

# Plymouth County Retirement Association

May 31, 2022

Meeting Materials

## Agenda

1. Estimated Retirement Association Performance As of April 30, 2022
2. Performance Update As of March 31, 2022
  - Q1 Performance Update
  - Private Markets 2021 Q4 Performance Update
3. Current Issues
  - Private Equity Benchmark Review
  - Non-Core Infrastructure RFP Finalist Review
4. Appendices
  - Economic Market Update
  - Investment Manager Status Report
  - Disclaimer, Glossary, and Notes

**Estimated Retirement Association Performance  
As of April 30, 2022**

### Estimated Aggregate Performance<sup>1</sup>

	April (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Total Retirement Association	-3.7	-5.5	2.8	9.7	8.4	7.9

### Benchmark Returns

	December (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Russell 3000	-9.0	-13.8	-3.9	13.1	13.0	13.2
MSCI EAFE	-6.5	-12.0	-9.1	4.5	5.0	7.6
MSCI Emerging Markets	-5.6	-12.2	-19.3	2.1	4.3	3.0
Barclays Aggregate	-3.8	-9.5	-8.4	0.4	1.2	1.7
Barclays TIPS	-2.0	-5.0	0.7	5.4	3.9	2.3
Barclays High Yield	-3.6	-8.2	-5.2	2.8	3.7	5.3
JPM EMBI Global Diversified (Hard Currency)	-5.6	-15.1	-14.4	-1.9	0.2	3.0
S&P Global Natural Resources	-4.4	11.7	17.9	13.6	11.6	5.2

### Estimated Total Assets

	Estimate
Total Retirement Association	1,315,612,939

<sup>1</sup> The April performance estimates are calculated using index returns as of April 29, 2022 for each asset class. No performance estimate was included for private equity, real estate, infrastructure, and private natural resources asset classes.

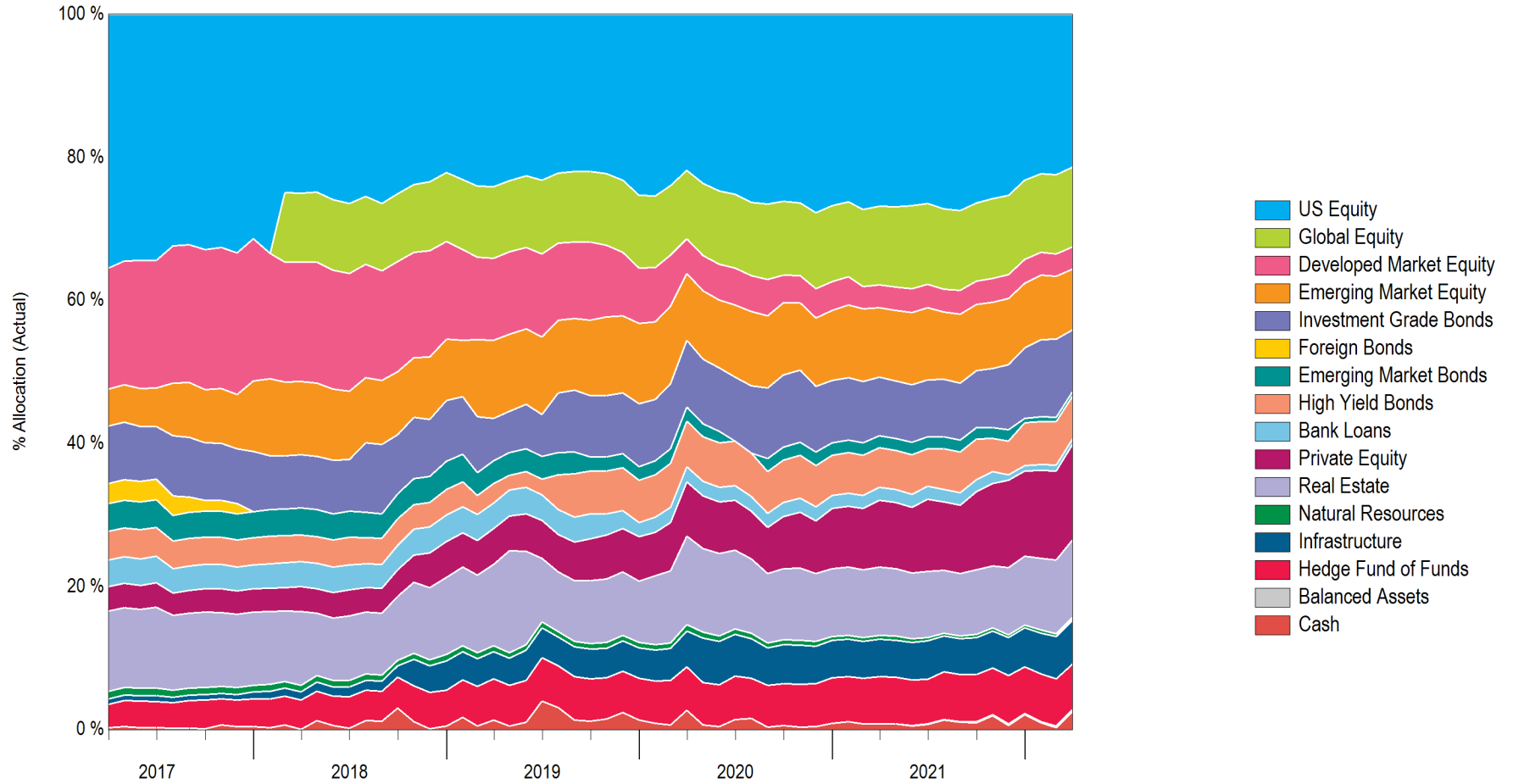
**Performance Update  
As of March 31, 2022**

DRAFT

	Allocation vs. Target		Policy	Policy Range	Within IPS Range?
	Current Balance	Current Allocation			
Domestic Equity	\$292,537,616	21%	26%	21% - 36%	Yes
International Developed Market Equity	\$42,294,317	3%	6%	1% - 16%	Yes
International Emerging Market Equity	\$115,306,701	8%	10%	5% - 20%	Yes
Global Equity	\$152,334,715	11%	10%	5% - 20%	Yes
Core Bonds	\$119,126,857	9%	9%	4% - 14%	Yes
Value-Added Fixed Income	\$100,099,894	7%	6%	2% - 12%	Yes
Private Equity	\$185,832,641	14%	13%	4% - 18%	Yes
Real Estate	\$147,521,393	11%	10%	5% - 15%	Yes
Real Assets	\$89,908,510	7%	6%	2% - 10%	Yes
Hedge Fund of Funds	\$86,512,324	6%	4%	2% - 8%	Yes
Cash	\$34,911,020	3%	0%	0% - 3%	Yes
<b>Total</b>	<b>\$1,366,385,988</b>	<b>100%</b>	<b>100%</b>		

	Current Balance	Current Allocation	Policy	Policy Range	Within IPS Range?
Total Equity	\$855,684,963	63%	69%	60% - 80%	Yes
Total Fixed Income	\$219,226,751	16%	15%	5% - 25%	Yes
Total Real Assets and Real Estate	\$256,563,254	19%	16%	13% - 19%	Yes
Cash	\$34,911,020	3%	0%	0% - 3%	Yes

Asset Allocation History  
5 Years Ending March 31, 2022



#### Asset Class Net Performance Summary

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Retirement Association</b>	<b>1,366,385,988</b>	<b>100.0</b>	<b>2.3</b>	<b>-1.8</b>	<b>9.6</b>	<b>11.8</b>	<b>9.5</b>	<b>8.3</b>	<b>8.1</b>	<b>Nov-89</b>
<i>Policy Benchmark (Net) (1)</i>			1.3	-3.0	9.7	12.0	10.1	8.8	--	Nov-89
<i>Actual Allocation (Net)</i>			1.2	-3.0	8.7	10.6	8.8	--	--	Nov-89
<b>Domestic Equity Assets</b>	<b>292,537,616</b>	<b>21.4</b>	<b>2.1</b>	<b>-6.3</b>	<b>6.0</b>	<b>17.7</b>	<b>14.9</b>	<b>--</b>	<b>15.3</b>	<b>Jan-16</b>
<i>Russell 3000</i>			3.2	-5.3	11.9	18.2	15.4	14.3	15.3	Jan-16
<b>International Developed Market Equity Assets</b>	<b>42,294,317</b>	<b>3.1</b>	<b>0.5</b>	<b>-11.0</b>	<b>0.2</b>	<b>2.9</b>	<b>3.3</b>	<b>--</b>	<b>4.1</b>	<b>Jan-16</b>
<i>MSCI EAFE</i>			0.6	-5.9	1.2	7.8	6.7	6.3	6.7	Jan-16
<b>International Emerging Market Equity Assets</b>	<b>115,306,701</b>	<b>8.4</b>	<b>-2.2</b>	<b>-9.7</b>	<b>-9.5</b>	<b>6.3</b>	<b>6.0</b>	<b>--</b>	<b>7.8</b>	<b>Jan-16</b>
<i>MSCI Emerging Markets</i>			-2.3	-7.0	-11.4	4.9	6.0	3.4	8.4	Jan-16
<b>Global Equity Assets</b>	<b>152,334,715</b>	<b>11.1</b>	<b>2.6</b>	<b>-2.5</b>	<b>7.1</b>	<b>12.4</b>	<b>--</b>	<b>--</b>	<b>8.1</b>	<b>Feb-18</b>
<i>MSCI ACWI</i>			2.2	-5.4	7.3	13.8	11.6	10.0	8.7	Feb-18
<b>Core Fixed Income</b>	<b>119,126,857</b>	<b>8.7</b>	<b>-2.1</b>	<b>-3.8</b>	<b>-1.9</b>	<b>2.6</b>	<b>2.6</b>	<b>--</b>	<b>2.8</b>	<b>Jan-16</b>
<i>75% Bbg Aggregate/25% Bbg US TIPs 1-10 year</i>			-2.5	-4.9	-2.2	2.6	2.6	2.2	2.7	Jan-16
<b>Value Added Fixed Income</b>	<b>100,099,894</b>	<b>7.3</b>	<b>-0.8</b>	<b>-3.9</b>	<b>-0.6</b>	<b>3.5</b>	<b>3.9</b>	<b>--</b>	<b>5.4</b>	<b>Jan-16</b>
<i>Custom Benchmark (2)</i>			-1.2	-5.3	-2.8	2.5	3.2	--	4.9	Jan-16
<b>Hedge Funds</b>	<b>86,512,324</b>	<b>6.3</b>	<b>-2.4</b>	<b>-4.6</b>	<b>-4.0</b>	<b>5.3</b>	<b>4.3</b>	<b>4.9</b>	<b>4.6</b>	<b>Feb-10</b>
<i>Custom Benchmark</i>			-0.9	-2.4	1.5	5.9	4.7	3.9	3.5	Feb-10
<b>Real Estate (3)</b>	<b>147,521,393</b>	<b>10.8</b>	<b>7.1</b>	<b>8.1</b>	<b>35.2</b>	<b>15.6</b>	<b>11.9</b>	<b>--</b>	<b>10.3</b>	<b>Jan-16</b>
<i>Custom Benchmark (4)</i>			7.4	7.4	28.5	11.2	9.2	--	8.7	Jan-16
<b>Private Equity (5)</b>	<b>185,832,641</b>	<b>13.6</b>	<b>8.5</b>	<b>8.5</b>	<b>43.0</b>	<b>25.4</b>	<b>18.2</b>	<b>--</b>	<b>13.8</b>	<b>Jan-16</b>
<i>Prequin Private Equity FoF 1Q Lagged</i>			0.0	0.0	37.4	24.9	20.6	16.0	17.6	Jan-16
<b>Real Assets (6)</b>	<b>89,908,510</b>	<b>6.6</b>	<b>5.0</b>	<b>4.1</b>	<b>21.5</b>	<b>11.0</b>	<b>7.2</b>	<b>--</b>	<b>3.6</b>	<b>Jan-16</b>
<i>CPI + 3%</i>			1.5	3.8	11.5	7.2	6.4	5.3	6.2	Jan-16
<b>Cash and Cash Equivalent</b>	<b>34,911,020</b>	<b>2.6</b>								

(1) The custom benchmark is comprised of 26% Russell 3000/ 6% MSCI EAFE/ 10% MSCI Emerging Markets/ 13% Prequin Private Equity FoF 1Q Lag/ 10% MSCI ACWI/ 4% Hedge Funds Custom Benchmark/ 9% (75/25 Barclays Aggregate and Barclays Tips 1-10yr)/ 6% Value Added FI Custom Benchmark/ 10% NCREIF ODCE / 6% CPI+3%

(2) The custom benchmark is comprised of 25% BBGBarc US High Yield/ 25% Credit Suisse Leveraged Loans/ 25% JP Morgan EMBI Global diversified/ 25% BBGBarc Multiverse TR

(3) The market value and performance is one quarter lagged.

(4) The custom benchmark is comprised of 80% NCREIF ODCE/ 20% Wilshire Reit up until 12/31/2019 and since is comprised of NCREIF ODCE.

(5) The market value and performance is one quarter lagged.

(6) The market value and performance is one quarter lagged.



#### Trailing Net Performance

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Retirement Association</b>	<b>1,366,385,988</b>	<b>100.0</b>	<b>--</b>	<b>2.3</b>	<b>-1.8</b>	<b>9.6</b>	<b>11.8</b>	<b>9.5</b>	<b>8.3</b>	<b>8.1</b>	<b>Nov-89</b>
<i>Policy Benchmark (Net)</i>				1.3	-3.0	9.7	12.0	10.1	8.8	--	Nov-89
<i>Actual Allocation (Net)</i>				1.2	-3.0	8.7	10.6	8.8	--	--	Nov-89
<i>InvMetrics Public DB Net Median</i>				0.9	-4.9	4.8	10.6	9.1	8.3	8.2	Nov-89
<i>InvMetrics Public DB Net Rank</i>				1	3	4	14	39	50	57	Nov-89
<b>Domestic Equity Assets</b>	<b>292,537,616</b>	<b>21.4</b>	<b>21.4</b>	<b>2.1</b>	<b>-6.3</b>	<b>6.0</b>	<b>17.7</b>	<b>14.9</b>	<b>--</b>	<b>15.3</b>	<b>Jan-16</b>
<i>Russell 3000</i>				3.2	-5.3	11.9	18.2	15.4	14.3	15.3	Jan-16
Rhumblin Russell 1000 Value	61,219,540	4.5	20.9	2.8	-0.7	11.7	13.0	10.2	--	10.8	Apr-13
<i>Russell 1000 Value</i>				2.8	-0.7	11.7	13.0	10.3	11.7	10.9	Apr-13
<i>eV US Large Cap Value Equity Net Median</i>				2.0	-0.6	12.8	14.2	11.2	11.8	11.2	Apr-13
<i>eV US Large Cap Value Equity Net Rank</i>				22	53	64	68	70	--	64	Apr-13
Rhumblin Russell 1000 Growth	58,422,804	4.3	20.0	3.9	-9.0	15.0	23.6	20.8	17.0	17.3	Jul-09
<i>Russell 1000 Growth</i>				3.9	-9.0	15.0	23.6	20.9	17.0	17.4	Jul-09
<i>eV US Large Cap Growth Equity Net Median</i>				2.8	-10.5	9.0	19.3	18.5	15.0	15.6	Jul-09
<i>eV US Large Cap Growth Equity Net Rank</i>				17	33	12	6	14	8	6	Jul-09
Fisher Midcap Value	69,580,384	5.1	23.8	2.7	-4.8	13.2	21.6	16.2	13.5	10.1	Apr-07
<i>Russell MidCap Value</i>				3.0	-1.8	11.5	13.7	10.0	12.0	8.1	Apr-07
<i>Russell MidCap</i>				2.6	-5.7	6.9	14.9	12.6	12.9	9.3	Apr-07
<i>eV US Mid Cap Value Equity Net Median</i>				1.4	-1.0	11.8	13.9	9.8	11.6	8.5	Apr-07
<i>eV US Mid Cap Value Equity Net Rank</i>				16	87	31	1	1	8	5	Apr-07
Newton Small Cap Growth	52,183,452	3.8	17.8	1.9	-13.4	-13.2	16.8	18.2	15.4	15.7	Aug-09
<i>Russell 2000 Growth</i>				0.5	-12.6	-14.3	9.9	10.3	11.2	12.8	Aug-09
<i>eV US Small Cap Growth Equity Net Median</i>				0.2	-13.4	-9.1	14.8	15.5	13.4	15.0	Aug-09
<i>eV US Small Cap Growth Equity Net Rank</i>				13	51	69	32	22	17	33	Aug-09

### Total Retirement Association | As of March 31, 2022

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
LMCG Small Cap Value	51,131,437	3.7	17.5	-1.4	-3.6	7.8	13.0	8.0	10.1	9.2	Mar-11
<i>Russell 2000 Value</i>				2.0	-2.4	3.3	12.7	8.6	10.5	9.4	Mar-11
<i>eV US Small Cap Value Equity Net Median</i>				0.1	-3.1	4.8	13.0	9.1	10.8	9.9	Mar-11
<i>eV US Small Cap Value Equity Net Rank</i>				83	55	30	50	66	67	72	Mar-11
<b>International Developed Market Equity Assets</b>	<b>42,294,317</b>	<b>3.1</b>	<b>3.1</b>	<b>0.5</b>	<b>-11.0</b>	<b>0.2</b>	<b>2.9</b>	<b>3.3</b>	<b>--</b>	<b>4.1</b>	<b>Jan-16</b>
<i>MSCI EAFE</i>				0.6	-5.9	1.2	7.8	6.7	6.3	6.7	Jan-16
Aristotle International Equity	22,534,208	1.6	53.3	0.2	-10.1	1.0	--	--	--	3.8	Mar-21
<i>MSCI EAFE</i>				0.6	-5.9	1.2	7.8	6.7	6.3	3.2	Mar-21
<i>eV EAFE Core Equity Net Median</i>				0.1	-7.4	-1.0	8.2	7.0	6.9	1.5	Mar-21
<i>eV EAFE Core Equity Net Rank</i>				45	78	34	--	--	--	38	Mar-21
Walter Scott International Equity	19,760,109	1.4	46.7	0.7	-11.9	-0.9	--	--	--	1.0	Mar-21
<i>MSCI EAFE</i>				0.6	-5.9	1.2	7.8	6.7	6.3	3.2	Mar-21
<i>eV EAFE Core Equity Net Median</i>				0.1	-7.4	-1.0	8.2	7.0	6.9	1.5	Mar-21
<i>eV EAFE Core Equity Net Rank</i>				30	86	50	--	--	--	57	Mar-21
<b>International Emerging Market Equity Assets</b>	<b>115,306,701</b>	<b>8.4</b>	<b>8.4</b>	<b>-2.2</b>	<b>-9.7</b>	<b>-9.5</b>	<b>6.3</b>	<b>6.0</b>	<b>--</b>	<b>7.8</b>	<b>Jan-16</b>
<i>MSCI Emerging Markets</i>				-2.3	-7.0	-11.4	4.9	6.0	3.4	8.4	Jan-16
ABS Emerging Markets	61,396,722	4.5	53.2	-2.7	-10.6	-9.6	8.0	--	--	10.7	Dec-18
<i>MSCI Emerging Markets</i>				-2.3	-7.0	-11.4	4.9	6.0	3.4	6.6	Dec-18
<i>eV Emg Mkts Equity Net Median</i>				-1.3	-8.0	-10.1	6.0	6.1	3.9	7.6	Dec-18
<i>eV Emg Mkts Equity Net Rank</i>				74	69	48	32	--	--	26	Dec-18
Driehaus Emerging Markets Growth	53,909,979	3.9	46.8	-1.5	-8.7	-9.4	9.4	--	--	9.5	Mar-19
<i>MSCI Emerging Markets</i>				-2.3	-7.0	-11.4	4.9	6.0	3.4	5.1	Mar-19
<i>eV Emg Mkts Equity Net Median</i>				-1.3	-8.0	-10.1	6.0	6.1	3.9	6.2	Mar-19
<i>eV Emg Mkts Equity Net Rank</i>				55	57	48	23	--	--	25	Mar-19

Total Retirement Association | As of March 31, 2022

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Global Equity Assets</b>	<b>152,334,715</b>	<b>11.1</b>	<b>11.1</b>	<b>2.6</b>	<b>-2.5</b>	<b>7.1</b>	<b>12.4</b>	<b>--</b>	<b>--</b>	<b>8.1</b>	<b>Feb-18</b>
<i>MSCI ACWI</i>				2.2	-5.4	7.3	13.8	11.6	10.0	8.7	Feb-18
First Eagle Global Value Fund	25,687,362	1.9	16.9	1.7	0.5	8.1	9.9	--	--	6.2	Feb-18
<i>MSCI ACWI Value NR USD</i>				1.9	-1.0	8.8	9.0	7.5	7.6	4.7	Feb-18
<i>eV Global Value Equity Net Median</i>				0.5	-2.3	5.8	10.8	8.1	8.2	5.2	Feb-18
<i>eV Global Value Equity Net Rank</i>				23	22	31	66	--	--	35	Feb-18
Kopernik Global All Cap Fund	37,582,505	2.8	24.7	5.6	0.2	9.0	19.2	--	--	10.9	Feb-18
<i>MSCI ACWI Value NR USD</i>				1.9	-1.0	8.8	9.0	7.5	7.6	4.7	Feb-18
<i>eV Global All Cap Value Eq Net Median</i>				0.4	-1.7	5.0	10.9	8.4	8.0	5.4	Feb-18
<i>eV Global All Cap Value Eq Net Rank</i>				8	27	23	4	--	--	8	Feb-18
Lee Munder Global Multi-Cap Strategy	44,908,893	3.3	29.5	1.6	-5.4	7.2	11.7	--	--	8.2	Mar-18
<i>MSCI ACWI</i>				2.2	-5.4	7.3	13.8	11.6	10.0	10.0	Mar-18
<i>eV All Global Equity Net Median</i>				1.6	-6.6	5.6	13.1	11.4	10.0	10.1	Mar-18
<i>eV All Global Equity Net Rank</i>				50	43	40	63	--	--	70	Mar-18
Wellington Durable Enterprises, L.P.	44,155,955	3.2	29.0	1.8	-3.3	4.9	10.3	--	--	9.9	Mar-18
<i>MSCI ACWI</i>				2.2	-5.4	7.3	13.8	11.6	10.0	10.0	Mar-18
<i>eV All Global Equity Net Median</i>				1.6	-6.6	5.6	13.1	11.4	10.0	10.1	Mar-18
<i>eV All Global Equity Net Rank</i>				46	25	55	75	--	--	52	Mar-18

### Total Retirement Association | As of March 31, 2022

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Core Fixed Income</b>	<b>119,126,857</b>	<b>8.7</b>	<b>8.7</b>	<b>-2.1</b>	<b>-3.8</b>	<b>-1.9</b>	<b>2.6</b>	<b>2.6</b>	<b>--</b>	<b>2.8</b>	<b>Jan-16</b>
<i>75% Bbg Aggregate/25% Bbg US TIPS 1-10 year</i>				-2.5	-4.9	-2.2	2.6	2.6	2.2	2.7	Jan-16
Lord Abbett Short Duration Credit Trust II	50,598,673	3.7	42.5	-1.3	-2.7	-2.3	--	--	--	1.1	Aug-19
<i>Bloomberg US Credit 1-3 Yr TR</i>				-1.2	-2.5	-2.6	1.4	1.7	1.7	1.0	Aug-19
<i>eV US Short Duration - Credit Net Median</i>				-1.3	-2.7	-2.4	1.5	1.9	2.1	1.0	Aug-19
<i>eV US Short Duration - Credit Net Rank</i>				51	63	32	--	--	--	41	Aug-19
Lord Abbett Core Fixed Income Trust II	43,306,776	3.2	36.4	-3.0	-5.7	--	--	--	--	-5.6	Dec-21
<i>Bloomberg US Aggregate TR</i>				-2.8	-5.9	-4.2	1.7	2.1	2.2	-6.2	Dec-21
<i>eV US Core Fixed Inc Net Median</i>				-2.7	-5.8	-4.0	2.0	2.4	2.5	-6.1	Dec-21
<i>eV US Core Fixed Inc Net Rank</i>				93	33	--	--	--	--	19	Dec-21
Rhumblin TIPS Trust	25,221,408	1.8	21.2	-1.9	-3.0	4.3	--	--	--	2.5	Sep-20
<i>Bloomberg US TIPS TR</i>				-1.9	-3.0	4.3	6.2	4.4	2.7	2.5	Sep-20
<i>eV US TIPS / Inflation Fixed Inc Net Median</i>				-1.4	-2.6	4.1	6.3	4.4	2.7	2.9	Sep-20
<i>eV US TIPS / Inflation Fixed Inc Net Rank</i>				81	77	35	--	--	--	74	Sep-20
<b>Value Added Fixed Income</b>	<b>100,099,894</b>	<b>7.3</b>	<b>7.3</b>	<b>-0.8</b>	<b>-3.9</b>	<b>-0.6</b>	<b>3.5</b>	<b>3.9</b>	<b>--</b>	<b>5.4</b>	<b>Jan-16</b>
<i>Custom Benchmark</i>				-1.2	-5.3	-2.8	2.5	3.2	--	4.9	Jan-16
Eaton Vance High Yield	12,330,095	0.9	12.3	-0.8	-4.0	0.2	4.5	4.4	5.6	6.4	Apr-06
<i>ICE BofA US High Yield TR</i>				-0.9	-4.5	-0.3	4.4	4.6	5.7	6.7	Apr-06
<i>eV US High Yield Fixed Inc Net Median</i>				-0.7	-3.9	0.0	4.4	4.4	5.4	6.3	Apr-06
<i>eV US High Yield Fixed Inc Net Rank</i>				61	53	40	48	49	42	37	Apr-06
First Eagle Bank Loan Select Fund	10,868,079	0.8	10.9	0.0	0.0	3.8	4.2	3.9	4.9	5.1	Sep-10
<i>Credit Suisse Leveraged Loans</i>				0.0	-0.1	3.2	4.1	4.1	4.5	4.6	Sep-10
<i>Bank Loan MStar MF Median</i>				0.0	-0.4	2.5	3.3	3.4	3.7	4.0	Sep-10
<i>Bank Loan MStar MF Rank</i>				45	7	8	11	11	1	1	Sep-10

### Total Retirement Association | As of March 31, 2022

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Manulife Strategic Fixed Income	53,524,786	3.9	53.5	-0.9	-4.0	-2.7	--	--	--	2.6	Jul-19
<i>Bloomberg Multiverse TR</i>				-2.9	-6.1	-6.2	0.8	1.8	1.2	-0.3	Jul-19
Mesirow High Yield	15,338,294	1.1	15.3	-0.6	-2.8	3.0	--	--	--	8.2	Aug-19
<i>Bloomberg US Corporate High Yield TR</i>				-1.1	-4.8	-0.7	4.6	4.7	5.7	4.0	Aug-19
<i>eV US High Yield Fixed Inc Net Median</i>				-0.7	-3.9	0.0	4.4	4.4	5.4	3.8	Aug-19
<i>eV US High Yield Fixed Inc Net Rank</i>				39	27	7	--	--	--	2	Aug-19
Eaton Vance EMD Opportunities Fund	8,038,640	0.6	8.0	-1.8	-9.8	-6.8	--	--	--	-0.1	Aug-20
<i>JP Morgan EMBI Global Diversified</i>				-0.9	-10.0	-7.4	0.0	1.7	3.7	-4.7	Aug-20
<i>eV Emg Mkts Fixed Inc - Blended Currency Net Median</i>				-0.5	-7.6	-7.0	0.2	1.4	2.0	-3.0	Aug-20
<i>eV Emg Mkts Fixed Inc - Blended Currency Net Rank</i>				87	94	46	--	--	--	18	Aug-20
<b>Hedge Funds</b>	<b>86,512,324</b>	<b>6.3</b>	<b>6.3</b>	<b>-2.4</b>	<b>-4.6</b>	<b>-4.0</b>	<b>5.3</b>	<b>4.3</b>	<b>4.9</b>	<b>4.6</b>	<b>Feb-10</b>
<i>Custom Benchmark</i>				-0.9	-2.4	1.5	5.9	4.7	3.9	3.5	Feb-10
ABS Offshore SPC - Global Segregated Portfolio	36,265,342	2.7	41.9	0.0	-4.4	-3.0	7.0	5.6	5.5	5.5	Aug-10
<i>HFRI Fund of Funds Composite Index</i>				0.5	-2.7	1.2	5.9	4.6	3.9	3.7	Aug-10
Entrust Special Opportunities Fund III, Ltd.	17,637,749	1.3	20.4	-4.7	-4.7	-10.1	2.9	3.1	--	7.3	Oct-16
<i>HFRI Fund of Funds Composite Index (QTR)</i>				-2.2	-2.2	1.7	5.8	4.6	3.9	4.8	Oct-16
Old Farm Partners Master Fund, L.P.	11,235,831	0.8	13.0	0.3	-3.3	1.4	9.0	--	--	6.8	Oct-18
<i>HFRI Fund of Funds Composite Index</i>				0.5	-2.7	1.2	5.9	4.6	3.9	4.8	Oct-18
EnTrustPermal Special Opportunities Evergreen Fund, Ltd.	21,373,403	1.6	24.7	-5.5	-5.5	-1.4	7.1	--	--	8.7	Jan-19
<i>HFRI Fund of Funds Composite Index (QTR)</i>				-2.2	-2.2	1.7	5.8	4.6	3.9	6.8	Jan-19

Note: The data for Entrust Special Opportunities Fund III, Ltd and Entrust Permal Special Opportunities Evergreen Fund, Ltd is based on preliminary performance

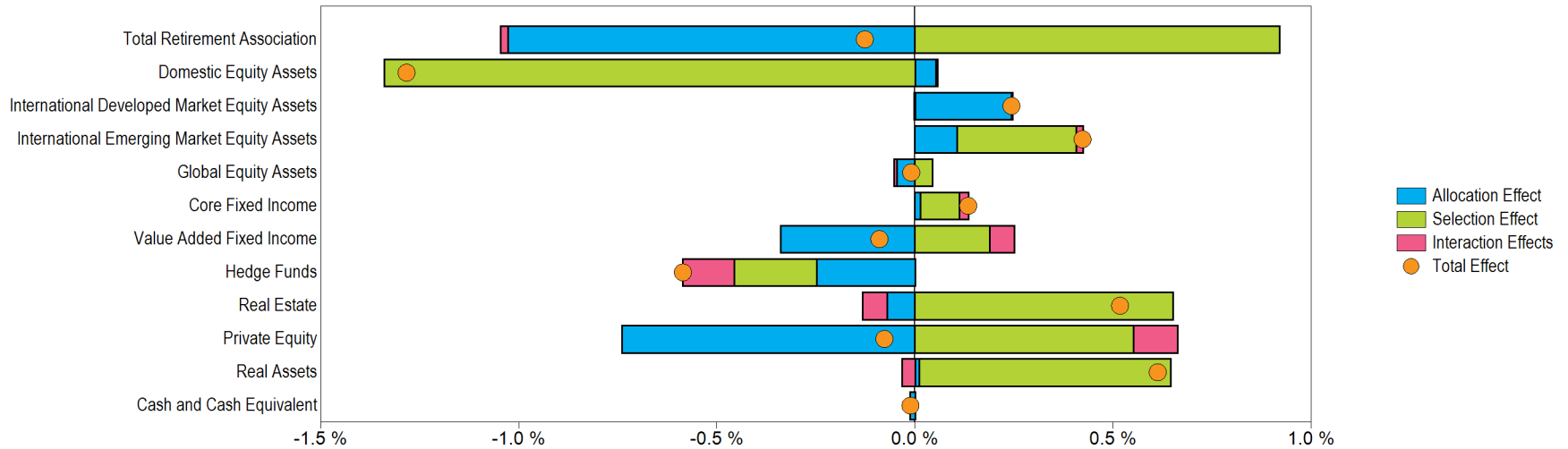
Total Retirement Association | As of March 31, 2022

	Market Value (\$)	% of Portfolio	% of Sector	1 Mo (%)	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Real Estate</b>	<b>147,521,393</b>	<b>10.8</b>	<b>10.8</b>	<b>7.1</b>	<b>8.1</b>	<b>35.2</b>	<b>15.6</b>	<b>11.9</b>	<b>--</b>	<b>10.3</b>	<b>Jan-16</b>
<i>Custom Benchmark</i>				7.4	7.4	28.5	11.2	9.2	--	8.7	Jan-16
<b>Core Real Estate</b>	<b>90,378,934</b>	<b>6.6</b>	<b>61.3</b>	<b>5.8</b>	<b>7.4</b>	<b>32.1</b>	<b>13.7</b>	<b>11.2</b>	<b>--</b>	<b>10.6</b>	<b>Jan-16</b>
<i>NCREIF-ODCE</i>				7.4	7.4	28.5	11.3	9.9	10.9	9.6	Jan-16
TA Realty Core Property Fund, L.P. <i>NCREIF ODCE</i>	54,605,866	4.0	60.4	8.2	8.2	37.0	17.5	--	--	15.4	Apr-18
JPMorgan Strategic Property <i>NCREIF-ODCE</i>	35,773,068	2.6	39.6	2.3	6.2	25.2	9.5	--	--	9.5	Apr-19
<i>NCREIF-ODCE</i>				7.4	7.4	28.5	11.3	9.9	10.9	11.3	Apr-19
<b>Non-Core Real Estate</b>	<b>57,142,459</b>	<b>4.2</b>	<b>38.7</b>	<b>9.2</b>	<b>9.2</b>	<b>40.2</b>	<b>18.4</b>	<b>11.6</b>	<b>--</b>	<b>7.8</b>	<b>Jan-16</b>
<b>Private Equity</b>	<b>185,832,641</b>	<b>13.6</b>	<b>13.6</b>	<b>8.5</b>	<b>8.5</b>	<b>43.0</b>	<b>25.4</b>	<b>18.2</b>	<b>--</b>	<b>13.8</b>	<b>Jan-16</b>
<i>Preqin Private Equity FoF 1Q Lagged</i>				0.0	0.0	37.4	24.9	20.6	16.0	17.6	Jan-16
<b>Private Equity</b>	<b>171,243,006</b>	<b>12.5</b>	<b>92.1</b>	<b>8.7</b>	<b>8.7</b>	<b>42.5</b>	<b>26.1</b>	<b>18.0</b>	<b>--</b>	<b>13.3</b>	<b>Jan-16</b>
<b>Venture Capital</b>	<b>14,589,636</b>	<b>1.1</b>	<b>7.9</b>	<b>5.9</b>	<b>5.9</b>	<b>51.1</b>	<b>19.7</b>	<b>16.1</b>	<b>--</b>	<b>13.8</b>	<b>Jan-16</b>
<b>Real Assets</b>	<b>89,908,510</b>	<b>6.6</b>	<b>6.6</b>	<b>5.0</b>	<b>4.1</b>	<b>21.5</b>	<b>11.0</b>	<b>7.2</b>	<b>--</b>	<b>3.6</b>	<b>Jan-16</b>
<i>CPI + 3%</i>				1.5	3.8	11.5	7.2	6.4	5.3	6.2	Jan-16
IFM Global Infrastructure <i>CPI + 3%</i>	44,332,807	3.2	49.3	3.0	1.2	16.5	11.6	--	--	11.6	Oct-18
<i>CPI + 3%</i>				1.5	3.6	10.8	6.4	5.6	4.5	6.0	Oct-18
<b>Cash and Cash Equivalent</b>	<b>34,911,020</b>	<b>2.6</b>	<b>2.6</b>								
Cash	34,911,020	2.6	100.0								

Note: The data for Real Estate, Private Equity, and Real Assets is based on December 31, 2021 fair market value, adjusted for subsequent cash flows.

Note: The data for TA Realty Core Property Fund, JPMorgan Strategic Property, and IFM Global Infrastructure is as of March 31, 2022.

