



QUARTERLY INVESTMENT REPORT

June 2022



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The pessimist complains about the wind. The optimist expects it to change. The leader adjusts the sails.
— John Maxwell

MERS' Portfolio Characteristics

- Disciplined asset allocation
- Globally diversified
- May lag in periods of extended bull markets
- Valuation focused investors
- Focus on risk-adjusted returns

MERS' Office of Investments Goals

- Maintain adequate liquidity
- Exceed the actuarial rate assumption on a long-term basis
- Minimize costs
- Exceed the Policy Benchmark ⁽¹⁾ on a long-term basis

Economic and Market Summary

Equity markets continued to sell off during the second quarter of 2022 as elevated inflation and slower economic growth weighed heavily on the market. The S&P 500 index returned -16.11% for the quarter and had the worst half to start a year since 1970. The tech heavy Nasdaq index, which contains growth-oriented companies that are more sensitive to rising interest rates, returned -29.22% year-to-date, which marks the largest first half of the year drop in the index's history. The bond market, historically a safe haven for investors, has proven to be the opposite in 2022. The Bloomberg U.S. Aggregate index has returned -10.35% year-to-date, due in large part to rising interest rates. Inflation continues to be a main concern as June year-over-year headline CPI came in at a four-decade high of 9.10%. The Federal Reserve, in its attempt to slow down inflation, raised short term interest rates twice during the quarter for a total of 125bps. As inflation continued to surprise to the upside during the quarter, the Fed was forced into a 75bps interest rate hike at its June meeting, with similar sized hikes expected in future meetings. These unprecedented actions are occurring as the Fed tries to catch up to current economic conditions after incorrectly characterizing inflation as "transitory" for more than a year. While the labor market remains strong with the unemployment rate at 3.60%, there are concerns that aggressive Fed rate hikes will increase the risk of a recession. Commodities are up 18.44% on the year, but sold off 5.66% during the second quarter, further signaling that economic growth is slowing. The U.S. economy contracted during the first quarter and second quarter of 2022 as GDP came in at -1.60% and -0.90% respectively. Consumer sentiment fell to its lowest point on record, further reflecting that elevated inflation is weighing on American confidence. The University of Michigan's gauge of consumer sentiment reached a reading of 50 in June. That was the lowest reading on record going back to 1952. In the Eurozone, the war in Ukraine continues to have an impact as concerns mount over potential gas shortages. The European Central Bank raised rates for the first time in 11 years with inflation coming in at elevated levels of 8.60% year-over-year as of June. As a result of deteriorating economic conditions, the MSCI Europe IMI index returned -15.22%.

Portfolio Performance Review

MERS' Total Portfolio returned -7.80% (net) for the first quarter, outperforming the Policy Benchmark by 4.91%. The Global Equity Portfolio returned -14.40%, outperforming the Global Equity Policy Blend by 156 bps mostly due to its underweight and selection within U.S. equities. The MERS U.S. Equity Portfolio outperformed the Russell 3000 benchmark by 143 bps. Allocation to S&P indices, including multi-factor ETFs, rather than Russell indices added value to the portfolio. The MERS International Equity Portfolio outperformed its benchmark by 35bps and the Emerging Market Equity Portfolio underperformed its benchmark by 75 bps. The Global Fixed Income Portfolio returned -6.14% on the quarter, outperforming the Global Fixed Policy Blend by 39 bps. Overweight to shorter duration assets within the U.S. Core Fixed Income Portfolio contributed to the outperformance. The Private Investments Portfolio delivered positive returns of 5.75%, which significantly contributed to outperformance for the Total Market Portfolio during the quarter. Infrastructure and Real Estate were the top performers within this portfolio as they returned 11.78% and 8.41% respectively. MERS' Defined Benefit (DB) portfolio assets are \$10.83 billion, and MERS' total assets are \$13.83 billion.

Risks and Trends

Economic Risks

- Covid-19 resurgence
- Monetary policy mistakes
- Corporate/government debt levels
- Eurozone instability
- Fiscal policy implementation
- Supply-chain disruptions

Medium-Term Trends

- Rise of populism
- Investment industry consolidation
- Rise of active investing
- Amplification of country and regional investment risks
- In-sourcing | Supply chain realignment

Long-Term Trends

- Aging population/workforce
- Rising taxes/entitlement costs
- Aging infrastructure
- Deglobalization | Competition for resources
- Geopolitical instability
- Rise of ESG

Projects and Initiatives

- Incorporating ETFs into the asset allocation program and internal strategies
- Researching the role of active management in sub-asset classes
- Enhancing internal equity portfolio models
- Internal fixed income portfolio development

¹ The Policy Benchmark consists of: 45% Russell 3000, 20% MSCI ACWI ex USA IMI (net), 25% Bloomberg US Aggregate, and 10% Bloomberg Global Aggregate ex U.S.

Asset Class Valuation Summary

Value/Price Discrepancy¹

Asset Class	Overvalued	Undervalued
US Equity	-31.40%	
Europe Equity		33.90%
Asia Pacific Equity		66.50%
EM Equity		54.5%
US Treasury	-1.90%	
EMD		7.00%
US HY	-7.70%	

¹ The value/price discrepancy is a ratio that compares the estimated fair value of an asset relative to its current market price. Overvalued assets have prices above estimated fair value and are expressed as a negative percentage and undervalued assets have prices below estimated fair value and are expressed as a positive percentage.

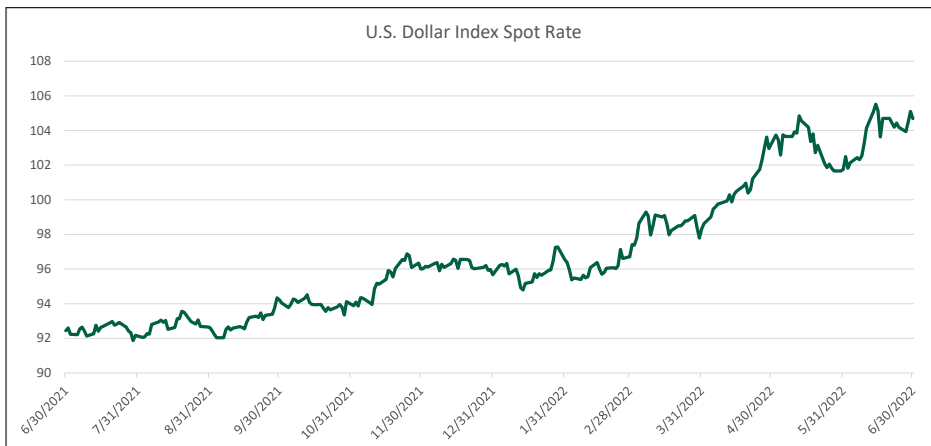
Equity Market Outlook

- Despite the most recent selloff, valuation multiples are still historically elevated in the U.S., and current earnings remain above estimated trend earnings due to cyclically high-profit margins, low-interest rates, and lower corporate taxes.
- Valuation multiples and earnings are expected to revert to long-term averages resulting in lower expected returns for US equities.
- Valuations are more favorable in Europe, Japan, and Emerging Markets
- European and Japanese earnings are currently below trend, which is expected to drive higher returns in the future as earnings recover to long-term cyclically-adjusted levels.
- In Emerging Markets, recovery from current below-trend earnings and strong trend earnings growth is expected to provide positive support going forward

Fixed Income Market Outlook

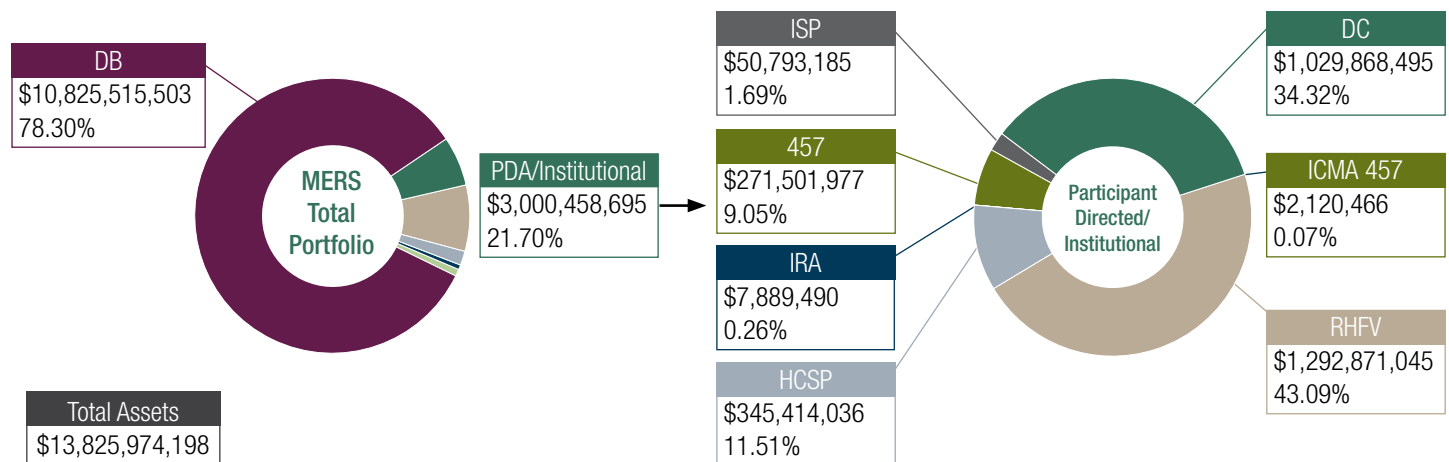
- U.S. treasury bonds are slightly overvalued due to current market interest rates being lower than MERS' long-term assumptions
- Emerging Markets Debt spreads have widened making the asset class attractive.
- High Yield bonds are the most overvalued due to historically low credit spreads and yields in those asset classes.

