

City of Miami Fire Fighters' and Police
Officers' Retirement Trust

May 12, 2022

Investment Meeting

Follow Ups From Last Meeting

Last Meeting

→ Asset allocation:

- Decision – maintain existing asset allocation targets

→ International equity:

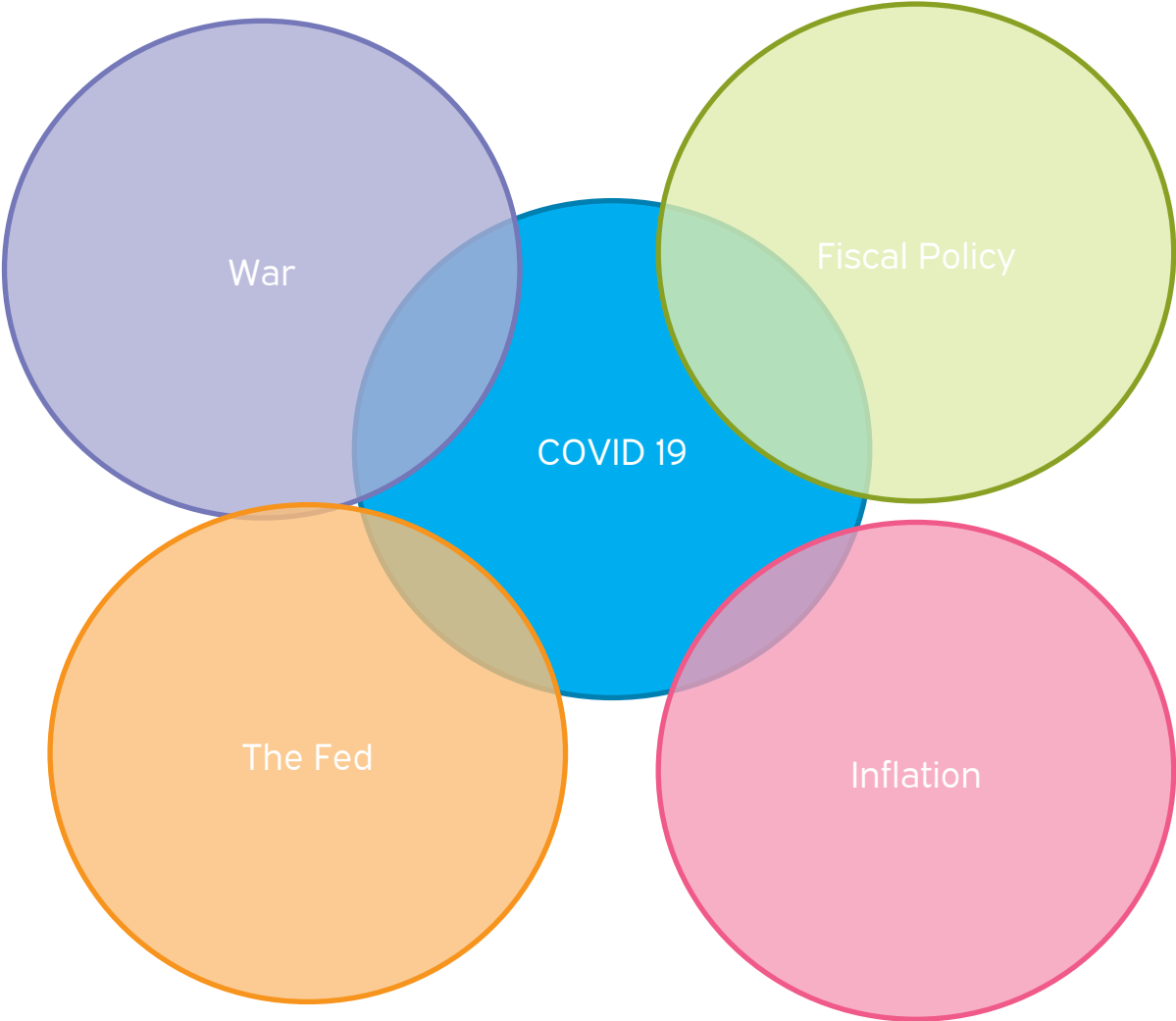
- Decision – rotate First Eagle to its new, lower cost, fully invested product.

Agenda

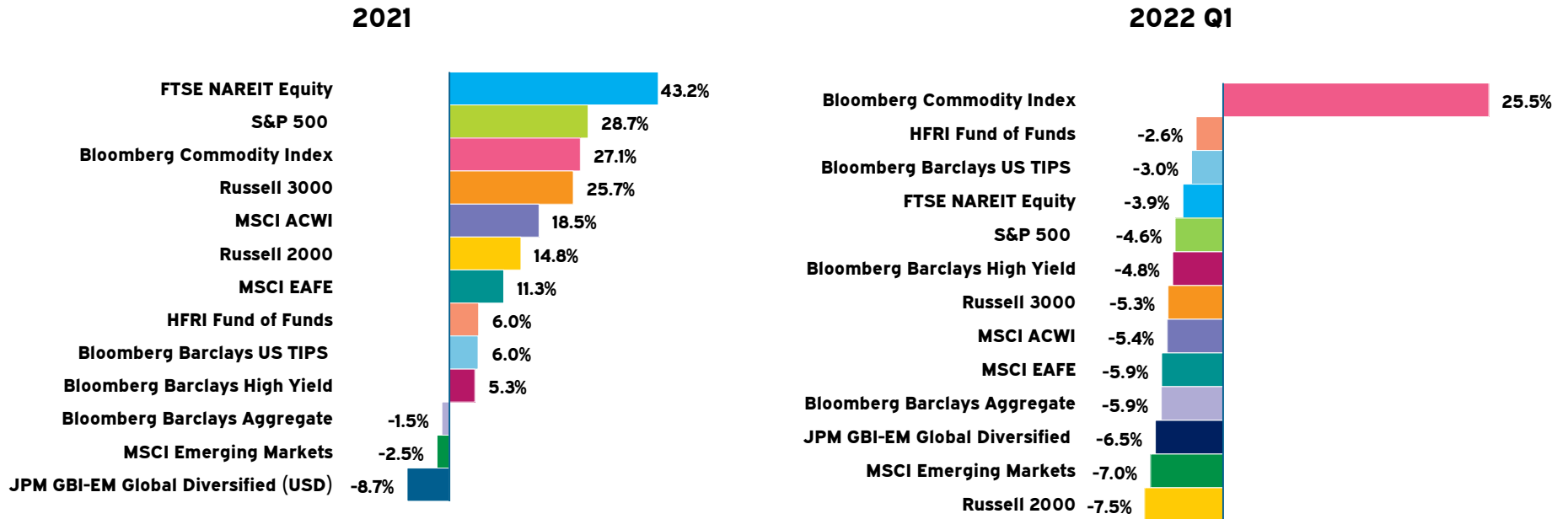
1. Economic and Market Review
2. Performance Report as of March 31, 2022
3. Domestic Equity Active Manager Search
4. Private Equity Benchmark Review
5. Investment Policy Statement Review
6. Disclaimer

Economic and Market Review

A Challenging Environment – Impacting both Equities and Bonds



Index Returns¹

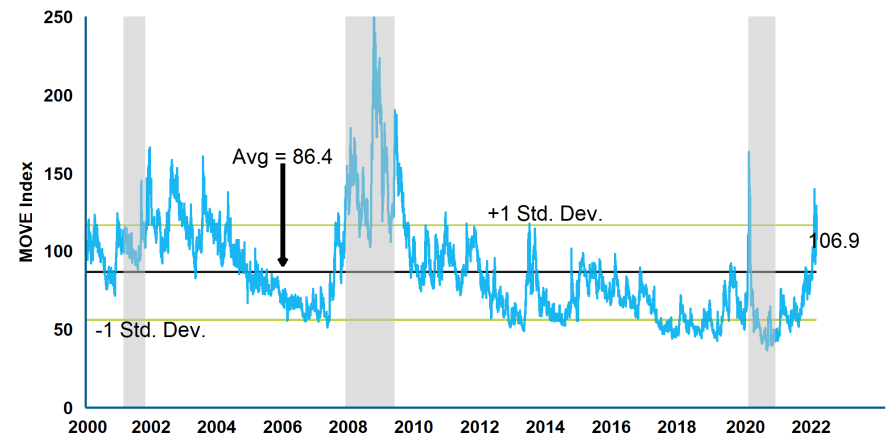
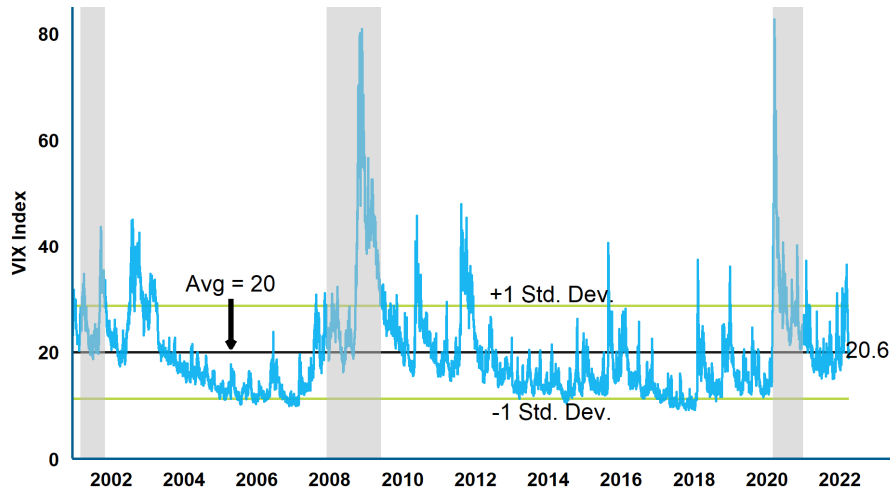


→ Outside of emerging markets and the broad US investment grade bond market (Barclays Aggregate), most asset classes appreciated in 2021.

→ Most major asset classes suffered negative returns in the first quarter of 2022 with the notable exception of commodities. TIPS declined less than most other asset classes in the inflationary environment.

¹ Data Source: Bloomberg and FactSet. Data is as of March 31, 2022.

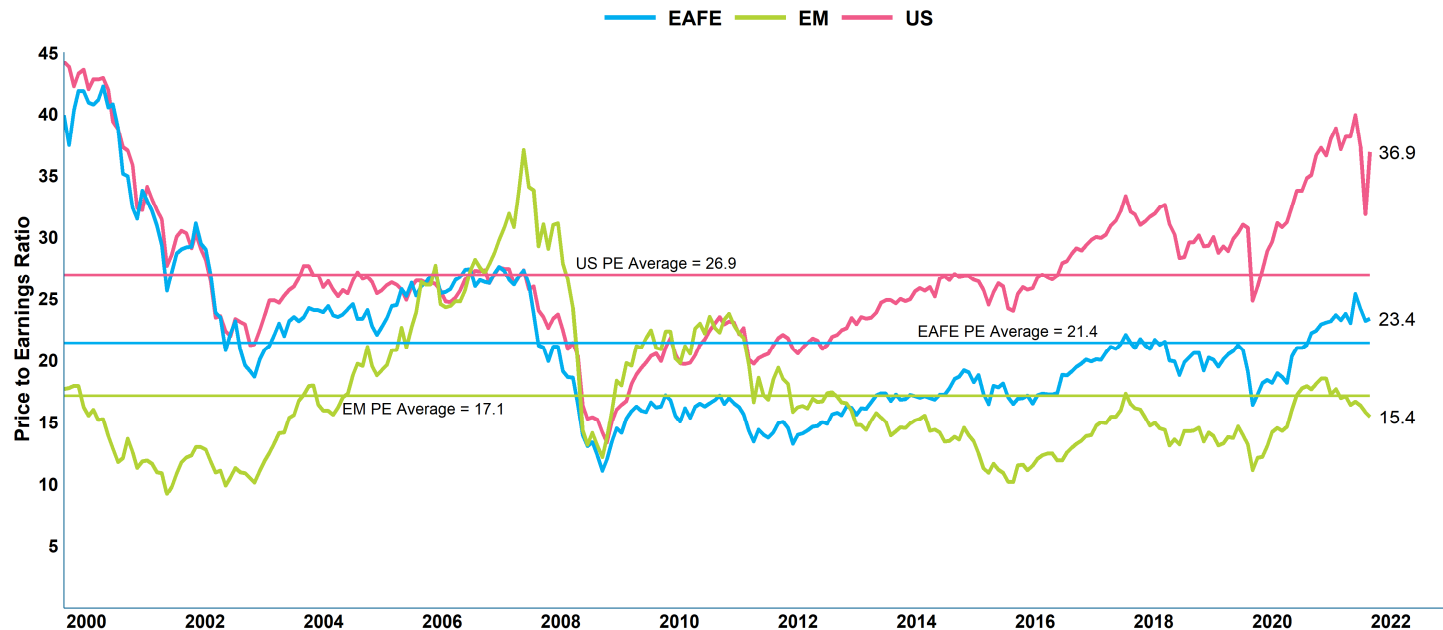
Equity and Fixed Income Volatility¹



- Volatility in equities (VIX) increased for the first quarter but finished well below the March peak of 36.5.
- Fixed income volatility (MOVE) also increased and remains elevated driven largely by expectations that the Federal Reserve would tighten monetary policy faster than previously expected.

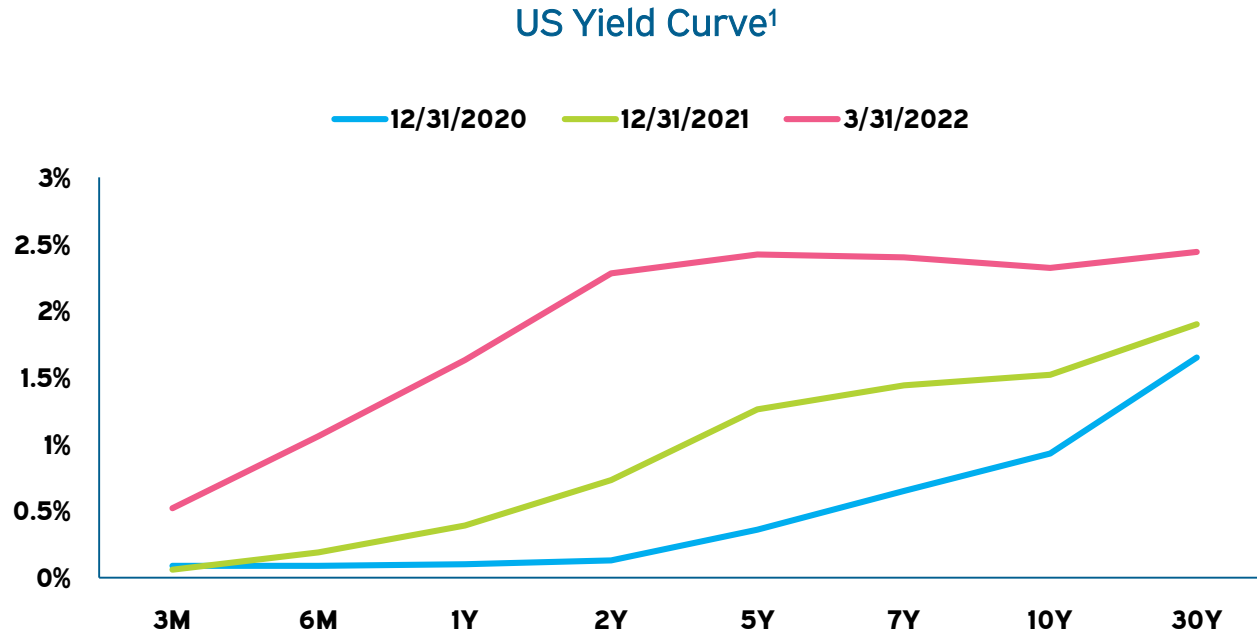
¹ Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of March 2022. The average line indicated is the average of the VIX and MOVE values between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

Equity Cyclically Adjusted P/E Ratios¹



- US equity valuations retreated in the first two months of 2022, and rebounded in March with the market recovery. They remain well above long-term averages (near +2 standard deviations).
- International developed market valuations remain below the US, with those for emerging markets under its long-term average.

¹ 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 March 31, 2022. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to month-end respectively.

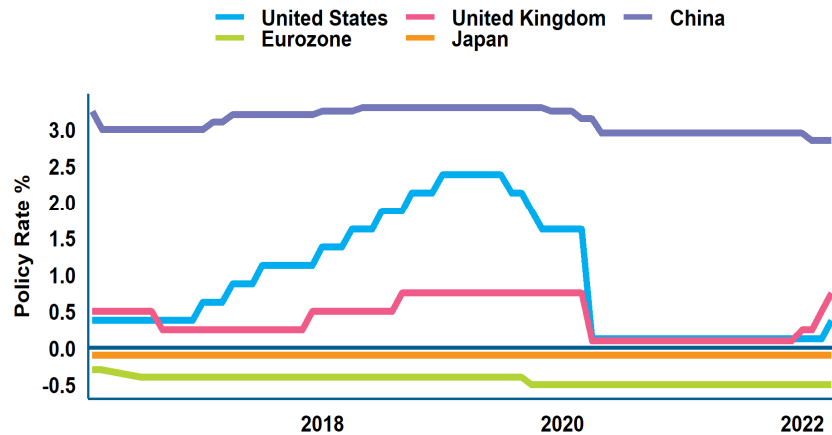


- The trends of higher rates across maturities and curve flattening continued during the first quarter of 2022 as markets repriced inflation, rate expectations, and an accelerated pace of the Federal Reserve reducing its balance sheet.
- The spread between two-year and ten-year Treasuries declined significantly over the quarter and became negative after quarter-end which historically has often signaled a recession.

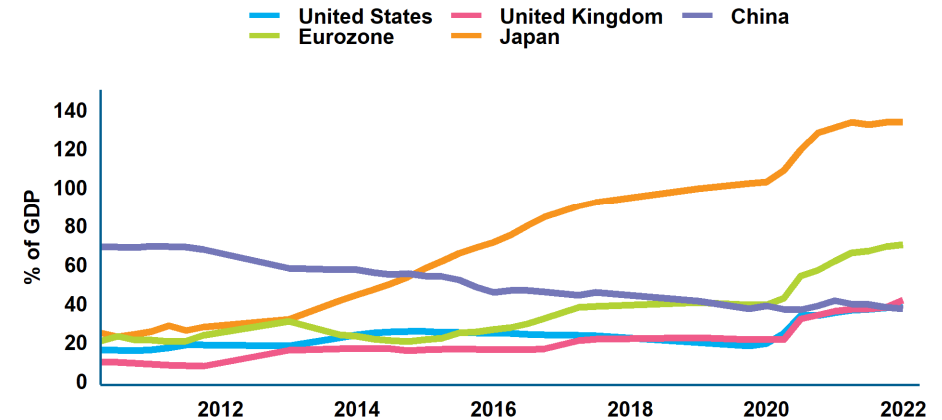
¹ Source: Bloomberg. Data is as of March 31, 2022.

Central Bank Response¹

Policy Rates



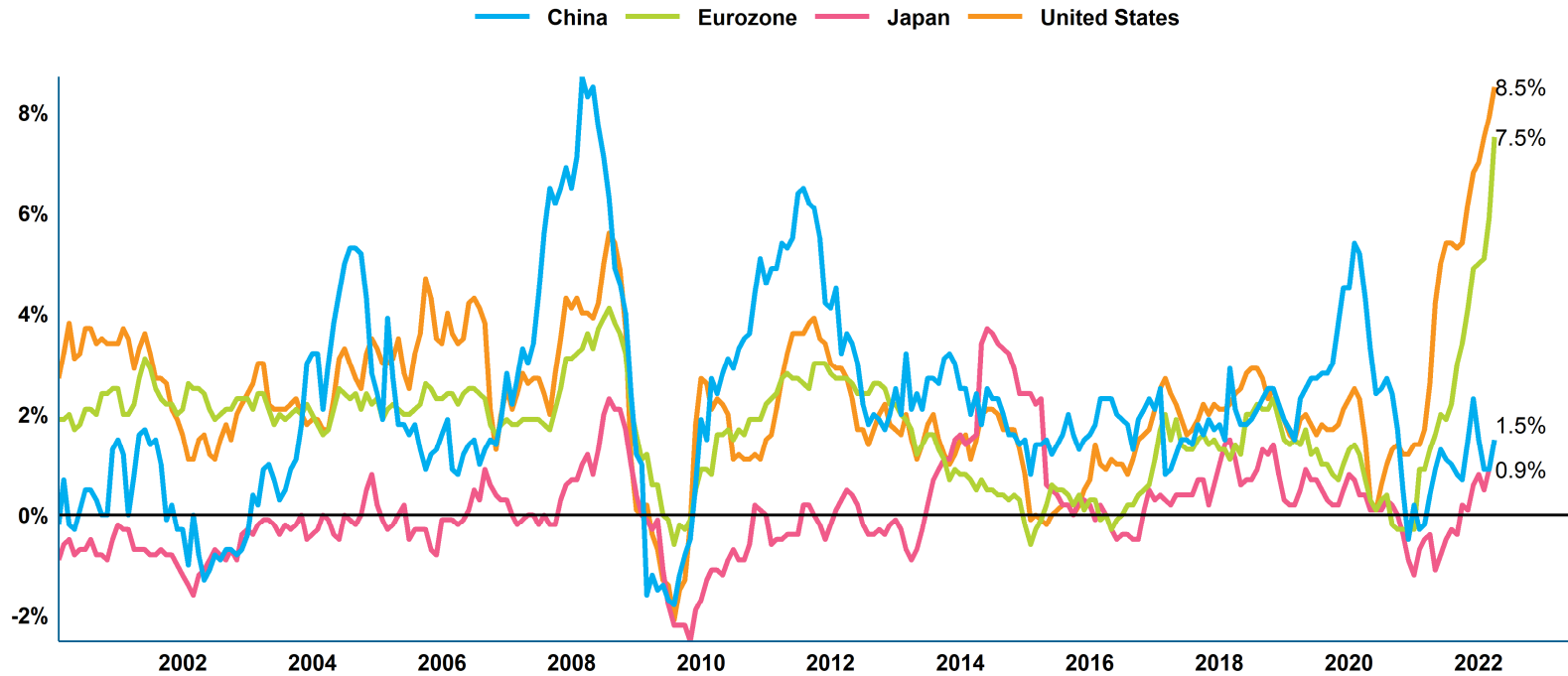
Balance Sheet as % of GDP



- After global central banks took extraordinary action to support the economy 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 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.

¹ Source: Bloomberg. Policy rate data is as of March 31, 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 December 31, 2021.

Inflation (CPI Trailing Twelve Months)¹



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

¹ Source: Bloomberg. Data is as of March 2022, except for Japan, where the most recent data available is as of February 28, 2022.

Summary

Key Trends in 2022:

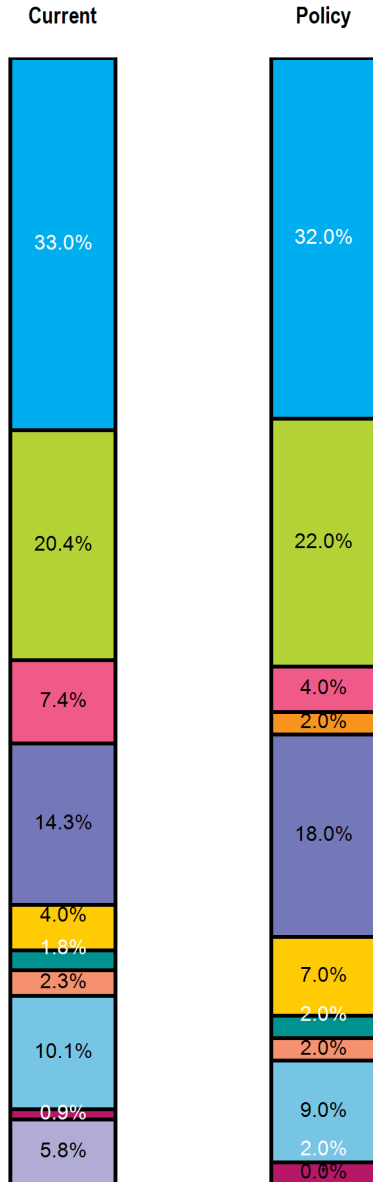
- The war in eastern Europe has created significant uncertainty going forward with a wide range of potential outcomes. Volatility will likely remain high.
- Expect growth to slow globally in 2022 but remain above trend. The track of the pandemic and war will be key.
- Inflationary pressures could linger, particularly if the Russian invasion of Ukraine intensifies or expands.
- The end of many fiscal programs will put the burden of continued growth on consumers. Higher energy and food prices will depress their ability to spend in other areas.
- Monetary policy will likely tighten globally but will remain relatively low. The risk of policy error remains.
- Valuations remain high in the US, but low rates and strong margins should be supportive.
- Outside the US, valuations remain lower in both emerging and developed markets, but risks remain.

**Performance Report
as of March 31, 2022**

Q1 2022 Executive Summary

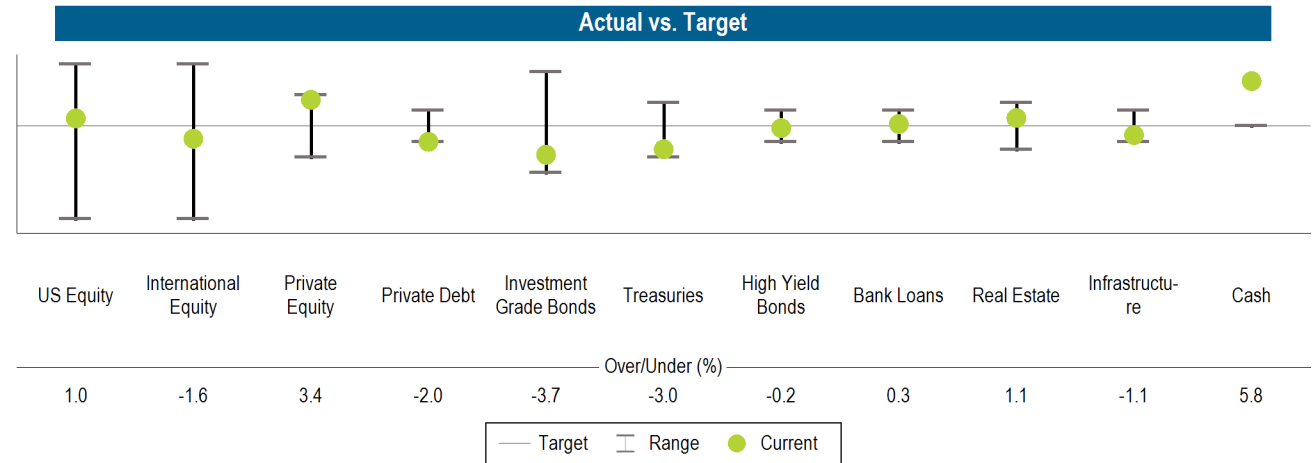
Category	Results	Notes
Total Fund Performance	Negative	-4.0% net of fees (~\$76 mm)
Performance vs. Benchmark	Underperformed	-4.0% net of fees vs. -3.9% policy benchmark
Performance vs. Peers	Matched	52nd percentile (-4.0% vs. -4.0% peer median)
Asset Allocation Attribution Effects	Additive	Overweight Private Equity and Real Estate, Underweight Treasuries and Inv. Grade Bonds vs. targets
Active Public ¹ Managers vs. Benchmarks	Underperformed	7 out of 11 active managers trailed their respective benchmarks after fees
Compliance with Targets	Temporarily out of compliance	Cash was temporarily overweight at quarter end

¹ All strategies that have liquidity, i.e. Includes open-end real estate, but not closed-end real estate, private equity, infrastructure.

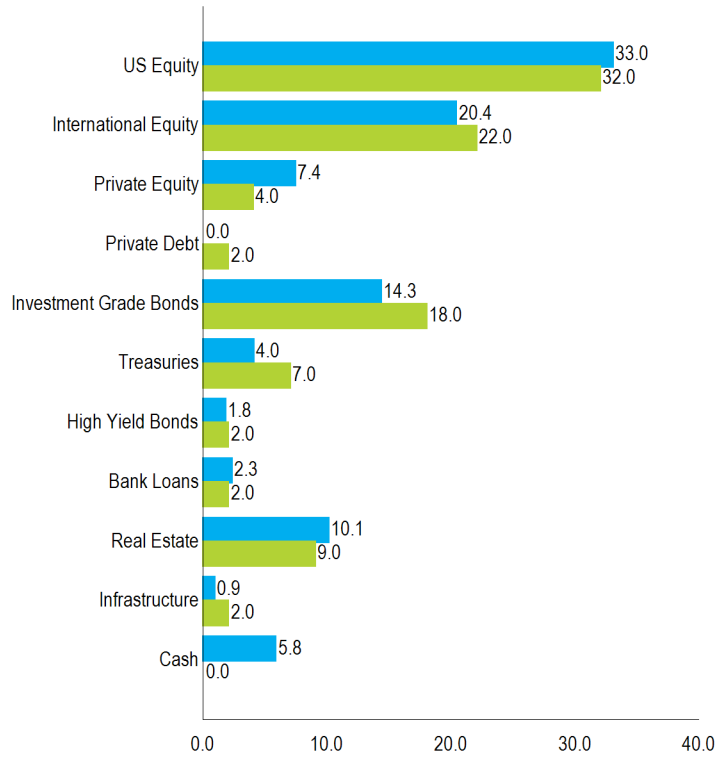


Allocation vs. Targets and Policy						
	Current Balance	Current Allocation	Policy	Policy Range	Within IPS Range?	
US Equity	\$593,360,006	33%	32%	20% - 40%	Yes	
International Equity	\$366,431,752	20%	22%	10% - 30%	Yes	
Private Equity	\$133,047,613	7%	4%	0% - 8%	Yes	
Private Debt	\$0	0%	2%	0% - 4%	Yes	
Investment Grade Bonds	\$257,643,868	14%	18%	12% - 25%	Yes	
Treasuries	\$72,511,595	4%	7%	3% - 10%	Yes	
High Yield	\$31,654,575	2%	2%	0% - 4%	Yes	
Bank Loans	\$41,287,106	2%	2%	0% - 4%	Yes	
Real Estate	\$180,964,658	10%	9%	6% - 12%	Yes	
Infrastructure	\$15,768,559	1%	2%	0% - 4%	Yes	
Cash & Cash Alternatives	\$104,552,580	6%	0%	0% - 5%	No	
Total	\$1,797,222,311	100%	100%			

Throughout the entire report, cash includes investment in the BlackRock Liquid Policy portfolio.

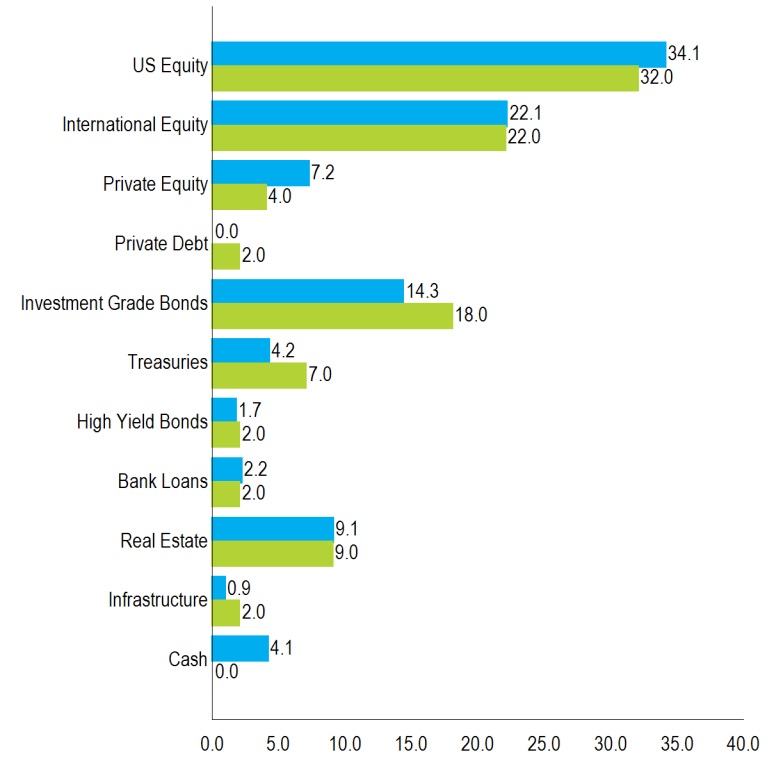


Actual vs Target Allocation (%)
As of March 31, 2022



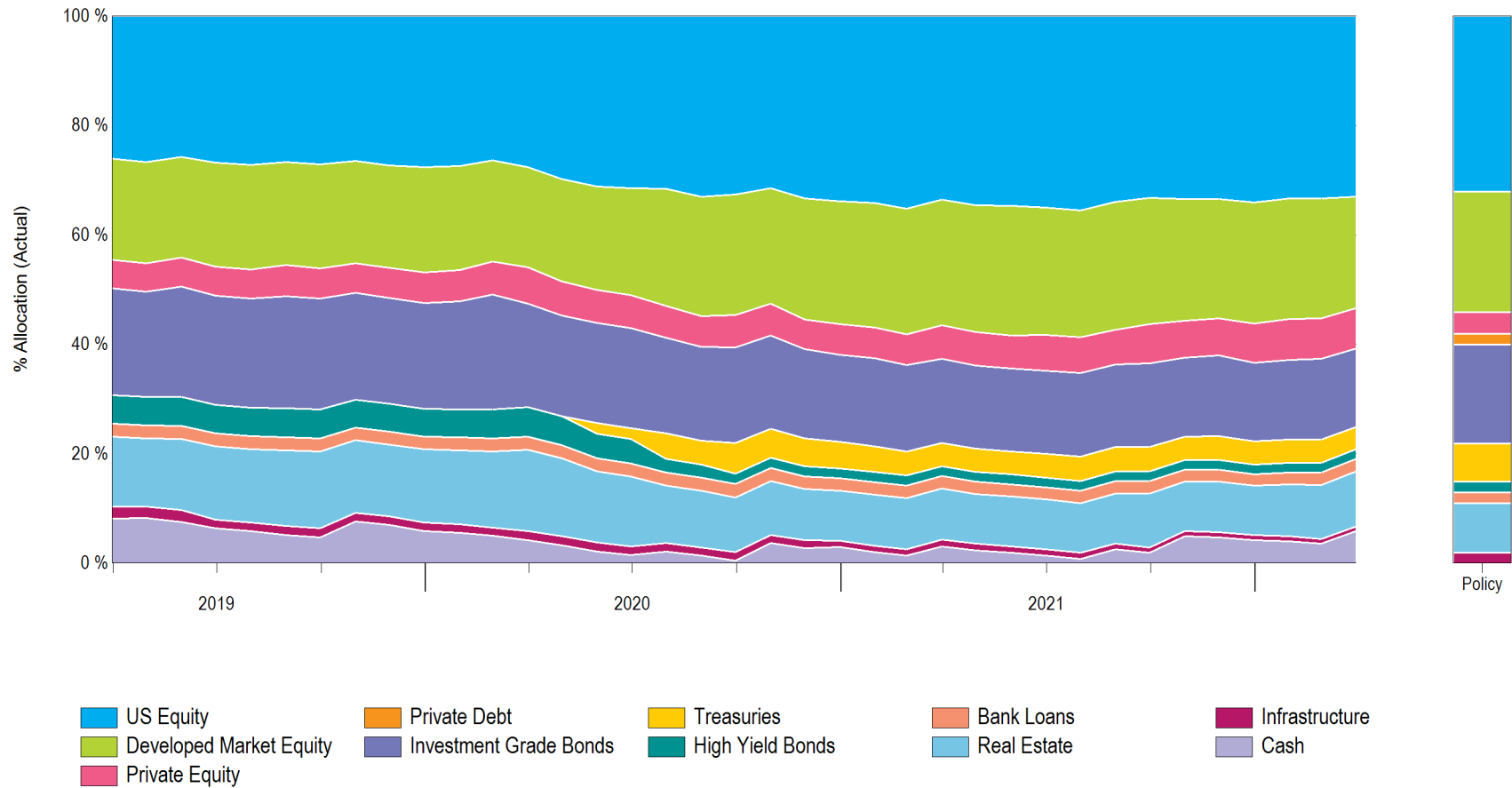
Actual Policy

Actual vs Target Allocation (%)
As of December 31, 2021

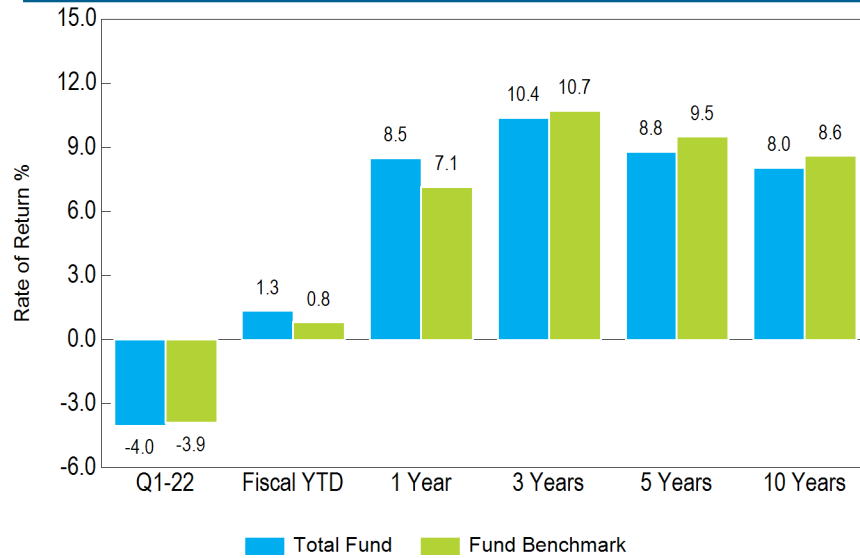


Actual Policy

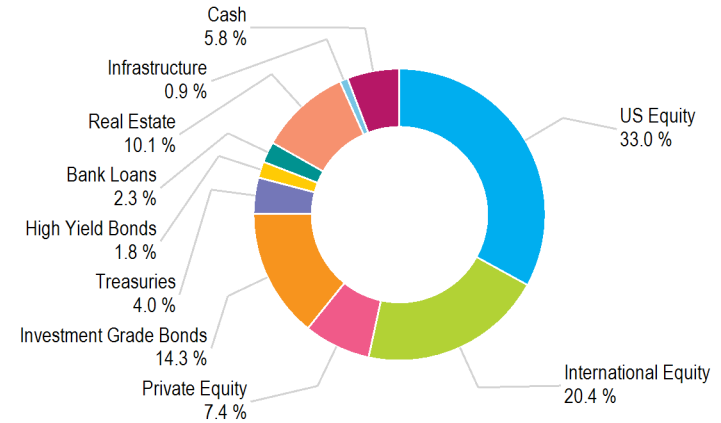
Asset Allocation History 3 Years Ending March 31, 2022



