



QUARTERLY INVESTMENT REPORT

March 2023



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“ *Investing is a business of making mistakes: losers make big mistakes, winners make small mistakes.*
– Ned Davis ”

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

Financial markets continued their rebound into the first quarter of 2023. The S&P 500 returned 7.48% amid optimism that the Federal Reserve will soon halt interest rate hikes. Growth stocks were the biggest beneficiaries as the Nasdaq had its best quarter since January 2001 and returned 20.77%. Economic data has continued to cool as year-over-year inflation has declined every month from the 9.10% high last June to 5.0% in March of 2023. March payroll numbers grew by 236,000 and were in line with estimates. The total was the lowest monthly gain since December 2020, as signs increasingly signal that labor market growth may be in the early stages of a slowdown. The unemployment rate returned to a near 50-year low of 3.50% as labor force participation increased to its highest level since before the Covid pandemic. The Federal Reserve raised short terms rates twice during the quarter; however, the 10-year U.S. Treasury decreased by 40 bps to 3.47%, further inverting the yield curve. Consensus believes this is a market signal pointing toward slower growth and eventually, rate cuts in the foreseeable future. Developed international equities were the top-performing asset class globally, as the MSCI EAFE index returned 8.65%; Europe led these strong returns as the MSCI Europe index returned 10.40%. Emerging markets delivered a 3.97% return during the quarter, lagging developed markets. The labor market, inflation, and financial conditions will be monitored closely to gauge the next step in Federal Reserve policy for the remainder of 2023.

Portfolio Performance Review

MERS' Total Portfolio returned 4.12% (net) for the first quarter, underperforming the Policy Benchmark by 147 bps, with portfolio diversification providing mixed results. The Global Equity Portfolio returned 5.45%, underperforming the Global Equity Policy Blend by 154 bps primarily due to its underweight to large-cap equities. The MERS U.S. Equity Portfolio underperformed the Russell 3000 benchmark by 158 bps. Being overweight to U.S. Mid, Small, and Micro Cap equities detracted value to the portfolio while selection within Micro Cap added value. The MERS International Equity Portfolio underperformed its benchmark by 224 bps due to its underweight to Europe, the best-performing region. The MERS Emerging Market Equity Portfolio outperformed its benchmark by 102 bps. The Global Fixed Income Portfolio returned 3.11% in the quarter, beating the Global Fixed Policy Blend by 12 bps. An overweight to high yield contributed to the outperformance. The Private Investments Portfolio delivered a return of 2.61%. The performance of private market investments typically lags, resulting in underperformance during up markets. MERS' Defined Benefit (DB) portfolio assets are \$11.22 billion, and MERS' total assets are \$14.52 billion.

Risks and Trends

Economic Risks

- Covid-19 resurgence | China
- 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 | Under investment in traditional energy sector

Projects and Initiatives

- Incorporating ETFs into the asset allocation program and internal strategies
- Researching the role of active management in sub-asset classes
- Private markets restructure
- 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	-49.56%	
Europe Equity	-18.83%	
Asia Pacific Equity		48.95%
EM Equity		43.28%
US Treasury	-4.92%	
EMD	-1.36%	
US HY	-9.61%	

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.

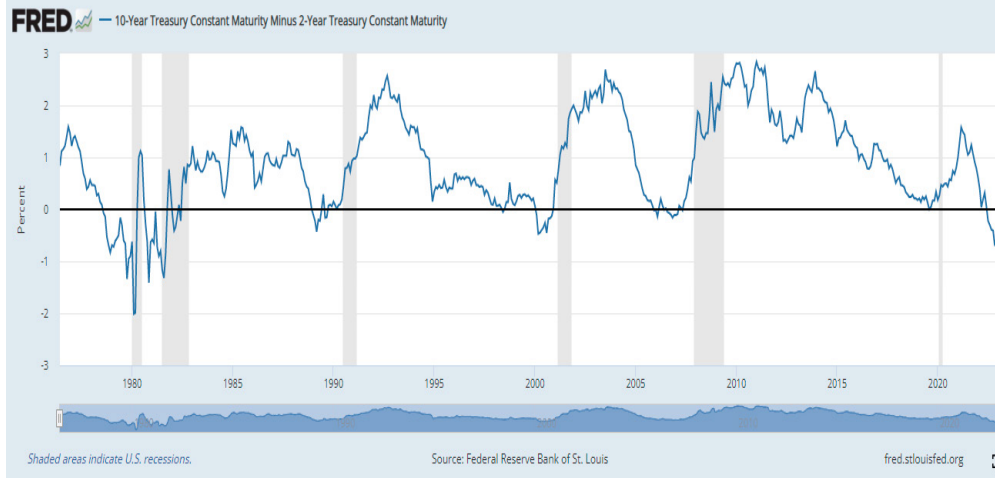
Equity Market Outlook

- Valuation multiples are still historically elevated in the U.S., and current earnings remain above estimated trend earnings contributing to that market's overvaluation.
- 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 Asia Pacific and Emerging Markets.
- Asia Pacific 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

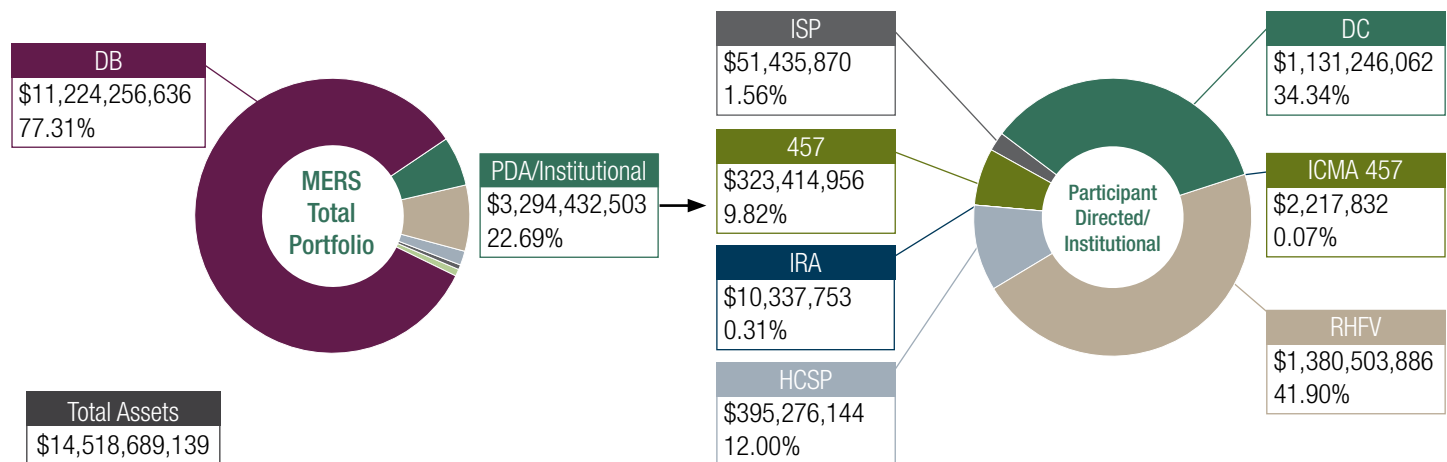
- All fixed income asset classes are currently overvalued on MERS valuation models
- Rising cash rates throughout 2022 has increased discount rates for longer duration assets such as US Treasuries and EM Debt.
- EM Debt is the most attractively priced fixed income segment, with spreads above long term averages.
- US high yield credit is overvalued due to spreads that are below historical averages, and the absence of a meaningful risk premium being priced into that market as of year-end.

Chart of the Quarter Source: Federal Reserve Bank of St. Louis



A yield curve plots the yield of U.S. treasuries with equal credit quality against their maturities. Typically, a yield curve is upward sloping, as bonds with shorter maturities have lower yields than bonds with longer maturities. A yield curve inverts when yields on short-dated bonds rise above longer-term ones. An inversion occurs when the market is pricing in slower economic growth, resulting in future interest rate cuts by the Federal Reserve. The most common measure of an inversion is the 2yr/10yr spread, as depicted in the chart. Historically, a yield curve inversion has been a predictor of a recession. The 2yr/10yr yield curve has inverted six to 24 months before each recession. The yield curve has currently been inverted for 193 straight days as of 03/31/23.