#### Attribution Effects 1 Year Ending March 31, 2022



#### Attribution Summary 1 Year Ending March 31, 2022

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Assets	6.0%	11.1%	-5.1%	-1.3%	0.1%	0.0%	-1.3%
International Developed Market Equity Assets	0.2%	0.4%	-0.2%	0.0%	0.2%	0.0%	0.2%
International Emerging Market Equity Assets	-9.5%	-12.0%	2.5%	0.3%	0.1%	0.0%	0.4%
Global Equity Assets	7.1%	6.5%	0.6%	0.0%	0.0%	0.0%	0.0%
Core Fixed Income	-1.9%	-2.9%	1.0%	0.1%	0.0%	0.0%	0.1%
Value Added Fixed Income	-0.6%	-3.5%	2.9%	0.2%	-0.3%	0.1%	-0.1%
Hedge Funds	-4.0%	0.8%	-4.7%	-0.2%	-0.2%	-0.1%	-0.6%
Real Estate	35.2%	27.6%	7.6%	0.7%	-0.1%	-0.1%	0.5%
Private Equity	43.0%	37.4%	5.6%	0.6%	-0.7%	0.1%	-0.1%
Real Assets	21.5%	10.8%	10.8%	0.6%	0.0%	0.0%	0.6%
Cash and Cash Equivalent	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>9.6%</b>	<b>9.8%</b>	<b>-0.1%</b>	<b>0.9%</b>	<b>-1.0%</b>	<b>0.0%</b>	<b>-0.1%</b>

Statistics Summary						
5 Years Ending March 31, 2022						
	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Retirement Association	9.5%	9.8%	-0.3	1.1	0.9	1.9%
Policy Benchmark (Net)	10.1%	8.9%	--	1.0	1.0	0.0%
Domestic Equity Assets	14.9%	18.7%	-0.1	1.1	0.7	4.4%
Russell 3000	15.4%	16.4%	--	1.0	0.9	0.0%
Rhumblin Russell 1000 Value	10.2%	16.5%	-0.7	1.0	0.6	0.1%
Russell 1000 Value	10.3%	16.6%	--	1.0	0.6	0.0%
Rhumblin Russell 1000 Growth	20.8%	17.4%	-0.6	1.0	1.1	0.1%
Russell 1000 Growth	20.9%	17.4%	--	1.0	1.1	0.0%
Fisher Midcap Value	16.2%	20.3%	1.2	1.0	0.7	5.1%
Russell MidCap Value	10.0%	18.9%	--	1.0	0.5	0.0%
Newton Small Cap Growth	18.2%	23.4%	1.1	1.0	0.7	7.5%
Russell 2000 Growth	10.3%	21.7%	--	1.0	0.4	0.0%
LMCG Small Cap Value	8.0%	20.6%	-0.1	0.9	0.3	4.9%
Russell 2000 Value	8.6%	21.9%	--	1.0	0.3	0.0%
International Equity	4.8%	15.8%	-0.4	1.0	0.2	4.6%
International Equity Custom Benchmark	6.8%	15.5%	--	1.0	0.4	0.0%
International Developed Market Equity Assets	3.3%	16.9%	-0.8	1.1	0.1	4.5%
MSCI EAFE	6.7%	15.0%	--	1.0	0.4	0.0%
Aristotle International Equity	--	--	--	--	--	--
MSCI EAFE	6.7%	15.0%	--	1.0	0.4	0.0%
Walter Scott International Equity	--	--	--	--	--	--
MSCI EAFE	6.7%	15.0%	--	1.0	0.4	0.0%



	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
International Emerging Market Equity Assets	6.0%	16.4%	0.0	1.0	0.3	2.6%
MSCI Emerging Markets	6.0%	16.6%	--	1.0	0.3	0.0%
ABS Emerging Markets	--	--	--	--	--	--
MSCI Emerging Markets	6.0%	16.6%	--	1.0	0.3	0.0%
Driehaus Emerging Markets Growth	--	--	--	--	--	--
MSCI Emerging Markets	6.0%	16.6%	--	1.0	0.3	0.0%
Global Equity Assets	--	--	--	--	--	--
MSCI ACWI	11.6%	15.1%	--	1.0	0.7	0.0%
First Eagle Global Value Fund	--	--	--	--	--	--
MSCI ACWI Value NR USD	7.5%	15.9%	--	1.0	0.4	0.0%
Kopernik Global All Cap Fund	--	--	--	--	--	--
MSCI ACWI Value NR USD	7.5%	15.9%	--	1.0	0.4	0.0%
Lee Munder Global Multi-Cap Strategy	--	--	--	--	--	--
MSCI ACWI	11.6%	15.1%	--	1.0	0.7	0.0%
Wellington Durable Enterprises, L.P.	--	--	--	--	--	--
MSCI ACWI	11.6%	15.1%	--	1.0	0.7	0.0%
Fixed Income Assets	3.3%	4.6%	0.3	0.8	0.5	3.6%
Bloomberg US Universal TR	2.3%	3.6%	--	1.0	0.4	0.0%
Core Fixed Income	2.6%	3.4%	0.0	0.9	0.4	1.6%
75% Bbg Aggregate/25% Bbg US TIPs 1-10 year	2.6%	3.2%	--	1.0	0.5	0.0%
Lord Abbett Short Duration Credit Trust II	--	--	--	--	--	--
Bloomberg US Credit 1-3 Yr TR	1.7%	1.7%	--	1.0	0.4	0.0%
Lord Abbett Core Fixed Income Trust II	--	--	--	--	--	--

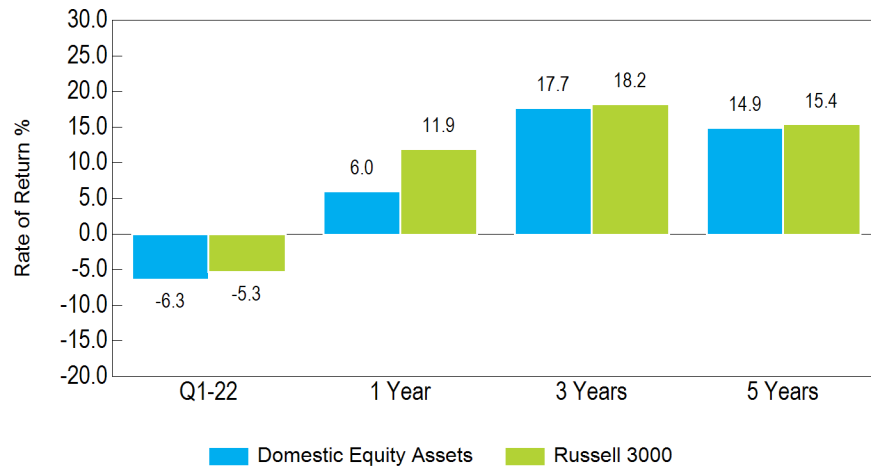
	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Bloomberg US Aggregate TR	2.1%	3.6%	--	1.0	0.3	0.0%
Rhumblin TIPS Trust	--	--	--	--	--	--
Bloomberg US TIPS TR	4.4%	3.8%	--	1.0	0.9	0.0%
Value Added Fixed Income	3.9%	6.4%	0.4	1.0	0.4	1.5%
Custom Benchmark	3.2%	6.4%	--	1.0	0.3	0.0%
Eaton Vance High Yield	4.4%	6.9%	-0.2	0.9	0.5	1.0%
ICE BofA US High Yield TR	4.6%	7.6%	--	1.0	0.5	0.0%
First Eagle Bank Loan Select Fund	3.9%	6.5%	-0.2	1.0	0.4	0.6%
Credit Suisse Leveraged Loans	4.1%	6.8%	--	1.0	0.4	0.0%
Manulife Strategic Fixed Income	--	--	--	--	--	--
Bloomberg Multiverse TR	1.8%	4.5%	--	1.0	0.2	0.0%
Mesirow High Yield	--	--	--	--	--	--
Bloomberg US Corporate High Yield TR	4.7%	7.5%	--	1.0	0.5	0.0%
Eaton Vance EMD Opportunities Fund	--	--	--	--	--	--
JP Morgan EMBI Global Diversified	1.7%	9.4%	--	1.0	0.1	0.0%
Hedge Funds	4.3%	12.5%	0.0	1.9	0.3	7.1%
Custom Benchmark	4.7%	6.0%	--	1.0	0.6	0.0%
ABS Offshore SPC - Global Segregated Portfolio	5.6%	8.4%	0.3	1.3	0.5	3.6%
HFRI Fund of Funds Composite Index	4.6%	6.1%	--	1.0	0.6	0.0%
Entrust Special Opportunities Fund III, Ltd.	3.1%	21.4%	-0.1	2.5	0.1	15.0%
HFRI Fund of Funds Composite Index (QTR)	4.6%	7.7%	--	1.0	0.5	0.0%
Old Farm Partners Master Fund, L.P.	--	--	--	--	--	--
HFRI Fund of Funds Composite Index	4.6%	6.1%	--	1.0	0.6	0.0%
EnTrustPermal Special Opportunities Evergreen Fund, Ltd.	--	--	--	--	--	--

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
HFRI Fund of Funds Composite Index (QTR)	4.6%	7.7%	--	1.0	0.5	0.0%
Real Estate	11.9%	7.1%	0.9	1.1	1.5	2.9%
Custom Benchmark	9.2%	6.2%	--	1.0	1.3	0.0%
Core Real Estate	11.2%	5.7%	0.5	0.8	1.8	2.9%
NCREIF-ODCE	9.9%	6.1%	--	1.0	1.4	0.0%
TA Realty Core Property Fund, L.P.	--	--	--	--	--	--
NCREIF ODCE	9.9%	6.1%	--	1.0	1.4	0.0%
JPMorgan Strategic Property	--	--	--	--	--	--
NCREIF-ODCE	9.9%	6.1%	--	1.0	1.4	0.0%
Private Equity	18.2%	11.8%	-0.3	0.8	1.5	7.1%
Preqin Private Equity FoF 1Q Lagged	20.6%	11.5%	--	1.0	1.7	0.0%
Real Assets	7.2%	5.8%	0.1	0.7	1.1	5.7%
CPI + 3%	6.4%	1.2%	--	1.0	4.5	0.0%
IFM Global Infrastructure	--	--	--	--	--	--
CPI + 3%	5.6%	1.2%	--	1.0	3.8	0.0%
ISQ Global Infrastructure Fund III (USTE), L.P.	--	--	--	--	--	--
CPI + 3%	5.6%	1.2%	--	1.0	3.8	0.0%

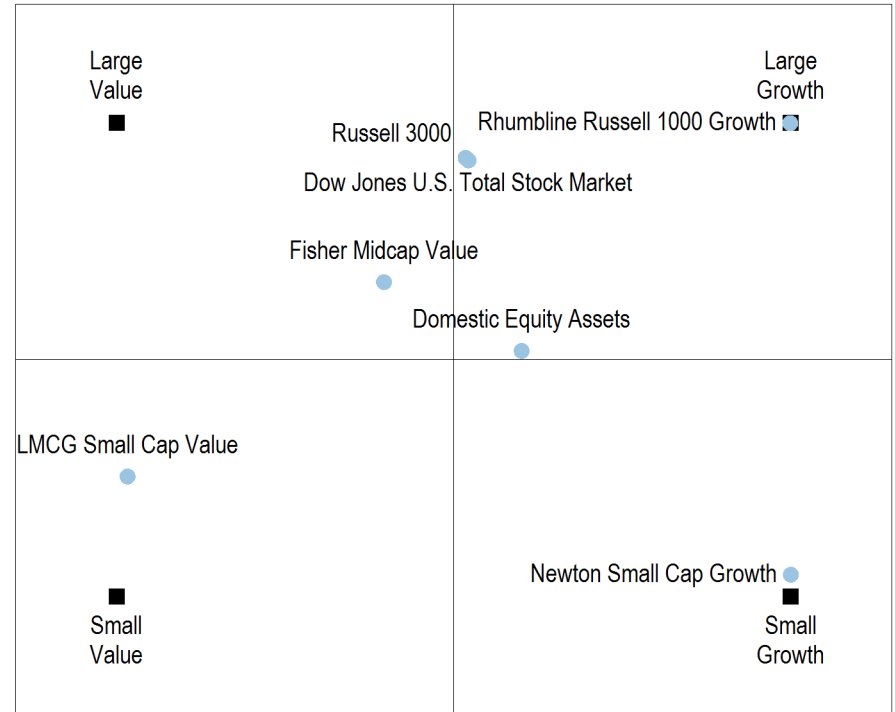
#### Asset Allocation on March 31, 2022

	Actual	Actual
Fisher Midcap Value	\$69,580,384	23.8%
LMCG Small Cap Value	\$51,131,437	17.5%
Newton Small Cap Growth	\$52,183,452	17.8%
Rhumblin Russell 1000 Growth	\$58,422,804	20.0%
Rhumblin Russell 1000 Value	\$61,219,540	20.9%
<b>Total</b>	<b>\$292,537,616</b>	<b>100.0%</b>

#### Return Summary Ending March 31, 2022

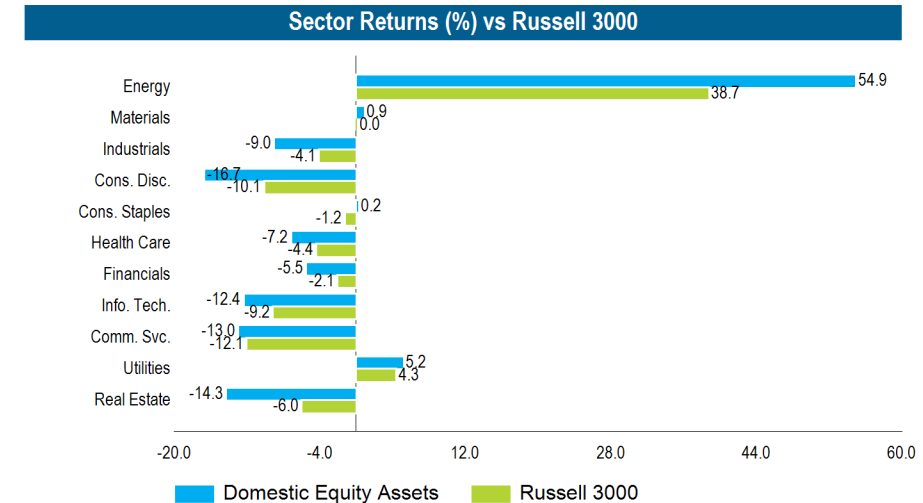
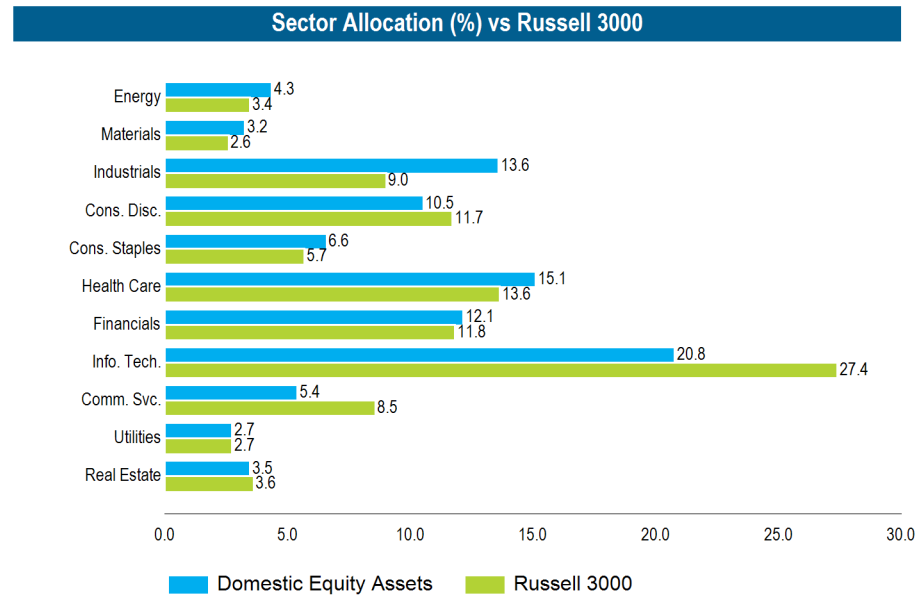


#### Domestic Equity Assets Style Map



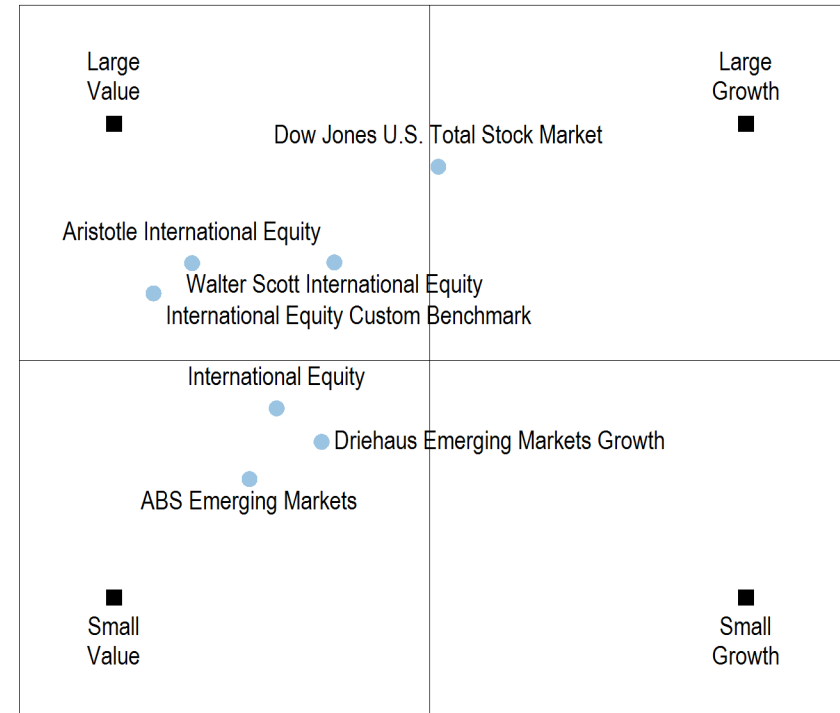
Domestic Equity Assets Equity Characteristics		
	Portfolio Q1-22	Index Q1-22
<b>Market Value</b>		
Market Value (\$M)	292.54	--
Number Of Holdings	1162	3040
<b>Characteristics</b>		
Weighted Avg. Market Cap. (\$B)	310.70	550.14
Median Market Cap (\$B)	13.29	2.61
P/E Ratio	19.80	21.61
Yield	1.18	1.36
EPS Growth - 5 Yrs.	18.09	20.21
Price to Book	3.38	4.17

Top 10 Holdings	
APPLE INC	3.4%
MICROSOFT CORP	2.9%
AMAZON.COM INC	1.5%
TESLA INC	1.0%
CACTUS INC	1.0%
ALPHABET INC	1.0%
ALPHABET INC	0.9%
BERKSHIRE HATHAWAY INC	0.9%
PLANET FITNESS INC	0.8%
RAPID7 INC	0.8%
<b>Total</b>	<b>14.1%</b>

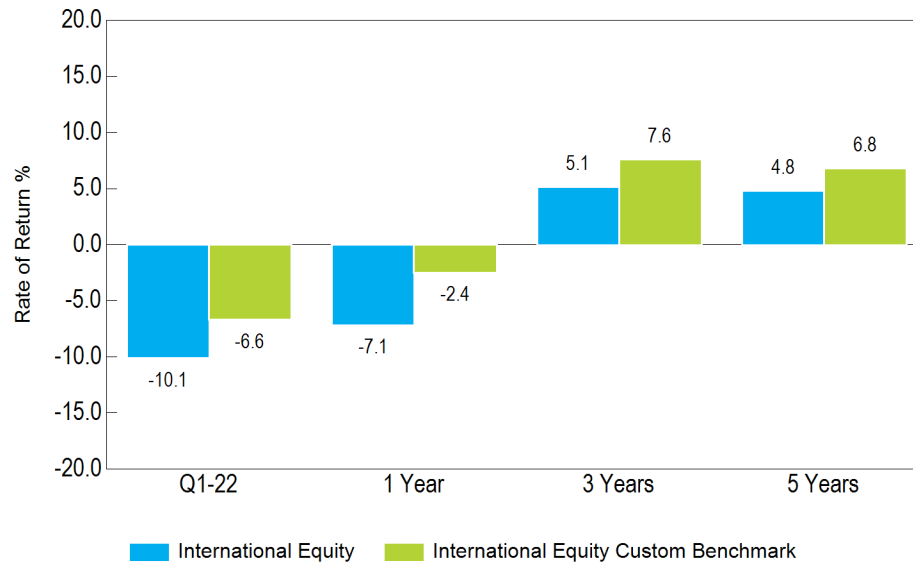


Asset Allocation on March 31, 2022		
	Actual	Actual
ABS Emerging Markets	\$61,396,722	39.0%
Aristotle International Equity	\$22,534,208	14.3%
Driehaus Emerging Markets Growth	\$53,909,979	34.2%
Walter Scott International Equity	\$19,760,109	12.5%
<b>Total</b>	<b>\$157,601,018</b>	<b>100.0%</b>

#### International Equity Style Map

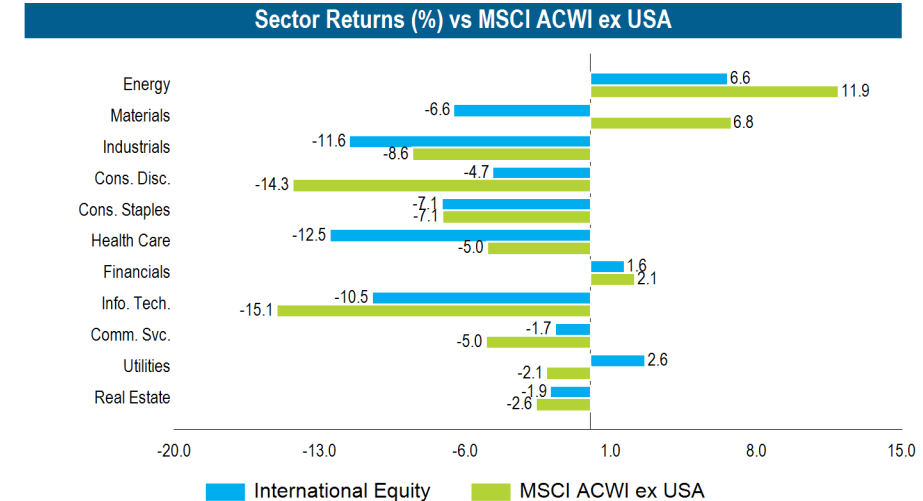
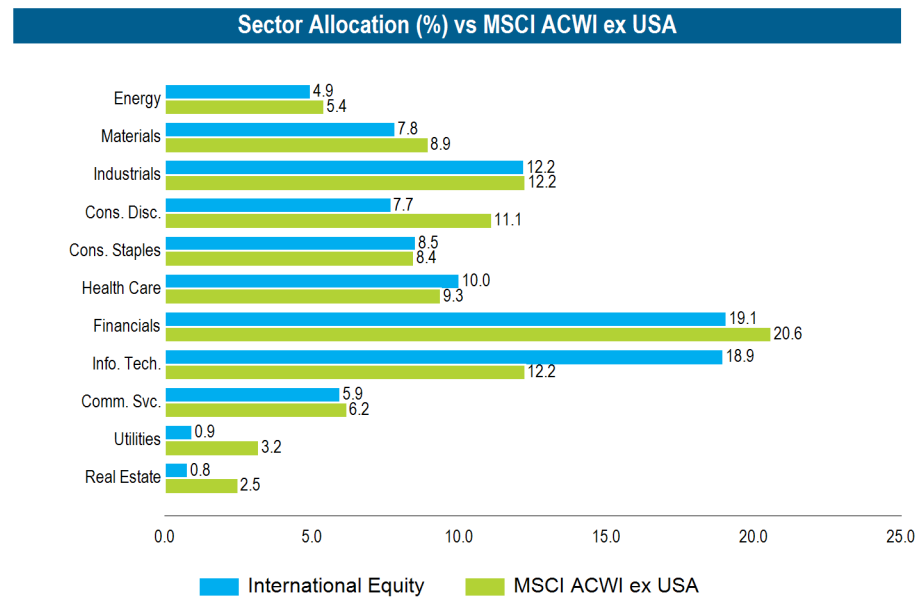


#### Return Summary Ending March 31, 2022



International Equity Equity Characteristics		
	Portfolio Q1-22	Index Q1-22
<b>Market Value</b>		
Market Value (\$M)	157.60	--
Number Of Holdings	166	2302
<b>Characteristics</b>		
Weighted Avg. Market Cap. (\$B)	137.68	94.00
Median Market Cap (\$B)	35.99	10.05
P/E Ratio	20.58	14.09
Yield	1.81	2.84
EPS Growth - 5 Yrs.	14.38	14.60
Price to Book	3.33	2.51

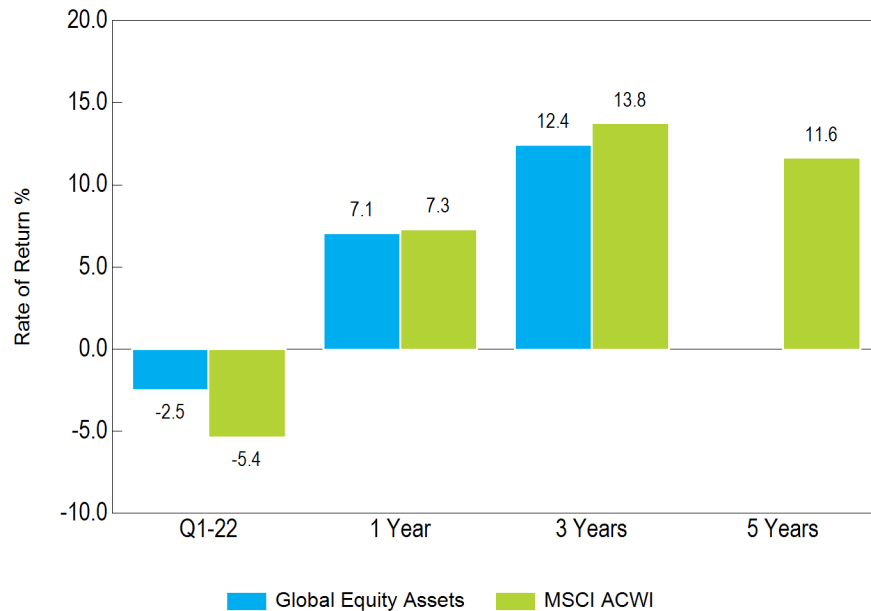
Top 10 Holdings	
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	5.3%
SAMSUNG ELECTRONICS CO LTD	3.8%
AIA GROUP LTD	2.1%
TENCENT HOLDINGS LTD	1.9%
RELIANCE INDUSTRIES LTD	1.4%
GPO FINANCE BANORTE	1.4%
DASSAULT SYSTEMES SA	1.4%
PT BANK CENTRAL ASIA TBK	1.4%
CHINA MERCHANTS BANK CO LTD	1.4%
KEYENCE CORP	1.3%
<b>Total</b>	<b>21.5%</b>



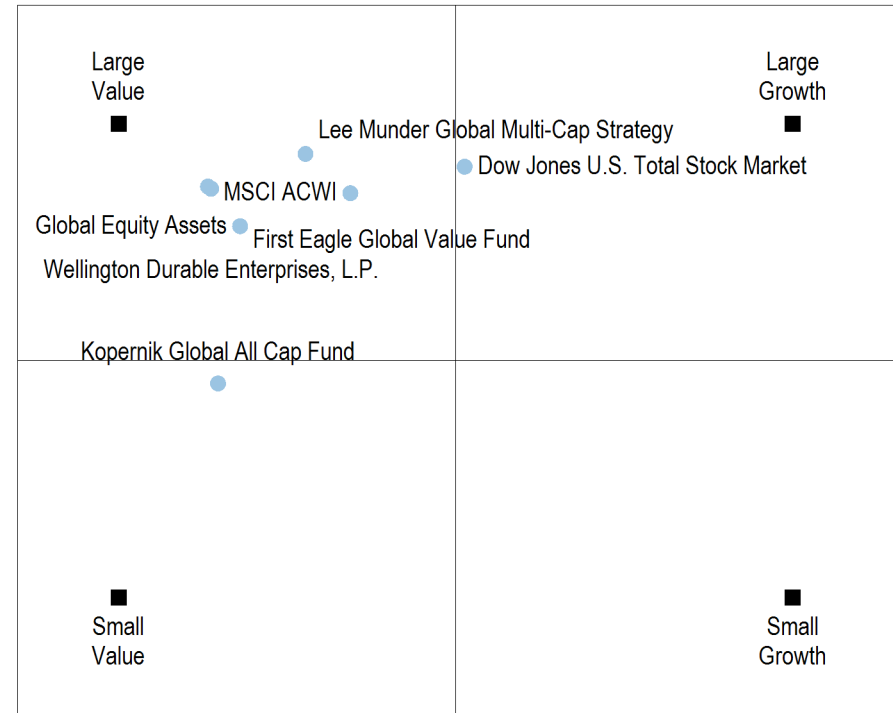
#### Asset Allocation on March 31, 2022

	Actual	Actual
First Eagle Global Value Fund	\$25,687,362	16.9%
Kopernik Global All Cap Fund	\$37,582,505	24.7%
Lee Munder Global Multi-Cap Strategy	\$44,908,893	29.5%
Wellington Durable Enterprises, L.P.	\$44,155,955	29.0%
<b>Total</b>	<b>\$152,334,715</b>	<b>100.0%</b>

#### Return Summary Ending March 31, 2022



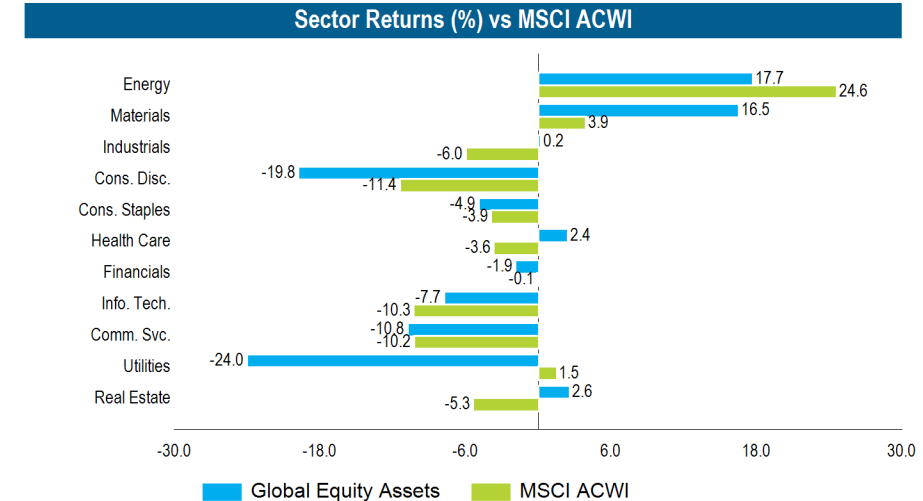
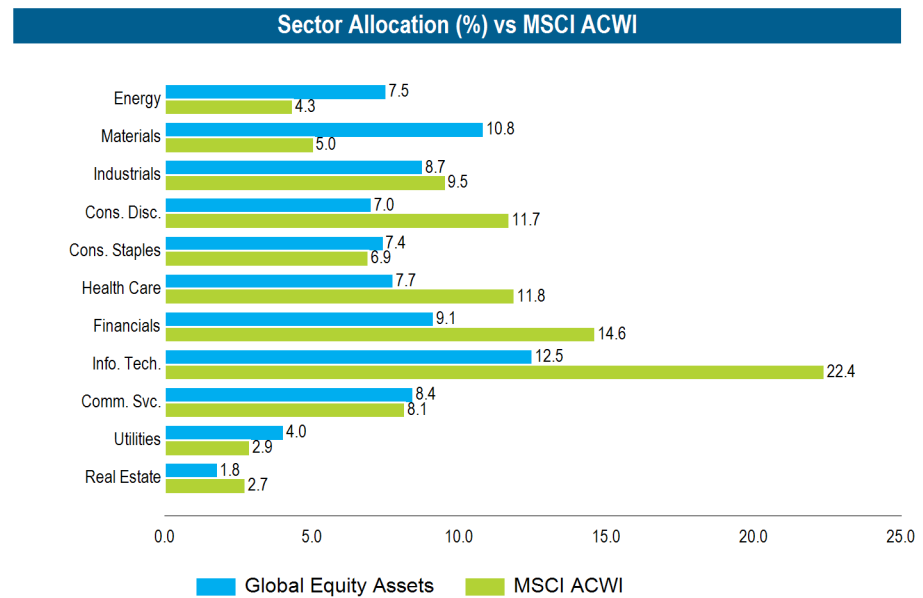
#### Global Equity Assets Style Map





Global Equity Assets Equity Characteristics		
	Portfolio Q1-22	Index Q1-22
<b>Market Value</b>		
Market Value (\$M)	152.33	--
Number Of Holdings	293	2929
<b>Characteristics</b>		
Weighted Avg. Market Cap. (\$B)	320.67	415.12
Median Market Cap (\$B)	19.32	13.16
P/E Ratio	14.17	18.43
Yield	2.06	1.93
EPS Growth - 5 Yrs.	16.12	18.37
Price to Book	3.00	3.54

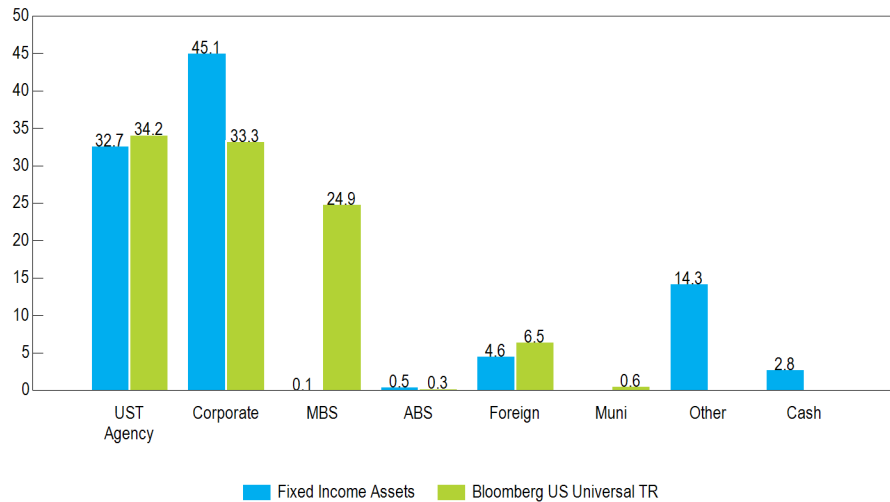
Top 10 Holdings	
APPLE INC	2.8%
MICROSOFT CORP	2.7%
ALPHABET INC	2.6%
AMAZON.COM INC	2.4%
NEWCREST MINING LTD	1.9%
ISHARES CORE MSCI EMERGING MARKETS ETF	1.7%
KT CORP	1.7%
META PLATFORMS INC	1.2%
COMCAST CORP	1.2%
TURQUOISE HILL RESOURCES LTD	1.1%
<b>Total</b>	<b>19.2%</b>



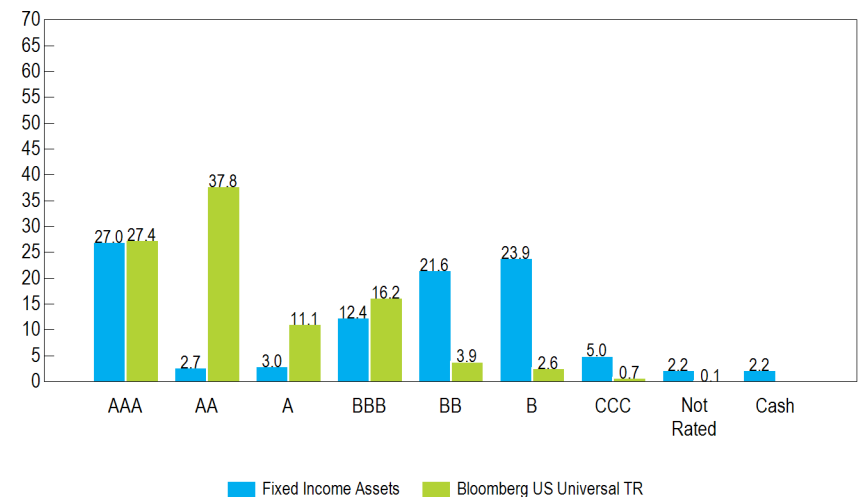
Asset Allocation on March 31, 2022		
	Actual	Actual
Eaton Vance EMD Opportunities Fund	\$8,038,640	3.7%
Eaton Vance High Yield	\$12,330,095	5.6%
First Eagle Bank Loan Select Fund	\$10,868,079	5.0%
Lord Abbett Core Fixed Income Trust II	\$43,306,776	19.8%
Lord Abbett Short Duration Credit Trust II	\$50,598,673	23.1%
Manulife Strategic Fixed Income	\$53,524,786	24.4%
Mesirow High Yield	\$15,338,294	7.0%
Rhumblin TIPS Trust	\$25,221,408	11.5%
<b>Total</b>	<b>\$219,226,751</b>	<b>100.0%</b>

Fixed Income Assets Characteristics vs. Bloomberg US Universal TR			
	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
Fixed Income Characteristics			
Yield to Maturity	4.6	3.3	3.8
Average Duration	4.1	6.6	3.8
Average Quality	BBB	AA	BBB
Weighted Average Maturity	6.3	12.7	5.8

### Sector Allocation



### Credit Quality Allocation



### Rhumblin Russell 1000 Value | As of March 31, 2022

#### Account Information

Account Name	Rhumblin Russell 1000 Value
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	4/30/13
Account Type	US Equity
Benchmark	Russell 1000 Value
Universe	eV US Large Cap Value Equity Net

#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Rhumblin Russell 1000 Value	-0.7	11.7	13.0	10.2	--	10.8	Apr-13
<i>Russell 1000 Value</i>	-0.7	11.7	13.0	10.3	11.7	10.9	Apr-13
<i>eV US Large Cap Value Equity Net Median</i>	-0.6	12.8	14.2	11.2	11.8	11.2	Apr-13
<i>eV US Large Cap Value Equity Net Rank</i>	53	64	68	70	--	64	Apr-13

#### Top 10 Holdings

BERKSHIRE HATHAWAY INC	3.1%
JOHNSON & JOHNSON	2.2%
UNITEDHEALTH GROUP INC	2.1%
JPMORGAN CHASE & CO	1.9%
PROCTER & GAMBLE CO (THE)	1.8%
EXXON MOBIL CORP	1.7%
CHEVRON CORP	1.5%
BANK OF AMERICA CORP	1.4%
PFIZER INC	1.4%
WALT DISNEY CO (THE)	1.1%
<b>Total</b>	<b>18.3%</b>

#### Rhumblin Russell 1000 Value Characteristics

	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
<b>Market Value</b>			
Market Value (\$M)	61.2	--	69.4
Number Of Holdings	850	848	854
<b>Characteristics</b>			
Weighted Avg. Market Cap. (\$B)	169.0	169.6	165.9
Median Market Cap (\$B)	14.7	14.7	15.0
P/E Ratio	17.0	17.1	18.9
Yield	2.0	2.0	1.9
EPS Growth - 5 Yrs.	14.5	14.5	13.6
Price to Book	2.7	2.7	2.8
<b>Sector Distribution</b>			
Energy	7.1	6.3	5.1
Materials	4.1	4.1	3.9
Industrials	11.0	11.1	11.5
Consumer Discretionary	5.0	4.8	5.7
Consumer Staples	7.4	7.4	7.4
Health Care	17.9	18.2	18.0
Financials	20.8	21.0	20.7
Information Technology	9.3	9.4	10.2
Communication Services	7.2	7.2	7.3
Utilities	5.3	5.5	5.2
Real Estate	4.9	5.0	5.1

### Rhumblin Russell 1000 Growth | As of March 31, 2022

Account Information	
Account Name	Rhumblin Russell 1000 Growth
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	7/31/09
Account Type	US Equity
Benchmark	Russell 1000 Growth
Universe	eV US Large Cap Growth Equity Net

Portfolio Performance Summary								
	QTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception	
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Date
Rhumblin Russell 1000 Growth	-9.0	15.0	23.6	20.8	17.0	17.3	Jul-09	
<i>Russell 1000 Growth</i>	-9.0	15.0	23.6	20.9	17.0	17.4	Jul-09	
<i>eV US Large Cap Growth Equity Net Median</i>	-10.5	9.0	19.3	18.5	15.0	15.6	Jul-09	
<i>eV US Large Cap Growth Equity Net Rank</i>	33	12	6	14	8	6	Jul-09	

Top 10 Holdings	
APPLE INC	12.8%
MICROSOFT CORP	11.0%
AMAZON.COM INC	5.7%
TESLA INC	3.8%
ALPHABET INC	3.1%
ALPHABET INC	2.9%
META PLATFORMS INC	2.4%
NVIDIA CORPORATION	2.3%
VISA INC	1.9%
MASTERCARD INC	1.7%
<b>Total</b>	<b>47.7%</b>

Rhumblin Russell 1000 Growth Characteristics			
	Portfolio	Index	Portfolio
	Q1-22	Q1-22	Q4-21
<b>Market Value</b>			
Market Value (\$M)	58.4	--	72.8
Number Of Holdings	499	499	505
<b>Characteristics</b>			
Weighted Avg. Market Cap. (\$B)	969.4	983.1	985.2
Median Market Cap (\$B)	18.4	18.3	20.4
P/E Ratio	30.5	31.0	36.0
Yield	0.8	0.8	0.7
EPS Growth - 5 Yrs.	25.3	26.2	26.4
Price to Book	11.8	11.8	13.3
<b>Sector Distribution</b>			
Energy	0.5	0.3	0.3
Materials	1.1	0.9	1.0
Industrials	6.3	6.1	5.7
Consumer Discretionary	17.9	18.5	18.2
Consumer Staples	4.8	4.2	3.9
Health Care	9.0	8.9	8.6
Financials	2.5	2.5	2.3
Information Technology	45.9	46.2	45.5
Communication Services	9.7	10.5	11.5
Utilities	0.0	0.0	0.0
Real Estate	1.9	1.7	1.7

### Fisher Midcap Value | As of March 31, 2022

#### Account Information

Account Name	Fisher Midcap Value
Account Structure	Separate Account
Investment Style	Active
Inception Date	4/30/07
Account Type	US Equity
Benchmark	Russell MidCap Value
Universe	eV US Mid Cap Value Equity Net

#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Fisher Midcap Value	-4.8	13.2	21.6	16.2	13.5	10.1	Apr-07
Russell MidCap Value	-1.8	11.5	13.7	10.0	12.0	8.1	Apr-07
Russell MidCap	-5.7	6.9	14.9	12.6	12.9	9.3	Apr-07
eV US Mid Cap Value Equity Net Median	-1.0	11.8	13.9	9.8	11.6	8.5	Apr-07
eV US Mid Cap Value Equity Net Rank	87	31	1	1	8	5	Apr-07

#### Top 10 Holdings

FREEMPORT-MCMORAN INC	4.8%
CHARLES RIVER LABORATORIES INTERNATIONAL INC	3.3%
SYNOPTIS INC	3.3%
CLEVELAND-CLIFFS INC	3.3%
PERKINELMER INC.	3.3%
SVB FINANCIAL GROUP	3.2%
UNITED RENTALS INC.	2.9%
RAYMOND JAMES FINANCIAL INC.	2.8%
PROLOGIS INC	2.7%
TERADYNE INC	2.5%
<b>Total</b>	<b>32.0%</b>

#### Fisher Midcap Value Characteristics

	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
<b>Market Value</b>			
Market Value (\$M)	69.6	--	73.0
Number Of Holdings	70	698	71
<b>Characteristics</b>			
Weighted Avg. Market Cap. (\$B)	26.4	22.8	28.2
Median Market Cap (\$B)	16.8	11.3	18.3
P/E Ratio	17.2	17.3	19.5
Yield	0.8	1.8	0.8
EPS Growth - 5 Yrs.	22.2	13.7	24.4
Price to Book	3.4	2.6	3.6
<b>Sector Distribution</b>			
Energy	6.3	6.5	4.3
Materials	13.4	8.2	9.3
Industrials	15.1	14.3	15.8
Consumer Discretionary	4.1	9.3	5.9
Consumer Staples	0.9	4.7	0.9
Health Care	18.7	7.9	19.7
Financials	16.6	16.6	17.3
Information Technology	19.3	9.6	20.9
Communication Services	0.3	3.6	0.3
Utilities	0.0	7.8	0.0
Real Estate	5.3	11.6	5.6

#### Account Information

Account Name	<b>Newton Small Cap Growth</b>
Account Structure	<b>Separate Account</b>
Investment Style	<b>Active</b>
Inception Date	<b>8/31/09</b>
Account Type	<b>US Equity</b>
Benchmark	<b>Russell 2000 Growth</b>
Universe	<b>eV US Small Cap Growth Equity Net</b>

