



QUARTERLY INVESTMENT REPORT

March 2022



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“There is a tide in the affairs of men, which taken at the flood, leads on to fortune. Omitted, all the voyage of their life is bound in shallows and in miseries. On such a full sea are we now afloat. And we must take the current when it serves, or lose our ventures.”
– William Shakespeare

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

After a remarkable 2021, U.S. equities closed out their first negative quarter in two years as the S&P 500 returned -4.60%. Year-over-year inflation in the U.S. accelerated to 7.90% in February, the highest since January 1982. The impact of the Russian invasion of Ukraine in late February weighed heavily on markets. Russia is a significant producer of several vital commodities, including oil, natural gas, and wheat. Sanctions imposed by Western countries on Russia sent commodity prices soaring, amplifying existing concerns over inflation pressures. WTI oil reached \$123 per barrel in early March – the highest in 14 years. At its March meeting, the Federal Reserve approved a 0.25% interest rate hike to begin combatting persistent inflationary pressures finally. After incorrectly describing inflation as transitory for more than a year, the Fed has communicated that it intends to use its tools to attempt to reign the highest inflation in more than four decades. The Fed also indicated there would be six or more rate hikes throughout 2022 and balance sheet reductions to start later in the year. Markets have priced in an aggressive Fed rate hike cycle, and its impact on financial conditions, liquidity, and economic activity will be closely monitored in the coming quarters. Many measurements of the “yield curve”, a market indicator based on the difference between long term and short term US Treasury bond yields, inverted during the first quarter, indicating that the bond market expects slowing economic growth and the rising probability of a recession in the coming years. Market expectations sent yields soaring as the 10 Year Treasury increased by 0.83% (from 1.51% to 2.34%). Rising rates hurt growth stocks this quarter as they underperformed the S&P value index by 8.43%. In Europe, the economic impact of rising commodity prices was severely felt since many countries are dependent on Russia for their energy. The MSCI Europe index returned -5.18% for the quarter. In emerging markets, the index returned -6.99%. Russia being almost 3.50% of the index and lockdowns from a resurgence of Covid-19 in China attributed to emerging markets being the worst-performing asset class.

Portfolio Performance Review

MERS' Total Portfolio returned -4.17% (net) for the first quarter and outperformed the Policy Benchmark by 1.37%. The Global Equity portfolio returned -6.50%, underperforming the global equity policy blend by 114 bps due to its overweight in international and emerging market equities. Within U.S. equities, MERS outperformed the Russell 3000 benchmark by 9 bps. Overweight to U.S. micro-cap detracted from performance, but allocation to S&P indices rather than Russell indices added value. The MERS International Equity and Emerging Market portfolios underperformed their respective index due to underperformance in large-cap and an overweight to small-cap. The Global Fixed Income portfolio returned -6.26% on the quarter, underperforming the global fixed income policy blend by 26 bps. Overweight to emerging market debt contributed to the underperformance. The Liquid Natural Resources portfolio, designed to protect MERS' assets from rising inflation, continues to benefit from a rising inflationary environment and returned 14.60% on the quarter. The Private Investments portfolio delivered positive returns of 0.80%, partially offsetting the negative returns of the public markets portfolio. MERS' Defined Benefit (DB) portfolio assets are \$11.78 billion, and MERS' total assets are \$15.09 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 passive 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 Barclays US Aggregate, and 10% Bloomberg Barclays Global Aggregate ex U.S.

Asset Class Valuation Summary

Value/Price Discrepancy¹

| Asset Class | Overvalued | Undervalued |
|---------------|------------|-------------|
| US Equity | -45.00% | |
| Europe Equity | | 24.70% |
| Japan Equity | | 55.60% |
| EM Equity | | 47.50% |
| US Treasury | -1.10% | |
| EMD | | 2.90% |
| US IG | -6.30% | |
| US HY | -10.10% | |

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.

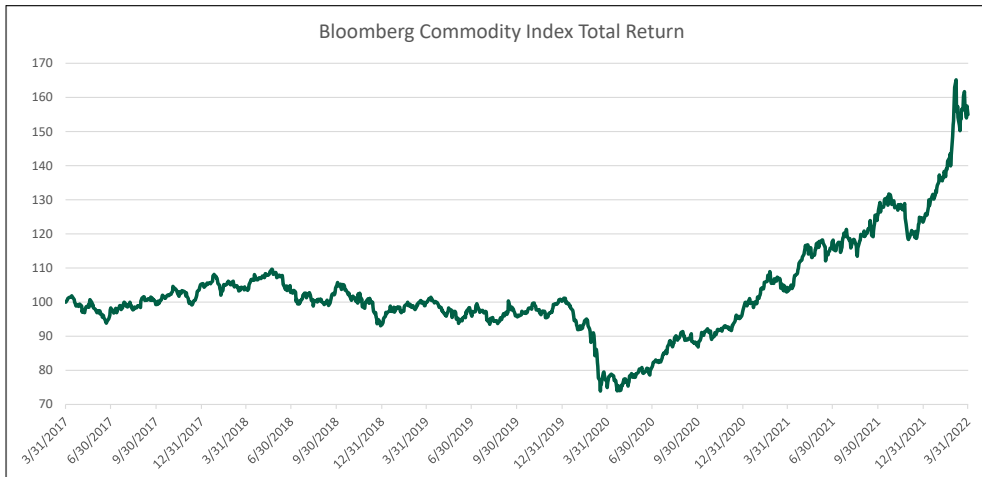
Equity Market Outlook

- 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

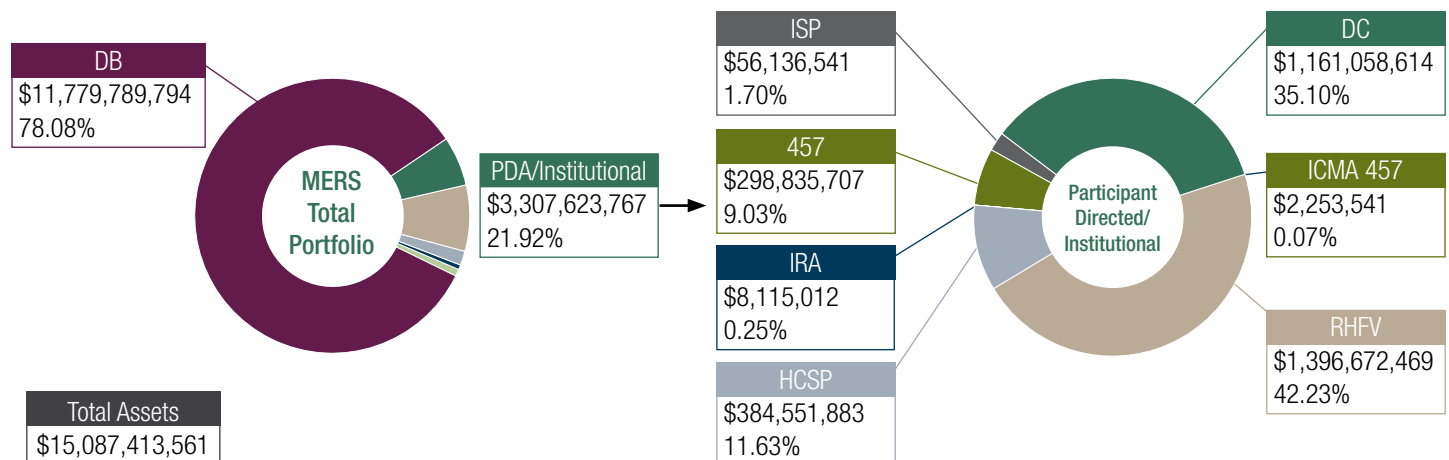
- Most fixed income asset classes are currently overvalued due to current market interest rates being lower than MERS' long-term assumptions
- Emerging Markets Debt spreads are near fair value, and the asset class is now modestly undervalued as spreads widened.
- U.S. Investment Grade and High Yield bonds are the most overvalued due to historically low credit spreads and yields in those asset classes.

Chart of the Quarter



The Bloomberg Commodity Index is a diversified basket of commodities that contains energy, grains, industrial metals, precious metals, softs, and livestock. In the years leading up to the Covid-19 pandemic, the index was relatively flat. As supply chain disruptions and pricing pressures escalated, this resulted in higher inflation with commodity prices rising. The Russian invasion of Ukraine exacerbated the issue and sent prices soaring as the index is up 25.55% during Q1 of 2022. MERS' has implemented strategies to protect assets from rising Inflation. The Liquid Natural Resources portfolio has a value of \$338 million and is up 14.60% in the quarter.