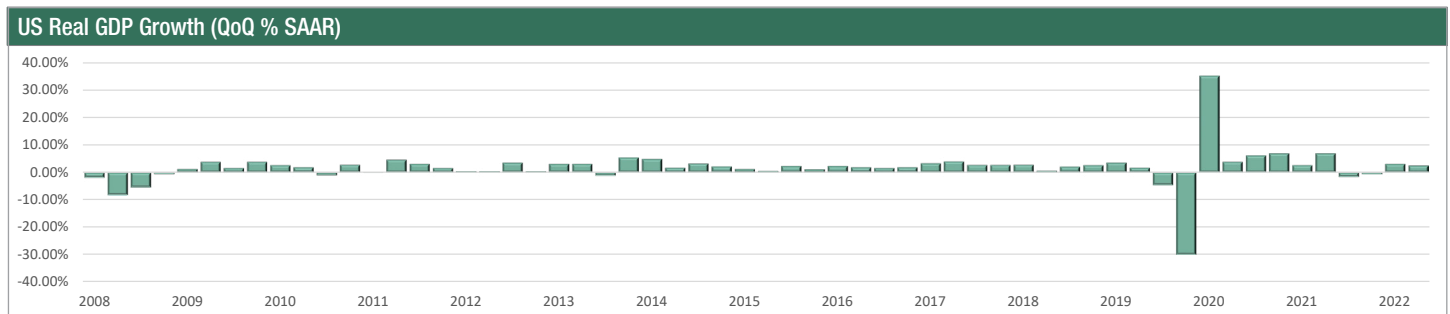
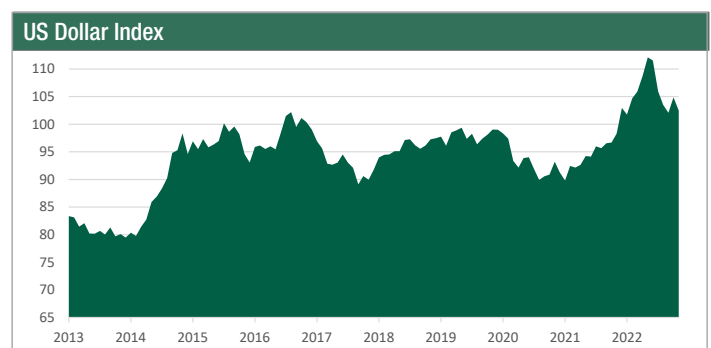
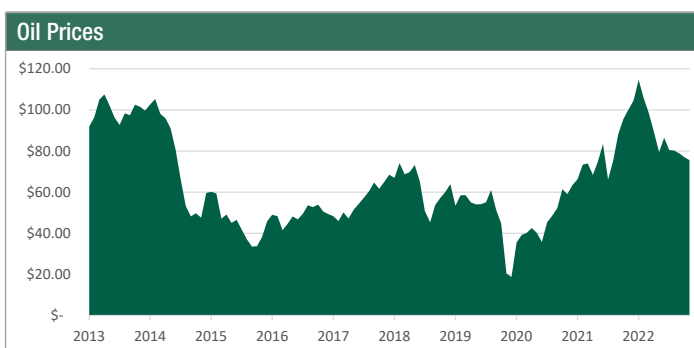
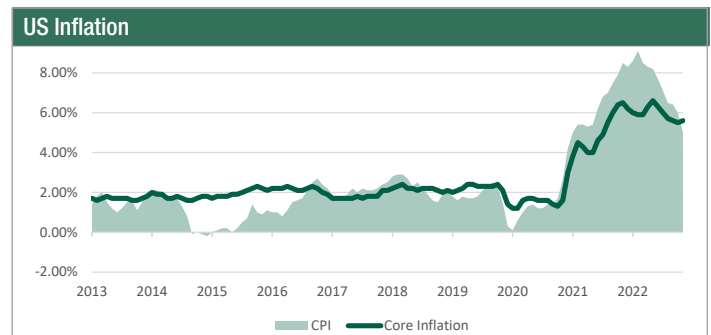
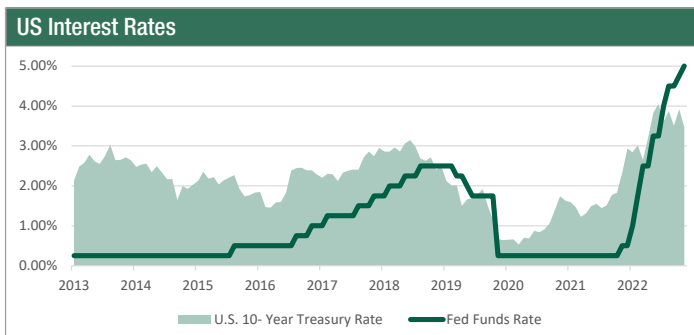
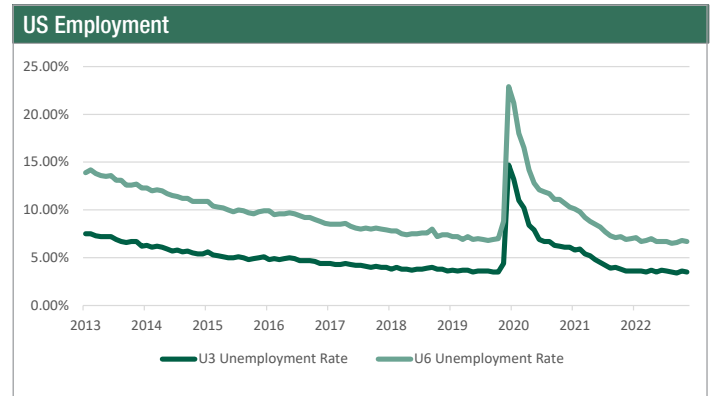
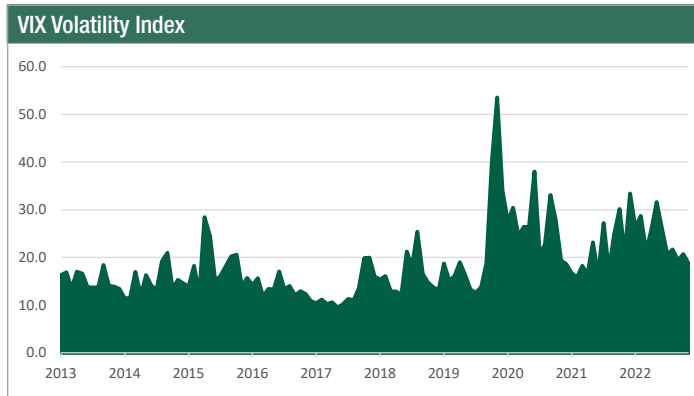
Assets by Program



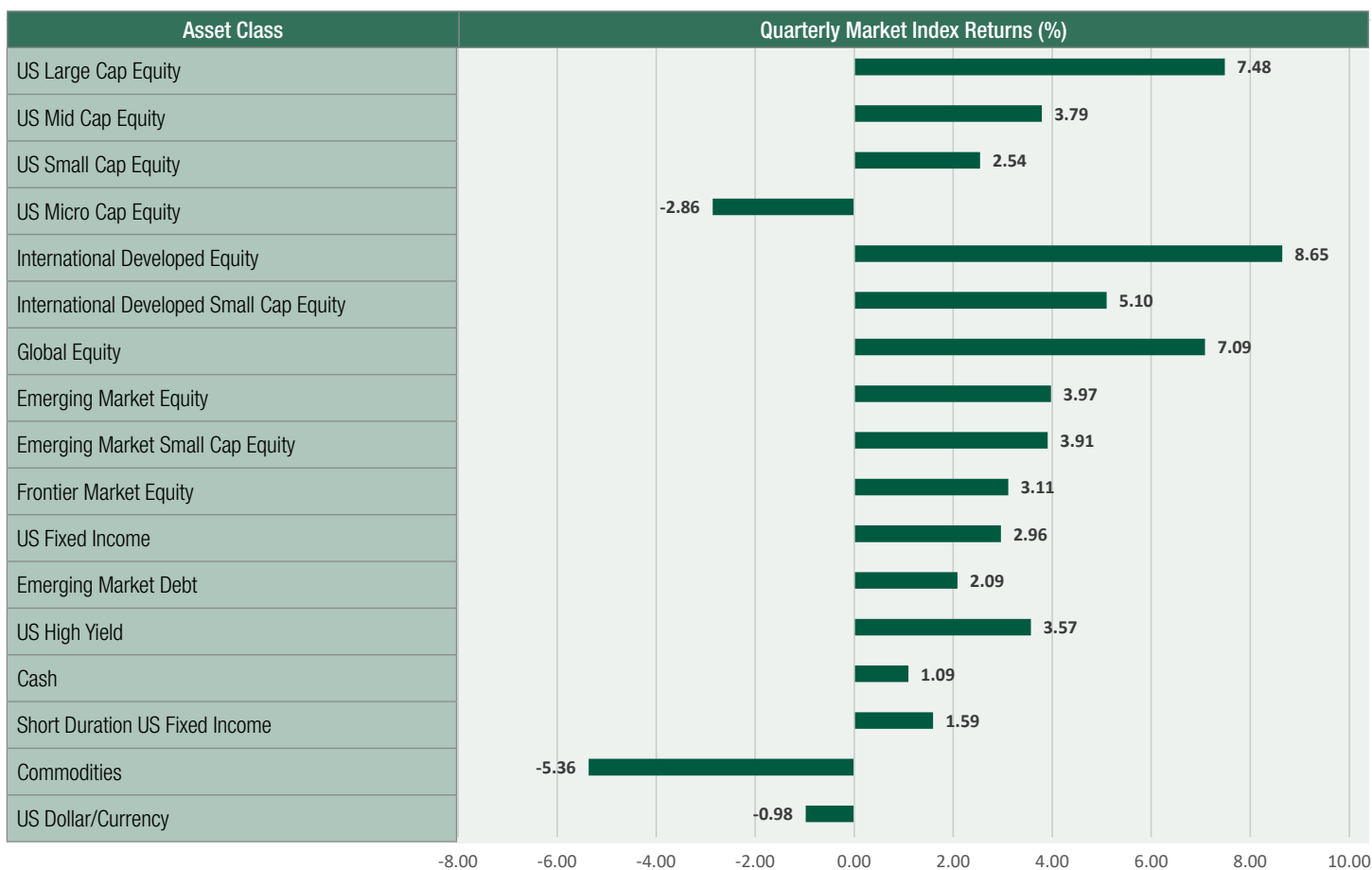
Market Indicators	Current	Prior Quarter
10 Year Treasury Yield	3.47%	3.87%
Fed Funds Rate	5.00%	4.50%
Crude Oil	\$75.7 /barrel	\$80.3 /barrel
Gold	\$1,969.3 /oz.	\$1,824.0 /oz.
30 Year Fixed Mortgage Rates	6.81%	6.66%
US Investment Grade Credit Spread	1.38%	1.30%
US High Yield Credit Spread	4.55%	4.69%
US Leading Economic Indicators	-6.50%	-6.10%