Return Summary (Net of Fees)

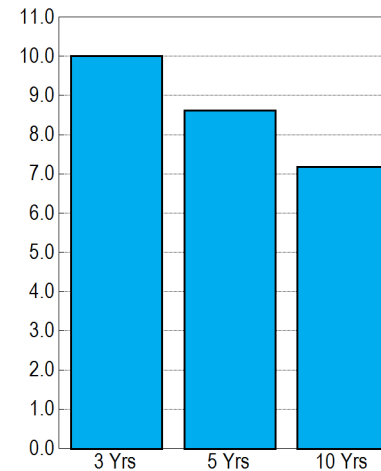


Current Allocation



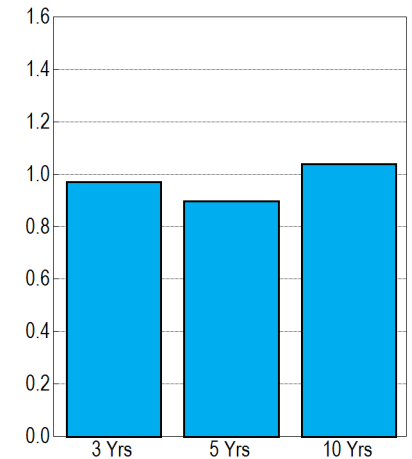
Annualized Standard Deviation

Total Fund



Sharpe Ratio

Total Fund

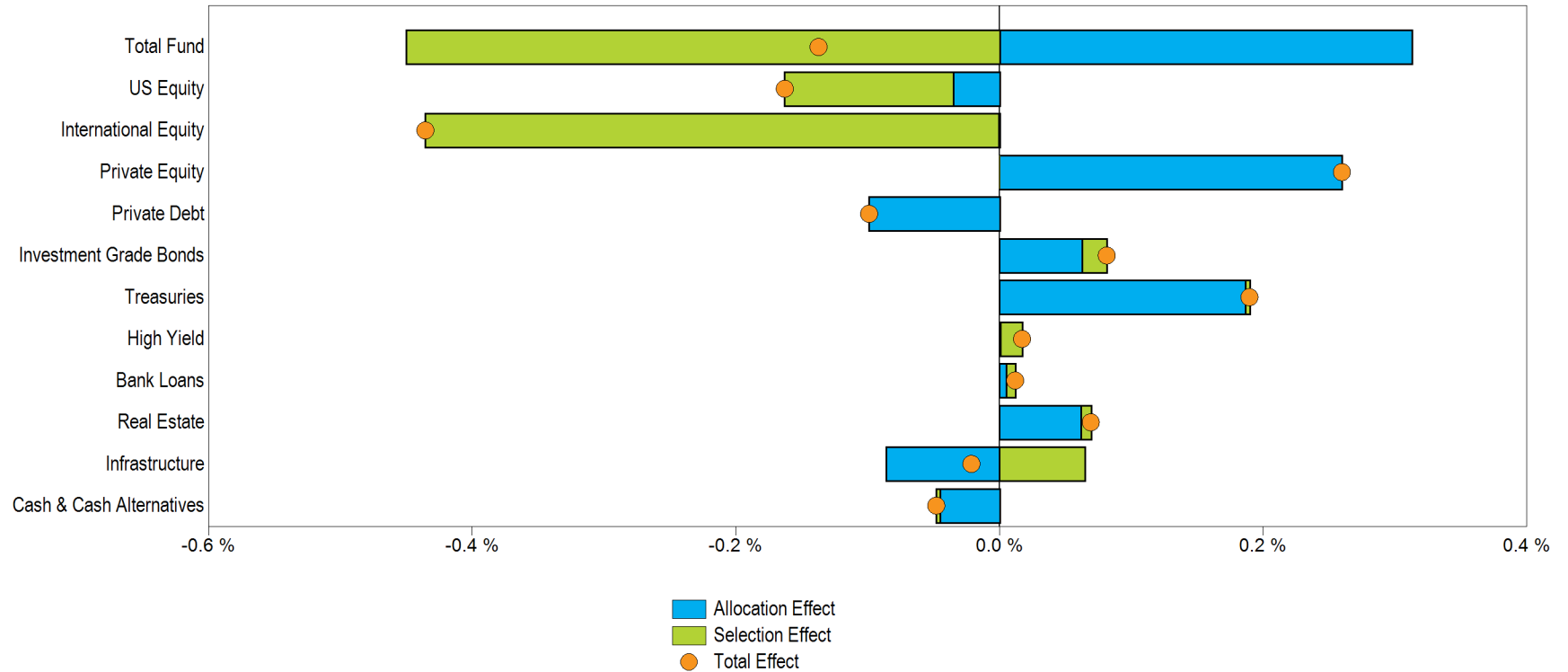


	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund (Net of Fees)	-4.0	1.3	8.5	10.4	8.8	8.0
<i>Fund Benchmark</i>	<i>-3.9</i>	<i>0.8</i>	<i>7.1</i>	<i>10.7</i>	<i>9.5</i>	<i>8.6</i>
<i>InvestorForce Public DB \$1-5B Net Rank</i>	<i>52</i>	<i>26</i>	<i>6</i>	<i>51</i>	<i>55</i>	<i>59</i>
<i>InvestorForce Public DB \$1-5B Net Median</i>	<i>-4.0</i>	<i>0.5</i>	<i>5.7</i>	<i>10.4</i>	<i>8.9</i>	<i>8.3</i>

As of 1/1/2020, the total fund benchmark consists of 32% Russell 3000, 22% MSCI ACWI ex US, 9% NCREIF ODCE, 4% Private Equity Benchmark, 2% Barclays US High Yield 1Q Lagged + 2%, 18% Barclays US Aggregate, 2% Credit Suisse Leveraged Loans, 2% ICE BofA Merrill Lynch US High Yield, 7% Barclays US Long Treasury, and 2% Consumer Price Index + 5%

Benchmark returns prior to 9/30/2019 provided by prior consultant.

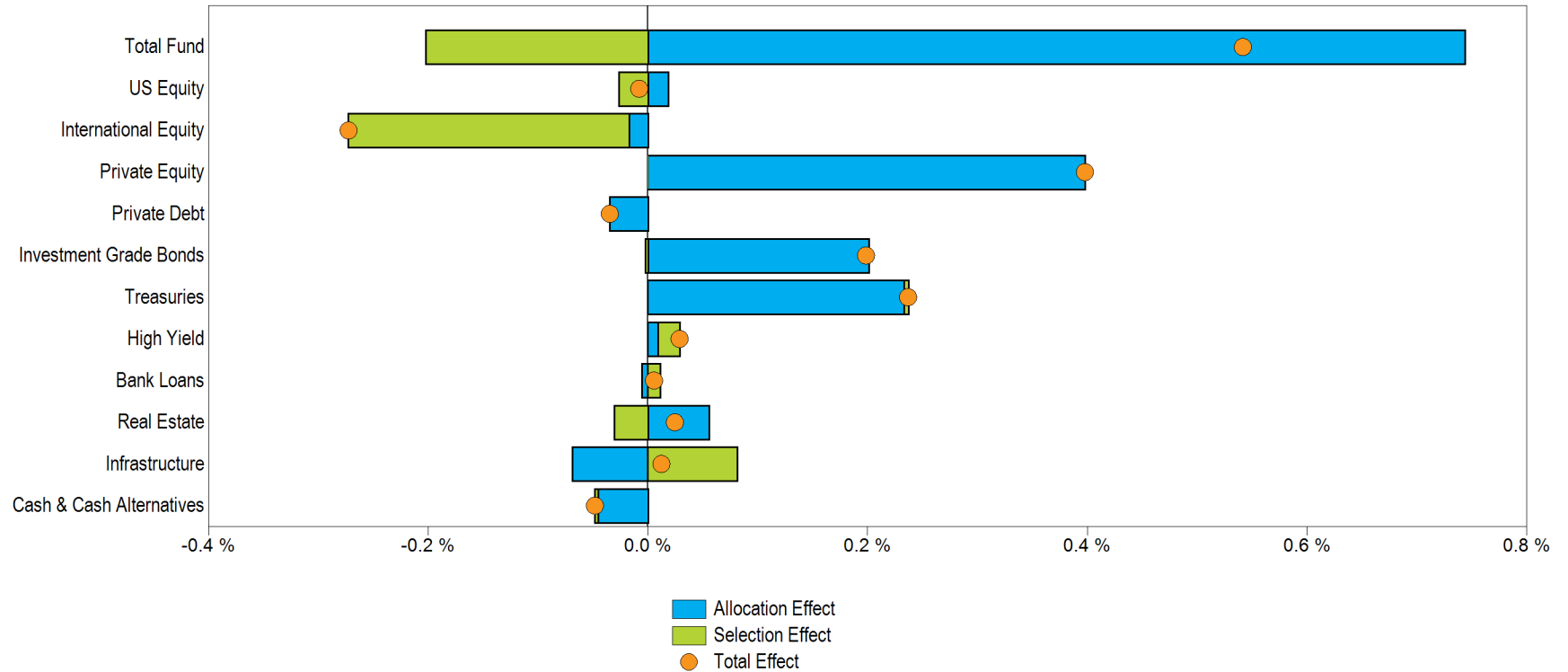
Attribution Effects 3 Months Ending March 31, 2022



	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total	-4.1%	-3.9%	-0.2%	-0.4%	0.2%	-0.2%

The performance calculation methodology in attribution tables is different from the standard time weighted returns (geometric linkage of monthly returns) found throughout the rest of the report. In attribution tables, the average weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding.

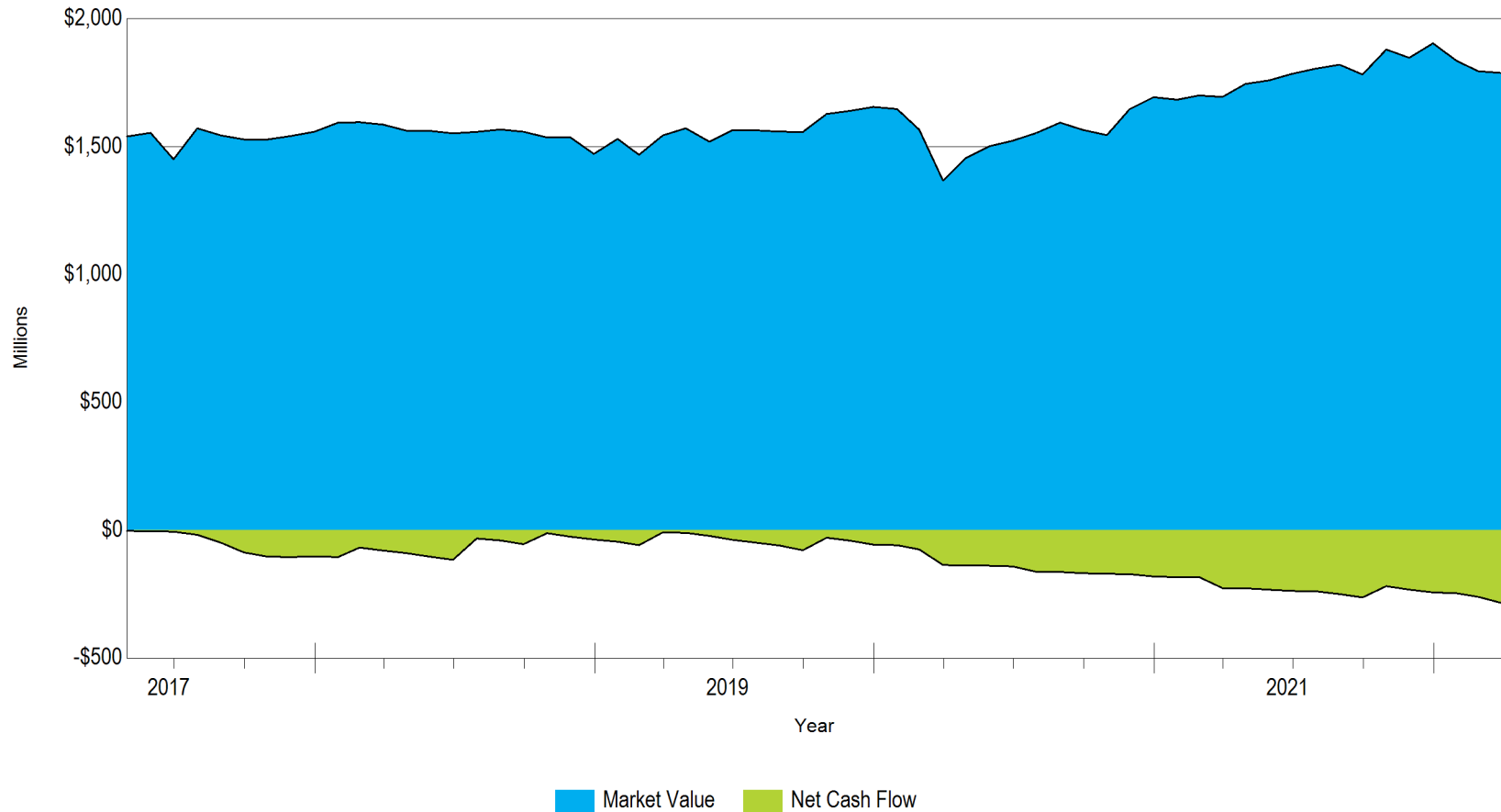
Attribution Effects 6 Months Ending March 31, 2022



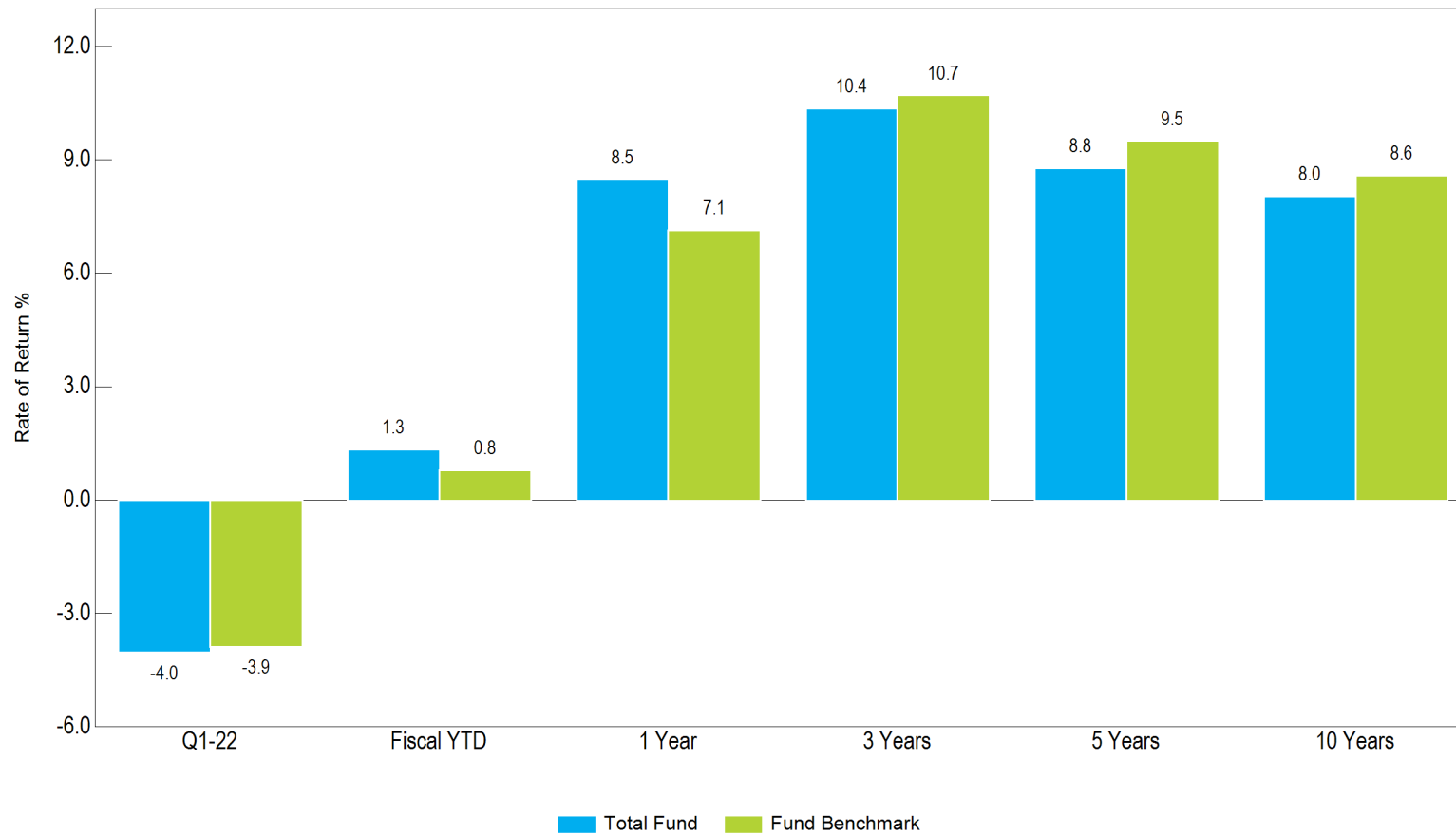
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total	8.3%	7.0%	1.3%	0.1%	1.2%	1.3%

The performance calculation methodology in attribution tables is different from the standard time weighted returns (geometric linkage of monthly returns) found throughout the rest of the report. In attribution tables, the average weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding.

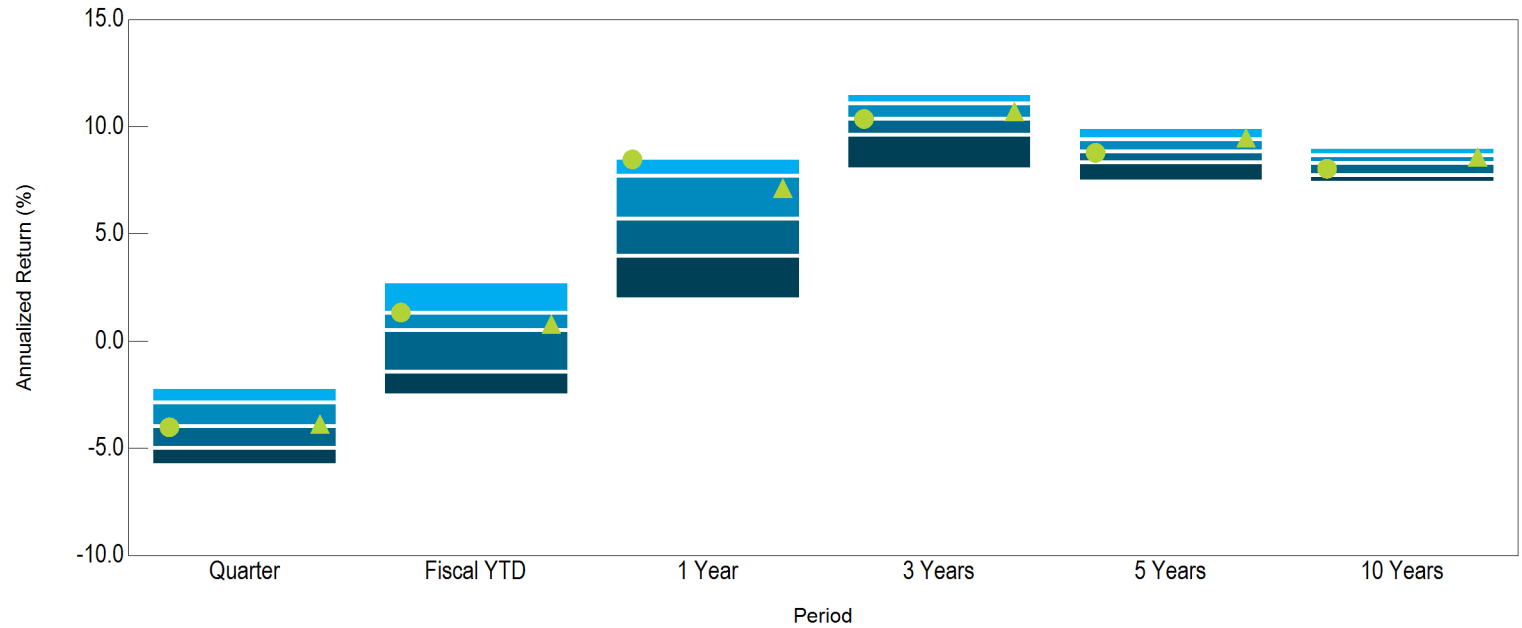
5 Year Growth in Market Value Ending March 31, 2022



Return Summary (Net of Fees)
Ending March 31, 2022



InvestorForce Public DB \$1-5B Net Return Comparison Ending March 31, 2022



	Quarter		Fiscal YTD		1 Year		3 Years		5 Years		10 Years	
5th Percentile	-2.2		2.8		8.5		11.6		10.0		9.0	
25th Percentile	-2.8		1.3		7.7		11.1		9.4		8.7	
Median	-4.0		0.5		5.7		10.4		8.9		8.3	
75th Percentile	-5.0		-1.4		4.0		9.6		8.4		7.8	
95th Percentile	-5.8		-2.5		2.0		8.0		7.5		7.4	
# of Portfolios	20		20		20		20		20		19	
● Total Fund	-4.0	(52)	1.3	(26)	8.5	(6)	10.4	(51)	8.8	(55)	8.0	(59)
▲ Fund Benchmark	-3.9	(49)	0.8	(42)	7.1	(39)	10.7	(48)	9.5	(21)	8.6	(34)

Asset Class Performance Summary (Net of Fees)

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. Date	S.I. (%)
Total Fund	1,797,222,311	100.0	-4.0	1.3	8.5	10.4	8.8	8.0	Jan-94	8.2
<i>Fund Benchmark</i>			<i>-3.9</i>	<i>0.8</i>	<i>7.1</i>	<i>10.7</i>	<i>9.5</i>	<i>8.6</i>	<i>Jan-94</i>	<i>7.9</i>
US Equity	593,360,006	33.0	-5.6	3.5	12.1	16.3	14.1	13.4	Jan-94	--
<i>Russell 3000</i>			<i>-5.3</i>	<i>3.5</i>	<i>11.9</i>	<i>18.2</i>	<i>15.4</i>	<i>14.3</i>	<i>Jan-94</i>	<i>10.4</i>
International Equity	366,431,752	20.4	-7.4	-4.8	-1.4	8.8	8.0	7.1	Jan-94	--
<i>MSCI ACWI ex USA</i>			<i>-5.4</i>	<i>-3.7</i>	<i>-1.5</i>	<i>7.5</i>	<i>6.8</i>	<i>5.6</i>	<i>Jan-94</i>	<i>--</i>
Private Equity	133,047,613	7.4	4.2	14.7	45.9	24.7	20.1	14.8	Jan-94	--
<i>Private Equity Benchmark</i>			<i>4.2</i>	<i>14.7</i>	<i>42.6</i>	<i>27.3</i>	<i>22.2</i>	<i>17.6</i>	<i>Jan-94</i>	<i>--</i>
Investment Grade Bonds	257,643,868	14.3	-5.8	-5.9	-4.1	1.8	2.2	2.4	Jan-94	4.8
<i>Bloomberg US Aggregate TR</i>			<i>-5.9</i>	<i>-5.9</i>	<i>-4.2</i>	<i>1.7</i>	<i>2.1</i>	<i>2.2</i>	<i>Jan-94</i>	<i>4.8</i>
Treasuries	72,511,595	4.0	-10.5	-7.8	-1.0	--	--	--	Jun-20	-9.6
<i>Bloomberg US Govt Long TR</i>			<i>-10.6</i>	<i>-7.8</i>	<i>-1.5</i>	<i>3.2</i>	<i>3.9</i>	<i>4.0</i>	<i>Jun-20</i>	<i>-9.6</i>
High Yield	31,654,575	1.8	-3.6	-2.8	-0.1	5.0	5.0	5.9	Jan-94	--
<i>ICE BofA US High Yield TR</i>			<i>-4.5</i>	<i>-3.9</i>	<i>-0.3</i>	<i>4.4</i>	<i>4.6</i>	<i>5.7</i>	<i>Jan-94</i>	<i>6.9</i>
Bank Loans	41,287,106	2.3	0.2	1.1	3.8	4.2	4.1	--	Jan-94	--
<i>Credit Suisse Leveraged Loans</i>			<i>-0.1</i>	<i>0.6</i>	<i>3.2</i>	<i>4.1</i>	<i>4.1</i>	<i>4.5</i>	<i>Jan-94</i>	<i>5.2</i>
Real Estate	180,964,658	10.1	7.7	16.1	29.0	10.3	9.1	9.7	Jan-94	--
<i>NCREIF ODCE</i>			<i>7.4</i>	<i>15.9</i>	<i>28.5</i>	<i>11.3</i>	<i>9.9</i>	<i>10.9</i>	<i>Jan-94</i>	<i>9.3</i>
Infrastructure	15,768,559	0.9	13.5	18.4	0.4	3.8	--	--	Jan-94	--
<i>CPI + 500 bps</i>			<i>4.4</i>	<i>7.4</i>	<i>13.9</i>	<i>9.4</i>	<i>8.5</i>	<i>--</i>	<i>Jan-94</i>	<i>--</i>
Cash & Cash Alternatives	104,552,580	5.8	-5.1	0.0	4.5	10.5	9.0	--	Jan-94	--
<i>BlackRock Custom Benchmark</i>			<i>-5.0</i>	<i>0.0</i>	<i>4.8</i>	<i>10.7</i>	<i>9.1</i>	<i>--</i>	<i>Jan-94</i>	<i>--</i>

Fiscal year end is September 30.

Performance Summary (Net of Fees)										
	Market Value (\$)	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. Date	S.I. (%)
Total Fund	1,797,222,311	--	-4.0	1.3	8.5	10.4	8.8	8.0	Jan-94	8.2
<i>Fund Benchmark</i>			<i>-3.9</i>	<i>0.8</i>	<i>7.1</i>	<i>10.7</i>	<i>9.5</i>	<i>8.6</i>	<i>Jan-94</i>	<i>7.9</i>
<i>InvestorForce Public DB \$1-5B Net Median</i>			<i>-4.0</i>	<i>0.5</i>	<i>5.7</i>	<i>10.4</i>	<i>8.9</i>	<i>8.3</i>	<i>Jan-94</i>	<i>7.8</i>
<i>InvestorForce Public DB \$1-5B Net Rank</i>			<i>52</i>	<i>26</i>	<i>6</i>	<i>51</i>	<i>55</i>	<i>59</i>	<i>Jan-94</i>	<i>5</i>
US Equity	593,360,006	33.0	-5.6	3.5	12.1	16.3	14.1	13.4	Jan-94	--
<i>Russell 3000</i>			<i>-5.3</i>	<i>3.5</i>	<i>11.9</i>	<i>18.2</i>	<i>15.4</i>	<i>14.3</i>	<i>Jan-94</i>	<i>10.4</i>
Northern Trust S&P500 Index Fund	416,115,814	70.1	-4.6	5.9	15.6	--	--	--	Aug-20	23.4
<i>S&P 500</i>			<i>-4.6</i>	<i>5.9</i>	<i>15.6</i>	<i>18.9</i>	<i>16.0</i>	<i>14.6</i>	<i>Aug-20</i>	<i>23.4</i>
Boston Partners Mid Cap Value	57,648,497	9.7	-0.4	7.3	11.5	15.5	10.7	13.2	Jun-98	10.1
<i>Russell MidCap Value</i>			<i>-1.8</i>	<i>6.6</i>	<i>11.5</i>	<i>13.7</i>	<i>10.0</i>	<i>12.0</i>	<i>Jun-98</i>	<i>9.5</i>
<i>eV US Mid Cap Value Equity Net Median</i>			<i>-1.0</i>	<i>7.4</i>	<i>11.7</i>	<i>13.9</i>	<i>9.8</i>	<i>11.6</i>	<i>Jun-98</i>	<i>10.1</i>
<i>eV US Mid Cap Value Equity Net Rank</i>			<i>42</i>	<i>51</i>	<i>54</i>	<i>29</i>	<i>36</i>	<i>12</i>	<i>Jun-98</i>	<i>51</i>
Champlain Mid Cap	53,684,681	9.0	-10.7	-4.7	8.1	17.1	17.2	15.7	Jul-09	16.7
<i>Russell MidCap</i>			<i>-5.7</i>	<i>0.4</i>	<i>6.9</i>	<i>14.9</i>	<i>12.6</i>	<i>12.9</i>	<i>Jul-09</i>	<i>15.0</i>
<i>eV US Mid Cap Core Equity Net Median</i>			<i>-7.4</i>	<i>0.5</i>	<i>6.5</i>	<i>14.0</i>	<i>11.8</i>	<i>12.6</i>	<i>Jul-09</i>	<i>14.5</i>
<i>eV US Mid Cap Core Equity Net Rank</i>			<i>68</i>	<i>88</i>	<i>25</i>	<i>13</i>	<i>3</i>	<i>1</i>	<i>Jul-09</i>	<i>4</i>
Champlain Small Cap	65,911,014	11.1	-10.4	-5.7	-3.4	11.5	11.2	12.6	Jan-04	11.7
<i>Russell 2000</i>			<i>-7.5</i>	<i>-5.5</i>	<i>-5.8</i>	<i>11.7</i>	<i>9.7</i>	<i>11.0</i>	<i>Jan-04</i>	<i>8.9</i>
<i>eV US Small Cap Core Equity Net Median</i>			<i>-7.2</i>	<i>-1.2</i>	<i>1.7</i>	<i>13.8</i>	<i>11.0</i>	<i>11.6</i>	<i>Jan-04</i>	<i>9.8</i>
<i>eV US Small Cap Core Equity Net Rank</i>			<i>84</i>	<i>84</i>	<i>86</i>	<i>77</i>	<i>45</i>	<i>28</i>	<i>Jan-04</i>	<i>3</i>

	Market Value (\$)	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. Date	S.I. (%)
International Equity	366,431,752	20.4	-7.4	-4.8	-1.4	8.8	8.0	7.1	Jan-94	--
<i>MSCI ACWI ex USA</i>			<i>-5.4</i>	<i>-3.7</i>	<i>-1.5</i>	<i>7.5</i>	<i>6.8</i>	<i>5.6</i>	<i>Jan-94</i>	<i>--</i>
Northern Trust EAFE Index Fund	120,795,031	33.0	-6.7	-3.8	0.7	--	--	--	Aug-20	13.7
<i>MSCI EAFE</i>			<i>-5.9</i>	<i>-3.4</i>	<i>1.2</i>	<i>7.8</i>	<i>6.7</i>	<i>6.3</i>	<i>Aug-20</i>	<i>14.0</i>
Wellington International Quality Growth (IQG)	121,563,519	33.2	-13.3	-11.0	-7.2	10.2	10.8	--	Nov-14	9.3
<i>MSCI ACWI ex USA Growth</i>			<i>-10.8</i>	<i>-8.7</i>	<i>-6.2</i>	<i>9.1</i>	<i>8.6</i>	<i>6.7</i>	<i>Nov-14</i>	<i>6.5</i>
<i>eV ACWI ex-US Growth Equity Net Median</i>			<i>-13.8</i>	<i>-12.0</i>	<i>-5.8</i>	<i>10.7</i>	<i>10.1</i>	<i>7.9</i>	<i>Nov-14</i>	<i>8.0</i>
<i>eV ACWI ex-US Growth Equity Net Rank</i>			<i>47</i>	<i>44</i>	<i>62</i>	<i>55</i>	<i>42</i>	<i>--</i>	<i>Nov-14</i>	<i>29</i>
First Eagle International Value	124,019,626	33.8	-0.7	1.6	3.2	6.7	4.9	5.7	Apr-11	5.2
<i>MSCI EAFE Value</i>			<i>0.3</i>	<i>1.5</i>	<i>3.6</i>	<i>5.2</i>	<i>4.2</i>	<i>4.9</i>	<i>Apr-11</i>	<i>3.6</i>
<i>MSCI EAFE</i>			<i>-5.9</i>	<i>-3.4</i>	<i>1.2</i>	<i>7.8</i>	<i>6.7</i>	<i>6.3</i>	<i>Apr-11</i>	<i>5.1</i>
<i>eV EAFE Value Equity Net Median</i>			<i>-3.1</i>	<i>-2.1</i>	<i>1.0</i>	<i>6.7</i>	<i>5.2</i>	<i>5.9</i>	<i>Apr-11</i>	<i>4.9</i>
<i>eV EAFE Value Equity Net Rank</i>			<i>8</i>	<i>11</i>	<i>18</i>	<i>50</i>	<i>55</i>	<i>57</i>	<i>Apr-11</i>	<i>45</i>
Private Equity	133,047,613	7.4	4.2	14.7	45.9	24.7	20.1	14.8	Jan-94	--
<i>Private Equity Benchmark</i>			<i>4.2</i>	<i>14.7</i>	<i>42.6</i>	<i>27.3</i>	<i>22.2</i>	<i>17.6</i>	<i>Jan-94</i>	<i>--</i>
Adams Street 2012 Global Fund	17,211,996	12.9	7.4	16.6	41.7	31.8	25.5	--	Jul-12	11.0
<i>Private Equity Benchmark</i>			<i>4.2</i>	<i>14.7</i>	<i>42.6</i>	<i>27.3</i>	<i>22.2</i>	<i>17.6</i>	<i>Jul-12</i>	<i>17.4</i>
Adams Street Venture Innovation Fund	14,097,278	10.6	9.6	31.1	120.3	67.0	--	--	Dec-17	32.4
<i>Private Equity Benchmark</i>			<i>4.2</i>	<i>14.7</i>	<i>42.6</i>	<i>27.3</i>	<i>22.2</i>	<i>17.6</i>	<i>Dec-17</i>	<i>23.4</i>
Catalyst III	1,992,690	1.5	-5.5	13.4	22.6	13.0	11.0	--	Oct-12	14.8
<i>Private Equity Benchmark</i>			<i>4.2</i>	<i>14.7</i>	<i>42.6</i>	<i>27.3</i>	<i>22.2</i>	<i>17.6</i>	<i>Oct-12</i>	<i>17.8</i>