#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Newton Small Cap Growth	-13.4	-13.2	16.8	18.2	15.4	15.7	Aug-09
<i>Russell 2000 Growth</i>	-12.6	-14.3	9.9	10.3	11.2	12.8	Aug-09
<i>eV US Small Cap Growth Equity Net Median</i>	-13.4	-9.1	14.8	15.5	13.4	15.0	Aug-09
<i>eV US Small Cap Growth Equity Net Rank</i>	51	69	32	22	17	33	Aug-09

#### Top 10 Holdings

PLANET FITNESS INC	3.5%
RAPID7 INC	3.4%
CACTUS INC	2.9%
GROCERY OUTLET INC	2.8%
IRHYTHM TECHNOLOGIES INC	2.8%
HUBSPOT INC	2.7%
ENERGY RECOVERY INC	2.5%
ISHARES RUSSELL 2000 GROWTH ETF	2.3%
BIOHAVEN PHARMACEUTICAL HOLDING CO LTD	2.2%
EQT CORP	2.2%
<b>Total</b>	<b>27.4%</b>

#### Boston Company Small Cap Growth Characteristics

	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
<b>Market Value</b>			
Market Value (\$M)	52.2	--	60.2
Number Of Holdings	96	1243	103
<b>Characteristics</b>			
Weighted Avg. Market Cap. (\$B)	5.3	3.7	6.6
Median Market Cap (\$B)	3.2	1.3	3.4
P/E Ratio	25.0	20.6	29.0
Yield	0.2	0.5	0.1
EPS Growth - 5 Yrs.	26.7	18.9	29.3
Price to Book	3.7	4.2	4.8
<b>Sector Distribution</b>			
Energy	4.9	3.4	2.9
Materials	1.3	3.5	1.4
Industrials	16.7	15.6	16.8
Consumer Discretionary	10.9	13.6	8.6
Consumer Staples	6.3	4.0	5.9
Health Care	29.1	25.2	31.4
Financials	2.6	5.5	2.9
Information Technology	17.7	22.9	19.7
Communication Services	2.4	2.7	2.8
Utilities	0.0	0.4	0.0
Real Estate	1.8	3.3	2.5

#### Account Information

Account Name	LMCG Small Cap Value
Account Structure	Separate Account
Investment Style	Active
Inception Date	3/31/11
Account Type	US Equity
Benchmark	Russell 2000 Value
Universe	eV US Small Cap Value Equity Net

#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
LMCG Small Cap Value	-3.6	7.8	13.0	8.0	10.1	9.2	Mar-11
Russell 2000 Value	-2.4	3.3	12.7	8.6	10.5	9.4	Mar-11
eV US Small Cap Value Equity Net Median	-3.1	4.8	13.0	9.1	10.8	9.9	Mar-11
eV US Small Cap Value Equity Net Rank	55	30	50	66	67	72	Mar-11

#### Top 10 Holdings

REGAL REXNORD CORPORATION	2.8%
PORTLAND GENERAL ELECTRIC CO	2.5%
NEWMARK GROUP INC	2.4%
PINNACLE FINANCIAL PARTNERS INC	2.3%
MURPHY USA INC	2.3%
BANKUNITED INC	2.2%
WINTRUST FINANCIAL CORP.	2.2%
CLEAN HARBORS INC	2.2%
WESTERN ALLIANCE BANCORPORATION	1.9%
LIVENT CORP	1.9%
<b>Total</b>	<b>22.5%</b>

#### LMCG Small Cap Value Characteristics

	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
<b>Market Value</b>			
Market Value (\$M)	51.1	--	52.9
Number Of Holdings	87	1435	87
<b>Characteristics</b>			
Weighted Avg. Market Cap. (\$B)	4.4	3.2	4.6
Median Market Cap (\$B)	3.7	1.1	3.9
P/E Ratio	14.7	13.1	16.2
Yield	1.6	1.8	1.4
EPS Growth - 5 Yrs.	12.2	13.1	13.1
Price to Book	2.1	1.8	2.2
<b>Sector Distribution</b>			
Energy	4.8	9.6	3.0
Materials	6.6	4.5	5.9
Industrials	21.7	15.3	22.7
Consumer Discretionary	8.5	7.1	8.9
Consumer Staples	7.9	3.0	8.2
Health Care	4.5	8.9	4.4
Financials	22.6	25.4	23.3
Information Technology	9.2	5.4	9.9
Communication Services	1.6	3.5	1.8
Utilities	5.5	5.4	5.0
Real Estate	5.1	11.9	5.4

#### Account Information

Account Name	<b>Aristotle International Equity</b>
Account Structure	<b>Commingled Fund</b>
Investment Style	<b>Active</b>
Inception Date	<b>3/01/21</b>
Account Type	<b>Non-US Stock Developed</b>
Benchmark	<b>MSCI EAFE</b>
Universe	<b>eV EAFE Core Equity Net</b>

#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Aristotle International Equity	-10.1	1.0	--	--	--	3.8	Mar-21
MSCI EAFE	-5.9	1.2	7.8	6.7	6.3	3.2	Mar-21
eV EAFE Core Equity Net Median	-7.4	-1.0	8.2	7.0	6.9	1.5	Mar-21
eV EAFE Core Equity Net Rank	78	34	--	--	--	38	Mar-21

#### Top 10 Holdings

ACCENTURE PLC	5.4%
BROOKFIELD ASSET MANAGEMENT INC	4.9%
SONY GROUP CORPORATION	4.7%
DASSAULT SYSTEMES SA	4.1%
NEMETSCHKE SE	3.8%
ASHTED GROUP PLC	3.8%
CREDICORP LTD	3.3%
GLAXOSMITHKLINE PLC	3.2%
DBS GROUP HOLDINGS LTD	3.1%
ALCON INC	3.1%
<b>Total</b>	<b>39.4%</b>

#### Aristotle International Equity Characteristics

	Portfolio Q1-22	Index Q1-22
<b>Market Value</b>		
Market Value (\$M)	22.5	--
Number Of Holdings	43	823
<b>Characteristics</b>		
Weighted Avg. Market Cap. (\$B)	81.2	84.0
Median Market Cap (\$B)	35.9	13.3
P/E Ratio	19.7	14.8
Yield	1.8	2.9
EPS Growth - 5 Yrs.	13.6	13.6
Price to Book	2.7	2.5
<b>Sector Distribution</b>		
Energy	2.3	4.1
Materials	4.7	8.2
Industrials	19.6	15.4
Consumer Discretionary	13.6	11.6
Consumer Staples	8.4	10.2
Health Care	9.9	13.0
Financials	20.9	17.7
Information Technology	15.6	8.6
Communication Services	2.7	4.8
Utilities	0.0	3.4
Real Estate	0.0	2.9



### Walter Scott International Equity | As of March 31, 2022

#### Account Information

Account Name	Walter Scott International Equity
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	3/01/21
Account Type	Non-US Stock Developed
Benchmark	MSCI EAFE
Universe	eV EAFE Core Equity Net

#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Walter Scott International Equity	-11.9	-0.9	--	--	--	1.0	Mar-21
MSCI EAFE	-5.9	1.2	7.8	6.7	6.3	3.2	Mar-21
eV EAFE Core Equity Net Median	-7.4	-1.0	8.2	7.0	6.9	1.5	Mar-21
eV EAFE Core Equity Net Rank	86	50	--	--	--	57	Mar-21

#### Top 10 Holdings

KEYENCE CORP	3.5%
NOVO NORDISK 'B'	3.5%
ASML HOLDING NV	3.4%
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	3.3%
ALIMENTATION COUCHE-TARD INC	3.1%
SHIN-ETSU CHEMICAL CO LTD	2.9%
DAIKIN INDUSTRIES LTD	2.8%
AIA GROUP LTD	2.7%
ROCHE HOLDING AG	2.6%
CANADIAN NATIONAL RAILWAY CO	2.5%
<b>Total</b>	<b>30.3%</b>

#### Walter Scott International Equity Characteristics

	Portfolio Q1-22	Index Q1-22
<b>Market Value</b>		
Market Value (\$M)	19.8	--
Number Of Holdings	50	823
<b>Characteristics</b>		
Weighted Avg. Market Cap. (\$B)	110.2	84.0
Median Market Cap (\$B)	42.7	13.3
P/E Ratio	26.1	14.8
Yield	1.8	2.9
EPS Growth - 5 Yrs.	10.0	13.6
Price to Book	4.0	2.5
<b>Sector Distribution</b>		
Energy	1.4	4.1
Materials	10.6	8.2
Industrials	22.0	15.4
Consumer Discretionary	7.5	11.6
Consumer Staples	9.8	10.2
Health Care	22.1	13.0
Financials	4.3	17.7
Information Technology	15.6	8.6
Communication Services	0.0	4.8
Utilities	1.6	3.4
Real Estate	3.6	2.9

### Driehaus Emerging Markets Growth | As of March 31, 2022

#### Account Information

Account Name	Driehaus Emerging Markets Growth
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	3/01/19
Account Type	Non-US Stock Emerging
Benchmark	MSCI Emerging Markets
Universe	eV Emg Mkts Equity Net

#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Driehaus Emerging Markets Growth	-8.7	-9.4	9.4	--	--	9.5	Mar-19
MSCI Emerging Markets	-7.0	-11.4	4.9	6.0	3.4	5.1	Mar-19
eV Emg Mkts Equity Net Median	-8.0	-10.1	6.0	6.1	3.9	6.2	Mar-19
eV Emg Mkts Equity Net Rank	57	48	23	--	--	25	Mar-19

#### Top 10 Holdings

TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	8.3%
SAMSUNG ELECTRONICS CO LTD	5.8%
TENCENT HOLDINGS LTD	3.5%
RELIANCE INDUSTRIES LTD	2.5%
GPO FINANCE BANORTE	2.5%
PT BANK CENTRAL ASIA TBK	2.5%
CHINA MERCHANTS BANK CO LTD	2.5%
ICICI BANK LTD	2.4%
HOUSING DEVELOPMENT FINANCE CORP LTD	2.0%
H D F C BANK LTD	1.9%
<b>Total</b>	<b>33.8%</b>

#### Driehaus Emerging Markets Growth Characteristics

	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
<b>Market Value</b>			
Market Value (\$M)	53.9	--	59.0
Number Of Holdings	88	1391	88
<b>Characteristics</b>			
Weighted Avg. Market Cap. (\$B)	171.0	126.9	175.5
Median Market Cap (\$B)	28.7	7.1	34.9
P/E Ratio	18.9	12.6	21.3
Yield	1.8	2.6	1.7
EPS Growth - 5 Yrs.	17.8	15.8	18.6
Price to Book	3.3	2.6	4.1
<b>Sector Distribution</b>			
Energy	7.3	4.8	6.6
Materials	8.0	9.4	7.2
Industrials	5.5	5.4	6.2
Consumer Discretionary	5.4	12.3	9.8
Consumer Staples	8.0	5.8	4.8
Health Care	5.5	3.9	3.9
Financials	23.8	22.1	19.7
Information Technology	21.5	21.6	26.6
Communication Services	9.4	10.1	8.3
Utilities	1.0	2.5	0.8
Real Estate	0.0	2.1	0.0

### First Eagle Global Value Fund | As of March 31, 2022

#### Account Information

Account Name	<b>First Eagle Global Value Fund</b>
Account Structure	<b>Commingled Fund</b>
Investment Style	<b>Active</b>
Inception Date	<b>2/01/18</b>
Account Type	<b>Equity</b>
Benchmark	<b>MSCI ACWI Value NR USD</b>
Universe	<b>eV Global Value Equity Net</b>

#### Portfolio Performance Summary

	QTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception
	(%)	(%)	(%)	(%)	(%)	(%)	Date
First Eagle Global Value Fund	0.5	8.1	9.9	--	--	6.2	Feb-18
MSCI ACWI Value NR USD	-1.0	8.8	9.0	7.5	7.6	4.7	Feb-18
eV Global Value Equity Net Median	-2.3	5.8	10.8	8.1	8.2	5.2	Feb-18
eV Global Value Equity Net Rank	22	31	66	--	--	35	Feb-18

#### Top 10 Holdings

ORACLE CORP	4.0%
EXXON MOBIL CORP	3.7%
COMCAST CORP	2.6%
META PLATFORMS INC	2.1%
BRITISH AMERICAN TOBACCO PLC	2.1%
C.H. ROBINSON WORLDWIDE INC.	2.1%
SCHLUMBERGER LTD	2.1%
PHILIP MORRIS INTERNATIONAL INC	1.9%
ANTHEM INC	1.8%
GROUPE BRUXELLES LAMBERT SA	1.8%
<b>Total</b>	<b>24.2%</b>

#### First Eagle Global Value Fund Characteristics

	Portfolio	Index	Portfolio
	Q1-22	Q1-22	Q4-21
<b>Market Value</b>			
Market Value (\$M)	25.7	--	25.6
Number Of Holdings	131	2929	138
<b>Characteristics</b>			
Weighted Avg. Market Cap. (\$B)	173.5	415.1	184.0
Median Market Cap (\$B)	29.1	13.2	30.8
P/E Ratio	17.5	18.4	17.9
Yield	2.3	1.9	2.2
EPS Growth - 5 Yrs.	11.9	18.4	13.1
Price to Book	2.4	3.5	2.5
<b>Sector Distribution</b>			
Energy	5.6	4.3	4.8
Materials	6.1	5.0	5.4
Industrials	10.7	9.5	10.6
Consumer Discretionary	5.4	11.7	6.3
Consumer Staples	11.5	6.9	11.5
Health Care	6.2	11.8	6.0
Financials	12.8	14.6	15.2
Information Technology	10.1	22.4	11.0
Communication Services	5.5	8.1	5.6
Utilities	0.5	2.9	0.6
Real Estate	4.1	2.7	4.1

### Kopernik Global All Cap Fund | As of March 31, 2022

#### Account Information

Account Name	<b>Kopernik Global All Cap Fund</b>
Account Structure	<b>Commingled Fund</b>
Investment Style	<b>Active</b>
Inception Date	<b>2/01/18</b>
Account Type	<b>Equity</b>
Benchmark	<b>MSCI ACWI Value NR USD</b>
Universe	<b>eV Global All Cap Value Eq Net</b>

#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Kopernik Global All Cap Fund	0.2	9.0	19.2	--	--	10.9	Feb-18
MSCI ACWI Value NR USD	-1.0	8.8	9.0	7.5	7.6	4.7	Feb-18
eV Global All Cap Value Eq Net Median	-1.7	5.0	10.9	8.4	8.0	5.4	Feb-18
eV Global All Cap Value Eq Net Rank	27	23	4	--	--	8	Feb-18

#### Top 10 Holdings

NEWCREST MINING LTD	5.2%
KT CORP	4.9%
TURQUOISE HILL RESOURCES LTD	3.2%
KAZATOMPROM JSC NAC	3.1%
CAMECO CORP	3.0%
CENTRAIS ELETRICAS BRASILEIRAS SA-ELETRONBRAS	2.8%
CHINA TELECOM CORP LTD	2.8%
EDF	2.7%
GOLDEN AGRI-RESOURCES LTD	2.7%
SPROTT PHYSICAL URANIUM TR UNIT	2.6%
<b>Total</b>	<b>33.1%</b>

#### Kopernik Global All Cap Fund Characteristics

	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
<b>Market Value</b>			
Market Value (\$M)	37.6	--	37.5
Number Of Holdings	103	2929	100
<b>Characteristics</b>			
Weighted Avg. Market Cap. (\$B)	12.3	415.1	16.1
Median Market Cap (\$B)	2.7	13.2	2.5
P/E Ratio	7.7	18.4	7.1
Yield	3.0	1.9	2.7
EPS Growth - 5 Yrs.	11.3	18.4	14.2
Price to Book	2.0	3.5	1.9
<b>Sector Distribution</b>			
Energy	14.5	4.3	19.5
Materials	24.2	5.0	24.4
Industrials	10.2	9.5	9.6
Consumer Discretionary	2.8	11.7	2.7
Consumer Staples	7.3	6.9	8.1
Health Care	2.6	11.8	2.7
Financials	2.9	14.6	3.1
Information Technology	0.4	22.4	0.2
Communication Services	8.4	8.1	7.7
Utilities	9.4	2.9	9.2
Real Estate	1.1	2.7	1.7

### Lee Munder Global Multi-Cap Strategy | As of March 31, 2022

#### Account Information

Account Name	Lee Munder Global Multi-Cap Strategy
Account Structure	Separate Account
Investment Style	Active
Inception Date	3/01/18
Account Type	Equity
Benchmark	MSCI ACWI
Universe	eV All Global Equity Net

#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Lee Munder Global Multi-Cap Strategy	-5.4	7.2	11.7	--	--	8.2	Mar-18
MSCI ACWI	-5.4	7.3	13.8	11.6	10.0	10.0	Mar-18
eV All Global Equity Net Median	-6.6	5.6	13.1	11.4	10.0	10.1	Mar-18
eV All Global Equity Net Rank	43	40	63	--	--	70	Mar-18

#### Top 10 Holdings

APPLE INC	6.0%
MICROSOFT CORP	5.4%
ALPHABET INC	5.2%
AMAZON.COM INC	5.1%
ISHARES CORE MSCI EMERGING MARKETS ETF	3.7%
ISHARES MSCI SOUTH KOREA ETF	2.3%
ISHARE INC - ISHARES MSCI TAIWAN ETF	2.3%
UNITEDHEALTH GROUP INC	2.1%
NORTHROP GRUMMAN CORP	1.9%
MASTERCARD INC	1.8%
<b>Total</b>	<b>35.9%</b>

#### Lee Munder Global Multi-Cap Strategy Characteristics

	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
<b>Market Value</b>			
Market Value (\$M)	44.9	--	47.4
Number Of Holdings	72	2929	73
<b>Characteristics</b>			
Weighted Avg. Market Cap. (\$B)	596.0	415.1	608.3
Median Market Cap (\$B)	114.6	13.2	111.7
P/E Ratio	20.0	18.4	23.0
Yield	1.3	1.9	1.3
EPS Growth - 5 Yrs.	21.0	18.4	20.1
Price to Book	4.2	3.5	4.4
<b>Sector Distribution</b>			
Energy	2.7	4.3	2.0
Materials	2.2	5.0	2.2
Industrials	6.5	9.5	6.2
Consumer Discretionary	11.4	11.7	12.5
Consumer Staples	5.2	6.9	5.1
Health Care	13.0	11.8	11.5
Financials	12.2	14.6	13.0
Information Technology	23.9	22.4	24.1
Communication Services	10.1	8.1	10.1
Utilities	1.5	2.9	1.3
Real Estate	1.1	2.7	1.0

#### Account Information

Account Name	<b>Rhumblin TIPS Trust</b>
Account Structure	<b>Commingled Fund</b>
Investment Style	<b>Passive</b>
Inception Date	<b>9/01/20</b>
Account Type	<b>US Fixed Income Investment Grade</b>
Benchmark	<b>Bloomberg US TIPS TR</b>
Universe	<b>eV US TIPS / Inflation Fixed Inc Net</b>

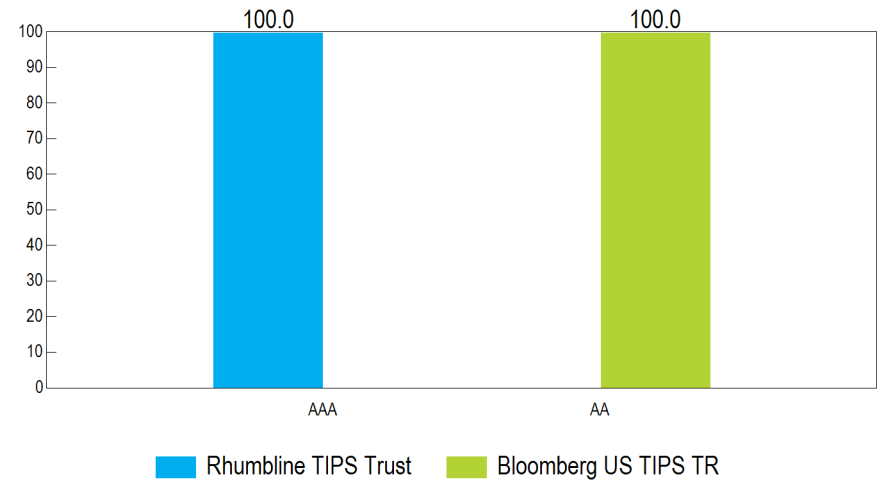
#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Rhumblin TIPS Trust	-3.0	4.3	--	--	--	2.5	Sep-20
<i>Bloomberg US TIPS TR</i>	-3.0	4.3	6.2	4.4	2.7	2.5	Sep-20
<i>eV US TIPS / Inflation Fixed Inc Net Median</i>	-2.6	4.1	6.3	4.4	2.7	2.9	Sep-20
<i>eV US TIPS / Inflation Fixed Inc Net Rank</i>	77	35	--	--	--	74	Sep-20

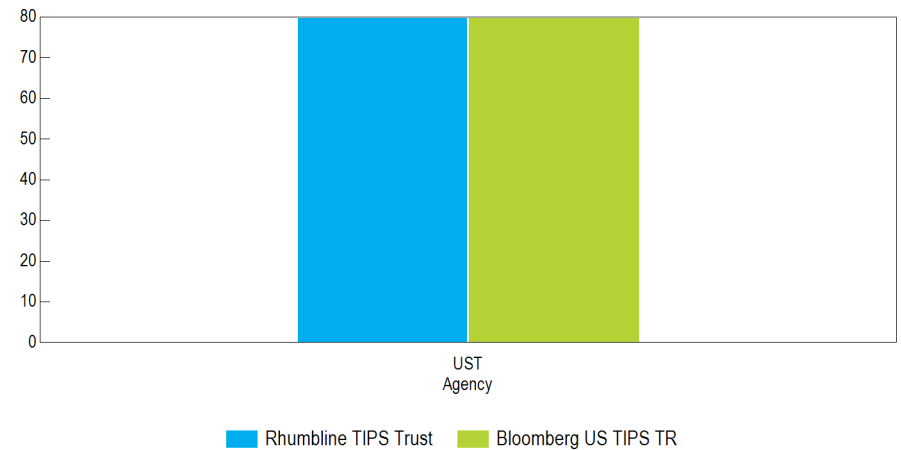
#### Rhumblin TIPS Trust Characteristics vs. Bloomberg US TIPS TR

	Portfolio Q1-22	Index Q1-22
<b>Fixed Income Characteristics</b>		
Yield to Maturity	2.5	2.4
Average Duration	7.5	7.5
Average Quality	AAA	AA
Weighted Average Maturity	8.0	8.0

#### Credit Quality Allocation



#### Sector Allocation



#### Account Information

Account Name	<b>Eaton Vance High Yield</b>
Account Structure	<b>Commingled Fund</b>
Investment Style	<b>Active</b>
Inception Date	<b>4/30/06</b>
Account Type	<b>US Fixed Income High Yield</b>
Benchmark	<b>ICE BofA US High Yield TR</b>
Universe	<b>eV US High Yield Fixed Inc Net</b>

#### Portfolio Performance Summary

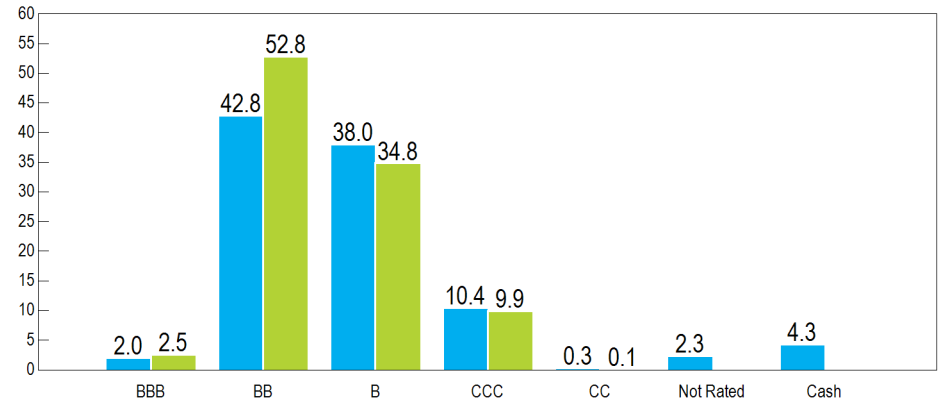
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Eaton Vance High Yield	-4.0	0.2	4.5	4.4	5.6	6.4	Apr-06
ICE BofA US High Yield TR	-4.5	-0.3	4.4	4.6	5.7	6.7	Apr-06
eV US High Yield Fixed Inc Net Median	-3.9	0.0	4.4	4.4	5.4	6.3	Apr-06
eV US High Yield Fixed Inc Net Rank	53	40	48	49	42	37	Apr-06

#### Eaton Vance High Yield Characteristics

vs. ICE BofA US High Yield TR

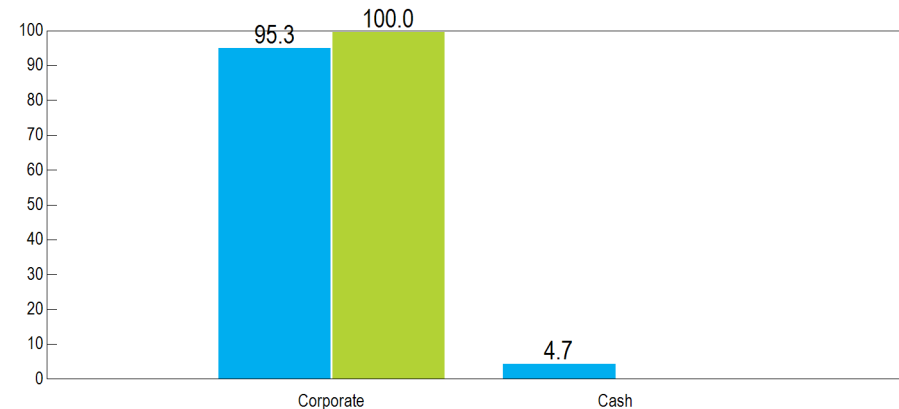
	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
<b>Fixed Income Characteristics</b>			
Yield to Maturity	5.6	6.0	4.6
Average Duration	4.1	4.9	3.4
Average Quality	B	B	B
Weighted Average Maturity	6.5	6.1	6.5

#### Credit Quality Allocation



■ Eaton Vance High Yield ■ ICE BofA US High Yield TR

#### Sector Allocation



■ Eaton Vance High Yield ■ ICE BofA US High Yield TR

### Eaton Vance EMD Opportunities Fund | As of March 31, 2022

#### Account Information

Account Name	<b>Eaton Vance EMD Opportunities Fund</b>
Account Structure	<b>Commingled Fund</b>
Investment Style	<b>Passive</b>
Inception Date	<b>8/01/20</b>
Account Type	<b>Non-US Fixed Income</b>
Benchmark	<b>JP Morgan EMBI Global Diversified</b>
Universe	<b>eV Emg Mkts Fixed Inc - Blended Currency Net</b>

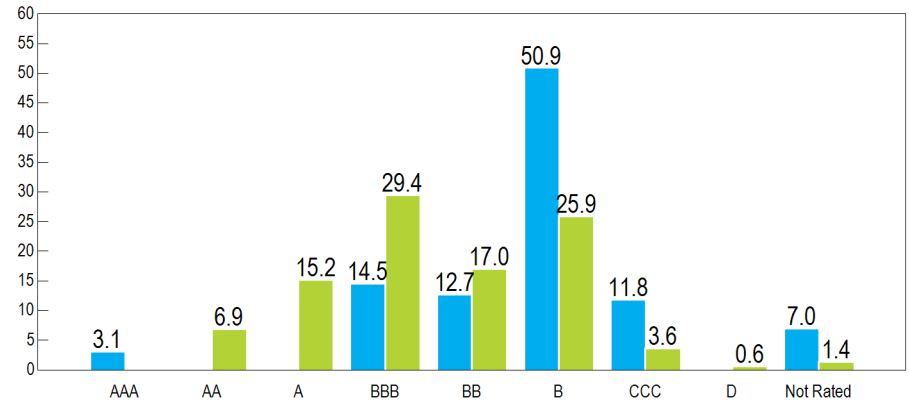
#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Eaton Vance EMD Opportunities Fund	-9.8	-6.8	--	--	--	-0.1	Aug-20
JP Morgan EMBI Global Diversified	-10.0	-7.4	0.0	1.7	3.7	-4.7	Aug-20
eV Emg Mkts Fixed Inc - Blended Currency Net Median	-7.6	-7.0	0.2	1.4	2.0	-3.0	Aug-20
eV Emg Mkts Fixed Inc - Blended Currency Net Rank	94	46	--	--	--	18	Aug-20

#### Eaton Vance EMD Opportunities Fund Characteristics vs. JP Morgan EMBI Global Diversified

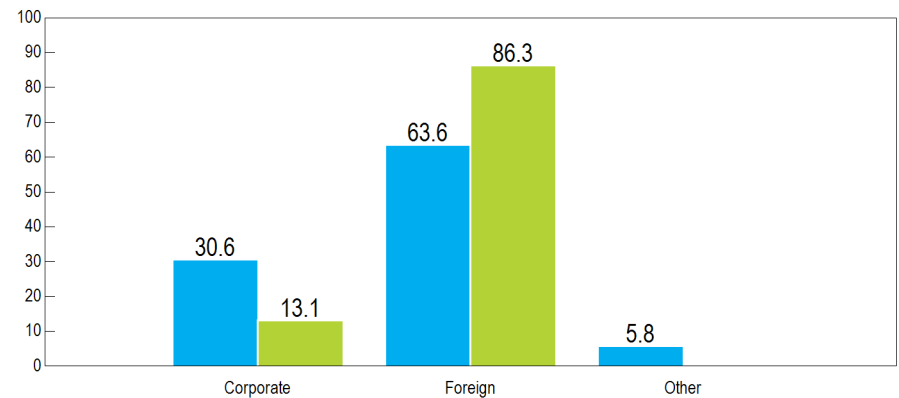
	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
<b>Fixed Income Characteristics</b>			
Yield to Maturity		8.3	6.1
Average Duration		2.2	7.5
Average Quality		BB	BB
Weighted Average Maturity		8.9	12.4
			7.1

#### Credit Quality Allocation



■ Eaton Vance EMD Opportunities Fund ■ JP Morgan EMBI Global Diversified

#### Sector Allocation



■ Eaton Vance EMD Opportunities Fund ■ JP Morgan EMBI Global Diversified



#### Account Information

Account Name	First Eagle Bank Loan Select Fund
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	9/30/10
Account Type	US Fixed Income High Yield
Benchmark	Credit Suisse Leveraged Loans
Universe	Bank Loan MStar MF

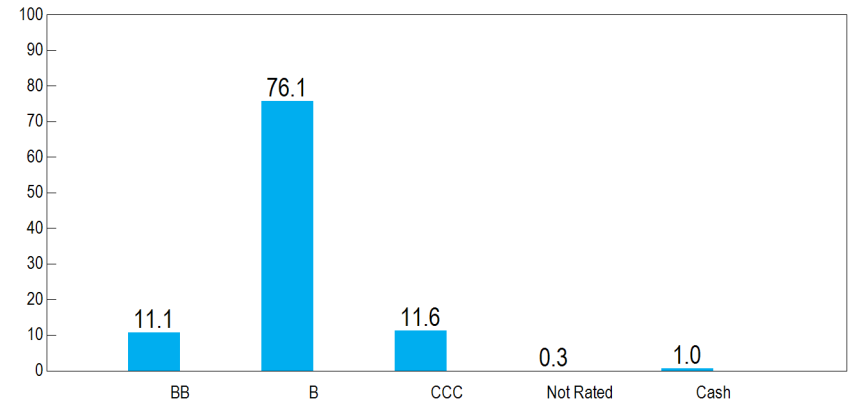
#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
First Eagle Bank Loan Select Fund	0.0	3.8	4.2	3.9	4.9	5.1	Sep-10
Credit Suisse Leveraged Loans	-0.1	3.2	4.1	4.1	4.5	4.6	Sep-10
Bank Loan MStar MF Median	-0.4	2.5	3.3	3.4	3.7	4.0	Sep-10
Bank Loan MStar MF Rank	7	8	11	11	1	1	Sep-10

#### THL Bank Loan Select Fund Characteristics

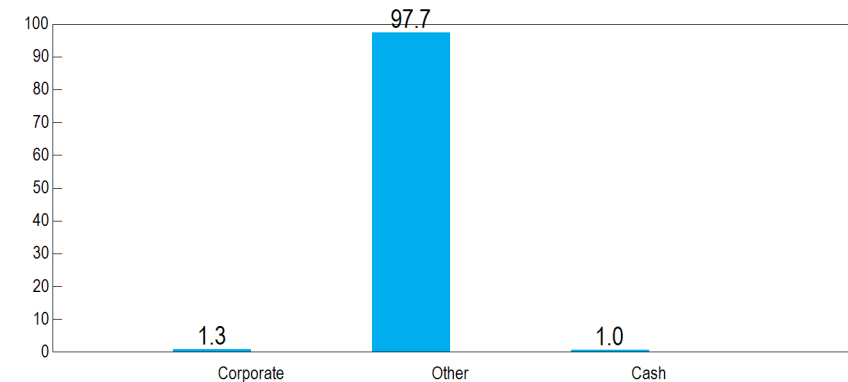
	Portfolio Q1-22	Portfolio Q4-21
Fixed Income Characteristics		
Yield to Maturity	7.8	5.4
Average Duration	0.2	0.2
Average Quality	B	B
Weighted Average Maturity	4.8	4.9

#### Credit Quality Allocation



First Eagle Bank Loan Select Fund

#### Sector Allocation



First Eagle Bank Loan Select Fund

#### Account Information

Account Name	<b>Manulife Strategic Fixed Income</b>
Account Structure	<b>Commingled Fund</b>
Investment Style	<b>Active</b>
Inception Date	<b>7/17/19</b>
Account Type	<b>US Fixed Income High Yield</b>
Benchmark	<b>Bloomberg Multiverse TR</b>
Universe	<b>Multisector Bond MStar MF</b>

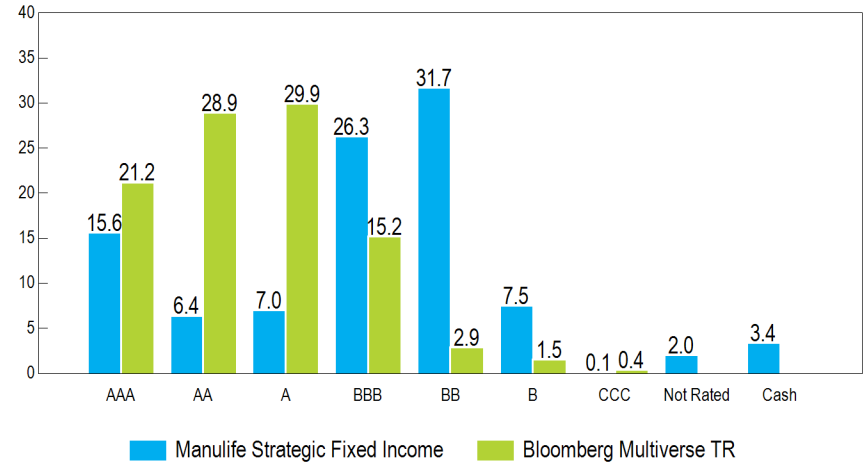
#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Manulife Strategic Fixed Income	-4.0	-2.7	--	--	--	2.6	Jul-19
Bloomberg Multiverse TR	-6.1	-6.2	0.8	1.8	1.2	-0.3	Jul-19

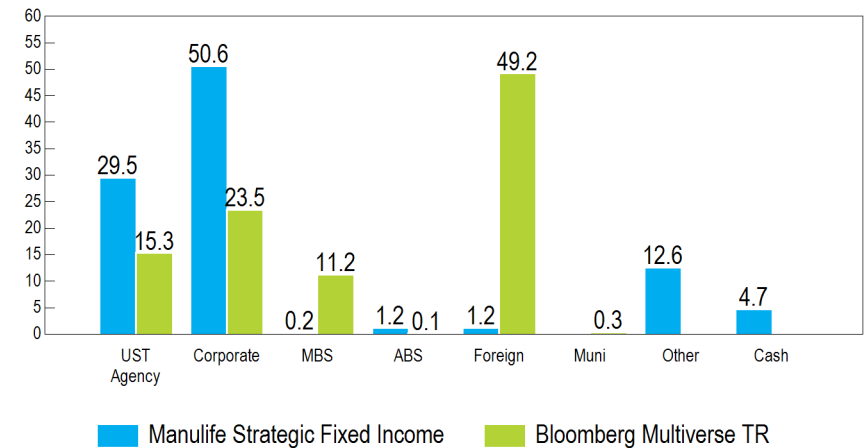
#### Manulife Strategic Fixed Income Characteristics vs. Bloomberg Multiverse TR

	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
<b>Fixed Income Characteristics</b>			
Yield to Maturity	3.3	2.4	2.5
Average Duration	3.6	7.2	3.5
Average Quality	BBB	A	BBB
Weighted Average Maturity	5.5	10.8	4.9

#### Credit Quality Allocation



#### Sector Allocation



#### Account Information

Account Name	Mesirow High Yield
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	8/01/19
Account Type	US Fixed Income High Yield
Benchmark	Bloomberg US Corporate High Yield TR
Universe	eV US High Yield Fixed Inc Net

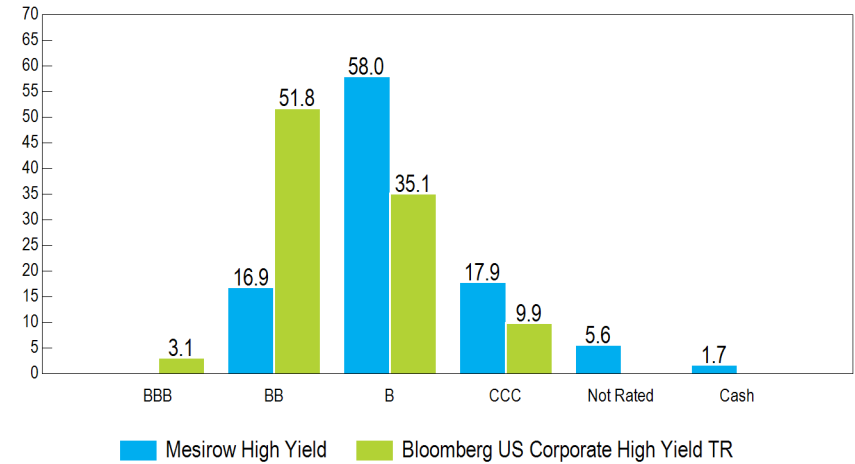
#### Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Mesirow High Yield	-2.8	3.0	--	--	--	8.2	Aug-19
Bloomberg US Corporate High Yield TR	-4.8	-0.7	4.6	4.7	5.7	4.0	Aug-19
eV US High Yield Fixed Inc Net Median	-3.9	0.0	4.4	4.4	5.4	3.8	Aug-19
eV US High Yield Fixed Inc Net Rank	27	7	--	--	--	2	Aug-19

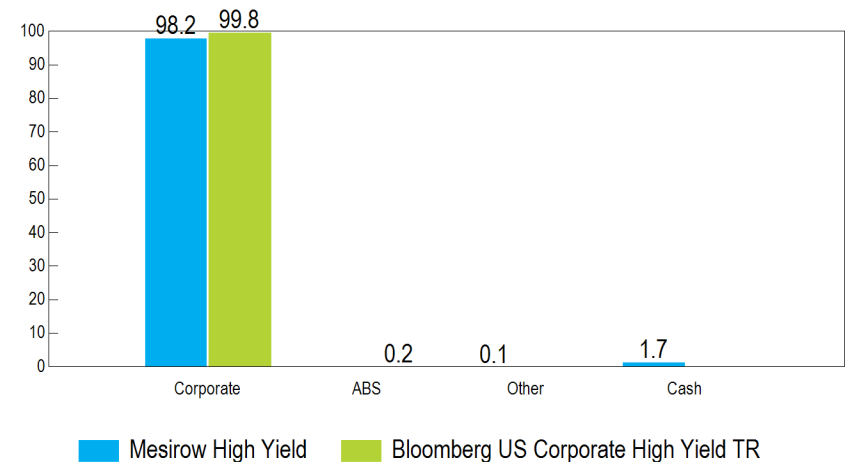
#### Mesirow High Yield Characteristics vs. Bloomberg US Corporate High Yield TR

	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
Fixed Income Characteristics			
Yield to Maturity	7.9	6.0	7.2
Average Duration	4.2	4.9	3.3
Average Quality	B	B	B
Weighted Average Maturity	5.7	6.2	5.1

