

Investment Performance Review
Period Ending September 30, 2022

Washoe County 457 & 401a Plans



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3rd Quarter 2022 Market Environment



The Economy

- Broadly, global markets declined during the 3rd quarter as inflation remained elevated, causing global central banks further drain liquidity from the market, and geopolitical risks increased as the conflict in Ukraine escalated.
- While inflation moderated slightly in the US, it showed signs of increasing, especially in Europe, where UK and German inflation reached multi-decade highs. US CPI was 8.3% in August, down from 9.1% at the end of the 2nd quarter.
- The US Federal Reserve Bank (the Fed) continued to increase interest rates during the quarter by raising 0.75% at the July and September meetings. Importantly, the Fed signaled it was committed to fight inflation by additional rate hikes if needed.
- The US labor market showed its resiliency during the quarter by adding an estimated 1.1 million jobs. As a result, the unemployment rate fell to 3.5% in September. The number of workers re-entering the workforce increased slightly during the period as wage growth remained strong.
- Real estate markets were under pressure during the quarter as rising interest rates pushed mortgages to their highest levels since 2007. As of September, the average 30-year fixed mortgage was roughly 6.7%, up from roughly 3.0% last year at the same time.

Equity (Domestic and International)

- US equities declined during the 3rd quarter as concerns regarding inflation, the path of interest rates, and a slowing global economy acted as headwinds. Small cap growth was the best performing domestic segment of the equity market relative to other US market capitalizations and styles during the period while large cap value performed the worst.
- Momentum was decidedly negative in international stocks during the 3rd quarter. The escalating conflict in Ukraine, rising inflation in Europe, and tightening monetary policy all contributed to the decline. The continued strength of the US dollar, which rose against most major developed market and emerging market currencies, also acted as a headwind. Finally, China continued its zero-tolerance policy regarding Covid-19, which led to additional restrictions.

Fixed Income

- While inflation fell slightly during the quarter, the Fed continued increasing interest rates which acted as a headwind for fixed income performance during the quarter. US interest rates moved significantly higher during the quarter with the US 10-Year Treasury bond rising 83 basis points to close at 3.80%.
- Performance across all bond market sectors was negative during the quarter, with US high yield corporate bonds and US Treasury bonds down the least.
- The combination of higher coupons and a shorter maturity profile relative to high quality government bonds was the primary driver of the relative outperformance of high yield bonds during the period.
- US Treasury bonds declined less than other investment grade bond market sectors during the quarter. During periods of increased volatility, investors have historically preferred the safety of government bonds over those with credit risk.

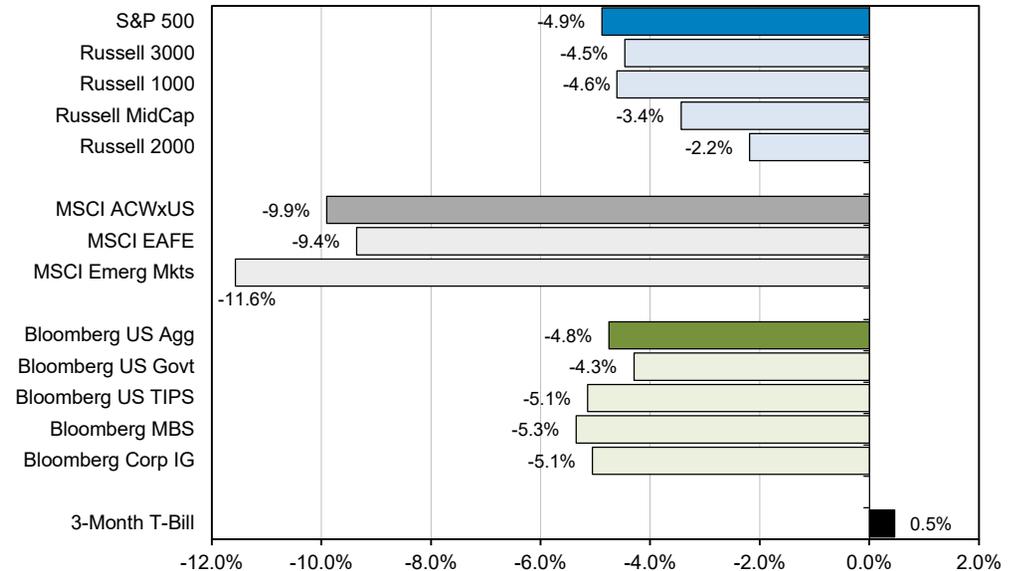
Market Themes

- Central banks remained hawkish during the quarter with several banks raising interest rates to fight higher inflation. The Fed, the Bank of England, and European Central Bank all raised rates during the quarter. Additionally, the Fed is currently allowing bonds to mature without reinvesting (quantitative tightening), while other banks are also considering similar actions. The outcome would be additional liquidity from the market.
- The escalating crisis in Ukraine spilled over as several gas pipelines were attacked in the Baltic Sea. The result was further disruption of energy supplies to Europe, Germany in particular. Energy costs have risen significantly since the start of the conflict which have negatively impacted economic activity in the region.
- US equity markets experienced their third consecutive quarter of negative performance during the 3rd quarter. Growth-oriented stocks outperformed value stocks as investors believe the Fed will begin slowing the rise of interest rates as economic growth declines. Historically, growth stocks have outperformed value stocks as the economy reaches the trough following a recession.
- Interest rates rose across the Treasury yield curve during the quarter as the Fed hiked interest rates by 0.75% at both the July and September meetings. The 3rd quarter marks the third consecutive quarter the bond market has suffered negative absolute returns. Long-term mortgage and investment grade corporate bonds underperformed during the quarter given their maturity profiles. High yield bonds outperformed primarily due to their shorter maturity profile and higher coupons.

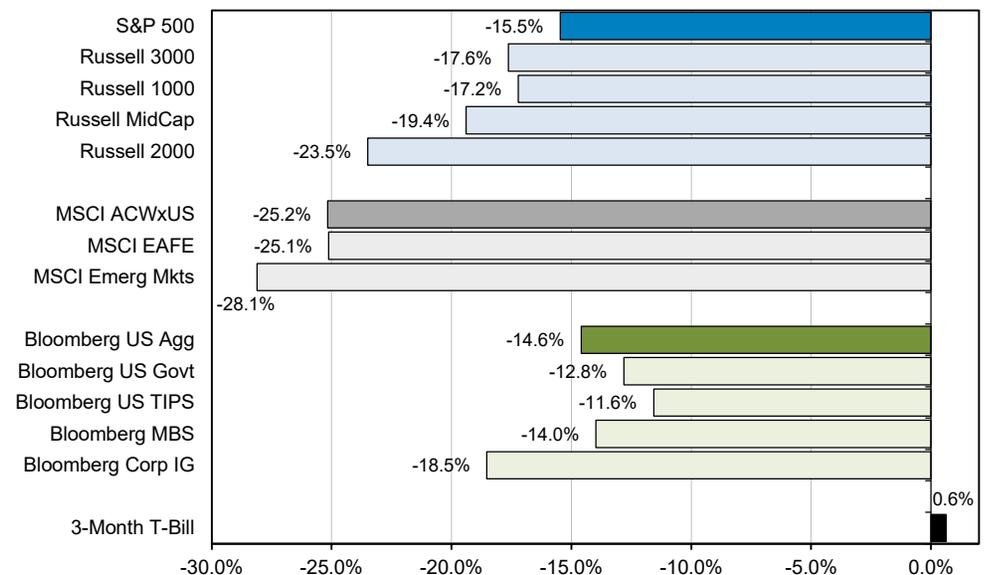


- Negative momentum continued during the 3rd quarter as broad US equity markets experienced negative returns. Factors that contributed to performance included elevated inflation, tighter monetary policy, continued geopolitical events in Ukraine, and expectations of slower economic growth. For the period, the S&P 500 large cap benchmark returned -4.9%, compared to -3.4% for mid-cap and -2.2% for small cap indices.
- Like domestic equities, developed markets international equities also suffered negative results for the 3rd quarter. Europe was negatively impacted by higher-than-expected inflation, the conflict in Ukraine, uncertainty regarding energy supplies, and rising interest rates. Emerging markets were also negatively impacted by war in Ukraine and a strengthening USD. During the period, the MSCI EAFE Index returned -9.4% while the MSCI Emerging Markets Index declined by -11.6%.
- For the quarter, performance of the bond market was broadly negative due to continued concerns about inflation and the FOMC's decision to raise interest rates twice during the period. The Bloomberg (BB) US Aggregate Index returned -4.8%, for the period while Investment Grade Corporate bonds posted a return of -5.1%.
- Performance for developed equity markets was strongly negative over the trailing 1-year period. The primary drivers of return during the period were weakening global economic growth, more restrictive monetary policy from global central banks, and elevated inflation. The S&P 500 large cap stock index led equity market performance for the year with a return of -15.5%. The outlier was the MSCI ACWI ex-US index which declined by -25.2% for the year.
- Over the trailing 1-year period, international markets fell with the developed market MSCI EAFE Index returning -25.1% while the MSCI Emerging Markets Index fell by -28.1%. Global economic growth slowed throughout the year and both developed and emerging markets were negatively impacted by a strong USD and continued geopolitical concerns.
- Bond market returns disappointed over the trailing 1-year period due primarily to concerns about rising inflation and the expectation of higher future interest rates. US TIPS were the best performing sector returning -11.6% while investment grade corporate bonds was the worst, falling -18.5%.

Quarter Performance



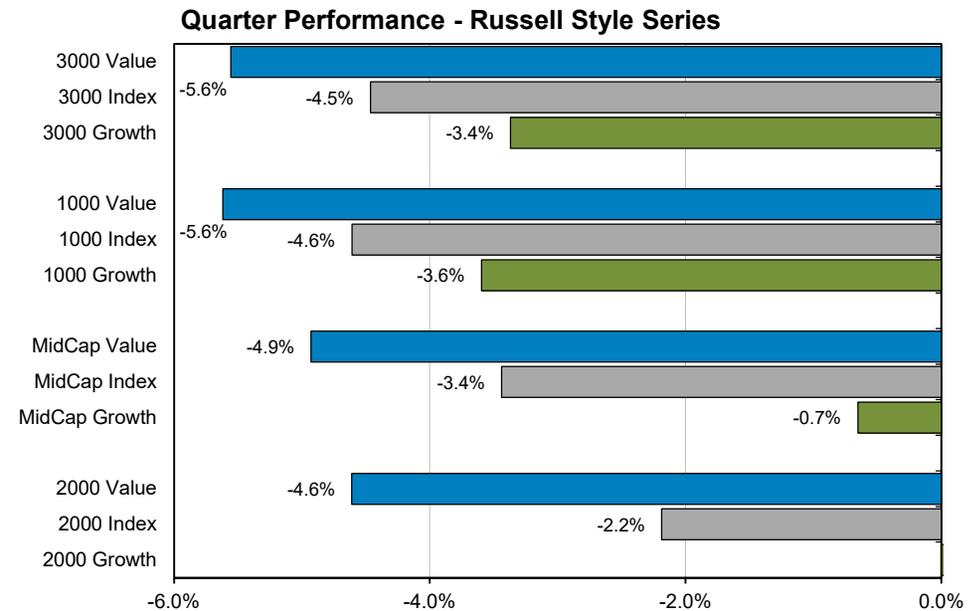
1-Year Performance



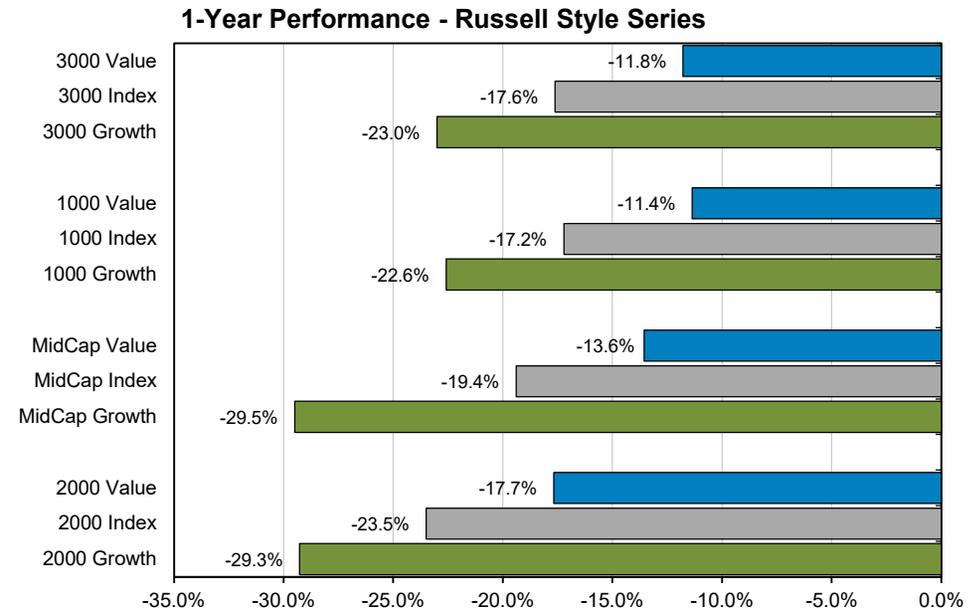
Source: Investment Metrics



- Volatility was high during the 3rd quarter as broad US equity markets rose sharply before falling to close the period with negative results across both the style and market capitalization spectrums. Leadership switched during the quarter with small cap stocks outperforming, followed by mid and large cap issues. The Russell 2000 Index declined by -2.2% for the quarter while the Russell Mid Cap Index and the Russell 1000 Index fell by -3.4% and -4.6%, respectively.
- Performance across styles and market capitalizations was disparate during the quarter. Large, mid, and small cap growth stocks all outperformed their value counterparts. For the period, the Russell 2000 Growth Index was the best relative performing style index, posting a return of 0.0%. Large and mid cap value stocks were the laggards during the period with the Russell Large Cap Value Index and Russell Mid Cap Value Index falling by -5.6% and -4.9%, respectively.



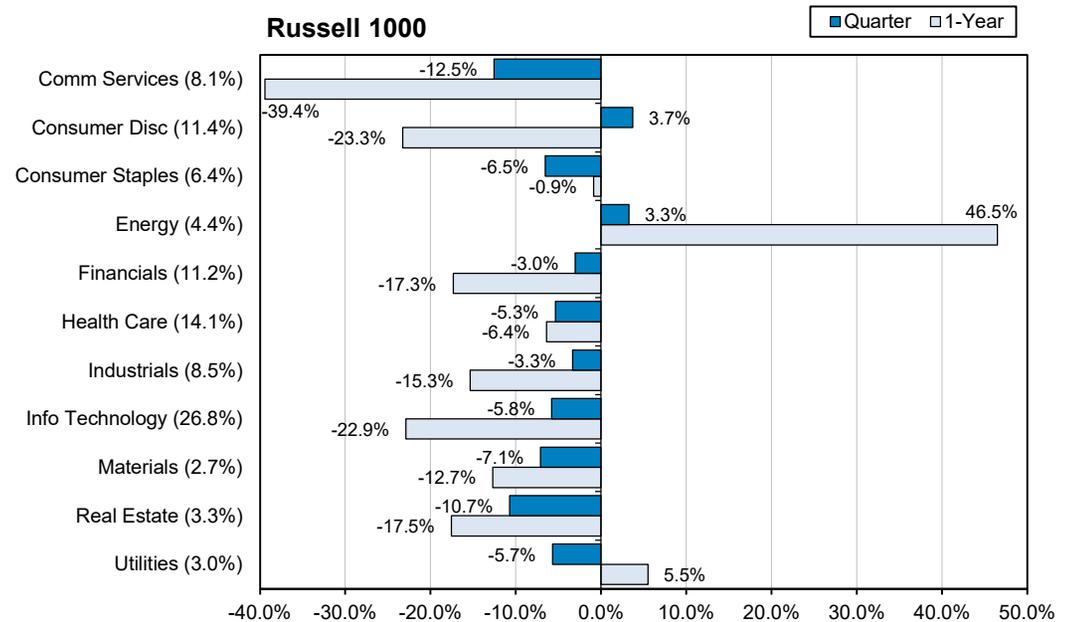
- Performance across all market capitalizations and styles was negative over the trailing 1-year period. Unlike the 3rd quarter, large cap stocks outperformed mid and small cap stocks for the year. The Russell 1000 Index return of -17.2% for the year, significantly outperformed both its mid and small cap growth index counterparts. The outlier during the period was the Russell 2000 Index which returned -23.5%.
- There was wide performance dispersion within across all style-based indexes. Value significantly outperformed growth over the year. Within large cap stocks, the Russell 1000 Value returned -11.4% compared to -22.6% for the Russell Large Cap Growth benchmark. The Russell Mid Cap Value Index returned -13.6% while the Russell 2000 Value Index returned -17.7% for the period. In comparison, the Russell Mid Cap Growth Index returned -29.5%, while the Russell 2000 Growth Index declined by -29.3%.