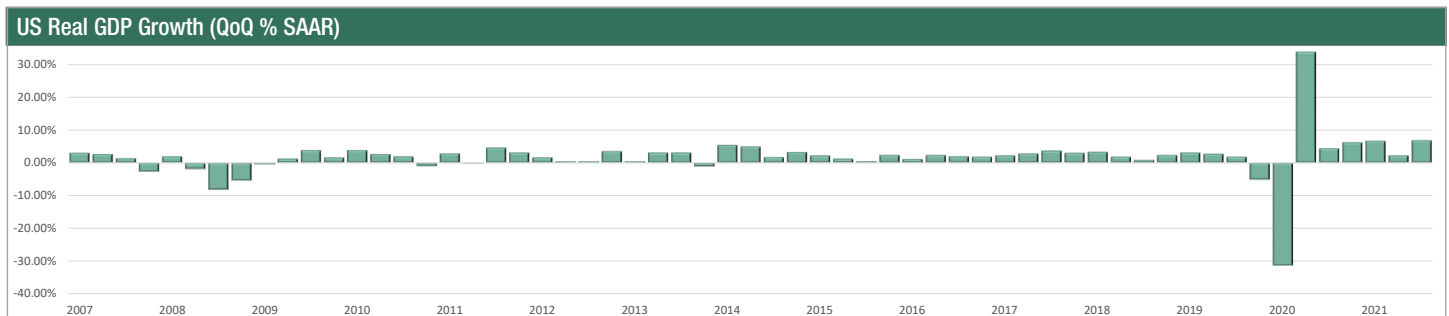
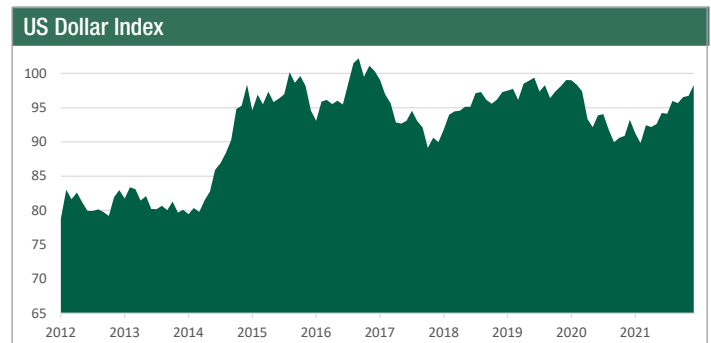
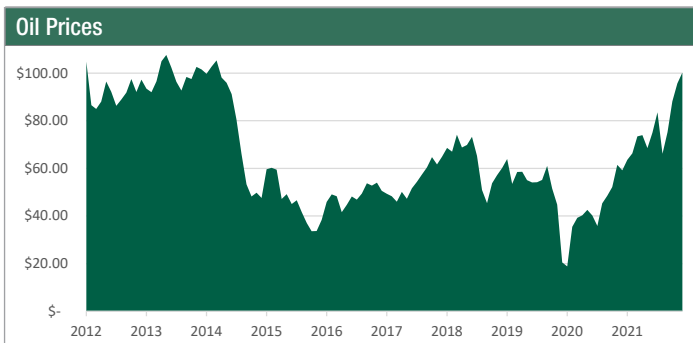
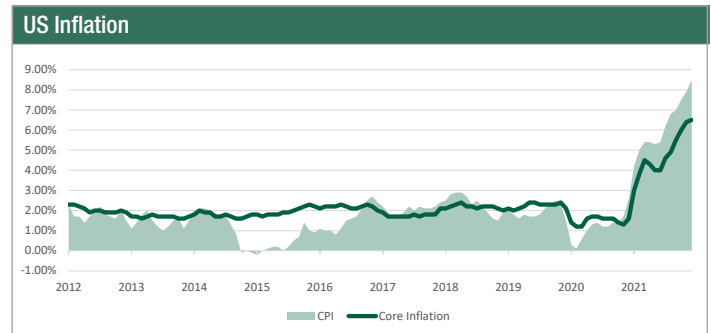
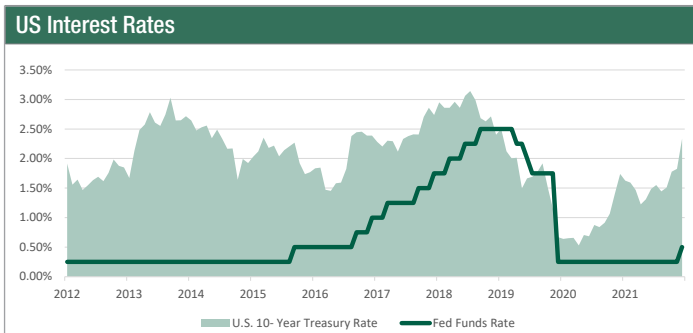
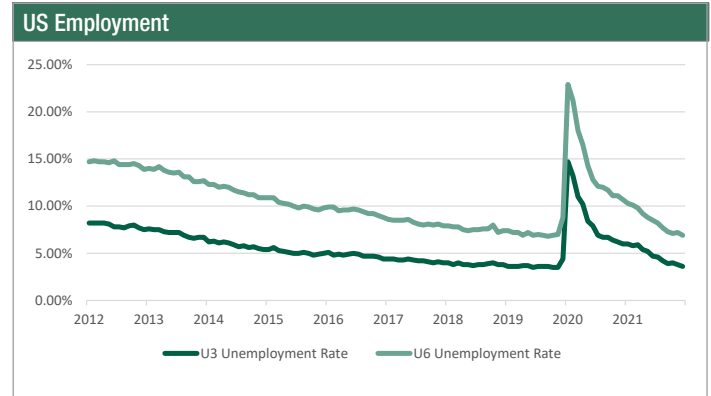
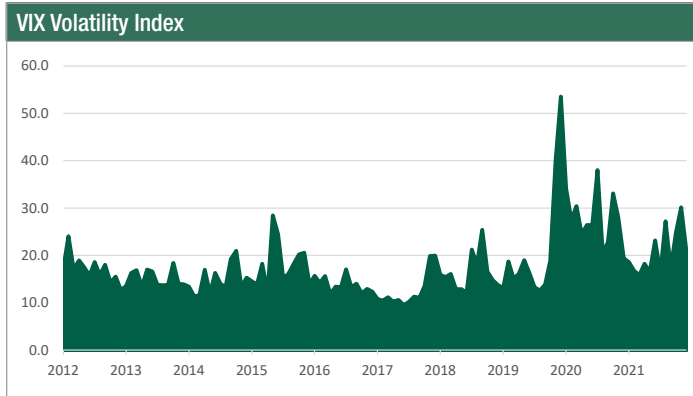
Assets by Program



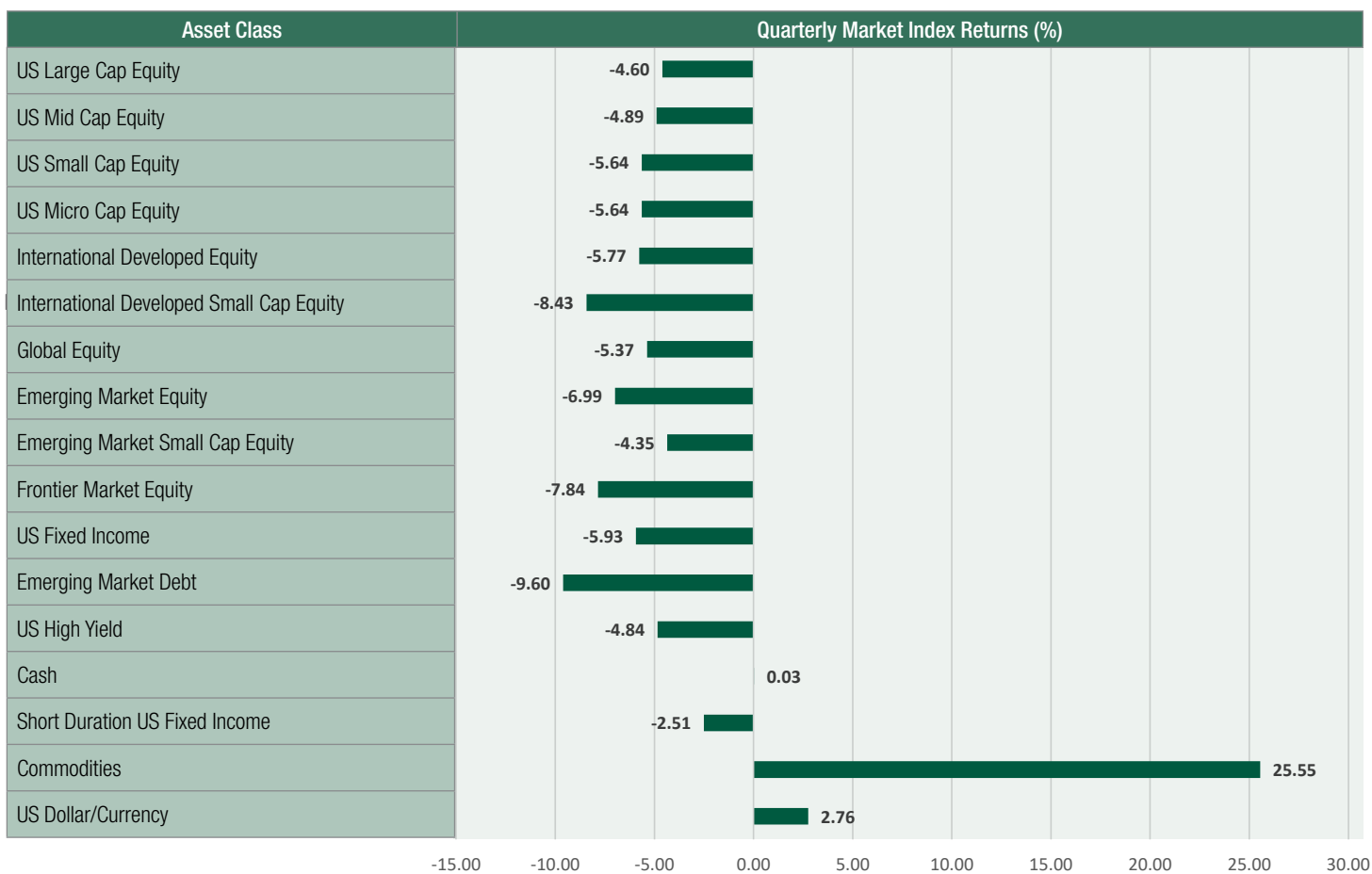
| Market Indicators | Current | Prior Quarter |
|-----------------------------------|-----------------|----------------|
| 10 Year Treasury Yield | 2.34% | 1.51% |
| Fed Funds Rate | 0.50% | 0.25% |
| Crude Oil | \$100.3 /barrel | \$75.2 /barrel |
| Gold | \$1,937.4 /oz. | \$1,829.2 /oz. |
| 30 Year Fixed Mortgage Rates | 4.90% | 3.27% |
| US Investment Grade Credit Spread | 1.16% | 0.92% |
| US High Yield Credit Spread | 3.25% | 2.83% |
| US Leading Economic Indicators | 7.60% | 8.40% |

| Economic Releases | Current | Prior Quarter |
|---------------------------|---------|---------------|
| ISM Manufacturing | 57.10 | 58.80 |
| ISM Non-Manufacturing | 58.30 | 62.30 |
| U of M Consumer Sentiment | 59.40 | 70.60 |
| US Real GDP* | 5.50% | 4.90% |
| Eurozone Real GDP* | 4.60% | 4.00% |
| UK GDP* | 6.60% | 6.90% |
| Japan GDP* | 0.40% | 1.20% |
| China GDP* | 4.00% | 4.90% |