Chart of the Quarter



The U.S. Dollar Index is a measure of the value of the U.S. Dollar (USD) against a basket of foreign currencies. The currencies include the Euro (EUR), Japanese Yen (JPY), Canadian Dollar (CAD), British Pound (GBP), Swedish Krona (SEK), and Swiss Franc (CHF). The index rises if the Dollar strengthens against these currencies and falls if the Dollar weakens against these currencies. The index has increased by 9.42% year-to-date and 13.25% over the last year. Demand for the dollar has been strong as investors park their dollars in U.S. government bonds as the Federal Reserve has raised interest rates before other central banks. A rising U.S. dollar increases currency risk for the foreign assets in a portfolio. MERS' has used various currency hedging strategies to protect against this risk.

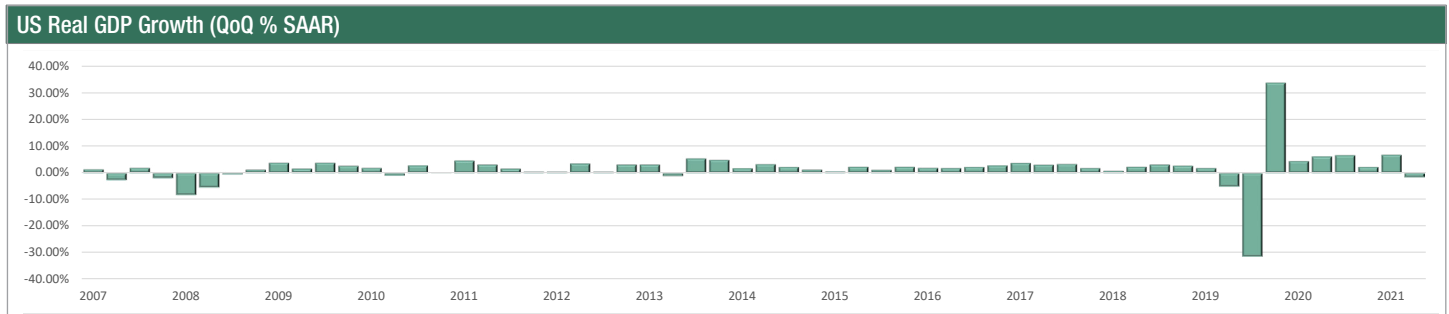
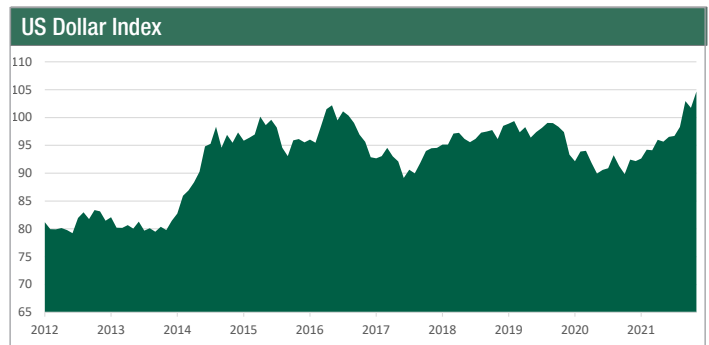
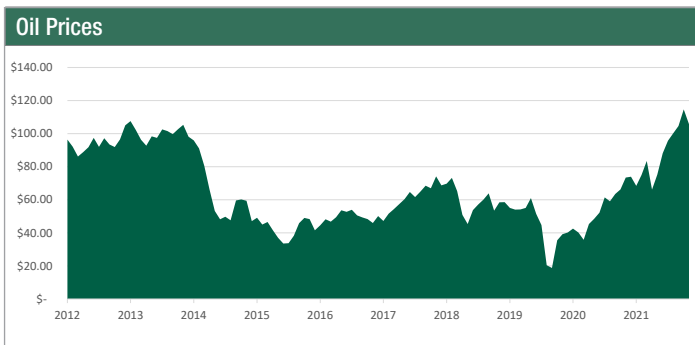
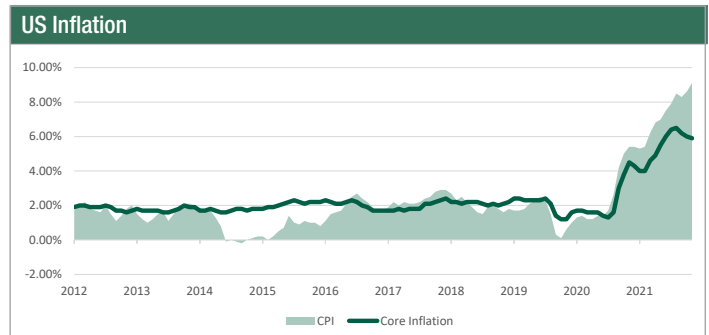
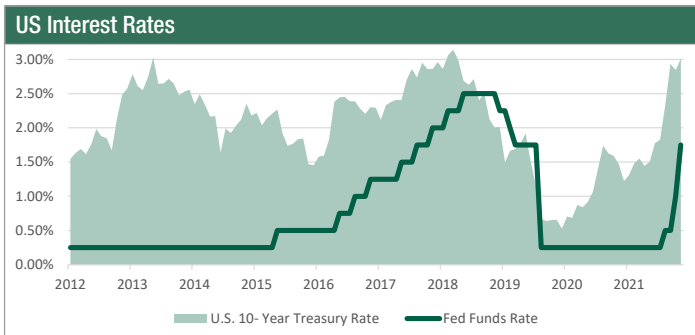
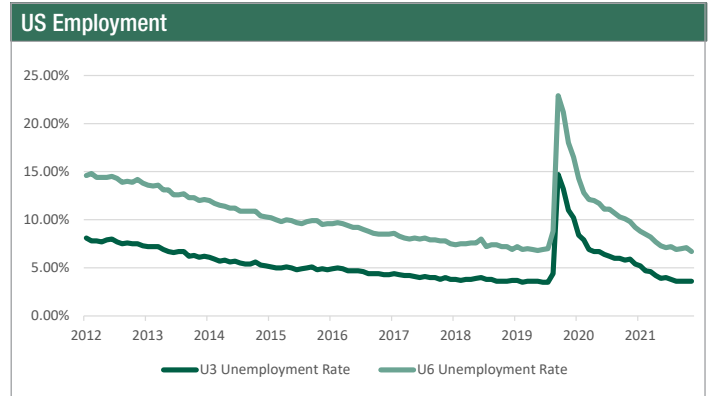
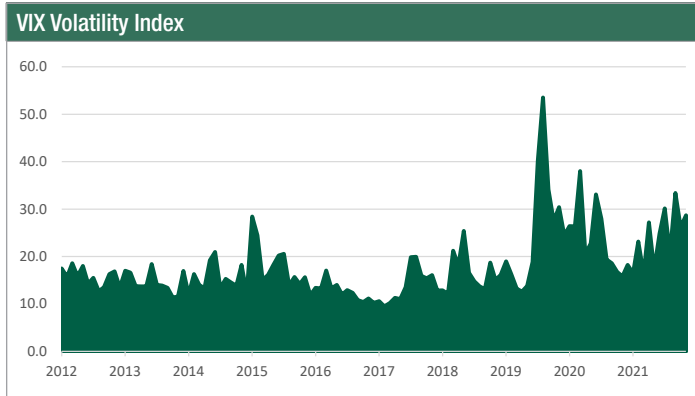
Assets by Program



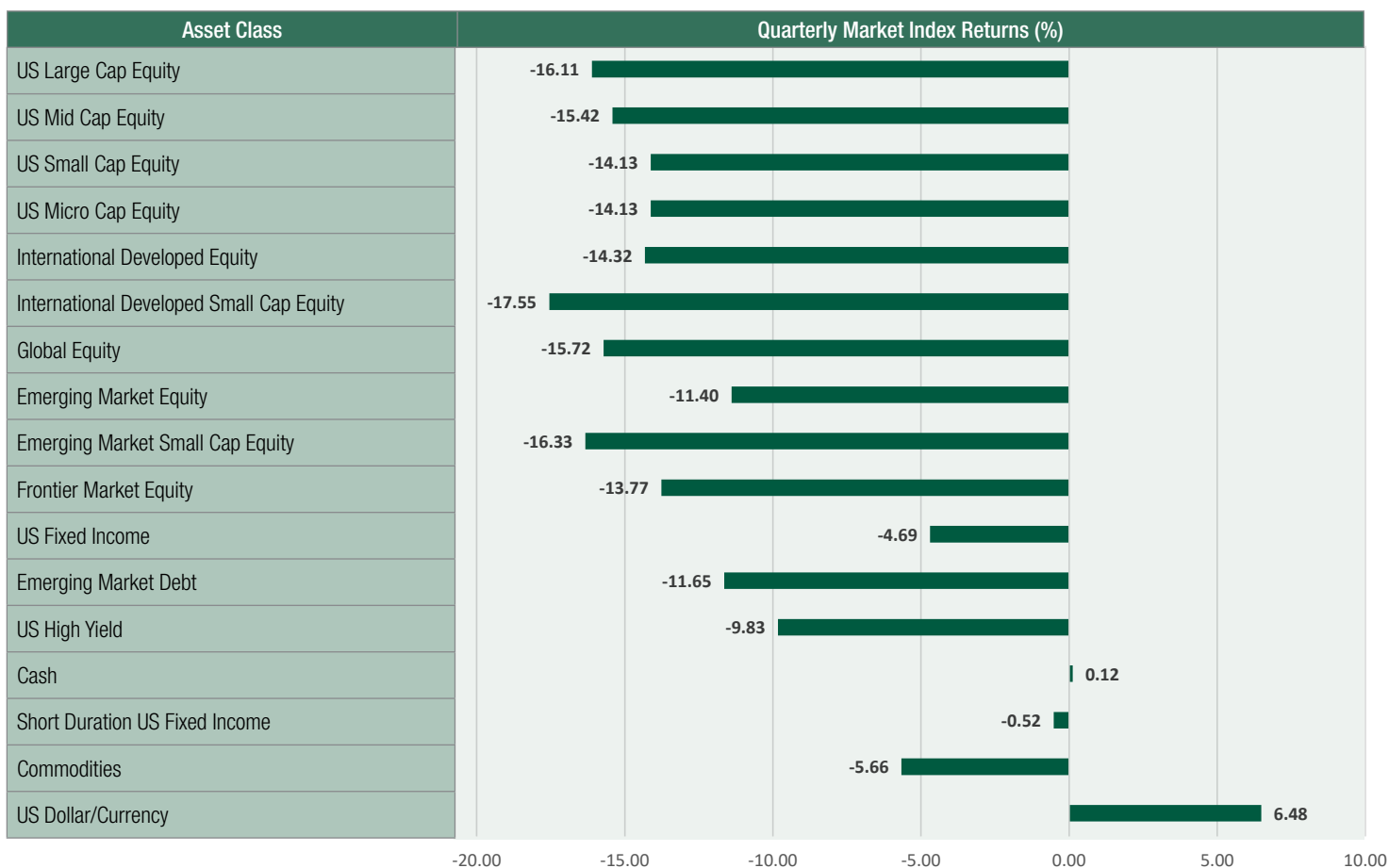
Market Indicators	Current	Prior Quarter
10 Year Treasury Yield	3.01%	2.34%
Fed Funds Rate	1.75%	0.50%
Crude Oil	\$105.8 /barrel	\$100.3 /barrel
Gold	\$1,807.3 /oz.	\$1,937.4 /oz.
30 Year Fixed Mortgage Rates	5.83%	4.90%
US Investment Grade Credit Spread	1.55%	1.16%
US High Yield Credit Spread	5.69%	3.25%
US Leading Economic Indicators	3.00%	6.00%