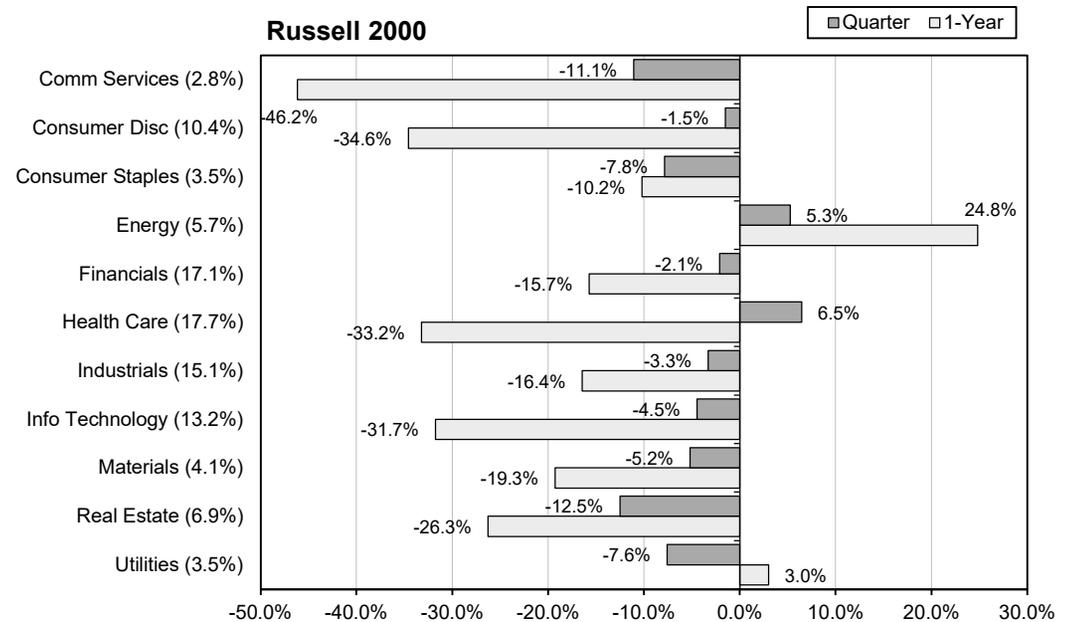
Source: Investment Metrics



- Economic sector performance was negative across nine of the eleven large cap economic sectors for the 3rd quarter. Four sectors outpaced the return of the broad index on a relative basis during the period.
- Consumer Discretionary (3.7%) and Energy (3.3%) were the only sectors with positive absolute performance during the period. Additionally, Financials (-3.0%) and Industrials (-3.3%) outperformed the broad index. Strong consumer demand acted as a tailwind for consumer-related stocks during the quarter. Energy continued its relative outperformance as the price of oil remained elevated.
- For the full year, six sectors exceeded the return of the broad large cap benchmark: Energy (46.5%), Utilities (5.5%), Consumer Staples (-0.9%), Health Care (-6.4%), Materials (-12.7%), and Industrials (-15.3%). The weakest economic sector performance in the Russell 1000 for the year was Communication Services which declined by returns (-39.4%).



- Small cap sector performance was also mixed during the quarter with two economic sectors posting positive performance relative to return of the broader Russell 2000 Index (-2.2%). Health Care (6.5%), and Energy (5.3%) were the best performing sectors for the period. Real Estate (-12.5%), and Communication Services (-11.1%) were the worst performing sectors for the quarter.
- For the trailing 1-year period, six of the eleven sectors outpaced the broad benchmark's return. Not surprisingly, sector performance was led by Energy (24.8%), Utilities (3.0%), Consumer Staples (-10.2%), Financials (-15.7%), and Industrials (-16.4%). The weakest sector over the full year was Communication Services (-46.2%), followed by Consumer Discretionary (-34.6%).



Source: Morningstar Direct
 As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



The Market Environment
Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000
As of September 30, 2022

| Top 10 Weighted Stocks | | | | |
|--------------------------------|--------|--------------|---------------|------------------------|
| Russell 1000 | Weight | 1-Qtr Return | 1-Year Return | Sector |
| Apple Inc | 6.31% | 1.22% | -1.79% | Information Technology |
| Microsoft Corp | 5.21% | -9.12% | -16.69% | Information Technology |
| Amazon.com Inc | 3.00% | 6.39% | -31.20% | Consumer Discretionary |
| Tesla Inc | 2.02% | 18.17% | 2.61% | Consumer Discretionary |
| Alphabet Inc Class A | 1.72% | -12.22% | -28.45% | Communication Services |
| Alphabet Inc Class C | 1.55% | -12.09% | -27.85% | Communication Services |
| Berkshire Hathaway Inc Class B | 1.44% | -2.20% | -2.17% | Financials |
| UnitedHealth Group Inc | 1.41% | -1.36% | 30.94% | Health Care |
| Johnson & Johnson | 1.28% | -7.35% | 3.82% | Health Care |
| Exxon Mobil Corp | 1.09% | 2.91% | 55.15% | Energy |

| Top 10 Performing Stocks (by Quarter) | | | | |
|---------------------------------------|--------|--------------|---------------|------------------------|
| Russell 1000 | Weight | 1-Qtr Return | 1-Year Return | Sector |
| Signify Health Inc Ordinary Shares | 0.01% | 111.23% | 63.12% | Health Care |
| First Solar Inc | 0.04% | 94.14% | 38.56% | Information Technology |
| Wolfspeed Inc | 0.04% | 62.90% | 28.03% | Information Technology |
| Penumbra Inc | 0.02% | 52.26% | -28.86% | Health Care |
| Oak Street Health Inc Ordinary Shares | 0.01% | 49.15% | -42.35% | Health Care |
| Sarepta Therapeutics Inc | 0.03% | 47.47% | 19.53% | Health Care |
| Constellation Energy Corp | 0.08% | 45.54% | N/A | Energy |
| The Trade Desk Inc Class A | 0.08% | 42.64% | -15.01% | Information Technology |
| Nutanix Inc Class A | 0.01% | 42.38% | -44.75% | Information Technology |
| Enphase Energy Inc | 0.11% | 42.12% | 85.02% | Energy |

| Bottom 10 Performing Stocks (by Quarter) | | | | |
|--|--------|--------------|---------------|------------------------|
| Russell 1000 | Weight | 1-Qtr Return | 1-Year Return | Sector |
| Sotera Health Co Ordinary Shares | 0.00% | -65.2% | -73.9% | Health Care |
| Novavax Inc | 0.00% | -64.6% | -91.2% | Health Care |
| Spectrum Brands Holdings Inc | 0.00% | -52.1% | -58.4% | Consumer Staples |
| AMC Entertainment Holdings Inc | 0.01% | -48.6% | -81.7% | Communication Services |
| WeWork Inc | 0.00% | -47.2% | N/A | Real Estate |
| The Scotts Miracle Gro Co A | 0.01% | -45.4% | -70.1% | Materials |
| AppLovin Corp Ordinary Shares | 0.01% | -43.4% | -73.1% | Information Technology |
| Azenta Inc | 0.01% | -40.6% | -58.1% | Health Care |
| NCR Corp | 0.01% | -38.9% | -51.0% | Information Technology |
| Enhabit Inc Shs | 0.00% | -38.9% | N/A | Health Care |

| Top 10 Weighted Stocks | | | | |
|------------------------------------|--------|--------------|---------------|------------------------|
| Russell 2000 | Weight | 1-Qtr Return | 1-Year Return | Sector |
| ShockWave Medical Inc | 0.45% | 45.5% | 35.1% | Health Care |
| Biohaven Pharmaceutical Holding Co | 0.43% | 3.7% | 8.8% | Health Care |
| Chart Industries Inc | 0.31% | 10.1% | -3.5% | Industrials |
| Karuna Therapeutics Inc | 0.30% | 77.8% | 83.9% | Health Care |
| Apellis Pharmaceuticals Inc | 0.28% | 51.0% | 107.2% | Health Care |
| Murphy USA Inc | 0.28% | 18.2% | 65.3% | Consumer Discretionary |
| Texas Roadhouse Inc | 0.27% | 19.8% | -2.4% | Consumer Discretionary |
| SouthState Corp | 0.27% | 3.2% | 8.5% | Financials |
| RBC Bearings Inc | 0.27% | 12.4% | -2.1% | Industrials |
| EMCOR Group Inc | 0.27% | 12.3% | 0.5% | Information Technology |

| Top 10 Performing Stocks (by Quarter) | | | | |
|---------------------------------------|--------|--------------|---------------|------------------------|
| Russell 2000 | Weight | 1-Qtr Return | 1-Year Return | Sector |
| Akero Therapeutics Inc | 0.04% | 260.3% | 52.3% | Health Care |
| Forma Therapeutics Holdings Inc | 0.03% | 189.6% | -14.0% | Health Care |
| Velo3D Inc | 0.01% | 185.5% | -52.9% | Industrials |
| Ventyx Biosciences Inc | 0.04% | 185.4% | N/A | Health Care |
| Verve Therapeutics Inc | 0.06% | 124.8% | -26.9% | Health Care |
| AN2 Therapeutics Inc | 0.00% | 124.3% | N/A | Health Care |
| Prothena Corp PLC | 0.10% | 123.3% | -14.9% | Health Care |
| Target Hospitality Corp Class A | 0.02% | 121.0% | 238.3% | Consumer Discretionary |
| 1Life Healthcare Inc Ordinary Shares | 0.14% | 118.8% | -15.3% | Health Care |
| Global Blood Therapeutics Inc | 0.19% | 113.1% | 167.3% | Health Care |

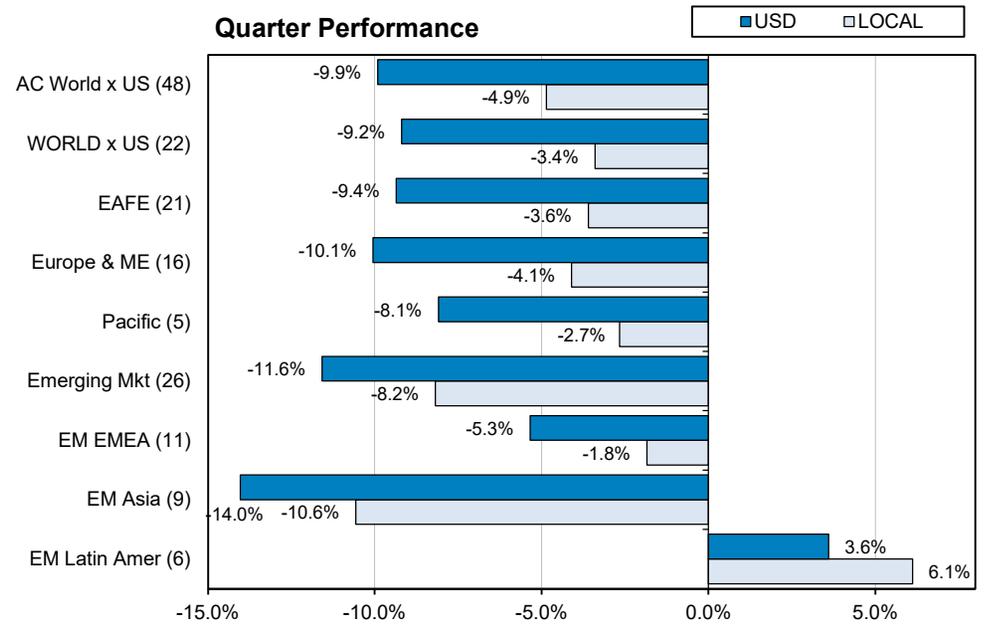
| Bottom 10 Performing Stocks (by Quarter) | | | | |
|--|--------|--------------|---------------|------------------------|
| Russell 2000 | Weight | 1-Qtr Return | 1-Year Return | Sector |
| Leafly Holdings Inc | 0.00% | -84.9% | 0.0% | Communication Services |
| VistaGen Therapeutics Inc | 0.00% | -82.7% | N/A | Health Care |
| Faraday Future Intelligent Electric Inc | 0.00% | -75.5% | N/A | Consumer Discretionary |
| SelectQuote Inc Ordinary Shares | 0.00% | -70.6% | -94.4% | Financials |
| IronNet Inc | 0.00% | -68.8% | N/A | Information Technology |
| Core Scientific Inc Ord Shs - Class A | 0.00% | -67.9% | N/A | Consumer Discretionary |
| Rockley Photonics Holdings Ltd | 0.00% | -67.4% | N/A | Information Technology |
| Loyalty Ventures Inc Ordinary Shares | 0.00% | -66.1% | 0.0% | Communication Services |
| Cryptyde Inc | 0.00% | -65.9% | 0.0% | Materials |
| Vintage Wine Estates Inc | 0.00% | -64.8% | -72.9% | Consumer Staples |

Source: Morningstar Direct



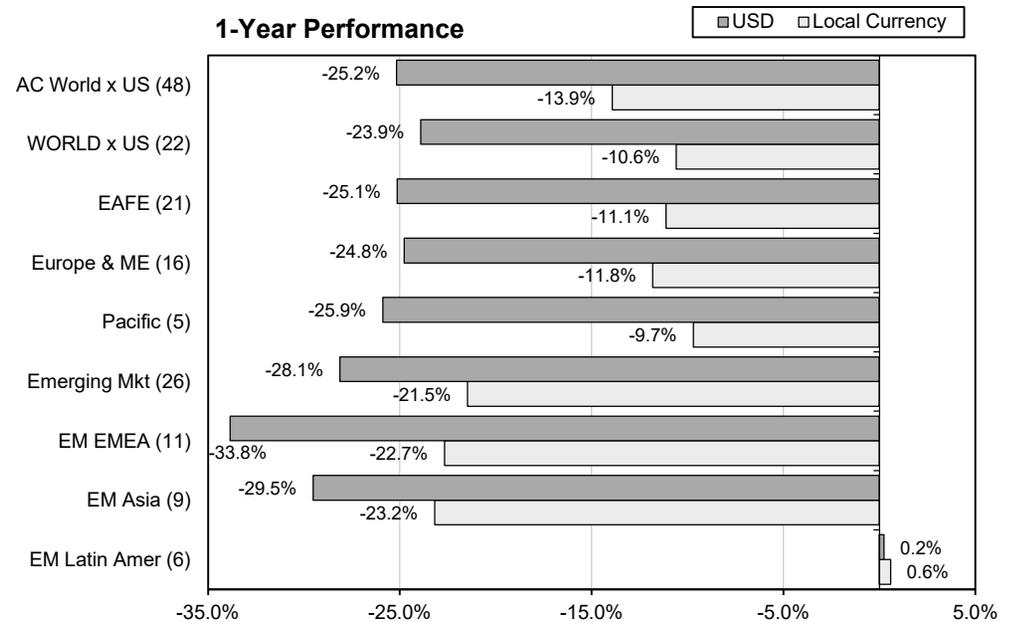
- Most developed and emerging market international equity indexes tracked in the chart posted negative returns in both US dollar (USD) and local currency (LC) terms for the 3rd quarter. The outlier during the period was the Latin America region. Higher commodity prices and demand benefited export-driven countries like Brazil. The developed market MSCI EAFE Index returned -9.4% in USD and -3.6% in LC terms for the period, while the MSCI Emerging Markets Index declined by -11.6% in USD and -8.2% in LC terms.