Economic Releases	Current	Prior Quarter
ISM Manufacturing	46.30	48.40
ISM Non-Manufacturing	51.20	49.20
U of M Consumer Sentiment	62.00	59.70
US Real GDP*	0.90%	1.90%
Eurozone Real GDP*	1.80%	2.40%
UK GDP*	0.60%	2.00%
Japan GDP*	0.40%	1.50%
China GDP*	2.90%	3.90%

* All GDP data is lagged 1 quarter

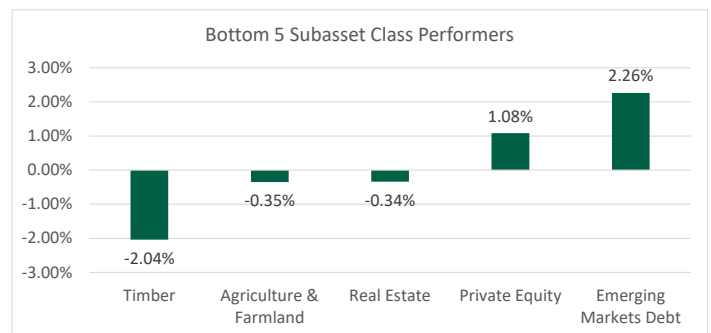
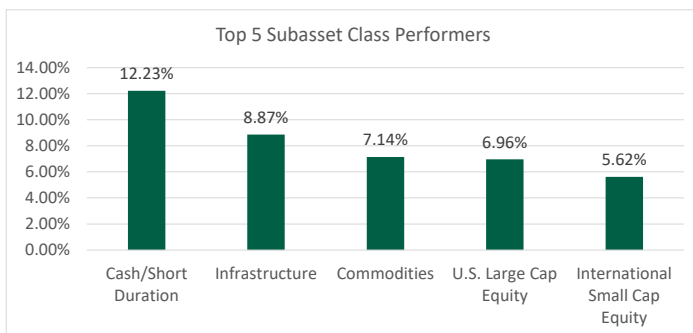
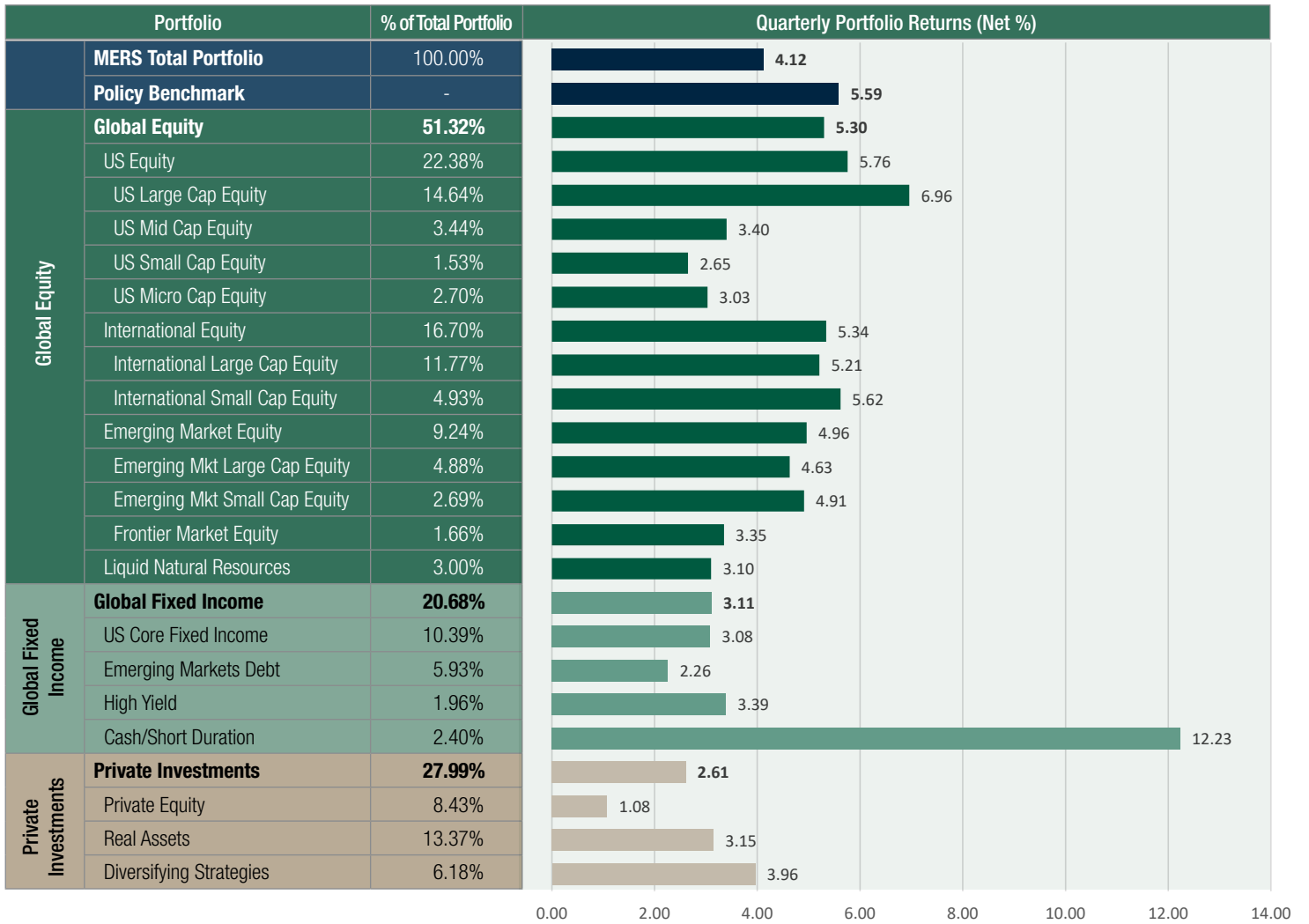