Economic Releases	Current	Prior Quarter
ISM Manufacturing	53.00	57.10
ISM Non-Manufacturing	55.30	58.30
U of M Consumer Sentiment	50.00	59.40
US Real GDP*	3.50%	5.50%
Eurozone Real GDP*	5.40%	4.70%
UK GDP*	8.70%	6.60%
Japan GDP*	0.40%	0.40%
China GDP*	4.80%	4.00%

* All GDP data is lagged 1 quarter

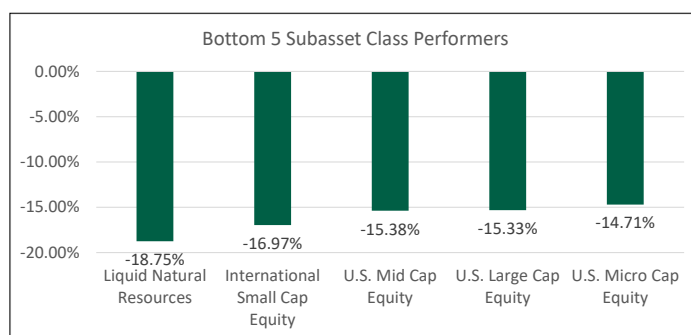
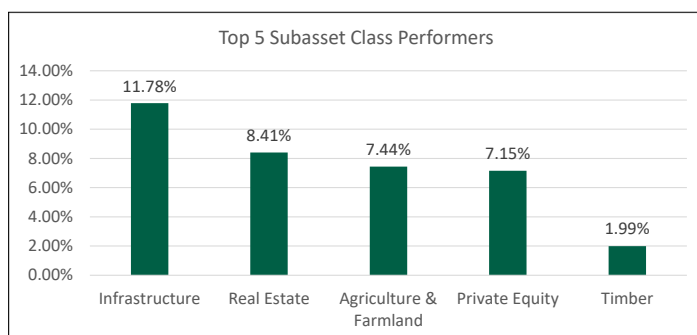
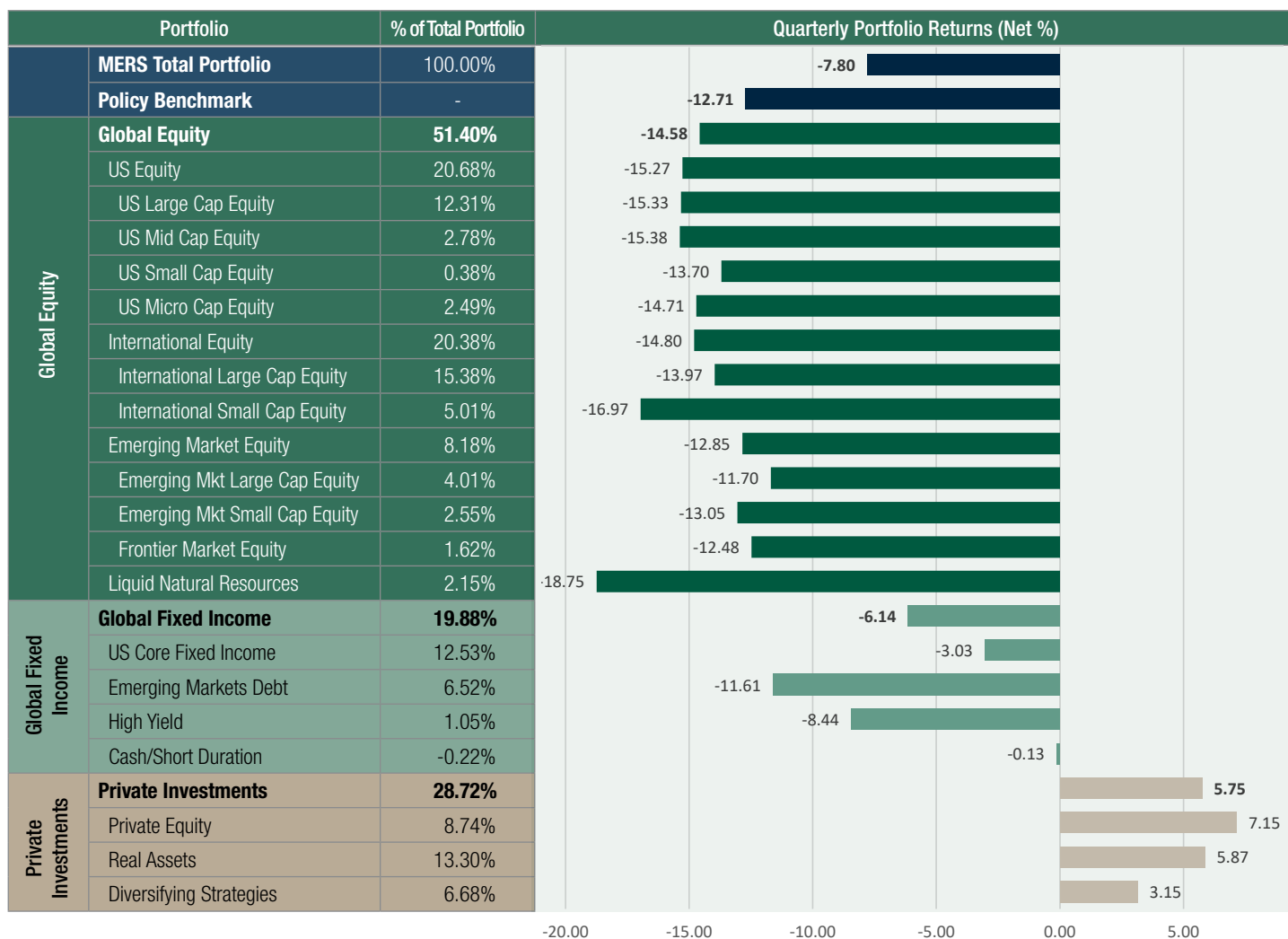