Quarter Performance



- The trailing 1-year results for international developed and emerging markets were broadly negative across most regions and currencies. The MSCI EAFE Index returned -25.1% in USD for the year and -11.1% in LC terms. Similarly, returns across emerging markets were broadly lower with the exception being Latin America with the MSCI Emerging Markets Index declining by -28.1% in USD and -21.5% in LC terms. Latin America regional index's return were the outlier, rising by 0.2% in USD and 0.6% in LC term. In contrast, performance in the EMEA regional benchmark significantly detracted from emerging market index performance with the EMEA Index returning -33.8% in USD and -22.7% in LC terms, respectively, due primarily to concerns related to Ukraine.

1-Year Performance



Source: MSCI Global Index Monitor (Returns are Net)



The Market Environment
US Dollar International Index Attribution & Country Detail
As of September 30, 2022

| MSCI - EAFE | Sector Weight | Quarter Return | 1-Year Return |
|------------------------|---------------|----------------|---------------|
| Communication Services | 4.8% | -13.7% | -28.6% |
| Consumer Discretionary | 11.3% | -9.8% | -32.3% |
| Consumer Staples | 11.3% | -7.1% | -17.3% |
| Energy | 4.9% | -5.0% | 6.0% |
| Financials | 17.6% | -9.6% | -22.1% |
| Health Care | 13.5% | -10.6% | -19.8% |
| Industrials | 15.0% | -8.3% | -31.5% |
| Information Technology | 7.9% | -8.3% | -38.9% |
| Materials | 7.5% | -8.9% | -21.3% |
| Real Estate | 2.8% | -13.1% | -29.1% |
| Utilities | 3.4% | -13.3% | -20.3% |
| Total | 100.0% | -9.4% | -25.1% |

| MSCI - ACWixUS | Sector Weight | Quarter Return | 1-Year Return |
|------------------------|---------------|----------------|---------------|
| Communication Services | 6.1% | -16.5% | -32.0% |
| Consumer Discretionary | 11.4% | -13.0% | -32.3% |
| Consumer Staples | 9.4% | -6.4% | -16.7% |
| Energy | 6.2% | -6.3% | -5.0% |
| Financials | 20.7% | -7.9% | -18.3% |
| Health Care | 9.6% | -11.0% | -23.5% |
| Industrials | 12.1% | -8.2% | -28.7% |
| Information Technology | 10.8% | -12.1% | -39.3% |
| Materials | 8.2% | -7.9% | -21.1% |
| Real Estate | 2.4% | -14.5% | -29.8% |
| Utilities | 3.4% | -10.9% | -16.0% |
| Total | 100.0% | -9.9% | -25.2% |

| MSCI - Emerging Mkt | Sector Weight | Quarter Return | 1-Year Return |
|------------------------|---------------|----------------|---------------|
| Communication Services | 9.7% | -19.3% | -36.2% |
| Consumer Discretionary | 14.0% | -18.7% | -33.7% |
| Consumer Staples | 6.6% | -4.5% | -17.8% |
| Energy | 5.3% | -2.6% | -30.1% |
| Financials | 22.6% | -5.1% | -14.3% |
| Health Care | 3.9% | -13.8% | -42.8% |
| Industrials | 5.8% | -9.9% | -20.8% |
| Information Technology | 18.3% | -15.5% | -36.1% |
| Materials | 8.7% | -7.4% | -26.3% |
| Real Estate | 2.0% | -19.3% | -31.9% |
| Utilities | 3.2% | -4.3% | -8.0% |
| Total | 100.0% | -11.6% | -28.1% |

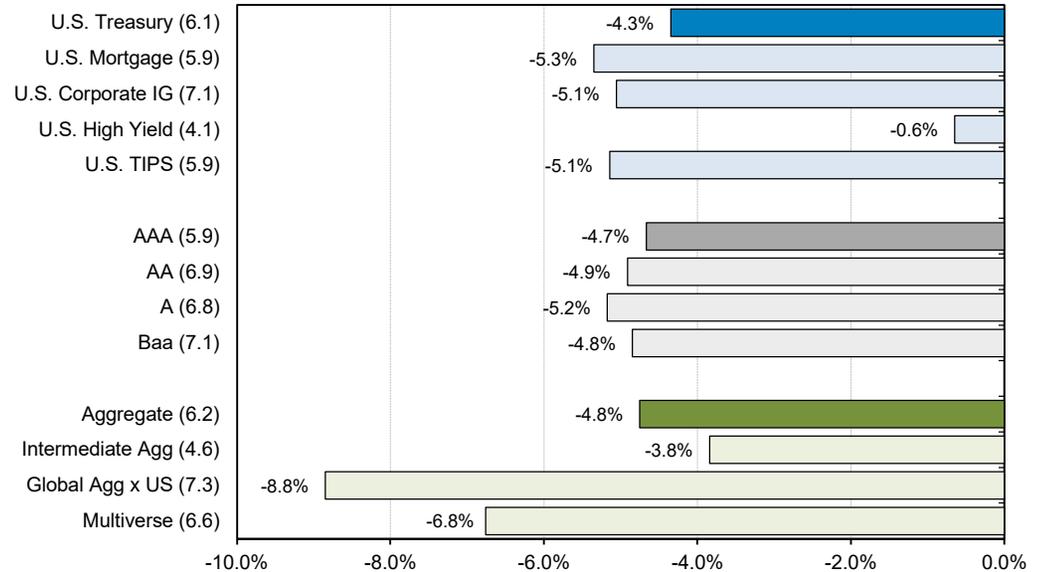
| Country | MSCI-EAFE Weight | MSCI-ACWixUS Weight | Quarter Return | 1-Year Return |
|----------------------------------|------------------|---------------------|----------------|---------------|
| Japan | 22.6% | 14.1% | -7.7% | -29.3% |
| United Kingdom | 15.5% | 9.7% | -10.8% | -14.1% |
| France | 11.3% | 7.1% | -8.9% | -24.0% |
| Switzerland | 10.7% | 6.7% | -7.5% | -16.5% |
| Australia | 8.0% | 5.0% | -6.7% | -16.4% |
| Germany | 7.6% | 4.7% | -12.6% | -37.1% |
| Netherlands | 4.1% | 2.6% | -10.7% | -38.2% |
| Sweden | 3.4% | 2.1% | -8.8% | -35.7% |
| Hong Kong | 3.0% | 1.9% | -17.0% | -22.3% |
| Denmark | 2.6% | 1.7% | -12.3% | -23.5% |
| Spain | 2.4% | 1.5% | -14.1% | -25.6% |
| Italy | 2.3% | 1.4% | -8.5% | -28.5% |
| Singapore | 1.6% | 1.0% | -1.5% | -22.1% |
| Belgium | 1.0% | 0.6% | -13.2% | -27.3% |
| Finland | 1.0% | 0.6% | -7.2% | -25.0% |
| Norway | 0.8% | 0.5% | -15.3% | -20.7% |
| Israel | 0.8% | 0.5% | -1.9% | -21.8% |
| Ireland | 0.6% | 0.4% | -5.5% | -38.9% |
| Portugal | 0.2% | 0.1% | -11.0% | -12.9% |
| Austria | 0.2% | 0.1% | -15.2% | -40.9% |
| New Zealand | 0.2% | 0.1% | -8.6% | -33.4% |
| Total EAFE Countries | 100.0% | 62.5% | -9.4% | -25.1% |
| Canada | | 8.2% | -7.8% | -12.6% |
| Total Developed Countries | | 70.7% | -9.2% | -23.9% |
| China | | 9.2% | -22.5% | -35.4% |
| Taiwan | | 4.0% | -14.5% | -30.5% |
| India | | 4.5% | 6.5% | -9.9% |
| Korea | | 3.1% | -16.4% | -40.7% |
| Brazil | | 1.7% | 8.5% | 4.3% |
| Saudi Arabia | | 1.4% | -0.1% | 1.9% |
| South Africa | | 1.0% | -12.3% | -19.2% |
| Mexico | | 0.7% | -5.4% | -7.4% |
| Thailand | | 0.6% | -2.9% | -6.8% |
| Indonesia | | 0.6% | 7.8% | 14.3% |
| Malaysia | | 0.4% | -7.1% | -15.9% |
| United Arab Emirates | | 0.4% | -2.5% | 5.1% |
| Qatar | | 0.4% | 3.1% | 12.7% |
| Kuwait | | 0.3% | -5.5% | 6.4% |
| Philippines | | 0.2% | -13.6% | -26.3% |
| Poland | | 0.2% | -25.1% | -51.9% |
| Chile | | 0.2% | 3.2% | 0.6% |
| Turkey | | 0.1% | 16.3% | 3.8% |
| Peru | | 0.1% | -0.9% | 3.0% |
| Greece | | 0.1% | -7.5% | -25.2% |
| Colombia | | 0.0% | -18.5% | -23.6% |
| Czech Republic | | 0.0% | -19.2% | -9.8% |
| Hungary | | 0.0% | -15.0% | -54.3% |
| Egypt | | 0.0% | -1.3% | -28.8% |
| Total Emerging Countries | | 29.3% | -11.6% | -28.1% |
| Total ACWixUS Countries | | 100.0% | -9.9% | -25.2% |

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.

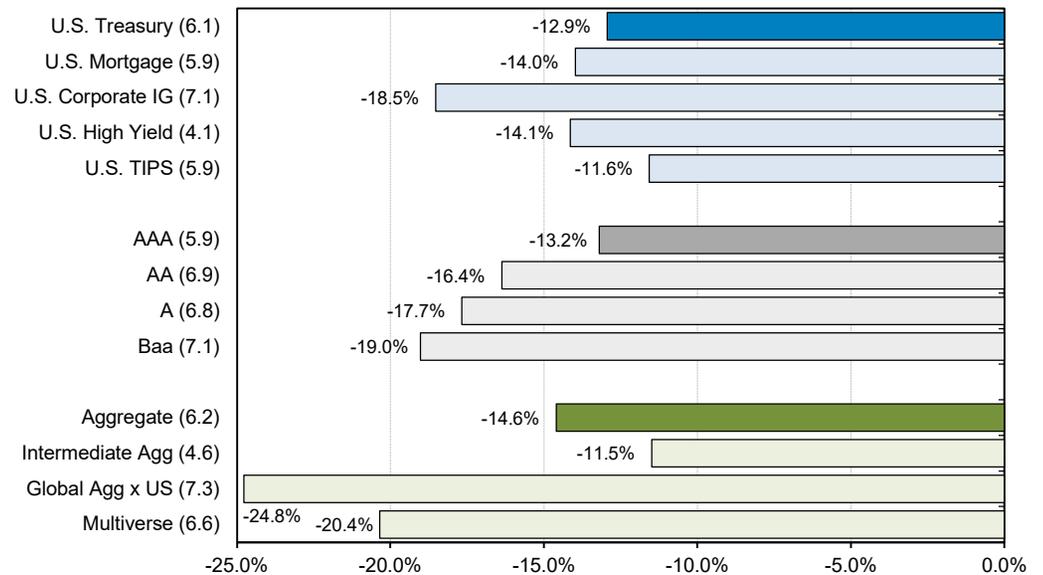


- Fixed income market results were broadly negative during the 3rd quarter. Investors' concerns about rising inflation, combined with expectations of higher US interest rates, detracted from performance. As a result, US Treasury yields continued to rise across the maturity curve throughout the quarter.
- The return for the BB US Aggregate Bond Index, the bellwether investment grade benchmark, was down -4.8% for the period.
- Performance across the investment grade index's segments was also negative during the period with the US Corporate Investment Grade bonds returning -5.1% and the US Mortgage index component posting a return of -5.3%.
- High yield bonds outperformed their investment grade counterparts, but still declined by -0.6%. US TIPS, which have delivered strong performance in recent periods, posted a decline of -5.1% as investors' expectations of future inflation declined.
- Outside of domestic markets, the BB Global Aggregate ex US Index posted a return of -8.8% for the quarter. Like domestic bonds, global bond index performance was negatively impacted by rising interest rates and a strengthening USD, which acted as a drag on domestic index returns.
- Over the trailing 1-year period, domestic investment grade benchmark performance was negative, led lower by investment grade corporate bonds (-18.5%), followed by mortgage-backed bonds (-14.0%), US Treasury bonds (-12.9%), and US TIPS (-11.6%). The bellwether Bloomberg US Aggregate Bond Index (-14.6%) declined for the year.
- Lower quality high yield corporate bonds outperformed their investment grade counterparts on a relative basis with the Bloomberg US High Yield Index returning -14.1% for the period.
- Performance for non-US bonds was broadly negative for the year with the developed market Bloomberg Global Aggregate ex US Index falling by -24.9%. The combination of rising interest rates overseas, persistent inflation, and USD strength hindered index performance for the year.