Total Plan | As of March 31, 2022

	Market Value (\$)	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. Date	S.I. (%)
Catalyst IV	10,230,587	7.7	-13.3	-9.3	15.0	32.5	25.5	--	Nov-15	19.0
<i>Private Equity Benchmark</i>			4.2	14.7	42.6	27.3	22.2	17.6	Nov-15	19.2
Coller Fund VI	3,075,107	2.3	3.2	13.9	46.0	18.9	18.8	--	Oct-12	22.0
<i>Private Equity Benchmark</i>			4.2	14.7	42.6	27.3	22.2	17.6	Oct-12	17.8
Coller Fund VII	7,191,642	5.4	3.3	15.1	47.2	17.0	29.4	--	Oct-16	32.0
<i>Private Equity Benchmark</i>			4.2	14.7	42.6	27.3	22.2	17.6	Oct-16	21.5
Coller Fund VIII	7,922,417	6.0	15.9	31.6	82.2	--	--	--	Jun-20	59.9
<i>Private Equity Benchmark</i>			4.2	14.7	42.6	27.3	22.2	17.6	Jun-20	37.5
JP Morgan Global Fund V	11,901,825	8.9	4.6	15.9	56.6	27.4	23.3	--	May-14	21.8
<i>Private Equity Benchmark</i>			4.2	14.7	42.6	27.3	22.2	17.6	May-14	18.1
JP Morgan Global Fund VI	16,006,577	12.0	6.2	16.5	36.2	18.3	--	--	Dec-17	24.6
<i>Private Equity Benchmark</i>			4.2	14.7	42.6	27.3	22.2	17.6	Dec-17	23.4
JP Morgan Global Fund VIII	11,807,823	8.9	4.9	11.6	23.9	12.7	--	--	Mar-19	12.4
<i>Private Equity Benchmark</i>			4.2	14.7	42.6	27.3	22.2	17.6	Mar-19	26.5
JPMorgan US Corporate Finance III	846,635	0.6	2.5	24.8	84.1	43.9	27.2	22.3	Oct-06	--
<i>Private Equity Benchmark</i>			4.2	14.7	42.6	27.3	22.2	17.6	Oct-06	13.9
JPMorgan Venture Capital Fund III	2,056,030	1.5	3.1	13.1	54.7	21.5	15.6	12.4	Oct-06	--
<i>Private Equity Benchmark</i>			4.2	14.7	42.6	27.3	22.2	17.6	Oct-06	13.9

	Market Value (\$)	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. Date	S.I. (%)
Lexington Capital Partners VIII <i>Private Equity Benchmark</i>	10,104,993	7.6	3.1 <i>4.2</i>	12.0 <i>14.7</i>	43.3 <i>42.6</i>	18.1 <i>27.3</i>	22.7 <i>22.2</i>	-- <i>17.6</i>	Aug-15 <i>Aug-15</i>	18.7 <i>19.3</i>
Lexington Capital Partners IX <i>Private Equity Benchmark</i>	10,763,478	8.1	7.4 <i>4.2</i>	20.0 <i>14.7</i>	63.6 <i>42.6</i>	19.8 <i>27.3</i>	-- <i>22.2</i>	-- <i>17.6</i>	Mar-19 <i>Mar-19</i>	-- <i>26.5</i>
Pantheon USA Fund VII <i>Private Equity Benchmark</i>	2,063,812	1.6	0.7 <i>4.2</i>	5.0 <i>14.7</i>	32.8 <i>42.6</i>	18.0 <i>27.3</i>	14.6 <i>22.2</i>	13.6 <i>17.6</i>	Sep-07 <i>Sep-07</i>	10.0 <i>12.8</i>
Standard Life Europe Smaller Funds I <i>Private Equity Benchmark</i>	4,673,854	3.5	2.8 <i>4.2</i>	4.3 <i>14.7</i>	13.2 <i>42.6</i>	9.4 <i>27.3</i>	7.5 <i>22.2</i>	-- <i>17.6</i>	Oct-12 <i>Oct-12</i>	-20.3 <i>17.8</i>
Pantheon Europe Fund V-B	395,222	0.3								
Lexington Capital Partners VI-B	160,731	0.1								
JPMorgan European Corporate Finance III	288,471	0.2								
Coller Fund V	256,445	0.2								
Investment Grade Bonds	257,643,868	14.3	-5.8	-5.9	-4.1	1.8	2.2	2.4	Jan-94	4.8
<i>Bloomberg US Aggregate TR</i>			<i>-5.9</i>	<i>-5.9</i>	<i>-4.2</i>	<i>1.7</i>	<i>2.1</i>	<i>2.2</i>	<i>Jan-94</i>	<i>4.8</i>
NT US Aggregate Bond <i>Bloomberg US Aggregate TR</i>	190,354,709	73.9	-5.9 <i>-5.9</i>	-6.0 <i>-5.9</i>	-4.1 <i>-4.2</i>	-- <i>1.7</i>	-- <i>2.1</i>	-- <i>2.2</i>	Aug-20 <i>Aug-20</i>	-4.7 <i>-4.6</i>
Dodge & Cox Core Fixed Income <i>Bloomberg US Aggregate TR</i>	67,289,159	26.1	-5.4 <i>-5.9</i>	-5.8 <i>-5.9</i>	-3.9 <i>-4.2</i>	2.8 <i>1.7</i>	2.9 <i>2.1</i>	3.1 <i>2.2</i>	Jan-02 <i>Jan-02</i>	4.6 <i>4.0</i>
<i>eV US Core Fixed Inc Net Median</i>			<i>-5.8</i>	<i>-5.9</i>	<i>-4.0</i>	<i>2.0</i>	<i>2.4</i>	<i>2.5</i>	<i>Jan-02</i>	<i>4.2</i>
<i>eV US Core Fixed Inc Net Rank</i>			<i>18</i>	<i>32</i>	<i>38</i>	<i>8</i>	<i>12</i>	<i>9</i>	<i>Jan-02</i>	<i>18</i>

	Market Value (\$)	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. Date	S.I. (%)
Treasuries	72,511,595	4.0	-10.5	-7.8	-1.0	--	--	--	Jun-20	-9.6
<i>Bloomberg US Govt Long TR</i>			<i>-10.6</i>	<i>-7.8</i>	<i>-1.5</i>	<i>3.2</i>	<i>3.9</i>	<i>4.0</i>	<i>Jun-20</i>	<i>-9.6</i>
NT Long-Term Gov. Bond Index Fund	72,511,595	100.0	-10.5	-7.8	-1.0	--	--	--	Jun-20	-9.6
<i>Bloomberg US Govt Long TR</i>			<i>-10.6</i>	<i>-7.8</i>	<i>-1.5</i>	<i>3.2</i>	<i>3.9</i>	<i>4.0</i>	<i>Jun-20</i>	<i>-9.6</i>
High Yield	31,654,575	1.8	-3.6	-2.8	-0.1	5.0	5.0	5.9	Jan-94	--
<i>ICE BofA US High Yield TR</i>			<i>-4.5</i>	<i>-3.9</i>	<i>-0.3</i>	<i>4.4</i>	<i>4.6</i>	<i>5.7</i>	<i>Jan-94</i>	<i>6.9</i>
AXA High Yield	31,654,575	100.0	-3.6	-2.8	-0.1	5.0	5.0	--	Mar-14	4.5
<i>ICE BofA US High Yield TR</i>			<i>-4.5</i>	<i>-3.9</i>	<i>-0.3</i>	<i>4.4</i>	<i>4.6</i>	<i>5.7</i>	<i>Mar-14</i>	<i>4.6</i>
<i>eV US High Yield Fixed Inc Net Median</i>			<i>-3.9</i>	<i>-3.3</i>	<i>0.0</i>	<i>4.4</i>	<i>4.4</i>	<i>5.4</i>	<i>Mar-14</i>	<i>4.3</i>
<i>eV US High Yield Fixed Inc Net Rank</i>			<i>36</i>	<i>33</i>	<i>53</i>	<i>28</i>	<i>22</i>	<i>--</i>	<i>Mar-14</i>	<i>37</i>
Bank Loans	41,287,106	2.3	0.2	1.1	3.8	4.2	4.1	--	Jan-94	--
<i>Credit Suisse Leveraged Loans</i>			<i>-0.1</i>	<i>0.6</i>	<i>3.2</i>	<i>4.1</i>	<i>4.1</i>	<i>4.5</i>	<i>Jan-94</i>	<i>5.2</i>
Pacific Asset Management	41,287,106	100.0	0.2	1.1	3.8	4.2	4.1	--	May-14	4.1
<i>Credit Suisse Leveraged Loans</i>			<i>-0.1</i>	<i>0.6</i>	<i>3.2</i>	<i>4.1</i>	<i>4.1</i>	<i>4.5</i>	<i>May-14</i>	<i>3.9</i>
<i>eV US Float-Rate Bank Loan Fixed Inc Net Median</i>			<i>-0.3</i>	<i>0.3</i>	<i>2.7</i>	<i>3.4</i>	<i>3.4</i>	<i>3.9</i>	<i>May-14</i>	<i>3.4</i>
<i>eV US Float-Rate Bank Loan Fixed Inc Net Rank</i>			<i>5</i>	<i>6</i>	<i>18</i>	<i>18</i>	<i>17</i>	<i>--</i>	<i>May-14</i>	<i>10</i>
Real Estate	180,964,658	10.1	7.7	16.1	29.0	10.3	9.1	9.7	Jan-94	--
<i>NCREIF ODCE</i>			<i>7.4</i>	<i>15.9</i>	<i>28.5</i>	<i>11.3</i>	<i>9.9</i>	<i>10.9</i>	<i>Jan-94</i>	<i>9.3</i>
Centersquare Value Fund IV	17,071,035	9.4	20.2	26.6	45.4	15.7	--	--	Oct-18	3.5
<i>NCREIF Property +300bps IQLAG</i>			<i>6.9</i>	<i>13.3</i>	<i>21.2</i>	<i>11.6</i>	<i>11.0</i>	<i>--</i>	<i>Oct-18</i>	<i>11.3</i>

Total Plan | As of March 31, 2022

	Market Value (\$)	% of Sector	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. Date	S.I. (%)
JP Morgan SPF <i>NCREIF ODCE</i>	128,067,561	70.8	6.3 <i>7.4</i>	14.7 <i>15.9</i>	25.4 <i>28.5</i>	9.7 <i>11.3</i>	8.1 <i>9.9</i>	9.7 <i>10.9</i>	Jan-10 <i>Jan-10</i>	-- <i>11.8</i>
JP Morgan SSPF <i>NCREIF ODCE + 100bps</i>	32,075,186	17.7	6.7 <i>7.6</i>	14.4 <i>16.5</i>	29.1 <i>29.7</i>	11.4 <i>12.4</i>	10.3 <i>11.0</i>	11.9 <i>12.0</i>	Jan-10 <i>Jan-10</i>	-- <i>12.9</i>
Retirement Office	3,350,000	1.9								
Centersquare Value Fund III	400,876	0.2								
Infrastructure <i>CPI + 500 bps</i>	15,768,559	0.9	13.5 <i>4.4</i>	18.4 <i>7.4</i>	0.4 <i>13.9</i>	3.8 <i>9.4</i>	-- <i>8.5</i>	-- <i>--</i>	Jan-94 <i>Jan-94</i>	-- <i>--</i>
BlackRock NTR Renewable Power Fund <i>CPI + 500 bps</i>	4,071,953	25.8	26.6 <i>4.4</i>	21.9 <i>7.4</i>	-23.6 <i>13.9</i>	-5.5 <i>9.4</i>	1.2 <i>8.5</i>	-- <i>--</i>	Apr-13 <i>Apr-13</i>	0.0 <i>7.5</i>
BlackRock Global Renewable Power Fund II <i>CPI + 500 bps</i>	11,696,607	74.2	9.6 <i>4.4</i>	16.5 <i>7.4</i>	8.2 <i>13.9</i>	7.2 <i>9.4</i>	4.0 <i>8.5</i>	-- <i>--</i>	Sep-16 <i>Sep-16</i>	4.1 <i>8.4</i>
Cash & Cash Alternatives <i>BlackRock Custom Benchmark</i>	104,552,580	5.8	-5.1 <i>-5.0</i>	0.0 <i>0.0</i>	4.5 <i>4.8</i>	10.5 <i>10.7</i>	9.0 <i>9.1</i>	-- <i>--</i>	Jan-94 <i>Jan-94</i>	-- <i>--</i>
BlackRock Liquid Policy Portfolio <i>BlackRock Custom Benchmark</i>	94,632,263	90.5	-5.1 <i>-5.0</i>	0.0 <i>0.0</i>	4.5 <i>4.8</i>	10.5 <i>10.7</i>	9.0 <i>9.1</i>	-- <i>--</i>	Jul-14 <i>Jul-14</i>	7.5 <i>7.6</i>
Main Account	9,920,317	9.5								

Asset Class Performance Summary (Net of Fees)

	Fiscal YTD (%)	Fiscal 2021 (%)	Fiscal 2020 (%)	Fiscal 2019 (%)	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)
Total Fund	1.3	19.7	6.3	4.8	6.7	9.0	8.6	1.9	8.3	11.9
<i>Fund Benchmark</i>	<i>0.8</i>	<i>18.5</i>	<i>9.1</i>	<i>6.1</i>	<i>7.2</i>	<i>10.8</i>	<i>9.9</i>	<i>0.1</i>	<i>9.1</i>	<i>11.4</i>
US Equity	3.5	32.8	8.7	1.1	18.7	16.9	13.9	2.1	14.0	24.8
<i>Russell 3000</i>	<i>3.5</i>	<i>31.9</i>	<i>15.0</i>	<i>2.9</i>	<i>17.6</i>	<i>18.7</i>	<i>15.0</i>	<i>-0.5</i>	<i>17.8</i>	<i>21.6</i>
Northern Trust S&P500 Index Fund	5.9	30.0	--	--	--	--	--	--	--	--
<i>S&P 500</i>	<i>5.9</i>	<i>30.0</i>	<i>15.1</i>	<i>4.3</i>	<i>17.9</i>	<i>18.6</i>	<i>15.4</i>	<i>-0.6</i>	<i>19.7</i>	<i>19.3</i>
Boston Partners Mid Cap Value	7.3	44.0	-7.5	2.3	7.8	16.1	15.4	5.3	17.4	31.6
<i>Russell MidCap Value</i>	<i>6.6</i>	<i>42.4</i>	<i>-7.3</i>	<i>1.6</i>	<i>8.8</i>	<i>13.4</i>	<i>17.3</i>	<i>-2.1</i>	<i>17.5</i>	<i>27.8</i>
Champlain Mid Cap	-4.7	39.2	17.7	6.0	24.7	17.6	21.0	1.2	13.2	27.8
<i>Russell MidCap</i>	<i>0.4</i>	<i>38.1</i>	<i>4.6</i>	<i>3.2</i>	<i>14.0</i>	<i>15.3</i>	<i>14.2</i>	<i>-0.2</i>	<i>15.8</i>	<i>27.9</i>
Champlain Small Cap	-5.7	36.2	5.4	-4.6	23.5	19.4	24.7	4.0	2.6	28.8
<i>Russell 2000</i>	<i>-5.5</i>	<i>47.7</i>	<i>0.4</i>	<i>-8.9</i>	<i>15.2</i>	<i>20.7</i>	<i>15.5</i>	<i>1.2</i>	<i>3.9</i>	<i>30.1</i>
International Equity	-4.8	20.1	8.4	1.8	3.5	14.2	11.3	-2.4	4.7	16.3
<i>MSCI ACWI ex USA</i>	<i>-3.7</i>	<i>23.9</i>	<i>3.0</i>	<i>-1.2</i>	<i>1.8</i>	<i>19.6</i>	<i>9.3</i>	<i>-12.2</i>	<i>4.8</i>	<i>16.5</i>
Northern Trust EAFE Index Fund	-3.8	25.5	--	--	--	--	--	--	--	--
<i>MSCI EAFE</i>	<i>-3.4</i>	<i>25.7</i>	<i>0.5</i>	<i>-1.3</i>	<i>2.7</i>	<i>19.1</i>	<i>6.5</i>	<i>-8.7</i>	<i>4.3</i>	<i>23.8</i>
Wellington International Quality Growth (IQG)	-11.0	20.8	19.9	1.3	8.0	20.0	10.5	--	--	--
<i>MSCI ACWI ex USA Growth</i>	<i>-8.7</i>	<i>17.0</i>	<i>17.5</i>	<i>2.0</i>	<i>3.1</i>	<i>17.7</i>	<i>11.5</i>	<i>-8.1</i>	<i>4.3</i>	<i>16.2</i>
First Eagle International Value	1.6	13.7	0.9	4.2	-0.7	8.4	14.4	-4.5	5.0	14.0
<i>MSCI EAFE Value</i>	<i>1.5</i>	<i>30.7</i>	<i>-11.9</i>	<i>-4.9</i>	<i>-0.4</i>	<i>22.5</i>	<i>3.5</i>	<i>-12.6</i>	<i>5.7</i>	<i>24.3</i>

	Fiscal YTD (%)	Fiscal 2021 (%)	Fiscal 2020 (%)	Fiscal 2019 (%)	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)
Private Equity	14.7	56.5	4.1	11.6	14.1	6.9	6.4	11.4	16.9	8.2
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Adams Street 2012 Global Fund	16.6	74.9	7.1	15.1	16.6	11.0	7.2	5.6	10.4	-17.5
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Adams Street Venture Innovation Fund	31.1	147.5	22.6	20.3	--	--	--	--	--	--
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Catalyst III	13.4	24.3	-4.7	11.8	8.2	7.0	13.2	14.6	21.6	35.6
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Catalyst IV	-9.3	59.7	47.5	16.7	14.6	17.3	--	--	--	--
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Coller Fund VI	13.9	57.5	-12.2	13.9	23.0	7.6	15.3	7.9	30.2	71.4
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Coller Fund VII	15.1	47.5	-3.2	6.0	63.0	62.0	--	--	--	--
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Coller Fund VIII	31.6	87.1	--	--	--	--	--	--	--	--
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
JP Morgan Global Fund V	15.9	59.8	-7.3	36.9	13.5	9.1	27.2	30.1	--	--
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
JP Morgan Global Fund VI	16.5	34.8	3.9	0.7	--	--	--	--	--	--
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
JP Morgan Global Fund VIII	11.6	20.2	7.0	--	--	--	--	--	--	--
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>

	Fiscal YTD (%)	Fiscal 2021 (%)	Fiscal 2020 (%)	Fiscal 2019 (%)	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)
JPMorgan US Corporate Finance III	24.8	107.9	14.8	-1.6	-0.3	23.5	4.6	26.8	20.6	13.6
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
JPMorgan Venture Capital Fund III	13.1	57.7	0.5	0.5	10.7	5.1	-6.2	19.2	24.6	8.4
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Lexington Capital Partners VIII	12.0	51.9	-1.0	3.1	42.4	15.1	10.0	--	--	--
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Lexington Capital Partners IX	20.0	63.9	-15.5	--	--	--	--	--	--	--
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Pantheon USA Fund VII	5.0	55.2	9.8	-9.3	13.8	14.5	7.2	9.2	20.7	16.7
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Standard Life Europe Smaller Funds I	4.3	21.3	3.5	5.4	10.6	-5.6	9.3	-20.1	-10.2	-89.8
<i>Private Equity Benchmark</i>	<i>14.7</i>	<i>54.1</i>	<i>8.4</i>	<i>11.3</i>	<i>16.6</i>	<i>17.6</i>	<i>5.6</i>	<i>12.1</i>	<i>21.5</i>	<i>12.6</i>
Pantheon Europe Fund V-B										
Lexington Capital Partners VI-B										
JPMorgan European Corporate Finance III										
Coller Fund V										
Investment Grade Bonds	-5.9	-0.1	7.0	9.4	-0.8	1.2	5.6	1.3	4.0	-1.0
<i>Bloomberg US Aggregate TR</i>	<i>-5.9</i>	<i>-0.9</i>	<i>7.0</i>	<i>10.3</i>	<i>-1.2</i>	<i>0.1</i>	<i>5.2</i>	<i>2.9</i>	<i>4.0</i>	<i>-1.7</i>
NT US Aggregate Bond	-6.0	-0.9	--	--	--	--	--	--	--	--
<i>Bloomberg US Aggregate TR</i>	<i>-5.9</i>	<i>-0.9</i>	<i>7.0</i>	<i>10.3</i>	<i>-1.2</i>	<i>0.1</i>	<i>5.2</i>	<i>2.9</i>	<i>4.0</i>	<i>-1.7</i>
Dodge & Cox Core Fixed Income	-5.8	2.4	7.5	8.8	-0.2	1.3	5.5	2.0	5.7	0.5
<i>Bloomberg US Aggregate TR</i>	<i>-5.9</i>	<i>-0.9</i>	<i>7.0</i>	<i>10.3</i>	<i>-1.2</i>	<i>0.1</i>	<i>5.2</i>	<i>2.9</i>	<i>4.0</i>	<i>-1.7</i>

Total Plan | As of March 31, 2022

	Fiscal YTD (%)	Fiscal 2021 (%)	Fiscal 2020 (%)	Fiscal 2019 (%)	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)
Treasuries	-7.8	-10.2	--	--	--	--	--	--	--	--
<i>Bloomberg US Govt Long TR</i>	<i>-7.8</i>	<i>-10.1</i>	<i>16.2</i>	<i>24.6</i>	<i>-3.5</i>	<i>-6.1</i>	<i>13.0</i>	<i>8.6</i>	<i>11.6</i>	<i>-10.4</i>
NT Long-Term Gov. Bond Index Fund	-7.8	-10.2	--	--	--	--	--	--	--	--
<i>Bloomberg US Govt Long TR</i>	<i>-7.8</i>	<i>-10.1</i>	<i>16.2</i>	<i>24.6</i>	<i>-3.5</i>	<i>-6.1</i>	<i>13.0</i>	<i>8.6</i>	<i>11.6</i>	<i>-10.4</i>
High Yield	-2.8	9.4	5.6	5.9	3.5	9.7	8.7	-3.6	6.8	9.8
<i>ICE BofA US High Yield TR</i>	<i>-3.9</i>	<i>11.5</i>	<i>2.3</i>	<i>6.4</i>	<i>2.9</i>	<i>9.1</i>	<i>12.8</i>	<i>-3.6</i>	<i>7.2</i>	<i>7.1</i>
AXA High Yield	-2.8	9.4	5.6	5.9	3.5	9.7	8.7	-3.6	--	--
<i>ICE BofA US High Yield TR</i>	<i>-3.9</i>	<i>11.5</i>	<i>2.3</i>	<i>6.4</i>	<i>2.9</i>	<i>9.1</i>	<i>12.8</i>	<i>-3.6</i>	<i>7.2</i>	<i>7.1</i>
Bank Loans	1.1	7.3	1.2	3.6	5.5	5.9	5.5	1.9	--	--
<i>Credit Suisse Leveraged Loans</i>	<i>0.6</i>	<i>8.5</i>	<i>0.8</i>	<i>3.1</i>	<i>5.6</i>	<i>5.4</i>	<i>5.3</i>	<i>1.2</i>	<i>4.3</i>	<i>5.8</i>
Pacific Asset Management	1.1	7.3	1.2	3.6	5.5	5.9	5.5	1.9	--	--
<i>Credit Suisse Leveraged Loans</i>	<i>0.6</i>	<i>8.5</i>	<i>0.8</i>	<i>3.1</i>	<i>5.6</i>	<i>5.4</i>	<i>5.3</i>	<i>1.2</i>	<i>4.3</i>	<i>5.8</i>
Real Estate	16.1	16.1	-3.5	7.4	7.0	5.1	10.9	11.3	10.0	11.8
<i>NCREIF ODCE</i>	<i>15.9</i>	<i>14.6</i>	<i>1.4</i>	<i>5.6</i>	<i>8.7</i>	<i>7.7</i>	<i>10.1</i>	<i>15.0</i>	<i>12.4</i>	<i>13.0</i>
Centersquare Value Fund IV	26.6	27.5	-0.9	-29.6	--	--	--	--	--	--
<i>NCREIF Property +300bps IQLAG</i>	<i>13.3</i>	<i>10.6</i>	<i>5.8</i>	<i>9.7</i>	<i>10.4</i>	<i>10.2</i>	<i>13.9</i>	--	--	--
JP Morgan SPF	14.7	13.0	0.8	2.9	6.9	6.5	8.6	13.4	11.0	13.8
<i>NCREIF ODCE</i>	<i>15.9</i>	<i>14.6</i>	<i>1.4</i>	<i>5.6</i>	<i>8.7</i>	<i>7.7</i>	<i>10.1</i>	<i>15.0</i>	<i>12.4</i>	<i>13.0</i>
JP Morgan SSPF	14.4	16.6	1.2	5.9	9.1	8.2	10.3	19.0	14.5	15.9
<i>NCREIF ODCE + 100bps</i>	<i>16.5</i>	<i>15.8</i>	<i>2.4</i>	<i>6.6</i>	<i>9.8</i>	<i>8.7</i>	<i>11.2</i>	<i>16.1</i>	<i>13.5</i>	<i>14.2</i>
Retirement Office										
Centersquare Value Fund III										

Total Plan | As of March 31, 2022

	Fiscal YTD (%)	Fiscal 2021 (%)	Fiscal 2020 (%)	Fiscal 2019 (%)	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)
Infrastructure	18.4	-7.7	2.4	7.2	--	--	--	--	--	--
<i>CPI + 500 bps</i>	<i>7.4</i>	<i>10.6</i>	<i>6.4</i>	<i>6.8</i>	<i>7.4</i>	<i>7.3</i>	<i>6.5</i>	<i>5.0</i>	<i>6.7</i>	--
BlackRock NTR Renewable Power Fund	21.9	-27.6	-5.7	14.2	7.4	6.5	1.2	6.1	1.3	--
<i>CPI + 500 bps</i>	<i>7.4</i>	<i>10.6</i>	<i>6.4</i>	<i>6.8</i>	<i>7.4</i>	<i>7.3</i>	<i>6.5</i>	<i>5.0</i>	<i>6.7</i>	--
BlackRock Global Renewable Power Fund II	16.5	-0.7	8.3	-2.6	4.3	-2.1	--	--	--	--
<i>CPI + 500 bps</i>	<i>7.4</i>	<i>10.6</i>	<i>6.4</i>	<i>6.8</i>	<i>7.4</i>	<i>7.3</i>	<i>6.5</i>	<i>5.0</i>	<i>6.7</i>	--
Cash & Cash Alternatives	0.0	21.9	6.3	3.9	7.2	12.2	31.1	-1.3	--	--
<i>BlackRock Custom Benchmark</i>	<i>0.0</i>	<i>22.3</i>	<i>6.2</i>	<i>3.9</i>	<i>7.5</i>	<i>12.5</i>	<i>11.6</i>	<i>-1.1</i>	--	--
BlackRock Liquid Policy Portfolio	0.0	21.9	6.3	3.9	7.2	12.2	11.4	-1.3	--	--
<i>BlackRock Custom Benchmark</i>	<i>0.0</i>	<i>22.3</i>	<i>6.2</i>	<i>3.9</i>	<i>7.5</i>	<i>12.5</i>	<i>11.6</i>	<i>-1.1</i>	--	--
Main Account										

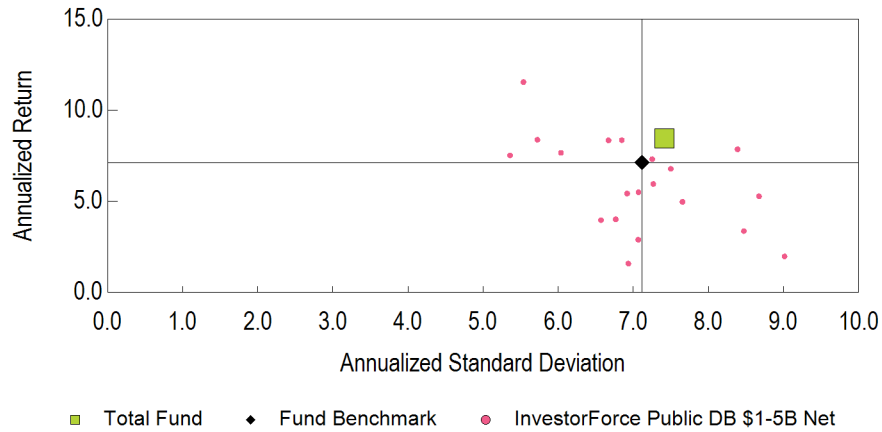
Statistics Summary (Net of Fees)

5 Years Ending March 31, 2022

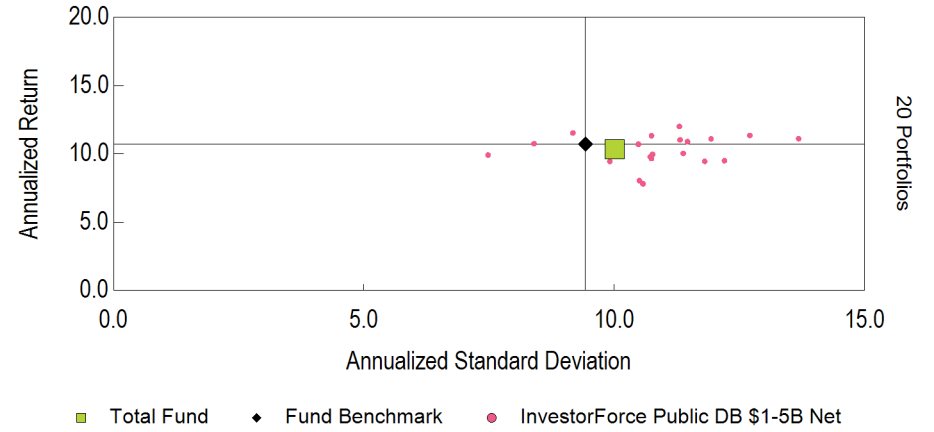
	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Fund	8.8%	8.6%	-0.6	1.0	0.9	1.3%
Fund Benchmark	9.5%	8.1%	--	1.0	1.0	0.0%
US Equity	14.1%	17.0%	-0.7	1.0	0.8	2.0%
Russell 3000	15.4%	16.4%	--	1.0	0.9	0.0%
International Equity	8.0%	12.9%	0.3	0.8	0.5	3.6%
MSCI ACWI ex USA	6.8%	14.9%	--	1.0	0.4	0.0%
Private Equity	20.1%	11.5%	-0.4	0.8	1.7	5.7%
Private Equity Benchmark	22.2%	12.5%	--	1.0	1.7	0.0%
Private Debt	--	--	--	--	--	--
BBarc HY 1Q Lagged + 2%	--	--	--	--	--	--
Investment Grade Bonds	2.2%	3.7%	0.1	1.0	0.3	1.6%
Bloomberg US Aggregate TR	2.1%	3.6%	--	1.0	0.3	0.0%
Treasuries	--	--	--	--	--	--
Bloomberg US Govt Long TR	3.9%	11.5%	--	1.0	0.2	0.0%
High Yield	5.0%	6.3%	0.3	0.8	0.6	1.6%
ICE BofA US High Yield TR	4.6%	7.6%	--	1.0	0.5	0.0%
Bank Loans	4.1%	5.1%	0.0	0.7	0.6	2.0%
Credit Suisse Leveraged Loans	4.1%	6.8%	--	1.0	0.4	0.0%
Real Estate	9.1%	4.9%	-0.1	0.4	1.7	5.4%
NCREIF ODCE	9.9%	6.1%	--	1.0	1.4	0.0%

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Infrastructure	--	--	--	--	--	--
CPI + 500 bps	8.5%	1.2%	--	1.0	6.1	0.0%
Cash & Cash Alternatives	9.0%	11.0%	-0.3	1.0	0.7	0.5%
BlackRock Custom Benchmark	9.1%	11.1%	--	1.0	0.7	0.0%

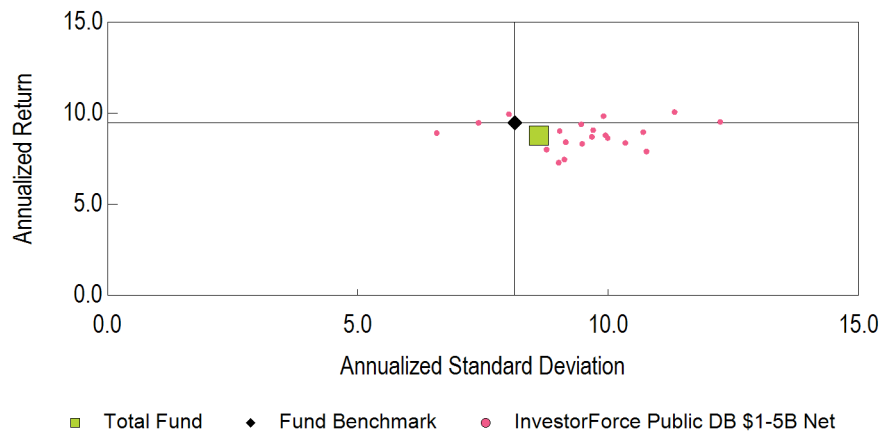
Annualized Return vs. Annualized Standard Deviation
1 Year Ending March 31, 2022



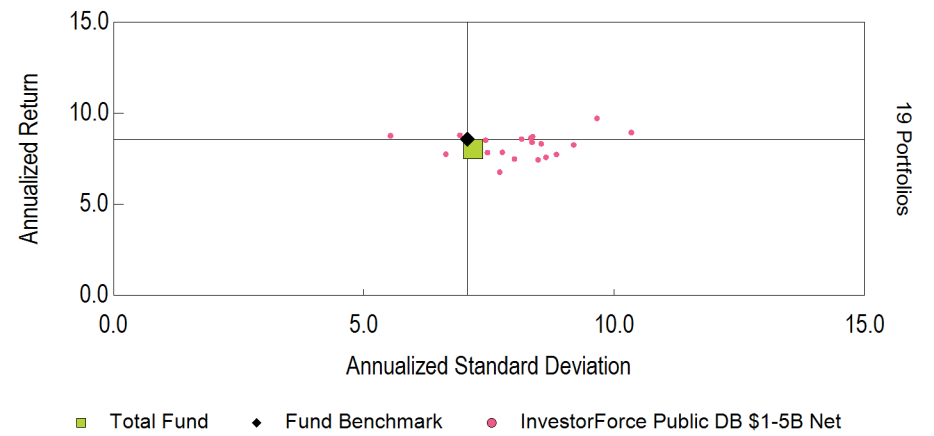
Annualized Return vs. Annualized Standard Deviation
3 Years Ending March 31, 2022



Annualized Return vs. Annualized Standard Deviation
5 Years Ending March 31, 2022



Annualized Return vs. Annualized Standard Deviation
10 Years Ending March 31, 2022