* All GDP data is lagged 1 quarter

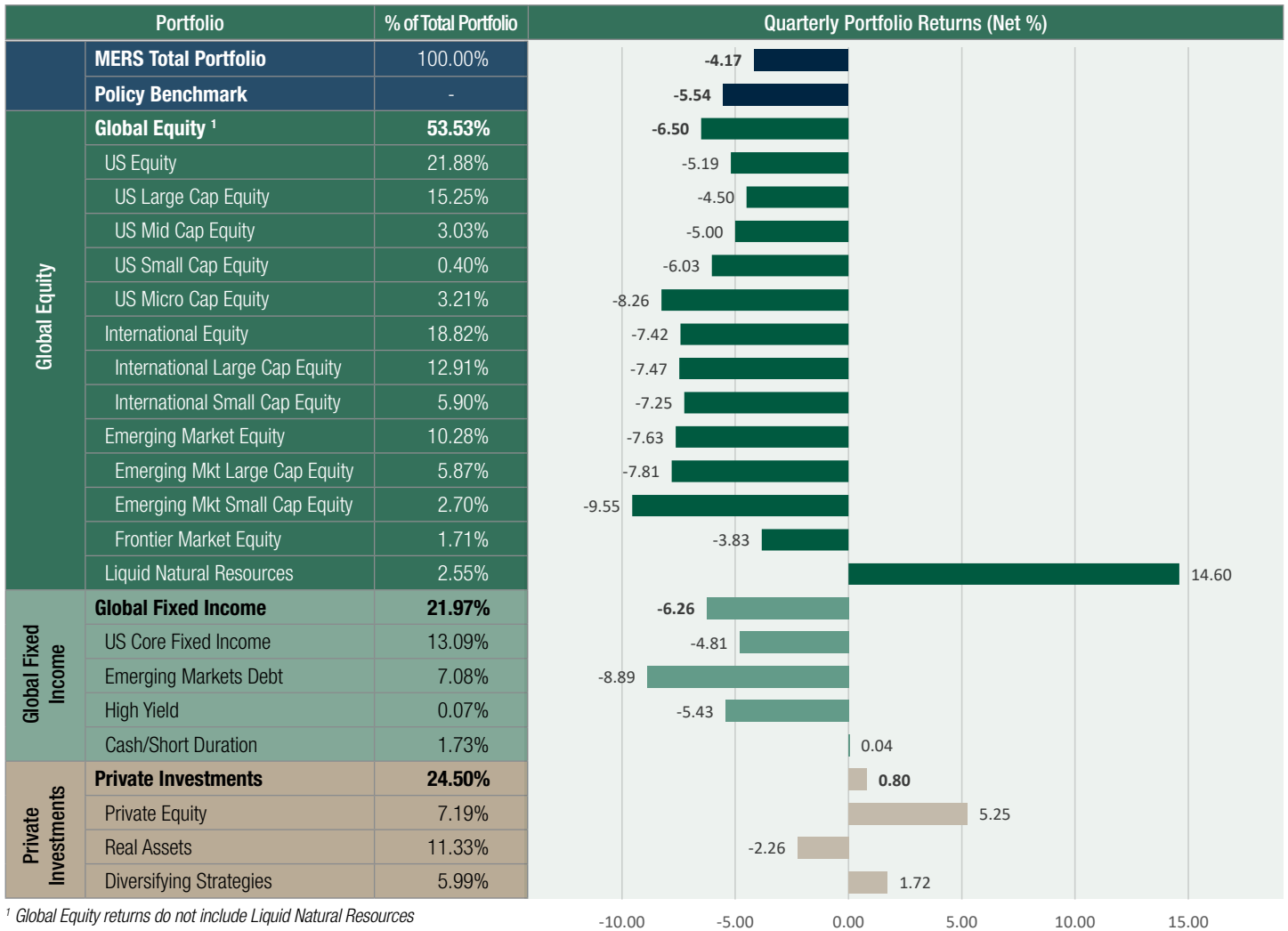


Quarterly Market Performance Review

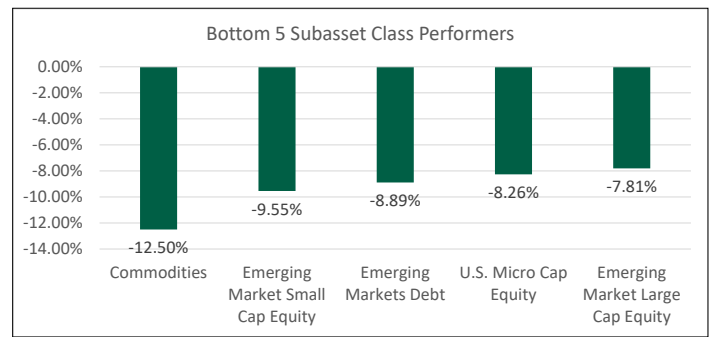
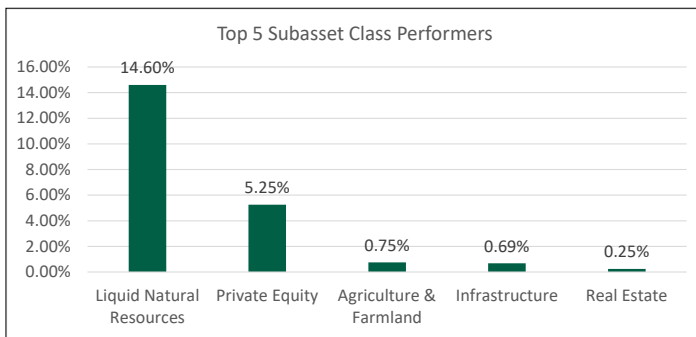


Market Index Returns

| Market Index | Asset Class | QTD | YTD | 1 Year | 3 Year | 5 Year | 7 Year | 10 Year |
|--|--|-------|-------|--------|--------|--------|--------|---------|
| S&P 500 | US Large Cap Equity | -4.60 | -4.60 | 15.63 | 18.91 | 15.98 | 14.00 | 14.63 |
| S&P 400 | US Mid Cap Equity | -4.89 | -4.89 | 4.56 | 14.11 | 11.08 | 10.18 | 12.18 |
| S&P 600 | US Small Cap Equity | -5.64 | -5.64 | 1.15 | 13.53 | 10.84 | 10.53 | 12.51 |
| Russell Microcap | US Micro Cap Equity | -7.61 | -7.61 | -11.01 | 12.99 | 9.86 | 8.56 | 11.14 |
| MSCI EAFE | International Developed Equity | -5.77 | -5.77 | 1.70 | 8.38 | 7.31 | 5.70 | 6.87 |
| MSCI EAFE Small Cap | International Developed Small Cap Equity | -8.43 | -8.43 | -3.28 | 8.93 | 7.82 | 7.69 | 8.68 |
| MSCI ACWI IMI | Global Equity | -5.37 | -5.37 | 6.75 | 14.06 | 11.95 | 10.12 | 10.55 |
| MSCI Emerging Markets | Emerging Market Equity | -6.99 | -6.99 | -11.13 | 5.27 | 6.32 | 5.07 | 3.72 |
| MSCI Emerging Markets Small Cap | Emerging Market Small Cap Equity | -4.35 | -4.35 | 5.85 | 12.24 | 8.10 | 6.37 | 5.57 |
| MSCI Frontier Markets Index | Frontier Market Equity | -7.84 | -7.84 | 9.59 | 7.40 | 6.05 | 4.12 | 5.85 |
| BBG Barclays U.S. Aggregate | US Fixed Income | -5.93 | -5.93 | -4.15 | 1.69 | 2.14 | 1.87 | 2.24 |
| JPMorgan EMBI Global Diversified Index | Emerging Market Debt | -9.60 | -9.60 | -6.46 | -0.25 | 1.22 | 2.60 | 3.36 |
| ICE BofA Merrill Lynch Global High Yield | US High Yield | -4.84 | -4.84 | -0.66 | 4.58 | 4.69 | 5.03 | 5.75 |
| 91 Day Treasury Bill | Cash | 0.03 | 0.03 | 0.05 | 0.74 | 1.07 | 0.82 | 0.59 |
| BBG Barclays 1-3 Year Treasury | Short Duration US Fixed Income | -2.51 | -2.51 | -3.04 | 0.84 | 1.04 | 0.91 | 0.84 |
| Bloomberg Commodity Index Total Return | Commodities | 25.55 | 25.55 | 49.25 | 16.12 | 9.00 | 4.33 | -0.70 |
| Bloomberg Dollar Spot Index | US Dollar/Currency | 2.76 | 2.76 | 5.45 | 1.06 | -0.41 | -0.01 | 2.21 |



