf	Q2 Perf	Q1 Perf
VS											
Benchm											
Benchm ark											

# Ending December 31, 2021

2021	2021	2021	2021	2020	2020	2020	2020
Q4 Perf vs	Q3 Perf vs	Q2 Perf vs	Q1 Perf vs	Q4 Perf vs	Q3 Perf vs	Q2 Perf vs	Q1 Perf vs
Benchmark							

Statistics Summary
5 Years Ending December 31, 2021

Sharpe Ratio

Information Ratio Statistics Summary
3 Years Ending December 31, 2021

HFRI Fund of Funds Composite Index

Anlzd Return 8.42%

Vorme

Name	Allocation Group	Status	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6
Brandywine Global Sovereign	Global Fixed Income	No Issues	$\checkmark$	R	R	R	R	B
RBC Access Capital	Domestic Fixed Income Mortgage	No Issues		R				
Western Asset Investment Grade Credit	Domestic Fixed Income	No Issues	$\checkmark$	R	$\checkmark$	R	$\checkmark$	
Loomis Sayles High Yield	Domestic Fixed Income High Yield	No Issues	R	R	R	R	R	
Eaton Vance Senior Loan Fund	Domestic Fixed Income Bank Loans	No Issues	R	R	R	$\checkmark$	R	
PIMCO Emerging Local Bond Ins	Emerging Markets Fixed Income	Watch	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	R
Invesco Core Real Estate	Real Estate	No Issues	$\checkmark$	R	R			

- Rule 1 Manager has underperformed the benchmark index more than half the time over the last 20 quarters
- Rule 2 Fixed Income manager has returned less than 105% of the benchmark index for the three year period.
- Rule 3 Manager has underperformed the 50th percentile in the appropriate style universe in more than two of the last five years of consecutive returns.
- Rule 4 Manager's Sharpe Ratio is worse than the 50th Percentile in an appropriate style universe for the five year period ([five year return minus five year risk free rate]/[standard deviation]).
- Rule 5 Manager's Information Ratio is worse than the 50th Percentile in an appropriate style universe for the five year period ([excess return over benchmark]/[tracking error]).
- Rule 6 Fund experiences non-performance related issues including personnel turnover, changes in investment philosophy or drift, excessive asset growth, change in ownership and any other reason that raises concern.

Watch List standards are run against historical composite returns prior to manager since inception. Brandywine Global Sovereign- Provisional: Franklin announced in February 2020 their intention to acquire 100% of Legg Mason for \$4.5 billion at \$50 per share of common stock in an all-cash deal. Given the complexity and large-scale nature of this change, we will continue to monitor for developments relating to Franklin Templeton and the affiliates. We will place a provisional flag on Franklin and each of the affiliates at the firm level to signify that a change has occurred, although we do not have serious concerns with the announcement at this time. Provisional: We view PIMCO's EMD team as robust and well-resourced but we retain a provisional watch rating to monitor for further turnover following the departure of senior team members Mike Gomez and Francesc Balcells.



Name	Allocation Group	Status	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6
Aronson Johnson Ortiz	Domestic Equity Large Cap Value	Terminate	$\checkmark$	R	R	R	R	R
NT MSCI World Ex-US Index	International Equity	No Issues						
Artisan International Growth	International Equity	No Issues	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Research Affiliates International Equity	International Equity	No Issues	R	R	R	R	R	
Mondrian International Small Cap	International Equity Small Cap	No Issues	R	R	R	R	R	
Mondrian Emerging Markets	<b>Emerging Markets Equity</b>	No Issues	R	R	R	R	R	
T. Rowe Price Large Cap Growth	Domestic Equity Large Cap Growth	No Issues	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
PIMCO StocksPLUS Small Fund	Domestic Equity Small Cap Core	No Issues	✓	$\checkmark$	$\checkmark$	R	$\checkmark$	
Baillie Gifford Emerging Markets	Emerging Markets Equity	No Issues	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
NT MSCI US Index		No Issues						

Watch List standards are run against historical composite returns prior to manager since inception. Baillie Gifford Emerging Markets- Provisional: In 4Q2019, Baillie Gifford announced Co-PM Richard Sneller will be retiring in May 2020. Aronson Johnson Ortiz- Provisional: AJO announced the addition of Greg McIntire as CIO (newly created title) and the departure of Cesar Orosco (formerly co-head of portfolio management and research).



Rule 1 - Manager has underperformed the benchmark index more than half the time over the last 20 quarters

Rule 2 - Equity manager has returned less than 110% of the benchmark index for the three year period.

Rule 3 - Manager has underperformed the 50th percentile in the appropriate style universe in more than two of the last five years of consecutive returns.

Rule 4 - Manager's Sharpe Ratio is worse than the 50th Percentile in an appropriate style universe for the five year period ((five year return minus five year risk free rate)/[standard deviation]).

Rule 5 - Manager's Information Ratio is worse than the 50th Percentile in an appropriate style universe for the five year period ([excess return over benchmark]/[tracking error]).

Rule 6 - Fund experiences non-performance related issues including personnel turnover, changes in investment philosophy or drift, excessive asset growth, change in ownership and any other reason that raises concern.