Quarter Performance



1-Year Performance

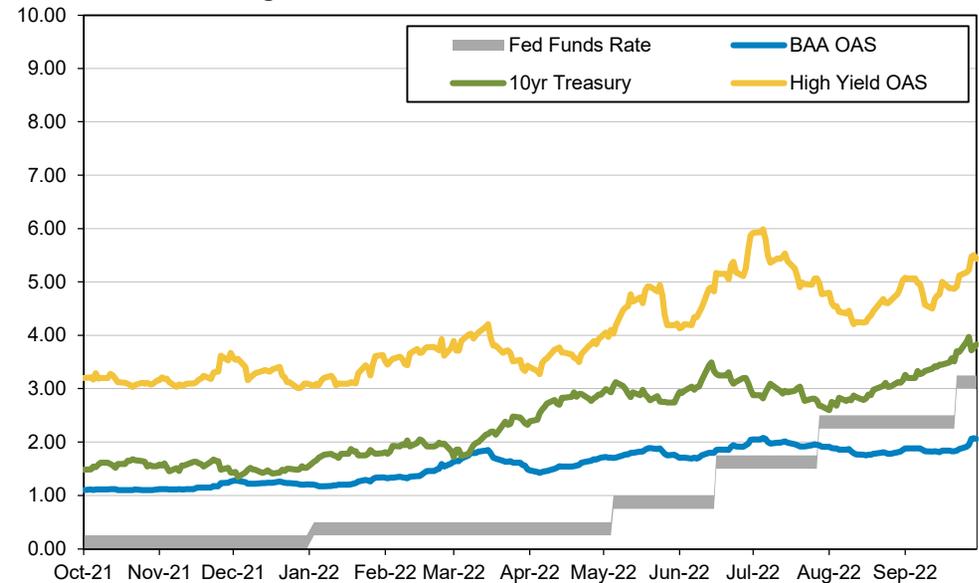


Source: Bloomberg

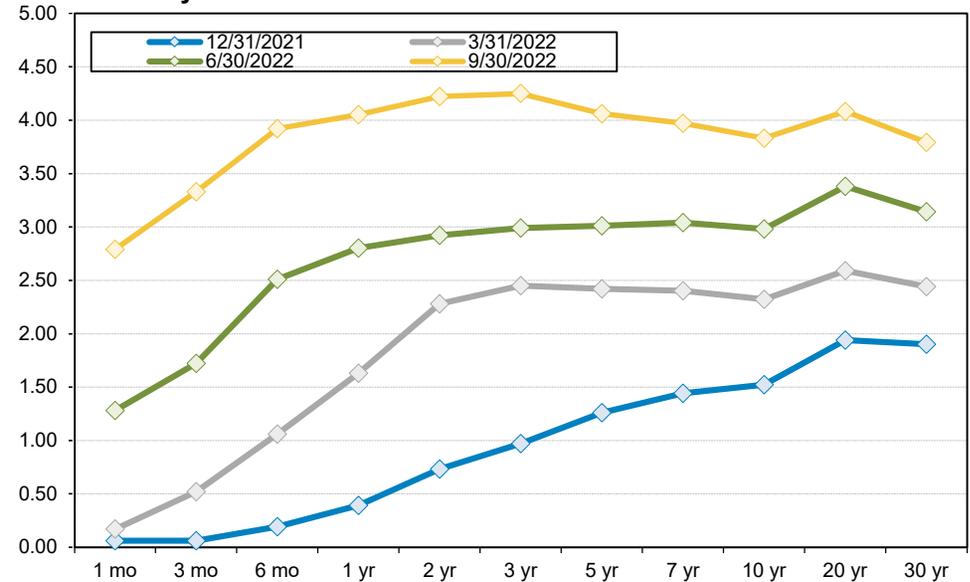


- The gray band across the graph illustrates the range of the current Fed Funds Rate. In the 3rd quarter this year, the Fed raised its target rate range from 1.75% to 3.25%. During its recent September meeting, the Federal Open Market Committee (FOMC) stated it intends to continue to remove liquidity from the market by raising interest rates and also allowing bonds held on its balance sheet to mature without reinvesting those proceeds. Importantly, the FOMC stated that it will remain vigilant in its fight against persistently higher inflation.
- The yield on the US 10-year Treasury (green line) ended the period higher as concerns over the pace of inflation, combined with the Fed's announced rate increase, drove yields higher. Interest rates continued to climb during the quarter, reaching a high of roughly 4.00% during the latter part of September 2022, before settling at 3.83% at the end of the month.
- The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-US Treasury investment grade issues. For the full year, the spread widened slightly from 1.10% to 2.06%. High Yield OAS was largely unchanged during the year as spreads rose from 3.17% to 5.43%. High Yield spreads reached as high as 5.80% in early July before trading lower the remainder of the quarter.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. Short-term rates continued to rise during the 3rd quarter as the FOMC continued raising rates to combat rising inflation. Both intermediate and longer-term rates were modestly higher across the curve, albeit less dramatically than short-term rates. The curve remained inverted between 2-year rates and 10-year rates. Said differently, the short-term rate was higher than the long-term rate. Historically, a persistent inversion of these two key rates has been an indication of a future recession withing 6- to 24-months.

1-Year Trailing Market Rates



Treasury Yield Curve



Source: US Department of Treasury, FRED (Federal Reserve of St. Louis)



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Evaluation Process

This section presents charts and graphs that highlight the investment character of each portfolio analyzed. The performance, portfolio characteristics, risk profile, and style traits of each portfolio are compared against those of its benchmark(s) and other funds with similar objectives. Eight criteria-specific rankings are developed, and then combined, to establish each portfolio's overall status.

The table below describes the evaluation standards used. Significant changes in portfolio characteristics compared to historical positioning, large performance deficits, and risk or style shortcomings are fundamental factors in concluding if remedial action is advisable. However, a violation of one of more of the standards does not automatically require remedial action.

| Investment Policy Criteria | Weighting | Summary of Evaluation |
|--|-----------|---|
| Manager Performance | | |
| Investment Returns vs. Peer Group | 20% | A fund is evaluated relative to where its 1, 3 and 5-year returns fall within its peer group. The results for each period are combined to determine total ranking (satisfactory, modest breach, significant concern). A similar process is used to evaluate the fund's performance relative to its benchmark(s). |
| Historical Performance vs. Benchmark | 20% | |
| Portfolio Characteristics | | |
| Adherence to Standards | 10% | These criteria compare portfolio characteristics such as market capitalization, number of holdings, cash, and concentration of holdings against objective standards and benchmarks. For example, a fund with a high allocation to cash or with a high/low average market capitalization relative to its benchmark will receive a lower grade. Additionally, funds having less than three years of performance history or having manager tenure of less than three years will receive a lower grade. |
| Inception & Manager Tenure | 10% | |
| Risk Profile | | |
| Sharpe Ratio & Standard Deviation Relative to Peer Group | 10% | A fund is evaluated relative to where its 3- and 5-year Sharpe ratio and standard deviation fall within its peer group. The results for each period are combined to determine total ranking. A similar process is used to evaluate the fund's Sharpe ratio and standard deviation relative to its benchmark(s). |
| Sharpe Ratio & Standard Deviation Relative to Benchmark | 10% | |
| Style Traits | | |
| Adherence to Investment Objectives | 10% | A fund's style is evaluated based upon how closely it adheres to its stated investment objective and how stable its style has been historically. Criteria used to evaluate a fund's style traits include returns-based style analysis, statistics such as r-squared, and portfolio characteristics such as price/earnings ratio. Funds with style traits that are inconsistent with their stated objective or historically unstable receive lower grades. |
| Historical Style Stability | 10% | |
| Status | | |
| Overall Status | | The results for all criteria are combined to determine an overall ranking for the fund. Rankings include Satisfactory, Modest Breach ("Guarded" status) and Significant Concern ("Watch List" status). |

Note: Grades are based on AndCo's Proprietary scale



Portfolio Evaluation Summary

This report provides opinions, analysis, and supporting statistical information concerning:

- the performance, volatility, and characteristics of each designated Plan fund
- the continuing suitability of each fund as a Plan investment option

Portfolio Performance and Suitability of Plan Funds

Our overall evaluation of the Plan's investment funds may be summarized as follows:

| Summary Evaluation | Number of Funds |
|---------------------|-----------------|
| Pass (Satisfactory) | 15 |
| Guarded | 1 |
| Watch | 0 |

See the Plan Funds Observations and Comments, below, for further explanation.

Plan Fund Observations and Comments

The majority of Plan funds have substantially achieved their category-specific standards for performance, controlled volatility, and portfolio characteristics. The charts in the following pages reveal some modest breaches compared to established

evaluation standards; however, we do not find divergences from the funds' stated objectives or styles that are worrisome except as discussed below.

Fund Commentary

The Hartford Mid Cap Fund remains on GUARDED status due to near term underperformance that has impacted longer term relative performance. The Fund continues to suffer from an overweight to technology and health care stocks which have struggled during the year. This was combined with poor stock selection in both sectors. We will continue to monitor the fund, we are not recommending any changes at this time.



Portfolio Evaluation Summary

- 1 Trailing 1, 3 and 5-year portfolio returns versus peer group
- 2 Historic performance relative to benchmark
- 3 Portfolio characteristics compared to established standards
- 4 At least 3 years of investment performance/At least 3 years with current fund manager
- 5 Sharpe ratio and standard deviation of fund relative to peer group
- 6 Sharpe ratio and standard deviation of fund relative to benchmark
- 7 Style consistent with fund objective
- 8 Style historically stable
- 9 Summary Evaluation

Pass (Satisfactory)

Guarded

Watch

| Investment Funds | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---------|---------|------|------|------|------|------|------|---------|
| American Funds EuroPacific Growth (RERGX) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| Allspring Small Co Growth R6 (WSCRX) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| Vanguard Small Cap Index Adm (VSMAX) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| AMG Managers Skyline Special Equities (SKSEX) | Guarded | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| Hartford Mid Cap (HIMCX) | Guarded | Guarded | Pass | Pass | Pass | Pass | Pass | Pass | Guarded |
| Vanguard Mid Cap Index Adm (VIMAX) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| American Funds Growth Fund of America (RGAGX) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| Allspring Disciplined US Core (EVSIX) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| Vanguard Institutional Index (VINIX) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| American Century Equity Income (AEUDX) | Guarded | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| American Funds Target Date 2060-2010 R6 | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| American Funds American Balanced (RLBGX) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| PIMCO High Yield (PHIYX) | Pass | Guarded | Pass |
| PIMCO Foreign Bond USD-Hedged (PFORX) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| Hartford Total Return Bond (HIABX) | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| Voya Fixed Account | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |



Historical Summary Evaluation

Pass (Satisfactory)

Guarded

Watch

| Investment Funds | 2Q22 | 1Q22 | 4Q21 | 3Q21 | 2Q21 | 1Q21 | 4Q20 | 3Q20 | 2Q20 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| American Funds EuroPacific Growth (RERGX) | Pass |
| Allspring Small Co Growth R6 (WSCRX) | Pass | Pass | Pass | Pass | Guarded | Guarded | Guarded | Guarded | Guarded |
| Vanguard Small Cap Index Adm (VSMAX) | Pass |
| AMG Managers Skyline Special Equities (SKSEX) | Pass | Guarded |
| Hartford Mid Cap (HIMCX) | Guarded | Guarded | Pass | Pass | Pass | Guarded | Guarded | Guarded | Pass |
| Vanguard Mid Cap Index Adm (VIMAX) | Pass |
| American Funds Growth Fund of America (RGAGX) | Guarded | Guarded | Guarded | Pass | Pass | Pass | Pass | Guarded | Guarded |
| Allspring Disciplined US Core (EVSIX) | Pass | Pass | Pass | Pass | Guarded | Guarded | Pass | Pass | Pass |
| Vanguard Institutional Index (VINIX) | Pass |
| American Century Equity Income (AEUDX) | Guarded | Guarded | Guarded | Guarded | Guarded | Pass | Pass | Pass | Pass |
| American Funds Target Date 2060-2010 R6 | Pass |
| American Funds American Balanced (RLBGX) | Pass |
| PIMCO High Yield (PHIYX) | Pass |
| PIMCO Foreign Bond USD-Hedged (PFORX) | Pass |
| Hartford Total Return Bond (HIABX) | Pass |
| Voya Fixed Account | Pass |

| Asset Allocation Attributes | Sep-2022 | | Jun-2022 | | Mar-2022 | |
|---|-----------------------|--------------------|---------------|--------------------|---------------|--------------------|
| | (\$) | % | (\$) | % | (\$) | % |
| | Total 457 Fund | 179,732,107 | 100.00 | 183,530,717 | 100.00 | 202,841,540 |
| International Equity | | | | | | |
| American Funds EuroPacific Growth (RERGX) | 4,723,302 | 2.63 | 5,235,254 | 2.85 | 6,148,263 | 3.03 |
| Domestic Equity | | | | | | |
| Allspring Small Co Growth (WSCRX) | 2,133,480 | 1.19 | 2,186,388 | 1.19 | 2,767,599 | 1.36 |
| Vanguard Small Cap Index (VSMAX) | 3,524,007 | 1.96 | 3,580,404 | 1.95 | 4,328,810 | 2.13 |
| AMG Managers Skyline Special Equities (SKSEX) | 1,696,231 | 0.94 | 1,789,990 | 0.98 | 2,147,808 | 1.06 |
| Hartford Mid Cap (HIMCX) | 7,411,814 | 4.12 | 7,873,704 | 4.29 | 9,824,119 | 4.84 |
| Vanguard Mid Cap Index (VIMAX) | 6,184,373 | 3.44 | 6,339,294 | 3.45 | 7,803,890 | 3.85 |
| AF Growth Fund of America (RGAGX) | 14,277,377 | 7.94 | 14,668,449 | 7.99 | 18,993,437 | 9.36 |
| Allspring Disciplined US Core (EVSIX) | 11,042,943 | 6.14 | 11,688,985 | 6.37 | 14,219,851 | 7.01 |
| Vanguard Institutional Index (VINIX) | 18,171,087 | 10.11 | 18,873,990 | 10.28 | 22,062,924 | 10.88 |
| American Century Equity Income (AEUDX) | 6,586,245 | 3.66 | 6,785,608 | 3.70 | 7,405,035 | 3.65 |
| Balanced Fund | | | | | | |
| American Funds American Balanced (RLBGX) | 6,280,616 | 3.49 | 6,650,103 | 3.62 | 7,391,723 | 3.64 |
| Fixed Income | | | | | | |
| PIMCO High Yield (PHIYX) | 2,085,760 | 1.16 | 2,133,435 | 1.16 | 2,338,624 | 1.15 |
| PIMCO Foreign Bond USD-Hedged (PFORX) | 447,918 | 0.25 | 471,557 | 0.26 | 500,263 | 0.25 |
| Hartford Total Return Bond (HIABX) | 3,317,301 | 1.85 | 3,503,150 | 1.91 | 3,705,677 | 1.83 |
| Cash | | | | | | |
| Voya Fixed Account | 73,484,768 | 40.89 | 73,120,719 | 39.84 | 73,274,457 | 36.12 |
| Loan Account | 2,231,297 | 1.24 | 2,143,480 | 1.17 | 2,023,948 | 1.00 |

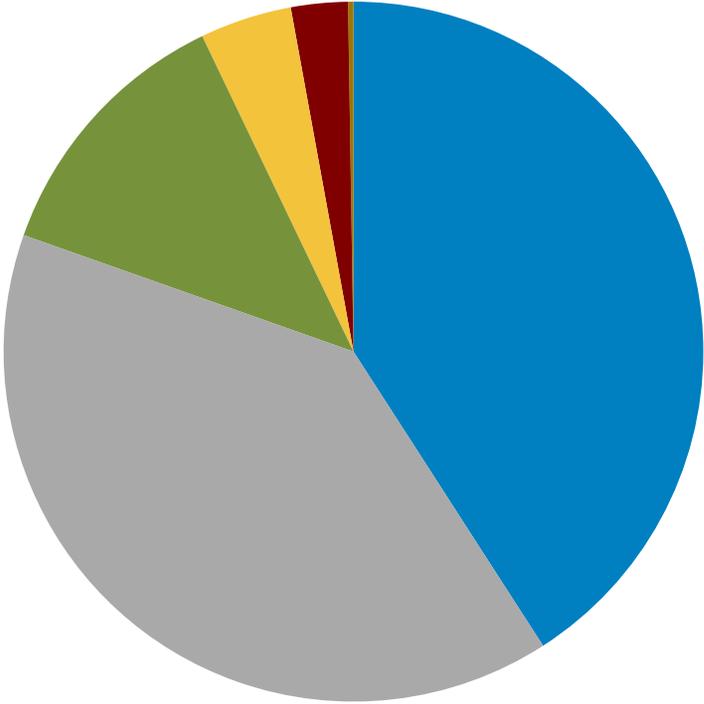


| Asset Allocation Attributes | Sep-2022 | | Jun-2022 | | Mar-2022 | |
|--|-------------------|---------------|-------------------|---------------|-------------------|---------------|
| | (\$) | % | (\$) | % | (\$) | % |
| American Funds 2060 TD Fund R6 (RFUTX) | 190,687 | 1.18 | 205,460 | 1.25 | 218,061 | 1.22 |
| American Funds 2055 TD Fund R6 (RFKTX) | 196,027 | 1.22 | 177,073 | 1.07 | 173,496 | 0.97 |
| American Funds 2050 TD Fund R6 (RFITX) | 1,890,192 | 11.72 | 1,913,796 | 11.61 | 2,034,713 | 11.36 |
| American Funds 2045 TD Fund R6 (RFHTX) | 1,268,260 | 7.86 | 1,244,515 | 7.55 | 1,259,507 | 7.03 |
| American Funds 2040 TD Fund R6 (RFGTX) | 4,122,173 | 25.55 | 4,184,658 | 25.38 | 4,645,467 | 25.94 |
| American Funds 2035 TD Fund R6 (RFFTX) | 1,296,369 | 8.04 | 1,318,177 | 8.00 | 1,429,682 | 7.98 |
| American Funds 2030 TD Fund R6 (RFETX) | 3,860,378 | 23.93 | 3,998,178 | 24.25 | 4,378,794 | 24.46 |
| American Funds 2025 TD Fund R6 (RFDTX) | 1,854,676 | 11.50 | 1,919,094 | 11.64 | 2,118,337 | 11.83 |
| American Funds 2020 TD Fund R6 (RRCTX) | 1,357,283 | 8.41 | 1,426,506 | 8.65 | 1,546,002 | 8.63 |
| American Funds 2015 TD Fund R6 (RFJTX) | 13,838 | 0.09 | 11,470 | 0.07 | 8,787 | 0.05 |
| American Funds 2010 TD Fund R6 (RFTTX) | 83,706 | 0.52 | 87,280 | 0.53 | 92,264 | 0.52 |
| Target Date Funds Total | 16,133,589 | 100.00 | 16,486,207 | 100.00 | 17,905,112 | 100.00 |