Quarterly Market Performance Review



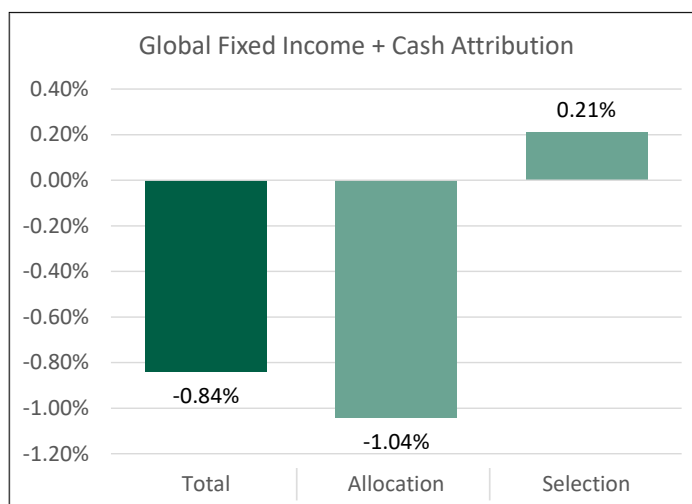
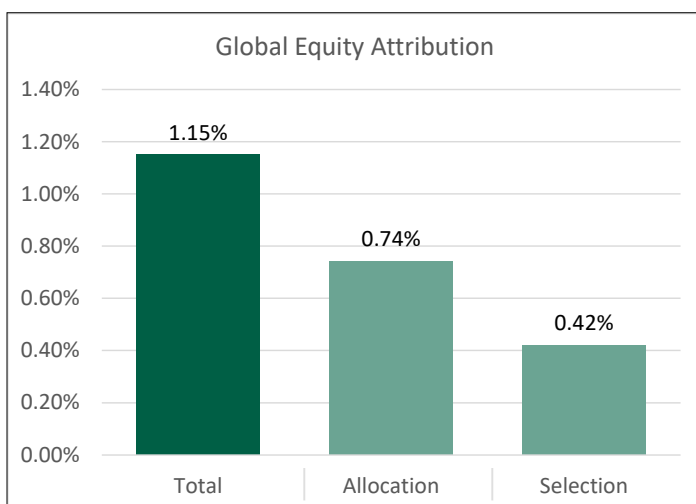
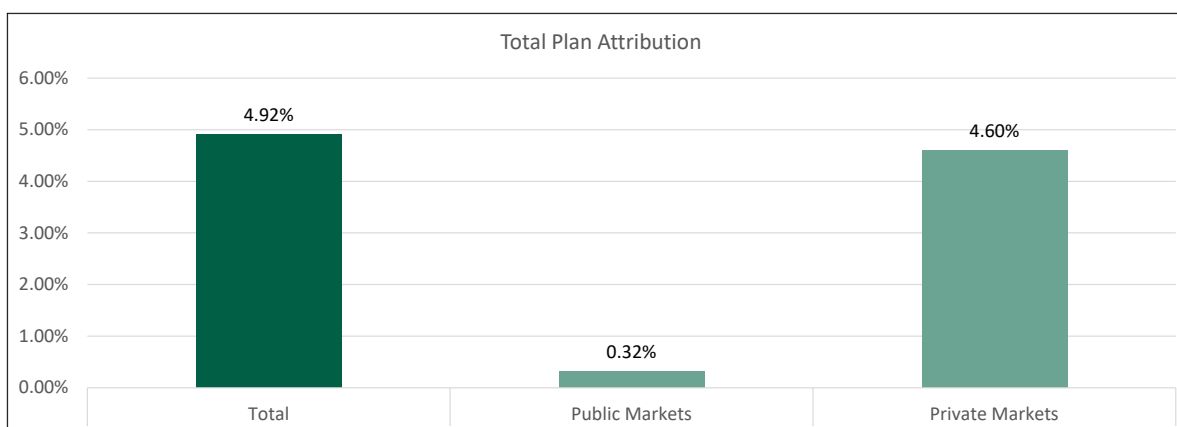
Market Index Returns

Market Index	Asset Class	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
S&P 500	US Large Cap Equity	-16.11	-19.97	-10.64	10.58	11.29	11.13	12.94
S&P 400	US Mid Cap Equity	-15.42	-19.55	-14.66	6.85	7.00	7.74	10.88
S&P 600	US Small Cap Equity	-14.13	-18.97	-16.88	7.25	7.15	8.12	11.22
Russell Microcap	US Micro Cap Equity	-18.96	-25.12	-30.75	5.02	4.55	4.94	9.04
MSCI EAFE	International Developed Equity	-14.32	-19.23	-17.26	1.64	2.78	3.28	5.99
MSCI EAFE Small Cap	International Developed Small Cap Equity	-17.55	-24.47	-23.63	1.54	2.12	4.12	7.56
MSCI ACWI IMI	Global Equity	-15.72	-20.23	-16.14	6.49	7.26	7.35	9.30
MSCI Emerging Markets	Emerging Market Equity	-11.40	-17.56	-25.07	0.87	2.51	3.16	3.42
MSCI Emerging Markets Small Cap	Emerging Market Small Cap Equity	-16.33	-19.97	-20.44	6.09	3.77	3.04	4.57
MSCI Frontier Markets Index	Frontier Market Equity	-13.77	-20.53	-17.16	0.71	1.73	1.93	5.07
BBG Barclays U.S. Aggregate	US Fixed Income	-4.69	-10.35	-10.29	-0.93	0.88	1.42	1.54
JPMorgan EMBI Global Diversified Index	Emerging Market Debt	-11.65	-20.13	-20.81	-5.67	-1.66	0.91	1.88
ICE BofA Merrill Lynch Global High Yield	US High Yield	-9.83	-14.19	-12.81	0.21	2.10	3.48	4.47
91 Day Treasury Bill	Cash	0.12	0.15	0.18	0.57	1.05	0.84	0.60
BBG Barclays 1-3 Year Treasury	Short Duration US Fixed Income	-0.52	-3.01	-3.51	0.18	0.90	0.81	0.77
Bloomberg Commodity Index Total Return	Commodities	-5.66	18.44	24.27	14.34	8.39	2.79	-0.82
Bloomberg Dollar Spot Index	US Dollar/Currency	6.48	9.42	13.25	8.90	1.83	1.32	2.52



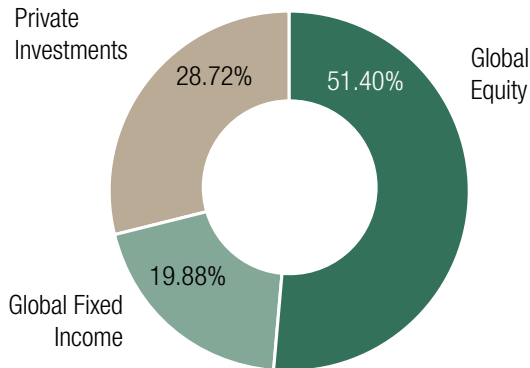
	Avg Weight			Return (Net)			Attribution Totals		
	Portfolio	Benchmark	Difference	Portfolio	Benchmark	Difference	Allocation	Selection	Total
Total Plan	100.00%	100.00%	0.00%	-7.81%	-12.73%	4.92%	-0.15%	5.06%	4.92%
Public Markets	73.86%	100.00%	-26.14%	-12.33%	-12.73%	0.40%	0.89%	0.42%	1.30%
Global Equity	53.48%	65.00%	-11.52%	-14.39%	-15.99%	1.60%	0.89%	0.42%	1.30%
U.S. Equity	20.74%	45.00%	-24.26%	-14.99%	-16.70%	1.71%	0.98%	0.37%	1.35%
International Equity	20.19%	15.00%	5.19%	-14.69%	-15.15%	0.46%	-0.13%	0.09%	-0.04%
Emerging Market Equity	10.09%	5.00%	5.09%	-12.56%	-12.10%	-0.46%	0.04%	-0.04%	0.00%
Liquid Natural Resources	2.46%	0.00%	2.46%	-18.78%	-12.71%	-6.07%	0.00%	-0.15%	-0.15%
Global Fixed Income	20.08%	35.00%	-14.92%	-6.15%	-6.53%	0.38%	-1.06%	0.20%	-0.86%
U.S. Core Fixed Income	13.00%	25.00%	-12.00%	-3.11%	-4.69%	1.58%	-0.97%	0.20%	-0.78%
Global Agg ex USD	0.00%	10.00%	-10.00%	0.00%	-11.02%	11.02%	-0.18%	0.00%	-0.18%
Emerging Markets Debt	6.79%	0.00%	6.79%	-11.59%	-11.43%	-0.16%	0.09%	-0.01%	0.08%
U.S. High Yield	0.29%	0.00%	0.29%	-7.42%	-9.83%	2.41%	0.00%	0.01%	0.01%
Cash	0.29%	0.00%	0.29%	0.38%	0.11%	0.27%	0.02%	0.01%	0.02%
Private Investments	26.14%	0.00%	26.14%	5.73%	-12.71%	18.44%	0.01%	4.59%	4.60%

- Outperformance was driven by the Private Investments Portfolio (+460bps).
- Allocation and selection in U.S. Equity were the largest contributors (+98bps & +37bps).
- Underweight to U.S. Core Fixed Income and Global Agg ex USD were the largest detractors (-97bps & -18bps).

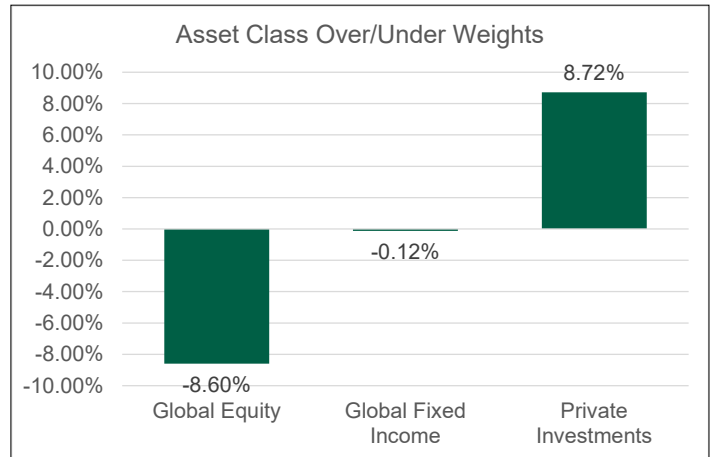


Asset Class	Market Value	% of Fund	Base Allocation	Over/Under Weight	Minimum Allocation	Maximum Allocation
Global Equity	\$6,277,386,589	51.40%	60.00%	-8.60%	30.00%	70.00%
Global Fixed Income	\$2,428,315,059	19.88%	20.00%	-0.12%	10.00%	60.00%
Private Investments	\$3,507,984,087	28.72%	20.00%	8.72%	No Minimum	30.00%
Total	\$12,213,685,735	100.00%	100.00%			