Quarterly Market Performance Review



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	7.48	7.48	-7.75	18.58	11.17	12.41	12.23
S&P 400	US Mid Cap Equity	3.79	3.79	-5.17	22.07	7.64	9.92	9.78
S&P 600	US Small Cap Equity	2.54	2.54	-8.88	21.64	6.24	9.58	9.82
Russell Microcap	US Micro Cap Equity	-2.86	-2.86	-17.97	17.15	2.93	7.66	7.27
MSCI EAFE	International Developed Equity	8.65	8.65	-0.79	13.65	4.12	6.82	5.60
MSCI EAFE Small Cap	International Developed Small Cap Equity	5.10	5.10	-9.37	12.57	1.29	5.67	6.25
MSCI ACWI IMI	Global Equity	7.09	7.09	-7.21	16.19	7.13	9.55	8.53
MSCI Emerging Markets	Emerging Market Equity	3.97	3.97	-10.39	8.17	-0.57	5.30	2.36
MSCI Emerging Markets Small Cap	Emerging Market Small Cap Equity	3.91	3.91	-10.63	21.06	2.11	6.10	3.45
MSCI Frontier Markets Index	Frontier Market Equity	3.11	3.11	-17.37	8.13	-2.75	3.26	2.78
Bloomberg U.S. Aggregate	US Fixed Income	2.96	2.96	-4.78	-2.77	0.91	0.88	1.36
JPMorgan EMBI Global Diversified Index	Emerging Market Debt	2.09	2.09	-6.75	-0.68	-0.86	0.97	1.65
ICE BofA Merrill Lynch Global High Yield	US High Yield	3.57	3.57	-3.34	5.91	3.21	5.08	4.10
91 Day Treasury Bill	Cash	1.09	1.09	2.60	0.91	1.38	1.18	0.84
Bloomberg 1-3 Year Treasury	Short Duration US Fixed Income	1.59	1.59	0.23	-0.84	1.09	0.81	0.80
Bloomberg Commodity Index Total Return	Commodities	-5.36	-5.36	-12.49	20.82	5.36	5.59	-1.72
Bloomberg Dollar Spot Index	US Dollar/Currency	-0.98	-0.98	4.27	3.49	2.64	1.16	2.14

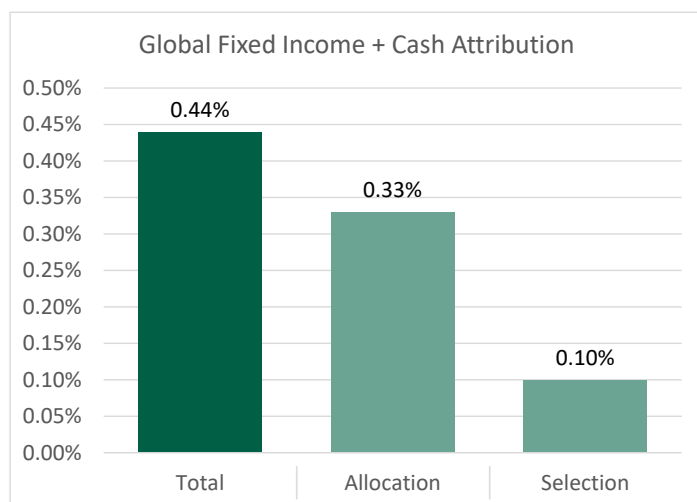
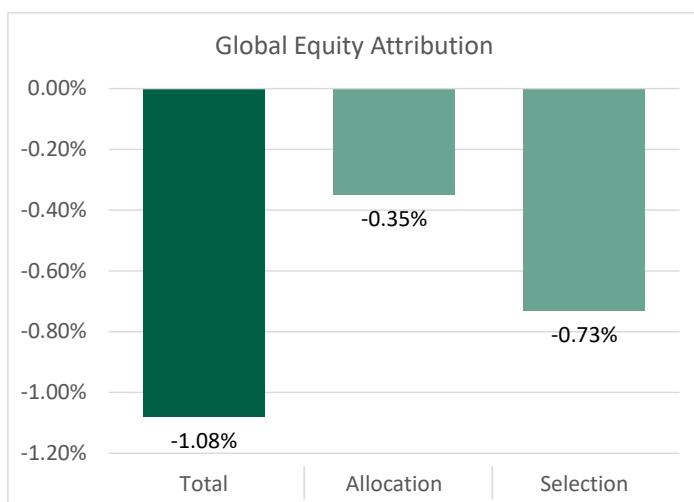
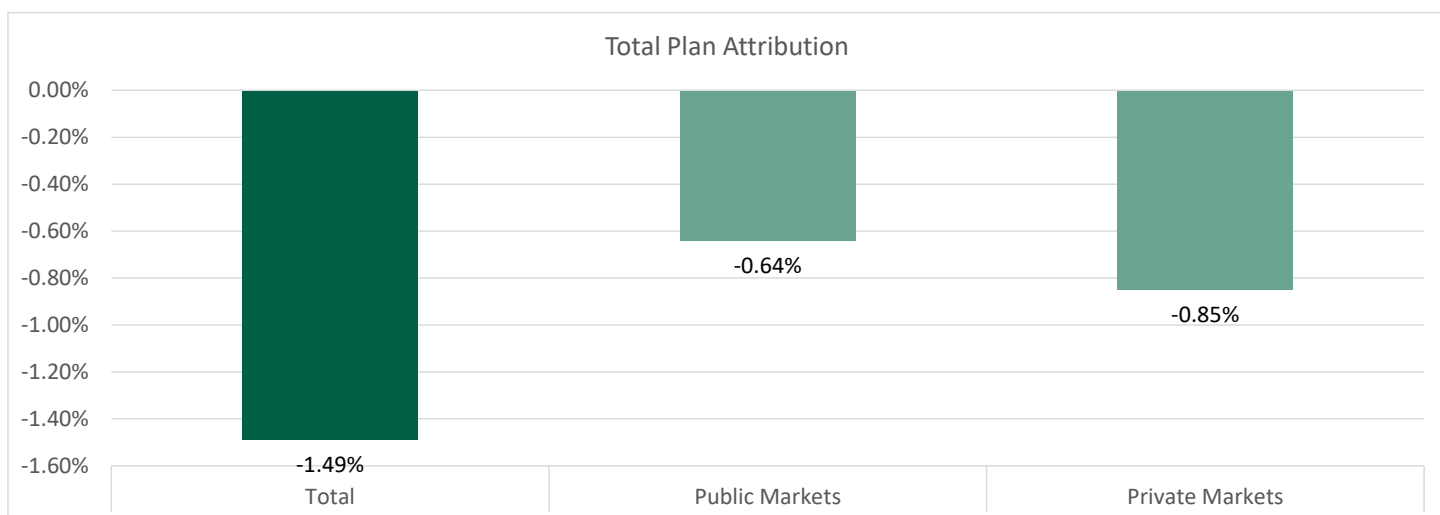


QUARTERLY PORTFOLIO ATTRIBUTION SUMMARY

2023
MARCH

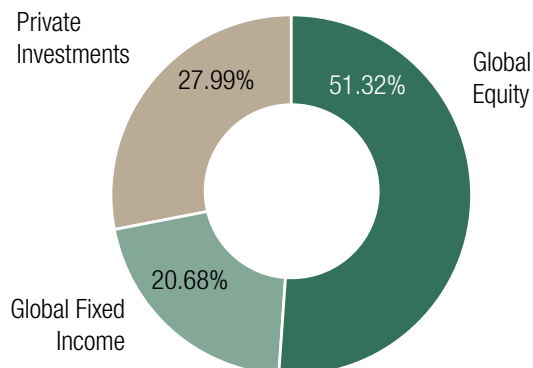
	Avg Weight			Return (Net)			Attribution Totals		
	Portfolio	Benchmark	Difference	Portfolio	Benchmark	Difference	Allocation	Selection	Total
Total Plan	100.00%	100.00%	0.00%	4.13%	5.62%	-1.49%	-0.02%	-1.47%	-1.49%
Public Markets	72.10%	100.00%	-27.90%	4.73%	5.62%	-0.89%	-0.02%	-0.63%	-0.64%
Global Equity	53.06%	65.00%	-11.94%	5.30%	7.03%	-1.73%	-0.35%	-0.73%	-1.08%
U.S. Equity	23.60%	45.00%	-21.40%	5.50%	7.18%	-1.68%	-0.34%	-0.40%	-0.73%
International Equity	17.27%	15.00%	2.27%	5.47%	7.58%	-2.11%	0.05%	-0.36%	-0.31%
Emerging Market Equity	9.26%	5.00%	4.26%	5.21%	3.94%	1.27%	-0.06%	0.12%	0.05%
Liquid Natural Resources	2.93%	0.00%	2.93%	2.88%	5.59%	-2.71%	0.00%	-0.09%	-0.09%
Global Fixed Income	17.65%	35.00%	-17.35%	3.14%	2.99%	0.15%	0.38%	0.09%	0.47%
U.S. Core Fixed Income	11.20%	25.00%	-13.80%	2.88%	2.96%	-0.08%	0.37%	-0.01%	0.37%
Global Agg ex USD	0.00%	10.00%	-10.00%	0.00%	3.06%	-3.06%	0.25%	0.00%	0.25%
Emerging Markets Debt	5.61%	0.00%	5.61%	2.79%	1.86%	0.93%	-0.22%	0.06%	-0.17%
U.S. High Yield	0.84%	0.00%	0.84%	7.84%	3.57%	4.27%	-0.02%	0.04%	0.02%
Cash	1.39%	0.00%	1.39%	2.22%	1.08%	1.14%	-0.05%	0.01%	-0.03%
Private Investments	27.90%	0.00%	27.90%	2.61%	5.59%	-2.98%	-0.01%	-0.84%	-0.85%

- Underperformance was partially driven by the Private Investments Portfolio (-85bps) due to a lag in mark to market gains.
- The Global Equity portfolio detracted value (-108bps), while the Global Fixed Income portfolio added value (+0.47%).
- Selection in the U.S. Equity and International Equity portfolios were the largest detractors at the sub-asset class level (-40bps & -36bps).
- Underweights in the U.S. Core and Global Agg fixed income portfolios added value (+37bps & +25bps).