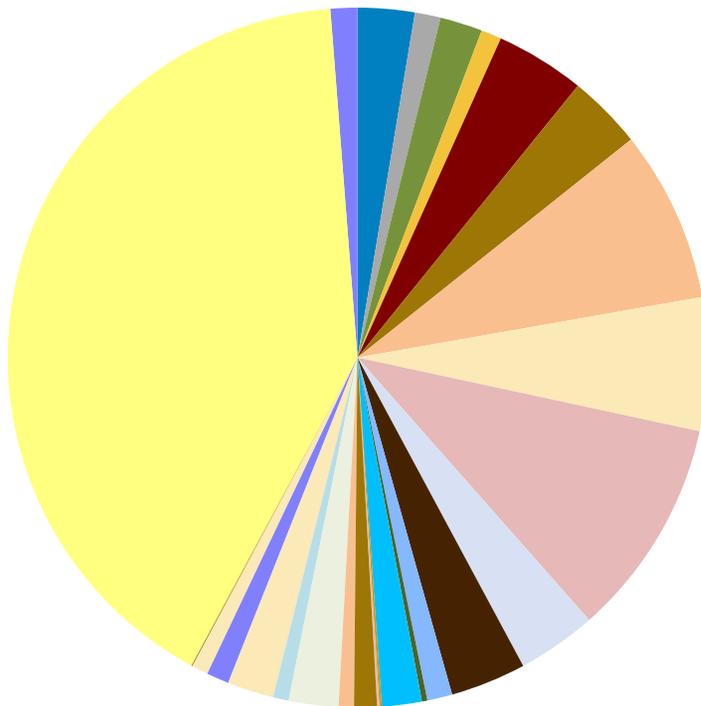
September 30, 2022 : \$179,732,107

| Allocation | Market Value | Allocation |
|----------------------------|--------------|------------|
| Cash | 73,484,768 | 40.9 |
| US Equity | 71,027,556 | 39.5 |
| US Balanced | 22,414,205 | 12.5 |
| US Fixed Income | 7,634,357 | 4.2 |
| International Equity | 4,723,302 | 2.6 |
| International Fixed Income | 447,918 | 0.2 |



Asset Allocation By Manager
457 Total Plan
As of September 30, 2022

September 30, 2022 : \$179,732,107



Allocation

| | Market Value | Allocation |
|---|---------------------|-------------------|
| American Funds EuroPacific Growth (RERGX) | 4,723,302 | 2.6 |
| Allspring Small Co Growth (WSCRX) | 2,133,480 | 1.2 |
| Vanguard Small Cap Index (VSMAX) | 3,524,007 | 2.0 |
| AMG Managers Skyline Special Equities (SKSEX) | 1,696,231 | 0.9 |
| Hartford Mid Cap (HIMCX) | 7,411,814 | 4.1 |
| Vanguard Mid Cap Index (VIMAX) | 6,184,373 | 3.4 |
| AF Growth Fund of America (RGAGX) | 14,277,377 | 7.9 |
| Allspring Disciplined US Core (EVSIX) | 11,042,943 | 6.1 |
| Vanguard Institutional Index (VINIX) | 18,171,087 | 10.1 |
| American Century Equity Income (AEUDX) | 6,586,245 | 3.7 |
| American Funds American Balanced (RLBGX) | 6,280,616 | 3.5 |
| PIMCO High Yield (PHIYX) | 2,085,760 | 1.2 |
| PIMCO Foreign Bond USD-Hedged (PFORX) | 447,918 | 0.2 |
| Hartford Total Return Bond (HIABX) | 3,317,301 | 1.8 |
| American Funds 2060 TD Fund R6 (RFUTX) | 190,687 | 0.1 |
| American Funds 2055 TD Fund R6 (RFKTX) | 196,027 | 0.1 |
| American Funds 2050 TD Fund R6 (RFITX) | 1,890,192 | 1.1 |
| American Funds 2045 TD Fund R6 (RFHTX) | 1,268,260 | 0.7 |
| American Funds 2040 TD Fund R6 (RFGTX) | 4,122,173 | 2.3 |
| American Funds 2035 TD Fund R6 (RFFTX) | 1,296,369 | 0.7 |
| American Funds 2030 TD Fund R6 (RFETX) | 3,860,378 | 2.1 |
| American Funds 2025 TD Fund R6 (RFDTX) | 1,854,676 | 1.0 |
| American Funds 2020 TD Fund R6 (RRCTX) | 1,357,283 | 0.8 |
| American Funds 2015 TD Fund R6 (RFJTX) | 13,838 | 0.0 |
| American Funds 2010 TD Fund R6 (RFTTX) | 83,706 | 0.0 |
| Voya Fixed Account | 73,484,768 | 40.9 |
| Loan Account | 2,231,297 | 1.2 |



| Asset Allocation Attributes | Sep-2022 | | Jun-2022 | | Mar-2022 | |
|---|-------------------|---------------|-------------------|---------------|-------------------|---------------|
| | (\$) | % | (\$) | % | (\$) | % |
| Total 401(a) Fund | 12,529,003 | 100.00 | 12,836,523 | 100.00 | 14,557,399 | 100.00 |
| International Equity | | | | | | |
| American Funds EuroPacific Growth (RERGX) | 260,099 | 2.08 | 286,062 | 2.23 | 343,746 | 2.36 |
| Domestic Equity | | | | | | |
| Allspring Small Co Growth (WSCRX) | 111,538 | 0.89 | 106,150 | 0.83 | 178,532 | 1.23 |
| Vanguard Small Cap Index (VSMAX) | 279,052 | 2.23 | 287,713 | 2.24 | 343,066 | 2.36 |
| AMG Managers Skyline Special Equities (SKSEX) | 328,129 | 2.62 | 349,842 | 2.73 | 413,008 | 2.84 |
| Hartford Mid Cap (HIMCX) | 534,387 | 4.27 | 562,389 | 4.38 | 747,522 | 5.13 |
| Vanguard Mid Cap Index (VIMAX) | 443,717 | 3.54 | 467,943 | 3.65 | 606,221 | 4.16 |
| American Funds Growth Fund of America (RGAGX) | 828,553 | 6.61 | 852,137 | 6.64 | 1,183,582 | 8.13 |
| Allspring Disciplined US Core (EVSIX) | 705,237 | 5.63 | 774,860 | 6.04 | 968,451 | 6.65 |
| Vanguard Institutional Index (VINIX) | 1,327,415 | 10.59 | 1,421,026 | 11.07 | 1,750,202 | 12.02 |
| American Century Equity Income (AEUDX) | 461,022 | 3.68 | 482,282 | 3.76 | 613,009 | 4.21 |
| Balanced Fund | | | | | | |
| American Funds American Balanced (RLBGX) | 812,770 | 6.49 | 874,601 | 6.81 | 1,005,803 | 6.91 |
| Fixed Income | | | | | | |
| PIMCO High Yield (PHIYX) | 108,925 | 0.87 | 102,059 | 0.80 | 39,901 | 0.27 |
| PIMCO Foreign Bond USD-Hedged (PFORX) | 74,761 | 0.60 | 73,716 | 0.57 | 7,751 | 0.05 |
| Hartford Total Return Bond (HIABX) | 180,802 | 1.44 | 180,920 | 1.41 | 152,712 | 1.05 |
| Cash | | | | | | |
| Voya Fixed Account | 4,931,425 | 39.36 | 4,707,526 | 36.67 | 4,476,548 | 30.75 |
| Loan Account | 130,500 | 1.04 | 143,884 | 1.12 | 161,264 | 1.11 |



Asset Allocation
401(a) Target Date Funds
As of September 30, 2022

Asset Allocation Attributes

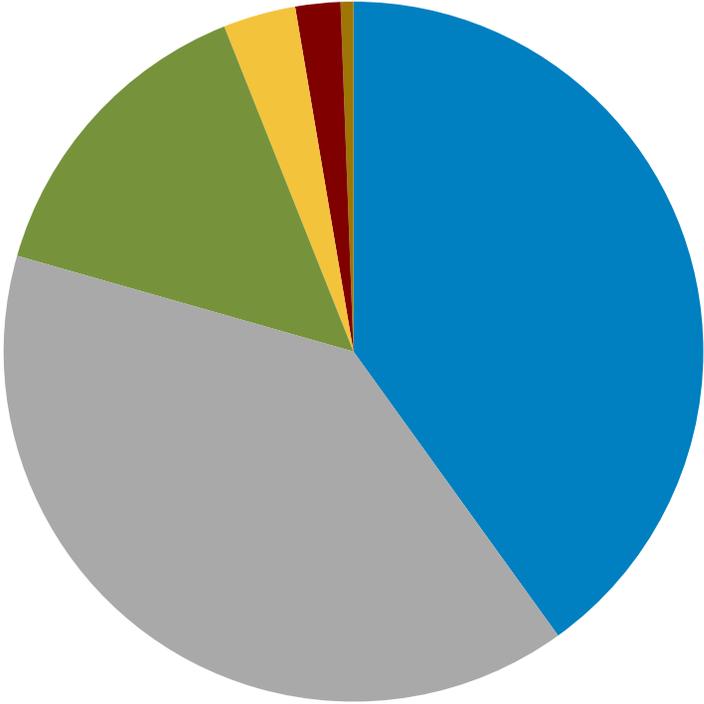
| | Sep-2022 | | Jun-2022 | | Mar-2022 | |
|--|------------------|---------------|------------------|---------------|------------------|---------------|
| | (\$) | % | (\$) | % | (\$) | % |
| American Funds 2060 TD Fund R6 (RFUTX) | 14,067 | 1.39 | 13,890 | 1.19 | 15,166 | 0.97 |
| American Funds 2055 TD Fund R6 (RFKTX) | - | 0.00 | - | 0.00 | - | 0.00 |
| American Funds 2050 TD Fund R6 (RFITX) | 77,264 | 7.64 | 78,327 | 6.73 | 87,813 | 5.61 |
| American Funds 2045 TD Fund R6 (RFHTX) | 5,874 | 0.58 | 4,860 | 0.42 | 4,023 | 0.26 |
| American Funds 2040 TD Fund R6 (RFGTX) | 150,203 | 14.86 | 151,135 | 12.99 | 165,750 | 10.58 |
| American Funds 2035 TD Fund R6 (RFFTX) | 143,602 | 14.21 | 139,513 | 11.99 | 191,635 | 12.24 |
| American Funds 2030 TD Fund R6 (RFETX) | 358,303 | 35.45 | 502,132 | 43.16 | 773,539 | 49.39 |
| American Funds 2025 TD Fund R6 (RFDTX) | 170,200 | 16.84 | 177,372 | 15.25 | 192,380 | 12.28 |
| American Funds 2020 TD Fund R6 (RRCTX) | - | 0.00 | - | 0.00 | - | 0.00 |
| American Funds 2015 TD Fund R6 (RFJTX) | 7 | 0.00 | 10 | 0.00 | 11 | 0.00 |
| American Funds 2010 TD Fund R6 (RFTTX) | 91,152 | 9.02 | 96,173 | 8.27 | 135,764 | 8.67 |
| Target Date Funds Total | 1,010,672 | 100.00 | 1,163,412 | 100.00 | 1,566,080 | 100.00 |



Asset Allocation By Asset Class
401(a) Total Plan
As of September 30, 2022

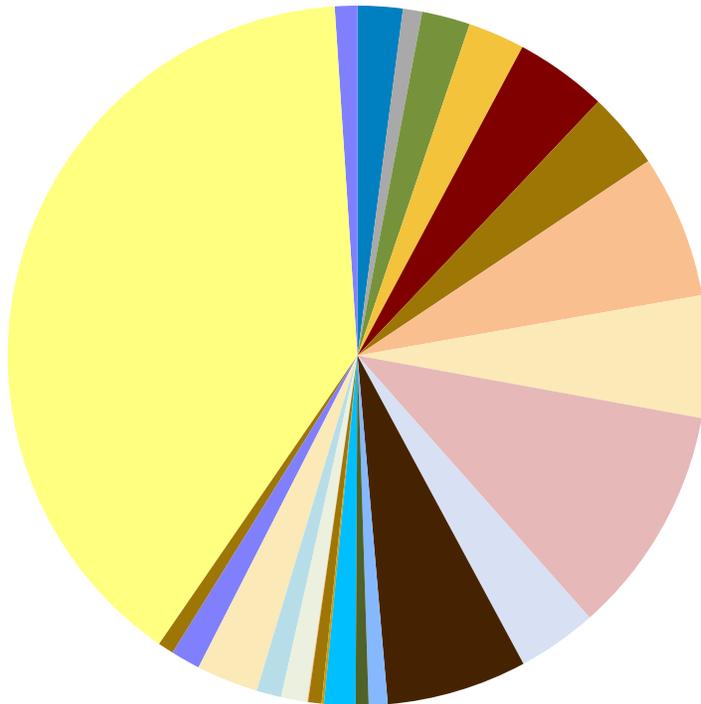
September 30, 2022 : \$12,529,003

| Allocation | Market Value | Allocation |
|------------------------------|--------------|------------|
| ■ US Equity | 5,019,049 | 40.1 |
| ■ Cash | 4,931,425 | 39.4 |
| ■ US Balanced | 1,823,441 | 14.6 |
| ■ US Fixed Income | 420,227 | 3.4 |
| ■ International Equity | 260,099 | 2.1 |
| ■ International Fixed Income | 74,761 | 0.6 |