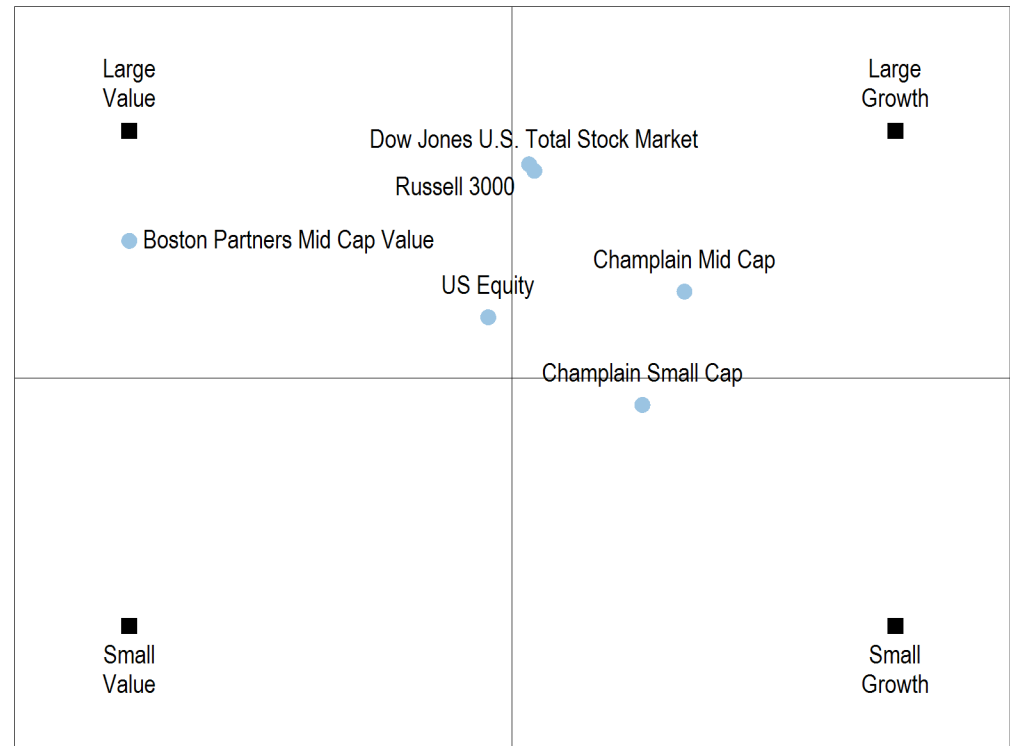


US Equity

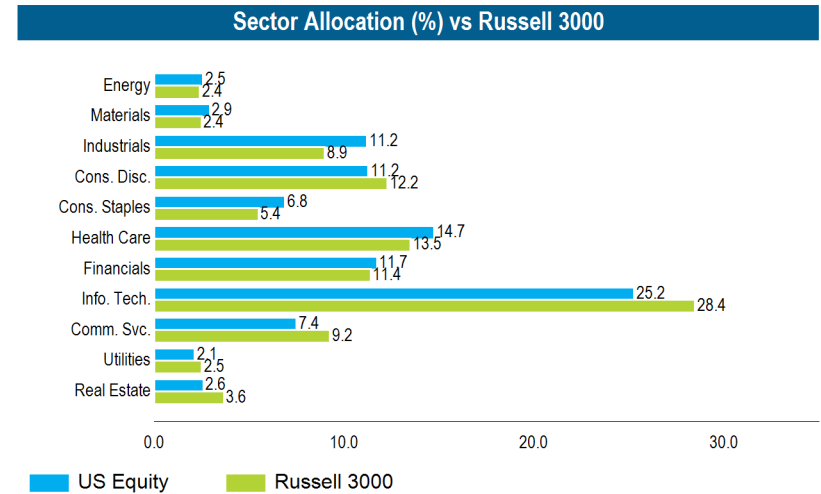
Asset Allocation on March 31, 2022

	Actual	Actual
Northern Trust S&P500 Index Fund	\$416,115,814	70.1%
Boston Partners Mid Cap Value	\$57,648,497	9.7%
Champlain Mid Cap	\$53,684,681	9.0%
Champlain Small Cap	\$65,911,014	11.1%
Total	\$593,360,006	100.0%

U.S. Effective Style Map 3 Years Ending March 31, 2022



US Equity Characteristics vs Russell 3000		
	Portfolio Q1-22	Index Q1-22
Market Value		
Market Value (\$M)	593.4	--
Number Of Holdings	650	3040
Characteristics		
Weighted Avg. Market Cap. (\$B)	460.7	550.1
Median Market Cap (\$B)	24.5	2.6
P/E Ratio	23.0	21.6
Yield	1.3	1.4
EPS Growth - 5 Yrs.	17.8	20.2
Price to Book	4.1	4.2
Beta (holdings; domestic)	1.0	1.0
Company Size Distribution		
Weighted Avg. Market Cap. (\$B)	460.7	550.1
Median Market Cap. (\$B)	24.5	2.6
Large Cap. (%)	63.1	70.7
Medium Cap. (%)	30.7	23.7
Small Cap. (%)	6.2	5.6



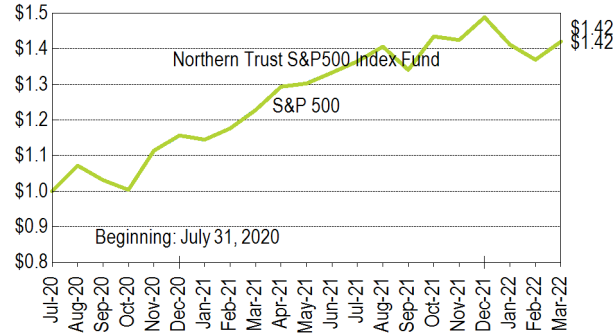
Top Holdings	
APPLE INC	5.0%
MICROSOFT CORP	4.3%
AMAZON.COM INC	2.6%
TESLA INC	1.7%
ALPHABET INC	1.5%
ALPHABET INC	1.4%
NVIDIA CORPORATION	1.3%
BERKSHIRE HATHAWAY INC	1.2%
META PLATFORMS INC	0.9%
UNITEDHEALTH GROUP INC	0.9%
Total	20.8%

Northern Trust S&P500 Index Fund | As of March 31, 2022

Account Information

Account Name	Northern Trust S&P500 Index Fund
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	8/01/20
Account Type	US Equity
Benchmark	S&P 500
Universe	

Investment Growth



Characteristics

	Portfolio	S&P 500
Number of Holdings	508	505
Weighted Avg. Market Cap. (\$B)	639.7	646.0
Median Market Cap. (\$B)	32.1	32.0
Price To Earnings	22.7	22.8
Price To Book	4.5	4.5
Price To Sales	3.1	3.1
Return on Equity (%)	30.9	30.8
Yield (%)	1.4	1.4

Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Northern Trust S&P500 Index Fund	-4.6	15.6	--	--	--	23.4	Aug-20
<i>S&P 500</i>	-4.6	15.6	18.9	16.0	14.6	23.4	Aug-20

Sector Allocation

	Portfolio	S&P 500
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	3.8	3.7
Materials	2.6	2.5
Industrials	7.8	7.8
Consumer Discretionary	11.9	12.7
Consumer Staples	6.0	6.5
Health Care	13.4	13.3
Financials	11.0	11.4
Information Technology	27.6	27.4
Communication Services	9.2	9.5
Utilities	2.7	2.6
Real Estate	2.7	2.6

Characteristics

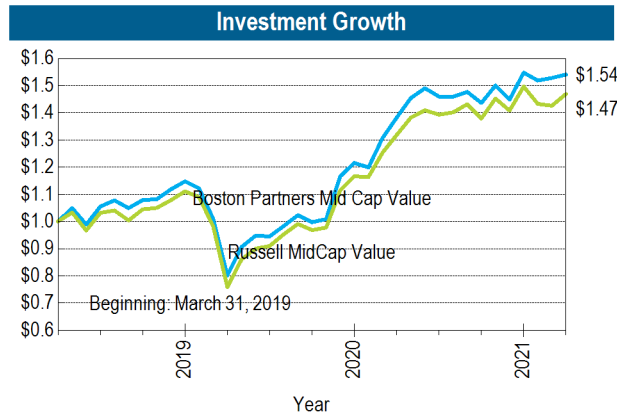
	Portfolio	S&P 500
COMPANY SIZE DISTRIBUTION		
Weighted Avg. Market Cap. (\$B)	639.7	646.0
Median Market Cap. (\$B)	32.1	32.0
Large Cap. (%)	84.0	82.8
Medium Cap. (%)	16.0	17.1
Small Cap. (%)	0.0	0.1

Top Holdings

APPLE INC	7.0%
MICROSOFT CORP	6.0%
AMAZON.COM INC	3.7%
TESLA INC	2.3%
ALPHABET INC	2.2%
ALPHABET INC	2.0%
NVIDIA CORPORATION	1.8%
BERKSHIRE HATHAWAY INC	1.7%
META PLATFORMS INC	1.3%
UNITEDHEALTH GROUP INC	1.2%

Boston Partners Mid Cap Value | As of March 31, 2022

Account Information	
Account Name	Boston Partners Mid Cap Value
Account Structure	Separate Account
Investment Style	Active
Inception Date	6/01/98
Account Type	US Stock Mid Cap Value
Benchmark	Russell MidCap Value
Universe	eV US Mid Cap Value Equity Net



Characteristics	Portfolio	Russell MidCap Value
Number of Holdings	135	698
Weighted Avg. Market Cap. (\$B)	28.5	22.8
Median Market Cap. (\$B)	21.1	11.3
Price To Earnings	18.2	17.3
Price To Book	2.6	2.6
Price To Sales	1.7	1.7
Return on Equity (%)	18.0	14.5
Yield (%)	1.6	1.8

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Boston Partners Mid Cap Value	-0.4	11.5	15.5	10.7	13.2	10.1	Jun-98
<i>Russell MidCap Value</i>	<i>-1.8</i>	<i>11.5</i>	<i>13.7</i>	<i>10.0</i>	<i>12.0</i>	<i>9.5</i>	<i>Jun-98</i>

Characteristics	Portfolio	Russell MidCap Value
COMPANY SIZE DISTRIBUTION		
Weighted Avg. Market Cap. (\$B)	28.5	22.8
Median Market Cap. (\$B)	21.1	11.3
Large Cap. (%)	24.3	6.6
Medium Cap. (%)	74.1	90.4
Small Cap. (%)	1.5	3.0

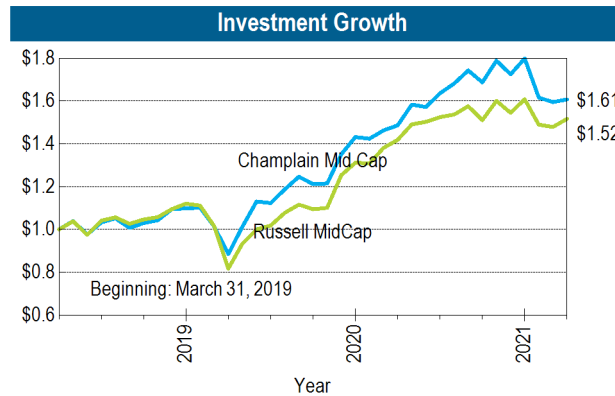
Top Holdings	
AMERIPRISE FINANCIAL INC	2.3%
FIFTH THIRD BANCORP	2.1%
AUTOZONE INC	1.9%
CASH - USD	1.9%
KEYCORP	1.6%
DOVER CORP	1.5%
CENTERPOINT ENERGY INC.	1.5%
SCHLUMBERGER LTD	1.4%
HUNTINGTON BANCSHARES INC	1.3%
ICON PLC	1.3%

Sector Allocation	Portfolio	Russell MidCap Value
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	8.7	6.5
Materials	4.9	8.2
Industrials	19.3	14.3
Consumer Discretionary	13.5	9.3
Consumer Staples	2.3	4.7
Health Care	9.7	7.9
Financials	17.4	16.6
Information Technology	10.2	9.6
Communication Services	0.6	3.6
Utilities	4.3	7.8
Real Estate	7.2	11.6

Champlain Mid Cap | As of March 31, 2022

Account Information

Account Name	Champlain Mid Cap
Account Structure	Separate Account
Investment Style	Active
Inception Date	7/01/09
Account Type	US Stock Mid Cap Core
Benchmark	Russell MidCap
Universe	eV US Mid Cap Core Equity Net



Characteristics

	Portfolio	Russell MidCap
Number of Holdings	61	824
Weighted Avg. Market Cap. (\$B)	22.9	24.0
Median Market Cap. (\$B)	17.9	11.4
Price To Earnings	32.3	19.7
Price To Book	4.5	3.3
Price To Sales	4.6	2.2
Return on Equity (%)	9.9	15.6
Yield (%)	0.7	1.4

Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Champlain Mid Cap	-10.7	8.1	17.1	17.2	15.7	16.7	Jul-09
Russell MidCap	-5.7	6.9	14.9	12.6	12.9	15.0	Jul-09

Sector Allocation

	Portfolio	Russell MidCap
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	0.0	5.0
Materials	1.7	6.1
Industrials	20.5	14.7
Consumer Discretionary	8.5	11.3
Consumer Staples	11.3	3.8
Health Care	23.8	10.9
Financials	12.3	12.8
Information Technology	17.5	18.1
Communication Services	0.0	3.5
Utilities	0.0	5.3
Real Estate	0.0	8.6

Characteristics

	Portfolio	Russell MidCap
COMPANY SIZE DISTRIBUTION		
Weighted Avg. Market Cap. (\$B)	22.9	24.0
Median Market Cap. (\$B)	17.9	11.4
Large Cap. (%)	10.8	10.7
Medium Cap. (%)	88.3	85.7
Small Cap. (%)	0.9	3.6

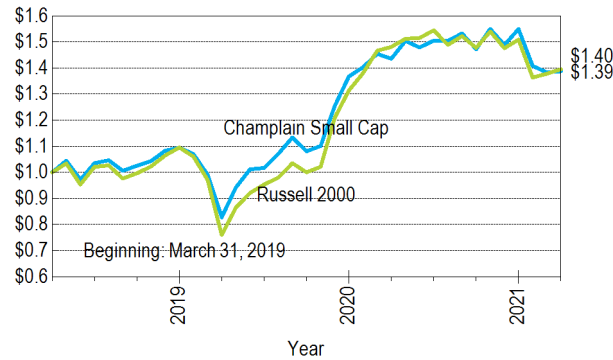
Top Holdings

AMETEK INC	3.0%
EVEREST RE GROUP LTD	2.9%
EDWARDS LIFESCIENCES CORP	2.8%
ARTHUR J. GALLAGHER & CO.	2.8%
FORTIVE CORP	2.7%
ADVANCE AUTO PARTS INC.	2.7%
PALO ALTO NETWORKS INC	2.6%
CASH - USD	2.5%
GENERAC HOLDINGS INC	2.5%
WORKDAY INC	2.5%

Account Information

Account Name	Champlain Small Cap
Account Structure	Separate Account
Investment Style	Active
Inception Date	1/01/04
Account Type	US Stock Small Cap Core
Benchmark	Russell 2000
Universe	eV US Small Cap Core Equity Net

Investment Growth



Characteristics

	Portfolio	Russell 2000
Number of Holdings	78	2,017
Weighted Avg. Market Cap. (\$B)	4.0	3.4
Median Market Cap. (\$B)	3.0	1.2
Price To Earnings	30.6	15.5
Price To Book	3.3	2.5
Price To Sales	3.0	1.6
Return on Equity (%)	-0.5	4.7
Yield (%)	0.7	1.2

Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Champlain Small Cap	-10.4	-3.4	11.5	11.2	12.6	11.7	Jan-04
<i>Russell 2000</i>	-7.5	-5.8	11.7	9.7	11.0	8.9	Jan-04

Sector Allocation

	Portfolio	Russell 2000
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	0.0	6.7
Materials	4.0	4.0
Industrials	19.1	15.5
Consumer Discretionary	4.2	10.2
Consumer Staples	12.6	3.5
Health Care	19.4	16.7
Financials	14.3	15.9
Information Technology	18.8	13.8
Communication Services	1.7	3.1
Utilities	0.0	3.0
Real Estate	0.0	7.8

Characteristics

	Portfolio	Russell 2000
COMPANY SIZE DISTRIBUTION		
Weighted Avg. Market Cap. (\$B)	4.0	3.4
Median Market Cap. (\$B)	3.0	1.2
Large Cap. (%)	0.0	0.0
Medium Cap. (%)	42.5	26.9
Small Cap. (%)	57.5	73.1

Top Holdings

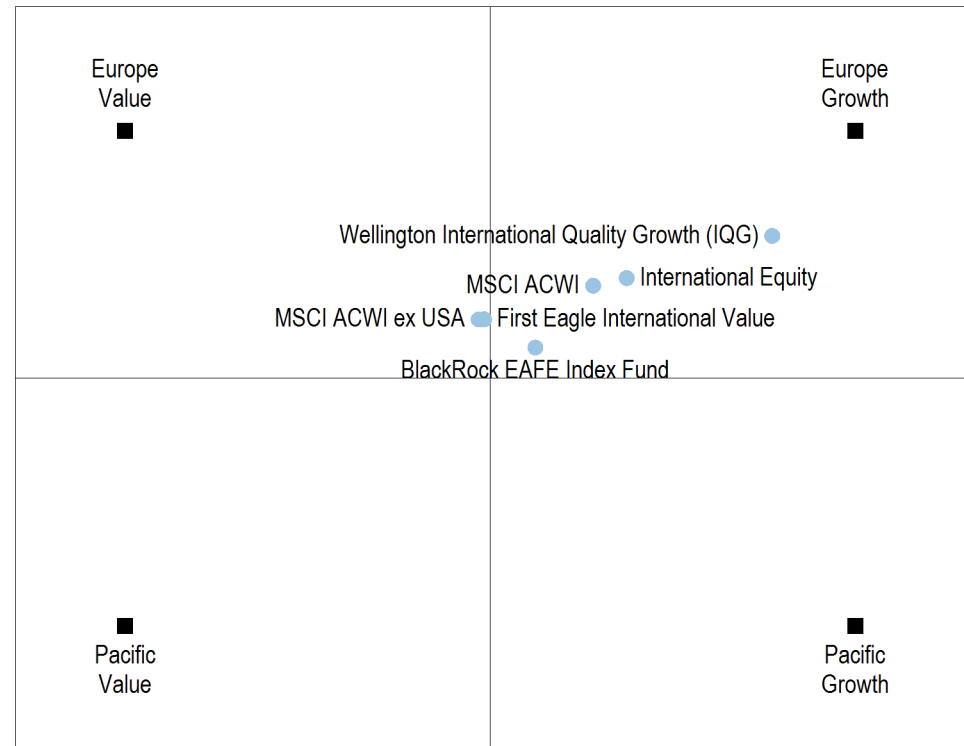
CASH - USD	5.0%
PURE STORAGE INC	3.2%
EVOQUA WATER TECHNOLOGIES CORP	2.9%
CONMED CORP	2.9%
JOHN BEAN TECHNOLOGIES CORP	2.8%
MSA SAFETY INC	2.6%
INTEGRA LIFESCIENCES HOLDINGS CORP	2.5%
INSPIRE MEDICAL SYSTEMS INC	2.5%
SIMPLY GOOD FOODS CO (THE)	2.4%
NEW RELIC INC	2.4%

International Equity

Asset Allocation on March 31, 2022

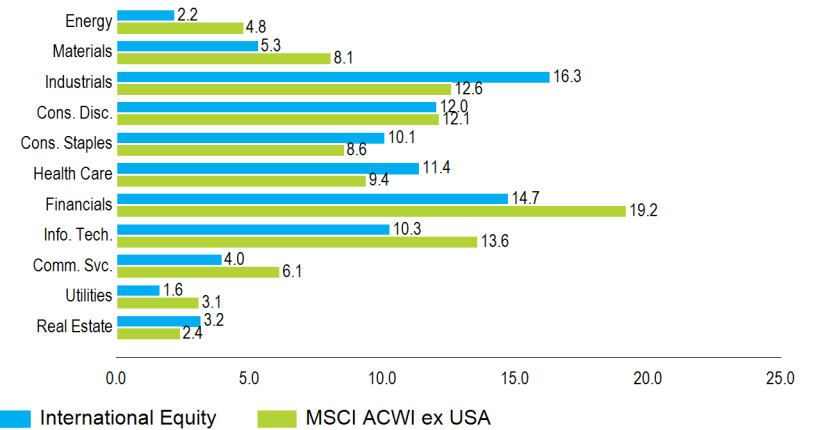
	Actual	Actual
First Eagle International Value	\$124,019,626	33.9%
Northern Trust EAFE Index Fund	\$120,795,031	33.0%
Wellington International Quality Growth (IQG)	\$121,563,519	33.2%
Total	\$366,378,176	100.0%

International Effective Style Map 3 Years Ending March 31, 2022



International Equity Characteristics vs MSCI ACWI ex USA		
	Portfolio Q1-22	Index Q1-22
Market Value		
Market Value (\$M)	366.4	--
Number Of Holdings	970	2302
Characteristics		
Weighted Avg. Market Cap. (\$B)	95.1	94.0
Median Market Cap (\$B)	13.8	10.0
P/E Ratio	15.9	14.1
Yield	2.6	2.8
EPS Growth - 5 Yrs.	13.7	14.6
Price to Book	2.7	2.5
Beta (holdings; domestic)	0.9	1.0
Company Size Distribution		
Weighted Avg. Market Cap. (\$B)	95.1	94.0
Median Market Cap. (\$B)	13.8	10.0
Large Cap. (%)	60.6	61.6
Medium Cap. (%)	23.0	24.7
Small Cap. (%)	16.4	13.7

Sector Allocation (%) vs MSCI ACWI ex USA



Top Holdings	
SPDR GOLD TRUST	3.3%
NESTLE SA, CHAM UND VEVEY	2.5%
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	2.3%
ROCHE HOLDING AG	1.9%
TENCENT HOLDINGS LTD	1.4%
SONY GROUP CORPORATION	1.3%
IMPERIAL OIL LTD	1.2%
ASTRAZENECA PLC	1.1%
BRITISH AMERICAN TOBACCO PLC	1.0%
NOVARTIS AG	1.0%
Total	16.9%

International Equity Region Allocation
vs MSCI ACWI ex USA

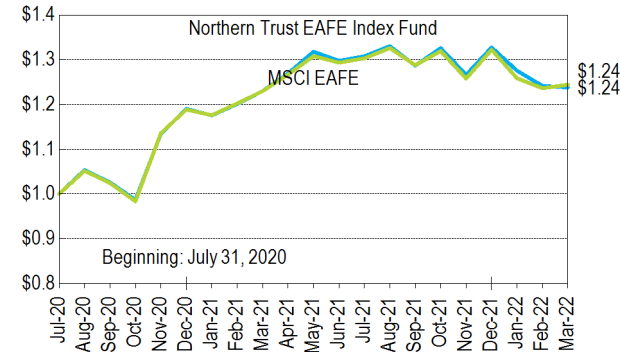
Region	% of Total	% of Bench	% Diff
North America ex U.S.	4.5%	8.3%	-3.8%
United States	4.5%	0.0%	4.5%
Europe Ex U.K.	40.5%	31.0%	9.5%
United Kingdom	12.8%	9.6%	3.1%
Pacific Basin Ex Japan	7.6%	8.0%	-0.4%
Japan	16.5%	14.1%	2.4%
Emerging Markets	12.2%	28.3%	-16.1%
Other	1.5%	0.7%	0.8%
Total	100.0%	100.0%	0.0%

Northern Trust EAFE Index Fund | As of March 31, 2022

Account Information

Account Name	Northern Trust EAFE Index Fund
Account Structure	Commingled Fund
Investment Style	Passive
Inception Date	8/01/20
Account Type	International
Benchmark	MSCI EAFE
Universe	

Investment Growth



Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	903	823
Weighted Avg. Market Cap. (\$B)	85.2	84.0
Median Market Cap. (\$B)	12.8	13.3
Price To Earnings	14.9	14.8
Price To Book	2.6	2.5
Price To Sales	1.4	1.4
Return on Equity (%)	16.0	15.6
Yield (%)	2.9	2.9

Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Northern Trust EAFE Index Fund	-6.7	0.7	--	--	--	13.7	Aug-20
MSCI EAFE	-5.9	1.2	7.8	6.7	6.3	14.0	Aug-20

Characteristics

	Portfolio	MSCI EAFE
COMPANY SIZE DISTRIBUTION		
Weighted Avg. Market Cap. (\$B)	85.2	84.0
Median Market Cap. (\$B)	12.8	13.3
Large Cap. (%)	65.6	65.7
Medium Cap. (%)	25.9	25.4
Small Cap. (%)	8.5	8.9

Top Holdings

NESTLE SA, CHAM UND VEVEY	2.3%
ROCHE HOLDING AG	1.8%
ASML HOLDING NV	1.7%
SHELL PLC	1.3%
ASTRAZENECA PLC	1.3%
NOVARTIS AG	1.3%
LVMH MOET HENNESSY LOUIS VUITTON SE	1.2%
BHP GROUP LTD	1.2%
TOYOTA MOTOR CORP	1.2%
NOVO NORDISK 'B'	1.2%

Sector Allocation

	Portfolio	MSCI EAFE
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	4.1	4.1
Materials	8.2	8.2
Industrials	15.2	15.4
Consumer Discretionary	11.4	11.6
Consumer Staples	10.1	10.2
Health Care	13.0	13.0
Financials	17.6	17.7
Information Technology	8.4	8.6
Communication Services	4.7	4.8
Utilities	3.3	3.4
Real Estate	2.8	2.9

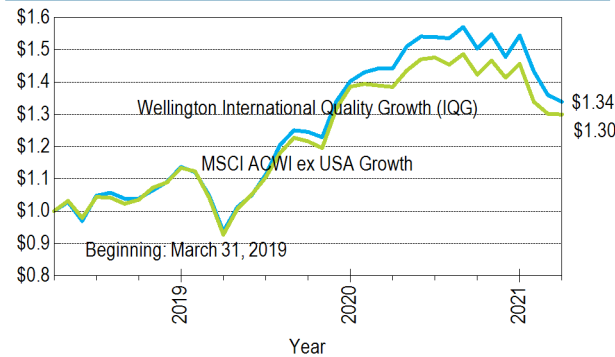
Sector allocation total is less than 100% due to cash holdings.

Wellington International Quality Growth (IQG) | As of March 31, 2022

Account Information

Account Name	Wellington International Quality Growth (IQG)
Account Structure	Separate Account
Investment Style	Active
Inception Date	11/01/14
Account Type	International
Benchmark	MSCI ACWI ex USA Growth
Universe	eV ACWI ex-US Growth Equity Net

Investment Growth



Characteristics

	Portfolio	MSCI ACWI ex USA Growth
Number of Holdings	63	1,184
Weighted Avg. Market Cap. (\$B)	133.4	118.2
Median Market Cap. (\$B)	38.8	10.2
Price To Earnings	18.3	22.2
Price To Book	3.6	3.6
Price To Sales	2.4	2.8
Return on Equity (%)	22.5	18.7
Yield (%)	2.2	1.5

Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
Wellington International Quality Growth (IQG)	-13.3	-7.2	10.2	10.8	--	9.3	Nov-14
MSCI ACWI ex USA Growth	-10.8	-6.2	9.1	8.6	6.7	6.5	Nov-14

Characteristics

	Portfolio	MSCI ACWI ex USA Growth
COMPANY SIZE DISTRIBUTION		
Weighted Avg. Market Cap. (\$B)	133.4	118.2
Median Market Cap. (\$B)	38.8	10.2
Large Cap. (%)	69.8	65.0
Medium Cap. (%)	26.2	22.3
Small Cap. (%)	3.9	12.7

Top Holdings

TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	6.5%
TENCENT HOLDINGS LTD	4.1%
ROCHE HOLDING AG	3.5%
ASTRAZENECA PLC	3.2%
NESTLE SA, CHAM UND VEVEY	3.0%
SONY GROUP CORPORATION	3.0%
CASH - USD	2.6%
HOYA CORP	2.2%
AIRBUS SE	2.2%
HONG KONG EXCHANGES AND CLEARING LTD	2.0%

Sector Allocation

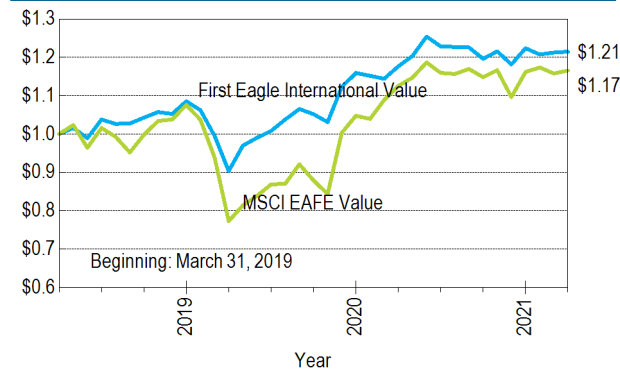
	Portfolio	MSCI ACWI ex USA Growth
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	0.0	2.0
Materials	1.8	7.1
Industrials	18.5	15.7
Consumer Discretionary	10.2	14.0
Consumer Staples	6.5	10.6
Health Care	14.8	12.3
Financials	16.4	11.1
Information Technology	14.1	18.8
Communication Services	10.9	6.7
Utilities	1.4	0.9
Real Estate	2.0	0.9

First Eagle International Value | As of March 31, 2022

Account Information

Account Name	First Eagle International Value
Account Structure	Separate Account
Investment Style	Active
Inception Date	4/01/11
Account Type	Non-US Stock Developed
Benchmark	MSCI EAFE Value
Universe	eV EAFE Value Equity Net

Investment Growth



Characteristics

	Portfolio	MSCI EAFE Value
Number of Holdings	109	497
Weighted Avg. Market Cap. (\$B)	64.9	74.7
Median Market Cap. (\$B)	18.2	12.8
Price To Earnings	14.2	11.1
Price To Book	2.0	1.7
Price To Sales	1.4	1.0
Return on Equity (%)	11.4	12.1
Yield (%)	2.6	4.1

Portfolio Performance Summary

	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	S.I. Date
First Eagle International Value	-0.7	3.2	6.7	4.9	5.7	5.2	Apr-11
MSCI EAFE Value	0.3	3.6	5.2	4.2	4.9	3.6	Apr-11

Characteristics

	Portfolio	MSCI EAFE Value
COMPANY SIZE DISTRIBUTION		
Weighted Avg. Market Cap. (\$B)	64.9	74.7
Median Market Cap. (\$B)	18.2	12.8
Large Cap. (%)	54.4	63.6
Medium Cap. (%)	28.6	26.3
Small Cap. (%)	17.0	10.1

Top Holdings

CASH - USD	9.4%
SPDR GOLD TRUST	9.2%
IMPERIAL OIL LTD	3.3%
GROUPE BRUXELLES LAMBERT SA	2.6%
BRITISH AMERICAN TOBACCO PLC	2.4%
CIE FINANCIERE RICHEMONT AG, ZUG	2.2%
DANONE	2.2%
WILLIS TOWERS WATSON PLC	2.1%
UNILEVER PLC COMMON STOCK GBP.0311	2.1%
AMBEV SA	1.8%

Sector Allocation

	Portfolio	MSCI EAFE Value
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	5.0	7.2
Materials	7.9	10.9
Industrials	11.4	11.5
Consumer Discretionary	8.1	8.4
Consumer Staples	17.9	7.8
Health Care	4.3	9.2
Financials	15.6	26.2
Information Technology	4.1	2.0
Communication Services	0.8	5.8
Utilities	0.0	6.0
Real Estate	4.6	4.9

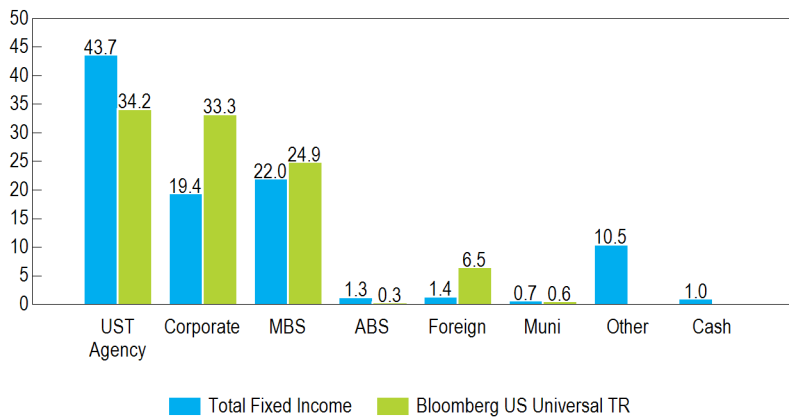
Sector allocation total is less than 100% due to gold holdings.

Fixed Income

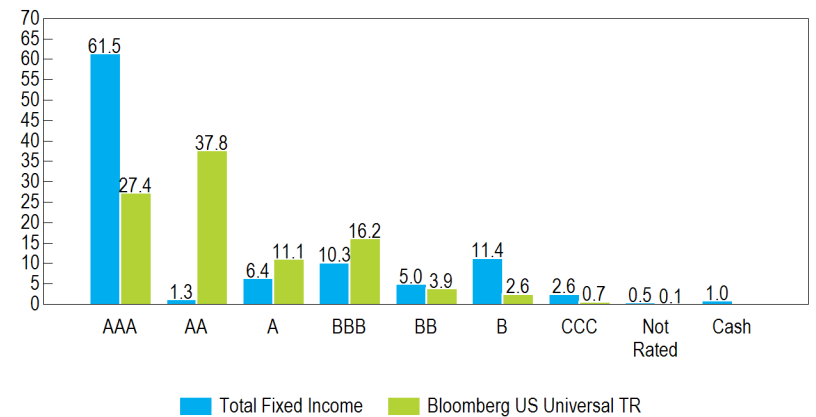
Asset Allocation on March 31, 2022		
	Actual	Actual
NT US Aggregate Bond	\$190,354,709	47.2%
Dodge & Cox Core Fixed Income	\$67,289,159	16.7%
NT Long-Term Gov. Bond Index Fund	\$72,511,595	18.0%
AXA High Yield	\$31,654,575	7.9%
Pacific Asset Management	\$41,287,106	10.2%
Total	\$403,097,144	100.0%

Total Fixed Income Characteristics vs. Bloomberg US Universal TR		
	Portfolio Q1-22	Index Q1-22
Fixed Income Characteristics		
Yield to Maturity	3.6	3.3
Average Duration	7.5	6.6
Average Quality	A	AA
Weighted Average Maturity	10.9	12.7

Sector Allocation



Credit Quality Allocation

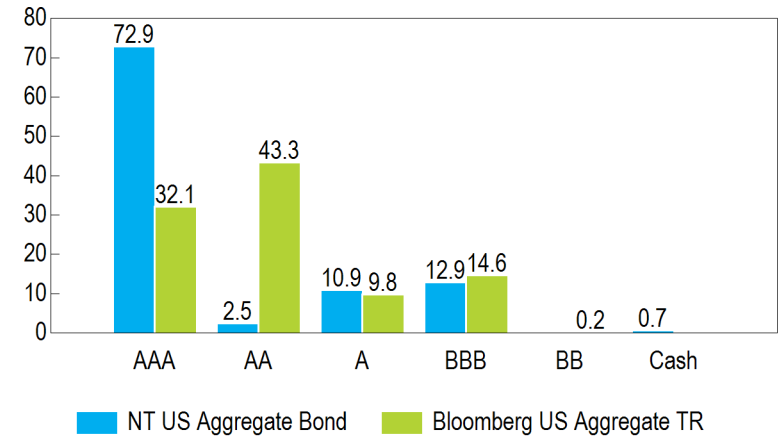


Weighted Average Maturity of BBgBarc US Universal TR is 8.6 as reported by Barclays Live.