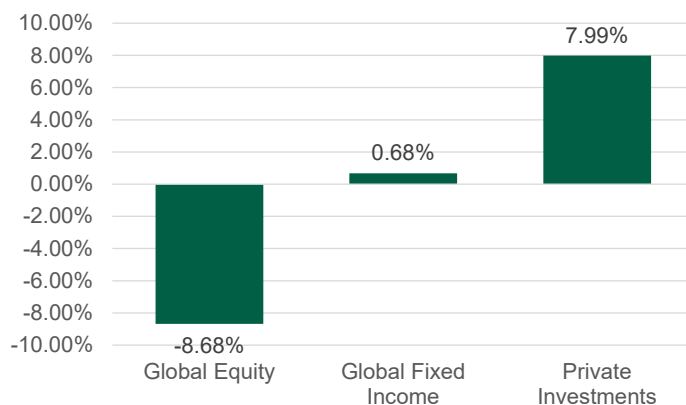


Asset Class	Market Value	% of Fund	Base Allocation	Over/Under Weight	Minimum Allocation	Maximum Allocation
Global Equity	\$6,517,861,045	51.32%	60.00%	-8.68%	30.00%	70.00%
Global Fixed Income	\$2,627,230,413	20.68%	20.00%	0.68%	10.00%	60.00%
Private Investments	\$3,554,769,595	27.99%	20.00%	7.99%	No Minimum	30.00%
Total	\$12,699,861,052	100.00%	100.00%			

Asset Allocation

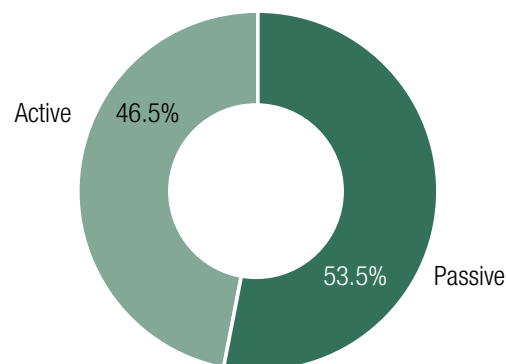


Asset Class Over/Under Weights



Asset Class	MERS Public Markets ¹	Policy Benchmark ²	Over/Under Weight
U.S. Equity	35.23%	45.00%	-9.77%
International Equity	23.20%	14.53%	8.67%
Emerging Market Equity	12.83%	5.47%	7.36%
U.S. Treasury	14.44%	20.85%	-6.41%
U.S. Investment Grade	0.03%	14.15%	-14.12%
U.S. High Yield	2.74%	0.00%	2.74%
Emerging Market Debt	8.25%	0.00%	8.25%
Cash/Short Duration	3.28%	0.00%	3.28%

MERS Public Markets

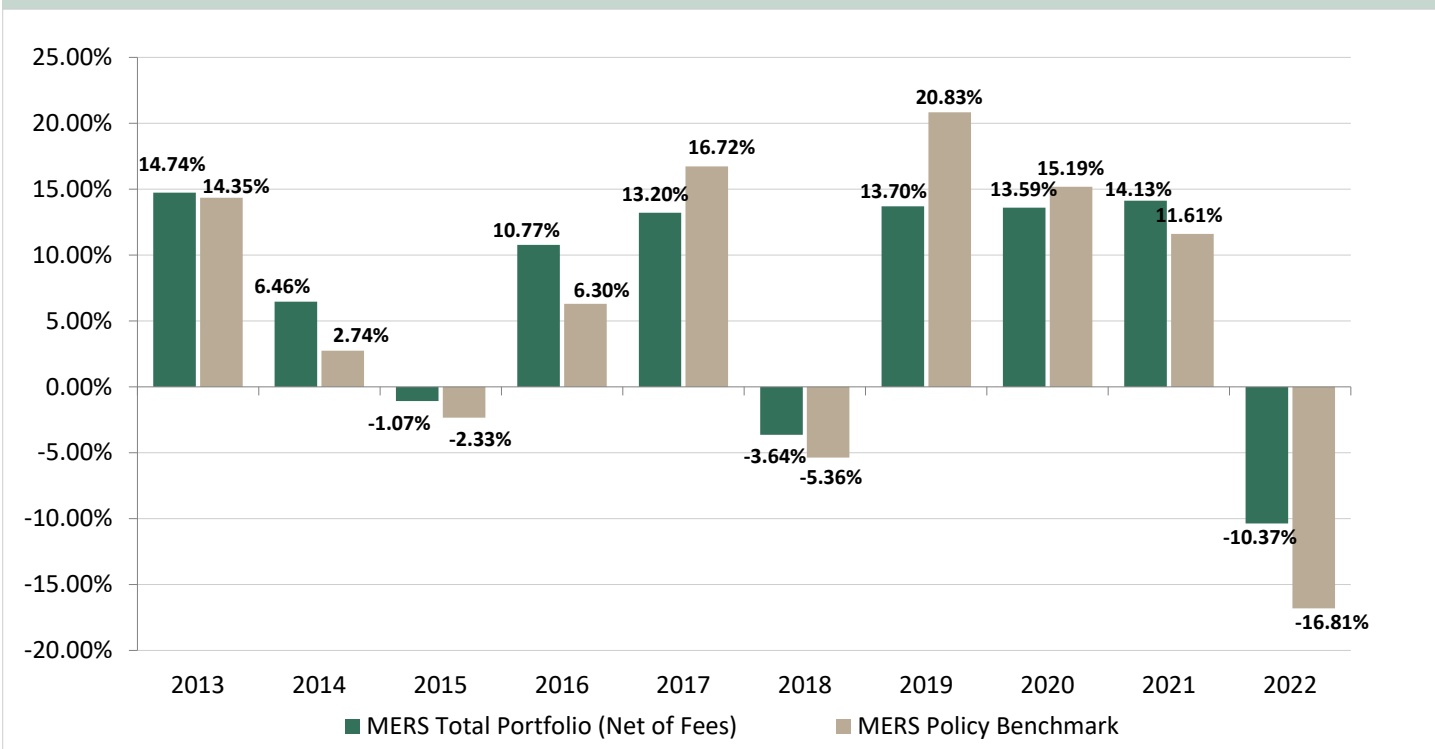


¹ MERS' Public Markets is made up of the Global Equity and Global Fixed Income Asset Classes

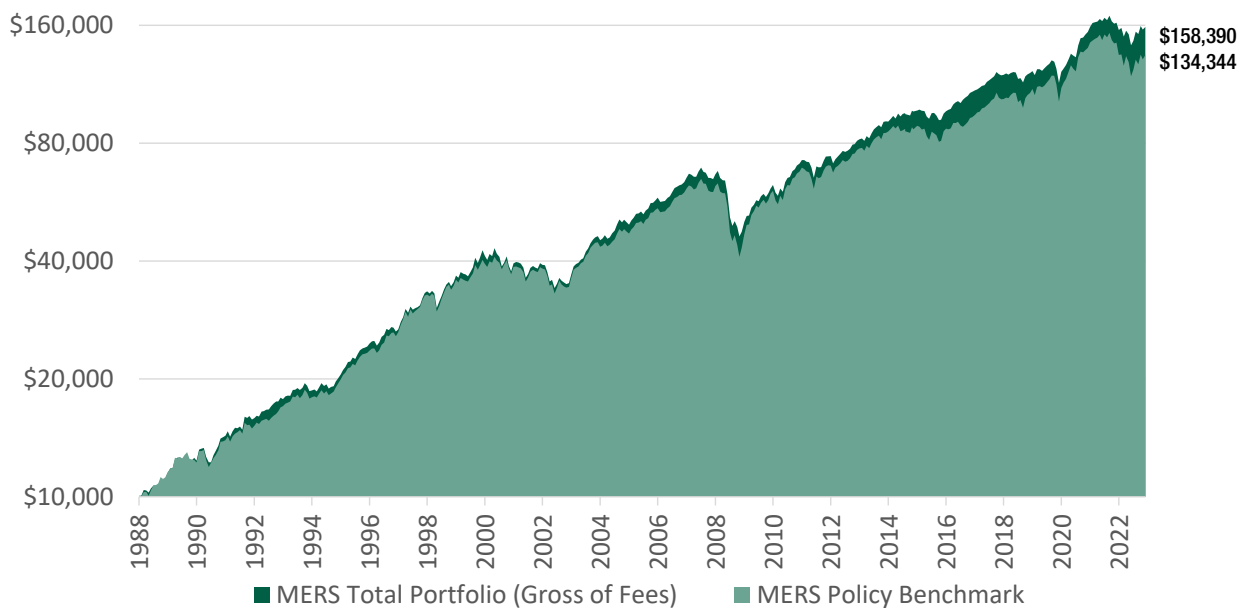
² 45% Russell 3000, 20% MSCI ACWI ex USA IMI (net), 25% Bloomberg Barclays US Aggregate, and 10% Bloomberg Barclays Global Aggregate ex U.S.