Asset Allocation

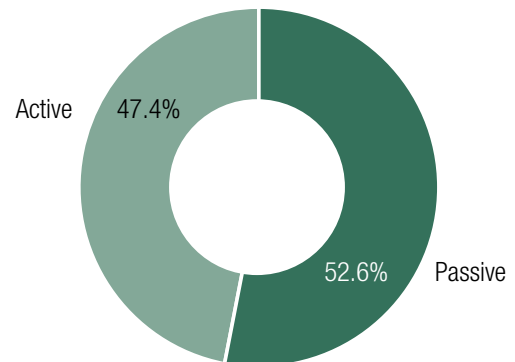


Asset Class Over/Under Weights



Asset Class	MERS Public Markets ¹	Policy Benchmark ²	Over/Under Weight
U.S. Equity	32.03%	45.00%	-12.97%
International Equity	27.67%	14.16%	13.51%
Emerging Market Equity	11.48%	5.84%	5.64%
U.S. Treasury	17.57%	20.93%	-3.36%
U.S. Investment Grade	0.02%	14.07%	-14.05%
U.S. High Yield	1.48%	0.00%	1.48%
Emerging Market Debt	9.16%	0.00%	9.16%
Cash/Short Duration	-0.33%	0.00%	-0.33%

MERS Public Markets

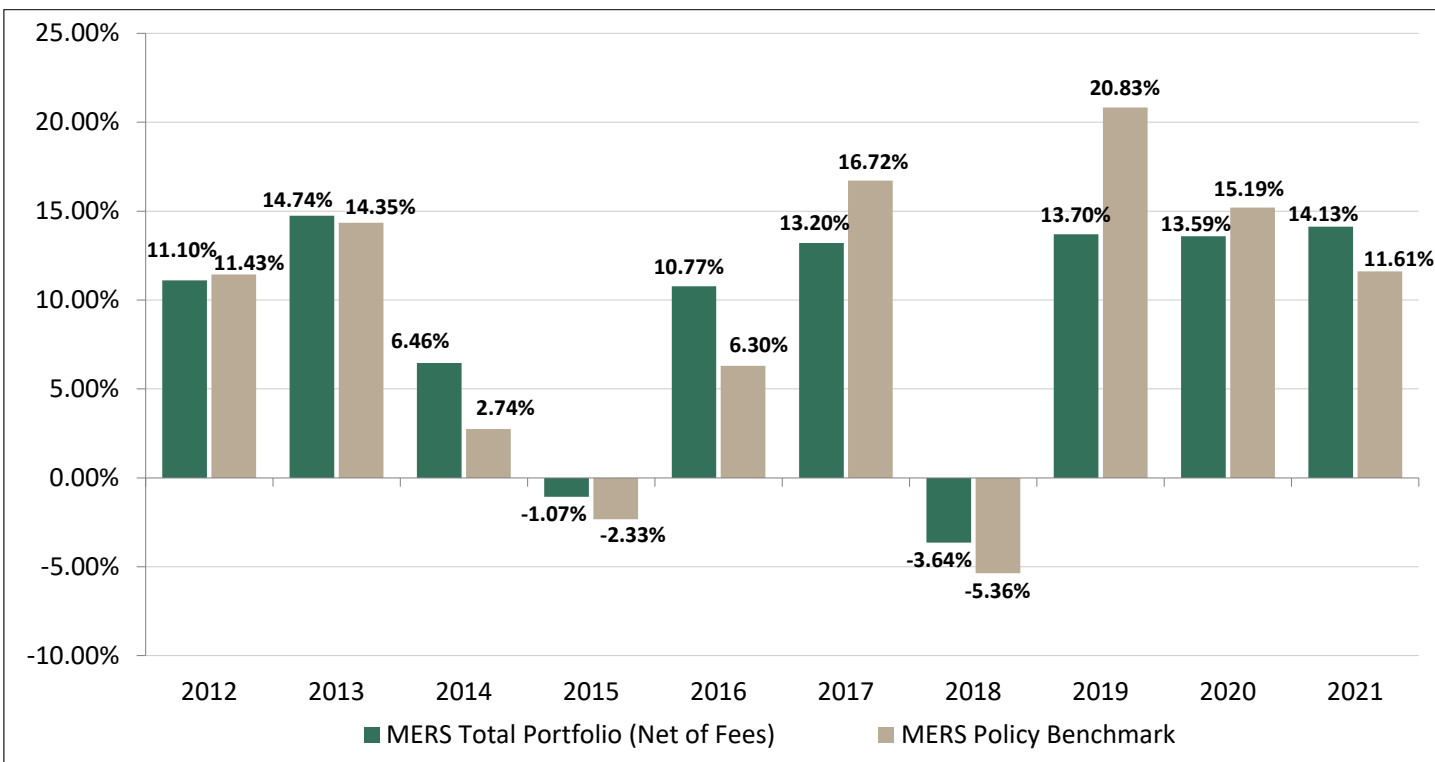


¹ MERS' Public Markets is made up of the Global Equity and Global Fixed Income Asset Classes

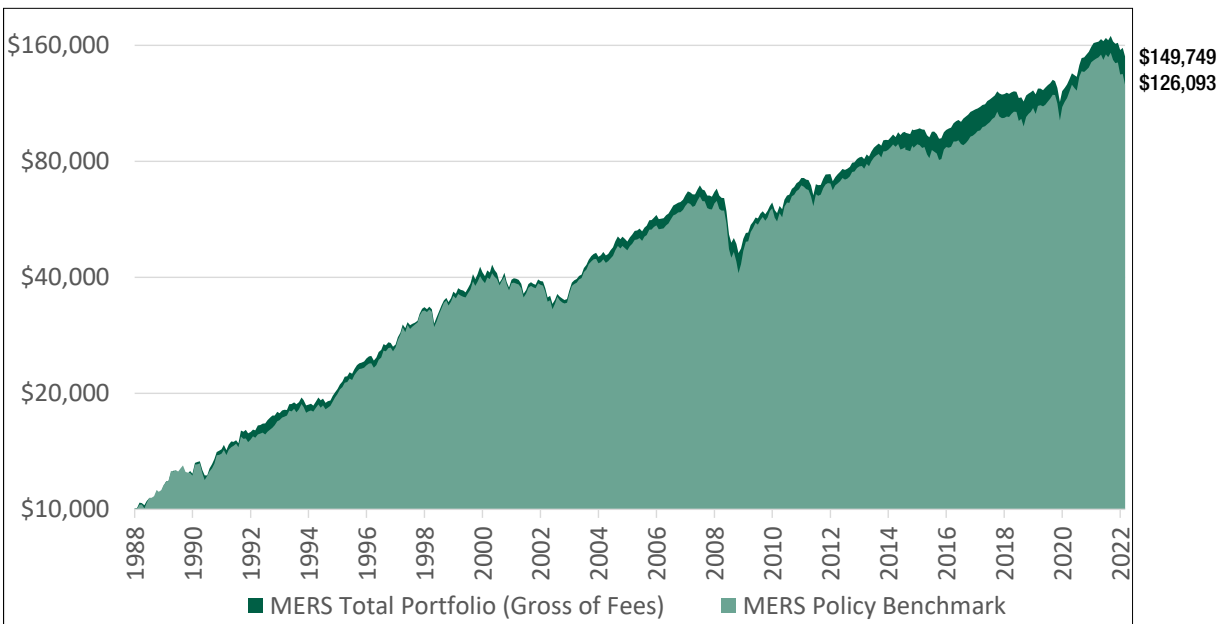
² 45% Russell 3000, 20% MSCI ACWI ex USA IMI (net), 25% Bloomberg Barclays US Aggregate, and 10% Bloomberg Barclays Global Aggregate ex U.S.

	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
MERS Total Portfolio - Gross of Fees (%)	-7.76	-11.58	-8.02	6.62	6.21	6.45	7.48
MERS Total Portfolio - Net of Fees (%)	-7.80	-11.64	-8.19	6.46	6.06	6.26	7.28
Policy Benchmark (%)	-12.71	-17.55	-14.53	4.21	5.55	5.50	6.17
Excess (Net) (%)	4.91	5.91	6.34	2.25	0.51	0.76	1.11

Calendar Year Performance – Last 10 Years

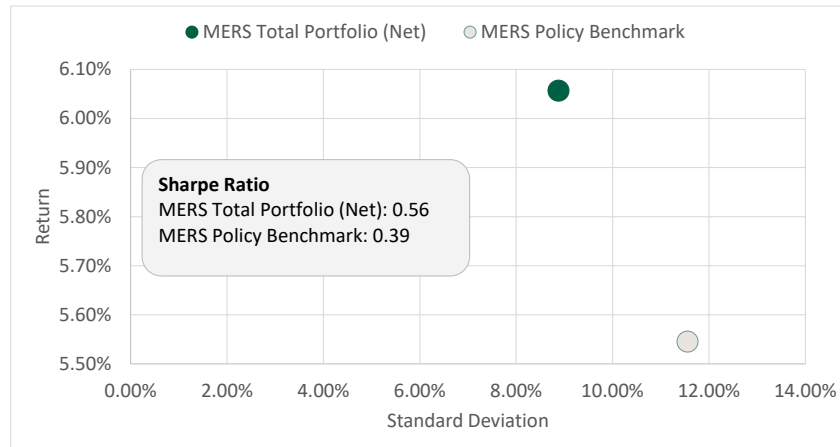


Growth of \$10,000 Comparison



5-Year

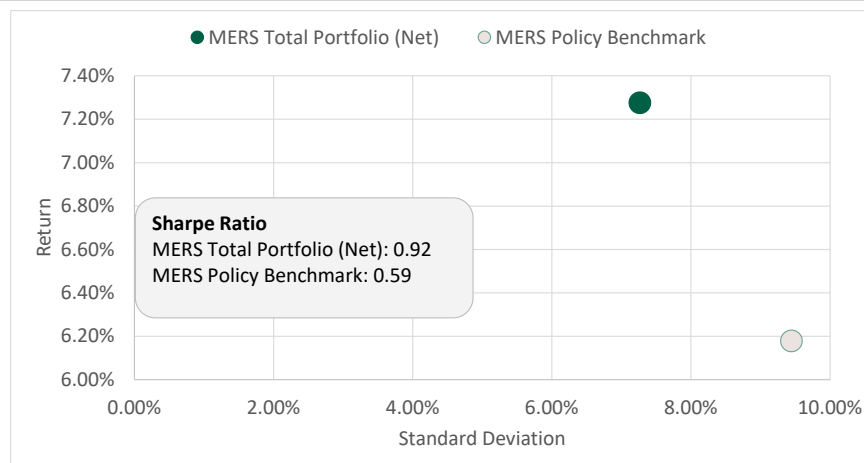
	Return	Standard Deviation	Downside Risk	Beta	R-Squared	Tracking Error
MERS Total Portfolio (Net)	6.06%	8.88%	6.64%	0.75	94.89	3.53%
MERS Policy Benchmark	5.55%	11.55%	8.76%	1.00	100	