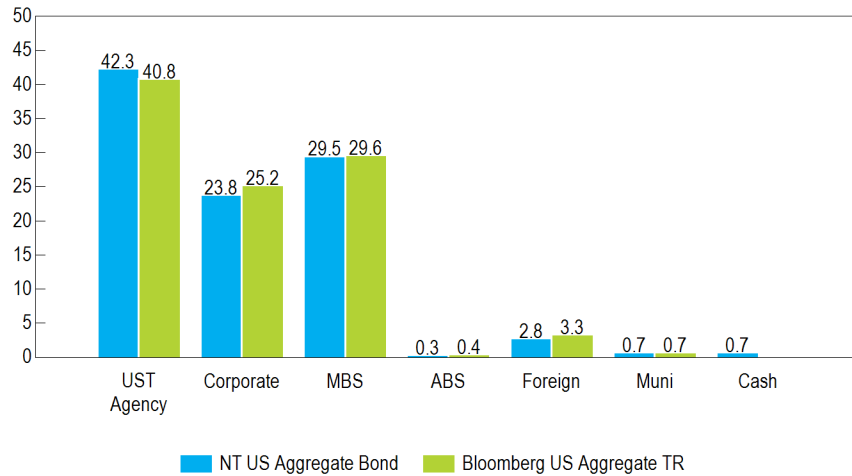
NT US Aggregate Bond Characteristics vs. Bloomberg US Aggregate TR			
	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
Fixed Income Characteristics			
Yield to Maturity	2.9	2.9	1.7
Average Duration	6.7	6.9	6.6
Average Quality	AA	AA	AA
Weighted Average Maturity	8.9	13.6	8.6

Weighted Average Maturity of BBgBarc US Aggregate TR is 8.8 as reported by Barclays Live.

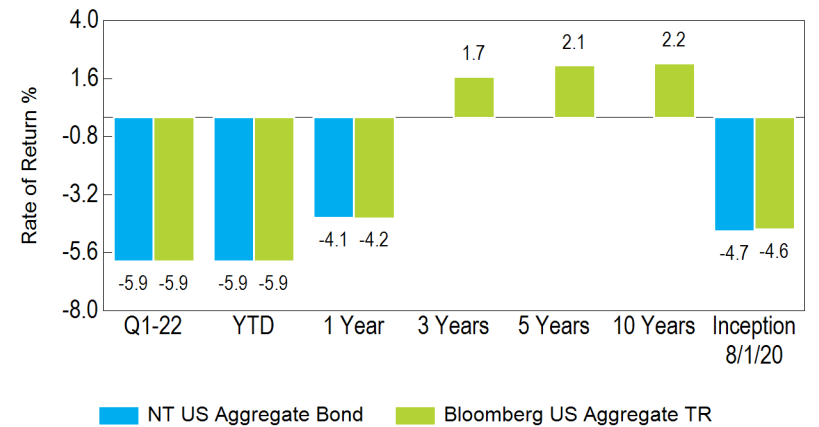
Credit Quality Allocation



US Sector Allocation



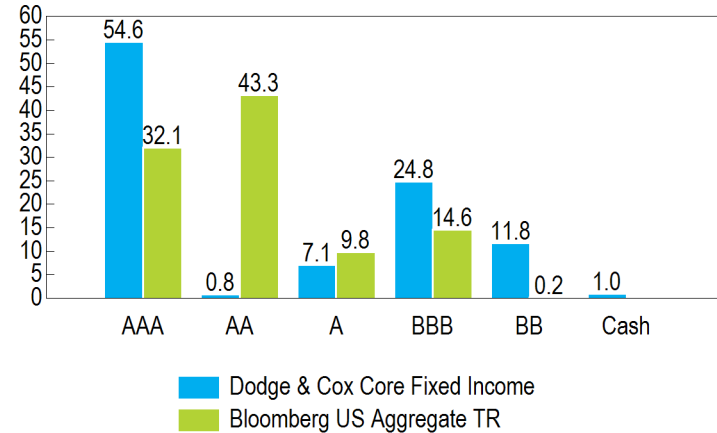
Return Summary Ending March 31, 2022



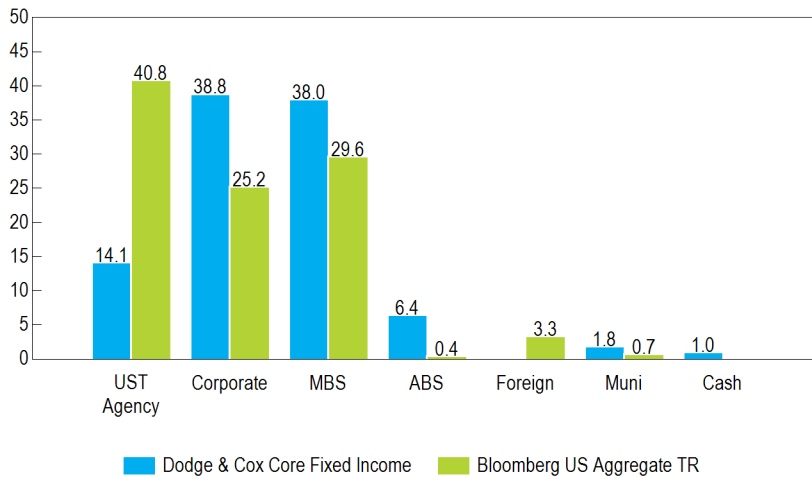
Dodge & Cox Characteristics vs. Bloomberg US Aggregate TR			
	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
Fixed Income Characteristics			
Yield to Maturity	3.5	2.9	2.2
Average Duration	5.0	6.9	5.2
Average Quality	A	AA	AA
Weighted Average Maturity	8.9	13.6	8.7

Weighted Average Maturity of BBgBarc US Aggregate TR is 8.8 as reported by Barclays Live.

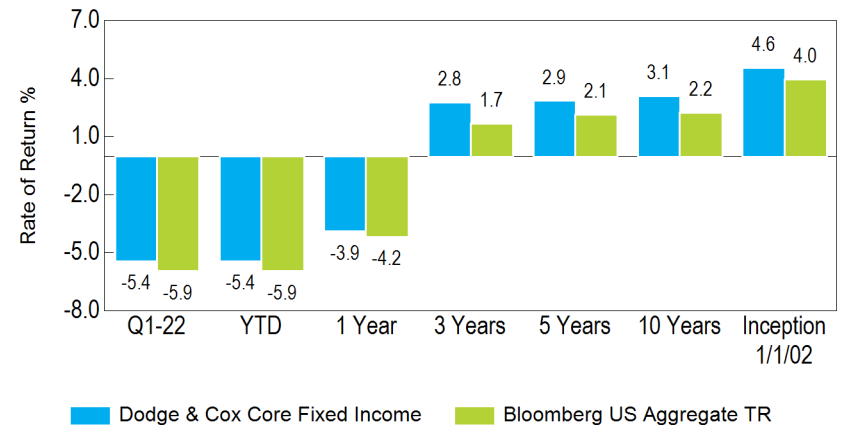
Credit Quality Allocation



US Sector Allocation

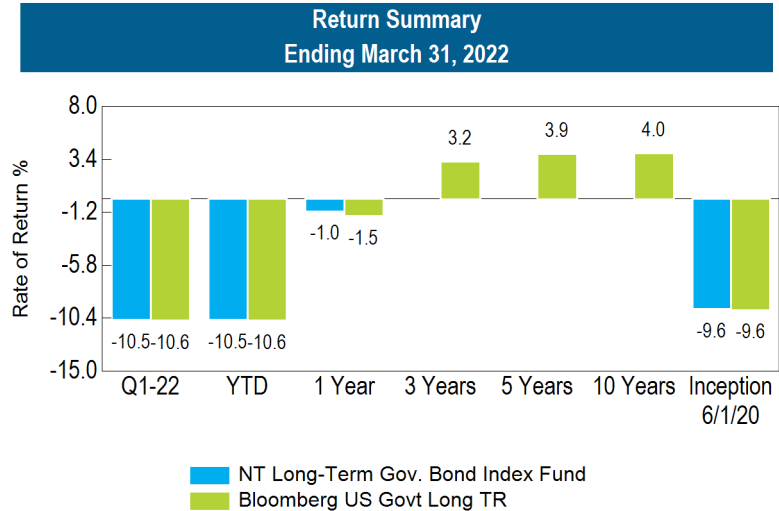
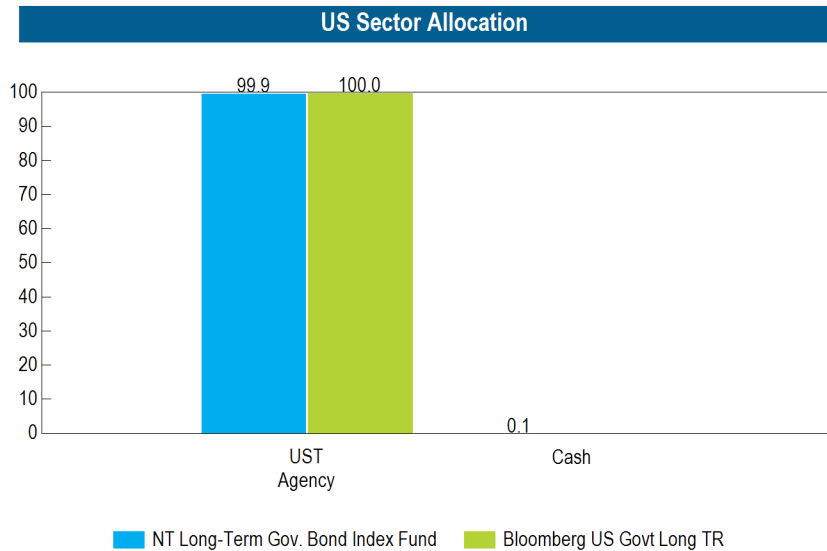
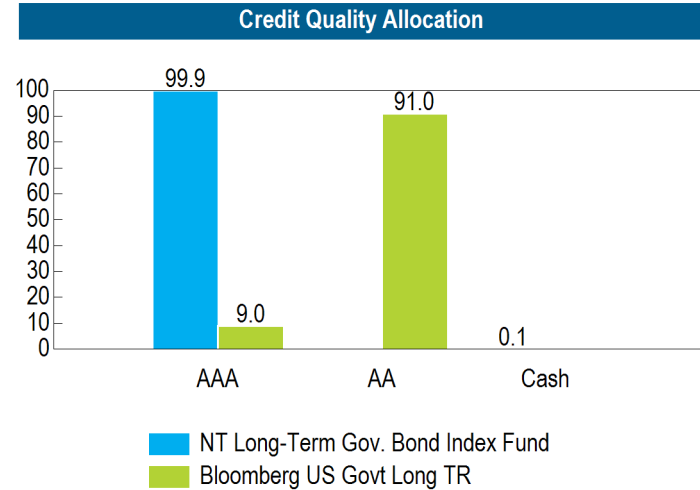


Return Summary Ending March 31, 2022



NT Long-Term Gov. Bond Index Fund | As of March 31, 2022

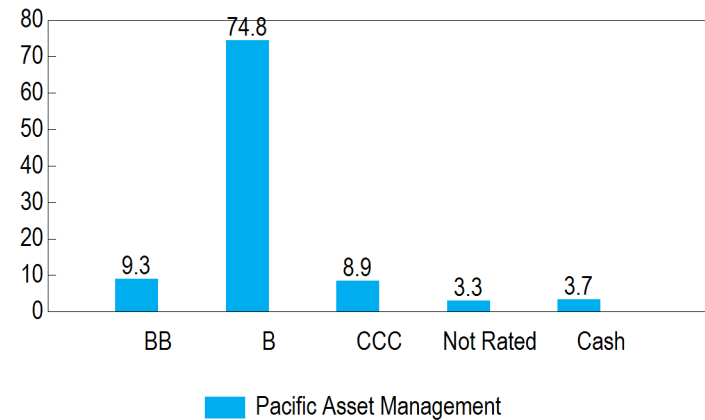
NT Long-Term Gov. Bond Index Fund Characteristics vs. Bloomberg US Govt Long TR			
	Portfolio Q1-22	Index Q1-22	Portfolio Q4-21
Fixed Income Characteristics			
Yield to Maturity	2.6	2.5	1.9
Average Duration	17.7	17.6	18.1
Average Quality	AAA	AA	AAA
Weighted Average Maturity	23.7	23.7	23.9



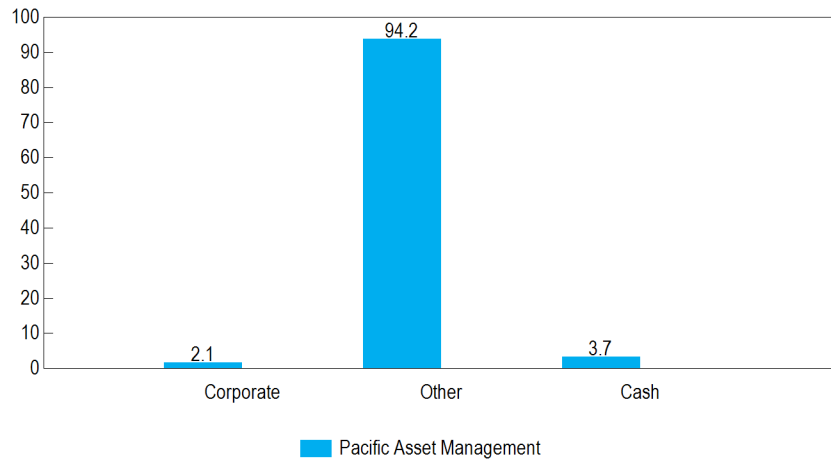
Pacific Asset Management Characteristics

	Portfolio Q1-22	Portfolio Q4-21
Fixed Income Characteristics		
Yield to Maturity	6.6	5.4
Average Duration	0.3	0.3
Average Quality	B	B
Weighted Average Maturity	4.5	4.8

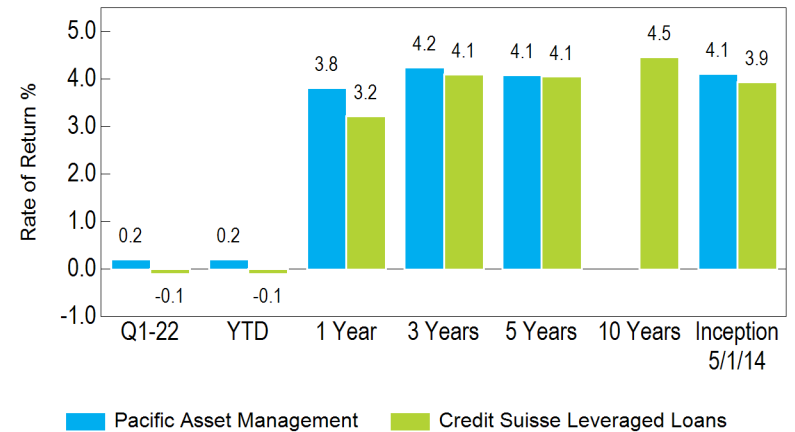
Credit Quality Allocation



US Sector Allocation



Return Summary Ending March 31, 2022

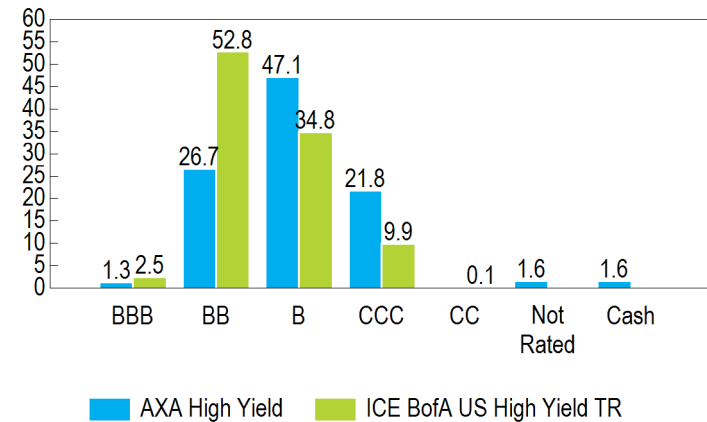


Characteristics unavailable for the Credit Suisse Leveraged Loans index.
 Other refers to bank loans.

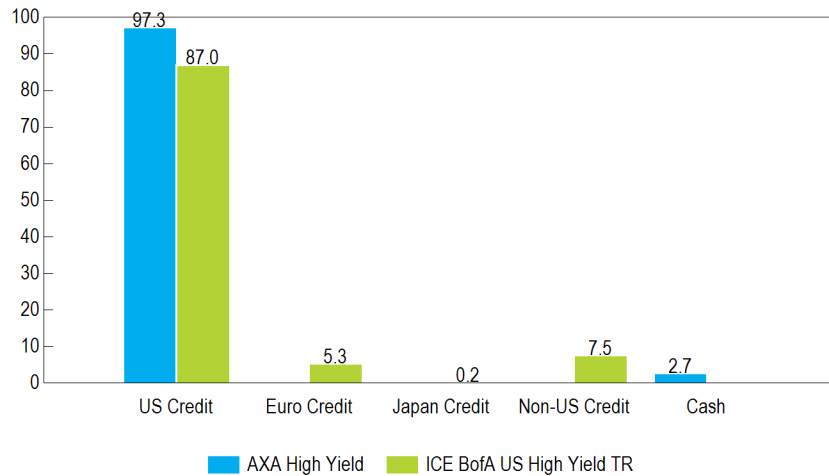
AXA High Yield Characteristics vs. ICE BofA US High Yield TR

	Portfolio Q1-22	Portfolio Q4-21
Fixed Income Characteristics		
Yield to Maturity	6.6	5.2
Average Duration	3.8	2.9
Average Quality	B	B
Weighted Average Maturity	5.8	5.9

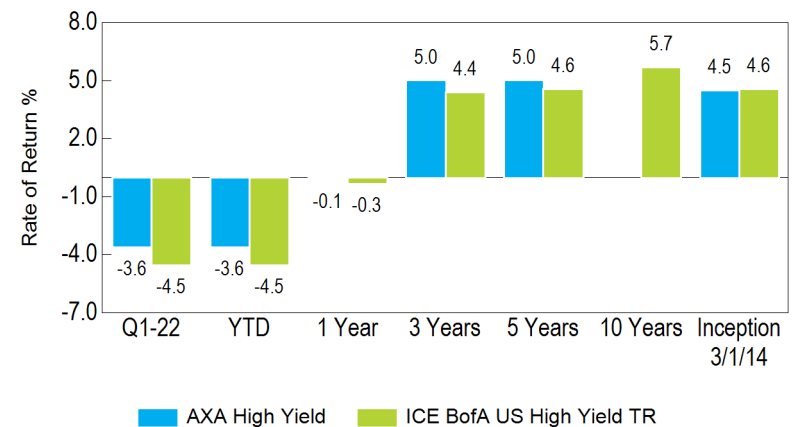
Credit Quality Allocation



Global Sector Allocation



Return Summary Ending March 31, 2022



Private Markets Analysis

Private Market Investments Overview

Investments		Commitments		Contributions & Distributions		Valuations		Performance		
Investment Name	Vintage Year	Commitment (\$)	Unfunded Commitment (\$)	Cumulative Contributions (\$)	Cumulative Distributions (\$)	Valuation (\$)	Total Value (\$)	DPI	TVPI	IRR (%)
CenterSquare Value-Added Fund IV, L.P.	2018	25,000,000	4,032,257	20,967,743	13,104,839	17,071,035	30,175,874	0.6	1.4	16.1
CenterSquare Value-Added Fund III, L.P.	2015	20,000,000	1,242,484	22,737,967	29,784,932	400,876	30,185,808	1.3	1.3	9.7
Total		45,000,000	5,274,741	43,705,710	42,889,771	17,471,911	60,361,682	1.0	1.4	12.0

Private Market Investments Overview										
Investments		Commitments		Contributions & Distributions		Valuations		Performance		
Investment Name	Vintage Year	Commitment (\$)	Unfunded Commitment (\$)	Cumulative Contributions (\$)	Cumulative Distributions (\$)	Valuation (\$)	Total Value (\$)	DPI	TVPI	IRR (%)
Adams Street 2012 Global Fund, L.P.	2012	14,000,000	1,905,400	12,094,600	12,147,524	15,996,513	28,144,037	1.0	2.3	16.4
Adams Street Venture Innovation Fund, L.P.	2017	5,000,000	597,500	4,402,500	2,052,445	12,857,560	14,910,005	0.5	3.4	52.5
Catalyst Fund Limited Partnership III	2012	5,000,000	128,080	5,871,920	7,603,647	1,992,690	9,596,337	1.3	1.6	10.0
Catalyst Fund Limited Partnership IV	2015	7,000,000	670,520	7,194,978	8,319,270	10,230,587	18,549,857	1.2	2.6	26.3
Coller International Partners V, L.P.	2007	14,000,000	3,052,000	10,948,000	15,263,844	256,445	15,520,289	1.4	1.4	7.5
Coller International Partners VI, L.P.	2012	14,000,000	4,161,257	9,838,743	14,917,447	3,075,107	17,992,555	1.5	1.8	15.6
Coller International Partners VII, L.P.	2015	10,000,000	3,056,975	7,670,766	5,548,048	7,191,642	12,739,690	0.7	1.7	16.2
Coller International Partners VIII, L.P.	2020	15,000,000	10,452,854	4,942,672	819,136	7,922,417	8,741,553	0.2	1.8	NM
JP Morgan Global Fund V, L.P.	2013	10,000,000	201,812	9,798,188	9,767,494	11,901,825	21,669,319	1.0	2.2	19.0
JP Morgan Global Fund VI, L.P.	2017	15,000,000	2,250,993	12,869,996	3,057,358	16,006,577	19,063,935	0.2	1.5	15.5
JP Morgan Global Fund VIII, L.P.	2019	15,000,000	5,222,712	9,777,288	326,008	11,807,823	12,133,831	0.0	1.2	NM
JP Morgan Corp Fin Pool III LLC	2006	7,000,000	76,422	6,923,578	13,665,248	846,635	14,511,883	2.0	2.1	13.4
JP Morgan European Corporate Finance Fund III, L.P.	2006	3,281,250	0	3,306,187	5,042,755	288,471	5,331,226	1.5	1.6	6.4
JP Morgan Venture Capital Fund III, L.P.	2006	3,458,000	9,589	3,448,411	5,068,306	2,056,030	7,124,336	1.5	2.1	10.6
Lexington Capital Partners VI-B, L.P.	2006	14,000,000	0	14,858,579	20,359,713	160,731	20,520,444	1.4	1.4	6.7
Lexington Capital Partners VIII, L.P.	2014	14,000,000	1,590,443	12,746,031	11,273,564	10,104,993	21,378,557	0.9	1.7	18.9
Lexington Capital Partners IX Offshore, L.P.	2018	15,000,000	6,215,909	9,420,594	4,391,119	10,763,478	15,154,597	0.5	1.6	NM
Pantheon USA Fund VII, L.P.	2006	10,500,000	714,000	9,786,000	16,332,759	2,063,812	18,396,571	1.7	1.9	10.2
Pantheon Europe Fund V B, L.P.	2006	3,702,263	171,342	3,530,920	4,905,109	439,744	5,344,853	1.4	1.5	6.7
SL Capital European Smaller Funds I, L.P.	2012	10,031,781	1,257,129	8,774,652	7,467,879	4,673,854	12,141,732	0.9	1.4	7.3
Total		204,973,294	40,851,421	168,204,604	168,328,673	130,636,934	298,965,607	1.0	1.8	15.2

Private Market Investments Overview

Investments		Commitments		Contributions & Distributions		Valuations		Performance		
Investment Name	Vintage Year	Commitment (\$)	Unfunded Commitment (\$)	Cumulative Contributions (\$)	Cumulative Distributions (\$)	Valuation (\$)	Total Value (\$)	DPI	TVPI	IRR (%)
BlackRock NTR Renewable Power Fund, L.P.	2012	20,000,000	0	22,303,751	22,542,355	3,216,544	25,758,899	1.0	1.2	3.4
BlackRock Renewable Power Fund II	2016	20,000,000	1,857,713	18,801,027	10,435,161	11,696,607	22,131,768	0.6	1.2	4.9
Total		40,000,000	1,857,713	41,104,777	32,977,516	14,913,151	47,890,667	0.8	1.2	3.9

Public Manager Expense Analysis
As Of March 31, 2022

Name	Market Value	% of Portfolio	Estimated Fee	Estimated Fee Value
AXA High Yield	\$31,654,575	2.0%	0.33%	\$102,877
BlackRock Liquid Policy Portfolio	\$94,632,263	5.9%	0.09%	\$85,169
Boston Partners Mid Cap Value	\$57,648,497	3.6%	0.63%	\$363,242
Champlain Mid Cap	\$53,684,681	3.3%	0.55%	\$295,266
Champlain Small Cap	\$65,911,014	4.1%	0.55%	\$362,511
Dodge & Cox Core Fixed Income	\$67,289,159	4.2%	0.26%	\$175,934
First Eagle International Value	\$124,019,626	7.7%	0.75%	\$930,147
JP Morgan SPF	\$128,067,561	7.9%	0.85%	\$1,090,507
JP Morgan SSPF	\$32,075,186	2.0%	1.25%	\$400,940
Northern Trust EAFE Index Fund	\$120,795,031	7.5%	0.01%	\$15,099
Northern Trust S&P500 Index Fund	\$416,115,814	25.7%	0.00%	\$10,403
NT Long-Term Gov. Bond Index Fund	\$72,511,595	4.5%	0.03%	\$21,753
NT US Aggregate Bond	\$190,354,709	11.8%	0.02%	\$33,312
Pacific Asset Management	\$41,287,106	2.6%	0.37%	\$152,762
Wellington International Quality Growth (IQG)	\$121,563,519	7.5%	0.59%	\$718,599
Total	\$1,617,610,336	100.0%	0.29%	\$4,758,522

Manager Search Document
Domestic Equity Active Large Cap

Introduction

Selecting strong and appropriate investment managers is a key determinant of the overall success of any plan. Investment managers are expected to operate within a client's investment guidelines and are given a large degree of latitude to achieve the investment objective.

Manager selection is a nuanced process and requires extensive due diligence. When selecting prospective active managers, Meketa evaluates the following areas:

- Organization
- Investment Team
- Investment Philosophy
- Investment Process
- Investment Performance
- Management Fees

In addition, all managers are evaluated within the context of the Plan's overall investment policy.

Background

- In late 2019/early 2020 we agreed to reduce the number of active managers in the plan, with an increased reliance on passive strategies.
- Since then, the weight within the top holdings of the most common equity indices (S&P 500 and Russell 1000) has increased.
- We think it may be appropriate to implement a “core-satellite” approach now.
- We believe an active large cap manager that holds a concentrated portfolio (with significant tracking error vs. the index) has a good opportunity to produce strong performance if their positions outperform the few large positions driving index returns.
- Today we have identified four compelling strategies that the Trustees could consider hiring for a portion (approximately \$50 mm) of the total domestic equity exposure (\$593 mm).

Manager Candidates

Investment Manager Overview

	Eagle Capital Management	Parnassus Investments	Wellington Management Company	Waycross Partners
Firm Location	New York, NY	San Francisco, CA	Boston, MA	Louisville, KY
Firm Inception	1988	1984	1928	2005
Ownership Structure	Private LLC	Private LLP	Private LLP	Private LLC
Strategy Name	Eagle Equity	Parnassus Core Equity	Dividend Growth	Focused Core Equity
Strategy Inception	December 1988	August 1992	November 2002	January 2013
Assets Under Management (Strategy) ¹	\$31.0 billion	\$35.7 billion	\$66.0 billion ²	\$66 million ³
Asset Under Management (Firm) ¹	\$31.0 billion	\$50.2 billion	\$1.3 trillion	\$192 million ³

¹ Data as of March 31, 2022.

² The related Select Quality Equity strategy had an additional \$6.1 billion in AUM

³ Firm and strategy assets under advisement (AUA) were \$2.1 billion and \$1.4 billion, respectively.

Eagle Capital Management

Organization

- Eagle Capital Management (Eagle) was formed in August 1988 by Ravenel Curry III and Beth Curry. It is based in New York City. The firm offers one strategy, the Eagle Equity portfolio, which it has been managing since its inception. The firm is 100% employee owned by 9 partners. Mr. Curry is the largest owner and holds over 50% of the firm's equity. Four other investment team members each own 5-10% of the firm. The remaining owners each have stakes that amount to less than 5% of the firm's equity.
- As of March 31, 2022, firm and strategy AUM were \$31.0 billion. The strategy had closed in 2013. The firm's management team decided to reopen the strategy several years ago on a limited basis in order to backfill natural attrition resulting from client rebalancings.

Eagle Capital Management

Investment Team

- Ravenel Curry III, CIO, has led the investment team since inception and has over 50 years of investment experience. He started his investment career in 1967 at Morgan Guaranty Trust Company. He also worked at H.C. Wainright and was the PM of the Duke Endowment prior to founding Eagle Capital Management. He holds a BA from Furman University and an MBA from the University of Virginia.
- Boykin Curry (Mr. Curry's son), Deputy CIO, joined the firm in 2002 as a research analyst. He began his investment career in 1993 at advisory firm Miller Anderson & Sherrerd. He also worked at Morgan Stanley Asset Management and Kingdon Capital prior to joining Eagle. He holds a BA from Yale University and an MBA from Harvard Business School.
- Adrian Meli, Deputy CIO, joined Eagle in 2008 as a research analyst. He started his investment career in 2002 at Farley Capital, where he was a partner at the time of his departure for Eagle. He holds a BA in Economics from Williams College.
- Alec Henry, Deputy CIO, joined Eagle in 2010 as a research analyst. He began his investment career at Corsair Capital Management, where he served as the Director of Research. Prior to joining Corsair, he worked in corporate strategy at Starwood Hotels and was a strategy consultant at Mercer Management Consulting. He holds a BS in Commerce from the University of Virginia and is a CFA® Charterholder.
- The team moved to the Deputy CIO structure in January of 2018 as part of a long-term succession plan. The strategy is further supported by three analysts who have investment experiences ranging from 5 to 13 years.

Eagle Capital Management

Investment Philosophy

- Eagle seeks strong companies that are attractively valued. These companies must have a competitive advantage, strong returns on capital, solid free cash flow, a healthy balance sheet and a strong management team. These quality characteristics help to provide a “value floor” during times of uncertainty. Along with the margin of safety, the “value floor” helps to protect on the downside.
- Eagle seeks companies that are experiencing long-term secular growth or a catalyst that has not been identified by the market. They consider this unappreciated element as a free “call option.” Even in the bear case in which the call option does not develop as anticipated, the health of the company and the strong cash flow can still make for an attractive investment.
- Eagle’s long-term investment horizon allows the team to be patient and wait for the call option to play out. Eagle manages concentrated, low-turnover portfolios using a benchmark agnostic approach.

Eagle Capital Management

Investment Process

- Eagle employs a fundamentally driven, bottom-up approach to investing. The team will consider all U.S. stocks and ADRs with a market cap of at least \$3bn. Analysts typically generate ideas through their research and network of industry contacts. Once an idea is determined to be interesting, the analyst will present it at a weekly research meeting. The entire team will determine if further work should be performed.
- The lead analyst will perform deeper due diligence. This entails traveling and having multiple meetings with company management, industry consultants, customers, suppliers and competitors. They also read various industry publications and rigorously analyze the financial statements. Eagle follows many quality companies, thus in many cases, the analyst already has a solid understanding of the company.
- Eagle is not tied to any particular methodology for determining an estimate of intrinsic value. The type of business will determine which valuation metrics are most appropriate. Some of the more common methodologies are a discounted cash flow model, sum of the parts analysis, or appropriate multiples.
- The analyst writes a formal report, which is discussed with the entire team. The report outlines the profile of the business, the investment thesis, the support for the value floor, drivers of the "call option," valuation, and key risks. The team will vet the idea collectively and develop a consensus before buying a stock. Ravenel Curry III does have final decision-making authority, but rarely exercises this prerogative.
- The portfolio is concentrated and will hold 25-35 stocks. Initial positions may start as high as 5% and can eventually reach 10% at market value. The team has an investment horizon of 5 years and turnover has averaged approximately 20%. Sector exposure is limited to 25%.

Parnassus Investments

Organization

- Parnassus Investments was founded in 1984 by Jerome Dodson and is based in San Francisco, CA. The firm manages five equity strategies all with a similar relative value investment approach. The firm has also managed one core fixed income strategy since 1992.
- Employees own 35% of the firm while AMG owns the remaining 65%. AMG acquired its stake in 2021 as an effective buyout of Mr. Dodson's stake. We view AMG as a strong partner and view the transaction as an ideal resolution to the prior uncertainty surrounding the ownership transition.
- As of March 31, 2022, Parnassus managed \$50.2 billion, with \$35.7 billion in the Core Equity strategy. Over \$30 billion of the strategy's assets are in the mutual fund, with the remainder managed through separate accounts.

Parnassus Investments

Investment Team

- The investment team is led by Todd Ahlsten, the CIO and the PM for the Core Equity strategy. He worked at Parnassus as an intern while he was an undergrad at UC Berkeley, then joined the firm when he completed his degree. He has been at Parnassus for his entire 27-year career. He became the Director of Research in 1998 and CIO in 2008. He holds a BA in Business Administration from the University of California, Berkeley.
- Benjamin Allen is a co-PM on Core Equity and has served as CEO of the firm since 2018. Mr. Allen joined Parnassus in 2005 and was previously an Investment Banking Analyst at Morgan Stanley. He holds AB in Government from Georgetown University and an MBA from the University of California, Berkeley.
- Messrs. Allen and Ahlsten split the stocks in the portfolio. Although they must agree on all buys and sells, each PM is responsible for monitoring their half of the portfolio. They continue to be supported by a large team of analysts and PMs. It is clear from our discussions of particular stocks that Mr. Allen is an analyst at heart. He has a reserved personality, but perks up once he begins discussing stocks.
- A team of twelve analysts supports all of the firm's strategies. While they are organized into sector teams, they are expected to know every industry well in order to vet all stock ideas effectively. The average experience of the 14 investment team members is 14 years.
- Parnassus has three ESG analysts who work with the fundamental analysts and highlight the ESG risks.
- Compensation is heavily weighted toward base salary (75%) rather than bonuses. Bonuses are based on qualitative and quantitative metrics. Mr. Allen explained that he does not want team members to be stressed during the year while striving to generate short-term performance to achieve a significant bonus.

Parnassus Investments

Investment Philosophy

- The key element of the Parnassus investment philosophy is being a prudent fiduciary and protecting investor capital. They believe this can be achieved by investing in high quality companies that are trading at attractive valuations.
- Parnassus' core belief is that stocks of higher quality companies are systematically mispriced because most investors fail to discount sufficiently for the risk of lower quality companies (the so-called "low beta anomaly"). Over time, high quality companies outperform low quality with less risk. Finding stocks at attractive valuations with a margin of safety helps to protect on the downside.
- Parnassus believes that high quality companies possess three characteristics: 1) Relevancy; 2) Moat; 3) Management. Relevancy refers to finding companies that have products that are becoming increasingly necessary in the world and are experiencing secular growth. Moat refers to companies that have a sustainable competitive advantage and have proven barriers to entry into that business. Management refers to companies that have shareholder friendly managements with strong track records of capital allocation and improving returns.
- ESG considerations are an important element of the firm's investment philosophy and have been since the firm's founding in 1984. They believe that ESG integration into the investment process is beneficial for investors, companies, and society. We consider Parnassus to be a "true believer" in ESG investing.

Parnassus Investments

Investment Process

- Ideas are generated from the bottom-up. They can come from screens for high ROIC, revenue growth and metrics that indicate a healthy balance sheet. Ideas can also come from analysts speaking with contacts or performing industry research. The Core Equity PMs select stocks from a fairly static universe of 150 "high quality" companies.
- As an idea becomes more interesting and the analyst gets comfortable with pitching the name, a two-page "Quick Look" is distributed to the investment team. Mr. Ahlsten described the pitch process as similar to lapidation. He believes intellectual integrity is important and being open to criticism at this stage is essential. If Mr. Ahlsten and Mr. Allen believe the idea merits further consideration, it normally takes about six weeks to research and vet all the potential issues.
- This strategy invests in strong businesses with sustainable business models and competitive advantages. Management quality is another element of a strong business. The team will perform on-site visits to company headquarters and production facilities. They will meet with different layers of management. They will also meet with customers, suppliers, competitors and other industry contacts. They read sell side research. They will meet with management multiple times, as well as speak to them on conference calls. The research process is iterative, and the depth of due diligence is considerable.