¹ Global Equity returns do not include Liquid Natural Resources



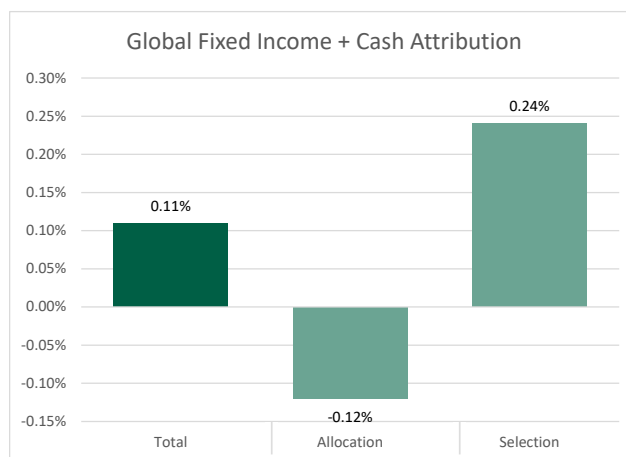
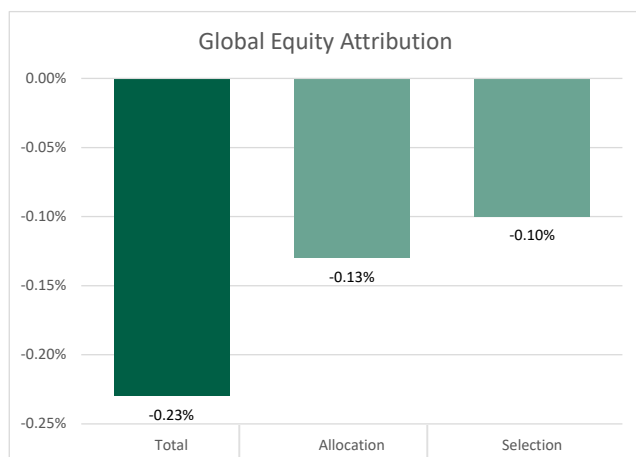
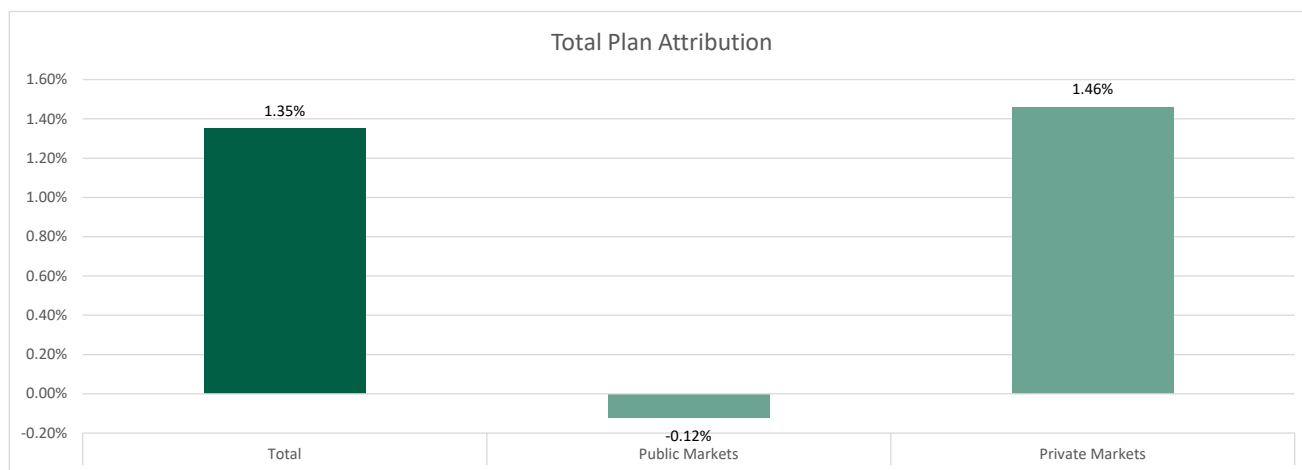
QUARTERLY PORTFOLIO ATTRIBUTION SUMMARY

2022
MARCH

| | Avg Weight | | | Return (Net) | | | Attribution Totals | | |
|-----------------------------------|----------------|----------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| | Portfolio | Benchmark | Difference | Portfolio | Benchmark | Difference | Allocation | Selection | Total |
| Total Plan | 100.00% | 100.00% | 0.00% | -4.18% | -5.53% | 1.35% | -0.26% | 1.60% | 1.35% |
| Public Markets | 76.28% | 100.00% | -23.72% | -5.68% | -5.53% | -0.15% | -0.25% | 0.14% | -0.12% |
| Global Equity ¹ | 53.51% | 65.00% | -11.49% | -6.51% | -5.35% | -1.16% | -0.13% | -0.10% | -0.23% |
| U.S. Equity | 21.61% | 45.00% | -23.39% | -5.20% | -5.28% | 0.08% | -0.08% | 0.01% | -0.07% |
| International Equity | 19.08% | 15.00% | 4.08% | -7.40% | -5.18% | -2.22% | 0.01% | -0.43% | -0.42% |
| Emerging Market Equity | 10.57% | 5.00% | 5.57% | -7.61% | -6.65% | -0.96% | -0.06% | -0.11% | -0.16% |
| Liquid Natural Resources | 2.24% | 0.00% | 2.24% | 14.54% | -5.54% | 20.08% | 0.00% | 0.42% | 0.42% |
| Global Fixed Income | 20.62% | 35.00% | -14.38% | -6.25% | -6.00% | -0.25% | -0.25% | 0.24% | -0.02% |
| U.S. Core Fixed Income | 13.34% | 25.00% | -11.66% | -4.81% | -5.93% | 1.12% | 0.03% | 0.15% | 0.18% |
| Global Agg ex USD | 0.00% | 10.00% | -10.00% | 0.00% | -6.15% | 6.15% | 0.05% | 0.00% | 0.05% |
| Emerging Markets Debt | 7.21% | 0.00% | 7.21% | -8.85% | -10.02% | 1.17% | -0.34% | 0.09% | -0.25% |
| U.S. High Yield | 0.07% | 0.00% | 0.07% | -5.43% | -4.84% | -0.59% | 0.00% | 0.00% | 0.00% |
| Cash | 2.16% | 0.00% | 2.16% | 0.03% | 0.04% | -0.01% | 0.13% | 0.00% | 0.13% |
| Private Investments | 23.72% | 0.00% | 23.72% | 0.80% | -5.54% | 6.34% | 0.00% | 1.47% | 1.46% |

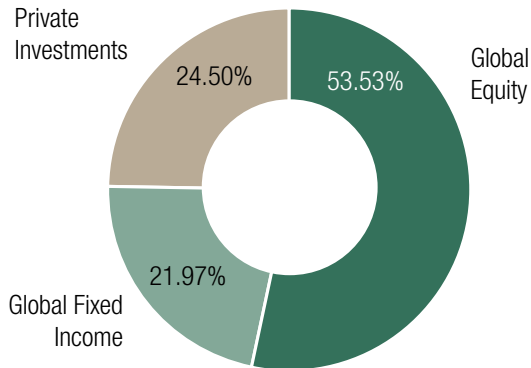
¹ Global Equity returns do not include Liquid Natural Resources

- Outperformance was driven by the Private Investments portfolio (+146bps).
- Selection within International Equity and overweight in Emerging Markets Debt were the largest detractors (-43bps & -34bps).
- Overweight to Liquid Natural Resources and selection within U.S. Core Fixed Income were the largest contributors (+42bps & +15bps).

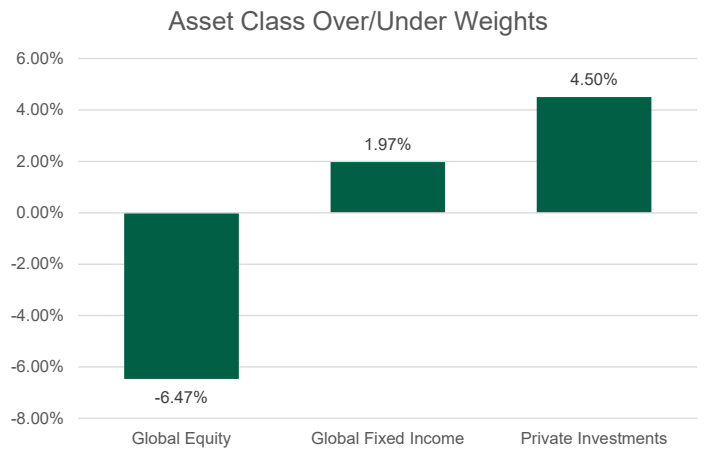


| Asset Class | Market Value | % of Fund | Base Allocation | Over/Under Weight | Minimum Allocation | Maximum Allocation |
|---------------------|-------------------------|----------------|-----------------|-------------------|--------------------|--------------------|
| Global Equity | \$7,105,176,608 | 53.53% | 60.00% | -6.47% | 30.00% | 70.00% |
| Global Fixed Income | \$2,916,574,192 | 21.97% | 20.00% | 1.97% | 10.00% | 60.00% |
| Private Investments | \$3,252,537,403 | 24.50% | 20.00% | 4.50% | No Minimum | 30.00% |
| Total | \$13,274,288,203 | 100.00% | 100.00% | | | |