Asset Allocation By Manager
401(a) Total Plan
As of September 30, 2022

September 30, 2022 : \$12,529,003



Allocation

| | Market Value | Allocation |
|---|--------------|------------|
| American Funds EuroPacific Growth (RERGX) | 260,099 | 2.1 |
| Allspring Small Co Growth (WSCRX) | 111,538 | 0.9 |
| Vanguard Small Cap Index (VSMAX) | 279,052 | 2.2 |
| AMG Managers Skyline Special Equities (SKSEX) | 328,129 | 2.6 |
| Hartford Mid Cap (HIMCX) | 534,387 | 4.3 |
| Vanguard Mid Cap Index (VIMAX) | 443,717 | 3.5 |
| American Funds Growth Fund of America (RGAGX) | 828,553 | 6.6 |
| Allspring Disciplined US Core (EVSIX) | 705,237 | 5.6 |
| Vanguard Institutional Index (VINIX) | 1,327,415 | 10.6 |
| American Century Equity Income (AEUDX) | 461,022 | 3.7 |
| American Funds American Balanced (RLBGX) | 812,770 | 6.5 |
| PIMCO High Yield (PHIYX) | 108,925 | 0.9 |
| PIMCO Foreign Bond USD-Hedged (PFORX) | 74,761 | 0.6 |
| Hartford Total Return Bond (HIABX) | 180,802 | 1.4 |
| American Funds 2060 TD Fund R6 (RFUTX) | 14,067 | 0.1 |
| American Funds 2055 TD Fund R6 (RFKTX) | - | 0.0 |
| American Funds 2050 TD Fund R6 (RFITX) | 77,264 | 0.6 |
| American Funds 2045 TD Fund R6 (RFHTX) | 5,874 | 0.0 |
| American Funds 2040 TD Fund R6 (RFGTX) | 150,203 | 1.2 |
| American Funds 2035 TD Fund R6 (RFFTX) | 143,602 | 1.1 |
| American Funds 2030 TD Fund R6 (RFETX) | 358,303 | 2.9 |
| American Funds 2025 TD Fund R6 (RFDTX) | 170,200 | 1.4 |
| American Funds 2020 TD Fund R6 (RRCTX) | - | 0.0 |
| American Funds 2015 TD Fund R6 (RFJTX) | 7 | 0.0 |
| American Funds 2010 TD Fund R6 (RFTTX) | 91,152 | 0.7 |
| Voya Fixed Account | 4,931,425 | 39.4 |
| Loan Account | 130,500 | 1.0 |



Comparative Performance
457 & 401(a) Trailing Returns
As of September 30, 2022

| Comparative Performance | QTR | | YTD | | 1 YR | | 3 YR | | 5 YR | | 7 YR | | 10 YR | |
|--|--------|------|--------|------|--------|-------|-------|------|-------|------|-------|------|-------|------|
| International Equity | | | | | | | | | | | | | | |
| American Funds EuroPacific Growth (RERGX) | -9.33 | (27) | -32.09 | (92) | -32.85 | (100) | -1.24 | (44) | -0.23 | (18) | 3.75 | (14) | 4.52 | (1) |
| MSCI EAFE (Net) Index | -9.36 | (27) | -27.09 | (36) | -25.13 | (42) | -1.83 | (51) | -0.84 | (30) | 2.84 | (37) | 3.67 | (21) |
| IM International Large Cap Core Equity (MF) Median | -10.18 | | -27.74 | | -25.40 | | -1.80 | | -1.40 | | 2.23 | | 2.99 | |
| Domestic Equity | | | | | | | | | | | | | | |
| Allspring Small Co Growth (WSCRX) | -3.28 | (77) | -27.40 | (25) | -23.14 | (18) | 6.46 | (26) | 6.77 | (42) | 8.03 | (58) | N/A | |
| Russell 2000 Growth Index | 0.24 | (24) | -29.28 | (40) | -29.27 | (54) | 2.94 | (78) | 3.60 | (79) | 7.12 | (71) | 8.81 | (65) |
| IM U.S. Small Cap Growth Equity (MF) Median | -1.36 | | -30.40 | | -29.12 | | 4.73 | | 5.95 | | 8.51 | | 9.31 | |
| Vanguard Small Cap Index (VSMAX) | -2.61 | (24) | -23.70 | (62) | -20.74 | (75) | 4.98 | (45) | 5.37 | (15) | 8.34 | (20) | 9.57 | (18) |
| Vanguard Spliced Small Cap Index | -2.63 | (24) | -23.71 | (62) | -20.75 | (75) | 4.96 | (46) | 5.35 | (15) | 8.32 | (21) | 9.55 | (19) |
| IM U.S. Small Cap Core Equity (MF) Median | -4.48 | | -23.02 | | -18.44 | | 4.60 | | 3.57 | | 6.98 | | 8.28 | |
| AMG Managers Skyline Special Equities (SKSEX) | -4.35 | (39) | -21.78 | (88) | -15.91 | (66) | 5.62 | (56) | 2.46 | (67) | 5.75 | (81) | 8.81 | (25) |
| Russell 2000 Value Index | -4.61 | (42) | -21.12 | (74) | -17.69 | (86) | 4.72 | (75) | 2.87 | (57) | 7.42 | (35) | 7.94 | (47) |
| IM U.S. Small Cap Value Equity (MF) Median | -5.41 | | -19.93 | | -15.25 | | 5.76 | | 3.19 | | 6.86 | | 7.84 | |
| Hartford Mid Cap (HIMCX) | -5.25 | (75) | -30.40 | (97) | -26.82 | (99) | 0.75 | (96) | 4.80 | (57) | 7.71 | (45) | 10.25 | (17) |
| Russell Midcap Index | -3.44 | (32) | -24.27 | (89) | -19.39 | (90) | 5.19 | (42) | 6.48 | (22) | 8.79 | (16) | 10.30 | (16) |
| IM U.S. Mid Cap Core Equity (MF) Median | -4.32 | | -20.76 | | -14.07 | | 4.68 | | 5.27 | | 7.43 | | 8.80 | |
| Vanguard Mid Cap Index (VIMAX) | -4.14 | (43) | -25.43 | (93) | -19.48 | (91) | 5.47 | (37) | 6.64 | (19) | 8.69 | (20) | 10.45 | (13) |
| Vanguard Spliced Mid Cap Index | -4.14 | (43) | -25.42 | (93) | -19.47 | (91) | 5.48 | (36) | 6.66 | (19) | 8.71 | (19) | 10.48 | (12) |
| IM U.S. Mid Cap Core Equity (MF) Median | -4.32 | | -20.76 | | -14.07 | | 4.68 | | 5.27 | | 7.43 | | 8.80 | |
| American Funds Growth Fund of America (RGAGX) | -2.62 | (11) | -32.05 | (35) | -27.58 | (49) | 7.78 | (39) | 8.54 | (68) | 11.11 | (47) | 11.94 | (40) |
| Russell 1000 Growth Index | -3.60 | (26) | -30.66 | (25) | -22.59 | (20) | 10.67 | (8) | 12.16 | (8) | 13.74 | (7) | 13.70 | (7) |
| IM U.S. Large Cap Growth Equity (MF) Median | -4.41 | | -33.10 | | -27.73 | | 7.08 | | 9.29 | | 10.99 | | 11.66 | |
| Allspring Disciplined US Core (EVSIX) | -5.05 | (46) | -23.16 | (29) | -14.15 | (21) | 8.55 | (16) | 8.15 | (60) | 10.46 | (48) | 11.55 | (20) |
| S&P 500 Index | -4.88 | (42) | -23.87 | (40) | -15.47 | (31) | 8.16 | (24) | 9.24 | (26) | 11.40 | (15) | 11.70 | (15) |
| IM U.S. Large Cap Core Equity (MF) Median | -5.16 | | -24.48 | | -17.11 | | 7.23 | | 8.43 | | 10.39 | | 10.78 | |
| Vanguard Institutional Index (VINIX) | -4.89 | (42) | -23.89 | (40) | -15.50 | (32) | 8.14 | (24) | 9.21 | (27) | 11.38 | (15) | 11.67 | (16) |
| S&P 500 Index | -4.88 | (42) | -23.87 | (40) | -15.47 | (31) | 8.16 | (24) | 9.24 | (26) | 11.40 | (15) | 11.70 | (15) |
| IM U.S. Large Cap Core Equity (MF) Median | -5.16 | | -24.48 | | -17.11 | | 7.23 | | 8.43 | | 10.39 | | 10.78 | |
| American Century Equity Income (AEUDX) | -4.33 | (17) | -11.74 | (4) | -5.56 | (10) | 3.26 | (88) | 5.43 | (70) | 8.97 | (39) | N/A | |
| Russell 1000 Value Index | -5.62 | (52) | -17.75 | (60) | -11.36 | (67) | 4.36 | (74) | 5.29 | (74) | 8.15 | (64) | 9.17 | (54) |
| IM U.S. Large Cap Value Equity (MF) Median | -5.57 | | -16.74 | | -9.58 | | 5.34 | | 6.09 | | 8.58 | | 9.29 | |

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.

*Returns are MassMutual Guaranteed Account until 1Q2019 then the Voya Fixed account thereafter.



Comparative Performance
457 & 401(a) Trailing Returns
As of September 30, 2022

| | QTR | | YTD | | 1 YR | | 3 YR | | 5 YR | | 7 YR | | 10 YR | |
|---|-------|------|--------|------|--------|------|------|------|------|------|------|-------|-------|-------|
| Balanced Fund | | | | | | | | | | | | | | |
| American Funds 2060 TD Fund R6 (RFUTX) | -5.44 | (19) | -26.12 | (76) | -21.77 | (66) | 4.02 | (10) | 5.11 | (1) | 7.88 | (N/A) | N/A | |
| S&P Target Date 2060 Index | -6.09 | (36) | -23.73 | (15) | -18.99 | (14) | 3.43 | (35) | 4.44 | (35) | 7.29 | (N/A) | 7.78 | (N/A) |
| IM Mixed-Asset Target 2065+ (MF) Median | -6.47 | | -25.57 | | -21.09 | | 3.22 | | 4.33 | | N/A | | N/A | |
| American Funds 2055 TD Fund R6 (RFKTX) | -5.48 | (16) | -26.02 | (77) | -21.59 | (69) | 4.09 | (4) | 5.15 | (4) | 7.94 | (1) | 8.53 | (1) |
| S&P Target Date 2055 Index | -6.07 | (30) | -23.69 | (16) | -18.94 | (16) | 3.42 | (31) | 4.39 | (28) | 7.20 | (25) | 7.74 | (20) |
| IM Mixed-Asset Target 2055 (MF) Median | -6.51 | | -25.14 | | -20.79 | | 3.11 | | 4.11 | | 6.74 | | 7.13 | |
| American Funds 2050 TD Fund R6 (RFITX) | -5.53 | (16) | -25.51 | (60) | -21.00 | (62) | 4.34 | (3) | 5.31 | (1) | 8.05 | (1) | 8.62 | (1) |
| S&P Target Date 2050 Index | -6.07 | (31) | -23.62 | (21) | -18.88 | (17) | 3.37 | (34) | 4.35 | (28) | 7.10 | (30) | 7.61 | (21) |
| IM Mixed-Asset Target 2050 (MF) Median | -6.47 | | -25.19 | | -20.67 | | 3.08 | | 4.09 | | 6.70 | | 7.02 | |
| American Funds 2045 TD Fund R6 (RFHTX) | -5.59 | (21) | -24.88 | (49) | -20.21 | (44) | 4.47 | (3) | 5.36 | (1) | 8.06 | (1) | 8.63 | (1) |
| S&P Target Date 2045 Index | -6.01 | (33) | -23.33 | (23) | -18.70 | (18) | 3.25 | (42) | 4.27 | (33) | 6.92 | (36) | 7.40 | (23) |
| IM Mixed-Asset Target 2045 (MF) Median | -6.40 | | -24.94 | | -20.31 | | 3.02 | | 4.08 | | 6.66 | | 6.93 | |
| American Funds 2040 TD Fund R6 (RFGTX) | -5.59 | (22) | -24.23 | (52) | -19.58 | (37) | 4.50 | (1) | 5.34 | (1) | 7.98 | (1) | 8.57 | (1) |
| S&P Target Date 2040 Index | -5.83 | (36) | -22.65 | (21) | -18.21 | (16) | 3.08 | (38) | 4.16 | (31) | 6.71 | (39) | 7.18 | (31) |
| IM Mixed-Asset Target 2040 (MF) Median | -6.13 | | -24.21 | | -19.89 | | 2.71 | | 3.89 | | 6.48 | | 6.81 | |
| American Funds 2035 TD Fund R6 (RFFTX) | -5.60 | (30) | -22.63 | (39) | -18.15 | (25) | 4.31 | (1) | 5.17 | (1) | 7.73 | (1) | 8.36 | (1) |
| S&P Target Date 2035 Index | -5.50 | (26) | -21.51 | (23) | -17.42 | (17) | 2.75 | (32) | 3.92 | (34) | 6.35 | (37) | 6.83 | (28) |
| IM Mixed-Asset Target 2035 (MF) Median | -5.87 | | -22.90 | | -19.06 | | 2.36 | | 3.62 | | 6.12 | | 6.38 | |
| American Funds 2030 TD Fund R6 (RFETX) | -5.64 | (53) | -20.48 | (32) | -16.41 | (23) | 3.34 | (1) | 4.42 | (1) | 6.83 | (1) | 7.72 | (1) |
| S&P Target Date 2030 Index | -4.98 | (19) | -19.79 | (25) | -16.23 | (21) | 2.26 | (27) | 3.58 | (27) | 5.85 | (33) | 6.34 | (29) |
| IM Mixed-Asset Target 2030 (MF) Median | -5.59 | | -21.54 | | -18.17 | | 1.67 | | 3.24 | | 5.49 | | 5.86 | |
| American Funds 2025 TD Fund R6 (RFDTX) | -5.59 | (65) | -18.55 | (26) | -14.86 | (20) | 2.91 | (1) | 3.95 | (1) | 6.01 | (2) | 6.98 | (1) |
| S&P Target Date 2025 Index | -4.57 | (22) | -18.31 | (24) | -15.16 | (24) | 1.82 | (25) | 3.24 | (25) | 5.33 | (27) | 5.80 | (26) |
| IM Mixed-Asset Target 2025 (MF) Median | -5.23 | | -19.99 | | -17.19 | | 1.11 | | 2.82 | | 4.86 | | 5.20 | |
| American Funds 2020 TD Fund R6 (RRCTX) | -5.47 | (69) | -16.76 | (6) | -13.19 | (5) | 2.23 | (1) | 3.41 | (3) | 5.26 | (4) | 6.01 | (3) |
| S&P Target Date 2020 Index | -4.59 | (20) | -17.57 | (23) | -14.75 | (18) | 0.98 | (51) | 2.64 | (49) | 4.60 | (50) | 5.11 | (41) |
| IM Mixed-Asset Target 2020 (MF) Median | -5.12 | | -18.70 | | -16.29 | | 0.99 | | 2.61 | | 4.56 | | 4.93 | |
| American Funds 2015 TD Fund R6 (RFJTX) | -5.41 | (72) | -15.88 | (12) | -12.42 | (3) | 2.06 | (1) | 3.16 | (3) | 4.88 | (4) | 5.43 | (1) |
| S&P Target Date 2015 Index | -4.23 | (4) | -16.50 | (21) | -13.95 | (22) | 1.05 | (42) | 2.61 | (34) | 4.28 | (58) | 4.65 | (49) |
| IM Mixed-Asset Target 2015 (MF) Median | -5.04 | | -17.92 | | -15.63 | | 0.95 | | 2.49 | | 4.36 | | 4.64 | |
| American Funds 2010 TD Fund R6 (RFTTX) | -5.20 | (74) | -14.55 | (4) | -11.26 | (1) | 1.95 | (2) | 2.98 | (3) | 4.65 | (2) | 4.95 | (1) |
| S&P Target Date 2010 Index | -4.07 | (3) | -15.66 | (35) | -13.60 | (19) | 0.71 | (44) | 2.33 | (39) | 3.75 | (62) | 3.99 | (47) |
| IM Mixed-Asset Target 2010 (MF) Median | -4.83 | | -16.36 | | -14.57 | | 0.47 | | 2.19 | | 3.90 | | 3.92 | |

Returns for periods greater than one year are annualized.