	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
MERS Total Portfolio - Gross of Fees (%)	4.20	4.20	-2.44	11.57	5.84	7.55	6.93
MERS Total Portfolio - Net of Fees (%)	4.12	4.12	-2.62	11.37	5.68	7.36	6.73
Policy Benchmark (%)	5.59	5.59	-7.01	9.55	5.34	6.62	5.75
Excess (Net) (%)	-1.47	-1.47	4.39	1.82	0.34	0.74	0.98

Calendar Year Performance – Last 10 Years

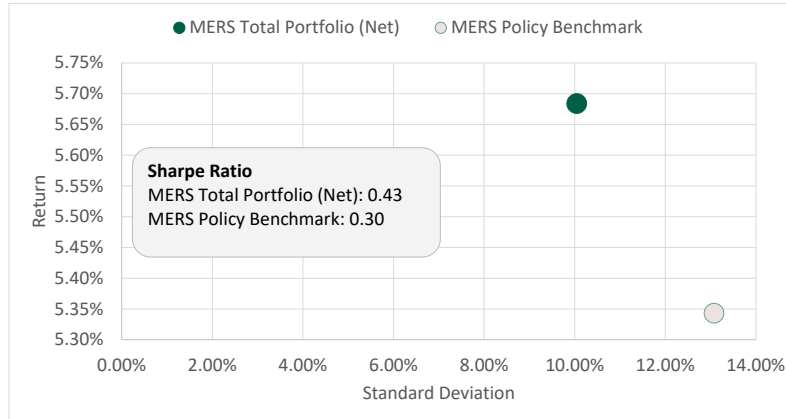


Growth of \$10,000 Comparison



5-Year

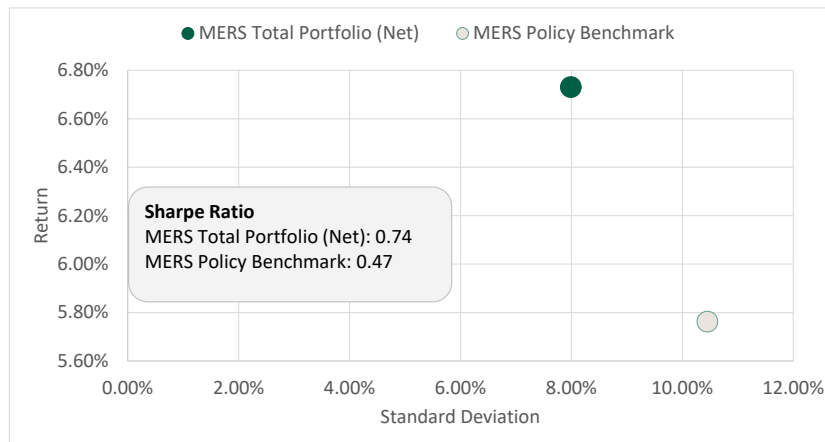
	Return	Standard Deviation	Downside Risk	Beta	R-Squared	Tracking Error
MERS Total Portfolio (Net)	5.68%	10.04%	7.45%	0.75	95.82	3.84%
MERS Policy Benchmark	5.34%	13.07%	9.77%	1.00	100	



	# of Months		Average Return		Up Capture	Down Capture
	Up	Down	Up	Down		
MERS Total Portfolio (Net)	38	22	2.20%	-2.43%	77.50%	75.30%
MERS Policy Benchmark	38	22	2.74%	-3.36%		

10-Year

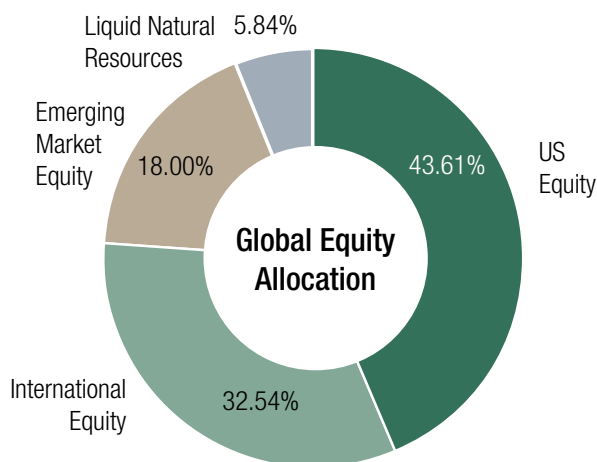
	Return	Standard Deviation	Downside Risk	Beta	R-Squared	Tracking Error
MERS Total Portfolio (Net)	6.73%	7.99%	5.95%	0.74	93.13	3.45%
MERS Policy Benchmark	5.76%	10.45%	7.77%	1.00	100.00	



	# of Months		Average Return		Up Capture	Down Capture
	Up	Down	Up	Down		
MERS Total Portfolio (Net)	80	40	1.79%	-1.88%	80.30%	68.60%
MERS Policy Benchmark	78	42	2.18%	-2.59%		

Market Value	\$6,517,861,045
Assets – % of Portfolio	51.32%

Sub Asset Class	Market Value
US Equity	\$2,842,369,129
International Equity	\$2,121,199,418
Emerging Market Equity	\$1,173,397,051
Liquid Natural Resources	\$380,895,447
Total	\$6,517,861,045



Performance (Net)

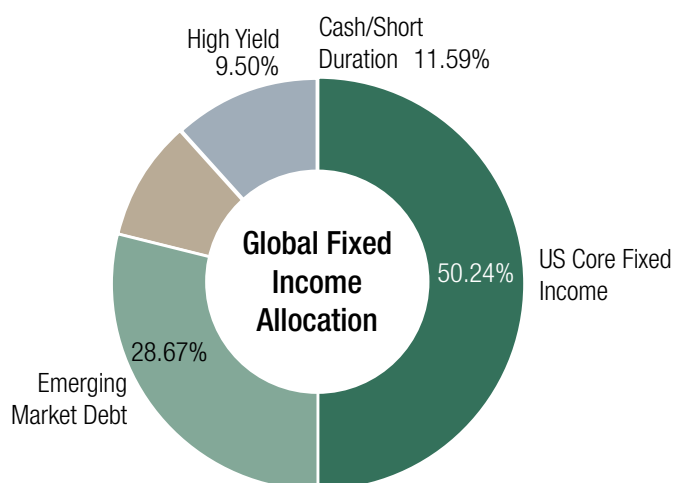
	Market Value	% OF PLAN	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Global Equity	\$6,517,861,045	51.32	5.30	5.30	-6.34	16.04	5.04	8.14	7.91
<i>Global Equity Policy Blend ¹</i>			6.99	6.99	-7.62	16.61	7.98	9.92	8.97
<i>MSCI ACWI</i>			7.31	7.31	-7.44	15.36	6.93	9.16	8.06
US Equity	\$2,842,369,129	22.38	5.76	5.76	-6.80	20.37			
<i>Russell 3000</i>			7.46	7.46	-8.39	18.55			
US Large Cap Equity	\$1,859,741,466	14.64	6.96	6.96	-6.93	18.82	10.60	12.08	12.47
<i>Russell 1000</i>			7.50	7.50	-7.73	18.60	11.19	12.42	12.24
US Mid Cap Equity	\$436,642,358	3.44	3.40	3.40	-5.66	21.64	7.56	9.51	9.43
<i>Russell Midcap</i>			4.06	4.06	-8.78	19.20	8.05	9.88	10.05
US Small Cap Equity	\$194,052,223	1.53	2.65	2.65	-7.34	22.61	6.51	9.60	8.69
<i>Russell 2000</i>			2.74	2.74	-11.61	17.51	4.71	8.55	8.04
US Micro Cap Equity	\$342,623,145	2.70	3.03	3.03	-4.42	26.41	6.34	9.19	8.54
<i>Russell Microcap</i>			-2.83	-2.83	-17.93	17.19	2.96	7.68	7.27
International Equity	\$2,121,199,418	16.70	5.34	5.34	-5.46	11.82			
<i>MSCI World ex USA IMI</i>			7.58	7.58	-3.85	13.46			
International Large Cap Equity	\$1,495,034,690	11.77	5.21	5.21	-4.75	10.46	2.72	4.39	
<i>MSCI World ex USA</i>			8.02	8.02	-2.74	13.49	3.80	6.33	
International Small Cap Equity	\$626,164,728	4.93	5.62	5.62	-7.33	15.46	2.77	7.97	7.80
<i>MSCI World ex USA Small Cap</i>			4.99	4.99	-10.13	13.43	1.54	5.54	5.54
Emerging Market Equity	\$1,173,397,051	9.24	4.96	4.96	-9.42	12.82	-0.08	6.06	3.04
<i>MSCI Emerging Markets IMI</i>			3.94	3.94	-10.74	9.18	-0.58	5.01	2.13
Emerging Market Large Cap Equity	\$620,320,313	4.88	4.63	4.63	-11.77	6.98	-1.47	3.88	1.25
<i>MSCI Emerging Markets</i>			3.96	3.96	-10.70	7.83	-0.91	4.91	2.00
Emerging Market Small Cap Equity	\$342,069,156	2.69	4.91	4.91	-4.60	24.04	3.98	10.09	
<i>MSCI Emerging Markets Small Cap</i>			3.87	3.87	-10.99	20.68	1.80	5.80	
Frontier Market Equity	\$211,007,581	1.66	3.35	3.35	-6.70	13.89	-1.62	4.93	3.05
<i>MSCI Frontier Markets</i>			3.10	3.10	-17.55	7.90	-2.85	3.16	2.73
Liquid Natural Resources	\$380,895,447	3.00	3.10	3.10	-2.85				
<i>Policy Benchmark ²</i>			5.59	5.59	-7.01				