Asset Allocation

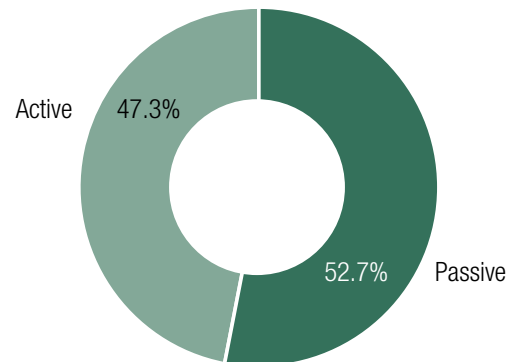


Asset Class Over/Under Weights



| Asset Class | MERS Public Markets ¹ | Policy Benchmark ² | Over/Under Weight |
|------------------------|----------------------------------|-------------------------------|-------------------|
| U.S. Equity | 31.00% | 45.00% | -14.00% |
| International Equity | 25.08% | 14.34% | 10.74% |
| Emerging Market Equity | 13.75% | 5.66% | 8.09% |
| U.S. Treasury | 16.83% | 20.43% | -3.60% |
| U.S. Investment Grade | 0.05% | 14.57% | -14.52% |
| U.S. High Yield | 0.11% | 0.00% | 0.11% |
| Emerging Market Debt | 8.88% | 0.00% | 8.88% |
| Cash/Short Duration | 3.83% | 0.00% | 3.83% |

MERS Public Markets

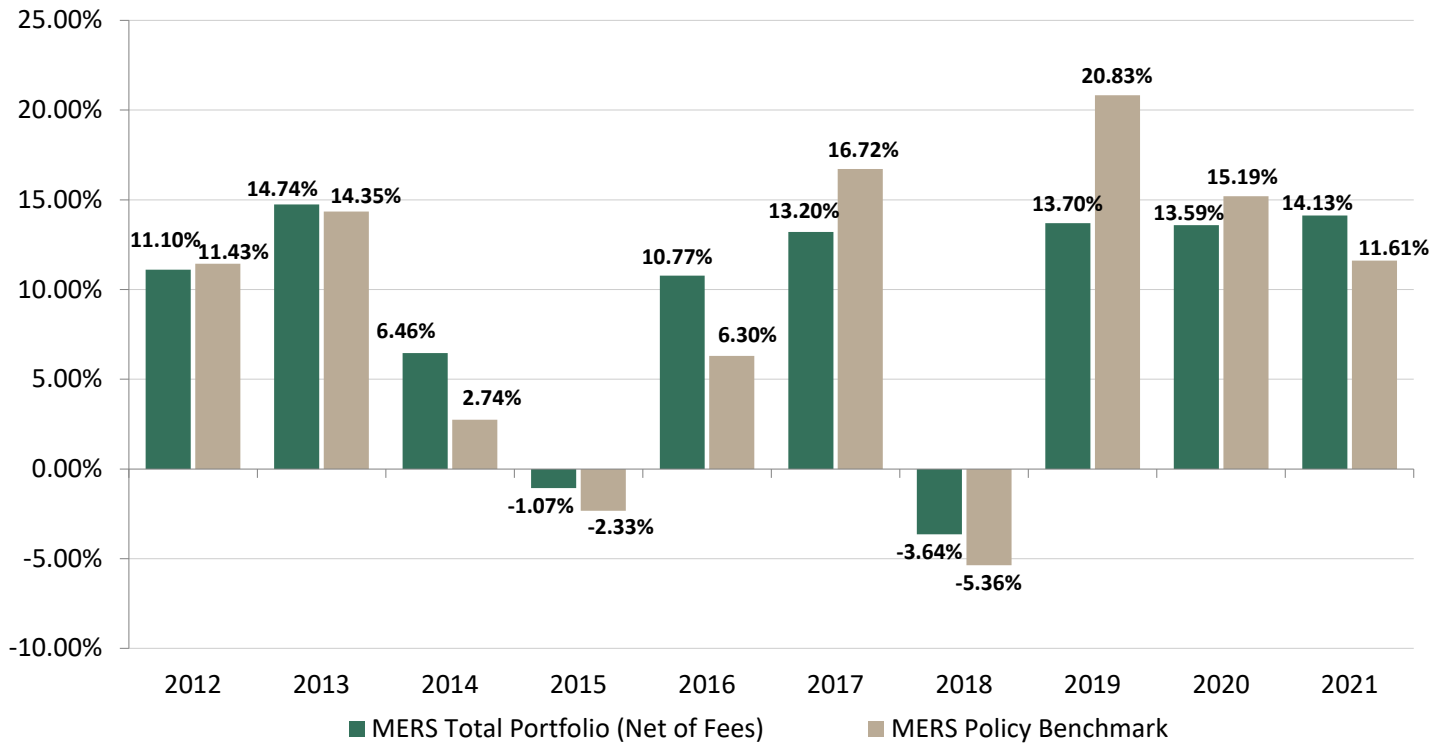


¹ MERS' Public Markets is made up of the Global Equity and Global Fixed Income Asset Classes

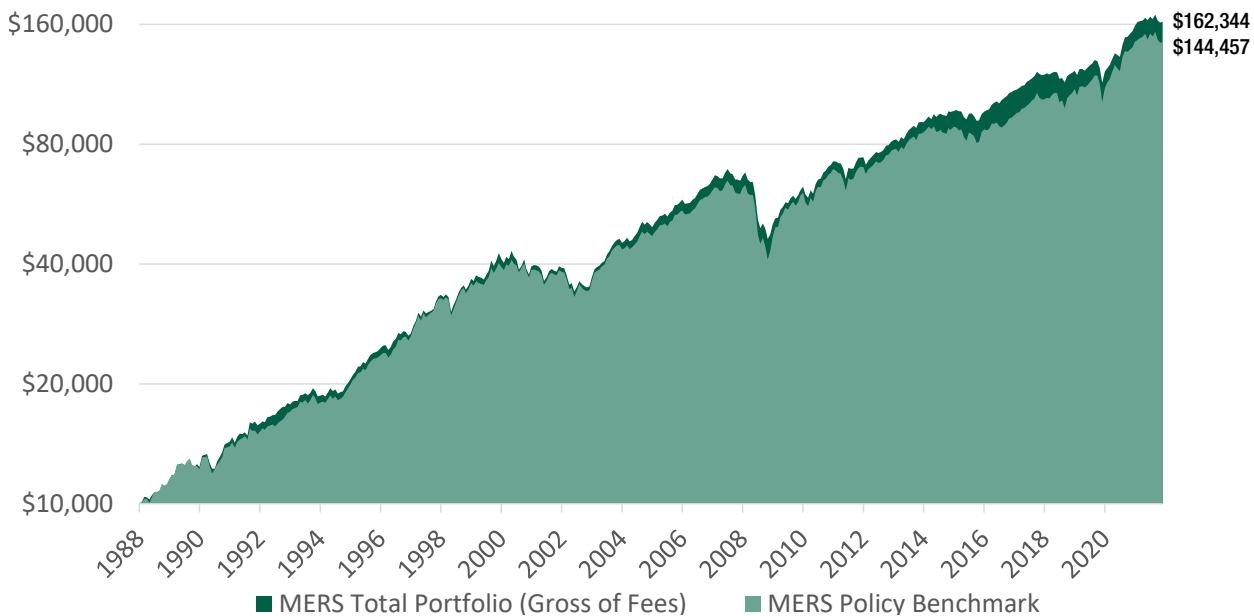
² 45% Russell 3000, 20% MSCI ACWI ex USA IMI (net), 25% Bloomberg Barclays US Aggregate, and 10% Bloomberg Barclays Global Aggregate ex U.S.

| | QTD | YTD | 1 Year | 3 Year | 5 Year | 7 Year | 10 Year |
|--|-------------|-------------|-------------|--------------|--------------|--------------|-------------|
| MERS Total Portfolio - Gross of Fees (%) | -4.14 | -4.14 | 5.45 | 10.33 | 8.46 | 7.73 | 8.17 |
| MERS Total Portfolio - Net of Fees (%) | -4.17 | -4.17 | 5.26 | 10.16 | 8.30 | 7.54 | 7.96 |
| Policy Benchmark (%) | -5.54 | -5.54 | 3.17 | 10.34 | 9.15 | 7.56 | 7.48 |
| Excess (Net) (%) | 1.37 | 1.37 | 2.09 | -0.18 | -0.85 | -0.02 | 0.48 |