Parnassus Investments

Investment Process (continued)

- Valuation is based upon a 3-year IRR with a P/E multiple. The analysts project earnings and assign a subjective P/E multiple to obtain a price target. Fifteen times is the starting multiple because that is the long-term average for the S&P 500. The analyst will then subjectively increase or decrease that multiple based upon a variety of subjective factors such as Porter's Five Forces and the strength of the balance sheet. The team looks for stocks trading at a 20% discount to their estimate of intrinsic value
- The upside/downside ratio should be at least 2:1. The strategy will tend to avoid companies when the investment team is unable to model the risks effectively and determine a downside target. The analyst will present the idea to the entire team. The decision-making process is collaborative and every member on the investment team is involved. Decisions are generally made by consensus, but CIO Todd Ahlsten has final decision-making authority. Stocks are sold as valuation becomes less attractive, fundamentals change, better opportunities arise or ESG issues emerge.
- The portfolio holds approximately 40-60 stocks, but typically has held closer to 40. The investment horizon is three years. Annual portfolio turnover has ranged from 25% to 37% over the past five years. Initial position sizes are 1%-3% depending on the upside/downside ratio. Maximum positions can be 5%. The portfolio is benchmark agnostic.

Investment Process (continued)

- ESG is integral to the investment process. Companies with significant portions of their revenue derived from business related to tobacco, alcohol, firearms, gambling or nuclear power, are excluded from consideration. In addition, the ESG analysis framework involves an evaluation of the following factors: governance, workplace, environment, community, and customers. For example, the environmental factor entails analysis of the company's energy and water usage, the waste stream, and carbon footprint.
- Parnassus engages with companies on ESG issues with the goal of encouraging action on such matters. The firm produced its first annual ESG Engagement Report in 2019 in which successful and unsuccessful company engagements are highlighted.
- Parnassus also looks at industry-specific ESG factors and they view ESG on a relative basis. They will occasionally own energy stocks if they are strong on ESG issues relative to peers.

Waycross Partners

Organization

- Waycross Partners, LLC (“Waycross”) is an investment firm that was founded in 2005 by Benjamin Thomas. The firm’s headquarters are located in Louisville, Kentucky. The firm is 100% employee-owned. However, Matthew Bevin, former governor of Kentucky, is Chairman of the firm and has a controlling equity stake. Mr. Thomas and Mr. Greco are the other equity owners.
- As of March 31, 2022, the firm had total assets of \$2.1 billion, of which \$192 million was AUM. The majority of the assets are model accounts for two large bank trusts and in the Focused Core Equity product. The strategy had \$1.4 billion in total assets, of which \$66 million were AUM. CEO Chris Greco was hired in 2021 in order to build out the firm’s institutional asset base.
- Waycross also offers a long/short equity product. The Focused Core equity product is essentially the long book of the long/short product. It was inceptioned in 2013 at the request of clients. Mr. Thomas brought on John Ferreby to manage this long only product.

Waycross Partners

Investment Team

- Benjamin Thomas and John Ferreby are the lead PMs on the investment team. Mr. Ferreby has final decision-making authority on the Focused Core product, while Mr. Thomas has final decision-making authority on the long/short product. However, the Focused Core product is usually in line with the long book of the long/short product.
- Before founding Waycross Partners in 2005, Mr. Thomas was a portfolio manager and senior equity analyst at Invesco where he was responsible for managing two mid cap strategies and led the firm's technology and telecom research effort. He also worked at JP Morgan Asset Management (when it was called Banc One Securities) and Prudential. He earned a bachelor's degree in Finance from the University of Kentucky and an MBA from Indiana University.
- Mr. Ferreby joined the firm in 2009 as a Portfolio Manager. He had worked as a PM at Invesco on the large cap core institutional strategy, and got to know Mr. Thomas during his time there. He holds a bachelor's degree from Dartmouth College.
- The PMs are supported by one strategist (Anthony Brooks) and four analysts, whose investment experiences range from 12 years to 32 years. All of the PMs and analysts are CFA charterholders.
- Mr. Brooks serves as a liaison between the PMs and the analysts. He has a background as an analyst and a PM, most recently at Sawgrass Asset Management. Unlike portfolio strategists at other firms, he is involved in the investment due diligence process.

Waycross Partners

Investment Philosophy

- The co-PMs believe that earnings drive stock prices. They believe that identifying the key drivers to a company's earnings through fundamental analysis is the best way to capitalize on market inefficiencies.
- They believe that successful investing is a balance between conviction and discipline. They seek to achieve conviction through their Key Factor approach, which is designed to keep them focused on only the most critical drivers to a company's earnings. They take a disciplined approach with respect to risk management, which plays a crucial role in understanding, monitoring, and limiting downside capture.

Waycross Partners

Investment Process

- The investment universe comprises all stocks in the Russell 1000 index with a market capitalization above \$5 billion. The team maintains a coverage list of 300 stocks. The team's analysts are responsible for covering their respective sectors.
- The due diligence process is centered on identifying the key earnings drivers. In order to do so, the team performs fundamental, valuation, and technical analyses. The fundamental analysis focuses on the company's financial health and upcoming catalysts. The valuation analysis involves assessing key metrics that can indicate a favorable valuation. Technical analysis is used to time entry into the position. Stocks are sold when there are deleterious changes in the key factors or the stock's valuation reaches extreme levels.
- The due diligence process mainly involves digging into a company through analyses of the firm's financial statements, earnings calls, investor presentations, etc. The objective of the process is to identify the top 3 earnings drivers that are key to the company's success. Given the informational efficiency in the large cap space, the team does not necessarily try to gain an information advantage. Instead, they seek to identify those key drivers as other market participants focus elsewhere.
- The team is collegial and collaborative. They described the culture as "quiet and nerdy." The team meets each Monday morning for what they call their "all hands on deck meeting." At this meeting, each member of the team gives an update on their coverage area, emphasizing relevant news and any changes in opinions. The PMs and Mr. Brooks meet each Thursday to discuss new ideas and upcoming tasks for the analysts. Everyone on the team keeps detailed notes of the analyses, which are visible to the entire team.

Waycross Partners

Investment Process (continued)

- The strategy will likely be perennially overweight to Technology, and often overweight to Financials and Industrials. They prefer the low cash flow volatility of technology companies. They often find opportunities in Financials and Industrials because these stocks can often be subject to “macro headlines.”
- The final portfolio will hold approximately 30 stocks. Positions are typically initiated at a 3.3% weighting. Position sizes are limited to 10% of average daily trading volume.
- The team will sell a stock when there are negative changes in the key factors or if the stock's valuation reaches extreme levels.

Wellington Management

Organization

- Wellington Management Company, LLP was founded in 1928 and is a Boston based, independent, employee-owned firm focused on institutional clients. As of the end of 2021, the firm served as an investment adviser to 2,464 clients located in 62 countries. Wellington has seventeen offices around the world including in London, Sydney, Singapore, Hong Kong and Tokyo.
- The firm has been an independent, private partnership since 1979. Wellington is owned by 195 partners, all of whom are active in the firm. The firm employs over 2,600 people, including over 800 investment professionals.
- As of March 31st, 2022, Wellington managed \$1.3 trillion in total assets across multiple asset classes. Equity strategies represent 28% of the firm's assets. The Dividend Growth strategy had \$66.0 billion, of which approximately \$55 billion was in the Vanguard mutual fund. The related Select Quality Equity strategy, which is a more concentrated version of the firm's Dividend Growth strategy, had \$6.1 billion in AUM and is soft closed.

Wellington Management

Investment Team

- CIO Donald Kilbride has been working on the Dividend Growth strategy since inception in November of 2002. He started as an analyst and was promoted to lead PM in 2006. Before joining Wellington, Mr. Kilbride was a senior investment analyst and director at Greenberg-Summit Partners. He was also the Director of US Equity Research at The Boston Company for six years. Mr. Kilbride received an MBA from the University of North Carolina's Kenan-Flagler Business School and his BA from the College of the Holy Cross.
- Mr. Kilbride works with Peter Fisher, associate PM, to manage the strategy. He began working on this strategy in 2012. He is the lead PM on the global and international Dividend Growth products. Prior to joining Wellington Management in 2005, Mr. Fisher was an equity research analyst at MFS Investment Management where his coverage included the consumer staples, energy, and technology sectors. He earned an MBA from the University of Chicago and a BA in economics from Davidson College.
- Messrs. Kilbride and Fisher are supported by two analysts, both of whom were hired within the last few years with the aim of broadening the perspective of the team. Ashley Carew was hired as an analyst in July of 2020. She worked as a forensic accountant at KPMG for nearly three years. She also worked at Royal Bank of Scotland and Citi in their fraud departments. She earned a BS and MS in Accounting from Villanova University. She also earned an MBA from Wharton and an MPA from the Harvard Kennedy School.

Wellington Management

Investment Team (continued)

→ Silas Brown, who had been an Equity Research Analyst on the Growth team at Wellington, joined this team at the beginning of 2022. He often interacted with Messrs. Kilbride and Fisher, and there was mutual agreement that he would be a good fit for the team. He will relocate to London and his main focus will be on the global and international products with Mr. Fisher. He will, however, be an active contributor to research on US companies as well. Prior to joining Wellington in 2014, Mr. Brown served in the United States Air Force. He holds a BS in Economics and Political Science from the United States Air Force Academy, a Masters in International Relations from Creighton University, and an MBA from the Massachusetts Institute of Technology.

Wellington Management

Investment Philosophy

- Mr. Kilbride believes that the long-term value of a stock is a function of the improving returns and increasing cash flows that a company generates. Improving cash flows and returns are a sign of value creation. Value creation is a function of wise capital allocation decisions. With that created value, the company can return capital to shareholders in the form of dividends and share repurchases.
- Mr. Kilbride also looks for high quality companies that have healthy balance sheets and are able to generate consistent and improving cash flows to grow their dividends. Rising cash flows should increase the intrinsic value of the stock. He believes that strong long term equity performance is a function of both price appreciation and dividend income.
- ROIC is important to Mr. Kilbride as another key indicator that management is adding value. As returns increase, the market will acknowledge this improvement, and the stock price will appreciate. Companies that are creating value generally have improving margins, FCF/revenue and ROIC. If these metrics are falling, it is a cause for concern. If Mr. Kilbride owns a stock where these metrics are deteriorating, he will sell it if he believes the reasons for the decline are secular as opposed to cyclical.
- From a qualitative perspective, Mr. Kilbride emphasizes the strength and depth of management and a strong sustainable advantage in the form of a cost, customer, or competitive advantage.
- Mr. Kilbride considers his approach to be relative value. There are times when market valuations are expensive on an absolute basis. He will not be dogmatic in regard to valuation and will assess valuation on a relative basis. However, he prefers to pay an attractive price for a stock. .

Wellington Management

Investment Process

- The investment process begins with an evaluation of capital spending relative to sales growth in the different industries in the market. The approach focuses on those industries where capital spending in the industry is below the growth rate in sales. The approach then evaluates all the larger cap companies (generally greater than US\$10 billion in market capitalization) in the industry.
- A large part of the company due diligence is performed by the central research analysts. Each member of the central research team has a concentrated coverage list. This allows this team of analysts to conduct very thorough due diligence and know their companies well. As Mr. Kilbride has grown his dedicated team, they are contributing more to the research process. Wellington's macro and fixed income analysts are also a resource.
- The central research analyst constructs a financial model projecting earnings and cash flow. Mr. Kilbride views earnings as "accounting fiction," but they still move markets, so he needs to have some sense of what they are. Cash flow is of paramount importance.
- Meeting with management is crucial and Mr. Kilbride will sometimes visit companies with the analysts. In his view, management's track record and the level of insider ownership are important factors in assessing their future behavior.

Wellington Management

Investment Process (continued)

- A discounted cash flow (DCF) model is the predominant tool used to value each stock. Different metrics are more appropriate for certain industries. Rather than develop one price target for a stock, a range of price targets are derived based on multiple scenarios.
- Position sizes are a function of conviction, which is influenced by the valuation of the security and the upside return potential relative to the downside risk. Stocks are purchased when the upside return potential is at least twice the downside risk. The average position size is 2.0% to 2.5% at purchase, and positions are often capped at a 5% weighting.
- Mr. Kilbride has an investment horizon of five years, and portfolio turnover has ranged from 25% to 50% during the last five years. Turnover had historically been closer to 20%, but the dislocations brought on by the COVID-19 pandemic caused it to increase. The portfolio will typically hold 40 to 60 stocks.
- Mr. Kilbride is benchmark agnostic and does not manage to the index. Capital preservation is his top priority. He reviews the risk data Wellington's quantitative group generates, but will not adjust the portfolio based on this information. Generally, sector weightings are within 10% of the benchmark.
- Mr. Kilbride will sell a position if the stock price gets close to the established price target, fundamentals deteriorate, a better idea emerges, or he becomes concerned about margins or revenue growth

Historical Performance, Risk, and Management Fees

Historical Performance (gross of fees)
As of March 31, 2022

	Eagle	Parnassus	Waycross	Wellington	S&P 500
Trailing Period Returns (%):					
1 Year	5.8	13.2	11.0	17.6	15.6
3 Year	16.9	19.9	23.8	16.7	18.9
5 Year	14.9	17.2	20.1	15.5	16.0
7 Year	13.3	14.6	17.2	13.3	14.0
10 Year	14.9	15.9	---	13.9	14.6
Calendar Year Returns (%):					
2021	28.9	28.6	28.8	25.2	28.7
2020	15.9	22.2	35.7	12.3	18.4
2019	32.3	31.7	39.4	31.3	31.5
2018	-4.4	0.7	-9.0	0.4	-4.4
2017	24.0	17.6	26.7	19.7	21.8
2016	11.0	11.4	15.3	7.9	12.0
2015	2.2	0.3	0.9	2.9	1.4
2014	13.1	15.5	12.4	12.3	13.7
2013	36.7	35.2	40.4	32.2	32.4
2012	17.8	16.5	---	10.7	16.0
2011	5.8	4.1	---	9.8	2.1

Portfolio Characteristics¹
(As of March 31, 2022)

	Eagle	Parnassus	Waycross	Wellington	S&P 500
Price-Earnings Ratio	17.6	29.0	23.1	24.5	22.3
Price-Book Value Ratio	2.7	5.2	4.8	6.3	4.3
Dividend Yield (%)	0.8	1.0	1.1	1.7	1.3
Return-On-Equity (%)	25.3	26.3	33.8	33.1	27.3
Historical Earnings Growth (%)	23.7	14.2	14.3	8.3	20.0
Projected Earnings Growth (%)	16.2	13.4	18.8	14.3	13.7
Weighted Average Market	\$670.4B	\$497.5B	\$667.1B	\$242.0B	\$647.0B
Median Market Cap	\$110.7B	\$121.9B	\$118.5B	\$155.7B	\$31.9B
Market Cap > \$100bn (%)	71.1	60.4	66.5	69.6	65.8
Market Cap \$25bn - \$100bn (%)	17.4	38.8	24.6	28.4	26.1
Market Cap < \$25bn (%)	10.3	0.3	8.1	---	8.1
Cash (%)	1.3	0.5	0.8	2.1	---
Number of Holdings	32	41	31	44	504
Expected Holdings Range	25 - 35	40	30	40 - 60	500
Active Share (%)	78.1	74.9	70.2	79.7	---
Top Sector Weightings (%)	Comm Serv. 33 Financials 21 Cons. Disc. 17	Technology 28 Industrials 14 Comm Serv. 13	Technology 31 Cons. Disc. 16 Industrials 14	Industrials 21 Health Care 20 Cons. Staples 16	Technology 28 Health Care 14 Cons. Disc. 12
% of Portfolio in Top 10 Holdings: (%)	57.7	43.2	47.2	31.9	29.5

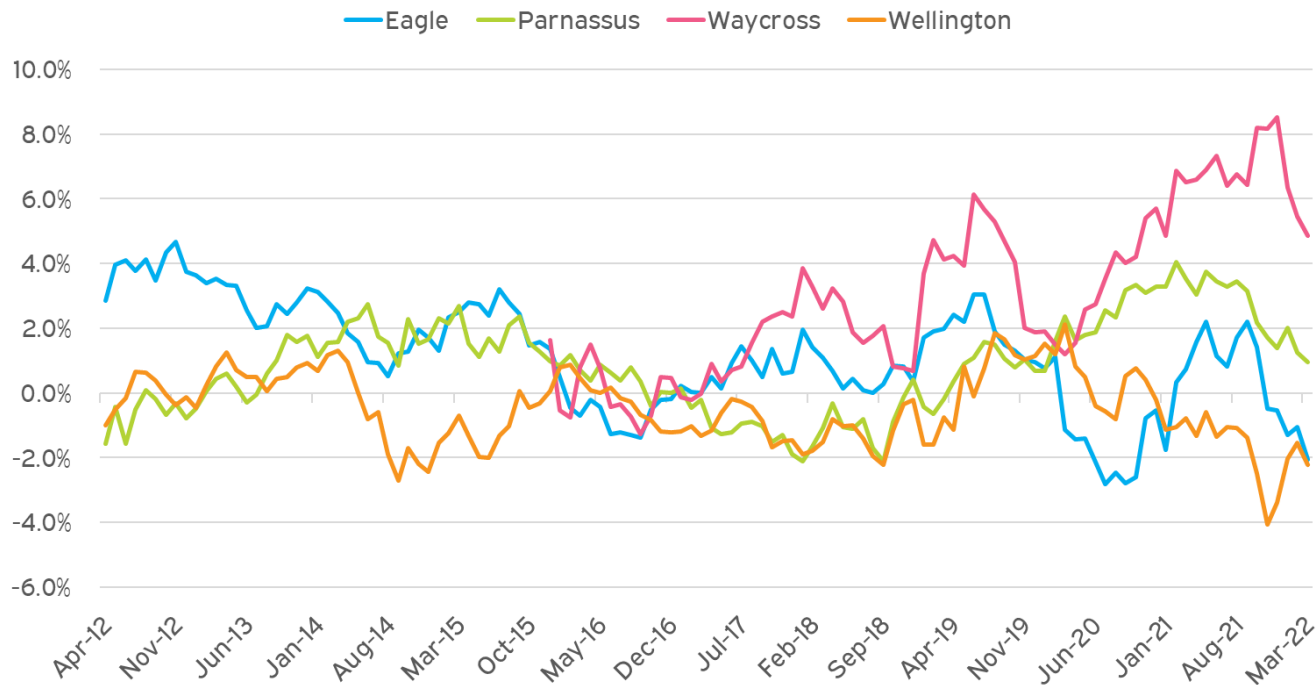
¹ Source: FactSet.

Historical Trailing Risk (gross of fees)
As of March 31, 2022

	Eagle				Parnassus				Waycross				Wellington			
	3 Yr.	5 Yr.	7 Yr.	10 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.
Information Ratio	-0.3	-0.2	-0.1	0.1	0.3	0.3	0.2	0.4	1.0	0.8	0.6	---	-0.3	-0.1	-0.1	-0.16
Tracking Error (%)	7.5	6.2	5.6	4.9	3.7	3.6	3.6	3.4	5.0	4.9	5.5	---	6.5	5.5	5.1	4.4
Sharpe Ratio	0.74	0.73	0.73	0.94	1.20	1.13	1.05	1.27	1.11	1.00	0.91	---	1.02	1.03	0.96	1.12
Standard Deviation (%)	21.7	18.9	17.1	15.3	15.9	14.2	13.1	12.0	20.8	19.0	17.9	---	15.6	14.0	13.0	11.9
Jensen's Alpha	-3.7	-2.4	-1.7	-0.8	2.7	2.7	2.1	2.6	2.0	1.4	0.8	---	1.0	1.9	1.4	1.4
Beta	1.15	1.14	1.12	1.10	0.88	0.88	0.87	0.88	1.15	1.18	1.18	---	0.82	0.83	0.84	0.85
Correlation Coefficient	0.95	0.95	0.95	0.95	0.98	0.98	0.97	0.97	0.98	0.98	0.96	---	0.93	0.94	0.94	0.94
Upside Market Capture (%)	110.6	108.6	109.5	108.1	92.8	94.2	92.2	95.7	122.1	124.6	123.2	---	80.8	87.2	86.2	87.4
Downside Market Capture (%)	119.0	114.2	114.7	109.9	87.1	87.0	86.2	85.9	107.3	111.1	112.4	---	83.6	85.4	84.9	84.9

- Wellington has the lowest downside market capture of the four managers over all trailing periods, followed closely by Parnassus. Waycross has the highest upside market capture over all trailing periods since its inception. Eagle consistently has the highest downside capture.
- Wellington consistently has the lowest standard deviation and beta, followed closely again by Parnassus.
- Waycross has the highest risk-adjusted returns as measured by information ratio over all trailing periods since its inception. Parnassus has the highest Jensen's alpha over all trailing periods.

Three-Year Rolling Excess Return (gross of fees)
 As of March 31, 2022



→ Waycross has outperformed the S&P 500 Index in 87% of rolling 3-year periods since inception in January of 2013. Eagle (65%), Parnassus (65%), and Wellington (28%) have outperformed the index over rolling 3-year periods as reported. The peer group average was 41%.

Peer Rankings¹ (gross of fees)
As of March 31, 2022

	Eagle				Parnassus				Waycross				Wellington			
	3 Yr.	5 Yr.	7 Yr.	10 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.
Excess Returns	64	56	45	25	19	19	15	8	3	2	3	---	67	46	49	59
Downside Market Capture	99	99	99	96	16	13	15	13	90	97	98	---	10	11	13	12
Standard Deviation	98	97	96	95	13	14	13	12	96	97	98	---	9	11	12	9
Sharpe Ratio	91	88	84	81	5	4	5	2	12	24	27	---	32	17	16	16
Beta	2	3	4	4	83	83	83	85	2	1	1	---	91	90	88	89
Jensen's Alpha	94	90	83	76	9	9	8	4	14	22	21	---	26	15	14	17
Tracking Error	11	14	16	17	59	53	49	44	34	25	17	---	17	18	21	24
Information Ratio	47	47	40	28	19	20	14	10	4	4	4	---	51	41	42	53

- The excess returns of Waycross consistently rank near the top percentile of the peer group since inception. The excess returns of Parnassus rank in the top decile over the trailing 10-year period.
- Wellington's beta consistently ranks in or near the bottom decile of the peer group. Waycross' beta consistently ranks toward the top percentile of the peer group.
- The tracking errors of both Wellington and Eagle consistently rank in the top quartile of the peer group.

¹ Scale: dark green is first quartile, light green is second quartile, yellow is third quartile, red is fourth quartile.

Fees and Terms

	Eagle	Parnassus	Waycross	Wellington
Investment Vehicle Type	Commingled Fund	Separate Account	Separate Account	Mutual Fund
Liquidity	Monthly	Daily	Daily	Daily
All-in-Fee	0.78%	0.40%	0.53%	0.22%
Peer Group Percentile Rank	91	17	51	3

Summary Grid

Eagle	Parnassus	Waycross	Wellington
<ul style="list-style-type: none"> - Singular focus – LC strategy - 100% employee owned - Long tenured founder/CIO - “quality” bias (strong free cash flow, healthy balance sheet, stable management teams). A “value” floor - Seek companies with a catalyst not identified yet by market - 25-35 stocks - Max position size 10% MV - Turnover around 20% 	<ul style="list-style-type: none"> - Five equity strategies plus one core fixed income - Employees 35%, AMG 65% - Core equity is flagship strategy. \$30 bb is in MF - CIO has been at Parnassus his entire career (27 years) - High quality stocks with a margin of safety - 40-60 stocks (but usually closer to 40) - Max position size 5% - Turnover around 25% to 37% 	<ul style="list-style-type: none"> - 100% employee owned - Focused – one EQ product and one long/short - John Ferreby (2009) is final decision maker on Focused Core - Earnings drive stock price. Identify top 3 drivers that are key to company’s success - 30 stocks - AUM vs. AUA issue - Shortest track record 	<ul style="list-style-type: none"> -100% employee owned - big firm, lots of strategies - dividend growth strategy (\$55 mm is in vanguard mutual fund) of \$66 bb - CIO Donald Kilbride since 2002 - high quality companies with healthy balances sheets, with improving cash flows (which can be returned to shareholders) - max position typically capped at 5% - turnover around 20% - 40-60 stocks
- most concentrated	- Third most concentrated	- Second most concentrated	- Least concentrated
- Second highest active share	- Third highest active share	- Lowest active share	- Highest active share
- Most value oriented	- Highest growth oriented	- Second growth oriented	- Second most value oriented
- Second highest beta/second highest volatility	- Second lowest beta/second lowest volatility	- Highest beta/ highest volatility	- Lowest beta/lowest volatility
- Second highest upside capture	- Second lowest upside capture	- highest upside capture	- lowest upside capture
- worst downside capture	- Second best downside capture	- Second Worst downside capture	- Best downside capture
- Most expensive	- Second lowest fee	- Third lowest fee	- Lowest fee
- Fees likely not negotiable	- Possibly fees negotiable	- We likely can negotiate fees	- Fees not negotiable

Appendix

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.

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.

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.

Tracking Error: This statistic measures the standard deviation of excess returns relative to a benchmark. Tracking error is calculated by multiplying the standard deviation of the monthly excess returns of a portfolio relative to a benchmark by the square root of twelve in order to annualize. The higher the tracking error, the greater the volatility of excess returns relative to a benchmark.

Sources: www.businessdictionary.com

http://www.naplia.com/employeedishonesty/Employee_Dishonesty_FAQ.shtml

[Investment Terminology](#), International Foundation of Employee Benefit Plans, 1999.

[Modern Investment Management](#), Litterman, Bob, 2003.

Private Equity Benchmark Review

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.

Thoughts

→ **Historically** – For many years we recommended clients use a peer group benchmark.

→ **What has changed** –

- Peer group providers are seeking to monetize their service at very 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
- **Aligned with FIPO IPS** – Section 3.1 states board objective is to “*exceed the return of the Retirement Trust’s passive, market-based, investment benchmark.*”

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 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 U.S. All PE (1 Qtr lag)	MSCI ACWI IMI (1Q Qtr lag) + 2%

Investment Policy Statement Review

Annual Review

- We conducted our annual review of the Investment Policy Statement
- This year we made a number of suggested edits (see redline with comments) with the following goals in mind:
 - Simplify
 - Reduce duplicative clauses
 - Consolidation of similar topics (e.g. reporting)
 - Delete not applicable clauses
- We conducted a full reconciliation with Florida Statute 112.611 to ensure no edits violated the statute.
- The following pages include a red-lined version for the Board's consideration
- After review, discussion and feedback, we will bring a "clean" copy for approval at a future board meeting.

INVESTMENT OBJECTIVES & POLICY STATEMENT

FOR

FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

CITY OF MIAMI

[March 11, 20202022](#)

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PREFACE

INVESTMENT GUIDELINE REQUIREMENTS OF FLORIDA STATUTE 112.661

There are seventeen specific requirements of Florida Statute 112.661. Each of these seventeen requirements is listed below and the page number and section in the Investment Objectives & Policy Statement that refer to these requirements is given. It is the intent of this Statement to comply with all of the requirements of this Statute.

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1. SCOPE: Page 1, point 2.0 Policy Scope.
2. INVESTMENT OBJECTIVES: Page 2, point 3.1 Board Investment Objectives.
3. PERFORMANCE MEASUREMENT: [Page 2, point 3.1 Board Investment Objectives](#), Pages 6-7, point 4.3 Investment Objectives (Performance Measurement).
4. INVESTMENT AND FIDUCIARY STANDARDS: Pages 2-3, point 3.3 Board Responsibilities (Investment & Fiduciary Standards).
5. AUTHORIZED INVESTMENTS: [Page 12, Point 4.0 Investment Diversification Policies](#); Page 9, point 5.4 Investment Manager Guidelines (Authorized Investments); also Appendix C, pages 20-24.
6. MATURITY & LIQUIDITY REQUIREMENTS: Page 3, point 3.4 Maturity & Liquidity Requirements and page 20 Diversification, Liquidity & Restrictions (Valuation of Illiquid Investments).
7. PORTFOLIO COMPOSITION: Pages 20-24, point 5.4 Investment Manager Guidelines (Authorized Investments) (Portfolio Composition).
8. RISK & DIVERSIFICATION: Page 6, point 4.0 Investment Diversification Policies and point 4.2 Style Orientation; Page 6 point 4.4 Asset Allocation Plan (also Appendix A, page 14); and Page 9, point 5.4 Investment Manager Guidelines (& Appendix C, pages 20-24).
9. EXPECTED ANNUAL RATE OF RETURN: Page 2, point 3.2 Expected Annual Rate of Return.
10. THIRD-PARTY CUSTODIAL AGREEMENTS: Page 4, point 3.7 Third-Party Custodial Agreements; Page 36 Appendix G-Responsibilities of Global Custodian.
11. MASTER REPURCHASE AGREEMENT: Page 20, point 5.4 (2) Investment Manager Guidelines-Cash & Equivalents (Master Repurchase Agreement).
12. BID REQUIREMENT: Page 11, point 8.1 Bid Requirement.
13. INTERNAL CONTROLS: Page 4, point 3.6 Policies to Ensure Ethical & Prudent Action (Internal Controls).
14. CONTINUING EDUCATION: Page 3, point 3.5 Training & Education Policy (Continuing Education).
15. REPORTING: Pages 25-28, point 9.0 Portfolio Reporting Requirements-Appendix E.
16. FILING OF INVESTMENT POLICY: Page 1, point 1.2, Policy Statement (Filing of Investment Policy).

17. VALUATION OF ILLIQUID INVESTMENTS: Page 18, point 5.4 (1) Investment Manager Guidelines-Diversification, Liquidity & Restrictions (Valuation of Illiquid Investments).
18. PLACEMENT AGENT FEE POLICY Page 5, point 3.8 Placement Agent Fee Policy.
19. SCRUTINIZED SECURITY POLICY FOR IRAN/SUDAN INVESTMENTS Page 5, point 3.9 Scrutinized Security Policy for Iran/Sudan Investments, as per the June 2, 2009 Senate Bill 538 Chapter 2009-97, which established provisions 175.07 (8) and 185.06 (7).

FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST
CITY OF MIAMI
INVESTMENT OBJECTIVES AND POLICY STATEMENT

PART I

POLICY PERSPECTIVES

1.0 INTRODUCTION AND POLICY STATEMENT

1.1 Introduction

The Fire Fighters' & Police Officers' Retirement Trust's Investment Objectives and Policy Statement ("IPS") is a document which:

- a) Establishes and outlines the responsibilities of the various parties that are associated with the management of the Retirement Trust;
- b) States various control procedures to ensure that the Retirement Trust is appropriately managed.

Reports from investment managers, the custodian, consultant and others must verify that the Retirement Trust is operating within the framework of the Trust's guidelines.

Commented [AL3]: All reporting language was moved and consolidated to one reporting appendix

1.2 Policy Statement (Filing of Investment Policy)

Notwithstanding any other provisions to the contrary, the policy of the Board of Trustees ("Board") of the Fire Fighters' & Police Officers' Retirement Trust ("Retirement Trust") shall be to invest trust funds in a manner that is consistent with the applicable sections of the City of Miami Code, which adheres to the prudent person standard, as well as State and Federal laws. As required by [Section 112.661](#), Fla. Stat., the Retirement Trust will file with the Department of Management Services, the City and the Trust's actuary, accountant and custodian its investment policy statement and any revisions. (Please see the Preface for policy references to the requirements of Florida Statute 112.661.)

2.0 POLICY SCOPE

This policy shall set forth guidance and requirements for the investment activities conducted by the Board. The funds eligible for investment are all those under the direct authority of the Retirement Trust Board of the Fire Fighters' & Police Officers' in accordance with the applicable sections of the Miami Code.

3.0 POLICY OBJECTIVES

The basic objectives are:

- 1) Safety of funds invested;

- 2) Liquidity sufficient to meet all cash needs of the Retirement Trust;
- 3) Investment performance that is competitive in the current market environment once the first two objectives have been satisfied.

The goals of the Board are to:

- 1) Fund the Retirement Trust's benefit payments, with the least amount of risk possible;
- 2) Protect against loss of purchasing power by achieving rates of return above inflation;
- 3) And, achieve a fully funded pension status, at the lowest possible cost.

3.1 Board Investment Objectives:

- 1) At a minimum, achieve a nominal return equivalent to the Trust's actuarial interest rate.
- 2) Earn a [long term](#) total return that averages 4 to 6% in excess of the [long term](#) rate of inflation.
- 3) Exceed the return of the Retirement Trust's passive, market-based, investment benchmark. Allocations to specific asset classes are based on the Retirement Trust's target asset mix, as detailed in this IPS.
- 4) Achieve a total Fund return, as well as risk-adjusted return, ranking above the median of other public sector retirement funds.

3.2 Expected Annual Rate of Return

As required by Section 112.661, Fla. Stat., the Board shall specify, to the extent reasonably possible upon the advice of its investment experts the Trust's total expected annual rate of return for the current year, for each of the next several years and for the long term. The Board's expected returns for each of these time periods is the actuarial hurdle rate, as specified in the actuary's most current actuarial valuation. The current actuarial hurdle rate is [7.347.0%](#).

3.3 Board Responsibilities (Investment & Fiduciary Standards)

The Board holds the fiduciary responsibility for the Retirement Trust. Thus, the Board will set a reasonably diversified asset allocation target (including minimum and maximum allocations), which is expected to appropriately fund the Retirement Trust's liabilities and meet its basic investment objectives. The basis for such a target asset allocation will be a study of the Retirement Trust's pension liabilities and reasonable, alternative investment portfolios.

It is also the goal of the Board to manage the Fund according to standards that are consistent with those established by the Employee Retirement Income Security Act (ERISA), 29 U.S.C. 1104(a) as incorporated in Section 112.661(4), Florida Statutes. Therefore, the Board will act in a prudent manner and expect its investment managers [and Investment Consultant](#) to act as prudent experts.

If deemed appropriate, consistent with Section 518.112, Fla. Stat., the Board may delegate fiduciary investment responsibility to qualified investment managers, with the managers

servicing at the sole pleasure of the Board. All Managers, in accordance with Florida Law, shall have a provision relating to fiduciary duty in their individual Contracts. Similarly, the Board may hire other experts to assist in the management and oversight of the Retirement Trust. Also, in fulfilling its fiduciary responsibility, the Board will establish investment goals, objectives, policies, guidelines and benchmarks for the Fund, asset classes and investment managers.

The Board shall appoint an Investment Consultant to assist in the overall supervision of the investments. The Investment Consultant's responsibilities shall include at a minimum the requirement to:

1. keep the Board of Trustees and the Administrator apprised of material changes in investment strategy, investment managers, asset mix, portfolio structure, and market value of the Assets;
2. monitor the Fund's investment performance and its investment managers, and assist the Board and the Administrator in interpreting the results;
3. provide the Board and the Administrator with quarterly performance reports to help ensure that the Fund's investment objectives are achieved. Investment performance will be measured against commonly accepted performance benchmarks;
4. keep the Board and the Administrator informed of events that may have a material adverse effect on the Assets; and
5. recommend changes to this Policy as necessary.

3.4 Maturity & Liquidity Requirements

Detailed liability projections shall be analyzed to determine the factors influencing the Trust's cash flow requirements. Sensitivity analyses will be prepared so that the Board may thoroughly evaluate the ability of alternative investment portfolios to fund the Trust's liabilities (cash flow requirements). This study will also consider levels of fund performance and total Plan funding volatility, such that risk is properly and prudently evaluated, and identify asset mix alternatives expected to match the risk tolerance of the Board. A comprehensive review of investment risk and asset/liability funding uncertainties will help ensure that an appropriate investment posture is assumed. In addition, portfolio rebalancing activities will occur to provide for short-term Fund cash flow requirements.

3.5 Training and Education Policy (Continuing Education)

It is the policy of the Board to provide periodic training to Board members and staff in the areas of retirement administration, trustee responsibilities, and investment related issues. This training will be provided through reputable educational organizations. ~~The subsequent language in this sub-section was adopted by the Board on March 3, 2006.~~

In order to comply with the education requirements of FS Chapter 112.661(14), this policy shall provide for the continuing education of the City of Miami Fire Fighters' and Police

Officers' Retirement Trust members in matters relating to investments and the Board's responsibilities.

First Year: In the first year, a Board member is encouraged to attend at least one approved program. Recommended programs include FPPTA New Trustee School and certification, International Foundation New Trustee program and CAPP certification, and the Florida Division of Retirement conference.