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	\$2,627,230,413
Assets – % of Portfolio	20.69%

Sub Asset Class	Market Value
US Core Fixed Income	\$1,319,992,595
Emerging Market Debt	\$753,249,229
High Yield	\$249,521,320
Cash/Short Duration	\$304,467,269
Total	\$2,627,230,413



Performance (Net)

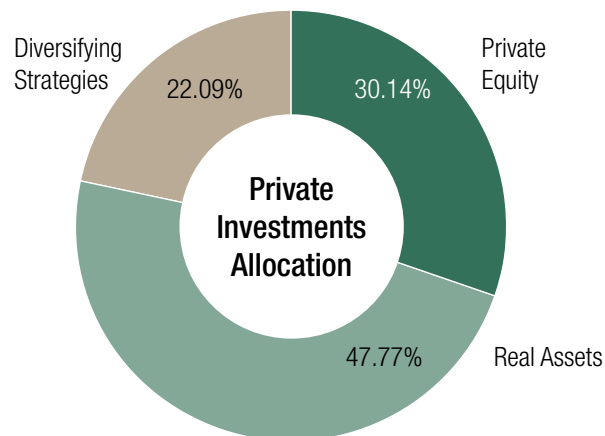
	Market Value	% OF PLAN	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Global Fixed Income ex Cash	\$2,322,763,144	18.29	3.11	3.11	-3.81	-0.30	2.13	2.46	2.60
<i>Global Fixed Income Policy Blend ¹</i>			2.99	2.99	-6.48	-3.14	-0.26	0.06	0.26
<i>Bloomberg Barclays Global Aggregate</i>			3.01	3.01	-8.07	-3.43	-1.34	-0.27	0.07
US Core Fixed Income	\$1,319,992,595	10.39	3.08	3.08	-3.57	-2.71	1.03	1.01	1.48
<i>Bloomberg Barclays U.S. Aggregate</i>			2.96	2.96	-4.78	-2.77	0.91	0.88	1.36
Emerging Market Debt	\$753,249,229	5.93	2.26	2.26	-6.56	0.34	-0.31	2.58	1.52
<i>JP Morgan EMBI Global Diversified</i>			1.86	1.86	-6.92	-0.02	-0.60	1.40	2.01
High Yield	\$249,521,320	1.96	3.39	3.39	-2.24				
<i>Bloomberg Barclays U.S. Corporate High Yield</i>			3.57	3.57	-3.34				
Cash/Short Duration ²	\$304,467,269	2.40	12.23	12.23	83.24	22.99	14.45	10.34	7.37
<i>91 Day Treasury Bill</i>			1.08	1.08	2.53	0.90	1.41	1.22	0.87

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	\$3,554,769,595
Assets – % of Portfolio	27.99%

Sub Asset Class	Market Value
Private Equity	\$1,071,035,773
Real Assets	\$1,697,700,845
Diversifying Strategies	\$784,977,976
Currency Hedge	\$1,055,000
Total	\$3,554,769,595



Performance (Net)

	Market Value	% OF PLAN	QTD	YTD	1 Year	3 Year	5 Year	7 Year	10 Year
Private Investments	\$3,554,769,595	27.99	2.61	2.61	6.29	13.85			
<i>Public Markets</i>			4.72	4.72	-5.56	10.72			
<i>Policy Benchmark¹</i>			5.59	5.59	-7.01	9.55			
Private Equity	\$1,071,035,773	8.43	1.08	1.08	6.28	25.90	19.78	17.03	15.94
<i>Private Equity Blend²</i>			3.86	3.86	-10.48	14.96	2.93	7.07	7.12
Real Assets	\$1,697,700,845	13.37	3.15	3.15	9.33	11.88	10.02	9.75	7.83
<i>Real Assets Blend³</i>									
Diversified Real Assets	\$1,369,737,395	10.79	4.01	4.01	8.33	12.48	9.37	7.31	
<i>Real Assets Blend</i>									
Real Estate	\$327,010,630	2.57	-0.34	-0.34	13.91	12.27	10.70	11.43	12.49
<i>Real Estate Blend⁴</i>									
Timber	\$35,907,830	0.28	-2.04	-2.04	-3.26	7.79	7.69	9.03	7.50
<i>S&P Global Timber & Forestry Index Net</i>			-1.79	-1.79	-18.58	15.76	-0.14	7.85	5.37
Infrastructure	\$367,342,333	2.89	8.87	8.87	29.39	22.24	13.04	10.86	9.11
<i>Private Infrastructure Blend⁵</i>			3.59	3.59	-11.09	5.02	3.49	3.34	3.63
Commodities	\$338,344,640	2.66	7.14	7.14	-2.32	3.87	5.55	6.93	2.14
<i>Bloomberg Commodity Index Total Return</i>			-5.36	-5.36	-12.49	20.82	5.36	5.59	-1.72
Agriculture & Farmland	\$408,810,607	3.22	-0.35	-0.35	-0.65	12.84	11.80	11.60	10.03
<i>S&P Global Agribusiness Equity Index TR</i>			-2.50	-2.50	-15.21	22.56	8.32	9.15	
Diversifying Strategies	\$784,977,976	6.18	3.96	3.96	0.40	7.54	5.61	6.26	5.85
<i>Diversifying Strategies Blend⁶</i>			4.40	4.40	-6.77	3.65	2.87	3.99	3.62

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	\$1,131,246,062	33,745	\$33,523	0.38%	Retirement Strategies
HCSP	\$395,276,144	36,835	\$10,731	0.38%	Retirement Strategies
457 Program	\$325,632,788	11,365	\$28,652	0.39%	Retirement Strategies
MERS IRA	\$10,337,753	921	\$11,224	0.39%	Retirement Strategies
TOTAL	\$1,862,492,748	82,866	\$22,476		

Institutional Funds

Program	Assets	Municipalities	Average Account Size	Weighted Average Fee
RHFV	\$1,380,503,886	324	\$4,260,814	0.46%
ISP	\$51,435,870	5	\$10,287,174	0.46%
TOTAL	\$1,431,939,755	329	\$4,352,400	

Investment Allocations

	PDA	Institutional Funds	Total
Retirement Strategies	\$1,377,671,409		\$1,377,671,409
Total Market Fund	\$43,057,419	\$1,430,870,857	\$1,473,928,276
Asset Allocation Portfolios	\$39,174,258	\$205,490	\$39,379,747
Asset Specific funds	\$372,175,994	\$863,409	\$373,039,403
Self-directed Brokerage	\$9,724,817		\$9,724,817
Other	\$20,688,851		\$20,688,851
TOTAL	\$1,862,492,748	\$1,431,939,755	\$3,294,432,503