Calendar Year Performance – Last 10 Years

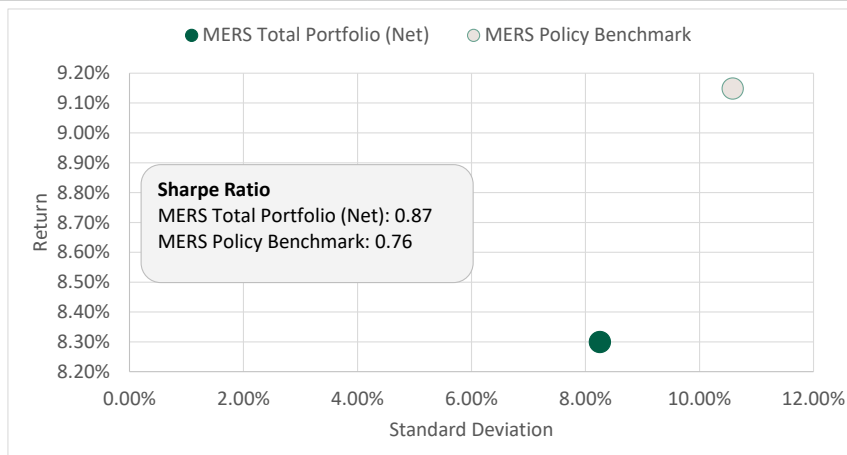


Growth of \$10,000 Comparison



5-Year

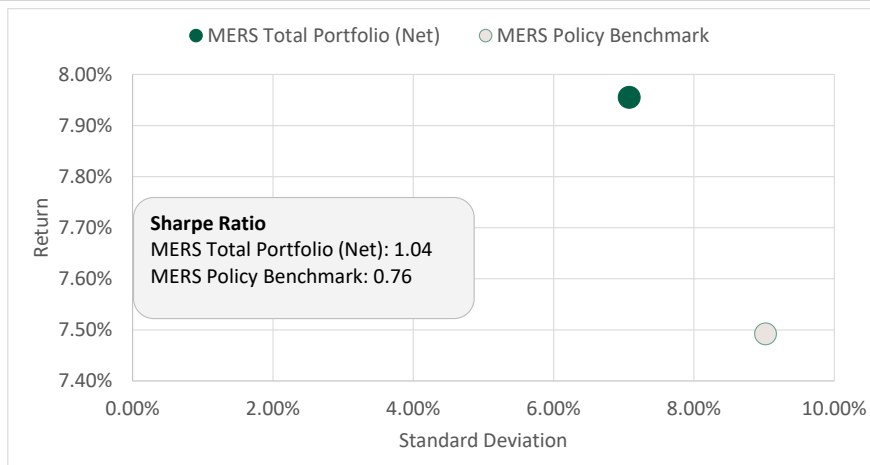
| | Return | Standard Deviation | Downside Risk | Beta | R-Squared | Tracking Error |
|----------------------------|--------|--------------------|---------------|------|-----------|----------------|
| MERS Total Portfolio (Net) | 8.30% | 8.25% | 6.10% | 0.76 | 94.36 | 3.23% |
| MERS Policy Benchmark | 9.15% | 10.58% | 7.92% | 1.00 | 100 | |



| | # of Months | | Average Return | | Up Capture | Down Capture |
|----------------------------|-------------|------|----------------|--------|------------|--------------|
| | Up | Down | Up | Down | | |
| MERS Total Portfolio (Net) | 42 | 18 | 1.82% | -1.92% | 78.60% | 74.60% |
| MERS Policy Benchmark | 42 | 18 | 2.25% | -2.64% | | |

10-Year

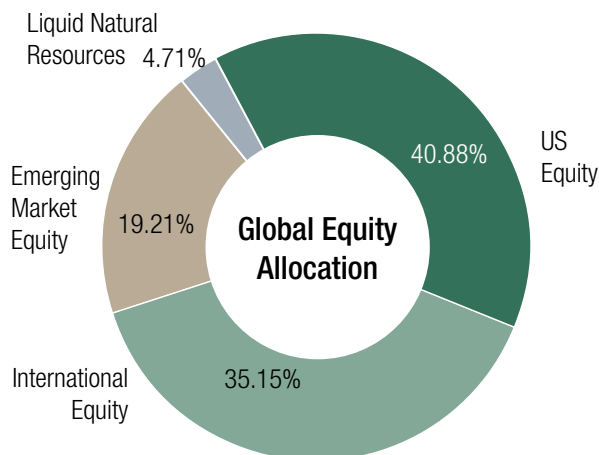
| | Return | Standard Deviation | Downside Risk | Beta | R-Squared | Tracking Error |
|----------------------------|--------|--------------------|---------------|------|-----------|----------------|
| MERS Total Portfolio (Net) | 7.96% | 7.08% | 5.27% | 0.75 | 91.60 | 3.04% |
| MERS Policy Benchmark | 7.49% | 9.02% | 6.65% | 1.00 | 100.00 | |



| | # of Months | | Average Return | | Up Capture | Down Capture |
|----------------------------|-------------|------|----------------|--------|------------|--------------|
| | Up | Down | Up | Down | | |
| MERS Total Portfolio (Net) | 84 | 36 | 1.65% | -1.64% | 82.60% | 68.60% |
| MERS Policy Benchmark | 81 | 39 | 1.98% | -2.15% | | |

| | |
|-------------------------|-----------------|
| Market Value | \$7,105,176,608 |
| Assets – % of Portfolio | 53.53% |

| Sub Asset Class | Market Value |
|--------------------------|------------------------|
| US Equity | \$2,904,525,077 |
| International Equity | \$2,497,637,327 |
| Emerging Market Equity | \$1,365,095,041 |
| Liquid Natural Resources | \$337,919,162 |
| Total | \$7,105,176,608 |



Performance (Net)

| | Market Value | % OF PLAN | QTD | YTD | 1 Year | 3 Year | 5 Year | 7 Year | 10 Year |
|--|------------------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|
| Global Equity ¹ | \$7,105,176,608 | 50.98 | -6.50 | -6.50 | 3.63 | 11.01 | 9.34 | 8.29 | 9.78 |
| <i>Global Equity Policy Blend ²</i> | | | -5.36 | -5.36 | 7.77 | 15.01 | 12.78 | 10.46 | 11.37 |
| <i>MSCI ACWI</i> | | | -5.36 | -5.36 | 7.28 | 13.75 | 11.64 | 9.67 | 10.00 |
| US Equity | \$2,904,525,077 | 21.88 | -5.19 | -5.19 | 12.45 | 15.38 | | | |
| <i>Russell 3000</i> | | | -5.13 | -5.13 | 13.27 | 18.71 | | | |
| US Large Cap Equity | \$2,024,486,485 | 15.25 | -4.50 | -4.50 | 16.04 | 17.54 | 15.28 | 13.62 | 14.95 |
| <i>Russell 1000</i> | | | -4.60 | -4.60 | 15.65 | 18.93 | 15.99 | 14.01 | 14.64 |
| US Mid Cap Equity | \$401,725,902 | 3.03 | -5.00 | -5.00 | 4.41 | 14.06 | 11.07 | 9.41 | 11.65 |
| <i>Russell Midcap</i> | | | -5.68 | -5.68 | 6.92 | 14.89 | 12.62 | 10.68 | 12.85 |
| US Small Cap Equity | \$52,681,237 | 0.40 | -6.03 | -6.03 | 2.32 | 13.68 | 10.61 | 9.74 | 10.92 |
| <i>Russell 2000</i> | | | -7.53 | -7.53 | -5.79 | 11.74 | 9.74 | 8.87 | 11.04 |
| US Micro Cap Equity | \$425,631,454 | 3.21 | -8.26 | -8.26 | 4.39 | 13.48 | 9.42 | 8.37 | 11.07 |
| <i>Russell Microcap</i> | | | -7.60 | -7.60 | -10.99 | 13.03 | 9.86 | 8.57 | 11.14 |
| International Equity | \$2,497,637,327 | 18.82 | -7.42 | -7.42 | -0.99 | 8.27 | | | |
| <i>MSCI World ex USA IMI</i> | | | -5.18 | -5.18 | 2.31 | 8.69 | | | |
| International Large Cap Equity | \$1,713,898,416 | 12.91 | -7.47 | -7.47 | -1.69 | 7.20 | 5.92 | | |
| <i>MSCI World ex USA</i> | | | -4.81 | -4.81 | 3.04 | 8.51 | 7.42 | | |
| International Small Cap Equity | \$783,738,911 | 5.90 | -7.25 | -7.25 | 0.67 | 10.95 | 9.36 | 9.65 | 10.40 |
| <i>MSCI World ex USA Small Cap</i> | | | -7.23 | -7.23 | -1.69 | 9.55 | 7.79 | 7.47 | 7.78 |
| Emerging Market Equity | \$1,365,095,041 | 10.28 | -7.63 | -7.63 | -4.87 | 7.34 | 5.91 | 5.64 | 3.92 |
| <i>MSCI Emerging Markets IMI</i> | | | -6.65 | -6.65 | -9.49 | 5.74 | 6.19 | 4.85 | 3.59 |
| Emerging Market Large Cap Equity | \$779,140,965 | 5.87 | -7.81 | -7.81 | -12.18 | 4.80 | 5.18 | 4.44 | 1.49 |
| <i>MSCI Emerging Markets</i> | | | -6.97 | -6.97 | -11.37 | 4.94 | 5.98 | 4.69 | 3.36 |
| Emerging Market Small Cap Equity | \$358,491,837 | 2.70 | -9.55 | -9.55 | 2.49 | 13.55 | 8.48 | 8.75 | |
| <i>MSCI Emerging Markets Small Cap</i> | | | -4.33 | -4.33 | 5.52 | 11.93 | 7.81 | 6.11 | |
| Frontier Market Equity | \$227,462,239 | 1.71 | -3.83 | -3.83 | 6.21 | 5.17 | 3.91 | 3.60 | 5.05 |
| <i>MSCI Frontier Markets</i> | | | -7.90 | -7.90 | 9.39 | 7.28 | 5.96 | 4.03 | 5.89 |
| Liquid Natural Resources | \$337,919,162 | 2.55 | 14.60 | 14.60 | 22.94 | | | | |
| <i>Policy Benchmark ³</i> | | | -5.54 | -5.54 | 3.17 | | | | |