Second Year: Board members are encouraged to complete one certification program by the end of the second year of membership. Recommended programs include FPPTA (3 parts), International Foundation CAPP (2 parts), Wharton Investments Institute (offered by Intl. Fdn).

Third Year and thereafter: Board members are encouraged to maintain all earned certifications per certifying requirements of the issuing organization. In addition, Board members may attend other conferences, schools or seminars as approved by the Board. Some may include NCPERS, Investment Consultant sponsored conferences, Guns & Hoses, NAPO, Wharton Advanced Investment Management, and investment product related conferences, etc.

The Board chairman shall provide each member upon completion of the above listed requirements a letter of acknowledgement.

Should a Board member fail to comply with the requirements above, the Board chairman shall notify the member of his/her non-compliance in writing.

Board members attending conferences are requested to present a brief report at the next available Board meeting summarizing the topics covered and lessons learned.

Commented [AL4]: Are these being done?

Board members are asked to provide conference programs, handouts, transcripts and other pertinent materials to the administrator for inclusion in a library to be maintained in the FIPO offices for reference purposes.

3.6 Policies to Ensure Ethical and Prudent Action (Internal Controls)

The in-house Retirement staff shall be governed by the "prudent person rule," which shall be applied in the context of the Retirement Trust's investment portfolio. Retirement staff shall perform due diligence according to established sections of the City of Miami -Code, policies of the Board and written Trust procedures. Ethical and prudent actions are further controlled by the following:

- 1) The Retirement Administrator shall establish and document a system of internal controls, which shall be approved by the Trust's Board. The controls shall be designed to prevent the loss of public funds arising from fraud, employee error, misrepresentation by third parties, or imprudent actions by employees of the Retirement Trust. Controls deemed most important include: control of collusion,

separation of duties (e.g., separating transactions authority from accounting authorization), custodial safekeeping and clear delegation of authority. These controls shall be reviewed annually by the Board's independent certified public accountant.

- 2) The staff shall act reasonably as custodians of the Trust, and shall recognize that the investment portfolio is subject to public review and evaluation.

3.7 Third-Party Custodial Agreements

- 1) It is the policy of the Board to contract with a bank or financial institution for the safekeeping of securities owned by the Retirement Trust.
- 2) It is the policy of the Board that all U. S. dollar denominated securities rendered for payment will be sent "delivery versus payment" (DVP) through the Federal Reserve System or through the Depository Trust Corporation. Any non-U. S. dollar denominated securities will be settled in accordance with local markets' rules and regulations.. This payment process ensures that the Retirement Trust's funds are not released until the Trust has received, through Federal Reserve wire or by physical delivery, the securities purchased.

3.8 Placement Agent Fee Policy

Additional disclosure requirements and restrictions have been instituted by public pension funds regarding placement agent fees. When a placement agent assists an investment management organization in obtaining new client accounts, any such compensation must be made public by the investment management organization and disclosed to the Retirement Trust. It is the Retirement Trust's policy to not pay any placement agent fee.

3.9 Scrutinized Security Policy for Prohibited Investments

Sections 215.4702-215.473, Fla. Stat. reflect the Florida Legislature's policy of prohibiting investment in certain companies and in certain countries by the State Board of Administration. The authority of The Trust to invest is established in part by the authorized investments of the State Board of Administration under Section 215.47, Fla. Stat. To the extent the Trust utilizes the standards and limitations in Section 215.47, the Trust shall also observe these limitations. For such portfolios, investment managers are required to review on a quarterly basis their portfolio holdings relative to a list of scrutinized companies on the State Board of Administration website (www.sbafla.com/fsb/) that have been identified as conducting restricted business activities in scrutinized companies and scrutinized nations.

Ongoing compliance is required subsequently. ~~Quarterly reporting to the Board of the investment managers' transactions in and evaluation of scrutinized companies is required.~~

For mutual funds, commingled funds and any other fund types, the Board has implemented communication policies with its investment managers that requests compliance with the divestment of companies on the scrutinized securities list. This

Commented [AL5]: All reporting requirements consolidated and moved to a Reporting appendix

communication requests the fund to comply with the divestment legislation. Documentation of the Retirement Trust's efforts with the investment managers of mutual funds, commingled funds is required. Continuing communication efforts will be made with such funds to request the divestment of scrutinized companies.

In addition, all active and passive managers shall adhere to the scrutinized nations limitations imposed by ordinance or resolution of the Miami City Commission.

3.10 Policy Statement Monitoring and Review

All parties identified in this Monitoring of compliance with the Retirement Trust's Policy Statement are expected to maintain compliance with provisions and requirements outlined in this Investment Policy Statement.

Reporting requirements are listed in the Appendix E

Annually the Policy Statement will be reviewed (and revised if needed).

will be conducted in the following manner:

1) Portfolio investment compliance

- a) A semi-annual (12/31, and 6/30) compliance worksheet has been developed and is attached in the Appendix. This worksheet requires investment managers to state if they are in compliance with each applicable policy.
- b) Additional review and follow-up will be performed by the consultant, as required. Reports on this work will be provided in writing to the Board.
- c) The above procedures apply to individually managed, separate account portfolios; not to commingled fund participations.

2) Annual policy reporting

- a) As discussed below, once a year, the investment managers will be requested to provide a copy of their internal ethics policies, ADV Part II, and all other internal policies that relate to the management of the Retirement Trust's portfolios.
- b) The custodian or other third-party lender, will provide an annual update on its securities lending program.
- c) Annual investment manager derivative reporting requirements are stated in the derivative section in Appendix B.
- d) Finally, the custodian will provide an annual update regarding its investment policies and practices in the management of the Retirement Trust's cash assets managed in the custodian's sweep vehicle, or other cash management accounts.

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3.11 Code of Conduct Compliance

Voluntary Guidelines for service providers to protect the interests of Plan Participants and Beneficiaries as per the National Conference on Public Employee Retirement Systems (NCPERS) requires service providers to:

1. Act in a professional and ethical manner at all times in dealing with public plan clients
2. Act for the benefit of public plan clients
3. Act with independence and objectivity
4. Fully disclose to public plan clients conflicts of interest that arise that may impair the ability to act independently or objectively
5. Act with reasonable care, skill, competence, and diligence when engaging in professional activities
6. Communicate with public plan clients in a timely and accurate manner
7. Uphold the applicable law, rules, and regulations governing their sector and profession
8. Fully disclose to public plan clients all fees charged for the products or services provided to said client
9. Not advocate for the diminishment of public defined benefit plans
10. Fully disclose all contributions made to entities enumerated in Schedule A that advocate for the diminishment of public defined benefit plans

PART II

RETIREMENT TRUST FUND PORTFOLIO MANAGEMENT

4.0 INVESTMENT DIVERSIFICATION POLICIES

As it is prudent to diversify investment risk, the Board has adopted a policy to invest in several institutionally acceptable asset classes. These may include any of the following asset classes: domestic equity (large, mid and small capitalization), international equity-developed and emerging markets, domestic real estate (institutional quality properties either individually, in closed-end or open-end commingled funds, or in global REIT securities portfolios), private equity funds or fund of funds, private debt funds or fund of funds, private infrastructure funds, domestic core investment grade fixed income, high yield fixed income, bank loans, inflation protected securities and short-term investments (primarily due to the transactional nature of most managers' portfolios). Other asset classes may be added by the Board to its investment policy.

4.1 Commingled Fund Participations

The Board acknowledges that when it is in the best interest of the Retirement Trust to invest in a commingled vehicle (i.e. collective fund or institutional mutual fund) or limited partnership, it is not possible to dictate specific investment guidelines and prohibitions. [It is the expectation that the investment managers will inform the Retirement Trust if there are any material differences between the commingled fund and the strategy model account. Therefore, it shall be the duty of the investment manager of](#)

~~such commingled fund, to report to the Board on a periodic basis (at least annually) the extent to which the investment strategy differs from the Board's Investment Objectives and Policy Statement. Periodically, the Board will review the differences and determine if the commingled fund remains in the best interest of the Retirement Trust.~~

4.2 Style Orientation

As part of the diversified asset class investment approach of the Retirement Trust, the Board ~~will also may~~ seek to employ a diverse group of investment portfolio managers within a specific asset class ~~if deemed appropriate. Investment style, market capitalization and other factors will be used to differentiate among managers in the same domestic equity asset class. Investment style and other factor diversification may also be applied to the Retirement Trust's investments in other asset classes if deemed appropriate.~~

Commented [AL7]: Covered in the revised first sentence above

4.3 Investment Objectives (Performance Measurement)

~~All of the previously mentioned asset classes in 4.0 are expected to:~~

- ~~1) Generate rates of return in excess of inflation.
 - ~~a) Equity investments should approach an average of 6 percent net of fees, above inflation over a full market cycle, or three to five year period.~~
 - ~~b) Fixed income investments should exceed inflation by an average of approximately 3 to 4 percent net of fees, over an interest rate cycle, or three to five years.~~~~
- ~~2) Exceed the return on the asset classes' market index (benchmark), or passive investment alternatives.~~
- ~~3) Achieve an asset class return, as well as risk adjusted performance, ranking above the median over a full market cycle, as well as three to five years.~~
- ~~4) The above three investment objectives apply not only to the Retirement Trust but also to the Trust's individual investment managers on a gross and net of fee basis
 - Investment managers are expected to outperform over a full market cycle, or three- to five-year period, their respective asset class market index or benchmark.
 - During this three- to five-year period, the investment managers are also expected to outperform the median manager in their respective style group.~~

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4.4 Asset Allocation Plan and Target Asset Mix

Please see Appendix A for the Retirement Trust's asset allocation target and ranges, as well as benchmarks.

PART III
INVESTMENT GUIDELINES

5.0 INVESTMENT MANAGERS' RESPONSIBILITIES, POLICIES AND GUIDELINES

All investment managers hired by the Retirement Trust will be registered investment advisors with the Securities and Exchange Commission, or will be trust companies that are regulated by State and Federal Banking authorities. Such investment managers will maintain adequate insurance coverages, including errors & omissions, surety bond, fiduciary liability, ERISA bond, etc. In addition, the Retirement Trust's investment managers agree to notify the Board Chairman and the Retirement Administrator in writing if they are unable to continue acting in the capacity of a fiduciary or investment advisor.

5.1 Investment Managers' Requirements & Responsibilities

The following items are required of investment managers employed by the Retirement Trust:

- 1) To act as prudent experts in the management of fully-discretionary accounts for the Retirement Trust.
- 2) To be fiduciaries to the Trust.
- 3) To continually educate the Board about capital market developments that pertain to their area of investment expertise.
- 4) To meet applicable investment objectives over the designated time horizon. If such objectives become unreasonable for any reason, it is the manager's responsibility to communicate his/her reservations about the objectives in writing to the Board. Otherwise, failure to meet these objectives may result in dismissal.
- 5) To satisfy the quarterly portfolio reporting requirements of the Retirement Trust and maintain the highest level of compliance with CFA Institute performance presentation standards as possible.
- ~~6) Complete and submit to the Trust and the Investment Consultant the semi-annual Compliance Certification Statement.~~
- ~~7)6) To immediately communicate in writing via e-mail to the Board and the Board's investment consultant significant portfolio developments, as well as major changes to the investment decision process, changes in the firm's ownership, organizational structure and personnel.~~
- ~~8)7) To provide to the Board a current version of their internal code of ethics. Once a~~

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year the manager will provide updated copies of investment and operational policies developed by the firm that are relevant to the Retirement Trust and its portfolio(s).

~~9)8)~~ To assist the Board achieve its goals and investment objectives, to implement the Board's asset allocation decisions, and to fulfill the Board's diversification policies.

5.2 — Investment Manager Policies

~~Each investment manager hired by the Retirement Trust is governed by the following investment policies. Managers agree to:~~

~~9) — Accept the requirements and responsibilities stated in section 5.1 above.~~

~~+0)9)~~ Maintain the investment approach that they were hired to implement under any and all capital market environments.

~~11) — Immediately report in writing to the Board any changes in their investment decision making process.~~

~~12) — Fully educate the Board as to the specifics of its investment process.~~

~~+3)10)~~ Exclusive of specific Retirement Trust investment guidelines, maintain a portfolio that generally conforms to other portfolios managed by the firm. When the Retirement Trust's guidelines require the investment manager to manage a portfolio significantly different than its other portfolios, it is the responsibility of the manager to communicate in writing the potential impact of the Retirement Trust's guidelines on the portfolio. Otherwise treat the Retirement Trust's portfolio in a manner similar to other comparable portfolios in portfolio construction, trading, and all other aspects.

~~+4)11)~~ Members of the firm's research and portfolio management teams will comply with CFA Institute Standards of Practice and Code of Ethics. Any industry or regulatory disciplinary action taken against members of the firm's investment staff must be immediately reported in writing to the Board.

~~+5)12)~~ Manage a fully discretionary portfolio that meets the guidelines under which the strategy is governed, ~~provisions of the Trust's investment objectives and policies, unless invested in commingled funds or limited partnerships.~~

~~16) — Unless otherwise specified, invest portfolios in acceptable investment securities. Under no circumstances shall an investment manager attempt to “market time” investments in its portfolio(s).~~

~~+7)13)~~ If the Board delegates proxy voting responsibilities to its investment managers, agree to vote all proxy ballots according to the best economic interest of the Retirement Trust's members and in a manner consistent with the Board's proxy policies.

~~+8)14)~~ Agree to actively support the Retirement Trust's securities lending and commission recapture programs, if applicable.

Commented [AL10]: Duplicative of points above

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Commented [AL12]: Unnecessary provision

5.3 ~~Derivatives Investing Policies~~

~~See Appendix B for the Retirement Trust's derivative investments policies.~~

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5.4 Investment Manager Guidelines (Authorized Investments)

Please see Appendix C for the Retirement Trust's investment manager guidelines.

5.5 Applicable Law

All investment activities shall be governed by the provisions of Chapter 112, Part VII, Fla. Stat., Section 215.47, Fla Stat. (including any limitations relating to scrutinized companies or nation); and Chapter 518, Fla. Stat., Investment of Fiduciary Funds.

PART IV
CONTROLS

6.0 SECURITIES LENDING

- 6.1** The Master Custodian (or an independent third-party) shall manage a securities lending program to produce incremental income in accordance with the terms and conditions set forth in a mutually acceptable securities lending agreement and guaranty.
- 6.2** The Board reserves exclusive authority to approve the securities lending agreement prior to the commencement of securities lending activity.
- 6.3** Unless otherwise specified in the agreement,
- 1) All loans shall be marked-to-market daily,
 - 2) Minimum collateral on each loan shall be maintained daily at 102 percent of loan value for domestic securities and 105 percent of loan value for international securities,
 - 3) Acceptable collateral shall be in the form of cash or marketable fixed income securities with maturities not greater than one year, including (1) Commercial Paper or Variable Rate Notes of issuers with quality ratings of P-1 and/or A-1 by Moody's Investors Services or Standard & Poor's Corporation, or their equivalents; (2) Banker's acceptances, certificates of deposits and time deposits; (3) United States Treasury and Government Agency short-term obligations; (4) Repurchase Agreements with United States Treasury Securities and Agencies of the United States Government as collateral; and (5) Money or short-term investment funds.
 - 4) Borrowers shall be rated A3 or A- or higher by Moody's or Standard & Poor.
- 6.4** The securities lending agent will report on an annual basis, the following information to the Retirement Trust:
- 1) The list of approved security borrowers. Also a list of those borrowers dropped from the program over the past year.
 - 2) A description of the evaluation process used when considering potential security borrowers. A list of borrowers that defaulted in the past year.
 - 3) Explanation of any changes to the securities lending process over the past year.
 - 4) A description of how the securities lending agent manages the asset/liability relationship of the securities lending program.
 - 5) A statement regarding how the securities lending queue is managed to produce equitable revenue for the participants
 - ~~6) Percentage of securities on loan and revenues generated.~~
- ~~**6.5** On a monthly basis the securities lending agent shall report the following information to the Retirement Trust and Consultant:~~
- ~~1) The percentage of securities on loan by asset class, revenues generated by asset class and the net basis points earned on the program. A comparison of this data will be~~

~~made to the past month.~~

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6.6 The Retirement Administrator and Consultant shall be responsible for monitoring the securities lending program and recommending changes as appropriate.

7.0 PROXY VOTING

Please see Appendix D for the Retirement Trust's proxy voting policies.

8.0 TRANSACTIONS, BROKERAGE, AND COMMISSION RECAPTURE PROGRAM

The Board understands its fiduciary responsibility with respect to transactions and hereby instructs its investment managers to seek best execution when conducting all trades. Managers are instructed to seek to minimize commission and market impact costs¹ when trading securities. Also, either internally or through an externally provided transaction cost evaluation service, investment managers are expected to measure the costs associated with their investment trades.

When trading securities, best execution is the paramount consideration of the Board. This objective is expected to provide for and protect the best economic interest of the Retirement Trust. As part of the trading process, managers shall determine expected trading costs associated with the Board's commission recapture brokerage firms. If trading through these brokerage firms is in the best economic interest of the Retirement Trust, the managers are expected to consider these firms as well as others in obtaining best execution.

All securities transactions are expected to be executed with FINRA registered broker/dealers.

8.1 Bid Requirement

For fixed income securities, [in accordance with Florida Statute 112.611](#) the Board requires that all its investment managers must obtain competitive bids when seeking to trade all types of fixed income securities or instruments.

9.0 PORTFOLIO REPORTING REQUIREMENTS

Please see Appendix E for the Retirement Trust's portfolio reporting requirements.

10.0 BOARD REVIEW

The Board will monitor investment performance and the Retirement Trust's manager structure. At the quarterly Investment Review Meeting, the Board will review ~~monthly~~ investment reports, investment strategy, market conditions, portfolio manager performance and the status of the Retirement Trust's asset allocation plan, as well as interview current investment managers (as needed). The Board will meet the Retirement Trust's investment managers approximately once a year in Miami, or as otherwise

¹ Market impact for equity trades is based on the transaction price relative to the volume weighted average price (VWAP) on the trade date and/or relative to same day closing prices.

determined by the Board. On-site due diligence visits will be scheduled as needed.

At the regular quarterly Investment Review Meeting, investment manager performance versus the respective investment manager's guidelines and benchmarks will be discussed. Performance net of investment management fees will be evaluated. Investment results over periods extending back ten years or since inception will be evaluated if available, as well as the appropriate universe medians and style group comparisons by the Retirement Trust's investment consultant.

Explanations will be provided by the investment consultant and/or Board staff as to why portfolios under or outperformed their respective benchmarks. Performance attribution will be provided to the extent possible. Also, risk-adjusted performance will be evaluated.

INVESTMENT COSTS

The Board, with the advice of the Consultant, intends to monitor and control investment costs at every level of the Trust. Accordingly, where appropriate and practical:

- professional fees will be negotiated;
- passive portfolios will be used to minimize management fees and portfolio turnover;
- transition managers will be used if doing so is expected to minimize transaction costs associated with a transition event and
- investment managers will be instructed to minimize brokerage and execution costs.

11.0 POLICY EXCEPTIONS

While this Policy Statement prescribes various maximums, minimums and other numerical limits, it is intended primarily to be a management tool. When the Board determines that an exception to one of the numerical limits here within is in the best interest of the Retirement Trust, such exception is permitted as long as it is consistent with applicable City, State and Federal laws.

Whenever an exception or violation of this Policy is discovered, that fact shall be reported to the Retirement Administrator and the Board Chairman within one business day of its discovery and major exceptions will be reported immediately.

12.0 POLICY REVIEW

This investment policy shall be regularly reviewed (at least annually) to ensure the Retirement Trust's compliance with the overall objectives of safety, liquidity and investment performance, and current laws and financial trends. Proposed amendments to the Policy Statement will be prepared by staff and the Retirement Trust's consultant. Recommendations will be presented to the Board for consideration and approval.

13.0 AFFIRMATIVE POLICY APPROVAL REQUIREMENT

If the Board receives a written request from a service provider, it is the Board's policy that a request for any action, position or stance cannot be assumed to be approved based upon a non-response (or the mere passage of a period of time). Unless the Board explicitly authorizes in writing any action, position or stance, authorization is not granted.

14.0 GRANDFATHER CLAUSE

Any investment held by the Retirement Trust at the time this policy is adopted shall not be sold to conform to any part of this policy unless its sale is judged to be prudent by the Retirement Trust's investment professionals.

15.0 PORTFOLIO REBALANCING

Please see Appendix G for the Retirement Trust's portfolio rebalancing procedures.

16.0 RESPONSIBILITIES OF GLOBAL CUSTODIAN

Please see Appendix H for the Retirement Trust's global custodian responsibilities.

17.0 TREATMENT AND OVERSIGHT OF DROP (DEFERRED RETIREMENT OPTION PLAN)

DROP is created pursuant to Miami City Code Section 40-203(p). The Board is required by the City to create a separate custodial arrangement for DROP participants and provide a series of self-directed investment options. By electing DROP, participants release the City and FIPO from all claims except timely payment of monthly retirement benefits. Under the terms of the City Code and Chapters 175 and 185 of the Florida Statutes, a DROP participant is considered a retiree.

DROP participants, as a condition of DROP and provided in the City Code, bear all risks associated with DROP. As such, the performance of any individual account is not relevant to the overall-all performance of the Retirement Trust. The Trustees of the Retirement Trust bear no oversight or responsibility for the individual investment decisions made by participants in the self-directed DROP account.

The Trust will review investment funds offered in the DROP on an annual basis, or more frequently when recommended by the Investment Consultant. These reviews are to ensure that investment options are appropriate for use by DROP participants based on performance and fees.

Appendix A

4.5 Asset Allocation Plan and Target Asset Mix

Based on the Retirement Trust's asset allocation study² and subsequent discussions with the Board, the following is the Retirement Trust's target asset mix and allocation ranges:

	Policy Target	Range	Policy Benchmark ³
Public Domestic Equity	32%	20% - 40%	Russell 3000 Index
Public Foreign Equity	22%	10% - 30%	MSCI ACWI ex U.S. MSCI EAFE
Private Equity Fund of Funds	4%	0% - 8%	Cambridge Associates U.S. All PE (1 Qtr lag) MSCI ACWI IMI (1 Qtr lag) + 2%
Private Debt	2%	0% - 4%	Bloomberg Barclays High Yield (1 Qtr lag) + 2%
Investment Grade Bonds	18%	12% - 25%	Bloomberg Barclays U.S. Aggregate
Treasuries	7%	3% - 10%	Bloomberg Barclays U.S. Long Treasury Total Return ⁴
High Yield Bonds	2%	0% - 4%	BofAML US High Yield Total Return
Bank Loans	2%	0% - 4%	Credit Suisse Leveraged Loan
Real Estate	9%	6% - 12%	NCREIF OCDE

Commented [AL15]: More appropriate as 2/3 of the international strategies are EAFE oriented

² Based upon the expected asset returns, risks, and correlations cited in next pages, this target allocation exhibits an expected ~~annual~~-twenty-year annualized return of ~~7.6%~~6.5% and a standard deviation of ~~11.7%~~12.1%.

³ Benchmarks listed are for purposes of monitoring asset class performance and calculation of the policy benchmark. Individual strategies within each asset class can have slightly different (more targeted) benchmarks chosen based on the specific characteristics of the strategies.

⁴ If FIPO implements the Treasury allocation with intermediate duration Treasuries, the benchmark will be updated accordingly

Non-Core Infrastructure	2%	0% - 4%	CPI + 5%
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TWENTY-YEAR, SINGLE ASSET CLASS AND SUB-ASSET CLASS FORECAST⁵

Asset Class	Expected Return (%)	Volatility (%)
Fixed Income		
Cash Equivalents	1.72.9	1.04.0
Short-term Investment Grade Bonds	1.93.4	1.04.0
Investment Grade Bonds	2.43.9	4.04.0
Investment Grade Corporate Bonds	3.04.6	7.07.0
Long-term Government Bonds	2.83.7	12.042.0
Long-term STRIPS	3.03.9	23.049.0
TIPS	2.43.6	7.07.0
High Yield Bonds	4.46.5	11.041.0
Bank Loans	4.06.1	10.09.0
Foreign Bonds	2.32.3	8.08.0
Emerging Market Bonds (major)	4.25.2	12.044.0
Emerging Market Bonds (local)	4.65.3	13.044.0
Equities		
U.S. Equity	6.88.1	18.047.0
Developed Market Equity	7.58.5	19.049.0
Emerging Market Equity	8.440.4	24.024.0
Frontier Market Equity	8.740.3	21.021.0
Global Equity	7.28.6	18.047.0
Private Equity/Debt	9.59.8	24.023.0
Buyouts	9.840.1	25.024.0
Venture Capital	10.340.0	36.034.0
Private Debt Composite	7.37.3	16.045.0
Mezzanine Debt	7.27.2	16.045.0
Distressed Debt	7.27.3	21.020.0
Real Assets		
Real Estate	7.47.0	17.045.0
REITs	7.17.0	26.026.0
Core Private Real Estate	6.15.8	12.044.0
Value Added Real Estate	8.17.5	20.048.0
Opportunistic Real Estate	9.69.1	26.024.0
Natural Resources (Public)	7.59.0	23.022.0
Natural Resources (Private)	8.59.5	24.021.0
Commodities (naïve)	4.65.0	17.047.0
Infrastructure (Public)	7.48.2	18.047.0
Core Infrastructure (Private)	7.36.5	18.044.0
Non-Core Infrastructure (Private)	9.38.8	18.022.0
Other		
Hedge Funds	4.45.4	7.07.0
Long-Short	4.15.0	10.09.0
Event-Driven	5.26.3	9.08.0
Global Macro	5.05.2	5.06.0
Risk Parity (10% vol)	5.26.2	11.040.0
Tactical Asset Allocation	4.55.1	11.040.0

⁵ Based on Meketa's 2019-2022 Asset Study Capital Market Assumptions

EXPECTED CORRELATIONS AMONG ASSET CLASSES AND SUB-ASSET CLASSES

	Inv. Grade Bonds Investment-Grade Bonds	Long-term Gov't Bonds Long-term Gov't Bonds	TIPS	High Yield Bonds High Yield Bonds	US Equity Bank Loans	Dev. Non-US Equity U.S. Equity	Em. Market Equity Developed-Market Equity	Private Equity Emerging Market Equity	Real Estate Private Equity	Private Debt Composite	Infra. Real Estate	Hedge Funds Natural Resources (private)
Investment Grade Bonds Investment-Grade Bonds	1.001-00		-	-	-	-	-	-	-	-	-	-
Long-term Government Bonds Long-term Gov't Bonds	0.830-85	1.001-00										
TIPS	0.760-80	0.530-60	1.001-00	-	-	-	-	-	-	-	-	-
High Yield Bonds High Yield Bonds	0.220-20	-0.22-0.20	0.410-30	1.001-00	-	-	-	-	-	-	-	-
US Equity Bank Loans	0.020-00	-0.31-0.35	0.200-20	0.740-80	1.001-00	-	-	-	-	-	-	-
Developed Non-US Equity U.S. Equity	0.090-05	-0.28-0.30	0.260-00	0.760-70	0.890-60	1.001-00	-	-	-	-	-	-
Emerging Market Equity Developed-Market Equity	0.140-05	-0.23-0.25	0.340-15	0.760-70	0.770-60	0.870-90	1.001-00	-	-	-	-	-
Private Equity Emerging Market Equity	0.000-05	-0.10-0.25	0.050-15	0.700-70	0.850-55	0.800-80	0.750-90	1.001-00	-	-	-	-
Real Estate Private Equity	0.200-00	0.05-0.10	0.100-05	0.500-70	0.500-65	0.450-85	0.400-80	0.450-75	1.001-00	-	-	-
Private Debt Composite	0.20	-0.20	0.10	0.85	0.800-75	0.750-70	0.70	0.650-80	0.800-40	1.001-00	-	-
Infrastructure Real Estate	0.290-20	0.090-05	0.310-10	0.640-50	0.630-45	0.650-50	0.580-45	0.500-40	0.570-45	0.410-40	1.001-00	-
Hedge Funds Natural Resources (private)	0.030-10	-0.34-0.15	0.260-10	0.770-45	0.860-40	0.870-65	0.850-60	0.600-60	0.450-60	0.690-40	0.650-45	1.001-00

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Non-Core Infrastructure (private)	0.30	0.15	0.30	0.65	0.50	0.65	0.70	0.60	0.60	0.45	0.50	0.65
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Appendix B

5.3 Derivatives Investing Policies

1) Introduction

There is a genuine need to allow the Retirement Trust's managers to evaluate new securities and introduce them into their portfolios, given that the investment process followed by the investment managers complies with the subsequent provisions of this policy statement. This policy statement allows the Retirement Trust's investment managers to exercise reasonable investment freedom, while minimizing the possibility of adverse implications for the Board.

2) Derivative Definition

"A 'derivative' commonly is defined as a financial instrument whose performance is derived, at least in part, from the performance of an underlying asset (such as a security or an index of securities)."⁶

3) Types of Securities Included or Excluded

Since the derivative sector of the market is likely to experience considerable change, provision must be made for the general characteristics of a derivative security, its evaluation and monitoring. Therefore, it is most appropriate to not attempt to definitively list all of the derivative securities that are covered by the Retirement Trust's policy statement. Instead, what will be explicitly stated is the investment process that governs derivative investments and the evaluation and monitoring requirements of this investment process:

4) Approach to Policy

An approach has been developed which states:

- a) allowable derivative investments
- b) limited allocation derivative investments and
- c) restricted derivative investments.

Derivative securities not specified in the above three groups of securities must be evaluated in accordance with the following section entitled Derivative Investment Process. If the security meets these provisions and the spirit of these policies, the manager may establish a prudent position in the instrument. However, the manager must be able to demonstrate the appropriateness of such an investment in light of the Retirement Trust's guidelines.

Commented [AL16]: Not necessary given FIPO's asset allocation and manager structure

⁶"Investments in Derivatives by Registered Investment Companies", August, 1994, Investment Company Institute, page 2. This document states the requirements of mutual funds regarding the investment in and oversight of derivative securities.

~~5) Counter-Party Evaluation~~

~~When entering into a non-exchange traded derivative investment, the investment manager must fully evaluate the other side of the derivative transaction—the counter parties to the trade. Due to the possibility of counter party default, the Retirement Trust's investment managers must evaluate the risks associated with the counter party as if an investment were being made in the traditional securities issued by the counter party.~~

~~At a minimum, the investment manager must evaluate the counter party's:~~

- ~~a) Corporate earnings stream~~
- ~~b) Corporate asset quality~~
- ~~c) Capitalization~~
- ~~d) Corporate liquidity~~
- ~~e) Moody's and Standard & Poor's debt ratings~~
- ~~f) Other fundamental investment and risk characteristics.~~

~~For those counter parties that are broker/dealers, they must:~~

- ~~a) Have investment grade (Moody's and S&P rated) debt~~
- ~~b) Be registered with the SEC~~
- ~~c) Have significant net capital to protect against potential adverse market circumstances.~~

~~For those counter parties that are financial institutions (banks), they must have:~~

- ~~a) Investment grade (Moody's and S&P rated) debt~~
- ~~b) Total assets in excess of \$1 billion~~
- ~~c) Significant net capital to protect against potential adverse market circumstances.~~

~~The investment manager must monitor individual investment and total portfolio exposure to counter parties. Individual counter party exposure must be well diversified and not concentrated in a small number of organizations.~~

6) Purposes for Derivatives

The acceptable investment purposes for the use of derivatives are as follows:

- a. Appropriate to use futures, options and forward currency contracts to assist investment managers in mitigating portfolio risk.
- b. Useful substitute for an existing, traditional investment. In certain circumstances it may be cheaper, quicker or easier to invest in a derivative instrument or security rather than transacting in the cash or traditional security market.
- c. Provides investment value to the portfolio, while being consistent with the Retirement Trust's overall and specific investment policies.
- d. Obtains investment exposure that is appropriate with the manager's investment strategy and the Retirement Trust's investment guidelines, but could not be made through traditional investment securities.

Given that one or more of these investment purposes are clearly met, it is the responsibility of the investment manager to explain and demonstrate how derivative investments impact portfolio risk and the context of the investment within the overall portfolio.

Any other derivative investment purpose is not allowed. Derivatives may not be introduced into the portfolio to create economic leverage or to create investment exposures that are otherwise excluded by the Retirement Trust's investment policies. However, if a manager develops an investment purpose other than those listed above which he/she feels is legitimate and consistent with the spirit of the Retirement Trust's guidelines, this purpose should be proposed in writing to the Board.

7) Investment Restrictions and Derivatives Policy

For the purpose of these guidelines, convertible debt, traditional zero coupon bonds, mortgage pass through securities and asset backed securities are not viewed as derivatives. Based upon the factors enumerated in the above section entitled Approach to Policy, the following guidelines have been established:

Allowable derivative investments

- a. Stable and well structured mortgage CMO's (collateralized mortgage obligations)
- b. Financial futures (if exchange traded)
- c. Currency forward contracts and currency options (exchange and OTC traded)

Derivative investments with allocation limits

- a. Interest only mortgage CMO's
- b. Principal only mortgage CMO's
- c. Interest rate swaps
- d. Options (if exchange traded)
- e. Caps and floors as they apply to the above stated allowable derivative investments

Derivative investments with allocation limits, as listed above, may not represent more than 5% of the individual portfolio manager's assets (based on market value) managed for the Retirement Trust. At the same time, derivative investments with allocation limits in aggregate may not expose the individual manager's portfolio to losses in excess of 5% of the manager's total assets. In addition, the use of interest rate swaps, options, caps and floors may be used only for defensive investment purposes.

Managers investing in the above defined limited allocation derivative instruments should ensure that portfolio exposure is maintained within the stated constraints and communicate the assumptions and model used to estimate VAR (Value at Risk and/or other reasonable risk measurement procedures) annually to the Board.

Restricted derivative investments

- a. Inverse floating rate notes and bonds
- b. Structured notes

Restricted derivatives cannot be held in the Retirement Trust's portfolios at any time.

8) Risk Analysis and Monitoring of Derivatives

For those securities that are classified as derivative investments with allocation limits, the investment managers are required to test and measure derivative investment sensitivities to changes in key risk factors. These risk factors are as follows:

- a. Extreme changes in interest rates, volatility, liquidity, credit quality, and cash market prices

These risk factors will be assessed prior to initial investment and on an on-going periodic basis, most likely on a quarterly basis. Results of such risk testing on derivative investments with allocation limits will be supplied to the Retirement Trust on an annual basis (December 31). If the investment manager identifies additional risks that should be evaluated, these other risk factors should be added to the list and handled in a manner consistent with the previously stated approach.

9) Derivative Investment Process

Investment managers are expected to cover the following issues before purchasing a derivative instrument or security, whether specifically stated as an allowable derivative investment, a derivative investment with allocation limits, or a derivative not specifically discussed in the Investment Restrictions and Derivatives Policy section above:

- a. Determine if the purpose for investing in a derivative security is consistent with one or more of the purposes in the previous section entitled Purposes for Derivatives.
- b. Determine where the security fits into the classification system, if at all, stated in the Investment Restrictions and Derivatives Policy.
- c. Evaluate, at a minimum, the counter party risk and the risks stated in the Risk Analysis and Monitoring section of the derivatives policy.
- d. Evaluate the derivative in a comparably thorough manner as the firm would any other traditional investment opportunity.

10) Reporting Requirements

It is the responsibility of the Retirement Trust's investment managers to certify and demonstrate that their portfolios are in compliance with the Retirement Trust's overall guidelines as well as those that apply to derivative investments. On an annual basis (December 31), the Retirement Trust's investment managers will provide the following minimum monitoring information on derivative securities that are classified as derivative investments with allocation limits:

- a. A general statement from the manager that his/her portfolio is in compliance with the Retirement Trust's derivatives policy.
- b. When stating the market value of the derivative exposure, the manager will specify the security pricing sources. Primary pricing sources will be exchange listed prices, independent third party pricing services, or the average of three broker/dealer prices.