#### Credit Quality Allocation



#### Sector Allocation



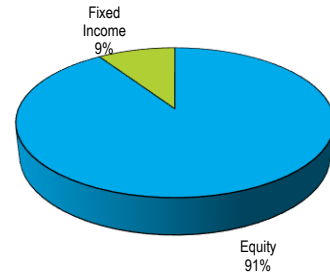
### EnTrustPermal Special Opportunities Evergreen Fund, Ltd. | As of March 31, 2022

#### Account Information

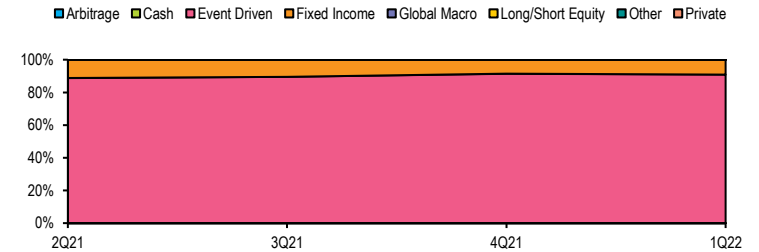
<b>Mandate:</b>	Hedge Fund, Fund of Funds
<b>Market Value:</b>	\$22.6 M
<b>Portfolio Manager:</b>	Team
<b>Location:</b>	New York, NY
<b>Inception Date:</b>	1/1/2019
<b>Account Type:</b>	Limited Partnership
<b># of Investments:</b>	26
<b>Fee Schedule:</b>	1.25% Management Fee, 10% Performance Fee

**Liquidity Constraints:** Distributions from monetized investments will be recycled into the Fund, unless otherwise noted by the investor. Investors who opt out of the Fund (in part or in whole) following expiration of the 3 year Commitment Period, and any applicable successive renewals, will receive their pro rata distributions of underlying investments in the Fund, net of fees and expenses, as they are realized by the Investment Manager

#### Instrument Allocation



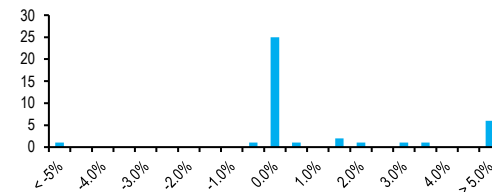
#### Historical Strategy Allocations



Geographic Exposure Allocation (%)	3/31/2022	12/31/2021	9/30/2021	6/30/2021
North America	69	66	59	62
Developed Europe	28	30	35	28
Developed Asia	3	4	6	10
Emerging Markets	1	0	0	1

Exposure Report (%)	3/31/2022	12/31/2021	9/30/2021	6/30/2021
Total Gross Exposure	94	92	88	89
Gross Long Exposure	93	91	86	88
Gross Short Exposure	1	1	2	1
Net Exposure	92	90	85	87

#### Return Distribution



#### Portfolio Performance Summary

	1Q22 (%)	1 YR (%)	3 YR (%)	5 YR (%)	Since 1/2019 (%)
EnTrustPermal Special Opportunities Evergreen Fund, Ltd.	0.0	4.4	9.2	NA	10.6
HFRI Fund of Funds Composite Index (QTR)	NA	NA	NA	NA	NA

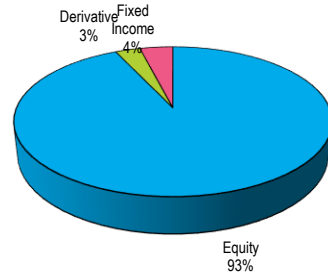
#### Top 5 Funds (%)

Seaworld II - Hill Path	12
Stubhub - Decleration	9
Dollar Tree - Mantle Ridge	7
IWG - Tosca	6
MGM - Corvex	6

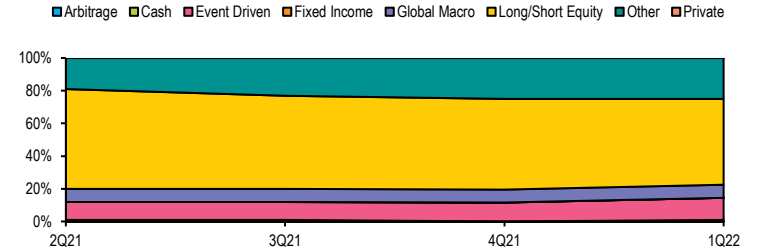
#### Account Information

<b>Mandate:</b>	Hedge Fund, Fund of Funds
<b>Market Value:</b>	\$11.2 M
<b>Portfolio Manager:</b>	Team
<b>Location:</b>	New York, NY
<b>Inception Date:</b>	10/1/2018
<b>Account Type:</b>	Limited Partnership
<b># of Investments:</b>	16
<b>Fee Schedule:</b>	0.5% Management Fee, 5% Performance Fee
<b>Liquidity Constraints:</b>	Quarterly with 65 days' notice

#### Instrument Allocation



#### Historical Strategy Allocations



#### Portfolio Performance Summary

	1Q22 (%)	1 YR (%)	3 YR (%)	5 YR (%)	Since 10/2018 (%)
Old Farm Partners Master Fund, L.P.	-3.3	1.4	9.0	NA	6.8
HFRI Fund of Funds Composite Index	-2.7	1.2	5.9	4.6	4.8

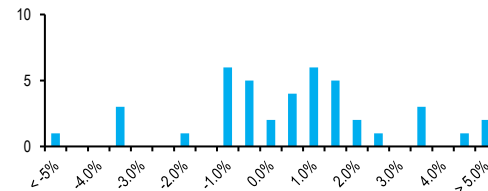
#### Top 5 Funds (%)

Crake	8
Divisar	7
Sio	7
Plustick	6
Prospect	5

Geographic Exposure Allocation (%)	3/31/2022	12/31/2021	9/30/2021	6/30/2021
North America	66	67	72	70
Developed Europe	29	28	22	22
Emerging Markets	3	4	4	4
Developed Asia	2	1	2	4

Exposure Report (%)	3/31/2022	12/31/2021	9/30/2021	6/30/2021
Total Gross Exposure	123	125	136	155
Gross Long Exposure	82	89	93	109
Gross Short Exposure	41	36	43	46
Net Exposure	41	53	50	63

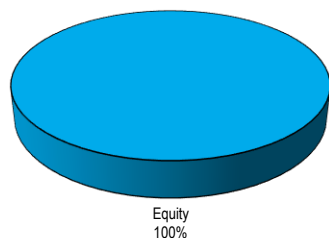
#### Return Distribution



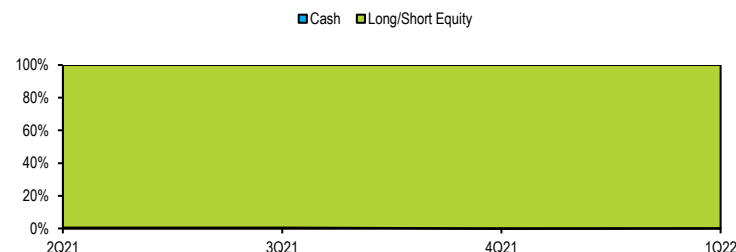
#### Account Information

<b>Mandate:</b>	Hedge Fund, Fund of Funds
<b>Market Value:</b>	\$61.4 M
<b>Portfolio Manager:</b>	Team
<b>Location:</b>	Greenwich, CT
<b>Inception Date:</b>	12/1/2018
<b>Account Type:</b>	Limited Partnership
<b># of Investments:</b>	Not Provided
<b>Fee Schedule:</b>	0.35% Management Fee, 10% Performance Fee
<b>Liquidity Constraints:</b>	Quarterly with 45 days' notice

#### Instrument Allocation



#### Historical Strategy Allocations



#### Portfolio Performance Summary

	1Q22 (%)	1 YR (%)	3 YR (%)	5 YR (%)	Since 12/2018 (%)
ABS Emerging Markets	-10.6	-9.6	8.0	NA	10.7
MSCI Emerging Markets	-7.0	-11.4	4.9	6.0	6.6

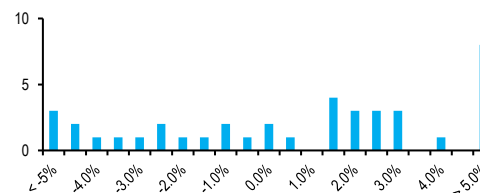
#### Top 5 Funds (%)

SinoVision Greater China SMA	16
Houshan SMA	10
ANDA SMA	9
IvyRock China SMA	8
WhiteOak SMA	7

Geographic Exposure Allocation (%)	3/31/2022	12/31/2021	9/30/2021	6/30/2021
Emerging Markets	97	96	96	97
North America	1	1	2	3
Developed Europe	1	1	1	0
Developed Asia	1	2	0	0

Exposure Report (%)	3/31/2022	12/31/2021	9/30/2021	6/30/2021
Total Gross Exposure	96	97	97	96
Gross Long Exposure	96	97	97	96
Gross Short Exposure	0	0	0	0
Net Exposure	96	97	97	96

#### Return Distribution

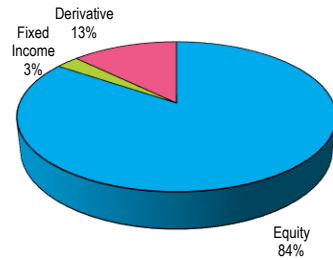


### ABS Offshore SPC - Global Segregated Portfolio | As of March 31, 2022

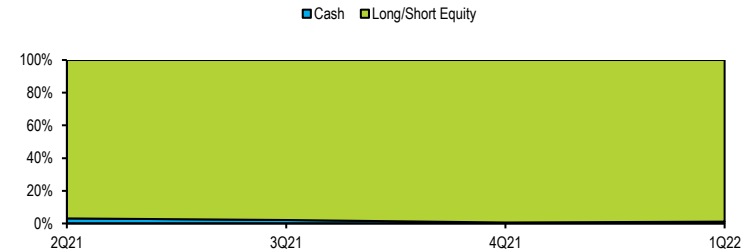
#### Account Information

<b>Mandate:</b>	Hedge Fund, Fund of Funds
<b>Market Value:</b>	\$36.3 M
<b>Portfolio Manager:</b>	Team
<b>Location:</b>	Greenwich, CT
<b>Inception Date:</b>	8/31/2010
<b>Account Type:</b>	Limited Partnership
<b># of Investments:</b>	Not Provided
<b>Fee Schedule:</b>	1.00% management fee; 5.0% performance fee
<b>Liquidity Constraints:</b>	Quarterly with 45 days' notice

#### Instrument Allocation



#### Historical Strategy Allocations



#### Portfolio Performance Summary

	1Q22 (%)	1 YR (%)	3 YR (%)	5 YR (%)	Since 8/2010 (%)
ABS Offshore SPC - Global Segregated Portfolio	-4.4	-3.0	7.0	5.6	5.6
HFRI Fund of Funds Composite Index	-2.7	1.2	5.9	4.6	3.7

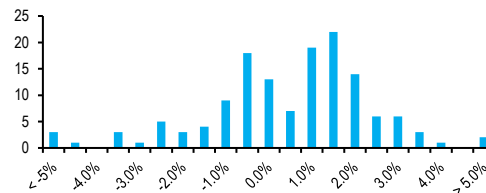
Geographic Exposure Allocation (%)	3/31/2022	12/31/2021	9/30/2021	6/30/2021
Emerging Markets	14	12	12	14
North America	70	68	68	65
Developed Europe	10	14	12	14
Developed Asia	6	7	7	7

Exposure Report (%)	3/31/2022	12/31/2021	9/30/2021	6/30/2021
Total Gross Exposure	148	149	147	153
Gross Long Exposure	95	101	99	103
Gross Short Exposure	53	48	48	50
Net Exposure	43	53	51	53

#### Top 5 Funds (%)

Seligman Tech Spectrum	6
TPG Public Equity	6
Antero Peak Long/Short	5
Sagil Latin American Opportunities	5
Energy Dynamics	5

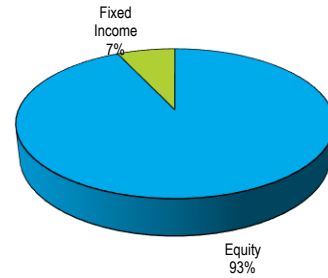
#### Return Distribution



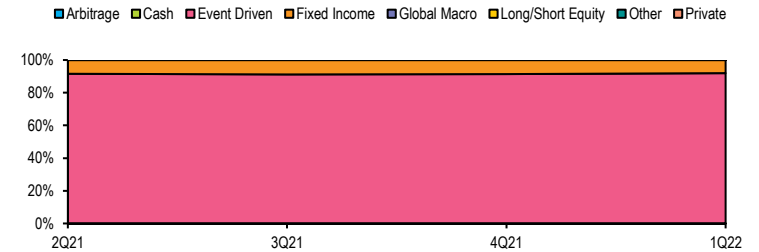
#### Account Information

<b>Mandate:</b>	Hedge Fund, Fund of Funds
<b>Market Value:</b>	\$18.5 M
<b>Portfolio Manager:</b>	Team
<b>Location:</b>	New York, NY
<b>Inception Date:</b>	10/1/2016
<b>Account Type:</b>	Limited Partnership
<b># of Investments:</b>	Not Provided
<b>Fee Schedule:</b>	1.25% management fee; 10% performance fee; 7.5% hurdle
<b>Liquidity Constraints:</b>	3 Year Lockup (4 years max) then quarterly with 95 days' notice

#### Instrument Allocation



#### Historical Strategy Allocations



#### Portfolio Performance Summary

	1Q22 (%)	1 YR (%)	3 YR (%)	5 YR (%)	Since 10/2016 (%)
EnTrust Special Opportunities Fund III, Ltd.	0.0	-5.6	4.5	4.0	8.3
HFRI Fund of Funds Composite Index (QTR)	NA	NA	NA	NA	NA

#### Geographic Exposure Allocation (%)

	3/31/2022	12/31/2021	9/30/2021	6/30/2021
North America	59	59	60	61
Developed Europe	36	34	33	31
Developed Asia	1	2	2	3
Emerging Markets	5	5	5	5

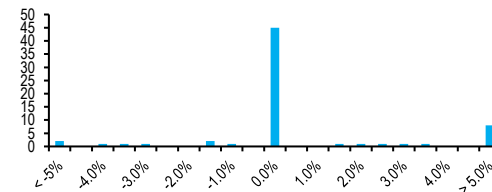
#### Exposure Report (%)

	3/31/2022	12/31/2021	9/30/2021	6/30/2021
Total Gross Exposure	98	98	98	101
Gross Long Exposure	98	98	98	101
Gross Short Exposure	0	0	0	0
Net Exposure	98	98	98	101

#### Top 5 Funds (%)

Seaworld - Hill Path	20
Deutsche Bank - Hudson Executive	9
IWG - Tosca	9
Bally's - Standard General	9
MGM - Corvex	8

#### Return Distribution





Annual Investment Expense Analysis				
As Of March 31, 2022				
Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
<b>Domestic Equity Assets</b>		<b>\$292,537,616</b>		
Rhumblin Russell 1000 Value	0.05% of First 25.0 Mil, 0.04% of Next 25.0 Mil, 0.03% Thereafter	\$61,219,540	\$25,866	0.04%
Rhumblin Russell 1000 Growth	0.05% of First 25.0 Mil, 0.04% of Next 25.0 Mil, 0.03% Thereafter	\$58,422,804	\$25,027	0.04%
Fisher Midcap Value	0.65% of Assets	\$69,580,384	\$452,272	0.65%
Newton Small Cap Growth	0.45% of Assets	\$52,183,452	\$234,826	0.45%
LMCG Small Cap Value	0.90% of Assets	\$51,131,437	\$460,183	0.90%
<b>International Developed Market Equity Assets</b>		<b>\$42,294,317</b>		
Aristotle International Equity	0.49% of Assets	\$22,534,208	\$110,418	0.49%
Walter Scott International Equity	0.75% of Assets	\$19,760,109	\$148,201	0.75%
<b>International Emerging Market Equity Assets</b>		<b>\$115,306,701</b>		
ABS Emerging Markets	Performance-based 0.35 and 0.10	\$61,396,722	\$214,889	0.35%
Driehaus Emerging Markets Growth	0.55% of Assets	\$53,909,979	\$296,505	0.55%
<b>Global Equity Assets</b>		<b>\$152,334,715</b>		
First Eagle Global Value Fund	0.75% of Assets	\$25,687,362	\$192,655	0.75%
Kopernik Global All Cap Fund	0.80% of First 50.0 Mil, 0.75% of Next 150.0 Mil, 0.70% of Next 250.0 Mil, 0.65% of Next 350.0 Mil	\$37,582,505	\$300,660	0.80%
Lee Munder Global Multi-Cap Strategy	0.45% of Assets	\$44,908,893	\$202,090	0.45%
Wellington Durable Enterprises, L.P.	0.60% of Assets	\$44,155,955	\$264,936	0.60%

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
<b>Core Fixed Income</b>		<b>\$119,126,857</b>		
Lord Abbett Short Duration Credit Trust II	0.17% of Assets	\$50,598,673	\$86,018	0.17%
Lord Abbett Core Fixed Income Trust II		\$43,306,776		
Rhumblin TIPS Trust	0.04% of First 5.0 Mil, 0.03% Thereafter	\$25,221,408	\$8,066	0.03%
<b>Value Added Fixed Income</b>		<b>\$100,099,894</b>		
Eaton Vance High Yield	0.42% of Assets	\$12,330,095	\$51,786	0.42%
First Eagle Bank Loan Select Fund	0.40% of Assets	\$10,868,079	\$43,472	0.40%
Manulife Strategic Fixed Income	0.35% of Assets	\$53,524,786	\$187,337	0.35%
Mesirow High Yield	0.40% of Assets	\$15,338,294	\$61,353	0.40%
Eaton Vance EMD Opportunities Fund	0.30% of Assets	\$8,038,640	\$24,116	0.30%

Total Retirement Association | As of March 31, 2022

Note: The value is based on December 31, 2021 FMV.

Private Equity	Commitment	Total Contributions	Total Distributions	Value
Ascend Ventures II, L.P.	2,500,000	2,327,488	925,962	52,310
Ascent Venture Partners IV, L.P.	2,500,000	2,502,219	417,638	7,498
Ascent Venture Partners V, L.P.	5,000,000	5,004,731	4,054,562	4,173,442
Audax Mezzanine Fund IV, L.P.	10,000,000	8,146,632	4,966,466	4,776,807
Charles River Partnership XI, L.P.	1,839,000	1,820,323	2,532,884	0
Charlesbank Technology Opportunities Fund, L.P.	12,000,000	5,171,663	1,071,735	8,873,553
Constitution Ironsides Co-Investment Fund VI, L.P.	13,000,000	11,251,173	0	12,211,196
DN Partners II, L.P.	5,000,000	2,375,841	23,571	1,851,617
Euro Choice V, L.P.	6,085,066	5,919,759	4,530,657	4,414,170
FS Equity Partners VIII, L.P.	12,000,000	6,198,691	324,324	8,088,780
Globespan Capital Partners V, L.P.	5,000,000	4,852,500	8,895,488	4,697,725
HarbourVest Partners Co-Investment Fund V, L.P.	12,000,000	9,300,000	623,032	15,761,371
HarbourVest Partners Co-Investment Fund VI, L.P.	13,000,000	0	0	0
Ironsides Direct Investment Fund V, L.P.	12,000,000	10,244,297	785,087	18,645,582
Kohlberg Investors IX	10,000,000	4,772,024	294,108	5,665,033
Landmark Equity Partners XIV, L.P.	6,000,000	5,837,967	7,223,059	686,092
Leeds Equity Partners IV, L.P.	5,000,000	5,093,100	9,709,704	13,521
Leeds Equity Partners V, L.P.	2,500,000	3,525,207	5,478,607	410,213
Lexington Capital Partners VII, L.P.	10,000,000	8,929,691	12,809,800	1,841,614
LLR Equity Partners V, L.P.	12,000,000	11,040,000	3,065,757	13,721,402
Mesirow Financial Capital Partners IX, L.P.	4,000,000	3,840,731	2,021,056	78,889
Ridgemont Equity Partners III, L.P.	12,000,000	10,213,999	4,487,116	12,772,302
Ridgemont Equity Partners IV, L.P.	13,000,000	0	0	0
Rimco Production Company, Inc	2,000,000	2,000,000	7,651,066	1
Searchlight Capital III, L.P.	12,000,000	6,922,103	1,090,439	9,791,061
Siguler Guff Distressed Opportunities Fund III, L.P.	6,000,000	5,820,000	9,072,499	627,751
Summit Partners Growth Equity Fund IX, L.P.	10,000,000	11,590,999	12,432,065	16,870,065
Summit Partners Venture Capital Fund V	10,000,000	2,577,793	0	2,592,771
Summit Partners Growth Equity Fund XI, L.P.	13,000,000	0	0	0
TRG Growth Partnership II, L.P.	7,500,000	7,366,152	7,872,114	1,098,025

### Total Retirement Association | As of March 31, 2022

Note: The value is based on December 31, 2021 FMV.

Private Equity	Commitment	Total Contributions	Total Distributions	Value
Trilantic Capital Partners VI (North America), L.P.	12,000,000	8,633,608	56,520	10,766,111
Waud Capital Partners V, L.P.	10,000,000	7,581,718	0	9,327,440
Wellspring Capital Partners VI, L.P.	12,000,000	11,674,617	2,436,987	14,550,592
<b>Total Plymouth County - PE</b>	<b>280,924,066</b>	<b>192,535,026</b>	<b>114,852,303</b>	<b>184,366,933</b>
Real Assets	Commitment	Total Contributions	Total Distributions	Value
Basalt Infrastructure Partners II	10,000,000	9,416,866	488,876	11,632,191
BlackRock Global Renewable Power Infrastructure Fund III, L.P.	10,000,000	1,681,112	14,116	1,581,406
BTG Pactual Global Timberland Resources Fund, LLC	5,043,536	5,043,536	1,869,240	1,356,215
Global Infrastructure Partners III, L.P.	10,000,000	9,241,377	2,429,488	10,404,297
Global Infrastructure Partners IV, L.P.	10,000,000	2,280,823	0	2,032,101
IFM Global Infrastructure (U.S.), L.P.	60,000,000	35,000,000	3,271,514	44,332,807
ISQ Global Infrastructure Fund III (USTE), L.P.	10,000,000	785,495	14	616,669
JPMorgan Global Maritime Investment	10,000,000	10,034,375	1,809,932	9,343,758
Domain Timbervest Partners III, L.P.	5,000,000	5,000,000	3,201,626	4,220,789
<b>Total Plymouth County - RA</b>	<b>130,043,536</b>	<b>78,483,584</b>	<b>13,084,806</b>	<b>85,520,233</b>
Real Estate	Commitment	Total Contributions	Total Distributions	Value
1921 Realty, Inc.	5,000,000	5,378,194	0	544,540
AEW Partners IX, L.P.	10,000,000	3,004,115	111	2,855,538
AEW Partners Real Estate Fund VIII, L.P.	25,000,000	23,989,589	23,767,042	10,055,281
Berkshire Value Fund V, L.P.	9,000,000	2,312,218	1,014,189	2,570,297
Carlyle Realty Partners VIII, L.P.	18,000,000	11,139,686	8,345,561	7,874,063
DSF Capital Partners IV, L.P.	5,000,000	5,000,000	7,406,550	0
DSF Multi-Family Real Estate Fund III, L.P.	15,000,000	15,079,717	4,407,797	19,332,400
JPMorgan Strategic Property	27,000,000	27,000,000	702,885	35,773,068
PCCP Equity IX, L.P.	10,000,000	0	0	0
Real Estate International Partnership Fund I, L.P.	15,000,000	12,677,141	11,372,161	981,636
Rockpoint Real Estate Fund VI, L.P.	9,000,000	5,505,156	90,341	6,526,732
TA Realty Core Property Fund, L.P.	60,000,000	35,373,141	2,505,373	50,986,726
TerraCap Partners V, L.P.	5,000,000	4,992,904	37,177	5,492,989
<b>Total Plymouth County - RE</b>	<b>213,000,000</b>	<b>151,451,861</b>	<b>59,649,188</b>	<b>142,993,270</b>

Note: The data for IFM Global Infrastructure, TA Realty Core Property Fund, and JPMorgan Strategic Property is as of March 31, 2022.

Cash Flow Summary					
Quarter Ending March 31, 2022					
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Ending Market Value
1921 Realty, Inc	\$562,673	\$0	\$0	\$0	\$544,540
ABS Emerging Markets	\$68,663,388	\$0	\$0	\$0	\$61,396,722
ABS Offshore SPC - Global Segregated Portfolio	\$37,942,317	\$0	-\$90,979	-\$90,979	\$36,265,342
AEW Partners Real Estate Fund IX, L.P.	\$2,891,020	\$946,502	\$0	\$946,502	\$3,802,040
AEW Partners Real Estate VIII	\$8,804,981	\$0	-\$4,025,693	-\$4,025,693	\$6,029,588
Aristotle International Equity	\$25,066,871	\$0	-\$27,889	-\$27,889	\$22,534,208
Ascend Ventures II	\$52,310	\$0	\$0	\$0	\$52,310
Ascent Ventures IV	\$7,998	\$0	-\$6,372	-\$6,372	\$1,126
Ascent Ventures V	\$4,395,569	\$0	\$0	\$0	\$4,173,442
Audax Mezzanine Debt IV	\$4,542,166	\$242,808	-\$945,553	-\$702,744	\$4,074,063
Basalt Infrastructure Partners II	\$10,821,748	\$0	\$0	\$0	\$11,632,191
Berkshire Value Fund V	\$2,342,293	\$2,361,600	-\$36,000	\$2,325,600	\$4,895,897
BlackRock Global Renewable Power Infrastructure Fund III, L.P.	\$1,538,953	\$341,337	\$0	\$341,337	\$1,922,743
BTG Pactual Global Timberland Resources	\$1,447,752	\$0	\$0	\$0	\$1,356,215
Carlyle Realty Partners VIII	\$6,917,427	\$0	\$0	\$0	\$7,874,063
Cash	\$29,246,527	\$31,137,204	-\$25,472,760	\$5,664,444	\$34,911,020
Charles River Partnership XI	\$9,492	\$0	\$0	\$0	\$0
Charlesbank Technology Opportunities Fund	\$7,829,929	\$81,573	\$0	\$81,573	\$8,955,126
DN Partners II, LP	\$1,851,617	\$0	\$0	\$0	\$1,851,617
Driehaus Emerging Markets Growth	\$58,993,894	\$0	-\$75,737	-\$75,737	\$53,909,979
DSF Multi-Family Real Estate Fund III	\$17,642,039	\$0	-\$326,178	-\$326,178	\$19,006,222
Eaton Vance EMD Opportunities Fund	\$8,911,545	\$0	-\$6,253	-\$6,253	\$8,038,640

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Ending Market Value
Eaton Vance High Yield	\$12,847,326	\$0	-\$13,047	-\$13,047	\$12,330,095
Entrust Special Opportunities Fund III, Ltd.	\$20,568,582	\$0	-\$2,060,976	-\$2,060,976	\$17,637,749
EnTrustPermal Special Opportunities Evergreen Fund, Ltd.	\$22,624,540	\$0	\$0	\$0	\$21,373,403
Euro Choice V Programme	\$4,574,127	\$0	-\$138,894	-\$138,894	\$4,275,276
First Eagle Bank Loan Select Fund	\$10,865,798	\$0	-\$10,880	-\$10,880	\$10,868,079
First Eagle Global Value Fund	\$25,561,076	\$0	-\$47,735	-\$47,735	\$25,687,362
Fisher Midcap Value	\$72,958,849	\$0	-\$110,632	-\$110,632	\$69,580,384
FS Equity Partners VIII, L.P.	\$7,606,254	\$1,271,496	\$0	\$1,271,496	\$9,360,276
Global Infrastructure Partners III	\$9,155,729	\$644,591	-\$95,506	\$549,085	\$10,953,382
Global Infrastructure Partners IV, L.P.	\$1,797,169	\$3,643,075	-\$145,220	\$3,497,855	\$5,529,956
Globespan Capital V	\$4,802,375	\$0	-\$817,415	-\$817,415	\$4,697,725
HarbourVest Partners Co-Investment V	\$14,888,274	\$0	-\$817,415	-\$817,415	\$14,943,956
IFM Global Infrastructure	\$43,799,912	\$0	\$0	\$0	\$44,332,807
Ironsides Co-Investment Fund VI, L.P.	\$11,261,173	\$3,269,190	-\$3,175,137	\$94,052	\$12,305,248
Ironsides Direct Investment Fund V, L.P.	\$18,211,807	\$0	\$0	\$0	\$18,645,582
ISQ Global Infrastructure Fund III (USTE), L.P.	\$785,481	\$0	\$0	\$0	\$616,669
JP Morgan Global Maritime Investment	\$8,771,924	\$0	\$0	\$0	\$9,343,758
JPMorgan Strategic Property	\$33,662,943	\$0	-\$164,483	-\$164,483	\$35,773,068
Kohlberg Investors IX	\$5,316,531	\$0	\$0	\$0	\$5,665,033
Kopernik Global All Cap Fund	\$37,504,072	\$0	-\$73,276	-\$73,276	\$37,582,505
Landmark Equity Partners XIV	\$672,791	\$0	-\$32,480	-\$32,480	\$653,612
Lee Munder Global Multi-Cap Strategy	\$47,411,539	\$0	-\$50,428	-\$50,428	\$44,908,893
Leeds Equity Partners IV	\$13,621	\$0	\$0	\$0	\$13,521
Leeds Equity Partners V	\$417,949	\$0	\$0	\$0	\$410,213

Total Retirement Association | As of March 31, 2022

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Ending Market Value
Lexington Capital Partners VII	\$1,799,856	\$4,859	-\$119,640	-\$114,781	\$1,726,833
LLR Equity Partners V, LP.	\$12,506,785	\$0	\$0	\$0	\$13,721,402
LMCG Small Cap Value	\$52,899,338	\$0	-\$115,452	-\$115,452	\$51,131,437
Lord Abbett Core Fixed Income Trust II	\$56,215,855	\$0	-\$10,000,000	-\$10,000,000	\$43,306,776
Lord Abbett Short Duration Credit Trust II	\$62,146,678	\$0	-\$10,024,597	-\$10,024,597	\$50,598,673
Manulife Strategic Fixed Income	\$55,733,231	\$0	-\$84,451	-\$84,451	\$53,524,786
Mesirow Financial Capital Partners IX, LP	\$80,253	\$0	\$0	\$0	\$78,889
Mesirow Financial International Real Estate Fund I	\$981,636	\$0	\$0	\$0	\$981,636
Mesirow High Yield	\$15,772,983	\$0	-\$15,475	-\$15,475	\$15,338,294
Newton Small Cap Growth	\$60,193,918	\$0	-\$58,084	-\$58,084	\$52,183,452
Old Farm Partners Master Fund, L.P.	\$11,617,242	\$0	\$0	\$0	\$11,235,831
PCCP Equity IX, L.P.	\$0	\$1,497,036	\$0	\$1,497,036	\$1,497,036
Rhumblin Russell 1000 Growth	\$72,771,143	\$0	-\$7,506,592	-\$7,506,592	\$58,422,804
Rhumblin Russell 1000 Value	\$69,408,163	\$0	-\$7,506,776	-\$7,506,776	\$61,219,540
Rhumblin TIPS Trust	\$20,904,338	\$10,000,000	-\$5,002,284	\$4,997,716	\$25,221,408
Ridgemont Equity Partners III, L.P.	\$9,662,064	\$0	\$0	\$0	\$12,772,302
RIMCO Royalty Partners, LP	\$1	\$0	\$0	\$0	\$1
Rockpoint Real Estate Fund VI, L.P.	\$6,183,160	\$491,717	\$0	\$491,717	\$7,018,449
Searchlight Capital III, L.P.	\$8,350,676	\$387,164	\$0	\$387,164	\$10,178,225
Siguler Guff Distressed Opportunities Fund III, LP	\$579,431	\$0	-\$48,427	-\$48,427	\$579,324
Summit Partners Growth Equity Fund IX	\$15,936,379	\$0	-\$126,688	-\$126,688	\$16,743,377
Summit Partners Venture Capital Fund V	\$2,554,079	\$759,751	\$0	\$759,751	\$3,352,522
TA Realty Core Property Fund, L.P.	\$50,986,726	\$0	-\$509,867	-\$509,867	\$54,605,866
TerraCap Partners V, L.P.	\$5,015,207	\$0	\$0	\$0	\$5,492,989

Total Retirement Association | As of March 31, 2022

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Ending Market Value
Timbervest Partners III, LP	\$3,852,123	\$0	\$0	\$0	\$4,220,789
TRG Growth Partnership II	\$1,157,483	\$0	\$0	\$0	\$1,098,025
Trilantic Capital Partners VI, L.P.	\$9,431,307	\$1,027,117	-\$192,864	\$834,253	\$11,600,364
Walter Scott International Equity	\$22,436,418	\$0	-\$78,876	-\$78,876	\$19,760,109
Waud Capital Partners V	\$8,849,688	\$265,398	\$0	\$265,398	\$9,592,838
Wellington Durable Enterprises, L.P.	\$45,650,511	\$0	-\$65,398	-\$65,398	\$44,155,955
Wellspring Capital Partners VI	\$13,431,564	-\$240,178	\$0	-\$240,178	\$14,310,414
<b>Total</b>	<b>\$1,413,670,585</b>	<b>\$58,132,239</b>	<b>-\$80,222,408</b>	<b>-\$22,090,169</b>	<b>\$1,366,385,988</b>



**Private Markets 2021 Q4  
Performance Update**

The purpose of this document is to offer a review of the Retirement Association’s aggregate private market investments.

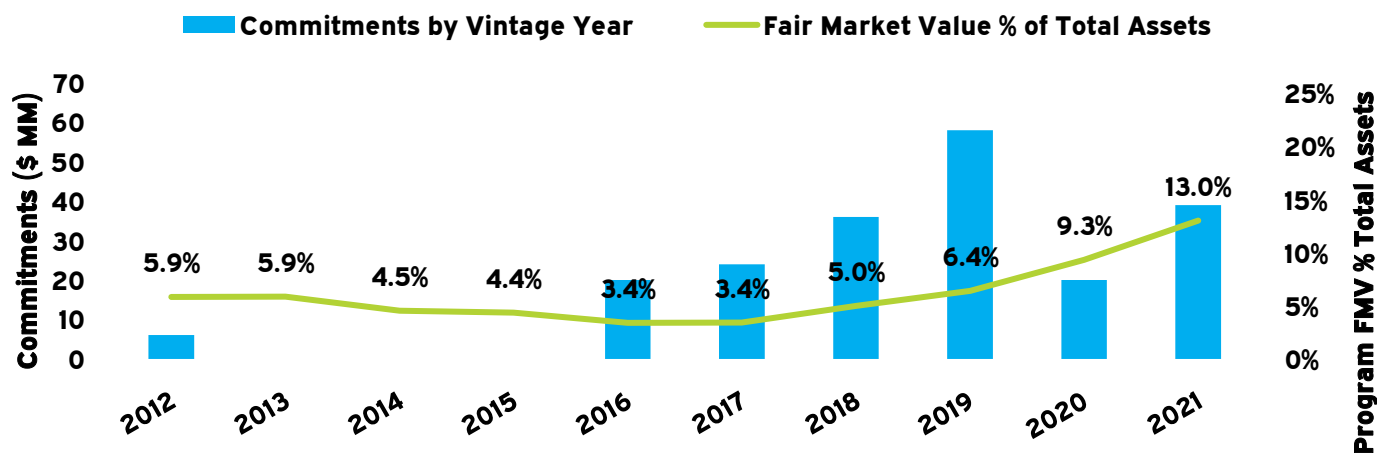
As of December 31, 2021 the Retirement Association had committed \$715.1 million to 67 partnerships. The reported fair market value of the program, in aggregate, was \$410.2 million at the end of the quarter.

Private Equity Program		Real Assets Program		Real Estate Program	
No. of Funds	37	No of Funds	9	No of Funds	21
Committed	297.1	Committed	130.0	Committed	288.0
Contributed	210.1	Contributed	78.5	Contributed	230.6
Distributed	130.2	Distributed	13.1	Distributed	197.9
Fair Market Value	184.4	Fair Market Value	85.0	Fair Market Value	140.8
TVPI	1.49x	TVPI	1.25x	TVPI	1.47x
Since Inception IRR	9.2%	Since Inception IRR	5.7%	Since Inception IRR	6.6%
1-Quarter IRR	8.0%	1-Quarter IRR	6.0%	1-Quarter IRR	8.7%
1-Year IRR	42.7%	1-Year IRR	22.1%	1-Year IRR	31.1%

## **Private Equity Program**

### Introduction

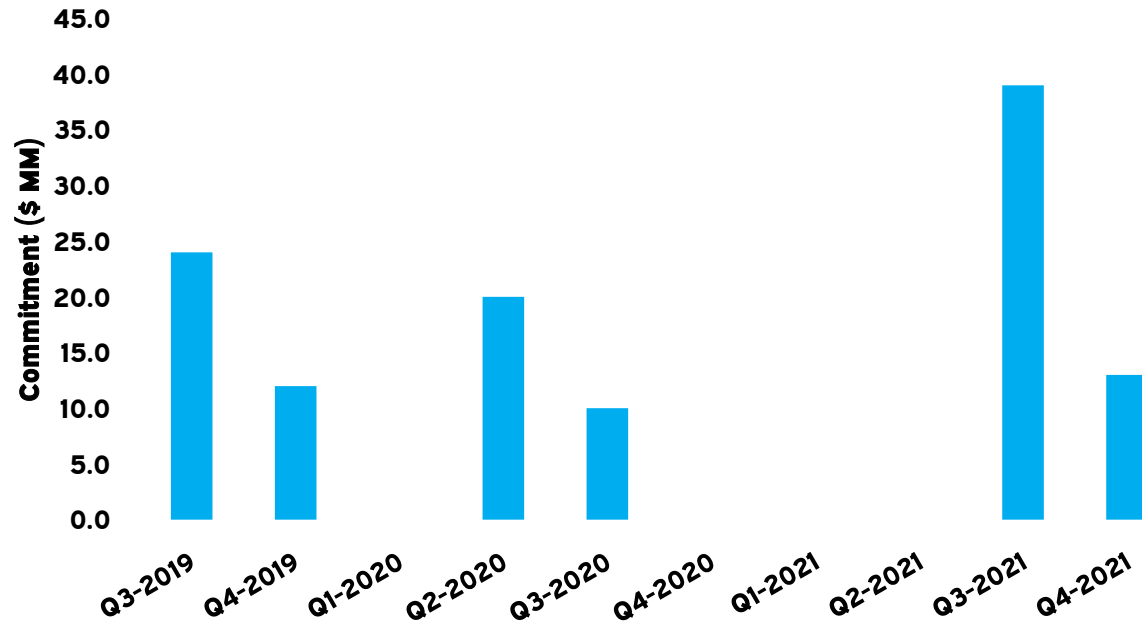
As of December 31, 2021, the Plymouth County Retirement Association (“the Retirement Association”) had committed \$297.1 million to 37 partnerships. The Retirement Association maintains a 13% allocation target to private equity. One new commitment was made during the fourth quarter of 2021. The fair market value of the private equity program was \$184.4 million, representing 13.0% of the Retirement Association’s total assets.