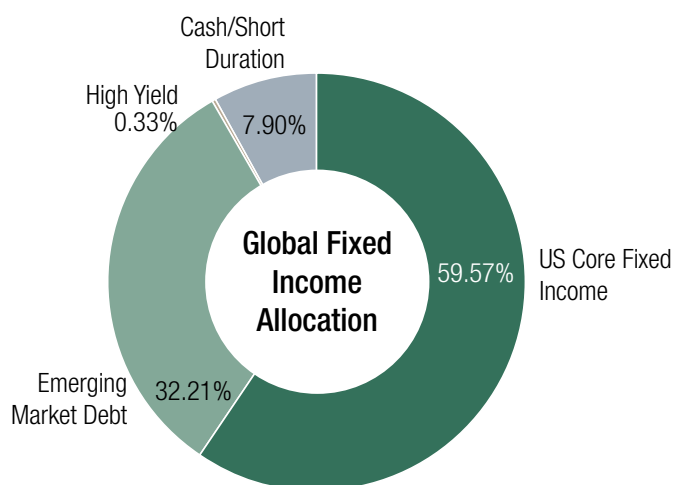
¹ Global Equity returns do not include Liquid Natural Resources

² 70% Russell 3000, 30% MSCI ACWI ex USA IMI (net)

³ 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 | \$2,916,574,192 |
| Assets – % of Portfolio | 21.97% |

| Sub Asset Class | Market Value |
|----------------------|------------------------|
| US Core Fixed Income | \$1,737,488,998 |
| Emerging Market Debt | \$939,319,093 |
| High Yield | \$9,486,112 |
| Cash/Short Duration | \$230,279,988 |
| Total | \$2,916,574,192 |



Performance (Net)

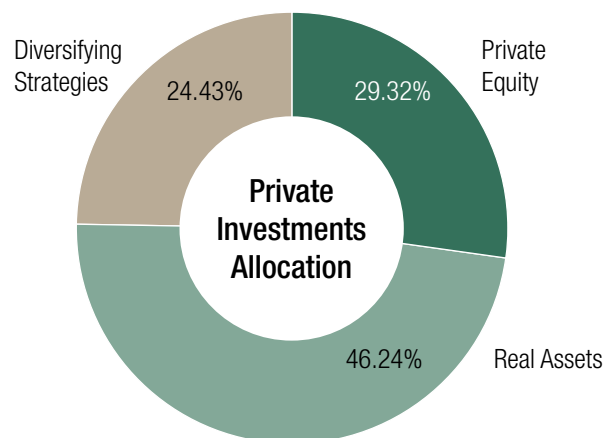
| | Market Value | % OF PLAN | QTD | YTD | 1 Year | 3 Year | 5 Year | 7 Year | 10 Year |
|---|------------------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|
| Global Fixed Income ex Cash | \$2,686,294,203 | 20.24 | -6.26 | -6.26 | -4.53 | 3.60 | 3.45 | 3.71 | 3.50 |
| <i>Global Fixed Income Policy Blend¹</i> | | | -6.00 | -6.00 | -5.22 | 1.17 | 1.91 | 1.67 | 1.39 |
| <i>Bloomberg Barclays Global Aggregate</i> | | | -6.16 | -6.16 | -6.40 | 0.69 | 1.70 | 1.58 | 1.04 |
| US Core Fixed Income | \$1,737,488,998 | 13.09 | -4.81 | -4.81 | -3.20 | 1.60 | 1.98 | 1.76 | 2.37 |
| <i>Bloomberg Barclays U.S. Aggregate</i> | | | -5.93 | -5.93 | -4.15 | 1.69 | 2.14 | 1.87 | 2.24 |
| Emerging Market Debt | \$939,319,093 | 7.08 | -8.89 | -8.89 | -7.08 | 1.09 | 2.04 | 3.95 | 3.60 |
| <i>JP Morgan EMBI Global Diversified</i> | | | -10.02 | -10.02 | -7.44 | 0.01 | 1.69 | 3.05 | 3.74 |
| High Yield | \$9,486,112 | 0.07 | -5.43 | -5.43 | -1.93 | | | | |
| <i>Bloomberg Barclays U.S. Corporate High Yield</i> | | | -4.84 | -4.84 | -0.66 | | | | |
| Cash/Short Duration² | \$230,279,988 | 1.73 | 0.04 | 0.04 | 0.73 | 1.67 | 1.52 | 1.32 | 1.22 |
| <i>91 Day Treasury Bill</i> | | | 0.04 | 0.04 | 0.06 | 0.81 | 1.13 | 0.87 | 0.63 |

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 | \$3,252,537,403 |
| Assets – % of Portfolio | 24.50% |

| Sub Asset Class | Market Value |
|-------------------------|------------------------|
| Private Equity | \$953,785,145 |
| Real Assets | \$1,504,026,835 |
| Diversifying Strategies | \$794,725,423 |
| Total | \$3,252,537,403 |



Performance (Net)

| | Market Value | % OF PLAN | QTD | YTD | 1 Year | 3 Year | 5 Year | 7 Year | 10 Year |
|---|------------------------|--------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|
| Private Investments | \$3,252,537,403 | 24.50 | 0.80 | 0.80 | 18.52 | 13.95 | | | |
| <i>Public Markets</i> | | | -5.67 | -5.67 | 1.72 | 9.22 | | | |
| <i>Policy Benchmark¹</i> | | | -5.54 | -5.54 | 3.17 | 10.34 | | | |
| Private Equity | \$953,785,145 | 7.19 | 5.25 | 5.25 | 42.39 | 27.52 | 22.44 | 17.68 | 16.10 |
| <i>Private Equity Blend²</i> | | | -8.01 | -8.01 | -4.62 | 10.23 | 8.71 | 8.25 | 9.82 |
| Real Assets | \$1,504,026,835 | 11.33 | -2.26 | -2.26 | 10.58 | 10.75 | 8.48 | 8.78 | 7.11 |
| <i>Real Assets Blend³</i> | | | | | | | | | |
| Diversified Real Assets | \$1,222,408,236 | 9.21 | -2.75 | -2.75 | 7.34 | 12.13 | 7.64 | | |
| <i>Real Assets Blend</i> | | | | | | | | | |
| Real Estate | \$280,158,571 | 2.11 | 0.25 | 0.25 | 25.33 | 9.82 | 11.12 | 11.20 | 12.37 |
| <i>Real Estate Blend⁴</i> | | | | | | | | | |
| Timber | \$37,929,852 | 0.29 | -0.28 | -0.28 | 20.28 | 9.38 | 11.01 | 8.81 | 8.03 |
| <i>S&P Global Timber & Forestry Index Net</i> | | | -2.77 | -2.77 | 6.28 | 13.45 | 10.99 | 8.98 | 9.74 |
| Infrastructure | \$328,822,325 | 2.48 | 0.69 | 0.69 | 21.92 | 11.86 | 7.54 | 7.12 | 5.89 |
| <i>Private Infrastructure Blend⁵</i> | | | -0.50 | -0.50 | 9.97 | 7.43 | 5.97 | 5.74 | 5.37 |
| Commodities | \$266,626,545 | 2.01 | -12.50 | -12.50 | 3.06 | 7.54 | 1.06 | 8.46 | 2.69 |
| <i>Bloomberg Commodity Index Total Return</i> | | | 25.55 | 25.55 | 49.25 | 16.12 | 9.00 | 4.33 | -0.70 |
| Agriculture & Farmland | \$405,124,142 | 3.05 | 0.75 | 0.75 | 2.98 | 16.58 | 14.51 | 9.94 | |
| <i>S&P Global Agribusiness Equity Index TR</i> | | | 17.47 | 17.47 | 27.24 | 20.82 | 14.26 | 10.91 | |
| Diversifying Strategies | \$794,725,423 | 5.99 | 1.72 | 1.72 | 12.18 | 9.16 | 6.96 | 5.89 | |
| <i>Diversifying Strategies Blend⁶</i> | | | -5.73 | -5.73 | -0.68 | 6.22 | 5.62 | 4.30 | |

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 | \$1,161,058,614 | 30,883 | \$37,595 | 0.38% | Retirement Strategies |
| HCSP | \$384,551,883 | 33,442 | \$11,499 | 0.38% | Retirement Strategies |
| 457 Program | \$298,835,707 | 9,827 | \$30,410 | 0.39% | Retirement Strategies |
| MERS IRA | \$8,115,012 | 803 | \$10,106 | 0.39% | Retirement Strategies |
| TOTAL | \$1,852,561,216 | 74,955 | \$24,716 | | |

Institutional Funds

| Program | Assets | Municipalities | Average Account Size | Weighted Average Fee |
|--------------|------------------------|----------------|----------------------|----------------------|
| RHFV | \$1,396,672,469 | 319 | \$4,378,284 | 0.46% |
| ISP | \$56,136,541 | 5 | \$11,227,308 | 0.46% |
| TOTAL | \$1,452,809,010 | 324 | \$4,483,978 | |

Investment Allocations

| | PDA | Institutional Funds | Total |
|-----------------------------|------------------------|------------------------|------------------------|
| Retirement Strategies | \$1,348,474,557 | | \$1,348,474,557 |
| Total Market Fund | \$42,519,656 | \$1,451,587,991 | \$1,494,107,647 |
| Asset Allocation Portfolios | \$44,770,222 | \$225,507 | \$44,995,729 |
| Asset Specific funds | \$388,998,713 | \$995,512 | \$389,994,225 |
| Self-directed Brokerage | \$9,773,630 | | \$9,773,630 |
| Other | \$18,024,438 | | \$18,024,438 |
| TOTAL | \$1,852,561,216 | \$1,452,809,010 | \$3,305,370,226 |