Program Highlights

- Simplified investment menu (June 2021)
- RHFV conducted a full plan reset (June 2021)
- Completed Record Keeper RFP (December 2021)
- Completed Target Date Funds RFP (October 2022)
- Transition to BlackRock Target Date Funds will be completed in May 2023

Current Research

- Review investment menu and design
- RFP for Stable Value Fund
- 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	\$21,385,373	0.38%	-3.87	4.28	3.13	-3.87
MERS 2010 Retirement Strategy	\$23,672,580	0.37%	-4.27	5.00	3.32	-4.27
MERS 2015 Retirement Strategy	\$75,609,278	0.38%	-4.89	6.80	3.94	-4.89
MERS 2020 Retirement Strategy	\$92,730,059	0.39%	-5.52	8.48	4.41	-5.52
MERS 2025 Retirement Strategy	\$203,253,794	0.39%	-5.93	9.65	4.71	-5.93
MERS 2030 Retirement Strategy	\$181,470,273	0.39%	-6.22	10.55	4.97	-6.22
MERS 2035 Retirement Strategy	\$184,095,207	0.40%	-6.37	11.51	5.23	-6.37
MERS 2040 Retirement Strategy	\$167,630,778	0.40%	-6.53	12.88	5.52	-6.53
MERS 2045 Retirement Strategy	\$141,059,802	0.40%	-6.59	14.16	5.90	-6.59
MERS 2050 Retirement Strategy	\$119,610,563	0.40%	-6.53	14.29	5.96	-6.53
MERS 2055 Retirement Strategy	\$94,254,026	0.40%	-6.54	14.32	5.99	-6.54
MERS 2060 Retirement Strategy	\$61,144,273	0.40%	-6.51	14.38	6.03	-6.51
MERS 2065 Retirement Strategy	\$11,755,402	0.40%	-6.39	14.50		
TOTAL	\$1,377,671,409					

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	\$1,473,928,276	0.56%	-2.94	10.93	5.27	6.33
<i>MERS Policy Benchmark</i>			-7.01	9.55	5.34	5.75
MERS Global Stock Portfolio (100/0)	\$14,649,743	0.34%	-6.94	16.54	5.82	
<i>Blended Benchmark</i>			-7.44	15.36	6.93	
MERS Established Market Portfolio (60/40)	\$12,947,399	0.34%	-5.29	9.25	4.02	5.69
<i>Blended Benchmark</i>			-6.14	8.48	5.31	6.32
MERS Diversified Bond Portfolio (0/100)	\$11,782,605	0.33%	-3.41	-1.47	0.62	1.11
<i>Bloomberg U.S. Aggregate Bond Index</i>			-4.78	-2.77	0.91	1.36
TOTAL	\$1,513,308,023					

Premium Select Options – Funds to Build Your Own Portfolio

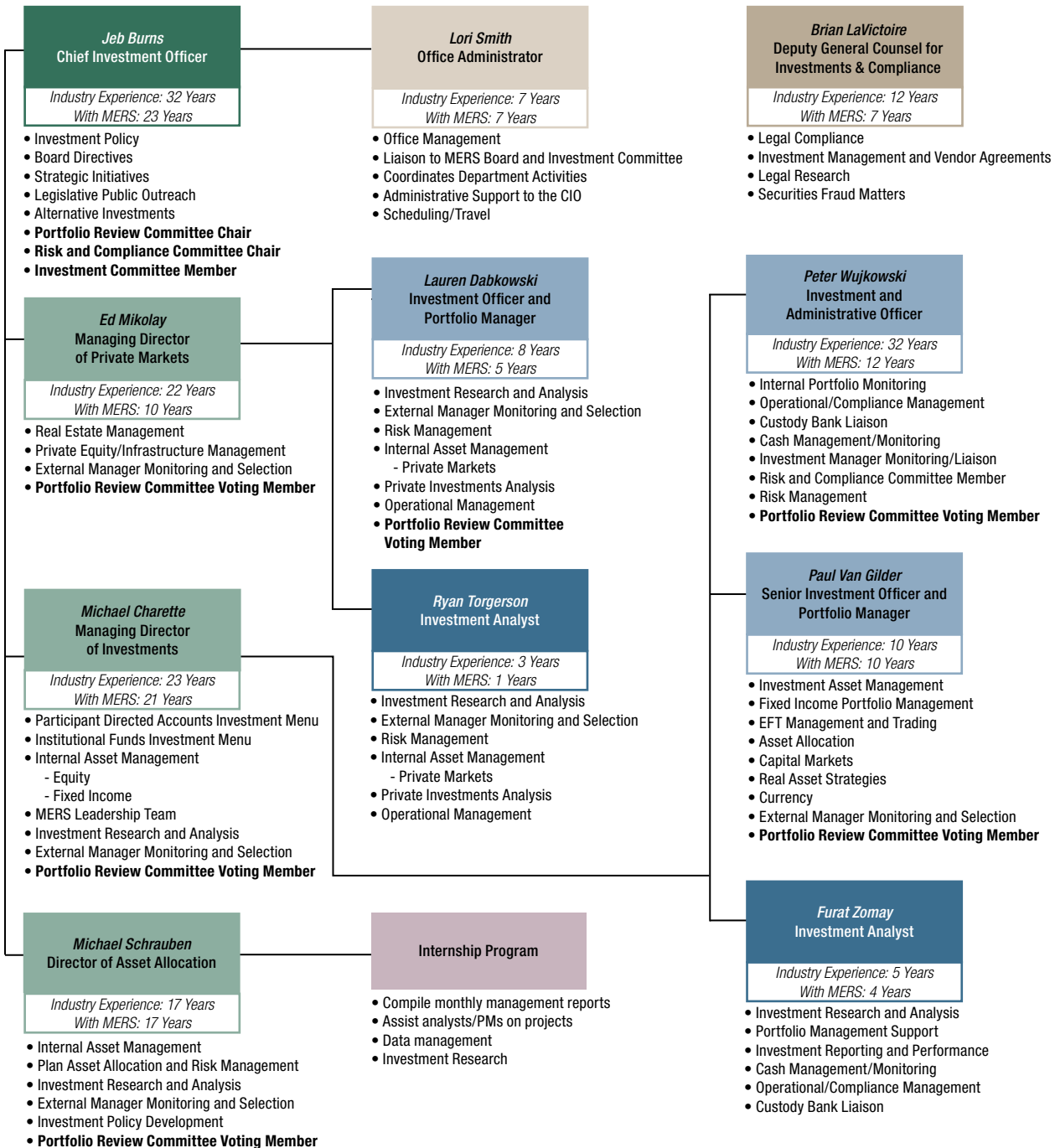
MERS Portfolio Options	Assets	Expense Ratio	1 Year	3 Year	5 Year	10 Year
Large Cap Stock Index Fund	\$178,567,197	0.33%	-8.09	18.08	10.80	11.82
<i>S&P 500 Index</i>			-7.73	18.60	11.19	12.24
Mid Cap Stock Index	\$39,247,177	0.33%	-5.39	21.54	7.38	9.55
<i>S&P 400 Index</i>			-5.12	22.10	7.67	9.80
Small Cap Stock Index	\$22,377,698	0.33%	-9.05	21.71	6.24	
<i>S&P 600 Index</i>			-8.82	21.71	6.30	
International Stock Index	\$16,644,144	0.36%	-2.24	11.96	2.87	4.41
<i>MSCI EAFE Net Dividend Index</i>			-1.38	12.99	3.52	5.00
Emerging Market Stock	\$4,275,793	0.45%	-10.81	9.39	-1.80	
<i>Blended Benchmark</i>			-10.70	7.83	-1.18	
Real Estate Stock	\$5,839,360	0.38%	-21.30	10.97	5.29	5.74
<i>Dow Jones U.S. Select REIT Index</i>			-20.98	11.32	4.66	5.31
Bond Index	\$18,074,744	0.35%	-5.07	-3.03	0.87	1.06
<i>Bloomberg U.S. Aggregate Bond Index</i>			-4.78	-2.77	0.91	1.36
High Yield Bond	\$5,381,637	0.48%	-4.37	4.77	2.39	3.28
<i>Bloomberg U.S. High Yield Net Return Index</i>			-13.60	-0.70	1.49	3.61
Short-Term Income	\$19,244,277	0.33%	-0.08	-0.14	1.25	0.75
<i>Bloomberg U.S. Treasury: 1-3 Year</i>			0.23	-0.84	1.09	0.80
Stable Value	\$63,387,375	0.58%	1.86	1.75	2.00	1.93
<i>ICE BofA US 3 Month Treasury Bill Index G001</i>			2.53	0.90	1.41	0.87
TOTAL	\$373,039,403					

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 03/31/2023. 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.