Program Status	
No. of Investments	37
Committed (\$ MM)	297.1
Contributed (\$ MM)	210.1
Distributed (\$ MM)	130.2
Fair Market Value (\$ MM)	184.4

Performance Since Inception	
	Program
DPI	0.62x
TVPI	1.49x
IRR	9.2%

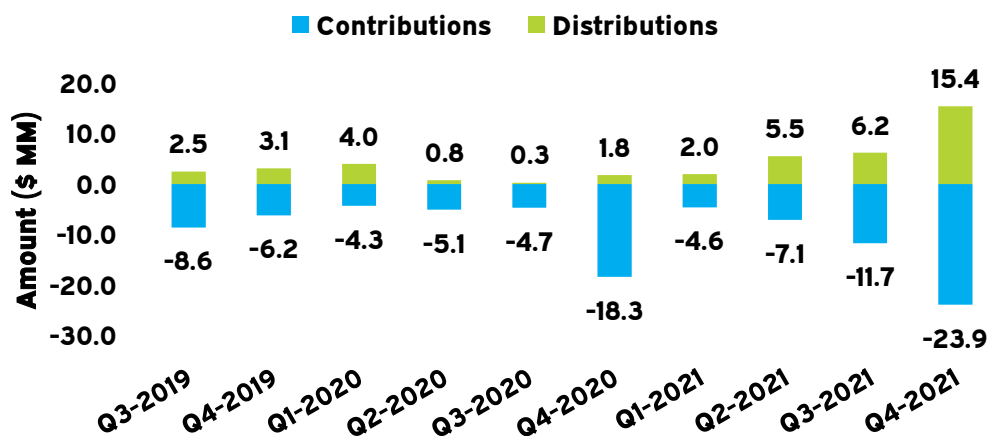
### Commitments Recent Quarterly Commitments



### Commitments This Quarter

Fund	Strategy	Region	Amount (MM)
Ridgemont IV	Buyout	North America	13.00

### Cash Flows Recent Quarterly Cash Flows



#### Largest Contributions This Quarter

Fund	Vintage	Strategy	Region	Amount (\$MM)
Ironsides Co-Inv VI	2021	Buyout	North America	11.25
Kohlberg IX	2020	Buyout	North America	2.61
Trilantic VI	2018	Buyout	North America	2.38

#### Largest Distributions This Quarter

Fund	Vintage	Strategy	Region	Amount (\$MM)
Summit Growth IX	2016	Growth Equity	North America	4.47
Ridgemont III	2019	Buyout	North America	3.83
Wellspring VI	2017	Buyout	North America	2.44

### Significant Events

- During the fourth quarter, the Retirement Association closed its commitment of \$13 million to Ridgemont Equity Partners IV, L.P. Through this commitment, the Retirement Association gained diversified North American buyout exposure.
- Ironsides Co-Investment Fund VI, L.P. called \$11.25 million during the fourth quarter to fund several investments as well as management fees and partnership expenses.
- Kohlberg Investors IX called \$2.61 million during the quarter, primarily to fund new investments.
- Trilantic Capital Partners VI, L.P. called \$2.75 million during the quarter to fund new investments. The call was offset by a \$0.37 million return of excess capital contributions for two investments.
- Summit Partners Growth Equity Fund IX, L.P. distributed \$4.47 million of recallable proceeds from the sale of existing portfolio companies.
- Ridgemont Equity Partners III, L.P. distributed \$3.83 million during the fourth quarter as proceeds from existing investments. Of the total distributions during the fourth quarter, \$1.49 million were recallable proceeds.
- Wellspring Capital Partners VI, L.P. distributed \$2.44 million during the fourth quarter as return of capital from existing investments.

### By Strategy

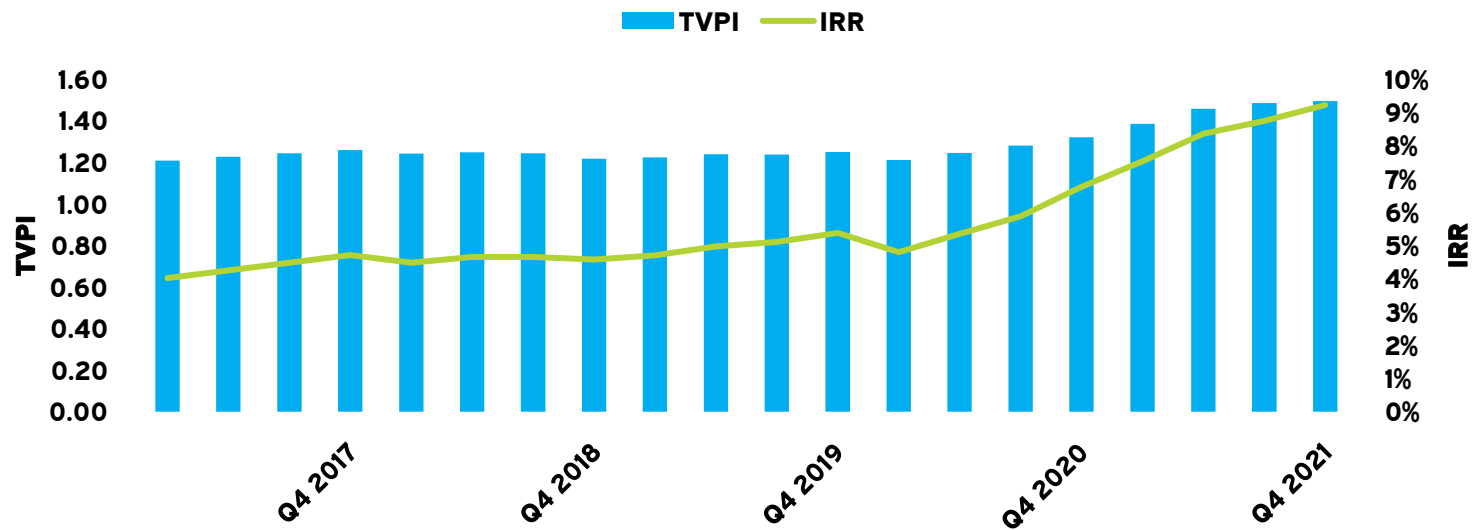
Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)
Buyout	20	188.1	122.6	73.7	39.2	142.5	216.2	0.32	1.48	11.3
Fund of Funds	3	17.6	17.3	2.0	21.6	5.0	7.0	1.25	1.55	8.7
Growth Equity	3	30.5	19.0	24.0	20.3	18.0	42.0	1.07	2.02	14.1
Private Debt	1	10.0	8.1	3.3	5.0	4.8	8.1	0.61	1.20	10.8
Secondary	2	16.0	14.8	1.3	20.0	2.5	3.8	1.36	1.53	12.7
Special Situations	1	3.0	4.9	0.0	5.1	0.0	0.0	1.04	1.04	1.3
Venture Capital	7	31.8	23.5	8.5	19.0	11.5	20.0	0.81	1.30	3.3
<b>Total</b>	<b>37</b>	<b>297.1</b>	<b>210.1</b>	<b>112.8</b>	<b>130.2</b>	<b>184.4</b>	<b>297.2</b>	<b>0.62</b>	<b>1.49</b>	<b>9.2</b>



### By Vintage

Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)
1998	1	2.6	2.7	0.0	0.1	0.0	0.0	0.04	0.04	-25.5
1999	1	5.0	4.4	0.6	2.2	0.0	0.6	0.49	0.49	-14.9
2000	1	1.8	1.8	0.0	2.5	0.0	0.0	1.39	1.39	5.5
2001	1	2.0	2.0	0.0	7.7	0.0	0.0	3.83	3.83	29.1
2004	3	13.0	13.1	0.5	18.2	0.0	0.5	1.39	1.39	4.8
2005	3	9.5	11.0	0.3	8.0	0.1	0.5	0.73	0.74	-5.3
2006	1	5.0	4.9	0.1	8.9	4.7	4.8	1.83	2.80	14.3
2007	2	12.5	9.7	2.8	7.9	2.9	5.7	0.81	1.11	1.7
2008	2	12.0	11.7	0.3	16.3	1.3	1.7	1.40	1.51	10.5
2009	1	10.0	8.9	1.2	12.8	1.8	3.0	1.43	1.64	14.1
2010	1	2.5	3.5	0.0	5.5	0.4	0.4	1.55	1.67	12.6
2011	1	5.0	5.0	0.2	4.1	4.2	4.3	0.81	1.64	8.0
2012	1	6.1	5.9	1.4	4.5	4.4	5.9	0.77	1.51	8.9
2016	2	20.0	19.7	14.2	17.4	21.6	35.8	0.88	1.98	34.0
2017	2	24.0	22.7	3.7	5.5	28.3	32.0	0.24	1.49	24.1
2018	3	36.0	28.2	8.3	1.5	45.2	53.5	0.05	1.66	27.3
2019	5	58.0	36.1	25.3	7.0	48.9	74.2	0.19	1.55	49.8
2020	2	20.0	7.3	12.9	0.3	8.3	21.2	0.04	1.16	NM
2021	3	39.0	11.3	28.0	0.0	12.2	40.2	0.00	1.09	NM
2022	1	13.0	0.0	13.0	0.0	0.0	13.0	0.00	NM	NM
<b>Total</b>	<b>37</b>	<b>297.1</b>	<b>210.1</b>	<b>112.8</b>	<b>130.2</b>	<b>184.4</b>	<b>297.2</b>	<b>0.62</b>	<b>1.49</b>	<b>9.2</b>

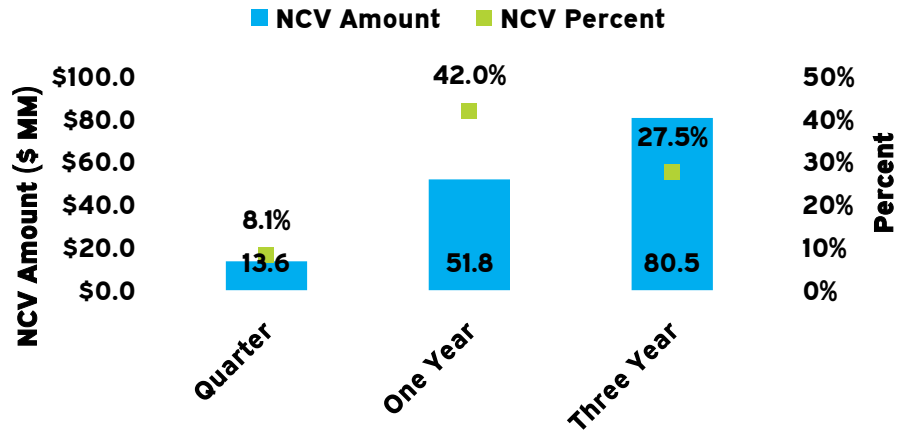
#### Since Inception Performance Over Time



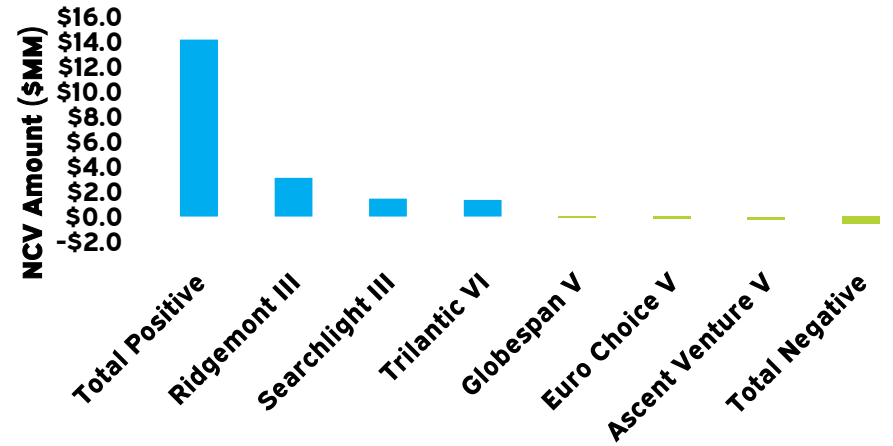
#### Horizon IRRs

	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)	Since Inception (%)
Aggregate Portfolio	42.7	30.1	24.3	13.7	9.2
Public Market Equivalent	19.1	21.8	17.0	13.9	8.8

#### Periodic NCV



#### 1 Quarter Drivers Of NCV



### Fund Performance: Sorted By Vintage And Strategy

By Investment	Vintage	Strategy	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
Senior Tour Players	1998	Buyout	2.6	2.7	0.0	0.1	0.0	0.04	1.38	-25.5	7.9
Charles River X	1999	Venture Capital	5.0	4.4	0.6	2.2	0.0	0.49	1.27	-14.9	6.1
Chales River XI	2000	Venture Capital	1.8	1.8	0.0	2.5	0.0	1.39	1.36	5.5	7.8
Rimco	2001	Buyout	2.0	2.0	0.0	7.7	0.0	3.83	1.60	29.1	13.0
Leeds IV	2004	Buyout	5.0	5.1	0.1	9.7	0.0	1.91	1.61	8.0	10.0
Euro Choice II	2004	Fund of Funds	5.5	5.5	0.4	8.0	0.0	1.46	1.61	7.0	10.0
Ascent Venture IV	2004	Venture Capital	2.5	2.5	0.0	0.4	0.0	0.17	1.61	-27.0	10.0
Mesirow IX	2005	Buyout	4.0	3.8	0.2	2.0	0.1	0.55	1.47	-7.0	8.2
Levine Leichtman DV	2005	Special Situations	3.0	4.9	0.0	5.1	0.0	1.04	1.47	1.3	8.2
Ascend Ventures II	2005	Venture Capital	2.5	2.3	0.2	0.9	0.1	0.42	1.47	-8.8	8.2
Globespan V	2006	Venture Capital	5.0	4.9	0.1	8.9	4.7	2.80	1.50	14.3	8.2
DN Partners II	2007	Buyout	5.0	2.4	2.6	0.0	1.9	0.79	1.64	-2.1	10.3
TRG II	2007	Growth Equity	7.5	7.4	0.2	7.9	1.1	1.22	1.64	3.7	10.3

Fund Performance: Sorted By Vintage And Strategy (con't)

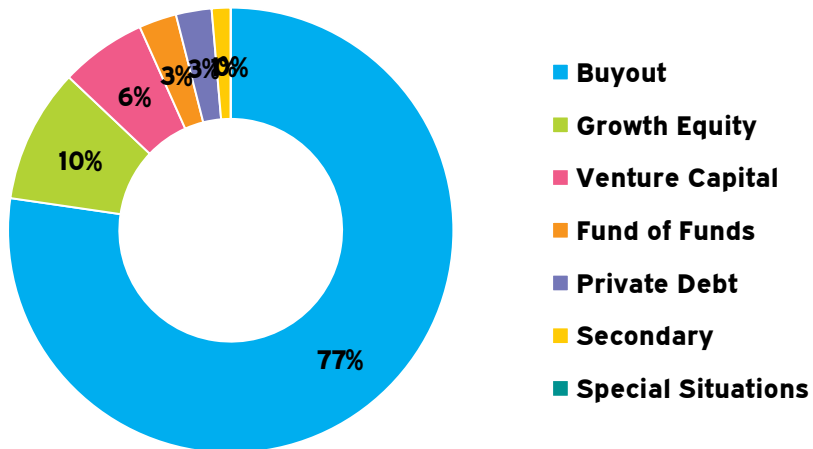
By Investment	Vintage	Strategy	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
Siguler Guff III	2008	Fund of Funds	6.0	5.8	0.2	9.1	0.6	1.67	1.75	10.7	12.3
Landmark XIV	2008	Secondary	6.0	5.8	0.2	7.2	0.7	1.35	1.75	10.0	12.3
Lexington VII	2009	Secondary	10.0	8.9	1.2	12.8	1.8	1.64	2.03	14.1	16.7
Leeds V	2010	Buyout	2.5	3.5	0.0	5.5	0.4	1.67	2.09	12.6	18.9
Ascent Venture V	2011	Venture Capital	5.0	5.0	0.2	4.1	4.2	1.64	1.89	8.0	16.2
Euro Choice V	2012	Fund of Funds	6.1	5.9	1.4	4.5	4.4	1.51	1.98	8.9	17.9
Summit Growth IX	2016	Growth Equity	10.0	11.6	10.8	12.4	16.9	2.53	1.90	43.8	23.6
Audax Mezz IV	2016	Private Debt	10.0	8.1	3.3	5.0	4.8	1.20	1.90	10.8	23.6
LLR V	2017	Buyout	12.0	11.0	2.5	3.1	13.7	1.52	1.85	21.1	29.6
Wellspring VI	2017	Buyout	12.0	11.7	1.2	2.4	14.6	1.46	1.85	28.9	29.6
HV Co-Invest V	2018	Buyout	12.0	9.3	2.7	0.6	15.8	1.76	1.62	44.0	30.8
Ironsides Direct V	2018	Buyout	12.0	10.2	2.2	0.8	18.6	1.90	1.62	24.8	30.8
Trilantic VI	2018	Buyout	12.0	8.6	3.4	0.1	10.8	1.25	1.62	16.7	30.8
Charlesbank Tech	2019	Buyout	12.0	5.2	7.5	1.1	8.9	1.92	1.45	110.4	NM
FS Equity VIII	2019	Buyout	12.0	6.2	5.8	0.3	8.1	1.36	1.45	23.2	NM

Fund Performance: Sorted By Vintage And Strategy (con't)

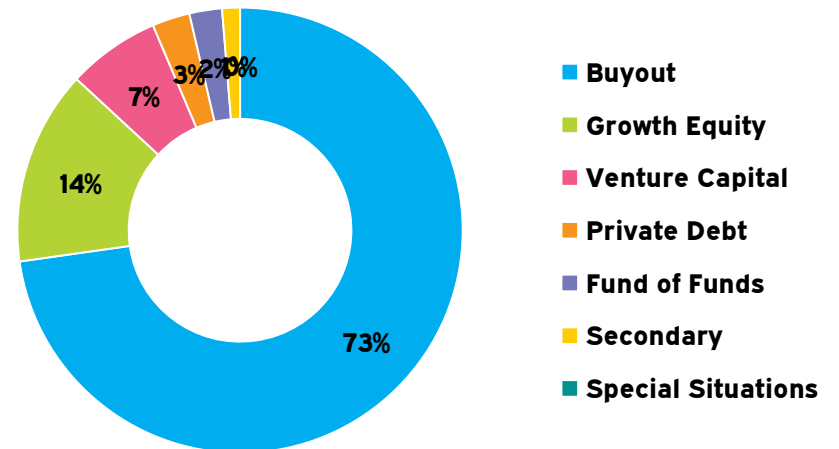
By Investment	Vintage	Strategy	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
Ridgemont III	2019	Buyout	12.0	10.2	3.9	4.5	12.8	1.69	1.45	56.8	NM
Searchlight III	2019	Buyout	12.0	6.9	5.6	1.1	9.8	1.57	1.45	55.0	NM
Waud V	2019	Buyout	10.0	7.6	2.4	0.0	9.3	1.23	1.45	29.8	NM
Kohlberg IX	2020	Buyout	10.0	4.8	5.5	0.3	5.7	1.25	1.29	NM	NM
Summit Venture V	2020	Venture Capital	10.0	2.6	7.4	0.0	2.6	1.01	1.29	NM	NM
HV Co-Invest VI	2021	Buyout	13.0	0.0	13.0	0.0	0.0	NA	1.05	NA	NM
Ironsides Co-Inv VI	2021	Buyout	13.0	11.3	2.0	0.0	12.2	1.09	1.05	NM	NM
Summit Growth XI	2021	Growth Equity	13.0	0.0	13.0	0.0	0.0	NA	1.05	NA	NM
Ridgemont IV	2022	Buyout	13.0	0.0	13.0	0.0	0.0	NA	NM	NA	NM
<b>Total</b>			<b>297.1</b>	<b>210.1</b>	<b>112.8</b>	<b>130.2</b>	<b>184.4</b>	<b>1.49</b>		<b>9.2</b>	

#### By Strategy

Percent of FMV

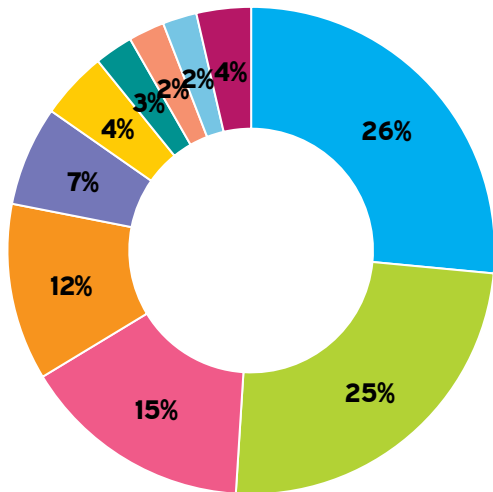


Percent of Exposure

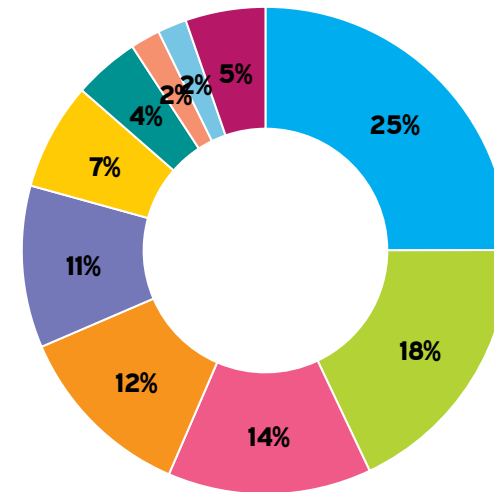


#### By Vintage

Percent of FMV



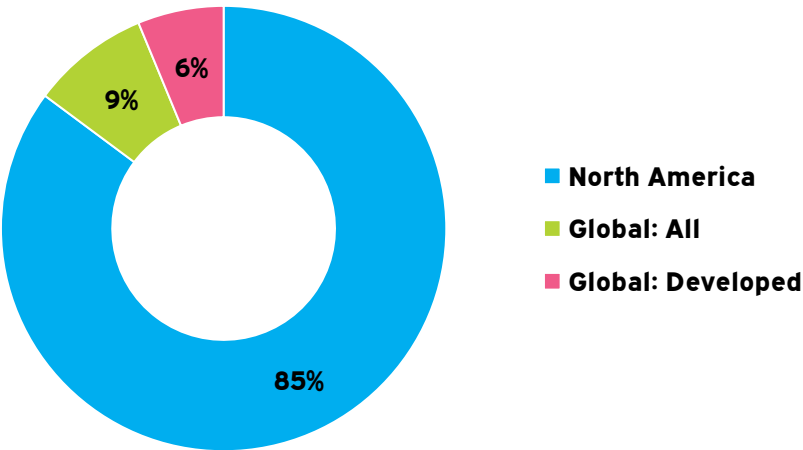
Percent of Exposure



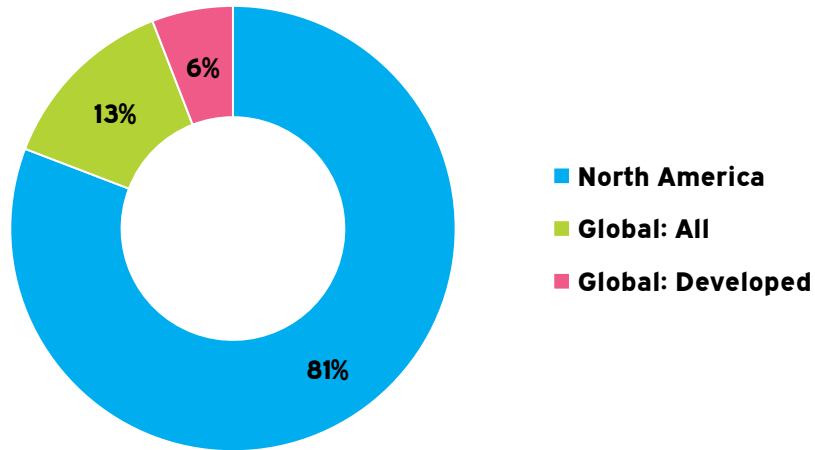


**By Geographic Focus**

**Percent of FMV**



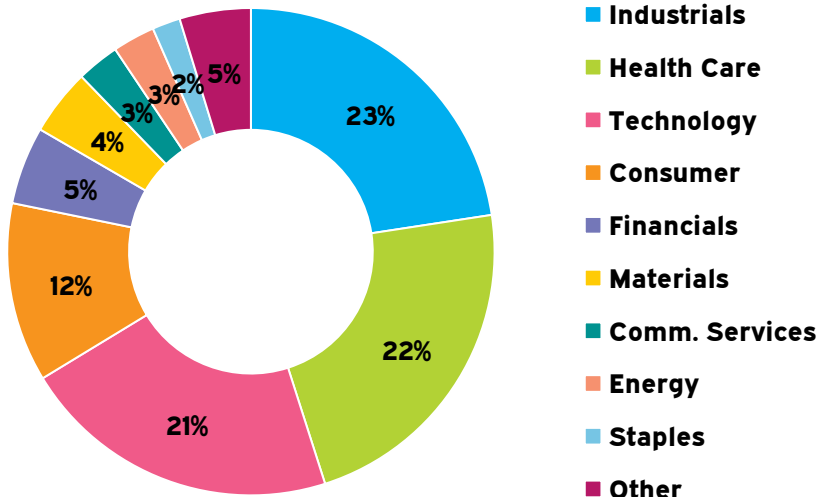
**Percent of Exposure**



#### Asset Diversification

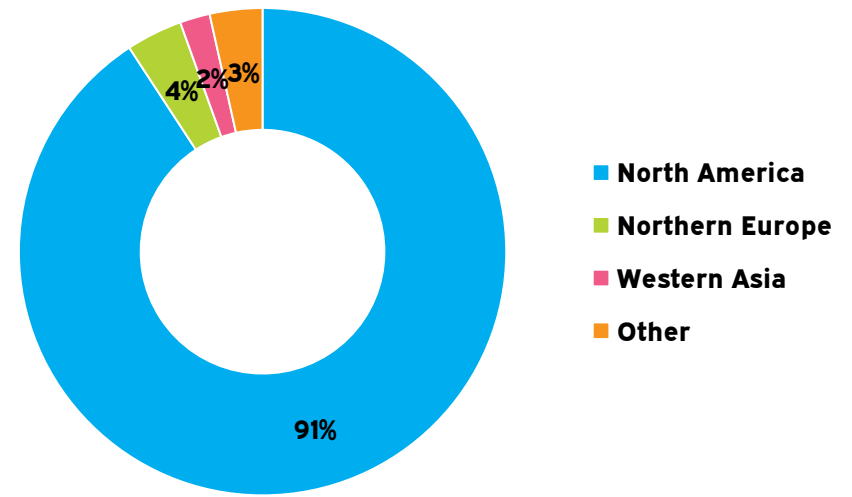
##### By Sector

Percent of FMV



##### By Geography

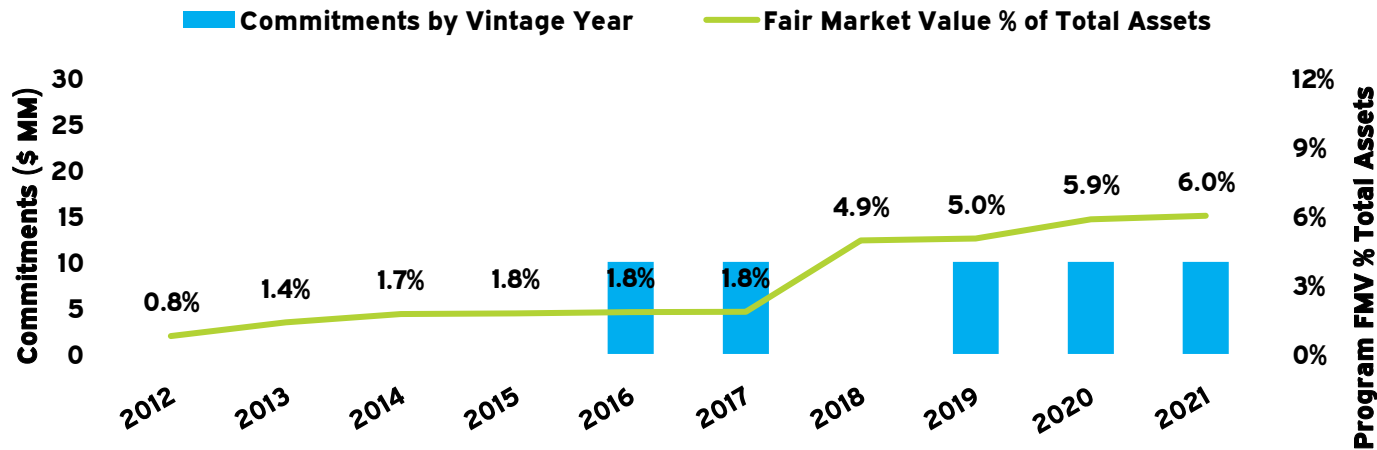
Percent of FMV



## **Real Assets Program**

### Introduction

As of December 31, 2021, the Plymouth County Retirement Association (“the Retirement Association”) had committed \$130.0 million to nine partnerships. No new commitments were made during the fourth quarter of 2021. The fair market value of the Retirement Association’s Real Assets program was \$85.0 million, representing 6.0% of total assets, meeting the program’s 6.0% target.



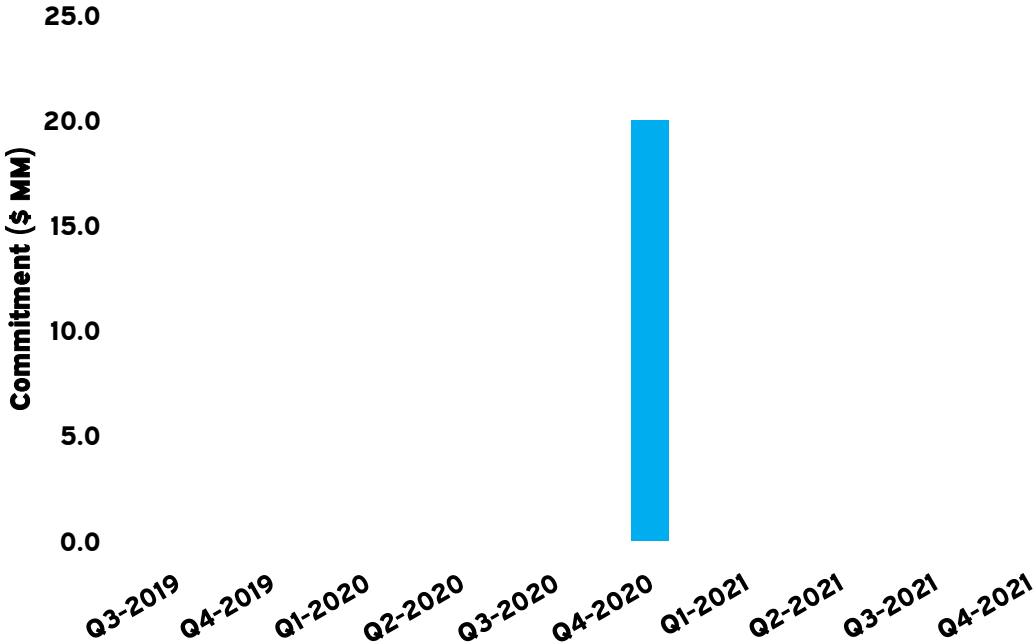
#### Program Status

No. of Investments	9
Committed (\$ MM)	130.0
Contributed (\$ MM)	78.5
Distributed (\$ MM)	13.1
Fair Market Value (\$ MM)	85.0

#### Performance Since Inception

	Program
DPI	0.17x
TVPI	1.25x
IRR	5.7%

Commitments  
Recent Quarterly Commitments

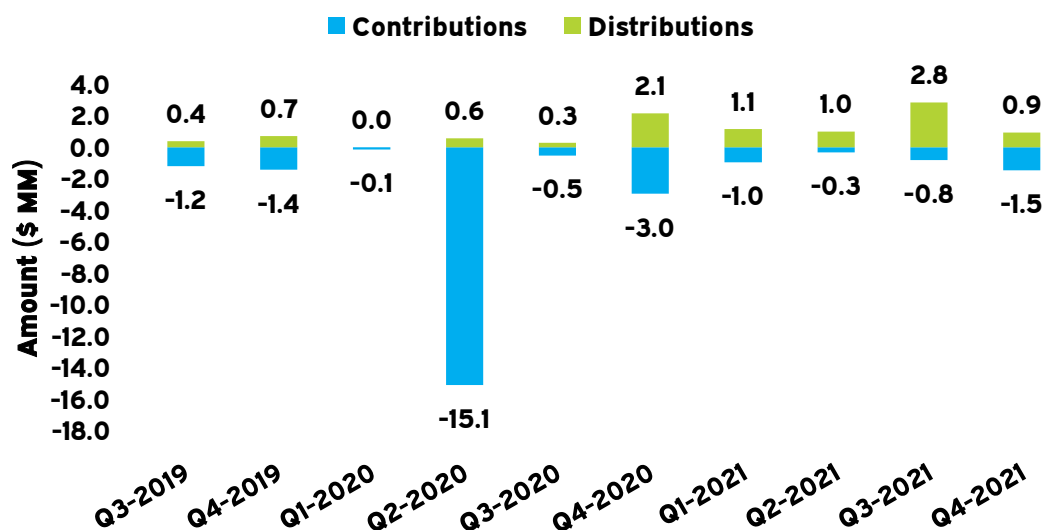


Commitments This Quarter

Fund	Strategy	Region	Amount (MM)
------	----------	--------	-------------

No new commitments made during the quarter.

### Cash Flows Recent Quarterly Cash Flows



#### Largest Contributions This Quarter

Fund	Vintage	Strategy	Region	Amount(\$MM)
ISQ IS III	2021	Value-Added	Global: Developed	0.79
BlackRock GRPIF III	2020	Value-Added	Global: All	0.57
GIP IV	2019	Value-Added	Global: Developed	0.07

#### Largest Distributions This Quarter

Fund	Vintage	Strategy	Region	Amount (\$MM)
IFM IS	2009	Core	Global: Developed	0.48
Timbervest III	2010	Natural Resources	North America	0.31
GIP III	2016	Value-Added	Global: Developed	0.14

### Significant Events

- ISQ Global Infrastructure Fund III, L.P. called \$0.79 million during the fourth quarter to fund several existing investments.
- BlackRock Global Renewable Power Infrastructure Fund III, L.P. called \$0.57 million during the fourth quarter to fund several new investment opportunities across APAC, EMEA, and North America.
- Global Infrastructure Partners IV, L.P. called \$0.07 million during the fourth quarter primarily to fund an existing investment, as well as management fees and partnership expenses.
- IFM Global Infrastructure Fund, L.P. distributed \$0.48 million during the quarter as proceeds from its existing investments.
- Domain Timbervest Partners III, L.P. distributed \$0.31 million during the fourth quarter as proceeds from timber and land sales throughout the quarter.
- Global Infrastructure Partners III, L.P. distributed \$0.14 million during the fourth quarter as dividend proceeds from its existing investments.

### By Strategy

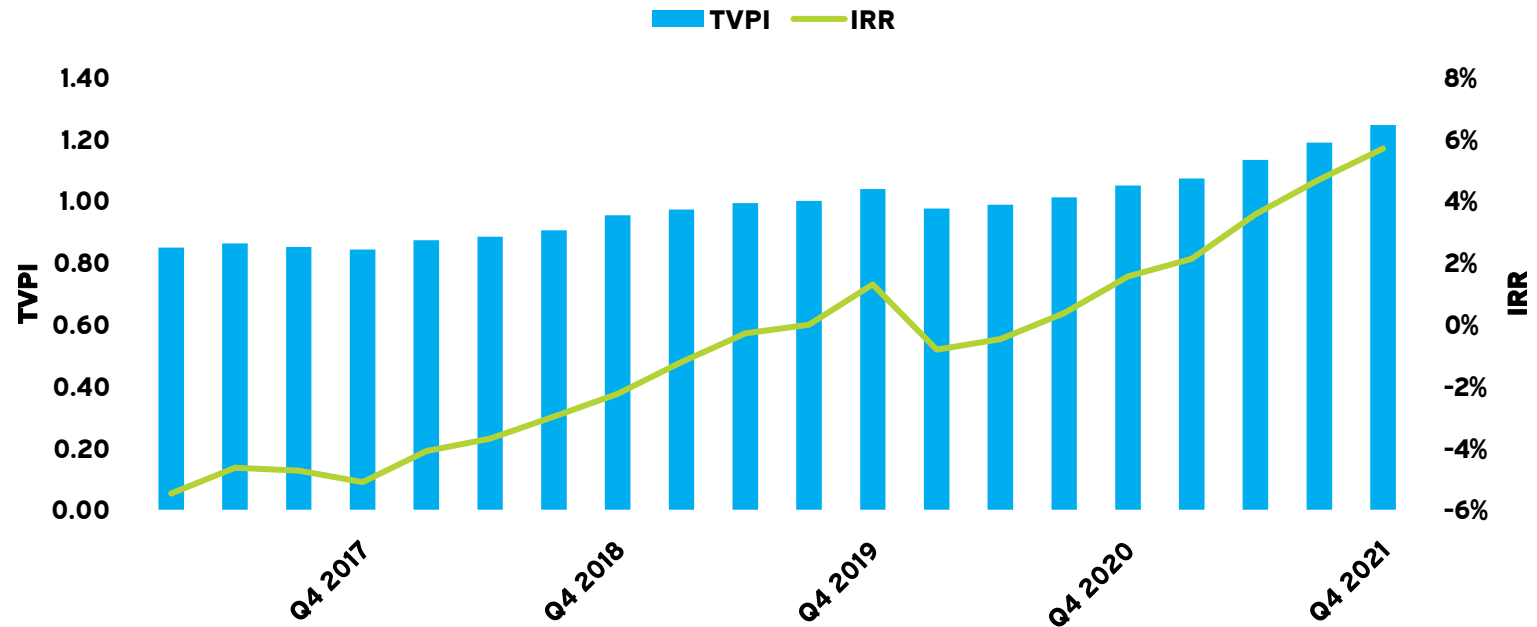
Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market		DPI (X)	TVPI (X)	IRR (%)
						Value (\$ MM)	Exposure (\$ MM)			
Core	2	70.0	44.4	26.1	3.7	55.4	81.5	0.08	1.33	11.7
Natural Resources	2	10.0	10.0	0.0	5.1	5.6	5.6	0.50	1.06	0.7
Opportunistic	1	10.0	10.0	0.3	1.8	9.3	9.6	0.18	1.11	1.6
Value-Added	4	40.0	14.0	27.6	2.5	14.6	42.2	0.18	1.22	8.3
<b>Total</b>	<b>9</b>	<b>130.0</b>	<b>78.5</b>	<b>54.0</b>	<b>13.1</b>	<b>85.0</b>	<b>138.9</b>	<b>0.17</b>	<b>1.25</b>	<b>5.7</b>

### By Vintage

Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market		DPI (X)	TVPI (X)	IRR (%)
						Value (\$ MM)	Exposure (\$ MM)			
Open-end	1	60.0	35.0	25.0	3.2	43.8	68.8	0.09	1.34	12.1
2010	2	15.0	15.0	0.3	5.0	13.6	13.8	0.33	1.24	3.0
2011	1	5.0	5.0	0.0	1.9	1.4	1.4	0.37	0.64	-5.5
2016	1	10.0	9.2	1.8	2.5	10.4	12.2	0.27	1.39	10.3
2017	1	10.0	9.4	1.1	0.5	11.6	12.7	0.05	1.29	10.3
2019	1	10.0	2.3	8.2	0.0	2.0	10.3	0.00	0.89	-12.5
2020	1	10.0	1.7	8.3	0.0	1.6	9.9	0.01	0.95	NM
2021	1	10.0	0.8	9.2	0.0	0.6	9.8	0.00	0.79	NM
<b>Total</b>	<b>9</b>	<b>130.0</b>	<b>78.5</b>	<b>54.0</b>	<b>13.1</b>	<b>85.0</b>	<b>138.9</b>	<b>0.17</b>	<b>1.25</b>	<b>5.7</b>



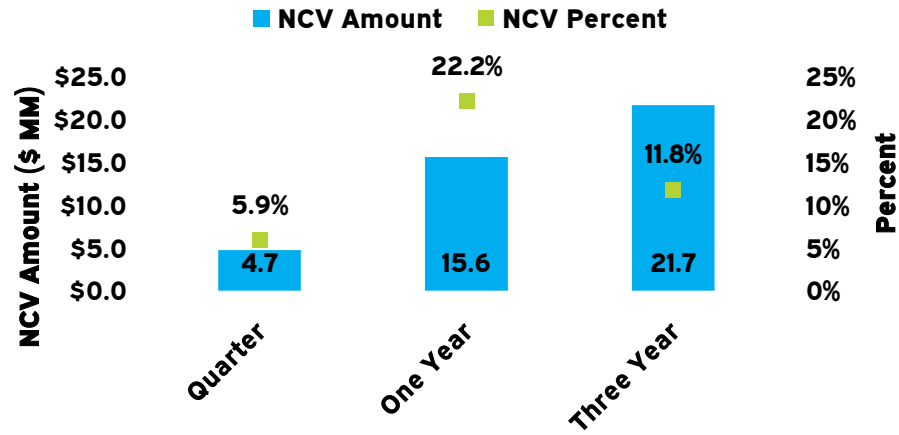
#### Since Inception Performance Over Time