Returns are expressed as percentages.

*Returns are MassMutual Guaranteed Account until 1Q2019 then the Voya Fixed account thereafter.



Comparative Performance
457 & 401(a) Trailing Returns
As of September 30, 2022

| | QTR | | YTD | | 1 YR | | 3 YR | | 5 YR | | 7 YR | | 10 YR | |
|--|-------|------|--------|------|--------|------|-------|------|-------|------|-------|------|-------|------|
| American Funds American Balanced (RLBGX) | -5.87 | (66) | -18.47 | (35) | -13.13 | (17) | 3.72 | (13) | 5.14 | (8) | 7.22 | (9) | 7.89 | (6) |
| American Balanced Fund Hybrid | -4.73 | (32) | -19.17 | (40) | -14.75 | (26) | 2.72 | (32) | 4.76 | (11) | 6.15 | (30) | 6.43 | (33) |
| IM All Balanced (MF) Median | -5.39 | | -20.58 | | -17.37 | | 1.82 | | 3.01 | | 5.04 | | 5.42 | |
| Fixed Income | | | | | | | | | | | | | | |
| PIMCO High Yield (PHIYX) | -0.53 | (32) | -14.37 | (48) | -13.81 | (48) | -1.29 | (61) | 1.04 | (46) | 3.38 | (39) | 3.45 | (32) |
| ICE BofA U.S. High Yield Index | -0.70 | (44) | -14.65 | (56) | -14.10 | (55) | -0.69 | (39) | 1.40 | (29) | 4.03 | (13) | 3.86 | (14) |
| IM U.S. High Yield Bonds (MF) Median | -0.78 | | -14.45 | | -13.92 | | -0.94 | | 1.00 | | 3.17 | | 3.10 | |
| PIMCO Foreign Bond USD-Hedged (PFORX) | -2.39 | (5) | -10.63 | (5) | -10.93 | (6) | -2.48 | (6) | 0.75 | (3) | 1.97 | (1) | 2.71 | (1) |
| Bloomberg Global Aggregate | -6.94 | (55) | -19.89 | (49) | -20.43 | (49) | -5.74 | (34) | -2.32 | (37) | -0.64 | (25) | -0.93 | (24) |
| IM International Fixed Income (MF) Median | -6.68 | | -20.28 | | -20.96 | | -7.21 | | -4.26 | | -1.90 | | -2.07 | |
| Hartford Total Return Bond (HIABX) | -4.30 | (19) | -16.34 | (85) | -16.19 | (78) | -3.07 | (40) | -0.04 | (25) | 1.14 | (10) | 1.34 | (14) |
| Blmbg. U.S. Aggregate Index | -4.75 | (60) | -14.61 | (28) | -14.60 | (24) | -3.26 | (55) | -0.27 | (44) | 0.54 | (55) | 0.89 | (51) |
| IM U.S. Broad Market Core Fixed Income (MF) Median | -4.67 | | -15.17 | | -15.29 | | -3.22 | | -0.33 | | 0.58 | | 0.90 | |
| Cash | | | | | | | | | | | | | | |
| Voya Fixed Account* | 0.48 | (20) | 1.07 | (46) | 1.43 | (45) | 1.87 | (25) | 2.44 | (1) | 2.85 | (1) | 3.19 | (1) |
| Morningstar US CIT Stable Value | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | |
| IM U.S. GIC/Stable Value (SA+CF) Median | 0.39 | | 1.04 | | 1.36 | | 1.67 | | 1.82 | | 1.75 | | 1.70 | |

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.

*Returns are MassMutual Guaranteed Account until 1Q2019 then the Voya Fixed account thereafter.



Comparative Performance
457 & 401(a) Calendar Returns
As of September 30, 2022

| Comparative Performance | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|--|------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|
| International Equity | | | | | | | | | | |
| American Funds EuroPacific Growth (RERGX) | 2.84 (96) | 25.27 (1) | 27.40 (4) | -14.91 (49) | 31.17 (10) | 1.01 (37) | -0.48 (22) | -2.29 (11) | 20.58 (46) | 19.64 (34) |
| MSCI EAFE (Net) Index | 11.26 (39) | 7.82 (67) | 22.01 (52) | -13.79 (25) | 25.03 (50) | 1.00 (37) | -0.81 (29) | -4.90 (27) | 22.78 (16) | 17.32 (61) |
| IM International Large Cap Core Equity (MF) Median | 10.74 | 9.07 | 22.06 | -15.00 | 25.00 | -0.04 | -1.95 | -6.01 | 20.42 | 18.04 |
| Domestic Equity | | | | | | | | | | |
| Allspring Small Co Growth (WSCRX) | 15.68 (30) | 28.87 (67) | 26.55 (55) | -3.57 (30) | 20.68 (51) | 7.76 (72) | -4.33 (71) | N/A | N/A | N/A |
| Russell 2000 Growth Index | 2.83 (82) | 34.63 (56) | 28.48 (47) | -9.31 (73) | 22.17 (43) | 11.32 (43) | -1.38 (34) | 5.60 (22) | 43.30 (45) | 14.59 (36) |
| IM U.S. Small Cap Growth Equity (MF) Median | 10.53 | 36.55 | 27.69 | -5.57 | 20.72 | 10.11 | -2.35 | 2.77 | 42.49 | 13.59 |
| Vanguard Small Cap Index (VSMAX) | 17.73 (84) | 19.11 (17) | 27.37 (16) | -9.31 (18) | 16.24 (14) | 18.30 (79) | -3.64 (39) | 7.50 (13) | 37.81 (43) | 18.24 (19) |
| Vanguard Spliced Small Cap Index | 17.71 (84) | 19.07 (17) | 27.35 (17) | -9.33 (18) | 16.24 (14) | 18.26 (80) | -3.68 (40) | 7.54 (13) | 37.77 (44) | 18.20 (19) |
| IM U.S. Small Cap Core Equity (MF) Median | 25.12 | 9.89 | 23.94 | -12.71 | 12.09 | 21.66 | -4.35 | 4.71 | 36.85 | 14.81 |
| AMG Managers Skyline Special Equities (SKSEX) | 32.93 (43) | 3.29 (54) | 28.64 (7) | -19.00 (80) | 8.39 (51) | 21.32 (84) | -6.05 (33) | 4.02 (38) | 51.59 (3) | 19.34 (24) |
| Russell 2000 Value Index | 28.27 (73) | 4.63 (35) | 22.39 (28) | -12.86 (23) | 7.84 (60) | 31.74 (17) | -7.47 (57) | 4.22 (35) | 34.52 (71) | 18.05 (37) |
| IM U.S. Small Cap Value Equity (MF) Median | 31.97 | 3.57 | 21.05 | -16.08 | 8.46 | 26.70 | -7.05 | 3.41 | 36.46 | 16.16 |
| Hartford Mid Cap (HIMCX) | 9.91 (100) | 25.10 (7) | 32.87 (16) | -7.44 (12) | 24.47 (2) | 11.98 (72) | 1.60 (6) | 11.37 (27) | 39.82 (14) | 19.44 (13) |
| Russell Midcap Index | 22.58 (68) | 17.10 (17) | 30.54 (31) | -9.06 (21) | 18.52 (25) | 13.80 (57) | -2.44 (31) | 13.22 (9) | 34.76 (49) | 17.28 (33) |
| IM U.S. Mid Cap Core Equity (MF) Median | 25.73 | 8.44 | 28.59 | -11.64 | 14.94 | 14.51 | -3.74 | 8.88 | 34.49 | 15.88 |
| Vanguard Mid Cap Index (VIMAX) | 24.51 (60) | 18.24 (15) | 31.03 (27) | -9.23 (22) | 19.25 (19) | 11.22 (76) | -1.34 (23) | 13.76 (6) | 35.15 (47) | 15.99 (50) |
| Vanguard Spliced Mid Cap Index | 24.52 (60) | 18.24 (15) | 31.09 (27) | -9.22 (22) | 19.30 (19) | 11.25 (76) | -1.28 (23) | 13.83 (6) | 35.21 (46) | 16.04 (49) |
| IM U.S. Mid Cap Core Equity (MF) Median | 25.73 | 8.44 | 28.59 | -11.64 | 14.94 | 14.51 | -3.74 | 8.88 | 34.49 | 15.88 |
| American Funds Growth Fund of America (RGAGX) | 19.69 (67) | 38.28 (36) | 28.54 (89) | -2.60 (64) | 26.53 (74) | 8.82 (2) | 5.70 (49) | 9.63 (61) | 34.29 (48) | 20.98 (4) |
| Russell 1000 Growth Index | 27.60 (17) | 38.49 (34) | 36.39 (19) | -1.51 (54) | 30.21 (39) | 7.08 (10) | 5.67 (49) | 13.05 (24) | 33.48 (57) | 15.26 (46) |
| IM U.S. Large Cap Growth Equity (MF) Median | 22.39 | 35.62 | 33.26 | -1.22 | 29.28 | 2.21 | 5.61 | 10.49 | 34.12 | 14.81 |
| Allspring Disciplined US Core (EVSIX) | 30.94 (8) | 16.47 (62) | 29.04 (67) | -8.08 (88) | 20.88 (59) | 12.09 (18) | 2.53 (22) | 15.69 (4) | 33.97 (21) | 14.90 (58) |
| S&P 500 Index | 28.71 (25) | 18.40 (50) | 31.49 (36) | -4.38 (32) | 21.83 (45) | 11.96 (20) | 1.38 (35) | 13.69 (18) | 32.39 (37) | 16.00 (41) |
| IM U.S. Large Cap Core Equity (MF) Median | 26.95 | 18.39 | 30.64 | -5.45 | 21.45 | 9.70 | 0.53 | 11.51 | 31.77 | 15.42 |
| Vanguard Institutional Index (VINIX) | 28.67 (26) | 18.39 (50) | 31.46 (37) | -4.42 (32) | 21.79 (45) | 11.93 (20) | 1.37 (35) | 13.65 (18) | 32.35 (38) | 15.98 (41) |
| S&P 500 Index | 28.71 (25) | 18.40 (50) | 31.49 (36) | -4.38 (32) | 21.83 (45) | 11.96 (20) | 1.38 (35) | 13.69 (18) | 32.39 (37) | 16.00 (41) |
| IM U.S. Large Cap Core Equity (MF) Median | 26.95 | 18.39 | 30.64 | -5.45 | 21.45 | 9.70 | 0.53 | 11.51 | 31.77 | 15.42 |
| American Century Equity Income (AEUDX) | 17.27 (98) | 1.43 (80) | 24.64 (74) | -4.17 (18) | 13.83 (82) | 19.88 (6) | 0.94 (6) | 12.84 (14) | N/A | N/A |
| Russell 1000 Value Index | 25.16 (63) | 2.80 (61) | 26.54 (50) | -8.27 (45) | 13.66 (82) | 17.34 (17) | -3.83 (69) | 13.45 (8) | 32.53 (44) | 17.51 (27) |
| IM U.S. Large Cap Value Equity (MF) Median | 25.96 | 3.82 | 26.50 | -8.61 | 16.95 | 13.85 | -3.00 | 10.82 | 32.11 | 15.79 |

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.
*Returns are MassMutual Guaranteed Account until 1Q2019 then the Voya Fixed account thereafter.