	# of Months		Average Return		Up Capture	Down Capture
	Up	Down	Up	Down		
MERS Total Portfolio (Net)	40	20	1.88%	-2.18%	79.90%	74.10%
MERS Policy Benchmark	40	20	2.28%	-3.05%		

10-Year

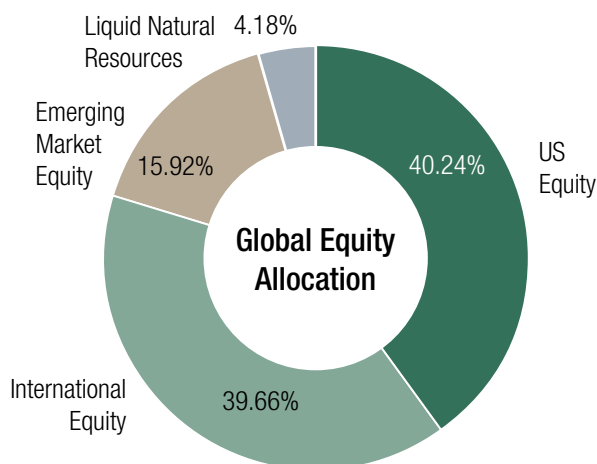
	Return	Standard Deviation	Downside Risk	Beta	R-Squared	Tracking Error
MERS Total Portfolio (Net)	7.28%	7.27%	5.46%	0.74	92.11	3.20%
MERS Policy Benchmark	6.18%	9.44%	7.09%	1.00	100.00	



	# of Months		Average Return		Up Capture	Down Capture
	Up	Down	Up	Down		
MERS Total Portfolio (Net)	83	37	1.65%	-1.73%	83.30%	67.70%
MERS Policy Benchmark	81	39	1.94%	-2.38%		

Market Value	\$6,277,386,589
Assets – % of Portfolio	51.40%

Sub Asset Class	Market Value
US Equity	\$2,526,006,254
International Equity	\$2,489,461,945
Emerging Market Equity	\$999,193,672
Liquid Natural Resources	\$262,724,718
Total	\$6,277,386,589



Performance (Net)

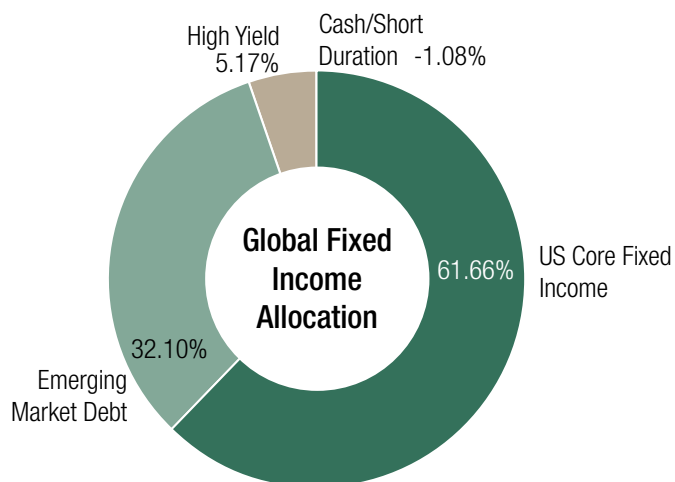
	Market Value	% OF PLAN	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Global Equity	\$6,277,386,589	51.40	-14.58	-19.43	-15.82	4.97	5.39	5.94	8.58
<i>Global Equity Policy Blend¹</i>			-15.96	-20.46	-15.70	7.24	8.10	7.67	9.84
<i>MSCI ACWI</i>			-15.66	-20.18	-15.75	6.21	7.00	6.98	8.76
US Equity	\$2,526,006,254	20.68	-15.27	-19.67	-11.18	8.34			
<i>Russell 3000</i>			-16.67	-20.94	-13.04	10.17			
US Large Cap Equity	\$1,503,506,911	12.31	-15.33	-19.14	-9.39	9.96	10.76	11.07	13.45
<i>Russell 1000</i>			-16.10	-19.96	-10.62	10.60	11.31	11.14	12.96
US Mid Cap Equity	\$339,429,686	2.78	-15.38	-19.61	-14.72	6.86	7.02	6.86	10.32
<i>Russell Midcap</i>			-16.85	-21.57	-17.30	6.59	7.96	8.04	11.29
US Small Cap Equity	\$45,836,680	0.38	-13.70	-18.90	-15.40	7.74	7.49	7.31	9.81
<i>Russell 2000</i>			-17.20	-23.43	-25.20	4.21	5.17	5.91	9.35
US Micro Cap Equity	\$304,325,402	2.49	-14.71	-21.75	-15.78	7.38	5.37	5.78	9.64
<i>Russell Microcap</i>			-18.96	-25.11	-30.73	5.05	4.55	4.94	9.04
International Equity	\$2,489,461,945	20.38	-14.80	-21.08	-19.28	1.72			
<i>MSCI World ex USA IMI</i>			-15.15	-19.54	-17.73	1.72			
International Large Cap Equity	\$1,877,943,276	15.38	-13.97	-20.35	-18.41	1.00	1.86		
<i>MSCI World ex USA</i>			-14.66	-18.76	-16.76	1.70	2.66		
International Small Cap Equity	\$611,518,669	5.01	-16.97	-22.98	-21.54	3.45	3.68	6.06	9.40
<i>MSCI World ex USA Small Cap</i>			-17.94	-23.87	-23.02	1.97	2.16	3.87	6.70
Emerging Market Equity	\$999,193,672	8.18	-12.85	-19.50	-22.01	2.56	1.90	3.30	4.03
<i>MSCI Emerging Markets IMI</i>			-12.10	-17.94	-24.75	1.15	2.33	2.76	3.20
Emerging Market Large Cap Equity	\$489,516,208	4.01	-11.70	-18.60	-26.11	0.31	1.62	2.47	2.32
<i>MSCI Emerging Markets</i>			-11.45	-17.63	-25.28	0.57	2.18	2.79	3.06
Emerging Market Small Cap Equity	\$311,743,666	2.55	-13.05	-21.35	-17.54	8.87	4.71	6.09	
<i>MSCI Emerging Markets Small Cap</i>			-16.41	-20.03	-20.72	5.78	3.48	2.78	
Frontier Market Equity	\$197,933,798	1.62	-12.48	-15.83	-13.88	0.49	-0.52	1.44	4.41
<i>MSCI Frontier Markets</i>			-13.77	-20.59	-17.33	0.57	1.65	1.85	5.07
Liquid Natural Resources	\$262,724,718	2.15	-18.75	-6.89	-5.11				
<i>Policy Benchmark²</i>			-12.71	-17.55	-14.53				

¹ 70% Russell 3000, 30% MSCI ACWI ex USA IMI (net)

² 45% Russell 3000, 20% MSCI ACWI ex USA IMI (net), 25% Bloomberg Barclays US Aggregate, and 10% Bloomberg Barclays Global Aggregate ex U.S.

Market Value	\$2,428,315,059
Assets – % of Portfolio	19.88%

Sub Asset Class	Market Value
US Core Fixed Income	\$1,530,320,409
Emerging Market Debt	\$796,567,951
High Yield	\$128,188,642
Cash/Short Duration	(\$26,761,942)
Total	\$2,428,315,059



Performance (Net)

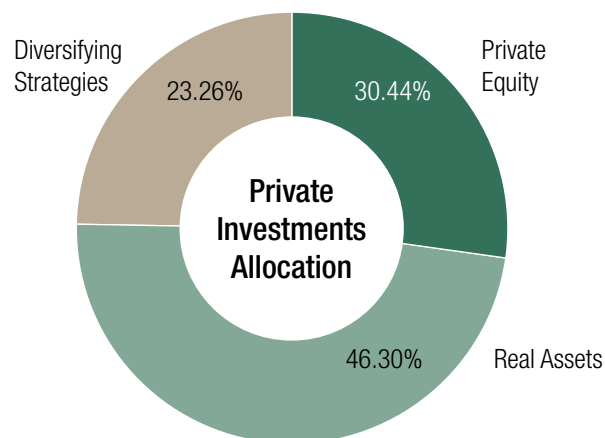
	Market Value	% OF PLAN	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Global Fixed Income ex Cash	\$2,455,077,001	20.10	-6.14	-12.02	-12.63	0.39	1.89	2.87	2.74
<i>Global Fixed Income Policy Blend¹</i>			-6.53	-12.13	-12.78	-2.11	0.14	0.86	0.52
<i>Bloomberg Barclays Global Aggregate</i>			-8.26	-13.91	-15.25	-3.22	-0.55	0.50	0.11
US Core Fixed Income	\$1,530,320,409	12.53	-3.03	-7.70	-7.65	-0.45	1.15	1.48	1.89
<i>Bloomberg Barclays U.S. Aggregate</i>			-4.69	-10.35	-10.29	-0.93	0.88	1.42	1.54
Emerging Market Debt	\$796,567,951	6.52	-11.61	-19.47	-21.18	-4.03	-0.90	2.19	2.32
<i>JP Morgan EMBI Global Diversified</i>			-11.43	-20.31	-21.22	-5.22	-1.19	1.33	2.21
High Yield	\$128,188,642	1.05	-8.44	-13.41	-12.19				
<i>Bloomberg Barclays U.S. Corporate High Yield</i>			-9.83	-14.19	-12.81				
Cash/Short Duration²	-\$26,761,942	-0.22	-0.13	-0.09	0.29	1.31	1.40	1.30	1.12
<i>91 Day Treasury Bill</i>			0.10	0.14	0.17	0.63	1.11	0.89	0.64

¹ 70% Bloomberg Barclays U.S. Aggregate, 30% Bloomberg Barclays Global Aggregate ex U.S.