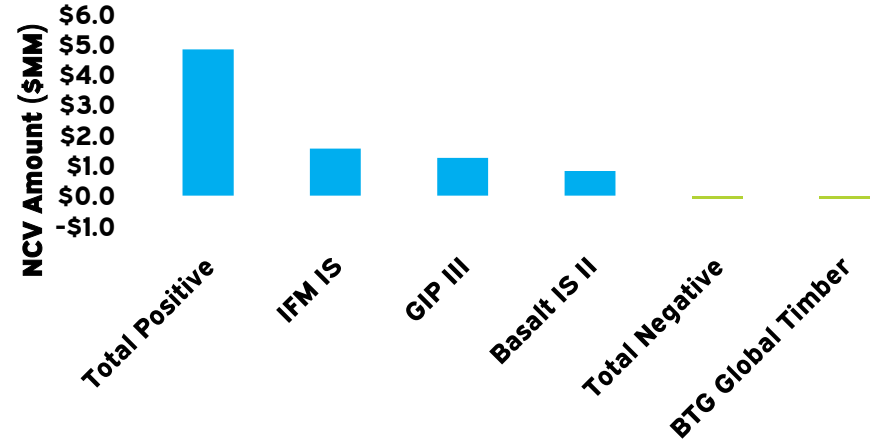
#### Horizon IRRs

	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)	Since Inception (%)
Aggregate Portfolio	22.1	11.3	9.5	5.9	5.7
Public Market Equivalent	24.3	17.2	12.2	9.7	9.7

#### Periodic NCV



#### 1 Quarter Drivers Of NCV



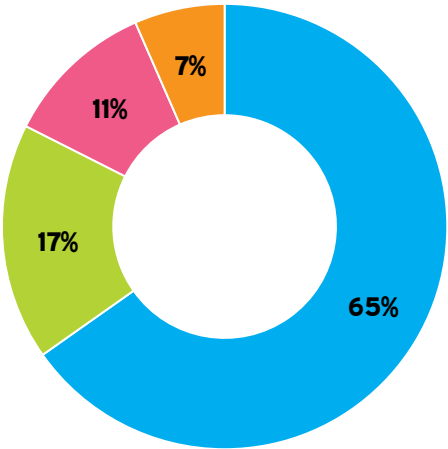
	4Q21 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Since Inception (%)	Inception Date
IFM Global Infrastructure	3.6	17.1	11.5	NA	NA	11.5	10/01/2018
CPI + 3%	2.2	9.3	5.8	NA	NA	5.3	NA

Fund Performance: Sorted By Vintage And Strategy

By Investment	Vintage	Strategy	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
IFM IS	Open-end	Core	60.0	35.0	25.0	3.2	43.8	1.34	NM	12.1	NM
Timbervest III	2010	Natural Resources	5.0	5.0	0.0	3.2	4.2	1.48	2.09	4.9	18.9
JPMorgan Maritime	2010	Opportunistic	10.0	10.0	0.3	1.8	9.3	1.11	2.09	1.6	18.9
BTG Global Timber	2011	Natural Resources	5.0	5.0	0.0	1.9	1.4	0.64	1.89	-5.5	16.2
GIP III	2016	Value-Added	10.0	9.2	1.8	2.5	10.4	1.39	1.90	10.3	23.6
Basalt IS II	2017	Core	10.0	9.4	1.1	0.5	11.6	1.29	1.85	10.3	29.6
GIP IV	2019	Value-Added	10.0	2.3	8.2	0.0	2.0	0.89	1.45	-12.5	NM
BlackRock GRPIF III	2020	Value-Added	10.0	1.7	8.3	0.0	1.6	0.95	1.29	NM	NM
ISQ IS III	2021	Value-Added	10.0	0.8	9.2	0.0	0.6	0.79	1.05	NM	NM
<b>Total</b>			<b>130.0</b>	<b>78.5</b>	<b>54.0</b>	<b>13.1</b>	<b>85.0</b>	<b>1.25</b>		<b>5.7</b>	

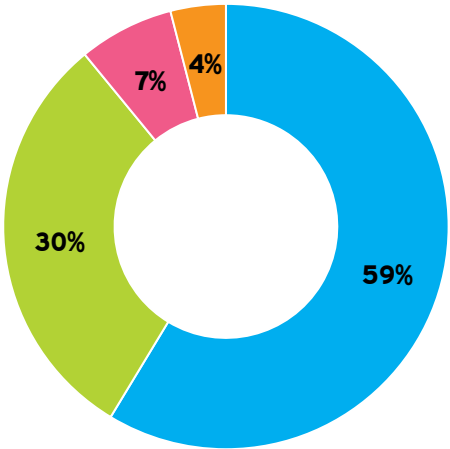
### By Strategy

Percent of FMV



- Core
- Value-Added
- Opportunistic
- Natural Resources

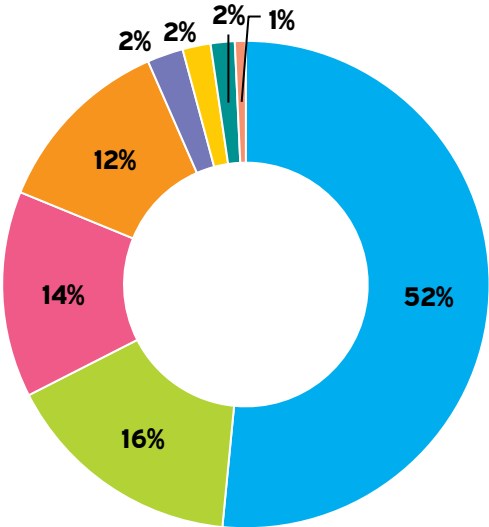
Percent of Exposure



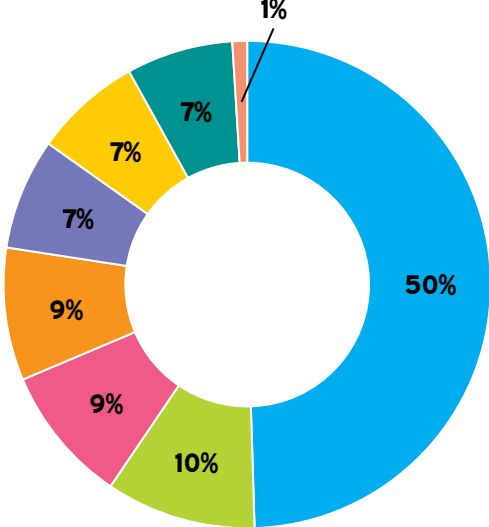
- Core
- Value-Added
- Opportunistic
- Natural Resources

#### By Vintage

Percent of FMV



Percent of Exposure

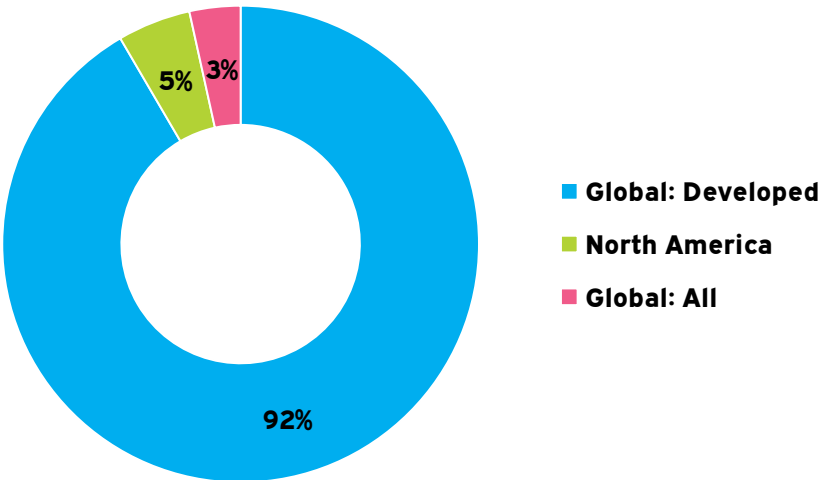


- Open-end
- 2010
- 2017
- 2016
- 2019
- 2020
- 2011
- 2021

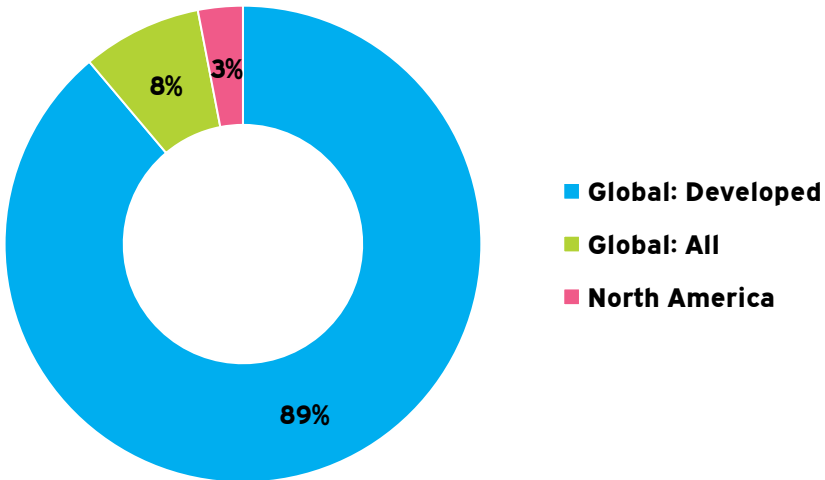
- Open-end
- 2010
- 2017
- 2016
- 2019
- 2020
- 2021
- 2011

### By Geographic Focus

Percent of FMV



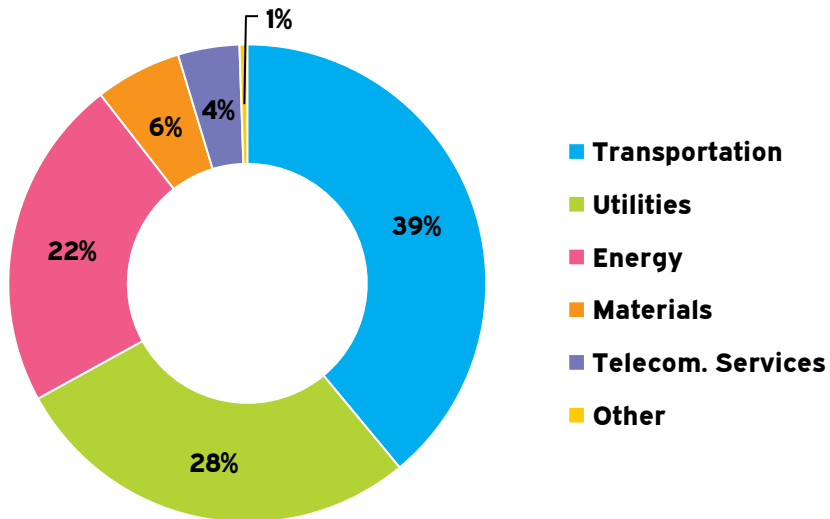
Percent of Exposure



#### Asset Diversification

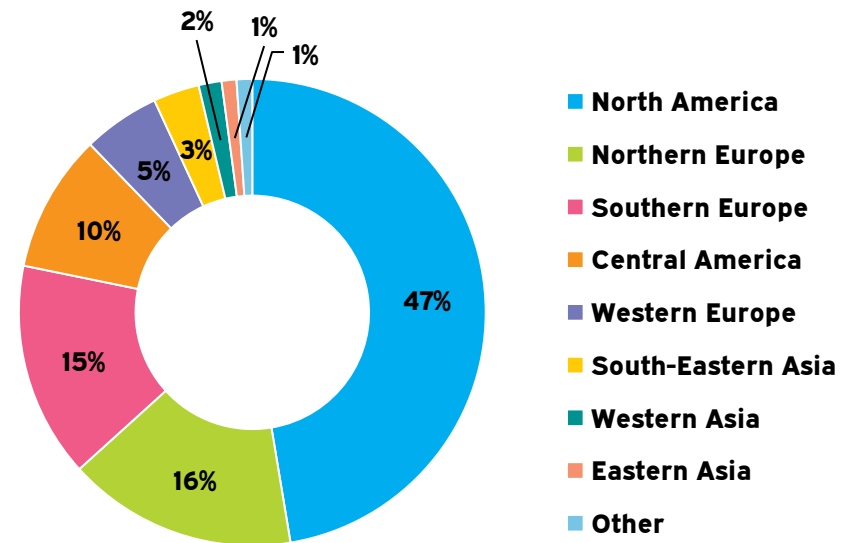
##### By Sector

Percent of FMV



##### By Geography

Percent of FMV

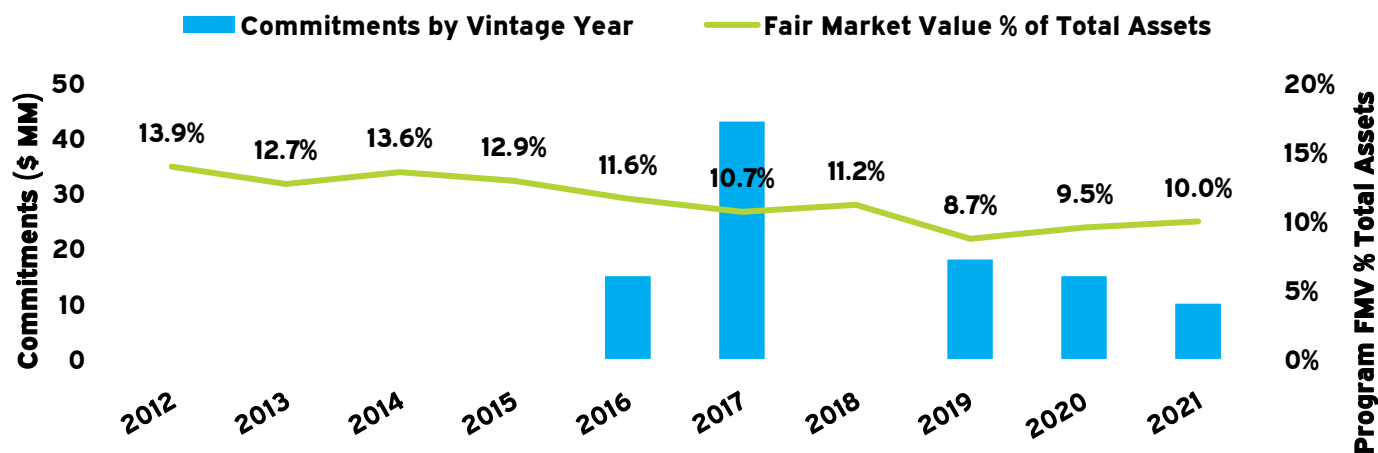




## **Real Estate Program**

### Introduction

As of December 31, 2021, the Retirement Association had committed \$288.0 million to 21 partnerships. As of quarter end, the fair market value of the real estate portfolio, in aggregate, was \$140.8 million. The net asset value of The Retirement Association's Real Estate Program represents 10.0% of total plan assets, meeting the program's target.



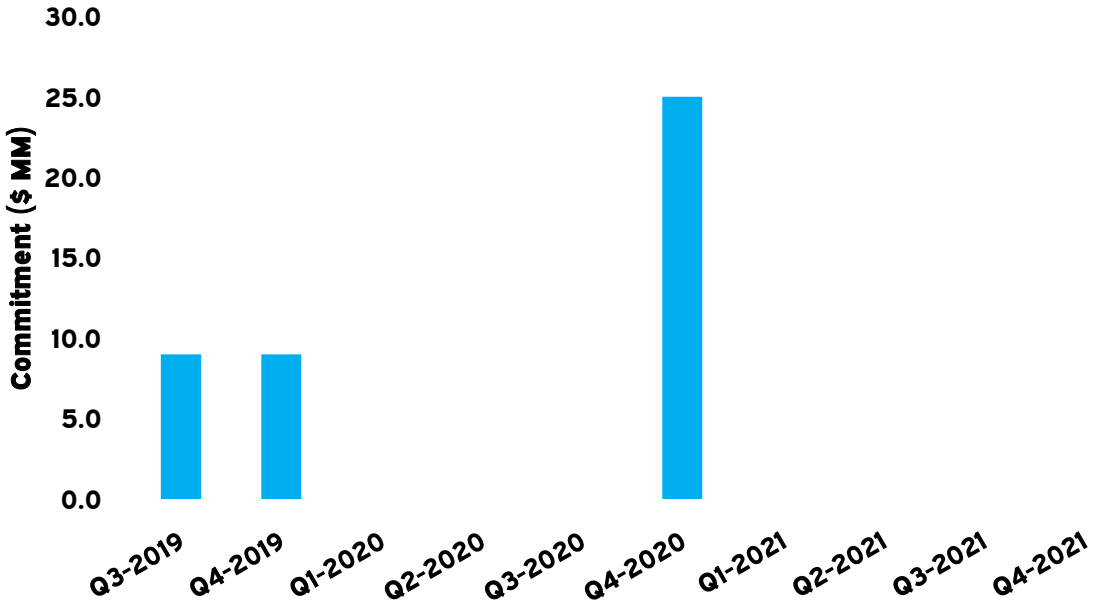
#### Program Status

No. of Investments	21
Committed (\$ MM)	288.0
Contributed (\$ MM)	230.6
Distributed (\$ MM)	197.9
Fair Market Value (\$ MM)	140.8

#### Performance Since Inception

	Program
DPI	0.86x
TVPI	1.47x
IRR	6.6%

**Commitments**  
Recent Quarterly Commitments

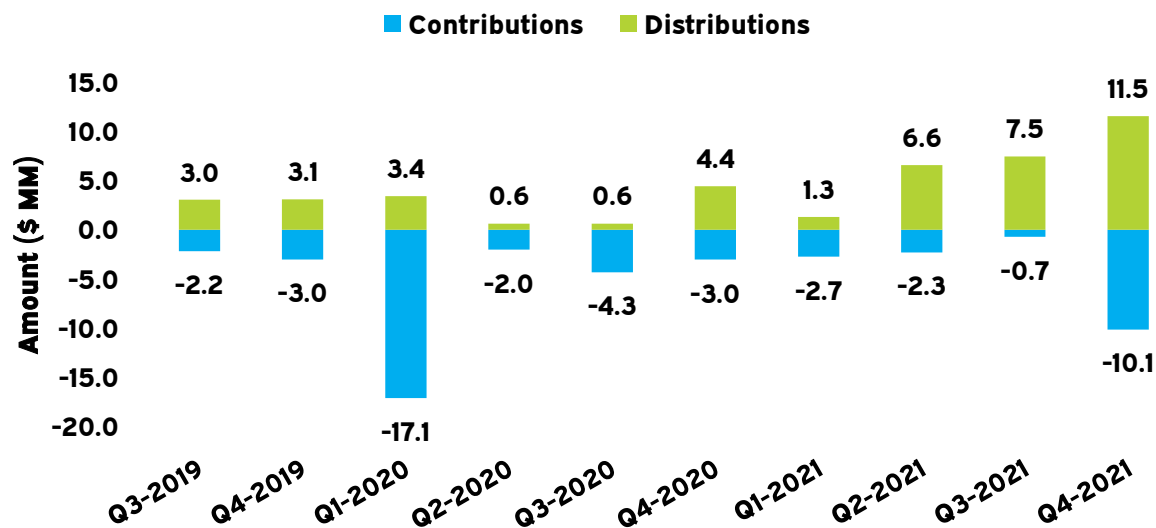


**Commitments This Quarter**

Fund	Strategy	Region	Amount (MM)
------	----------	--------	-------------

No new commitments made during the quarter

### Cash Flows Recent Quarterly Cash Flows



#### Largest Contributions This Quarter

Fund	Vintage	Strategy	Region	Amount (\$MM)
Rockpoint VI	2019	Opportunistic	North America	2.89
AEW Partners VIII	2017	Opportunistic	North America	2.44
AEW Partners IX	2020	Opportunistic	North America	1.89

#### Largest Distributions This Quarter

Fund	Vintage	Strategy	Region	Amount (\$MM)
AEW Partners VIII	2017	Opportunistic	North America	7.81
Carlyle Realty VIII	2017	Opportunistic	North America	2.52
TA Realty Core	2018	Core	North America	0.56

### Significant Events

- Rockpoint Real Estate Fund VI, L.P. called \$2.89 million during the fourth quarter to fund several existing investments and management fees.
- AEW Partners Real Estate Fund VIII, L.P. called \$2.44 million during the fourth quarter primarily to fund new and existing investments. The Fund distributed \$7.81 million, primarily as proceeds from the sale of existing investments.
- AEW Partners IX, L.P. called \$1.89 million during the fourth quarter to fund several existing investments.
- Carlyle Realty Partners VIII, L.P. distributed \$2.52 million. Proceeds stemmed from several portfolio investments during the quarter.
- TA Realty Core Property Fund, L.P. distributed \$0.56 million during the quarter as proceeds from its existing investments. The Fund closed on eight acquisitions in the fourth quarter, consisting of five multifamily and three industrial properties.

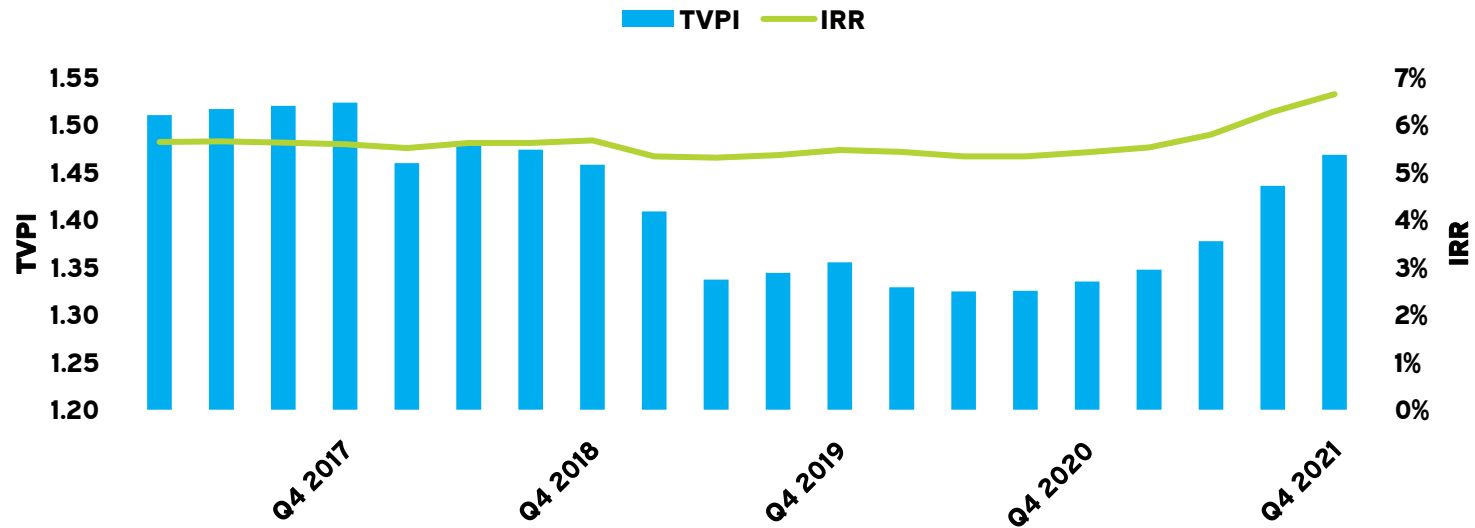
### By Strategy

Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)
Core	5	129.0	108.5	25.0	98.7	84.6	109.6	0.91	1.69	7.3
Fund of Funds	1	15.0	12.7	2.3	11.4	1.0	3.3	0.90	0.97	-0.4
Opportunistic	6	77.0	49.6	36.1	33.2	27.8	64.5	0.68	1.22	6.6
Value-Added	9	67.0	59.8	11.1	54.6	27.4	38.5	0.91	1.37	6.3
<b>Total</b>	<b>21</b>	<b>288.0</b>	<b>230.6</b>	<b>74.6</b>	<b>197.9</b>	<b>140.8</b>	<b>216.0</b>	<b>0.86</b>	<b>1.47</b>	<b>6.6</b>

### By Vintage

Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market		DPI (X)	TVPI (X)	IRR (%)
						Value (\$ MM)	Exposure (\$ MM)			
Open-end	5	129.0	108.5	25.0	98.7	84.6	109.6	0.91	1.69	7.3
2001	1	4.0	4.6	0.0	5.7	0.0	0.0	1.23	1.23	2.4
2003	1	10.0	9.0	1.9	11.7	0.0	1.9	1.31	1.31	5.1
2004	1	4.0	4.6	0.0	2.4	0.0	0.0	0.54	0.54	-8.0
2007	3	30.0	26.9	4.3	33.3	1.0	5.3	1.24	1.27	4.9
2008	1	5.0	5.4	0.0	0.0	0.5	0.5	0.00	0.10	-15.6
2011	1	5.0	5.0	0.0	7.4	0.0	0.0	1.48	1.48	11.6
2016	1	15.0	15.1	0.0	4.4	19.3	19.3	0.29	1.57	13.4
2017	2	43.0	35.7	15.6	33.1	17.9	34.2	0.94	1.43	23.3
2019	2	18.0	7.8	10.8	1.1	9.1	19.9	0.14	1.30	24.2
2020	2	15.0	8.0	7.0	0.0	8.3	15.3	0.00	1.05	NM
2021	1	10.0	0.0	10.0	0.0	NA	10.0	0.00	NA	NA
<b>Total</b>	<b>21</b>	<b>288.0</b>	<b>230.6</b>	<b>74.6</b>	<b>197.9</b>	<b>140.8</b>	<b>216.0</b>	<b>0.86</b>	<b>1.47</b>	<b>6.6</b>

#### Since Inception Performance Over Time

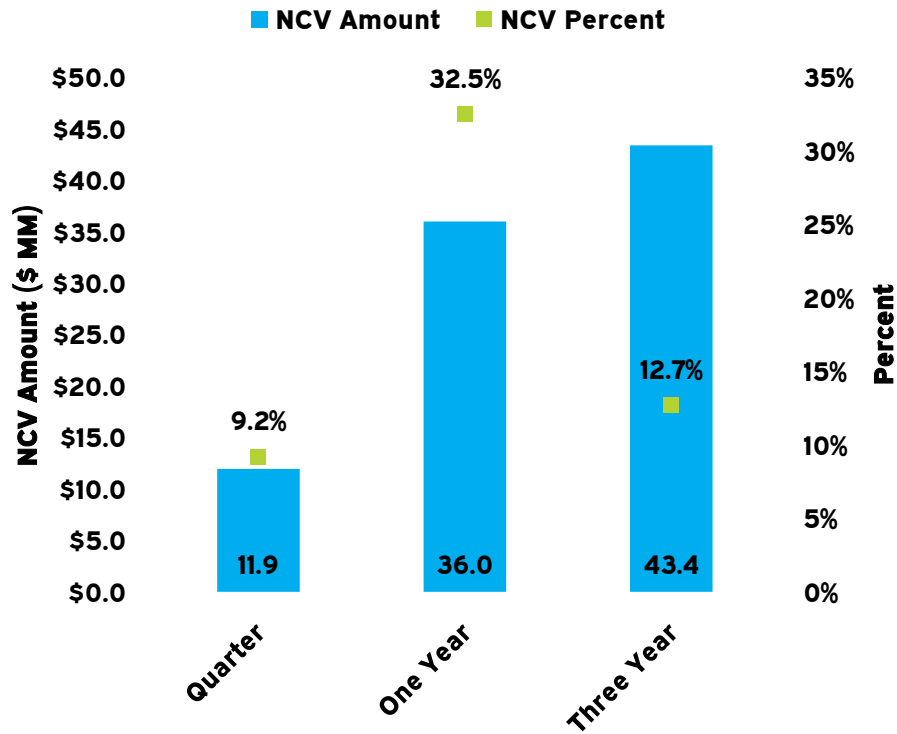


#### Horizon IRRs

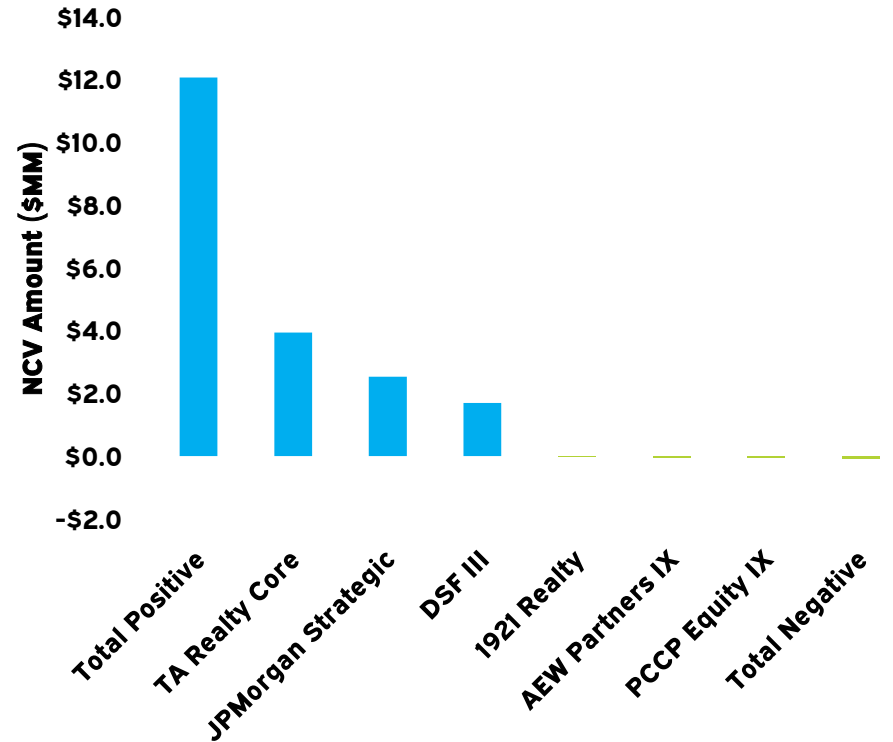
	1 Year (%)	3 Year (%)	5 Year (%)	10 Year (%)	Since Inception (%)
Aggregate Portfolio	31.1	11.9	9.5	8.7	6.6
Public Market Equivalent	43.0	15.4	8.7	10.3	7.8



#### Periodic NCV



#### 1 Quarter Drivers Of NCV



	2Q21 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Since Inception (%)	Inception Date
Invesco Equity Real Estate Securities Trust	0.0	0.0	3.6	3.9	6.9	8.4	11/20/2002
Wilshire REIT	17.1	46.2	19.2	10.9	11.5	11.5	NA
Multi Employer Property Trust	0.0	0.0	0.0	1.4	5.5	5.2	12/30/1999
NCREIF ODCE Equal Weighted (Net)	7.4	21.9	8.9	8.2	9.7	7.5	NA
JPMorgan Strategic Property	8.1	20.1	NA	NA	NA	8.4	4/01/2019
NCREIF ODCE Equal Weighted (Net)	7.4	21.9	NA	NA	NA	9.2	NA
TA Realty Core Property Fund, L.P.	8.3	29.4	14.0	NA	NA	14.5	3/21/2018
NCREIF ODCE Equal Weighted (Net)	7.4	21.9	8.9	NA	NA	8.9	NA

Fund Performance: Sorted By Vintage And Strategy

By Investment	Vintage	Strategy	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
Invesco RE	Open-end	Core	22.0	23.9	0.0	44.8	0.0	1.87	NM	8.3	NM
JPMorgan Strategic	Open-end	Core	27.0	27.0	0.0	0.1	33.7	1.25	NM	8.4	NM
MEPT	Open-end	Core	5.0	5.0	0.0	15.9	0.0	3.18	NM	6.5	NM
PRISA I	Open-end	Core	15.0	17.2	0.0	35.5	0.0	2.06	NM	5.3	NM
TA Realty Core	Open-end	Core	60.0	35.4	25.0	2.5	51.0	1.51	NM	14.6	NM
Intercontinental III	2001	Value-Added	4.0	4.6	0.0	5.7	0.0	1.23	1.60	2.4	13.0
Hunt Redevelopment	2003	Value-Added	10.0	9.0	1.9	11.7	0.0	1.31	1.60	5.1	12.8
Intercontinental IV	2004	Value-Added	4.0	4.6	0.0	2.4	0.0	0.54	1.61	-8.0	10.0
Mesirow RE Intl	2007	Fund of Funds	15.0	12.7	2.3	11.4	1.0 <sup>1</sup>	0.97	1.64	-0.4	10.3

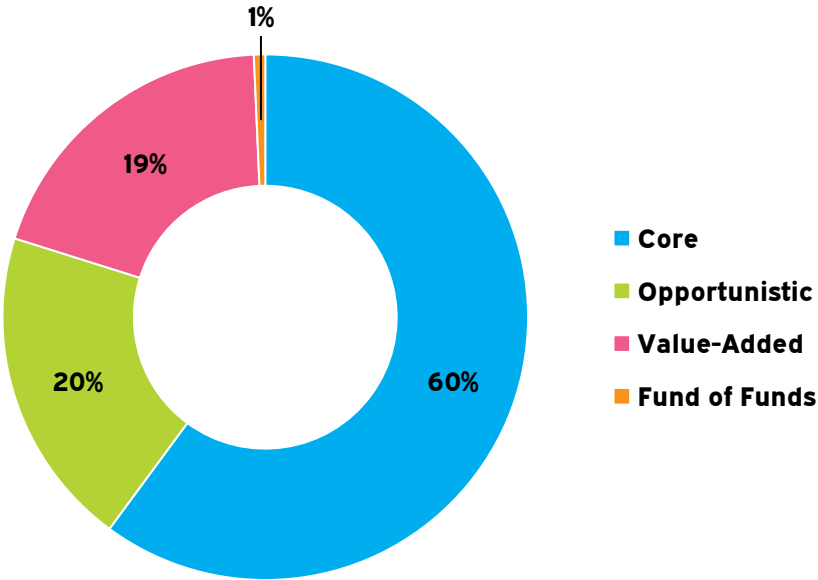
<sup>1</sup> The fair market value of Mesirow Real Estate International Partnership I, L.P. is estimated as of December 31, 2021. At the time of publishing this report, the manager had not yet provided a year end capital account statement. As such, the fair market value has been estimated using the Fund's actual fair market value as of September 30, 2021, plus all contributions and minus all distributions that occurred between October 1, 2021 and December 31, 2021.

Fund Performance: Sorted By Vintage And Strategy (con't)

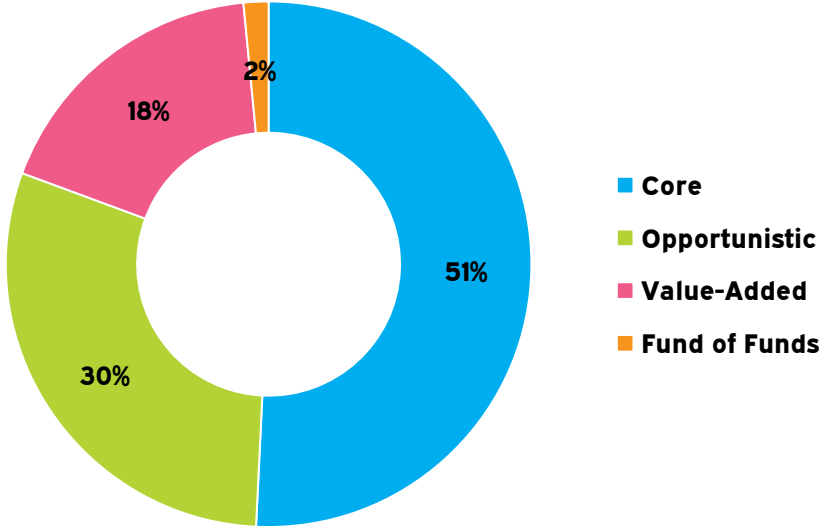
By Investment	Vintage	Strategy	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Fair Market Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
Berkshire Multi II	2007	Value-Added	10.0	11.3	0.0	17.9	0.0	1.59	1.64	11.0	10.3
New Boston VII	2007	Value-Added	5.0	3.0	2.0	4.0	0.0	1.33	1.64	5.6	10.3
1921 Realty	2008	Opportunistic	5.0	5.4	0.0	0.0	0.5	0.10	1.75	-15.6	12.3
DSF IV	2011	Value-Added	5.0	5.0	0.0	7.4	0.0	1.48	1.89	11.6	16.2
DSF III	2016	Value-Added	15.0	15.1	0.0	4.4	19.3	1.57	1.90	13.4	23.6
AEW Partners VIII	2017	Opportunistic	25.0	24.0	4.5	23.8	10.1	1.41	1.85	20.5	29.6
Carlyle Realty VIII	2017	Opportunistic	18.0	11.7	11.2	8.6	7.9	1.41	1.85	31.9	29.6
Rockpoint VI	2019	Opportunistic	9.0	5.5	3.5	0.1	6.5	1.20	1.45	31.5	NM
Berkshire Value V	2019	Value-Added	9.0	2.3	7.3	1.0	2.6	1.55	1.45	20.4	NM
AEW Partners IX	2020	Opportunistic	10.0	3.0	7.0	0.0	2.9	0.95	1.29	NM	NM
TerraCap V	2020	Value-Added	5.0	5.0	0.0	0.0	5.5	1.11	1.29	NM	NM
PCCP Equity IX	2021	Opportunistic	10.0	0.0	10.0	0.0	NA	NA	1.05	NA	NM
<b>Total</b>			<b>288.0</b>	<b>230.6</b>	<b>74.6</b>	<b>197.9</b>	<b>140.8</b>	<b>1.47</b>		<b>6.6</b>	

#### By Strategy

Percent of FMV

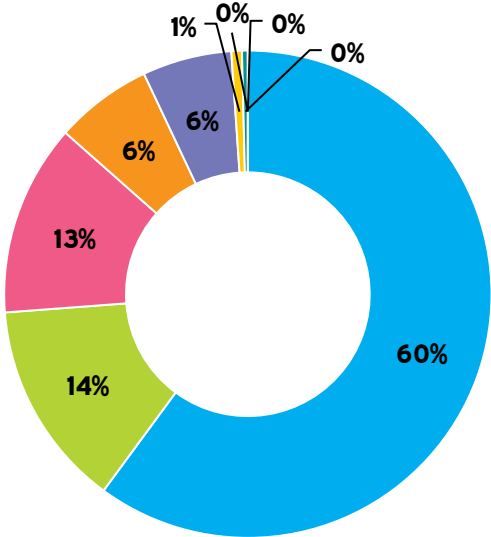


Percent of Exposure



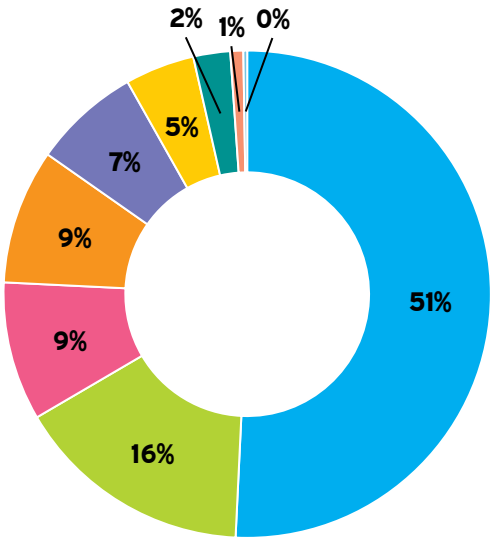
#### By Vintage

Percent of FMV



- Open-end
- 2016
- 2017
- 2019
- 2020
- 2007
- 2008
- 2011
- 2003

Percent of Exposure

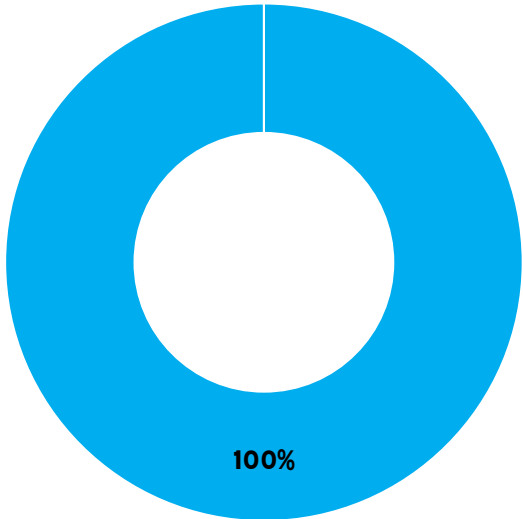


- Open-end
- 2017
- 2019
- 2016
- 2020
- 2021
- 2007
- 2003
- 2008

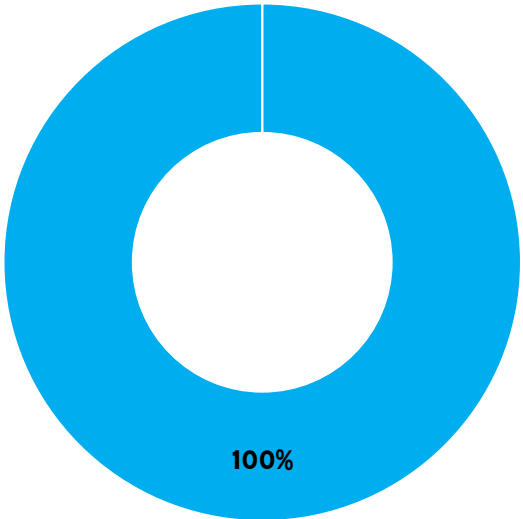
By Geographic Focus

Percent of FMV

Percent of Exposure



■ North America

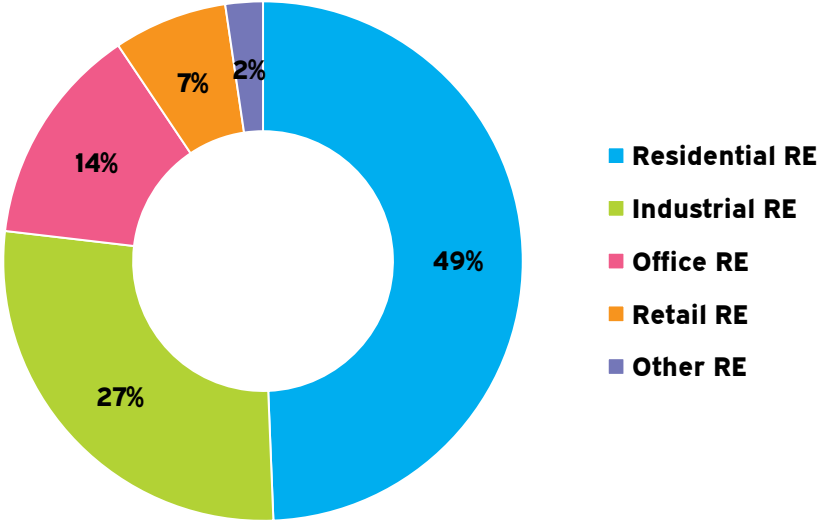


■ North America

Asset Diversification

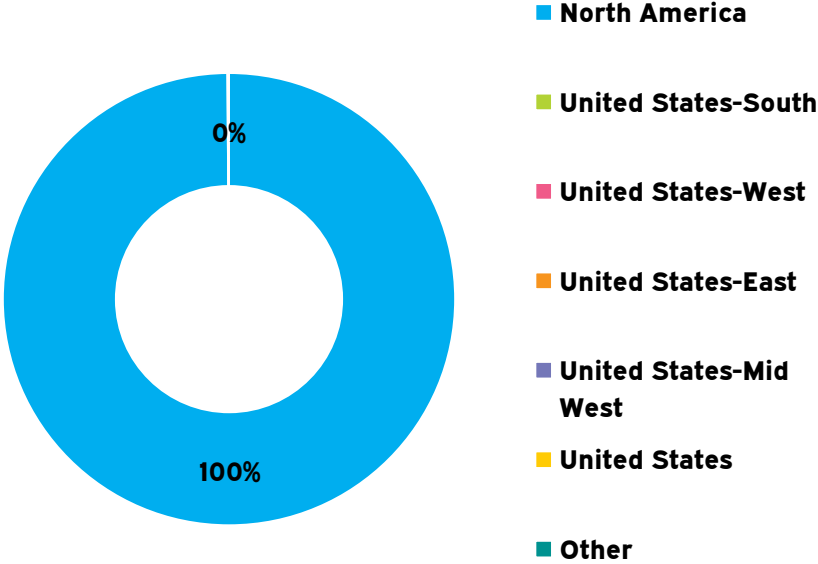
By Sector

Percent of FMV



By Geography

Percent of FMV





## Current Issues

## **Private Equity Benchmark Review**

#### Background

- For many years, we recommended clients use a private equity peer group benchmark.
  - Per the Association’s Investment Policy Statement, the benchmark for private equity is a peer universe composite produced by Cambridge Associates.
- What has changed –
  - Peer group providers are seeking to monetize their service at high rates
  - The impact of venture capital in the peer groups has grown – skewing the results
  - Timing delays (on data release) have grown to 3-6 months for some peer group universes
- Now – we recommended clients use a public market plus spread benchmark
- Advantages of public markets plus spread benchmark –
  - **Increased transparency** – all components of public markets indices are reported publicly
  - **Attribution** – easy to understand what sectors/styles are driving the benchmark return
  - **True Test of Outperformance** – plans invest in private markets to achieve returns above public markets.
  - **Real Time** – There are no reporting delays like peer group benchmarks

### Recommendation

#### We recommend:

- (1) using the broadest public equity benchmark as the starting point (MSCI ACWI IMI) which has exposure to public equities over the world
- (2) adding a spread of 200 bps. This is roughly the expected degree of outperformance we forecast in our capital market expectations
- (3) use a one quarter lag to better match up the timing of when the private equity NAV's are applied.