- ~~e. — A statement of the risks (credit risk — an evaluation of potential counter party default on obligations, market risk — percent of portfolio invested in derivatives, and any other relevant risks) associated with the derivative investments.~~
- ~~d. — Potential adverse impact on market values if extreme adverse market movements occur.~~
- ~~e. — A statement regarding the liquidity of the derivative investments.~~
- ~~f. — Summary comments on the firm's list of approved counter parties and a statement regarding any changes to this list.~~
- ~~g. — An overall statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.~~

APPENDIX C

5.4 Investment Manager Guidelines ~~(Authorized Investments) (Portfolio Composition)~~

1) Diversification, Liquidity & Restrictions (Valuation of Illiquid Investments)

Portfolio holdings are expected to be well-diversified, so as to avoid excessive volatility and to be liquid. Only investments in liquid securities⁷ are allowed, except for real estate, private equity, private debt and infrastructure. ~~In addition, short selling, use of leverage or margin and investments in commodities is prohibited.~~

If any investment should become illiquid, they are subject to Florida Statute 215.47 (6). This Statute limits the allocation to illiquid investments and addresses requirements of such investments.

Given the direct ownership of its office property, the Retirement Trust will determine a reasonable estimate of the property's market value. Annually, the Board will contract for a full appraisal of any real property holdings by an MAI (Member Appraisal Institute)-accredited appraiser. Competitive bids for the appraisal valuation will be obtained on an annual basis.

⁷A liquid security is one that has a readily available price, based either on a recent trade or a well recognized pricing mechanism. Such a security could be sold within one week at most, without incurring significant losses due to price depreciation, in a normal or typical capital market environment.

2) **Manager Guidelines for Separately Managed Accounts**

Investment managers hired to invest a strategy through a separately managed account (i.e. FIPO owns stocks/and or bonds held in a custodial account) will be provided customized investment manager guidelines outlining certain restrictions (e.g. limits on security issues, issuers, and maturities, sector concentration limits, benchmark relative constraints, eligible securities, etc.).

Managers are expected to invest the strategy in accordance with the guidelines and shall inform Miami FIPO whenever a breach is reached (if it is not corrected within 30 days by market movement or manager action).

3) **Manager Guidelines for Investments not held in separately Managed Accounts**

Any investment strategy held outside of a separately managed account (e.g. commingled funds, mutual funds, Limited Partnership vehicles, etc.) is expected to follow the guidelines contained in the fund’s Prospectus, Offering Memorandum, or similar governing document.

Managers are expected to invest the strategy in accordance with the guidelines and shall inform Miami FIPO whenever a breach is reached (if it is not corrected within 30 days by market movement or manager action).

4) **Cash & Equivalents Guidelines (Master Repurchase Agreement)**

Transactional cash, portfolio assets that are temporarily not invested in authorized, longer term securities as stated below, may be "swept" into the Fund's custodial short-term investment (money market) commingled fund or invested as stated below. Allowable high-grade, short-term fixed income investments are as follows:

- a. certificates of deposit
- b. commercial paper
- c. U. S. Treasury bills
- d. repurchase agreements.

All repurchase agreements must comply with provisions of the currently prevailing Master Repurchase Agreement, as established by the Securities Industry and Financial Markets Association.

These investments will have short maturities, typically less than 90 days, but none more than 1 year. If an investment is made in the custodian's money market fund, it is the responsibility of the investment manager to make sure that the money market fund has investment guidelines that comply with the Retirement Trust’s investment objectives and policy statement.

If the Retirement Trust hires a firm to manage the overall cash position of the Retirement Trust such that the firm partially or fully replicates the Retirement Trust’s total Fund

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Commented [AL17]: Kept this language to comply with Florida Statute 112.661, point 11

~~asset mix, the use of futures, ETFs and other derivative securities may be used for this function exclusively. (The BlackRock Liquid Public Policy Portfolio is an example of such a cash management product.) The purpose of this investment is to minimize the impact of the Trust's cash allocation on total Fund performance. Such derivative securities may not be used to gain more of a market value than the Retirement Trust's total cash balance.~~

Commented [AL18]: Remainder of the guidelines section not needed. See language above in sections 2 and 3

A comprehensive manager guideline review (for the applicable managers) was presented to the Board in late 2020

3) Domestic Equity Portfolios—Large Capitalization

~~The types of assets that may be held in large capitalization, domestic equity accounts are:~~

- ~~a. common stock~~
- ~~b. preferred stock~~
- ~~c. convertible securities~~

~~The vast majority of holdings will be in common stock. In distinction to mid and small capitalization portfolios, which are described below, large capitalization domestic equity portfolios will primarily invest in stocks with market capitalizations (current market price per share times the number of common shares outstanding) consistent with their underlying performance benchmark (the S&P 500 or the Russell 1000). Large capitalization domestic equity managers can invest in mid and large capitalization stocks. However, the vast majority of equity holdings will be in large capitalization issues.~~

~~Firm's that manage equity portfolios will continually monitor the risk associated with their equity investments. They will be expected to report on the active management positions they have assumed relative to their respective benchmarks. As a result of this risk/reward analysis, active equity managers will statistically attribute actual performance variance from their benchmarks in each regular quarterly report. Included in this report will be statistics attributing performance to sector weighting decisions versus the benchmark and security selection decisions within each sector relative to the benchmark.~~

~~Use of American Depository Receipts (ADR's) of foreign companies and dollar-denominated foreign securities will be selectively approved by the Board on a portfolio by portfolio basis. Specific approval for foreign investments as well as the acceptable portfolio percentage will be individually established in writing with each of the Retirement Trust's managers. Under no circumstance can ADR and dollar denominated foreign securities exceed 20% of a portfolio's market value. Assuming specific Board approval, ADR securities that are 144A securities are authorized investments and cannot exceed 5% of the portfolio.~~

~~No single security can represent more than 5% of the market value of a portfolio at the time of purchase, and no single industry (based on Global Industry Classification System codes) can represent more than 15% of the market value of the account. On a selective basis, the Board may approve the single security and single industry limit to be raised to a higher percentage.~~

~~Derivative securities may not be held in domestic equity portfolios except to mitigate~~

risk, on a temporary basis, of underlying portfolio holdings. Compliance with the previously stated derivatives guidelines must be met.

4) Domestic Equity Portfolios—Mid Capitalization

The above restrictions and guidelines for large capitalization domestic equity portfolios also apply to mid capitalization domestic equity portfolios, except for the applicable benchmark related requirements. Mid capitalization, domestic equity portfolios will invest in stocks with market capitalizations consistent with its underlying benchmark (the Russell Mid Cap, Russell Mid Cap Growth or the Russell Mid Cap Value). Single security limitations that exist for large capitalization portfolios also apply to mid capitalization portfolios.

Investments in equity securities that are not rated by nationally recognized rating agencies are acceptable for mid capitalization equity managers. It is possible that a significant percentage of mid capitalization equity holdings will not have stock ratings.

5) Domestic Equity Portfolios—Small Capitalization

The above restrictions and guidelines for large capitalization domestic equity portfolios also apply to small capitalization domestic equity portfolios, except for the breakdown of investments by market capitalization. Small capitalization, domestic equity portfolios will primarily invest in stocks with market capitalizations consistent with its underlying benchmark (the Russell 2000, Russell 2000 Growth or the Russell 2000 Value). Single security limitations that exist for large capitalization portfolios also apply to small capitalization portfolios. Investments in equity securities that are not rated by nationally recognized rating agencies are acceptable for small capitalization equity managers. It is expected that a majority of small capitalization equity holdings will not have stock ratings.

6) International Equity Portfolios—Developed Markets

Assets in international equity portfolios will be primarily composed of foreign ordinary shares and ADR's (including ADR's that are 144A securities). Short term, high grade fixed income securities may be purchased as previously stated, similar types of securities denominated in foreign currencies may be purchased, or the Trust's custodial sweep account may be employed. Larger capitalization securities may be held, as well as investments in small and mid capitalization securities. No single security can represent more than 5% of the market value of an international equity portfolio at the time of purchase. Firms will continually monitor the country, currency, sector, and security selection risks associated with their international portfolios. All of the risks associated with the Retirement Trust's international equity portfolios will be included in the manager's quarterly reports and performance attribution based on these factors will also be included. Currency hedging, consistent with the previously stated derivative policy, is an acceptable investment activity. Developed country international equity portfolios will be measured against a reasonable version of the MSCI EAFE Index (Europe, Australia, and the Far East) or the MSCI ACWI ex US Index. Emerging markets investments are allowed up to 30% of total manager portfolio holdings. If the manager feels another

index is more appropriate, this case should be made in writing to the Board.

7) **Private Equity Funds and Fund-of-Funds**

The private equity market is inefficient and illiquid due partially to privately negotiated, non-auction pricing mechanisms. High return premiums are expected by investors who are willing to accept the illiquid and inefficient characteristics of the private equity market. Therefore, the long term expected return from private equity markets exceeds the expected return of public equity markets.

Controlling risk in a private equity portfolio is equally as important as seeking higher returns. Because private equity cannot measure risk in a traditional manner (using quantitative risk measures like standard deviation and benchmark tracking error), risk will be managed through a combination of quantitative and qualitative constraints like diversification of investment type and thorough due diligence.

To strengthen diversification of the investments, private equity funds and fund-of-funds are the primary focus. This approach employs active systematic identification of excellent partnerships. The criteria to develop partnerships will consist of (and not be limited to) geographic location, industry investment orientation, financial funding stage orientation, source of deal flow, and investment size.

Performance will be reported on a vintage year internal rate of return (IRR) basis. Internal rate of return is a total dollar weighted rate of return where the discount rate equates the net present value (NPV) of an investment's cash inflows with its cash outflows. Vintage year is the year of fund formation and first takedown of capital. The long term objective is to outperform the benchmark, net of investment management fees, calculated on an IRR basis over long time periods.

Asset allocation is a critical driver for the long term success of the private equity program. To control asset allocation risk, investments are diversified through long term subclass parameters.

Leveraged Buyouts/Corporate Finance: acquisition of a product or business that is typically further along the business life cycle having relatively predictable cash flows and the ability to raise capital along the entire capital structure, utilizing a significant amount of debt and little or no equity.

Venture Capital: targets companies in the earliest phases of a business cycle. Companies may be classified as seed, early, middle and late stage. These companies have uncertain revenues and a need for cash to build their businesses and are subject to high failure rates.

Special Situations: includes investments in distressed debt, mezzanine, sector, opportunity, and secondary funds.

~~Geography/Domestic vs. Global: investments either made in the United States or investments made outside of the U.S. including Europe, Asia, Canada and emerging markets.~~

~~Risk will be controlled by liquidity, vintage year, investment managers, firm, time and geographic and economic region.~~

~~Liquidity risk is managed by minimizing the possibility of forced sales that may arise from exceeding maximum exposure limits or lowering asset allocation exposure limits. Exposure through a fund of funds will help minimize this risk.~~

~~Vintage reflects the year of fund formation and first takedown of capital. Vintage risk refers to the variability of private equity commitments over time. A secondary investment that is a vehicle in the special situation subclass will allow the portfolio to gain prior year vintage exposure, further minimizing vintage risk.~~

~~Manager risk consists of the exposure within a partnership and the number of general partners in the private equity portfolio. Most partnerships require minimum commitments, which help control the exposure of partnerships.~~

~~Firm risk is the amount of exposure to a private equity general partner. No more than 5% of the Retirement Trust may be invested in private equity managed by a single general partner. The limitation does not apply to other asset classes managed by the general partner (e.g. real estate).~~

~~Commitments will be made over the full course of the business cycle and will not be concentrated in any one year.~~

~~Geographic and Economic Region: In the selection of private equity investments, the portfolio will not favor particular economic or geographic regions. Most likely, the focus will be globally oriented.~~

~~Alignment of Interests~~

~~General partnership agreements will be actively negotiated. The partnership agreements will ensure that the interests of the general partner are aligned with the limited partners.~~

8) ~~Domestic Investment Grade Bond Fixed Income Portfolios~~

~~Acceptable security types for domestic fixed income portfolios are:~~

- ~~a. certificates of deposit~~
- ~~b. commercial paper~~
- ~~c. other high grade short term securities~~
- ~~d. U. S. Government and Agency securities~~
- ~~e. corporate bonds~~
- ~~f. mortgage and asset backed securities⁸ (including commercial mortgage backed~~

⁸ Please note that mortgage and asset backed securities are technically derivative securities but

securities)

~~g. Yankee bond securities~~

~~h. 144 A securities (private placements)~~

~~i. cash and equivalent holdings may be comprised of high grade certificates of deposit, commercial paper, U. S. Treasury bills and repurchase agreements.~~

~~Firm's that manage fixed income portfolios will continually monitor the risk associated with their fixed income investments. They will be expected to report on their active investment management decisions they have assumed relative to their respective benchmarks. As a result of this risk/reward analysis, active fixed income managers will seek to statistically attribute actual performance variance from their benchmarks in each regular quarterly report. Statistics which relate performance variance to effective duration decisions, yield curve positioning, sector allocation, security selection and other portfolio management decisions will be included in each quarterly report. Also, to the extent possible, various interest rate scenarios will be depicted in horizon analysis testing with time horizons spanning the next six months to one year, or longer.~~

~~Derivative securities may be held in domestic fixed income portfolios according to the guidelines stated in Appendix B. A measurement of the risk⁹ associated with the derivative security must be provided in writing and explained to the Board.~~

~~No securities in an investment grade bond investment manager's fixed income portfolio may be invested in below investment grade rated securities (below BBB rated bonds). An investment grade security is defined as a security which has been rated BBB or higher by at least one (but preferably two) of the three nationally recognized rating agencies,¹⁰ preferably with such rating provided by Standard & Poor's or Moody's. The intent of this guideline is to require domestic fixed income managers to invest in investment grade securities. This investment grade requirement also means that domestic fixed income managers should not attempt to enhance portfolio returns by specifically purchasing split-rated securities (bonds that have both investment grade and non-investment grade ratings). Therefore, split rated investments cannot be purchased.~~

~~for the purposes of this Policy Statement these securities are not classified as a derivative. Such investments must meet the risk requirements discussed in the subsequent footnote.~~

~~⁶ An example of an acceptable risk measurement tool is the bond Flow Uncertainty Index (FLUX) score. Under this risk scoring system, acceptable individual issues must have a FLUX score of 15 or less. The FLUX score measures the cash flow certainty of a bond using seven interest rate scenarios. Assuming certain prepayment rates as developed by the Public Securities Association, FLUX scores represent an evaluation of the present value of cash flows that a bond will generate under the above interest rate scenarios, plus a measure of yield volatility. FLUX scores have been developed for CMO's (collateralized mortgage obligations) and MBS's (mortgage backed securities).~~

~~¹⁰ The three nationally recognized rating agencies are Standard & Poor's, Moody's, and Fitch Investors Service, Inc.~~

~~Securities that have at least a BBB rating but subsequently fall below the lowest investment grade rating, based upon the ratings of nationally recognized rating agencies, shall be held if the firm expects improvement or sold in an orderly manner. Overall bond portfolio quality ratings shall be high.~~

~~No single security can represent more than 5% of the market value of a portfolio at the time of purchase, and no single industry (based on Global Industry Classification System codes) can represent more than 15% of the market value of the account. These single security and single industry restrictions do not apply to U. S. Government and Agency bond holdings.~~

~~Rule 144A Securities~~

~~Rule 144A allows for qualified investors to purchase debt that is unregistered with the SEC and traded in U. S. securities markets, with some restrictions. Only investors with \$100 million under management may purchase Rule 144A securities. This is called the “Qualified Institutional Buyer” restriction. Typically, the Rule is used by investment grade Yankee issuers (foreign domiciled entities that issue U. S. dollar denominated fixed income securities), although domestic issuers have issued this type of debt. Each bond portfolio may hold up to 10% of assets in Rule 144A bond issues.~~

9) Bank Loans

~~The Retirement Trust has approved a dedicated bank loan allocation target. The same fundamentally based research effort required of domestic core and high yield fixed income managers is also required of bank loan managers. The goal of the bank loan allocation is to generate reasonable returns, while providing diversification relative to core and high yield fixed income managers. Proper portfolio diversification of bank loans portfolios is required, such that reasonable risk/reward expectations are maintained.~~

~~Performance attribution is required, as is the case of domestic core and high yield fixed income managers. With respect to future performance patterns, it is anticipated that bank loan fixed income managers will provide solid down side protection, while attaining reasonable up side returns. All other requirements of domestic core fixed income managers apply to bank loan fixed income managers.~~

10) High Yield Fixed Income

~~The Retirement Trust has approved a dedicated below investment grade asset allocation target. The same fundamentally based research effort required of domestic core fixed income managers is also required of high yield fixed income managers. The goal of the high yield allocation is to generate high total returns, while investing across the full maturity spectrum of corporate securities. Proper diversification of high yield portfolios is required, such that reasonable risk/reward expectations are maintained. Performance~~

attribution is required, as is the case of domestic core fixed income managers. With respect to future performance patterns, it is anticipated that high yield fixed income managers will provide significant down side protection, while attaining reasonable up side returns. All other requirements of domestic core fixed income managers apply to high yield fixed income managers.

11) REIT Portfolios

The above restrictions and guidelines for large capitalization domestic equity portfolios also apply to REIT equity portfolios, except for the following differences. Investments are expected to be in common stock only. No restrictions exist on the market capitalization of REIT portfolio holdings. In addition, the REIT benchmarks have individual security market capitalization weights greater than 5%, which is further addressed in the following paragraph.

While REIT securities are recognized to have both real estate and small cap security characteristics, REIT security portfolios are primarily viewed as an alternative to direct real estate investments. These securities also have a higher level of liquidity than direct real estate investments and this is considered a favorable attribute. As such, there is a desire to maintain the favorable liquidity attributes of these securities and not to become over concentrated in individual portfolio holdings. Therefore, securities that have a weighting in excess of 5% of the portfolio's comparison benchmark (index) may be held up to a maximum weighting of 7%, based on current portfolio market values.

12) Private Real Estate

The Retirement Trust invests in private real estate through commingled funds managed by professional investment managers. As such, the Retirement Trust is a limited partner in a commingled fund and does not directly own the real estate investments. The Retirement Trust may not purchase individual properties, nor serve in a land lord or operator capacity, with the exception of the Retirement Trust Retirement Office building.

The Retirement Trust may invest in core open end real estate strategies, value add closed end real estate strategies or opportunistic closed end real estate strategies. It is expected that each investment will seek to produce returns for the Retirement Trust through market appreciation, income generation or a combination of both.

All investments are expected to be appropriately diversified by region and property type. The Retirement Trust will generally pursue real estate strategies with a national or global investment opportunity set.

Performance will be monitored relative to common industry accepted real estate benchmarks and peer vintage year benchmarks, where applicable.

Leverage may be used (imbedded in the investment strategies managed by professional investment managers) but is expected to be commiserate with the strategy selection (i.e. core, value-add or opportunistic).

13) Infrastructure

The Retirement Trust has a modest exposure to infrastructure, which is primarily invested in wind and solar energy generation. These investments are domestic as well as international. The same fundamental and valuation-based research effort required of all Retirement Trust investment managers is also required of Infrastructure managers. The goals of the Infrastructure allocation are to protect against inflation and to mitigate volatility. Proper diversification of Infrastructure portfolios is required, such that reasonable risk/reward expectations are maintained. Performance attribution is required.

14) Private Debt and Private Debt Fund of Funds

The Retirement Trust has a modest target allocation to private debt. Similar to private equity, the private debt market is inefficient and illiquid due partially to privately negotiated, non-auction pricing mechanisms. High return premiums are expected by investors who are willing to accept the illiquid and inefficient characteristics of the private debt market. Therefore, the long-term expected returns from private debt markets are expected to exceed the return of public debt markets. Relative to public high yield debt, returns from private debt are expected to be less volatile and less correlated with equity markets.

Proper diversification of private debt investments is required such that reasonable risk/return expectations are maintained. It is expected that the Retirement Trust will only invest in private debt funds or fund of funds managed by institutional quality investment managers with appropriate experience in the asset class. When making commitments to private debt funds or fund of funds, it is expected the Retirement Trust will evaluate (among other things) the expected geographic exposure, sector exposure, loan seniority, loan concentration and historic default rates.

Similar to the limitations accepted when investing in private equity, investors in private debt cannot measure risk in a traditional manner (using quantitative risk measures like standard deviation and benchmark tracking error). Risk will be managed through a combination of quantitative and qualitative constraints. Performance will be evaluated relative to public market equivalents and/or comparable peer vintage year private debt investments.

Appendix D

7.0 PROXY VOTING

The Board reserves the right to delegate proxy voting to the investment managers or an external independent third party (collectively referred to as “proxy voter” in this appendix).

Developments in the equity markets have caused a heightened awareness of investment managers’ proxy voting policies. In addition, the SEC requires mutual funds to report their proxy voting decisions to fund investors. The desire of certain investors to make sure the mutual fund companies are remaining objective in their evaluation of corporate activity has created the desire for higher proxy voting visibility.

While these SEC requirements do not directly apply to separately managed institutional portfolios, the Board expects no lesser reporting disclosure from its proxy voter, regardless of the form of the account. The Board directs its proxy voter to remain vigilant in its evaluation of corporate actions. Managers must be thorough and objective in their evaluation of proxy voting issues. The Fund’s proxy voter must demand the highest degree of integrity from corporate managements represented in the Fund’s portfolios. If the Fund’s proxy voter is found to be in favor of corporate managements to the disadvantage of the Fund, the proxy voter may be terminated. Finally, the Board expects a high degree of accountability and objectivity from its proxy voter with respect to proxy voting. Areas that the Board will closely monitor include employee stock options, management compensation, and the level of external directors on Boards and various management committees.

7.1 The Board's primary objective is to have its proxy ballots voted according to the best economic interest of the Retirement Trust’s members. If the Board decides to delegate to the responsibility for voting proxy ballots, the proxy voter agrees to classify and report on the Retirement Trust’s proxies according to the following generic categories:

- 1) Routine business or financial matters
- 2) Non-routine business or financial matters
- 3) Anti-takeover issues
- 4) Corporate governance shareholder proposals
- 5) Social responsibility shareholder proposals

7.2 Under normal circumstances, it is expected that the proxy voter will employ the Retirement Trust's following proxy voting guidelines on issues of routine business or financial matters. The proxy voter will vote for:

- 1) The proposed slate of directors, assuming directors attend requisite meetings
- 2) Appointment of auditors
- 3) Increases in authorized common stock, not to exceed 100% of existing authorized shares
- 4) Changes in board structure

- 7.3** The Board also provides the following general guidelines with respect to non-routine matters, anti-takeover issues, corporate governance proposals and socially responsible proposals:
- 1) For issues that involve non-routine business or financial matters, the proxy voter would be expected to vote against the nonfinancial effects of a merger proposal, but for director liability and indemnification, stock option plans and stock splits.
 - 2) In the area of anti-takeover issues, it is expected that the proxy voter shall vote against blank check preferred stock proposals, classified boards, limiting shareholders' right to call special meetings, limiting shareholders' rights to act by written consent, super-majority voting requirements, reincorporation proposals, issuance of stock with unequal voting rights and elimination of preemptive rights.
 - 3) For corporate governance shareholder proposals, the proxy voter will be expected to vote for requiring a majority of independent directors submitting a company's shareholder rights plan to a shareholder vote, implementing confidential voting, anti-greenmail proposals, opting out of State anti-takeover laws, equal access to proxy materials, submitting golden parachutes to a shareholder vote, adopting cumulative voting and shareholder proposals involving anti-takeover proposals. The proxy voter will be expected to vote against limiting the terms of directorship and stock ownership requirements.
 - 4) In the area of socially responsible shareholder proposals, the proxy voter will vote these proxies in the best economic interest of the Retirement Trust's members.
- 7.4** Under certain circumstances, the Board recognizes that voting in accordance with these issue-specific proxy guidelines will not be consistent with its primary proxy voting guideline of voting all proxy ballots according to the best economic interest of the Retirement Trust's members. In such cases, when reporting to the Board in its regular quarterly report, the proxy voter shall explain why they did not vote according to the Board's issue-specific proxy guidelines.

Appendix E

9.0 PORTFOLIO REPORTING REQUIREMENTS

Satisfying the quarterly portfolio reporting requirements of the Retirement Trust is an important part of the manager's responsibilities. These requirements are stated below. Significant portfolio developments, as well as major changes in the firm's ownership, organizational structure and personnel, should be immediately communicated in writing via fax or e-mail to the Board, the Retirement Administrator, and the investment consultant. [Managers are expected to disclose any SEC investigations or litigation brought against the firm or key personnel immediately.](#)

There will be a regular quarterly written review of investment manager performance versus the respective investment manager's guidelines and benchmarks. Performance both before and after investment management fees will be evaluated. Investment results over periods extending back ten years or since inception, will be stated, if available, as well as the appropriate universe medians and style group comparisons by the Trust's investment consultant.

Also, the manager agrees to satisfy the Board's prescribed quarterly reporting requirements.

It is the responsibility of the Trust's investment managers to certify and demonstrate that their portfolios are in compliance with the Retirement Trust's overall guidelines ~~as well as those that apply to derivative investments.~~

Investment management firm's will continually monitor risks associated with their investments. They will be expected to report on the active management positions assumed relative to their respective benchmarks. As a result of this risk/reward analysis, active managers will statistically attribute actual performance variance from their benchmarks in each regular quarterly report.

9.1 Quarterly Reporting ~~Format:~~

[Quarterly reporting shall be timely delivered to the Trust and Consultant and should meet industry best practices which generally includes the following: As of the issuance of this Investment Objectives & Policy Statement date, all subsequent quarterly reports by investment managers to the Retirement Trust should have the following format, as well as table of contents:](#)

1. Portfolio investment objectives, strategy and process
2. Portfolio performance – gross and net of fees
3. Portfolio asset mix & asset growth
4. Portfolio & benchmark characteristic comparison
5. Quarter-end reconciliation to custodian
6. Quarter-end portfolio positions & transactions
7. Portfolio attribution analysis

- 8. Soft dollar brokerage services
- 9. Conflicts of interest
- 10. Cash flows
- 11. Proxy voting record (if applicable)– past quarter
- 12. Economic analysis & additional information
- 13. Statement of Sudan/Iran holdings (include date of Protecting Florida’s Investment Act quarterly report used)

All manager reports should adhere to this order, unless otherwise instructed by the Retirement Trust.

9.2 Proxy Voting Requirements:

~~On a quarterly basis, the investment managers shall provide to the Board the following information on their proxy votes:~~

Company Name	Date of Vote	Proxy Issue	Vote

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Reports come from the proxy vendor

9.3 Quarterly Portfolio Reporting Requirements:

~~When requested to attend a Board meeting, investment managers are required to email their quarterly reports to the Retirement Trust Board no later than two weeks (14 days) prior to the scheduled meeting date. One copy of the report should be emailed to the investment consultant. Reports to the Board shall include the following information and cover these stated topics:~~

~~1) Portfolio investment objectives, investment strategy and decision making process:~~

~~The investment objectives of the portfolio will be clearly stated. Next, a narrative description of the portfolio's investment strategy will be provided, with a discussion of the factors that proved to be favorable and those that were unfavorable. In addition, a concise statement of the firm's investment decision making process will be provided and any changes or modifications that were made to the process.~~

~~2) Portfolio performance before and after investment management fees:~~

~~The manager shall report the quarterly total portfolio rate of return before and after investment management fees have been deducted, as well as cumulative and annual~~

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performance on both bases since account inception. Also included in these tables will be the manager's performance benchmarks.

3) ~~Portfolio asset mix and asset growth:~~

~~The portfolio's allocation to the major asset classes will be specified for the beginning and end of the quarter. Market values will be shown for the total account over the same period.~~

4) ~~Portfolio allocations according to characteristics and other classifications:~~

~~Specific portfolio characteristics will be developed and contrasted to those of the portfolio's performance benchmark. In addition other sector and industry comparisons will be provided.~~

5) ~~Portfolio reconciliation to the custodial bank:~~

~~As of quarter end, the manager will reconcile their portfolio market value to that provided by the Retirement Trust's custodial bank. Explanation of discrepancies shall be provided.~~

6) ~~Portfolio positions and transactions:~~

~~Individual issues in the portfolio as of the most recent quarter end shall be provided, as well as a list of portfolio purchases and sales. Securities that are sold will be classified according to the manager's general reasons for sale.~~

7) ~~Portfolio Investment Guidelines~~

~~Portfolio characteristic reporting is required, as well as attribution analysis reporting.~~

8) ~~Soft Dollar Brokerage Services~~

~~Provide a list of soft dollar vendors, as well as services, data and reports that the firm has acquired in the preceding quarter from those vendors. State the cost of these services.~~

Soft Dollar Broker Name	Received Soft Dollar Services (Y/N)	Type of Soft Dollar Services Received	Cost of Services (\$)

9) ~~Potential Conflicts of Interest~~

~~State if the investment management firm has any potential conflicts of interest with respect to its investments for the Retirement Trust. For example, does your firm manage assets for companies that are represented in the Trust's portfolio?~~

10) ~~Cash Flows~~

~~State the amount of any significant portfolio cash flows that occurred during the quarter.~~

~~11) SEC investigations or lawsuits~~

~~Managers are expected to disclose any SEC investigations or litigation brought against the firm or key personnel.~~

9.4 Monthly Reports:

1) Portfolio summary report.

A summary report consisting of a statement of changes in market value from the preceding month, a summarized portfolio composition using market values and portfolio performance for the latest month, preceding quarter, fiscal year to date (Retirement Trust's fiscal year is October 1 through September 30), and annualized return since account inception.

Appendix F

14.0 PORTFOLIO REBALANCING

- 14.1** The Retirement Administrator and Consultant shall monitor the portfolio regularly. The Consultant shall issue a recommendation to the Board any time an asset class breaches its acceptable range.
- 14.2** In monitoring the portfolio, the Retirement Administrator and Consultant shall be guided by the section on target asset allocation ranges for each asset class.
- 14.3** The Board has authority to issue instructions to managers to liquidate securities for reallocation to other managers or other asset classes, but shall do so only after considering the recommendation of the Retirement Administrator and Investment Consultant.
- 14.4** All interest, dividends, net operating revenue and capital gains shall be reinvested by the investment manager accountable for the underlying security investment.
- 14.5** The Board shall review the allocation of assets to each investment manager as part of the Board's asset allocation review.

Appendix G

15.0 Responsibilities of Global Custodian

The Board recognizes that accurate and timely completion of custodial functions are necessary for the effective monitoring of the investment management activity. The custodian's responsibilities for the Retirement Trust's investable assets are to:

- 15.1** Provide complete global custody and depository services for the Retirement Trust's designated accounts.
- 15.2** Provide a Short Term Investment Fund (STIF) for investments of any cash, to ensure maximum investment of the Retirement Trust's assets.
- 15.3** Provide in a timely and effective manner, settlement of securities transactions and provide monthly reports of the investment actions implemented by the Retirement Trust's investment managers.
- 15.4** Collect all income and principal realizable and properly report the collections on the custodial periodic statements.
- 15.5** Provide monthly and fiscal year-end accounting statements for the Retirement Trust's portfolios, including all transactions. These statements will be based on accurate security values both for cost and market. Audited reports will be provided within 12 business days of month-end and fiscal year-end.
- 15.6** Report to the Retirement Trust situations where accurate security pricing, valuations and accrued income is either not possible to report or is subject to considerable uncertainty.
- 15.7** Provide assistance to the Retirement Trust to complete such activities as the annual audit, transaction verification or unique issues as required by the Board.
- 15.8** Manage a securities lending program to enhance income if designated by the Boards.
- 15.9** Provide electronic access to accounting and performance reporting systems.
- 15.10** Assist the Board in keeping track of securities litigation cases of past and current investments made by the Retirement Trust's investment managers. Periodic securities litigation reports will be supplied to the Board to review.

Appendix H

Derivative Definitions

A.1—Derivatives

The following derivative definitions are taken from the ICI Memorandum on Fund Investments in Derivatives:

1) — **Options:** An option represents the right to buy or sell an underlying asset (often, a security) at a specified time for a specified price. A call option is a right to purchase the underlying asset; a put option is the right to sell it. A fund that buys options has the right to buy or sell the underlying asset. A fund that writes (i.e. sells) an option is obligated to sell the underlying asset to, or buy it from, the party that purchased the options (if that party "exercises" the option). A fund that writes an option is paid a premium for doing so. Options can be either standardized or customized and privately negotiated. Some are exchange listed and others are traded over the counter.

2) — **Forward Contracts:** Funds may enter into forward contracts, which obligate the fund and its counterparty to trade an underlying asset (commonly, foreign currency) at a specified price at a specified date in the future. Forward contracts are traded in the over the counter markets.

3) — **Futures:** Futures are similar to forward contracts, but differ in that they are standardized and traded on a futures exchange. Unlike forward contracts, the counterparty to a futures contract is the clearing corporation for the appropriate exchange. Futures are typically settled in cash, rather than requiring actual delivery of the instrument in question. Perhaps the best known futures contracts are those involving the S&P 500. Parties may also buy or write options on futures.

4) — **Swaps:** Swaps are over the counter transactions that involve two parties exchanging a series of cash flows at specified intervals. In the case of an interest rate swap, the parties exchange interest payments based on an agreed upon principal amount (referred to as the 'notional principal amount'). Under the most basic scenario, Party A would pay a fixed rate (e.g., 6%) on the notional principal amount (e.g., \$10 million) to Party B, which would pay a floating rate (e.g., LIBOR) on the same notional principal amount to Party A. (Typically, payments between the parties would be netted out and settled periodically.)

In recent years, the swaps market has grown dramatically, both in terms of size and variety. For example, interest rate swaps can involve cross market payment (e.g., short term rates in the US vs. short term rates in the UK) and cross currency payments (e.g., payments in dollars vs. payments in yen). Floating rate payments may be subject to caps (i.e., ceilings, floors) or collars (i.e., caps and floors together).

5) — **Structured Notes:** Structured notes are over the counter debt instruments where the interest rate and/or the principal are indexed to an unrelated indicator (e.g., short term rates in Japan, the price of oil). Sometimes the two are inversely related (i.e., as the index goes up, the coupon rate goes down; inverse floaters are an example of this) and sometimes they may fluctuate to a greater degree than the underlying index (e.g., the coupon may change twice as

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much as the change in the index rate).

Structured notes are often issued by high grade corporate issuers. There is often an underlying swap involved; the issuer will receive payments that match its obligations under the structured note (usually from an investment bank that puts the deal together) and, in turn, makes more 'traditional' payments to the investment bank (e.g., fixed rate or ordinary floating rate payments). It is important to note, however, that in such cases the mutual fund would not be involved in the swap; the issuer of the note would remain obligated even if its counterparty defaulted.

6) — Mortgage Backed Securities: The term 'mortgage backed securities' encompasses a broad array of instruments with differing characteristics. Some of these instruments often are referred to as 'derivatives.' One such example is stripped mortgage backed securities, which represent interests in a pool of mortgages, the cash flow of which has been separated into its interest and principal components. Interest only securities ('IOs') receive the interest portion of the cash flow and principal only securities ('POs') receive the principal portion. These securities may be issued by US government agencies or by certain private issuers. Their values are highly sensitive to the rate of mortgage principal prepayments, which tends to increase as interest rates fall and decrease as interest rates rise. When interest rates decline and principal payments accelerate, the interest payment stream is reduced and the value of the IOs decreases. When interest rates are rising and prepayments are slower, the average life of POs increases and their value decreases."

The final definition is from JP Morgan Securities Inc., Capital Markets Product Development Group, dated June 7, 1996, as prepared by Simon R. Pszerno:

7) — Swaptions (Options of Swaps): "Options on swaps are agreements between two parties, giving one party (the buyer of the option) the right and the other party (the seller of the option) the obligation to, within a specified period of time, either 1) begin the exchange of payments of an interest rate swap (a 'contingent' swap) or 2) terminate the exchange of payments of an existing interest rate swap (a 'cancelable' swap). As in all options, the buyer of the option pays a premium to the seller for the right to initiate or to terminate a swap. Contingent swaps and cancelable swaps can be exercised on the exercise date (a 'European' option) and during the exercise period (and 'American' option). The terms of the option on the swap, such as the amount of the fixed and floating payments, the exercise date or period, the payment dates, and the maturity of the swap, are all determined at the start of the transaction."

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Disclaimer

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