² Cash/Short Duration market value reflects collateral for futures positions

Market Value	\$3,507,984,087
Assets – % of Portfolio	28.72%

Sub Asset Class	Market Value
Private Equity	\$1,067,948,266
Real Assets	\$1,624,421,314
Diversifying Strategies	\$816,233,282
Currency Hedge	(\$618,775)
Total	\$3,507,984,087



Performance (Net)

	Market Value	% OF PLAN	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Private Investments	\$3,507,984,087	28.72	5.75	6.60	14.72	14.93			
<i>Public Markets</i>			-12.30	-17.26	-14.86	3.89			
<i>Policy Benchmark¹</i>			-12.71	-17.55	-14.53	4.21			
Private Equity	\$1,067,948,266	8.74	7.15	12.78	33.15	29.75	23.59	18.65	16.56
<i>Private Equity Blend²</i>			-17.42	-24.04	-24.52	2.77	3.55	4.97	8.42
Real Assets	\$1,624,421,314	13.30	5.87	3.49	7.93	11.14	10.19	9.69	7.86
<i>Real Assets Blend³</i>			3.74	7.68	12.06	8.31	6.77	5.44	4.94
Diversified Real Assets	\$1,314,956,536	10.77	5.31	2.41	6.15	11.93	8.76		
<i>Real Assets Blend</i>			3.74	7.68	12.06	8.31	6.77		
Real Estate	\$308,004,749	2.52	8.41	8.68	16.37	11.47	11.96	11.95	12.80
<i>Real Estate Blend⁴</i>									
Timber	\$38,684,690	0.32	1.99	1.71	12.95	11.10	11.35	8.48	8.38
<i>S&P Global Timber & Forestry Index Net</i>			-15.49	-17.83	-12.91	8.95	5.74	6.87	8.86
Infrastructure	\$352,357,579	2.88	11.78	12.55	28.65	16.13	11.42	8.48	7.15
<i>Private Infrastructure Blend⁵</i>			-10.43	-10.88	-6.21	2.35	3.62	3.80	4.12
Commodities	\$280,148,313	2.29	-8.07	-19.57	-21.24	3.28	1.47	6.79	2.25
<i>Bloomberg Commodity Index Total Return</i>			-5.66	18.44	24.27	14.34	8.39	2.79	-0.82
Agriculture & Farmland	\$439,279,477	3.60	7.44	8.24	10.39	15.30	16.40	13.01	
<i>S&P Global Agribusiness Equity Index TR</i>			-15.62	-0.87	7.03	12.26	9.79	7.37	
Diversifying Strategies	\$816,233,282	6.68	3.15	4.93	8.72	9.83	7.05	6.06	7.19
<i>Diversifying Strategies Blend⁶</i>			-9.99	-15.15	-13.73	1.40	3.17	2.68	4.05

¹ 45% Russell 3000, 20% MSCI ACWI ex USA IMI (net), 25% Bloomberg Barclays US Aggregate, and 10% Bloomberg Barclays Global Aggregate ex U.S.

² 50% Russell 2000, 50% MSCI EAFE Small Cap (net)

³ 100% CPI + 3%

⁴ 100% NCREIF ODCE Value Weighted

⁵ 50% DJ Brookfield Global Infrastructure Index, 50% Bloomberg Barclays Global Inflation-Linked

⁶ 25% Russell 3000, 10% MSCI ACWI ex U.S. IMI (net), 45% Bloomberg Barclays U.S. Aggregate, 20% Bloomberg Barclays Global Aggregate ex U.S.

PDA Funds

Program	Assets	Participants	Average Account Size	Weighted Average Fee	Default Option
DC/Hybrid Plan	\$1,029,868,495	31,846	\$32,339	0.38%	Retirement Strategies
HCSP	\$345,414,036	33,383	\$10,347	0.38%	Retirement Strategies
457 Program	\$273,622,443	10,218	\$26,778	0.39%	Retirement Strategies
MERS IRA	\$7,889,490	823	\$9,586	0.39%	Retirement Strategies
TOTAL	\$1,656,794,464	76,270	\$21,723		

Institutional Funds

Program	Assets	Municipalities	Average Account Size	Weighted Average Fee
RHFV	\$1,292,871,045	320	\$4,040,222	0.46%
ISP	\$50,793,185	5	\$10,158,637	0.46%
TOTAL	\$1,343,664,230	325	\$4,134,351	

Investment Allocations

	PDA	Institutional Funds	Total
Retirement Strategies	\$1,204,611,422		\$1,204,611,422
Total Market Fund	\$41,533,327	\$1,342,592,244	\$1,384,125,571
Asset Allocation Portfolios	\$38,030,371	\$222,400	\$38,252,770
Asset Specific funds	\$345,341,447	\$849,587	\$346,191,034
Self-directed Brokerage	\$8,707,172		\$8,707,172
Other	\$18,570,725		\$18,570,725
TOTAL	\$1,656,794,464	\$1,343,664,230	\$3,000,458,695

Program Highlights

- Added default option for RHFV plan (Total Market Portfolio)
- RHFV full plan reset (completed June 2021)
- Completed Record Keeper RFP by continuing relationship with Alerus Retirement Services
- Entered into relationship with Vergence Institutional Partners to review plans

Future Research

- RFP for Target Date Funds Provider (Q3 2022)
- Review investment menu and design (Q4 2022)
- RFP for Stable Value Fund (Q1 2023)
- Review options for Managed Account Solution

Retirement Strategies for PDA Accounts

MERS Retirement Strategies	Assets	Expense Ratio	1 Year	3 Year	5 Year	10 Year
Retirement Income Fund	\$19,406,040	0.37%	-8.17	2.28	3.10	-8.17
MERS 2010 Retirement Strategy	\$23,769,174	0.37%	-8.52	2.51	3.42	-8.52
MERS 2015 Retirement Strategy	\$75,693,781	0.38%	-9.40	3.25	4.11	-9.40
MERS 2020 Retirement Strategy	\$90,864,259	0.38%	-10.60	3.69	4.56	-10.60
MERS 2025 Retirement Strategy	\$194,644,504	0.39%	-11.71	3.93	4.82	-11.71
MERS 2030 Retirement Strategy	\$158,763,058	0.39%	-12.67	4.07	5.10	-12.67
MERS 2035 Retirement Strategy	\$157,586,412	0.39%	-13.64	4.24	5.36	-13.64
MERS 2040 Retirement Strategy	\$142,005,361	0.39%	-14.49	4.56	5.69	-14.49
MERS 2045 Retirement Strategy	\$117,805,354	0.39%	-15.25	5.01	6.01	-15.25
MERS 2050 Retirement Strategy	\$98,067,311	0.39%	-15.59	4.97	5.98	-15.59
MERS 2055 Retirement Strategy	\$74,785,954	0.39%	-15.58	4.99	6.01	-15.58
MERS 2060 Retirement Strategy	\$45,860,224	0.39%	-15.54	5.07	6.06	-15.54
MERS 2065 Retirement Strategy	\$5,359,990	0.39%	-15.39			
TOTAL	\$1,204,611,422					

Premium Select Options – Portfolios Built for You

MERS Portfolio Options	Assets	Expense Ratio	1 Year	3 Year	5 Year	10 Year
MERS Total Market Portfolio	\$1,384,125,571	0.56%	-8.50	6.07	5.66	6.99
<i>MERS Policy Benchmark</i>			-14.53	4.21	5.55	6.17
MERS Global Stock Portfolio (100/0)	\$13,381,033	0.34%	-16.54	4.96	6.09	
<i>Blended Benchmark</i>			-15.75	6.21	7.00	
MERS Established Market Portfolio (60/40)	\$12,217,029	0.34%	-13.34	2.80	4.07	6.31
<i>Blended Benchmark</i>			-13.43	4.14	5.45	6.82
MERS Diversified Bond Portfolio (0/100)	\$12,654,709	0.33%	-8.74	-1.47	0.39	1.49
<i>Bloomberg U.S. Aggregate Bond Index</i>			-10.29	-0.93	0.88	1.54
TOTAL	\$1,422,378,342					