### Example

	Client 1Q 22 Report	Client 2Q 22 Report
Private Equity NAV "as-of" date	12/31/2021	3/31/2022
Benchmark	MSCI ACWI IMI 4Q21 return +2%	MSCI ACWI IMI 1Q22 return +2%

### Recommended IPS Change

Old Private Equity Benchmark	New Private Equity Benchmark
Cambridge Associates F.O.F Composite (1 Qtr lag)	MSCI ACWI IMI (1Q Qtr lag) + 2%

### Common Types of Private Market Benchmarks

- **Peer Benchmarks** – Several service providers, most notably including Cambridge Associates (“Cambridge”) and Burgiss, aggregate industry fund performance to calculate peer benchmark returns typically broken out by asset class, geography, and/or vintage year. For portfolio benchmarking of time-weighted returns, the peer benchmark’s quarterly “pooled returns” are generally used to calculate a trailing return
- **Public Equity Benchmarks** – Uses common public indexes, often similar to those used for benchmarking public equity portfolios, to calculate comparable trailing returns. A “spread” is typically added to the public benchmark’s annual return to account for the anticipated illiquidity premium from private markets investments
- **Inflation Benchmarks** – Calculates comparable returns on the inflation rate (typically based on CPI) observed over a matching trailing period. Most commonly used for benchmarking the performance of private real assets portfolios. A spread (typically larger than used for public benchmarks) is also commonly added to the inflation benchmark.

All Private Benchmarks are Imperfect

Factors	Peer Benchmarks	Public Equity Benchmarks	Inflation Benchmarks	Comments
Optimal Time Period	Short/Mid/Long	Mid/Long	Mid/Long	Private investments tend to exhibit significantly less volatility than public benchmarks over shorter-term periods (one year or less) meaning the benchmarked portfolio will consistently lag public markets in strong public markets and outperform in strong public market downturns. This effect generally evens out over longer periods.
Investability	Not Investable	Somewhat Investable	Not Investable	Investors do not have the option of earning the return of peer or inflation benchmarks. Investors can gain low-cost exposure to all common public benchmarks but have no way of capturing the excess return spread.
Compatibility	High	Moderate	Moderate	Compatibility refers to the degree to which the benchmark matches with the investor’s objectives, risk preference, and portfolio composition. An appropriate peer benchmark can usually be selected for a range of private portfolios. Public benchmarks, though, are unable to fully mirror the unique dynamics of private investments.
Clarity	Low	High	High	Even the most common peer benchmarks like Cambridge and Burgiss do not provide visibility into the underlying funds. Public benchmarks, however, offer perfect clarity into assets and weightings of all assets included in the index. Similarly, extensive CPI subcomponent data are publicly available.
Incremental Cost	High	None	None	Cambridge Associates and Burgiss (and likely others) are seeking to monetize their datasets and seeking to initiate contracts directly with plan sponsors (at costs in the multiple thousands). Use of public market indices or inflation benchmarks is free.

**Non-Core Infrastructure RFP  
Finalist Review**

## Background

- As of March 31, 2022, the Association's real assets allocation was approximately \$89.9 million, or roughly 7% of total portfolio assets.
- In March, Meketa issued an RFP on behalf of the Plymouth County Retirement Association seeking proposals from managers of North America-focused, closed-end, non-core private infrastructure funds.
- The Board received seven responses, which was narrowed down to two finalists:
  - BlackRock Global Infrastructure Fund IV
  - Climate Adaptive Infrastructure
- As a reminder, Meketa is recommending a commitment of \$10 - \$12 million, in this asset class for 2022.
- The following pages highlight the two finalist firms/strategies.



## **BlackRock Global Infrastructure Fund IV**

**Firm**

BlackRock	
Firm Location (Headquarters)	New York, NY
Firm Inception	1988
Strategy Inception	2008
Firm AUM (As of 12/31/21)	\$10T

- BlackRock (the “Manager” or the “Firm”) was founded in New York City in 1988 as an investment management services firm initially focused on fixed income.
- Over the next three decades, BlackRock expanded its global offerings for institutional and retail clients, through organic growth, strategic partnerships, and mergers and acquisitions, across equity, fixed income, alternatives, multi-asset strategies, and cash management.
- The global infrastructure product was originally formed by Mark Florian in 2008 under First Reserve Corporation to raise global energy and power infrastructure funds.
- In 2017, BlackRock acquired the franchise from First Reserve and it became part of the infrastructure platform within BlackRock that includes the global renewable funds and soon a core infrastructure vehicle.
- The first vehicle under the BlackRock umbrella, BlackRock Global Energy and Power Infrastructure Fund III, closed in 2019 on \$5.1 billion. Fund IV has been rebranded as BlackRock Global Infrastructure Fund (“BGIF”) as the strategy has expanded to also focus on decarbonization, decentralization, and digitalization.

### Investment Team

- BlackRock's Global Infrastructure team includes 36 investment professionals led by Managing Director Mark Florian located across seven cities across America, Europe, and Asia Pacific (Greenwich, Houston, New York, London, Dublin, Singapore, and Mexico City).
- The investment team is comprised of nine Managing Directors, four directors, nine vice presidents, and 14 Associates.
- Supporting the investment team are five capital markets and asset management professionals, nine finance and operations professionals, and six product strategy and investor relations professionals.
- The senior investment team members have worked together for over a decade dating back to their time at First Reserve.

## Investment Terms

BlackRock Global Infrastructure Fund IV	
Partnership Type	Limited Partnership
Investment Strategy/Focus	Infrastructure
Geographic Focus	Global
Vintage Year	2022
Fund Size	\$7.5 billion target size
Final Closing	TBD
Term	12 years from the final closing date (w/three possible 1-year extensions)
Management Fee <sup>1</sup>	0.7% on total commitments in the investment period; 1.0% on invested capital in the investment period and thereafter 1.7% on invested capital
Preferred Return	8% compounded annually
Carried Interest	Performance fee is 15% above the preferred return, calculated on a whole-fund basis, with an 80% catch up for the General Partner
General Partner Commitment	The GP will commit at least 2.5% of aggregate commitments (not to exceed \$150 million). Within this amount, members of the investment team will commit at least 0.50% of aggregate commitments (not to exceed \$15 million).

<sup>1</sup> First Close Fee Discount: 20 basis points during the investment period on the committed portion of fees.

### Investment Strategy

- The Fund strategy has evolved as the prior vehicles were primarily focused on traditional energy. As the investment landscape has changed with energy transition, GIF will focus on this opportunity set, along with some other new areas (with target allocations to each shown).
  - **Energy and Environmental (30% to 50%)** – Including clean fuels, carbon capture and sequestration, recycling, natural gas midstream, liquified natural gas and storage.
  - **Low Carbon Power (20% to 40%)** – Focusing on generation, storage, and grid stability for renewable power, natural gas power plants, electric vehicle charging, and battery storage.
  - **Transportation and Logistics (10% to 15%)** – Looking to support decarbonization on a path to net zero through advancement of energy efficient forms of transportation.
  - **Digital Infrastructure (10% to 15%)** – Targeting smart meters, fiber infrastructure, data centers, and wireless towers that can benefit from low carbon power and energy efficiency.
  - **Regulated Utilities (5% to 10%)** – Improving access to low carbon electricity and more sustainable forms of energy.
- The Fund will target control positions adding value through technical, operational, and financial expertise.
- Geographically, the portfolio is expected to be global with targets of 50% in North America, 25% in Europe, Middle East and Africa (“EMEA”), 15% in Asia Pacific, and 10% in Latin America.
- The portfolio will target 15 to 20 investments ranging in equity from \$200 million to \$500 million.
- The Fund will target a gross return of 12% to 14% with an overall cash yield of at least 7%.

Historical Track Record  
As of December 31, 2021

	Inception Year	Fund Size (\$ B)	Called (\$ M)	Distributed (\$ M)	Total Value (\$ M)	Net TVPI <sup>1</sup> (x)	Net IRR (%)	Top Quartile <sup>2</sup> (%)	Loss Ratio (%) <sup>3</sup>
Fund I	2010	1.2	1.1	1.1	1.2	1.0	-0.4	35.8	15.9
Fund II	2014	2.5	2.4	2.3	3.7	1.3	17.2	18.8	12.4
Fund III	2019	5.1	2.6	0.5	3.2	1.1	11.7	NM	0.0
<b>Total</b>		<b>8.8</b>	<b>6.0</b>	<b>3.9</b>	<b>8.1</b>	<b>1.2</b>	<b>8.4</b>		<b>7.7</b>

- Fund I did not meet expected returns and was negatively affected by government subsidies expiring on several of its assets.
- Fund II is more diversified with 17 portfolio companies, of which nine have been fully realized, with net returns to date above target and close to top quartile.
- Fund III is still in its value creation stage and has invested approximately 50% of its capital to date.

<sup>1</sup> TVPI: Total Value to Paid-In ratio (a realization ratio). The TVPI is the total of the net asset value and distributions, as compared to contributed capital.

<sup>2</sup> Preqin | Infrastructure | All Geographies | Top Quartile | As of December 31, 2021

<sup>3</sup> Loss Ratios represent the proportion of invested capital that has resulted in realized and unrealized losses in a portfolio. The Ratio is calculated by taking the sum of lost capital (invested capital minus an investment's total value) for all investments that have generated a negative return, then dividing that amount by total invested capital across the entire portfolio.

## Strengths

- **Deep Industry Network** – The senior team has an extensive network of industry connections they use to source prospective investment opportunities through a consultative approach. BGIF has historically originated 80% of investment opportunities through exclusively negotiated transactions.
- **Performance of Funds II and III** – Fund II has returned nearly all capital and has a gross return of 22.7% as of September 30, 2021. Fund III is still in its value creation stage but has a zero loss ratio to date, and has a diversified portfolio across sectors and geographies.
- **BlackRock Platform Resources** – BlackRock has over 18,000 employees in over 38 countries that can provide locally sourced origination, diligence, and monitoring assistance. BlackRock also has over 50 in-house Capital Markets professionals that are available to BGIF. The Real Assets team has approximately 110 professionals in addition to the BGIF team that also are available to BGIF.
- **Disciplined Portfolio Construction** – BGIF has shown ability to develop portfolios that are diverse across sectors and geography. The team looks to have no portfolio company exceed 10% of the fund, which also limits single asset exposure risks. Fund IV is a compelling offering covering multiple sectors with an emphasis on decarbonization, decentralization, and digitization.
- **Expanding Sector Exposure** – BGIF continues to evolve its energy-sector targets with the opportunity set in a decarbonizing world, and has expanded into adjacent spaces in other sectors, namely transportation, logistics, and communications, where there are low carbon power and energy efficiency needs. The team is expanding its size and expertise commensurately.

## Considerations

- **Carry to the House** – Economic alignment with the BGIF team is diluted with half of the Fund’s carried interest going to BlackRock.
  - Mitigating factor(s): The GP commitment at a fund size of \$7.5 billion of \$150 million represents 2.0% of the Fund. Within this amount, the investment team will be making an up to \$15 million commitment, funded in cash (not management fee offsets). There has been no carry paid out from prior vehicles, so the contribution amounts are significant commitments from the team members.
- **Fund I Performance** – As of December 31, 2021, Fund I had a gross IRR of 3.6% and net IRR of -0.4%. The Fund is below target expectations and doesn’t have much value remaining to further boost recovery.
  - Mitigating factor(s): Fund I was negatively affected by government subsidies expiring on several of its assets back when returns relied on subsidies to reach target. BlackRock learned the lesson to not rely on the subsidies as part of their underwriting and have not included these since Fund I.
- **Potential Core Infrastructure Vehicle** – BlackRock is planning to launch a core infrastructure vehicle that is expected to initially make one to two investments per year. Former Managing Director for BGIF, David O’Brien, has left the team to launch the core platform. BlackRock says that deals will be originated by members of the BGIF and Global Renewables teams as the senior team members are already seeing core risk/return deal flow.
  - Mitigating factor(s): Originating transactions for another vehicle is not expected to take significant time away from team members responsibility to the flagship vehicle. These additional responsibilities are not expected to make up more than 5% of their time, on average.



## **Climate Adaptive Infrastructure Fund LP**

### Firm

Climate Adaptive Infrastructure	
Firm Location (Headquarters)	Mill Valley, CA
Firm Inception	2019
Strategy Inception	2019
Firm AUM (As of 02/01/22)	\$536 M

- Climate Adaptive Infrastructure (“CAI”, the “Manager”, or the “Firm”) was founded for the specific purpose of investing in low-carbon infrastructure assets within the energy, water, and transportation sectors through its inaugural fund, Climate Adaptive Infrastructure Fund LP (the “Fund”).
- The Founders have prior experience in infrastructure investment management, infrastructure operation, and policymaking in the renewables, environmental services, and energy transition sectors, as well as private equity investing and asset management. Four have prior work experience together building and operating a solar and wind portfolio in the US.
- CAI is 100% owned by the Founding Managing Partner, Bill Green, who previously was CEO of Macquarie Infrastructure Company Renewable Energy Holdings (“MREH”) and is the originator of CAI’s strategy. Mr. Green along with seven other team members will be allocated carry points for the Fund.
- The Firm is headquartered in Mill Valley, California—across the Golden Gate Bridge from San Francisco, with two team members working from New York City and Paris.

### Investment Team

- CAI has eight investment professionals that include five Partners, one Senior Director, one Director of Asset Operations, and one Associate. There are plans to hire two more junior staff in the near term as the fundraising progresses.
- CAI also retains three other senior advisors who have a diverse background in operations, asset management, and sustainability. The advisors are paid through the management company and are not an expense for the Fund.
- Managing Partner Mr. Green, Partner Lex Wolf, Partner Mark Freyman, and Director Nicolas Rodier worked together building the MREH renewables portfolio, with Messrs. Green, Wolf, and Rodier on the Macquarie team, and Mr. Freyman leading Chevron's participation as the tax equity partner.
- Partner Cynthia Jaggi has a background in analytic decision-making and leads Environmental, Social, & Corporate Governance ("ESG") initiatives at the Firm, including being responsible for CAI's Climate and ESG Screening tools used by the investment and asset management teams for sourcing and ongoing monitoring.
- Senior Director Dominique Desmессence, based in Paris, has 25 years of experience in the water, wastewater, and waste industry, including overseeing Suez's North American operations for a period, and also running corporate divisions in other companies and facility operations in Europe and Latin America.

## Investment Terms

Climate Adaptive Infrastructure Fund LP	
Partnership Type	Limited Partnership
Investment Strategy/Focus	Infrastructure
Geographic Focus	North America (no more than 20% outside US and Canada)
Vintage Year	2021
Fund Size	\$1.0 billion target size & hard cap
Final Closing	Expected in 1H 2022
Term	12 years from the final closing date (w/three possible 1-year extensions)
Fees / Expenses:	
Management Fee <sup>1</sup>	1.75% annual management fee based on committed capital during the Investment Period; 1.75% of net invested capital thereafter.
Preferred Return	8% compounded annually
Carried Interest	Performance fee is 17.5% above the preferred return, calculated on a whole-fund basis, with a 100% catch up for the General Partner
General Partner Commitment	Lesser of 1.5% of commitments and \$15 million, funded with cash, management fee offsets, and debt.

<sup>1</sup> Fee breaks may be available based on size and timing of commitment.

### Investment Strategy

- The Fund will seek to invest in low-carbon infrastructure assets within the energy, water, and transportation sectors with expected capital allocations of 40%, 30%, and 30%, respectively.
- Energy sector targets focus on renewable generation including hydropower, offshore wind, next-generation solar, renewable natural gas, battery storage, and pumped hydroelectric energy storage.
- Water sector opportunities consist of potable reuse for aquifer recharge, industrial water treatment and renewable-powered desalination.
- Transportation targets include maritime electrification, light rail, hydrogen fuel, and autonomous vehicle charging.
- A common theme for CIA is to look to repurpose existing infrastructure where it is hard, time consuming, or potentially impossible to new build or rebuild, but opportunities exist to modify, reconfigure, and/or transform existing assets.
- Geographically, 80% or more of the Fund will be invested in North America, with the balance in developed countries, which would mostly represent foreign assets of the North American portfolio companies.
- CAI will assess the climate adaptive impact of each investment by evaluating both the physical risk associated with climate change and the impact on the global transition to low-carbon economy.
- The portfolio is expected to be seven to 10 platform investments ranging in equity investments of \$75 million to \$200 million.
- The Fund will target a gross return of 14% to 16%.

### Historical Track Record

- As a first time fund, there is no historical track record, and the performance to date of the two seed investments—a solar project development platform and a hydropower platform—is not yet meaningful.
- The performance of the MREH solar and wind portfolio is not permitted for attribution to Messrs. Green, Wolf, Rodier, and Freyman. However, Meketa reviewed materials associated with these investments and their exits and believe the investments were collectively successful and returns were consistent with the strategy and targets.
- Highlights of the MREH portfolio include:
  - Operating platform of 10 utility scale solar and wind facilities totaling 345 megawatts (“MW”) of generation, including nine projects across seven US states with commercial operation dates between 2012 and 2017, with 142MW of solar and 203MW of wind generation;
  - Development platform joint venture with Intersect Power (now a Fund portfolio company) consisting of a four gigawatts of solar project pipeline in Texas and California;
  - In August 2019, MREH closed on the sale of the solar portfolio to Goldman Sachs Asset Management and the wind portfolio to DIF Infrastructure Fund V.
- In addition to their time at MREH, Mr. Green and Mr. Wolf both have prior private equity investing experience, including as Managing Directors at VantagePoint Capital Partners and The Beekman Group, respectively. Neither track record is permitted attributable and neither strategy is similar to the Fund’s.

## Strengths

- **Experienced Senior Team** - The Founding Partners have extensive experience in operations, sustainability, and portfolio management dating back at least the past three decades. Several of the team, including Messrs. Green, Wolf, Rodier, and Freyman have joint experience building the MREH portfolio as Macquarie and Chevron professionals.
- **ESG Focused Firm and Strategy** - CAI is an impact-focused fund targeting projects addressing climate change and low carbon infrastructure. The Firm performs a climate and ESG risk evaluation on all potential investment opportunities, and relies on a systematic, numeric-, and qualitative-based evaluation model that uses standardized criteria and scoring across all investments from initial screening through to post-investment asset management and monitoring.
- **Initial Portfolio Investments** – There is visibility into the portfolio with two seed investments funded within the hydro and solar power generation spaces. Each investment represents a significant pipeline of projects for those portfolio companies. Additionally, CAI’s current new deal pipeline also appears actionable and consistent with the Fund’s stated strategy.
- **Deep Industry Network** – The senior team members have extensive relationships, built over decades within infrastructure, government, and institutional investing, that can be used to source and execute off-market deal flow. The relationships cover solar and wind, hydropower, renewable natural gas, water, wastewater, and waste management—all areas of opportunity for the Fund.

## Considerations

- **Limited Track Record** - CAI does not have a direct, attributable track record as a team with their first fund.
  - Mitigating factor(s): Several team members worked together at Macquarie Renewable Energy Holdings to build a portfolio of solar and wind assets that was successfully realized in 2019.
- **Team Partially Built** - CAI has a strong senior team, but has not completed the buildout of the mid- and junior levels. The team appears set at the senior level but they have only hired one Associate to date.
  - Mitigating factor(s): CAI was waiting for the Fund to close on capital in order to have the budget for additional hires. They are actively recruiting for Vice President and Associate roles. In the interim, the current team members appear to have capacity to cover the existing investments and pipeline.
- **Lack of Firm Diversity** – The initial team is not very diverse with seven team members that include five males and only one minority professional.
  - Mitigating factor(s): CAI is focused on increasing the diversity of their Firm as they look to build out. CAI has told recruiters that they will only interview women and/or minority candidates to fill their current open positions at Vice President and Associate.
- **Outsourced Operations** - The Firm relies heavily on outsourced resources, including for the Chief Financial Officer position, as well as accounting, operations, administration, and investor relations. Additionally, Mr. Green currently is both CEO and Chief Compliance (“CCO”) officer, two roles best separate.
  - Mitigating factor(s): It is common for a new firm/fund to rely on third-party service providers. CAI’s outsourced providers are institutional and recognized by Meketa. The Firm plans to hire an in-house CCO in the near term as it scales up, separating the CEO-CCO functions, and will likely bring some other functions in house as well, while still retaining substantial third-party support.



# Appendix

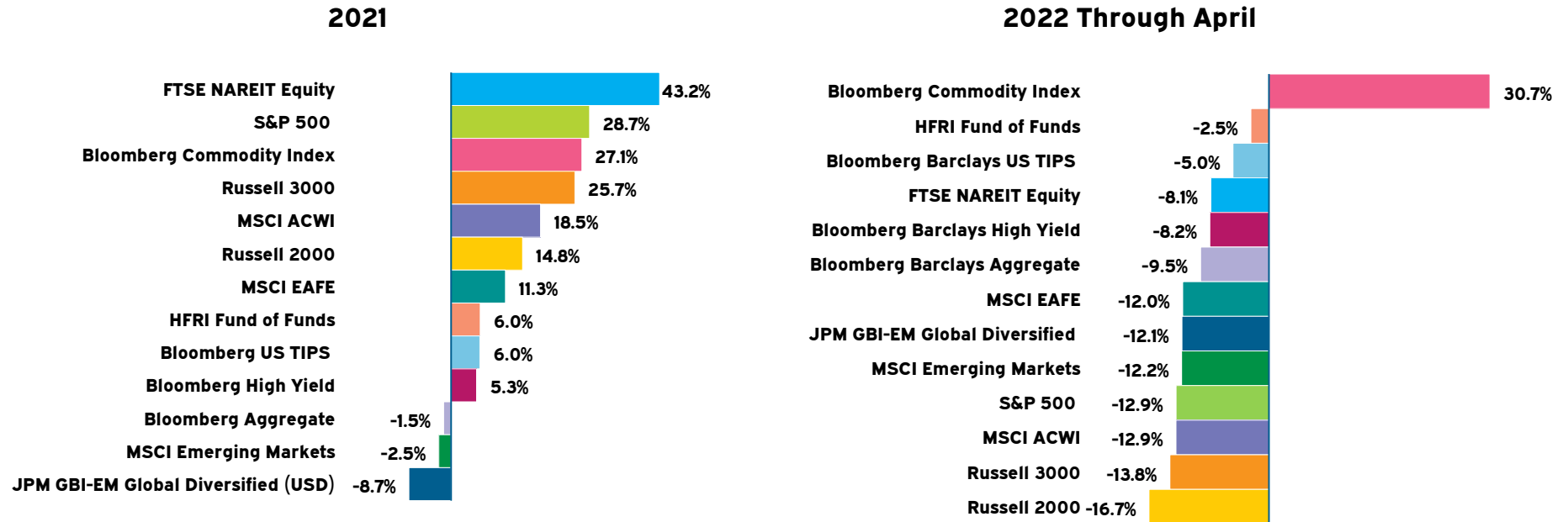
# **Economic and Market Update**

Data as of April 30, 2022

### Commentary

- Market volatility rose sharply in April due to continued inflation pressures, driven by supply chain issues, global stimulus, and the war in Ukraine.
- Except for commodities, all asset classes declined in April.
  - Equities fell across the board with the US experiencing the steepest declines.
  - Value-oriented equities outpaced growth in the US, influenced by higher interest rates and notable weakness in some high-profile technology companies.
  - The global bond selloff continued, as rates rose further on inflation fears and policy expectations.
  - Rates rose across the US yield curve, with the curve steepening after a brief early month inversion.
  - Inflation remains high globally given lingering supply issues from the pandemic and the conflict in Ukraine.
  - The pace of policy tightening will likely increase due to persistent inflation.
- The conflict in Ukraine, lingering COVID-19 issues, persistent inflation, and strict lockdowns in China will all have considerable economic and financial consequences for the global economy going forward.

### Index Returns<sup>1</sup>



→ Outside of emerging markets and the broad US investment grade bond market (Bloomberg Aggregate), most asset classes rose in 2021.

→ In April, most major asset classes extended their losses from the first quarter, with US stocks and bonds having one of their worst starts to a year on record. Commodities continue to be the one exception to the trend, adding 4.1% in April and bringing the year-to-date return to over 30%.

<sup>1</sup> Source: Bloomberg and FactSet. Data is as of April 30, 2022.

### Domestic Equity Returns<sup>1</sup>

Domestic Equity	April (%)	Q1 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	-8.7	-4.6	-12.9	-0.5	13.8	13.7	13.6
Russell 3000	-9.0	-5.3	-13.8	-3.9	13.1	13.0	13.2
Russell 1000	-8.9	-5.1	-13.6	-2.8	13.6	13.4	13.5
Russell 1000 Growth	-12.1	-9.0	-20.0	-6.0	16.7	17.3	15.5
Russell 1000 Value	-5.6	-0.7	-6.3	0.5	9.6	9.1	11.1
Russell MidCap	-7.7	-5.7	-12.9	-7.1	10.5	10.7	11.9
Russell MidCap Growth	-11.3	-12.6	-22.4	-17.7	8.7	12.1	12.1
Russell MidCap Value	-5.9	-1.8	-7.7	-0.9	10.2	8.6	11.3
Russell 2000	-9.9	-7.5	-16.7	-17.9	6.7	7.2	9.9
Russell 2000 Growth	-12.3	-12.6	-23.3	-27.4	4.1	7.1	9.8
Russell 2000 Value	-7.8	-2.4	-10.0	-7.7	8.4	6.7	9.7

#### US Equities: Russell 3000 Index declined 9%, and value indices outperformed growth in April.

- The steep declines in US stocks were driven by an overall weakening of economic data and persistent inflation, leading to expectations for the Federal Reserve to increase rates much faster than previously expected.
- Value stocks declined far less than growth stocks for the month, maintaining the recent trend as rising rates and inflation continued to weigh on growth companies.
- Large company stocks outpaced small company stocks for the month, extending year-to-date relative outperformance.

<sup>1</sup> Source: Bloomberg. Data is as of April 30, 2022.

### Foreign Equity Returns<sup>1</sup>

Foreign Equity	April (%)	Q1 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	-6.3	-5.4	-11.4	-11.3	4.3	4.9	5.0
MSCI EAFE	-6.5	-5.9	-12.0	-9.1	4.4	4.8	5.7
MSCI EAFE (Local Currency)	-1.4	-3.7	-5.1	2.9	6.5	6.0	8.7
MSCI EAFE Small Cap	-6.9	-8.5	-14.8	-14.4	4.9	5.0	7.6
MSCI Emerging Markets	-5.6	-7.0	-12.2	-19.3	2.2	4.3	3.0
MSCI Emerging Markets (Local Currency)	-3.5	-6.1	-9.4	-15.3	4.1	6.2	6.0
MSCI China	-4.1	-14.2	-17.7	-37.1	-5.0	2.1	3.9

#### International Developed Market Equities: MSCI EAFE -6.5% in April.

- Non-US stocks fell less than US stocks in April, leading to their smaller year-to-date declines.
- The war in Ukraine, high inflation, continued strength in the US dollar, and slowing growth all weighed on stocks in Europe. A particularly weak currency and diverging monetary policy impacted Japan's results.
- Like the US, value stocks outperformed growth stocks by a wide margin across developed markets, but not in emerging markets where value and growth declined equally in the month of April.

#### Emerging Markets: MSCI EM -5.6% in April.

- Emerging market stocks suffered negative returns in April but outperformed developed market stocks.
- China's strict COVID-19 policies, increased hawkishness from the US Fed, the war in Ukraine, and US dollar strength all contributed to declines.

<sup>1</sup> Source: Bloomberg. Data is as of April 30, 2022.

### Fixed Income Returns<sup>1</sup>

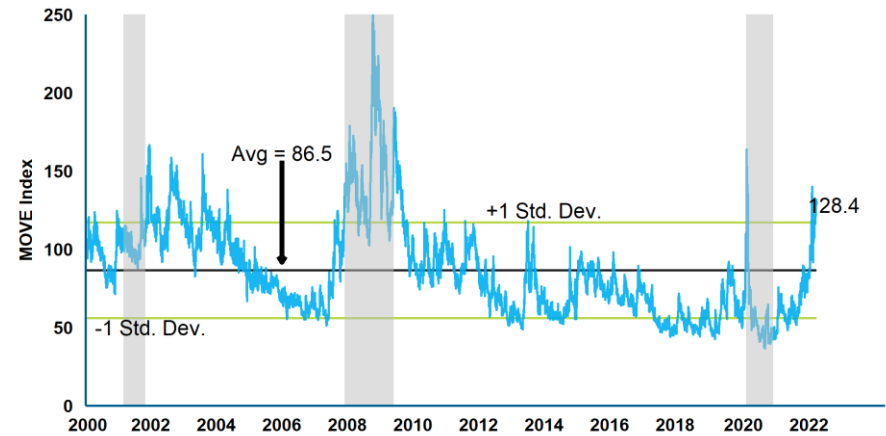
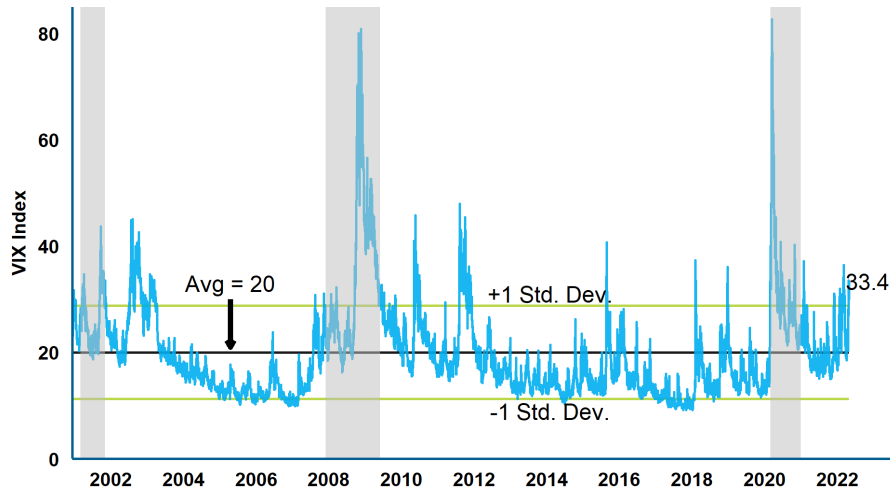
Fixed Income	April (%)	Q1 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	-3.7	-6.1	-9.6	-8.5	0.6	1.4	2.1	3.9	6.5
Bloomberg Aggregate	-3.8	-5.9	-9.5	-8.4	0.4	1.2	1.7	3.5	6.7
Bloomberg US TIPS	-2.0	-3.0	-5.0	0.7	5.4	3.9	2.3	3.1	7.5
Bloomberg High Yield	-3.6	-4.8	-8.2	-5.2	2.8	3.7	5.3	7.0	4.8
JPM GBI-EM Global Diversified (USD)	-6.0	-6.5	-12.1	-15.9	-3.1	-1.3	-1.4	6.9	4.9

#### Fixed Income: Bloomberg Universal -3.7% in April.

- Continued concerns about policy tightening and inflation led to rates rising further in April resulting in the broad US investment grade bond market (Bloomberg Aggregate) having its worst start to a year on record. The nominal 10-year Treasury yield approached 3% by month-end and real yields moved toward becoming positive (this eventually happened after month-end).
- US credit spreads continued to widen, particularly in high yield, as risk assets fell.
- Emerging market debt experienced the worst declines for the month and year-to date periods with the conflict in Ukraine, rising rates in the US, and strict lockdowns in China all contributing.

<sup>1</sup> Source: Bloomberg. JPM GBI-EM is from InvestorForce. Data is as of April 30, 2022.

### Equity and Fixed Income Volatility<sup>1</sup>

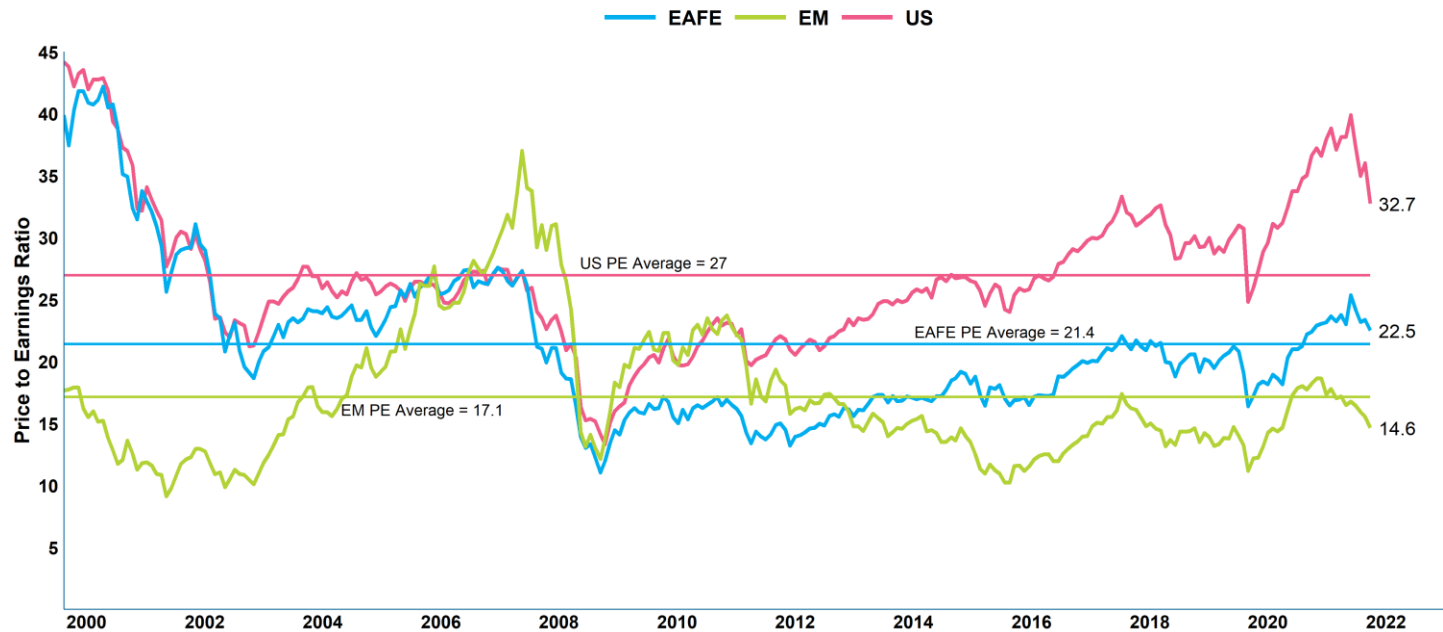


- Volatility in both equities (VIX) and fixed income (MOVE) surged in April remaining well above long run averages.
- Concerns over high inflation and the related faster pace of expected policy tightening has led to volatility across markets remaining elevated.

<sup>1</sup> Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of April 2022. The average line indicated is the average of the VIX and MOVE values between January 2000 and the present month-end respectively.

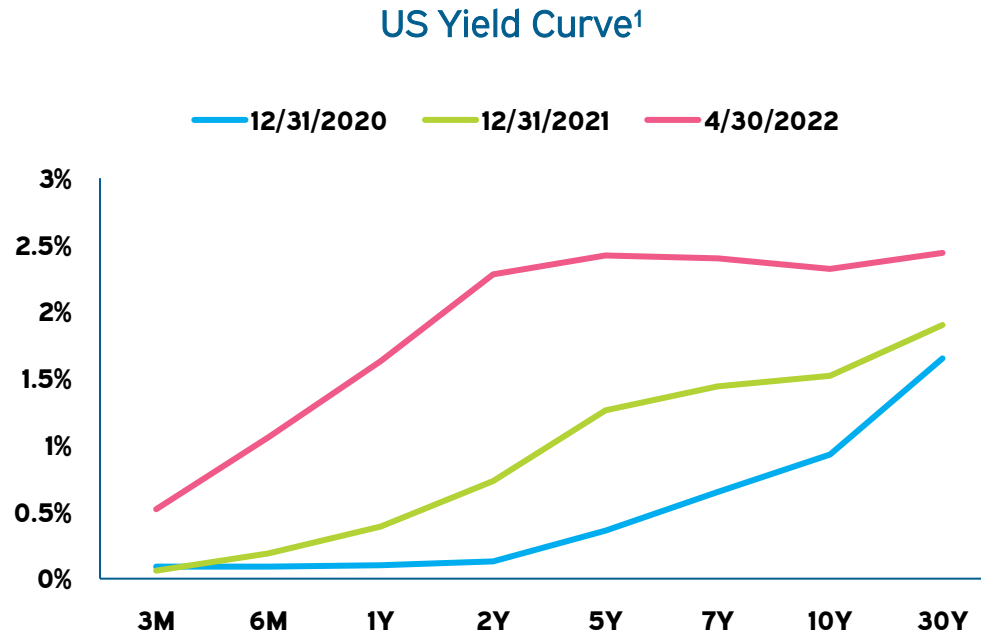


**Equity Cyclically Adjusted P/E Ratios<sup>1</sup>**



- After a pause in March, US stocks resumed their sell-off in April. Despite the recent sell-off, valuations remain well above long-term averages (near +2 standard deviations).
- International developed market valuations remain below the US, with those for emerging markets under the long-term average.