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 (Q4 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 | \$19,300,879 | 0.37% | 1.33 | 5.50 | 4.83 | 1.33 |
| MERS 2010 Retirement Strategy | \$25,874,367 | 0.38% | 1.66 | 5.94 | 5.33 | 1.66 |
| MERS 2015 Retirement Strategy | \$83,488,480 | 0.38% | 2.70 | 7.21 | 6.36 | 2.70 |
| MERS 2020 Retirement Strategy | \$103,720,453 | 0.38% | 3.58 | 8.29 | 7.24 | 3.58 |
| MERS 2025 Retirement Strategy | \$221,396,266 | 0.39% | 3.94 | 9.03 | 7.86 | 3.94 |
| MERS 2030 Retirement Strategy | \$177,188,955 | 0.39% | 4.03 | 9.56 | 8.39 | 4.03 |
| MERS 2035 Retirement Strategy | \$176,378,127 | 0.39% | 4.12 | 10.08 | 8.92 | 4.12 |
| MERS 2040 Retirement Strategy | \$160,515,413 | 0.39% | 4.38 | 10.77 | 9.49 | 4.38 |
| MERS 2045 Retirement Strategy | \$132,868,922 | 0.39% | 4.66 | 11.56 | 10.03 | 4.66 |
| MERS 2050 Retirement Strategy | \$110,555,911 | 0.39% | 4.67 | 11.61 | 10.07 | 4.67 |
| MERS 2055 Retirement Strategy | \$82,856,366 | 0.39% | 4.74 | 11.67 | 10.11 | 4.74 |
| MERS 2060 Retirement Strategy | \$49,478,438 | 0.39% | 4.72 | 11.72 | 10.14 | 4.72 |
| MERS 2065 Retirement Strategy | \$4,851,980 | 0.39% | 4.77 | | | |
| TOTAL | \$1,348,474,557 | | | | | |

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 | \$1,494,107,647 | 0.56% | 4.93 | 9.75 | 7.90 | 7.53 |
| <i>MERS Policy Benchmark</i> | | | 3.17 | 10.34 | 9.15 | 7.48 |
| MERS Global Stock Portfolio (100/0) | \$16,030,822 | 0.34% | 4.69 | 11.94 | 10.44 | |
| <i>Blended Benchmark</i> | | | 7.28 | 13.75 | 11.64 | |
| MERS Established Market Portfolio (60/40) | \$15,010,394 | 0.34% | 1.62 | 7.86 | 7.07 | 7.16 |
| <i>Blended Benchmark</i> | | | 2.70 | 9.65 | 8.66 | 7.92 |
| MERS Diversified Bond Portfolio (0/100) | \$13,954,514 | 0.33% | -3.11 | 0.99 | 1.60 | 2.10 |
| <i>Bloomberg U.S. Aggregate Bond Index</i> | | | -4.15 | 1.69 | 2.14 | 2.24 |
| TOTAL | \$1,539,103,377 | | | | | |

Premium Select Options – Funds to Build Your Own Portfolio

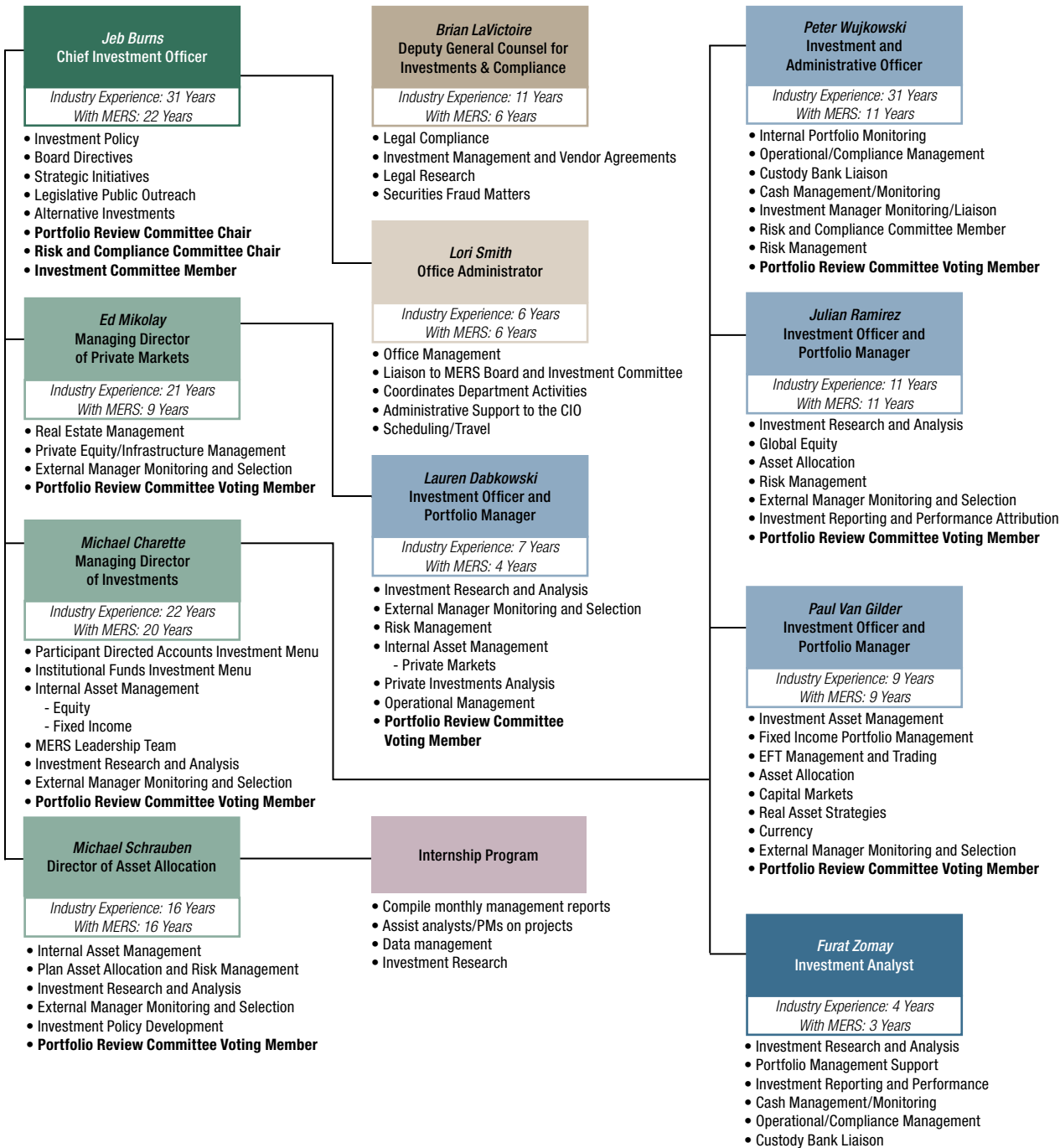
| MERS Portfolio Options | Assets | Expense Ratio | 1 Year | 3 Year | 5 Year | 10 Year |
|---|----------------------|---------------|--------|--------|--------|---------|
| Large Cap Stock Index Fund | \$196,677,132 | 0.33% | 15.18 | 18.46 | 15.59 | 14.22 |
| <i>S&P 500 Index</i> | | | 15.65 | 18.93 | 15.99 | 14.64 |
| Mid Cap Stock Index | \$39,685,053 | 0.33% | 4.12 | 13.77 | 10.77 | 11.95 |
| <i>S&P 400 Index</i> | | | 4.59 | 14.14 | 11.10 | 12.20 |
| Small Cap Stock Index | \$23,903,968 | 0.33% | 0.56 | 13.78 | 10.92 | |
| <i>S&P 600 Index</i> | | | 1.23 | 13.58 | 10.89 | |
| International Stock Index | \$16,619,729 | 0.36% | 1.04 | 7.12 | 6.24 | 5.74 |
| <i>MSCI EAFE Net Dividend Index</i> | | | 1.16 | 7.78 | 6.72 | 6.27 |
| Emerging Market Stock | \$4,533,729 | 0.45% | -10.34 | 5.21 | 4.54 | |
| <i>Blended Benchmark</i> | | | -11.37 | 4.94 | 5.80 | |
| Real Estate Stock | \$7,153,045 | 0.38% | 27.57 | 11.02 | 10.17 | 9.57 |
| <i>Dow Jones U.S. Select REIT Index</i> | | | 27.72 | 9.90 | 8.89 | 9.17 |
| Bond Index | \$18,908,370 | 0.35% | -4.40 | 1.86 | 2.06 | 1.89 |
| <i>Bloomberg U.S. Aggregate Bond Index</i> | | | -4.15 | 1.69 | 2.14 | 2.24 |
| High Yield Bond | \$5,728,916 | 0.48% | -1.16 | 3.57 | 3.89 | 4.82 |
| <i>Bloomberg U.S. High Yield Net Return Index</i> | | | 9.96 | 6.39 | 5.97 | 6.50 |
| Short-Term Income | \$22,133,585 | 0.33% | -1.24 | 1.34 | 1.29 | 0.84 |
| <i>Bloomberg U.S. Treasury: 1-3 Year</i> | | | -3.05 | 0.84 | 1.04 | 0.84 |
| Stable Value | \$54,650,698 | 0.58% | 1.57 | 2.04 | 2.00 | 1.99 |
| <i>ICE BofA US 3 Month Treasury Bill Index G001</i> | | | 0.06 | 0.81 | 1.13 | 0.63 |
| TOTAL | \$389,994,225 | | | | | |

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.

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