Premium Select Options – Funds to Build Your Own Portfolio

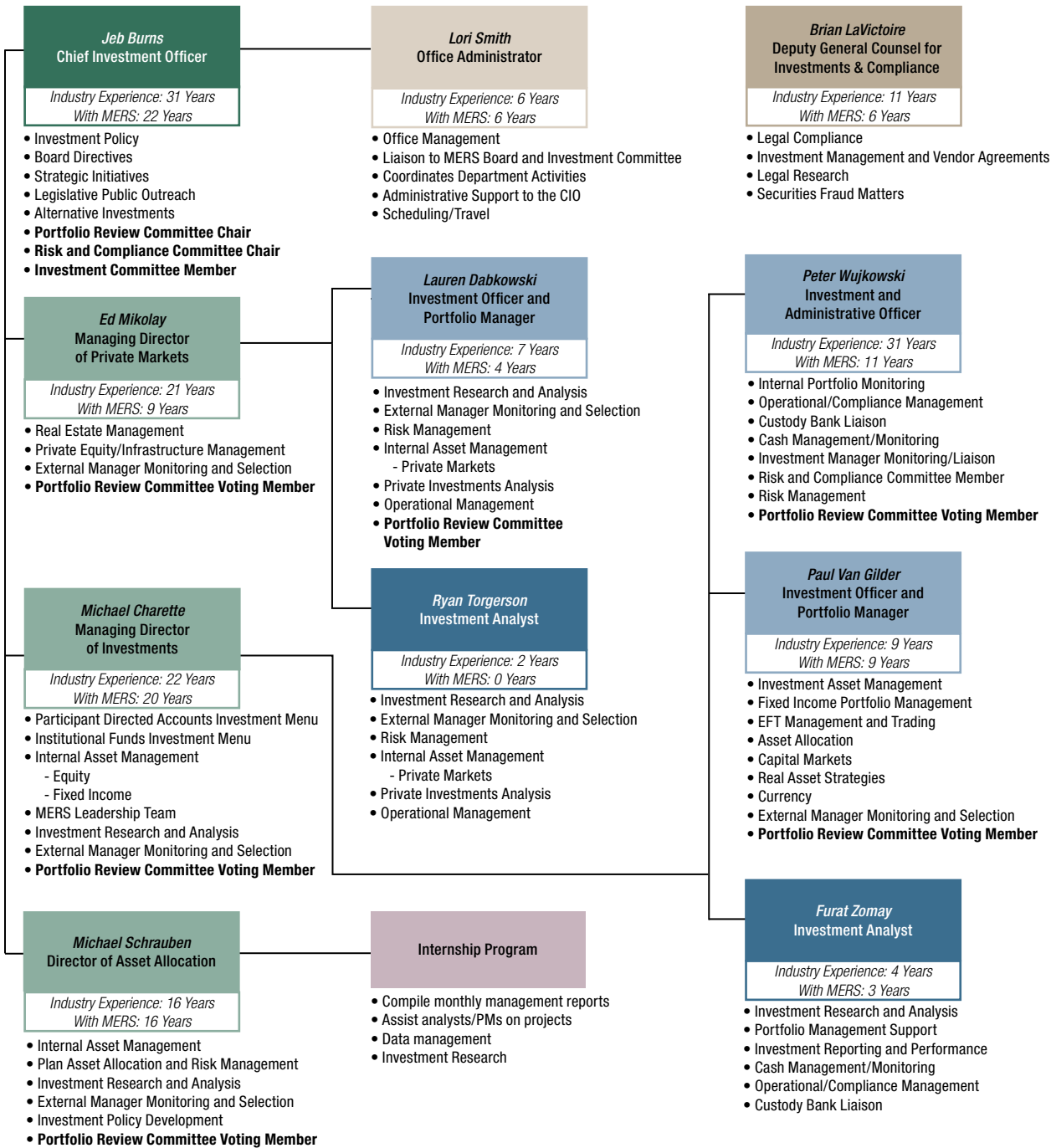
MERS Portfolio Options	Assets	Expense Ratio	1 Year	3 Year	5 Year	10 Year
Large Cap Stock Index Fund	\$164,679,392	0.33%	-10.85	10.16	10.93	12.54
<i>S&P 500 Index</i>			-10.62	10.60	11.31	12.96
Mid Cap Stock Index	\$33,431,471	0.33%	-14.84	6.60	6.75	10.66
<i>S&P 400 Index</i>			-14.64	6.87	7.02	10.90
Small Cap Stock Index	\$20,310,935	0.33%	-17.04	7.46	7.26	
<i>S&P 600 Index</i>			-16.81	7.30	7.20	
International Stock Index	\$13,896,345	0.36%	-18.42	0.21	1.55	4.77
<i>MSCI EAFE Net Dividend Index</i>			-17.77	1.07	2.20	5.40
Emerging Market Stock	\$3,872,067	0.45%	-25.37	0.90	0.61	
<i>Blended Benchmark</i>			-25.28	0.57	2.01	
Real Estate Stock	\$6,161,291	0.38%	-13.06	2.19	4.03	6.35
<i>Dow Jones U.S. Select REIT Index</i>			-6.41	2.54	4.28	6.61
Bond Index	\$17,548,865	0.35%	-9.99	-0.52	0.91	1.27
<i>Bloomberg U.S. Aggregate Bond Index</i>			-10.29	-0.93	0.88	1.54
High Yield Bond	\$4,765,363	0.48%	-13.31	-0.95	1.20	3.56
<i>Bloomberg U.S. High Yield Net Return Index</i>			-13.60	-0.70	1.49	3.61
Short-Term Income	\$20,363,788	0.33%	-2.85	0.54	1.02	0.69
<i>Bloomberg U.S. Treasury: 1-3 Year</i>			-3.51	0.18	0.90	0.77
Stable Value	\$61,161,517	0.58%	1.70	2.03	2.01	1.98
<i>ICE BofA US 3 Month Treasury Bill Index G001</i>			0.17	0.63	1.11	0.64
TOTAL	\$346,191,034					

APPENDIX

Investment Decision Making Roles and Responsibilities

<p>MERS BOARD</p>	<ul style="list-style-type: none"> • Is the System's fiduciary; • Appoints public members with investment expertise to serve on the Investment Committee; • Appoints one Board member for two years to observe Investment Committee meetings (observer does not have voting privileges); • Monitors activity of the Investment Committee; • Approves investment governance documents (Investment Guidelines, Defined Benefit Investment Policy Statement, and Participant Directed Accounts & Institutional Funds Investment Policy Statement); • Sets the Portfolio's asset class allocation ranges; • Establishes the long-term actuarial investment return assumption; and • Approves the Portfolio's Policy Benchmark.
<p>INVESTMENT COMMITTEE</p>	<ul style="list-style-type: none"> • Contains three voting Board members, including two public members with investment expertise; • Includes CEO and CIO (both non-voting members); • Serves as the Board's investment policy development arm; • Monitors investment management activity and policy recommendations developed by the Office of Investments; • Approves PRC investment recommendations to hire/terminate investment managers; • Approves investments above PRC discretionary size limits; • Provides advice on investment activities including: industry best practices, fiduciary duties, and Portfolio risk expectations of the Board; and • Monitors Portfolio risk, asset allocation, and investment performance.
<p>PORTFOLIO REVIEW COMMITTEE</p>	<ul style="list-style-type: none"> • Office of Investment's decision-making body chaired by the CIO and consisting of Office staff; • Voting members are appointed by the CIO; • Reports decisions and provides recommendations to the Investment Committee; • Determines and implements the Portfolio's asset allocation within Board-approved allocation ranges; • Approves and implements investments up to discretionary size limits provided in this Policy; and • Develops and maintains PRC operating guidelines.
<p>OFFICE OF INVESTMENTS</p>	<ul style="list-style-type: none"> • Carries out all investment activity on behalf of the System; including policy documentation for Board approval; • Hires/terminates investment consultants, vendors, and the custodial bank with CEO approval; • Provides a quarterly report on the Portfolio's investment activities, allocation, and performance; • Reports any material changes within the Portfolio to the Investment Committee and the Board; • Internally manages a portion of the Portfolio across both Public and Private Investments; • Monitors performance and determines courses of action for external investment managers; • Monitors compliance with statutory, regulatory, and policy limitations; • Trade execution, settlement, and daily cash movements as needed; and • Conducts its affairs in a manner that reflects the highest standards of ethical conduct, and complies with CFA Institute Code of Ethics and Standards of Professional Conduct (Appendix).
<p>MERS' INVESTMENT MANAGEMENT RISK AND COMPLIANCE COMMITTEE</p>	<ul style="list-style-type: none"> • Provides investment and compliance oversight outside of the Office of Investments; • Monitors operational, market, and regulatory issues that may materially impact portfolio performance or put MERS at risk of regulatory sanctions; • Promotes cross-office discussion regarding varying potential risks including prevention and solutions; and • Consists of CEO, CIO, Financial Officer, Deputy General Counsel for Investments and Compliance, Internal Auditor, Investment and Administrative Officer, and Analysts from the Office of Investments.

Organizational Chart



Guiding Principles

- Collaborative team environment
- Robust collegial debate and cognitive diversity is critical
- Progressive and willing to deviate from conventional wisdom
- Commitment to continuous improvement and efficiency gains
- Relentless pursuit of fiduciary excellence

This publication is designed to provide descriptive information only. Investors should research all possible investment choices. Please make independent investment decisions carefully and seek the assistance of independent experts where appropriate. We recommend investors define their goals, risk tolerance, time horizon, and investment objectives to determine whether this fund is appropriate for you.

Investors should read the fund summary sheets and carefully consider the investment objective, risks, and fees of the fund before investing. The fund summary sheets may be found on the MERS website at www.mersofmich.com. To request the fund summary sheets, please contact the MERS Service Center at 800.767.6377.

This publication contains a summary description of MERS benefits, policies or procedures. MERS has made every effort to ensure that the information provided is accurate and up to date as of 06/30/2022. If this publication conflicts with the relevant provisions of the Plan Document, the Plan Document Controls. MERS, as a governmental plan, is exempted by state and federal law from registration with the SEC. However, it employs registered investment advisors to manage the trust fund in compliance with Michigan Public Employee Retirement System Investment Act. Past performance is not a guarantee of future returns. Please make independent investment decisions carefully and seek the assistance of independent experts when appropriate.