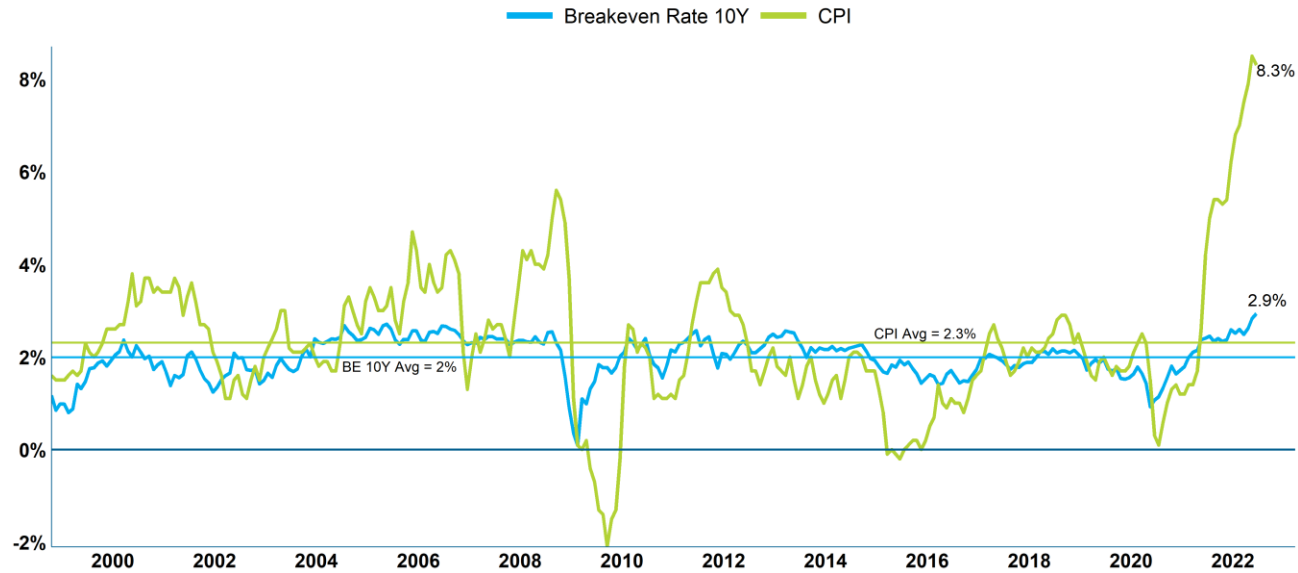
<sup>1</sup> US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years. Data is as of April 30, 2022. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to month-end respectively.



- In April, the trend of higher rates across maturities persisted as markets continue to reprice inflation, rate expectations, and an accelerated pace of the Federal Reserve reducing its balance sheet.
- After a brief inversion at the start of the month, which historically has often signaled building recessionary pressures, the curve steepened, with the spread between two-year and ten-year Treasuries finishing April at 22.7 basis points.

<sup>1</sup> Source: Bloomberg. Data is as of April 30, 2022.

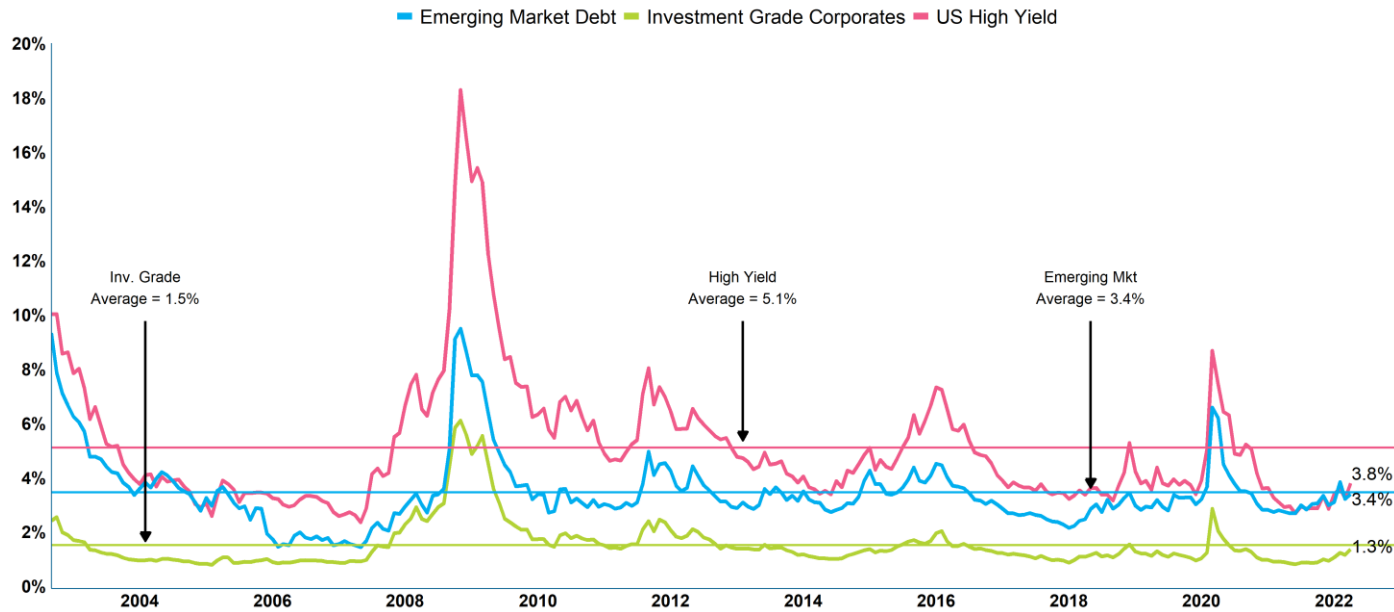
**Ten-Year Breakeven Inflation and CPI<sup>1</sup>**



- Inflation expectations (breakevens) increased slightly in April making a new peak above 3% during the month. It is worth noting that breakevens declined significantly after month-end, on expectations inflation could be peaking.
- Trailing twelve-month CPI declined slightly in April (8.3% versus 8.5%) remaining well above the long-term average of 2.3%.
- Rising prices for energy and food, and for new and used cars, remained key drivers of higher inflation.

<sup>1</sup> Source: Bloomberg. Data is as of April 30, 2022. The CPI and 10 Year Breakeven average lines denote the average values from August 1998 to the present month-end respectively. Breakeven values represent month-end values for comparative purposes.

**Credit Spreads vs. US Treasury Bonds<sup>1</sup>**



- Credit spreads (the spread above a comparable maturity Treasury) increased further in April in the risk-off environment extending losses for the year, particularly for riskier bonds.
- In the US, spreads for high yield increased more than investment grade. Emerging market spreads also increased during the month but finished lower than US high yield.
- Despite the recent increase, US high yield spreads remain well below the long-term average (3.8% versus 5.1%).

<sup>1</sup> Sources: Bloomberg. Data is as of April 30, 2022. Average lines denote the average of the investment grade, high yield, and emerging market spread values from August 2000 to the present month-end respectively.

### Global Economic Outlook

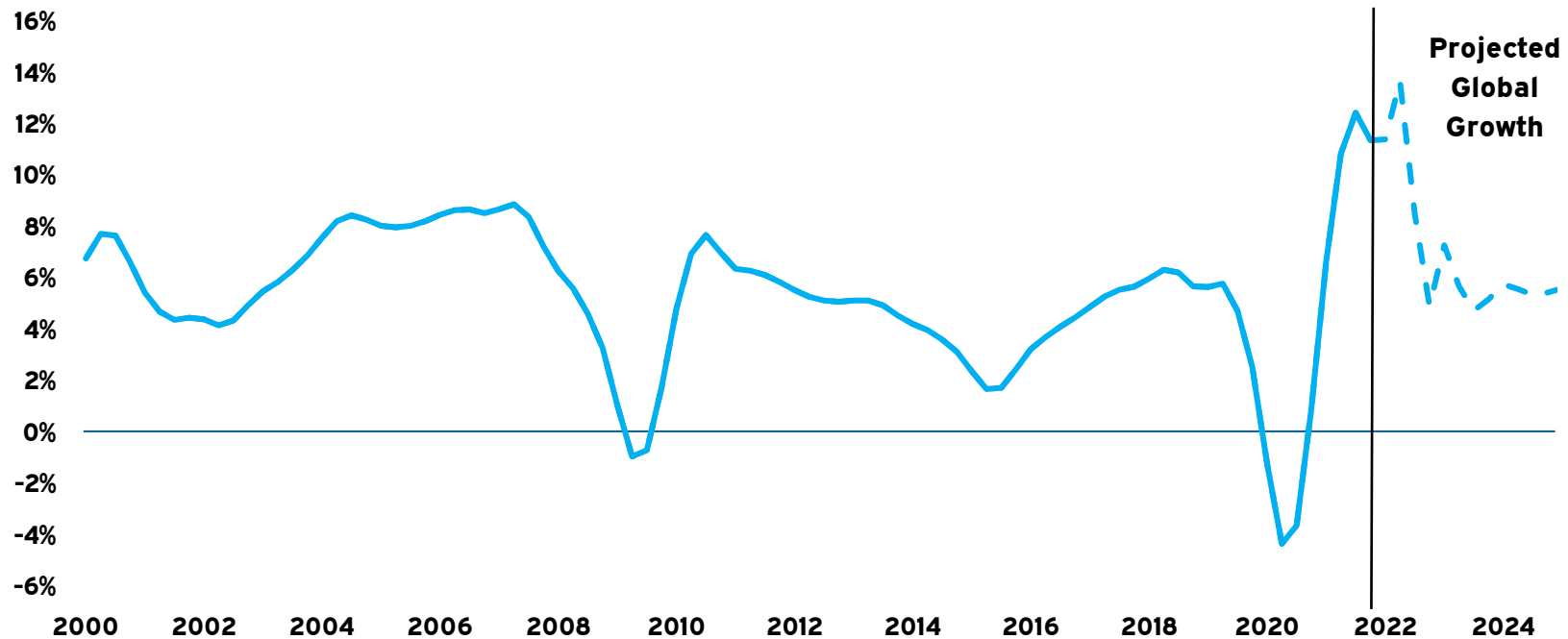
The IMF significantly lowered global growth forecasts in their latest projections, driven by the economic impacts of the war in Ukraine.

- The IMF forecasts final global GDP to come in at 6.1% in 2021 and 3.6% in 2022 (0.8% below the prior 2022 estimate), both still above the past ten-year average of 3.0%.
- In advanced economies, GDP is projected to increase 3.3% in 2022 and 2.4% in 2023. The US has limited economic ties with Russia but saw another downgrade in the 2022 growth forecast (3.7% versus 4.0%) largely due to policy tightening happening faster than previously expected. The euro area saw a significant downgrade in expected growth (2.8% versus 3.9%) in 2022 as rising energy prices particularly weigh on the region that is a net importer of energy. The Japanese economy is expected to grow 2.4% this year.
- Growth projections for emerging markets are higher than developed markets, at 3.8% in 2022 and 4.4% in 2023. China's growth was downgraded (4.4% versus 4.8%) for 2022 given tight COVID-19 restrictions and continued property sector problems.
- The global inflation forecast was significantly increased for 2022 (7.4% versus 3.8%) due to the war in Ukraine.

	Real GDP (%) <sup>1</sup>			Inflation (%) <sup>1</sup>		
	IMF 2022 Forecast	IMF 2023 Forecast	Actual 10 Year Average	IMF 2022 Forecast	IMF 2023 Forecast	Actual 10 Year Average
World	3.6	3.6	3.0	7.4	4.8	3.5
Advanced Economies	3.3	2.4	1.6	5.7	2.5	1.5
US	3.7	2.3	2.1	7.7	2.9	1.9
Euro Area	2.8	2.3	0.9	5.3	2.3	1.2
Japan	2.4	2.3	0.5	1.0	0.8	0.5
Emerging Economies	3.8	4.4	4.2	8.7	6.5	5.1
China	4.4	5.1	6.7	2.1	1.8	2.1

<sup>1</sup> Source: IMF World Economic Outlook. Real GDP forecasts from April WEO Update. Inflation forecasts are as of the April 2022 Update. "Actual 10 Year Average" represents data from 2012 to 2021.

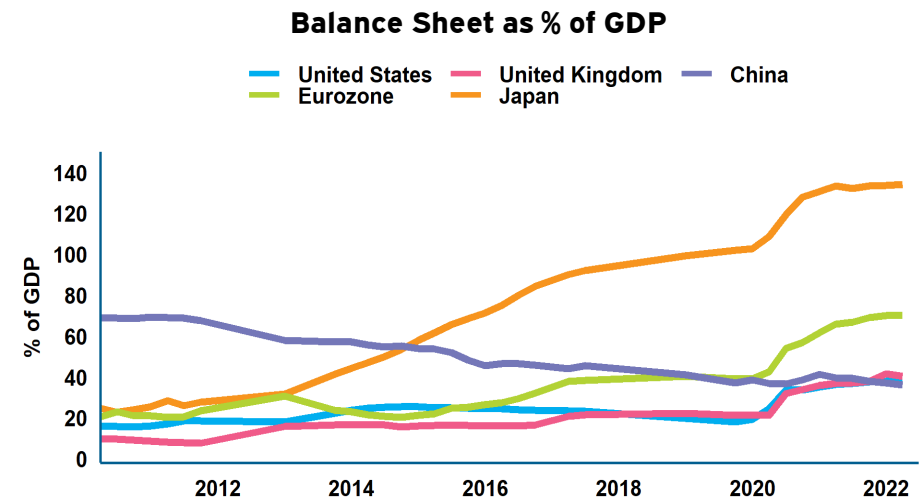
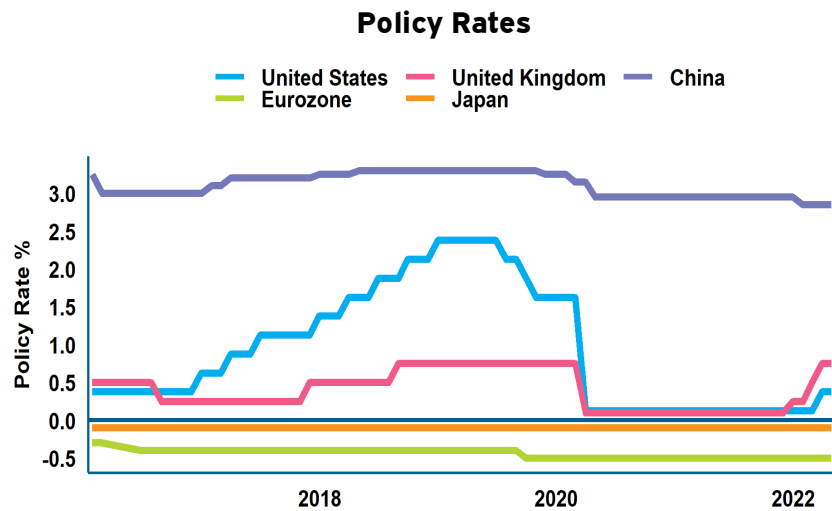
### Global Nominal Gross Domestic Product (GDP) Growth<sup>1</sup>



- Global economies are expected to slow in 2022 compared to 2021 but are forecasted to have another year of largely above-trend growth as economies continue to emerge from the pandemic.
- Looking forward, the track of the conflict between Russia and Ukraine, continued supply chain issues, ongoing inflationary pressures, tighter monetary policy, and lingering pandemic problems all remain key with the risk for continued downgrades in growth forecasts.

<sup>1</sup> Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, nominal, % change YoY). Updated April 2022.

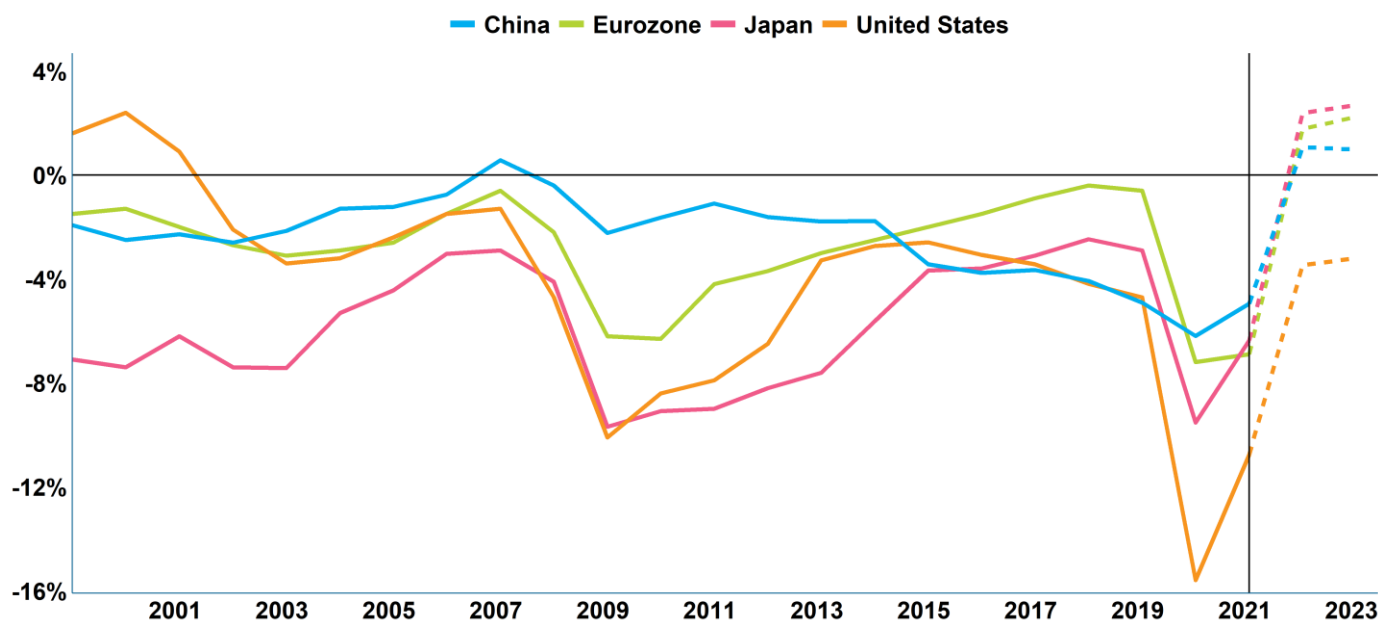
### Central Bank Response<sup>1</sup>



- After global central banks took extraordinary action to support economies during the pandemic including policy rate cuts and emergency stimulus through quantitative easing (QE), many are considering reducing support in the face of high inflation.
- The pace of withdrawing support will likely vary across central banks with the US expected to take a more aggressive approach. The risk remains for a policy error, particularly overtightening, as the war in Ukraine and a tough COVID-19 policy in China could suppress global growth.
- The one notable outlier is China, where the central bank recently lowered rates and reserve requirements in response to slowing growth.

<sup>1</sup> Source: Bloomberg. Policy rate data is as of April 30, 2022. China policy rate is defined as the medium-term lending facility 1 year interest rate. Balance sheet as % of GDP is based on quarterly data and is as of March 31, 2022.

### Budget Surplus / Deficit as a Percentage of GDP<sup>1</sup>



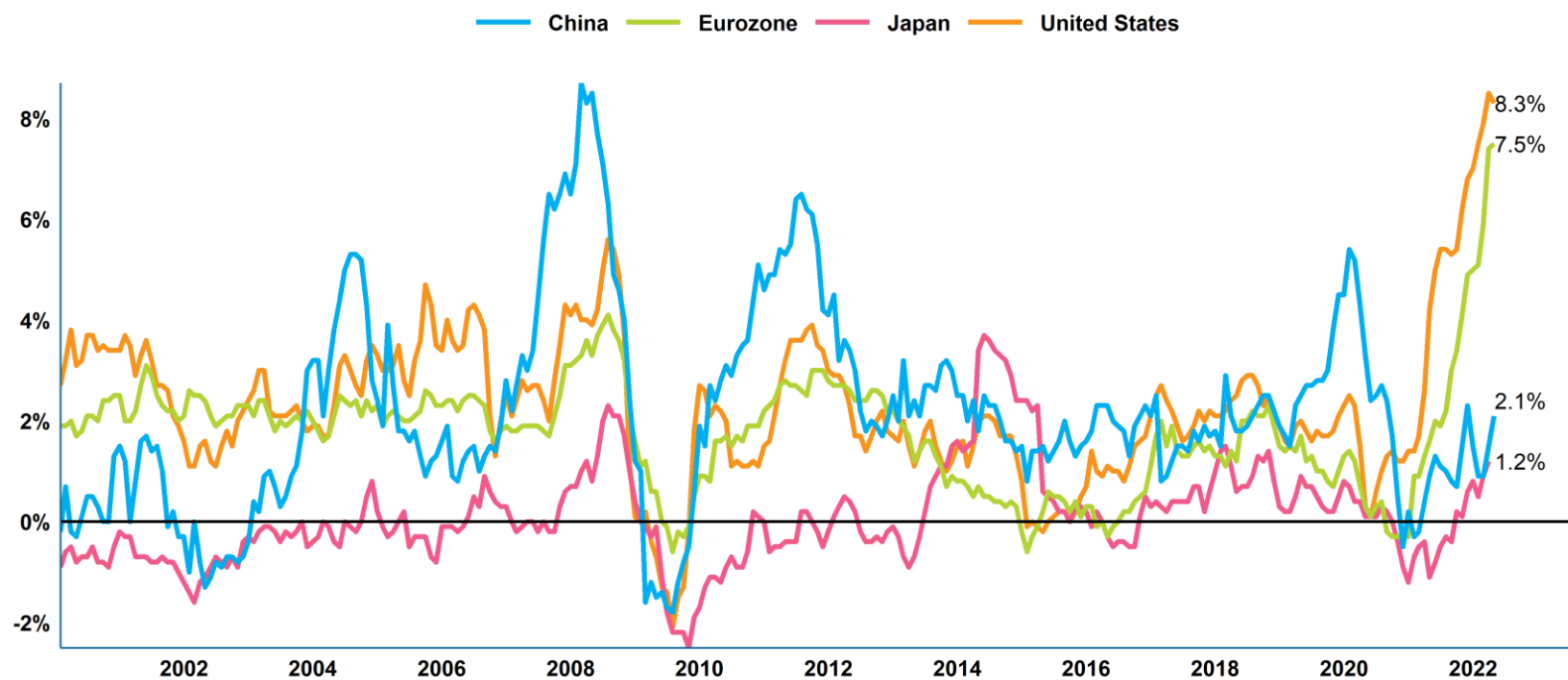
→ Budget deficits as a percentage of GDP drastically increased for major world economies, particularly the US, due to massive fiscal support and the severe economic contraction's effect on tax revenue in 2020 and 2021.

→ As fiscal stimulus programs end, and economic recoveries continue, deficits should improve in the coming years.

<sup>1</sup> Source: Bloomberg. Data is as of March 31, 2022. Projections via IMF Forecasts from April 2022 Report. Dotted lines represent 2022 and 2023 forecasts.



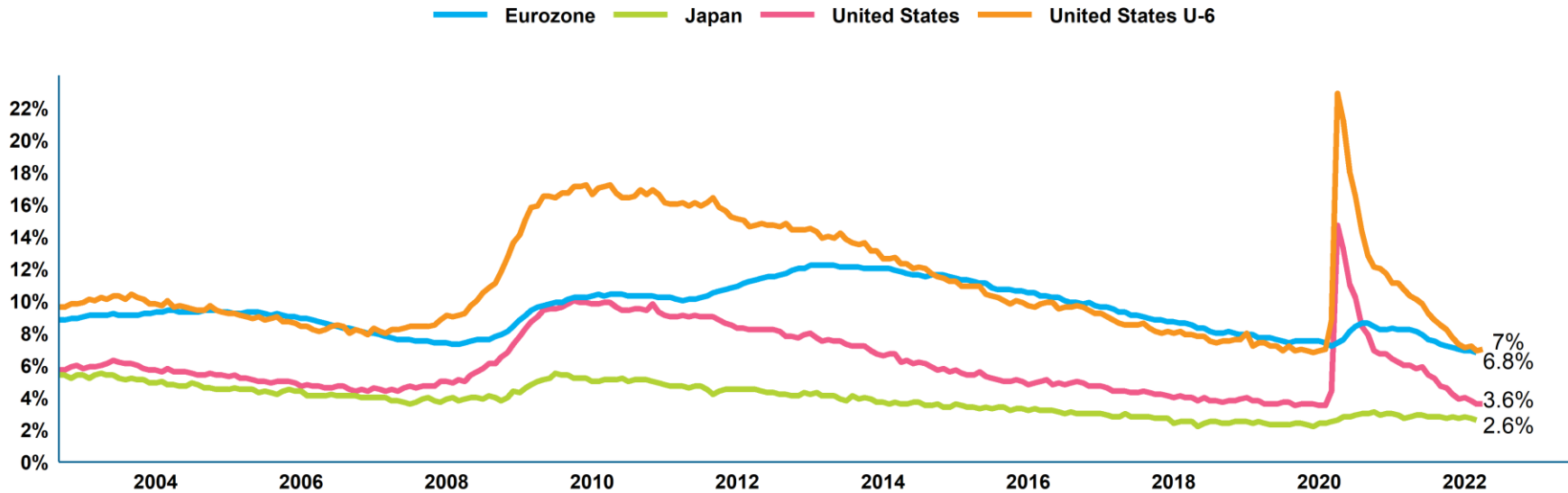
### Inflation (CPI Trailing Twelve Months)<sup>1</sup>



- Inflation increased dramatically from the lows of the pandemic, particularly in the US and Eurozone where it remains at levels not seen in decades.
- Supply issues related to the pandemic and higher prices in many commodities driven by the Russia and Ukraine conflict have been key drivers of inflation globally.

<sup>1</sup> Source: Bloomberg. Data is as of April 2022, except for Japan, where the most recent data available is as of March 31, 2022.

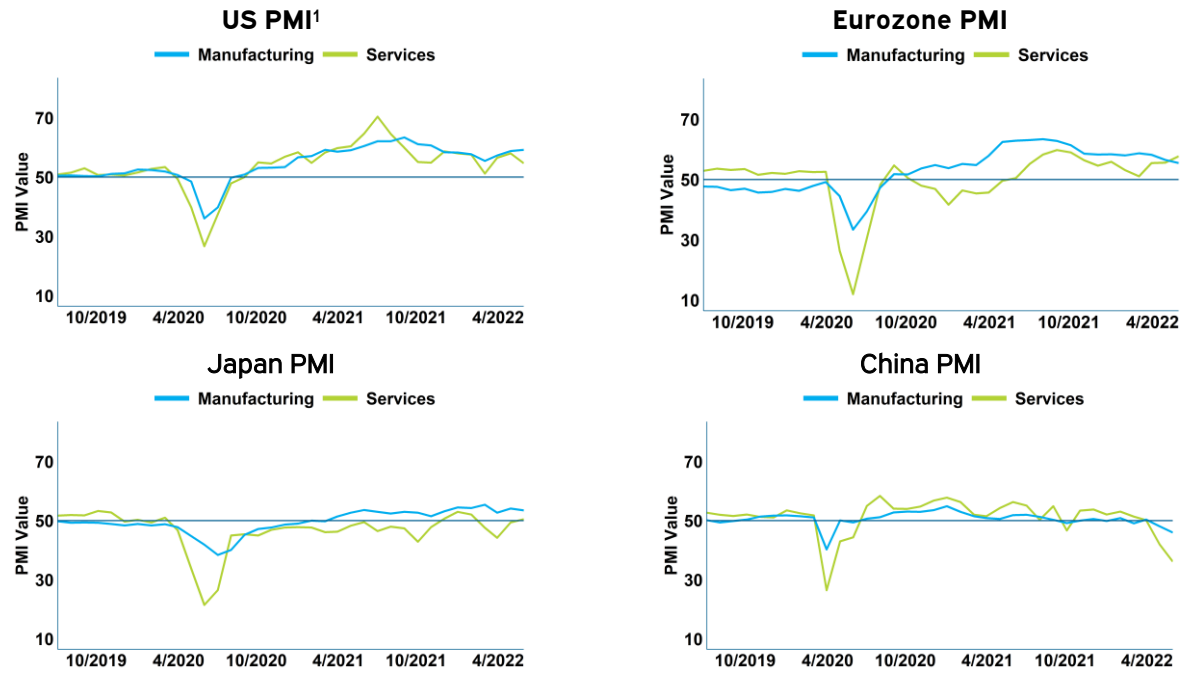
### Unemployment<sup>1</sup>



- As economies have largely reopened, helped by vaccines for the virus, improvements have been seen in the labor market.
- US unemployment, which experienced the steepest rise from the pandemic, has declined back to pre-pandemic levels. The broader measure (U-6) that includes discouraged and underemployed workers declined but is much higher at 7.0%.

<sup>1</sup> Source: Bloomberg. Data is as of April 30, 2022, for the US. The most recent data for Eurozone and Japanese unemployment is as of March 31, 2022.

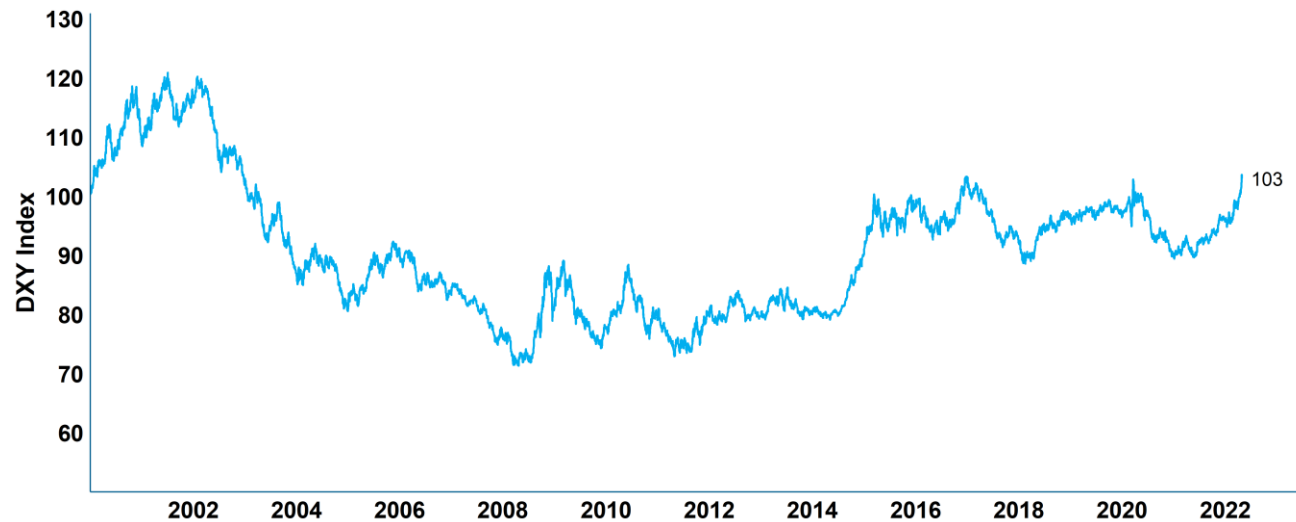
### Global PMIs



- After improvements from the lows of the pandemic, Purchasing Managers Indices (PMI), based on surveys of private sector companies, have experienced some pressures recently.
- Service sector PMIs have seen some improvements in the US and Europe lately as the effects of the Omicron variant wane, while Japan and China remain weaker due to a rise in COVID-19 cases, with China still in contraction due to their strict policies.
- In most countries, manufacturing PMIs are in expansion territory as pandemic-related production issues ease and orders increase. China is the one exception, though, with the manufacturing PMI falling below 50 due to increased COVID-19 restrictions.

<sup>1</sup> Source: Bloomberg. US Markit Services and Manufacturing PMI, Caixin Services and Manufacturing PMI, Eurozone Markit Services and Manufacturing PMI, Jibun Bank Services and Manufacturing PMI. Data is as of April 2022. Readings below 50 represent economic contractions.

US Dollar versus Broad Currencies<sup>1</sup>



- The US dollar continued its trend of strengthening against a broad basket of peers in April of 2022 with further increases after month-end.
- Safe-haven flows, relatively stronger growth, and higher rates have all been key drivers of the dollar’s on-going strength.
- The euro, yen, and yuan have all experienced significant declines versus the dollar, adding to inflation and slowing growth concerns.

<sup>1</sup> Source: Bloomberg. Data as of April 30, 2022.

## Summary

### Key Trends in 2022:

- The war in Ukraine has created significant uncertainty, with a wide range of potential outcomes. Volatility will likely remain high.
- Expect growth to slow globally in 2022 but remain above the long-term trend for the year. The pandemic's impact on economic activity and the war will be key.
- Inflationary pressures could linger, particularly if the Russian invasion of Ukraine intensifies or expands.
- The end of many fiscal programs is expected to put the burden of continued growth on consumers. Higher energy and food prices will depress consumer ability to spend in other areas.
- Monetary policy will likely tighten globally but will remain relatively accommodative. The risk of overtightening policy impacting growth remains.
- Valuations remain high in the US, but relatively low interest rates and strong margins could be supportive of equity markets.
- Outside the US, equity valuations remain lower in both emerging and developed markets, but risks remain, including continued strength in the US dollar, higher inflation particularly weighing on Europe, and China maintaining its restrictive COVID-19 policies.

## **Investment Manager Status Report**

### Overview of Watch List Policies

- The Board is responsible for selecting and monitoring investment managers on the Association's roster and recognizes the importance of diligent manager oversight.
- The Board must be informed of changes in strategy, personnel, and organizational structure, to effectively evaluate the Association's managers.
- However, overly aggressive "management" of managers (i.e., rapid hiring and firing of managers) can be counterproductive.
  - Achieving superior returns requires patience. Frequent changes in managers usually results in poor performance, since each change can incur substantial transaction costs, as an entire portfolio of securities is restructured.
- Watch List Policies represent an intermediate state of heightened oversight, triggered by any change that could jeopardize an Investment Manager's ability to successfully fulfill their role for the Association.
- This document presents an overview of the Association's current Watch List Policy and our recommendations.

## Watch List and Probation Policy

### In-Compliance

- The investment manager is acting in accordance with its investment guidelines.

### Watch List

- An elevated state of review. There is a problem with performance, an unusual change in characteristics, an alternation in management style or key investment personnel, and/or any irregularities that diminish the Board's confidence in the manager.

### Probation

- An elevated state of Watch List status. Based on continued concern with one or more of the alert issues, failure for a manager to improve upon stated issues within a time period justifies termination.

### Termination

- The Board has voted to terminate the manager.



### PCRA Investment Policy Statement Language: Portfolio Monitoring Procedures

- The Trustees will meet with the Consultant no less frequently than quarterly to review portfolio performance, review portfolio weights relative to target weights and managers' performance. Further, the Board will endeavor to meet with each of its investment managers in accordance with PERAC requirements.
- The investment managers managing separate accounts on behalf of the System will be issued investment manager guidelines and they will be monitored at two levels of contract review: Watchlist and Probation, the latter being a more heightened level of review.
- The Consultant will recommend to the Board when a manager should be placed on or removed from Watchlist or Probation. When an investment manager is placed on the Watchlist/Probation, it is effective immediately. There is no minimum time requirement on the Watchlist/Probation before a termination may be made. An investment manager's contract may be terminated for any reason at any time, whether on Watchlist/Probation or not.
- A representative listing of potential reasons an investment manager may be added to Watchlist/Probation is detailed on the next page. During an investment manager's tenure on the Watchlist/Probation, the investment consultant will provide the Board with regular reports, including background information and support, about the progress the investment manager is or is not making. An investment manager may be removed from heightened alert if the Board believes the issues that placed the firm on the Watchlist/Probation are resolved.
- Should the manager's performance not improve over a reasonable time period, the Consultant will recommend further action and possible termination after a careful review of the manager's performance, portfolio structure and the market environment. Before a manager is officially dismissed, the Consultant will recommend to the Board a plan of action for managing (internally, externally, or in combination) or liquidating the assets.
- Circumstances may warrant that the Trustees take immediate action to terminate a manager. Therefore, the Trustees reserve the right to bypass the course outlined above and remove a manager immediately if deemed prudent and in the best interests of the Association participants.

## PCRA Investment Policy Statement Language: Watch List and Probation Policy

### Organizational Issues

- Change in ownership or control of the company
- Significant change in team composition or responsibilities
- Material change in the business organization of the investment manager
- Departure of significant personnel

### Performance

- 1, 3 and 5-year performance net of fees below benchmark
- 1, 3 and 5-year performance net of fees below peers (below median of relevant peer universe)
- Performance inconsistent with the investment manager's style and risk controls

### Investment Process

- Deviation from investment style
- Deviation from risk controls

### Other

- Material guideline violation not brought to our attention by the investment manager
- Material guideline violation not sufficiently explained by the investment manager
- Failure to comply with terms of contract
- Any extraordinary regulatory action or other proceeding affecting the investment
- Failure to abide by Massachusetts law and investment restrictions
- Unsatisfactory client service

### Active Manager Roster<sup>1</sup>

Investment Manager	Recommendation As of 3/31/22
Fisher Midcap Value	In-Compliance
Newton Small Cap Growth (formerly Mellon)	In-Compliance
LMCG Small Cap Value	Termination – Organizational
Aristotle International Equity	In-Compliance
Walter Scott International Equity	In-Compliance
ABS Emerging Markets	In-Compliance
Driehaus Emerging Markets Growth	In-Compliance
First Eagle Global Value	In-Compliance
Kopernik Global All Cap	In-Compliance
Lee Munder Global Multi-cap	In-Compliance
Wellington Durable Enterprises	In-Compliance

<sup>1</sup> Excluding illiquid asset classes of private equity and non-core real estate.

Active Manager Roster<sup>1</sup> (con't)

Investment Manager	Recommendation as of 3/31/22
IR&M Core Bonds	Terminated - RFP
Lord Abbett Short Duration	In-Compliance
Lord Abbett Core Fixed Income	In-Compliance
Eaton Vance High Yield	In-Compliance
First Eagle Bank Loan Select (Formerly THL Bank Loan Select)	In-Compliance
Manulife Strategic Fixed Income	In-Compliance
Mesirow High Yield	In-Compliance
Eaton Vance Emerging Market Debt	In-Compliance
ABS Offshore SPC - Global Segregated	In-Compliance
Entrust Special Opportunities Fund III,	In-Compliance
Old Farm Partners Master Fund	In-Compliance
EnTrustPermal Special Opportunities Evergreen Fund	In-Compliance
TA Realty Core Property Fund	In-Compliance
JPMorgan Strategic Property	In-Compliance
IFM Global Infrastructure	In-Compliance

<sup>1</sup> Excluding illiquid asset classes of private equity and non-core real estate.

## **Disclaimer, Glossary, and Notes**

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

**Credit Risk:** Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

**Duration:** Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

**Information Ratio:** This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

**Jensen's Alpha:** A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk.  $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} * (\text{market return} - \text{Risk Free Rate})]$ .

**Market Capitalization:** For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

**Market Weighted:** Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

**Maturity:** The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

**Prepayment Risk:** The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

**Price-Book Value (P/B) Ratio:** The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

**Price-Earnings (P/E) Ratio:** A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

**Quality Rating:** The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

**Sharpe Ratio:** A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk-free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

**SI:** Since Inception

**STIF Account:** Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

**Standard Deviation:** A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

**Style:** The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

**Tracking Error:** A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.



**Yield to Maturity:** The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

**Yield to Worst:** The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

**NCREIF Property Index (NPI):** Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

**NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE):** Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.  
The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

The Russell Indices®, TM, SM are trademarks/service marks of the Frank Russell Company.

Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.