Comparative Performance
457 & 401(a) Calendar Returns
As of September 30, 2022

| | 2021 | | 2020 | | 2019 | | 2018 | | 2017 | | 2016 | | 2015 | | 2014 | | 2013 | | 2012 | |
|---|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Balanced Fund | | | | | | | | | | | | | | | | | | | | |
| American Funds 2060 TD Fund R6 (RFUTX) | 17.19 | (48) | 19.44 | (1) | 25.01 | (61) | -5.64 | (1) | 22.49 | (N/A) | 8.41 | (N/A) | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| S&P Target Date 2060 Index | 18.05 | (34) | 13.99 | (73) | 24.73 | (84) | -7.95 | (7) | 20.75 | (N/A) | 10.08 | (N/A) | -0.66 | (N/A) | 5.64 | (N/A) | 24.96 | (N/A) | 15.81 | (N/A) |
| IM Mixed-Asset Target 2065+ (MF) Median | 17.15 | | 16.23 | | 26.28 | | -9.37 | | N/A | | N/A | | N/A | | N/A | N/A | | N/A | | N/A |
| American Funds 2055 TD Fund R6 (RFKTX) | 17.28 | (46) | 19.39 | (7) | 25.09 | (40) | -5.65 | (3) | 22.63 | (5) | 8.30 | (48) | 0.63 | (1) | 7.01 | (22) | 26.59 | (1) | 16.76 | (18) |
| S&P Target Date 2055 Index | 18.19 | (25) | 13.86 | (71) | 24.48 | (63) | -7.97 | (38) | 20.48 | (66) | 9.94 | (7) | -0.54 | (20) | 5.64 | (45) | 24.96 | (26) | 15.81 | (39) |
| IM Mixed-Asset Target 2055 (MF) Median | 17.18 | | 15.65 | | 24.84 | | -8.48 | | 21.12 | | 8.25 | | -1.67 | | 5.43 | | 23.21 | | 15.60 | |
| American Funds 2050 TD Fund R6 (RFITX) | 17.27 | (42) | 19.42 | (6) | 25.04 | (38) | -5.61 | (2) | 22.61 | (6) | 8.33 | (44) | 0.65 | (1) | 7.02 | (18) | 26.65 | (1) | 16.72 | (17) |
| S&P Target Date 2050 Index | 17.99 | (26) | 13.86 | (65) | 24.35 | (60) | -7.94 | (35) | 20.18 | (67) | 9.74 | (14) | -0.47 | (16) | 5.69 | (46) | 24.13 | (33) | 15.49 | (50) |
| IM Mixed-Asset Target 2050 (MF) Median | 16.99 | | 15.54 | | 24.67 | | -8.54 | | 20.80 | | 8.10 | | -1.63 | | 5.61 | | 23.08 | | 15.47 | |
| American Funds 2045 TD Fund R6 (RFHTX) | 17.18 | (37) | 19.21 | (5) | 24.68 | (48) | -5.58 | (3) | 22.44 | (6) | 8.27 | (47) | 0.64 | (1) | 7.09 | (14) | 26.51 | (2) | 16.80 | (13) |
| S&P Target Date 2045 Index | 17.52 | (25) | 13.66 | (69) | 24.02 | (63) | -7.74 | (36) | 19.56 | (73) | 9.54 | (13) | -0.46 | (18) | 5.67 | (43) | 23.14 | (46) | 15.15 | (61) |
| IM Mixed-Asset Target 2045 (MF) Median | 16.67 | | 15.38 | | 24.61 | | -8.19 | | 20.65 | | 8.15 | | -1.65 | | 5.55 | | 23.07 | | 15.47 | |
| American Funds 2040 TD Fund R6 (RFGTX) | 16.83 | (15) | 18.77 | (5) | 24.40 | (30) | -5.52 | (3) | 21.98 | (4) | 8.17 | (41) | 0.58 | (1) | 6.96 | (15) | 26.66 | (2) | 16.71 | (10) |
| S&P Target Date 2040 Index | 16.55 | (20) | 13.37 | (69) | 23.37 | (57) | -7.41 | (34) | 18.87 | (70) | 9.23 | (16) | -0.40 | (15) | 5.69 | (41) | 22.10 | (46) | 14.69 | (58) |
| IM Mixed-Asset Target 2040 (MF) Median | 15.67 | | 14.74 | | 23.63 | | -7.97 | | 19.74 | | 7.95 | | -1.66 | | 5.38 | | 21.61 | | 14.92 | |
| American Funds 2035 TD Fund R6 (RFFTX) | 15.54 | (12) | 17.55 | (6) | 23.29 | (22) | -5.14 | (4) | 21.04 | (3) | 8.00 | (44) | 0.59 | (1) | 7.02 | (11) | 25.97 | (1) | 16.64 | (9) |
| S&P Target Date 2035 Index | 14.93 | (20) | 12.79 | (75) | 22.18 | (52) | -6.88 | (44) | 17.78 | (71) | 8.85 | (15) | -0.35 | (15) | 5.69 | (40) | 20.84 | (49) | 14.12 | (65) |
| IM Mixed-Asset Target 2035 (MF) Median | 13.84 | | 14.15 | | 22.26 | | -7.26 | | 18.72 | | 7.75 | | -1.53 | | 5.40 | | 20.78 | | 14.75 | |
| American Funds 2030 TD Fund R6 (RFETX) | 13.16 | (13) | 15.16 | (14) | 20.06 | (52) | -4.16 | (5) | 18.40 | (11) | 7.71 | (38) | 0.47 | (1) | 7.06 | (7) | 25.64 | (1) | 16.49 | (5) |
| S&P Target Date 2030 Index | 12.61 | (25) | 11.91 | (65) | 20.38 | (48) | -5.99 | (42) | 16.19 | (61) | 8.35 | (19) | -0.30 | (10) | 5.64 | (35) | 19.14 | (41) | 13.43 | (56) |
| IM Mixed-Asset Target 2030 (MF) Median | 11.44 | | 12.86 | | 20.08 | | -6.32 | | 16.92 | | 7.30 | | -1.47 | | 5.18 | | 17.87 | | 13.71 | |
| American Funds 2025 TD Fund R6 (RFDTX) | 11.44 | (14) | 13.67 | (23) | 17.85 | (57) | -3.47 | (7) | 15.33 | (38) | 7.36 | (31) | 0.13 | (3) | 6.66 | (11) | 23.76 | (1) | 15.58 | (5) |
| S&P Target Date 2025 Index | 10.67 | (27) | 11.22 | (64) | 18.38 | (47) | -5.02 | (43) | 14.55 | (56) | 7.82 | (17) | -0.25 | (11) | 5.56 | (39) | 17.03 | (35) | 12.51 | (57) |
| IM Mixed-Asset Target 2025 (MF) Median | 9.70 | | 12.13 | | 18.18 | | -5.23 | | 14.95 | | 6.87 | | -1.37 | | 5.19 | | 15.85 | | 13.00 | |
| American Funds 2020 TD Fund R6 (RRCTX) | 10.64 | (6) | 10.99 | (47) | 15.59 | (58) | -2.69 | (4) | 12.87 | (46) | 7.05 | (28) | 0.19 | (2) | 6.74 | (3) | 18.71 | (1) | 12.98 | (28) |
| S&P Target Date 2020 Index | 8.76 | (48) | 10.24 | (58) | 16.52 | (42) | -4.16 | (41) | 12.80 | (48) | 7.22 | (25) | -0.19 | (7) | 5.67 | (23) | 14.76 | (27) | 11.48 | (52) |
| IM Mixed-Asset Target 2020 (MF) Median | 8.70 | | 10.90 | | 15.97 | | -4.52 | | 12.69 | | 6.36 | | -1.44 | | 4.72 | | 11.84 | | 11.53 | |
| American Funds 2015 TD Fund R6 (RFJTX) | 10.27 | (3) | 9.96 | (64) | 14.94 | (58) | -2.72 | (5) | 11.19 | (52) | 7.55 | (8) | -0.62 | (18) | 6.64 | (3) | 15.72 | (1) | 11.58 | (35) |
| S&P Target Date 2015 Index | 8.01 | (50) | 10.28 | (62) | 15.40 | (47) | -3.67 | (41) | 11.39 | (49) | 6.56 | (44) | -0.16 | (7) | 5.49 | (25) | 12.16 | (36) | 10.32 | (63) |
| IM Mixed-Asset Target 2015 (MF) Median | 8.00 | | 11.37 | | 15.22 | | -3.91 | | 11.30 | | 6.39 | | -1.30 | | 4.49 | | 10.38 | | 10.81 | |
| American Funds 2010 TD Fund R6 (RFTTX) | 9.32 | (1) | 9.25 | (74) | 13.88 | (57) | -2.49 | (9) | 10.41 | (41) | 7.45 | (3) | -0.84 | (27) | 6.79 | (1) | 12.55 | (1) | 10.51 | (35) |
| S&P Target Date 2010 Index | 6.54 | (50) | 9.95 | (59) | 14.30 | (49) | -3.10 | (25) | 9.95 | (66) | 5.82 | (59) | -0.21 | (7) | 5.07 | (18) | 9.42 | (46) | 8.94 | (64) |
| IM Mixed-Asset Target 2010 (MF) Median | 5.80 | | 10.43 | | 14.19 | | -3.58 | | 10.24 | | 6.06 | | -1.20 | | 4.11 | | 8.67 | | 9.78 | |

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.
*Returns are MassMutual Guaranteed Account until 1Q2019 then the Voya Fixed account thereafter.



Comparative Performance
457 & 401(a) Calendar Returns
As of September 30, 2022

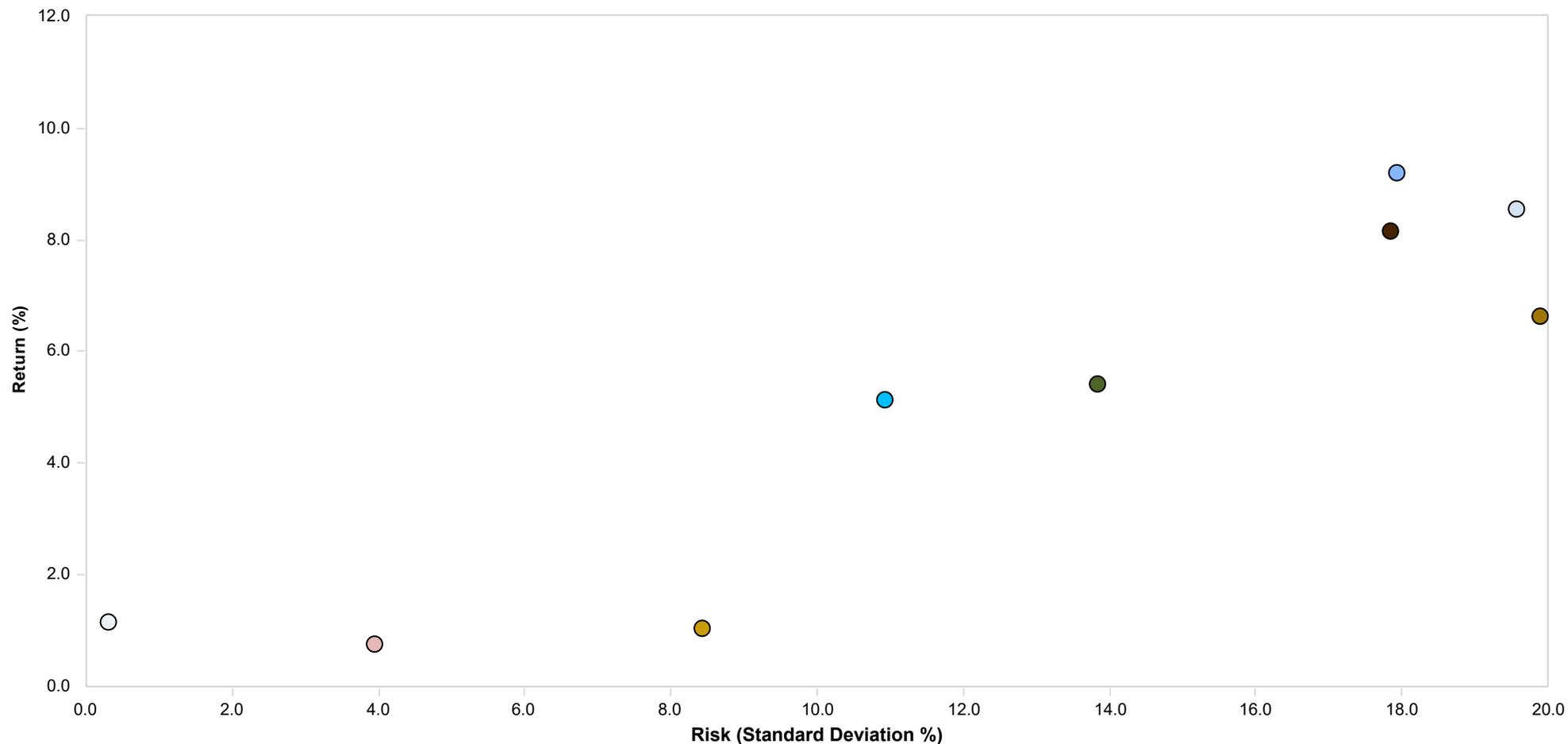
| | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 |
|--|------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|
| American Funds American Balanced (RLBGX) | 16.11 (25) | 11.22 (57) | 19.55 (45) | -2.42 (7) | 15.84 (39) | 8.90 (18) | 2.03 (3) | 9.22 (6) | 22.12 (20) | 14.57 (24) |
| American Balanced Fund Hybrid | 12.80 (46) | 13.66 (35) | 19.89 (42) | -1.90 (5) | 12.37 (62) | 7.38 (39) | 1.21 (4) | 9.85 (4) | 14.08 (56) | 10.13 (73) |
| IM All Balanced (MF) Median | 11.99 | 12.01 | 18.63 | -6.15 | 14.08 | 6.80 | -1.58 | 4.75 | 15.39 | 12.17 |
| Fixed Income | | | | | | | | | | |
| PIMCO High Yield (PHIYX) | 4.06 (73) | 5.31 (53) | 14.94 (24) | -2.49 (32) | 7.02 (35) | 12.68 (70) | -1.88 (21) | 3.31 (13) | 5.77 (74) | 14.57 (50) |
| ICE BofA U.S. High Yield Index | 5.35 (40) | 6.17 (34) | 14.41 (36) | -2.27 (27) | 7.48 (21) | 17.49 (5) | -4.64 (61) | 2.50 (23) | 7.42 (32) | 15.58 (30) |
| IM U.S. High Yield Bonds (MF) Median | 4.93 | 5.43 | 13.83 | -2.97 | 6.63 | 13.80 | -3.96 | 1.50 | 6.72 | 14.57 |
| PIMCO Foreign Bond USD-Hedged (PFORX) | -1.67 (8) | 6.15 (57) | 7.35 (34) | 2.63 (7) | 3.53 (69) | 7.03 (7) | 0.40 (9) | 11.16 (3) | 0.90 (17) | 11.19 (22) |
| Bloomberg Global Aggregate | -4.71 (41) | 9.20 (28) | 6.84 (42) | -1.19 (46) | 7.39 (59) | 2.09 (61) | -3.15 (24) | 0.59 (52) | -2.60 (37) | 4.32 (79) |
| IM International Fixed Income (MF) Median | -5.39 | 6.55 | 6.64 | -2.47 | 9.80 | 3.34 | -5.82 | 0.63 | -3.74 | 7.43 |
| Hartford Total Return Bond (HIABX) | -0.95 (31) | 9.03 (27) | 10.65 (5) | -0.81 (61) | 5.16 (5) | 4.49 (11) | -0.59 (73) | 5.89 (33) | -1.36 (28) | 7.54 (23) |
| Blmbg. U.S. Aggregate Index | -1.55 (60) | 7.51 (73) | 8.72 (53) | 0.01 (18) | 3.54 (54) | 2.65 (62) | 0.55 (20) | 5.97 (27) | -2.02 (54) | 4.21 (81) |
| IM U.S. Broad Market Core Fixed Income (MF) Median | -1.33 | 8.15 | 8.76 | -0.62 | 3.60 | 2.90 | 0.04 | 5.55 | -1.97 | 6.04 |
| Cash | | | | | | | | | | |
| Voya Fixed Account* | 1.73 (19) | 2.19 (18) | 2.97 (5) | 3.38 (1) | 3.67 (2) | 3.94 (1) | 4.00 (1) | 4.00 (2) | 4.00 (1) | 4.00 (4) |
| Morningstar US CIT Stable Value | 1.74 (18) | 2.24 (13) | 2.51 (19) | 2.23 (15) | 1.96 (20) | 1.79 (34) | 1.77 (32) | 1.69 (40) | 1.84 (29) | 2.26 (44) |
| IM U.S. GIC/Stable Value (SA+CF) Median | 1.43 | 1.97 | 2.29 | 1.99 | 1.68 | 1.58 | 1.44 | 1.36 | 1.47 | 2.13 |

Returns for periods greater than one year are annualized.
Returns are expressed as percentages.

*Returns are MassMutual Guaranteed Account until 1Q2019 then the Voya Fixed account thereafter.



Risk and Return



- American Funds EuroPacific Growth (RERGX)
- AMG Managers Skyline Special Equities (SKSEX)
- American Funds Growth Fund of America (RGAGX)
- American Century Equity Income (AEUDX)
- PIMCO Foreign Bond USD-Hedged (PFORX)
- 90 Day U.S. Treasury Bill
- Allspring Small Co Growth (WSCRX)
- Hartford Mid Cap (HIMCX)
- Allspring Disciplined US Core (EVSIX)
- American Funds American Balanced (RLBGX)
- Hartford Total Return Bond (HIABX)
- Vanguard Small Cap Index (VSMAX)
- Vanguard Mid Cap Index (VIMAX)
- Vanguard Institutional Index (VINIX)
- PIMCO High Yield (PHIYX)
- Voya Fixed Account

Calculation based on monthly periodicity.



American Funds Target Retirement R6
Target Date Fund Universe Ranges
September 30, 2022

| Asset Class | 2060+ | 2055 | 2050 | 2045 | 2040 | 2035 | 2030 | 2025 | 2020 | 2015 | 2010 |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Equity Range | | | | | | | | | | | |
| Maximum | 100% | 100% | 100% | 95% | 95% | 90% | 85% | 75% | 65% | 55% | 45% |
| Minimum | 50% | 50% | 50% | 45% | 45% | 40% | 35% | 25% | 15% | 10% | 5% |
| Fixed Income Range | | | | | | | | | | | |
| Maximum | 20% | 20% | 30% | 35% | 40% | 50% | 55% | 65% | 70% | 75% | 80% |
| Minimum | 0% | 0% | 0% | 5% | 5% | 10% | 15% | 20% | 25% | 35% | 40% |
| Cash Range | | | | | | | | | | | |
| Maximum | 20% | 20% | 30% | 30% | 30% | 30% | 30% | 30% | 35% | 35% | 35% |
| Minimum | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Other Range | | | | | | | | | | | |
| Maximum | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% |
| Minimum | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Target Date Universe | 61 | 54 | 55 | 52 | 55 | 54 | 51 | 57 | 56 | 37 | 38 |

Morningstar Definitions:

1. Cash - The percentage of the fund's assets in cash. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.
2. Other - The percentage of the fund's assets in other instruments. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.
3. Target Date Universe - Based on the number of unique glide paths in the Morningstar Target Date Universe. Only one share class is selected to represent the fund manager.



American Funds Target Retirement R6
Target Date Fund Asset Allocation
September 30, 2022

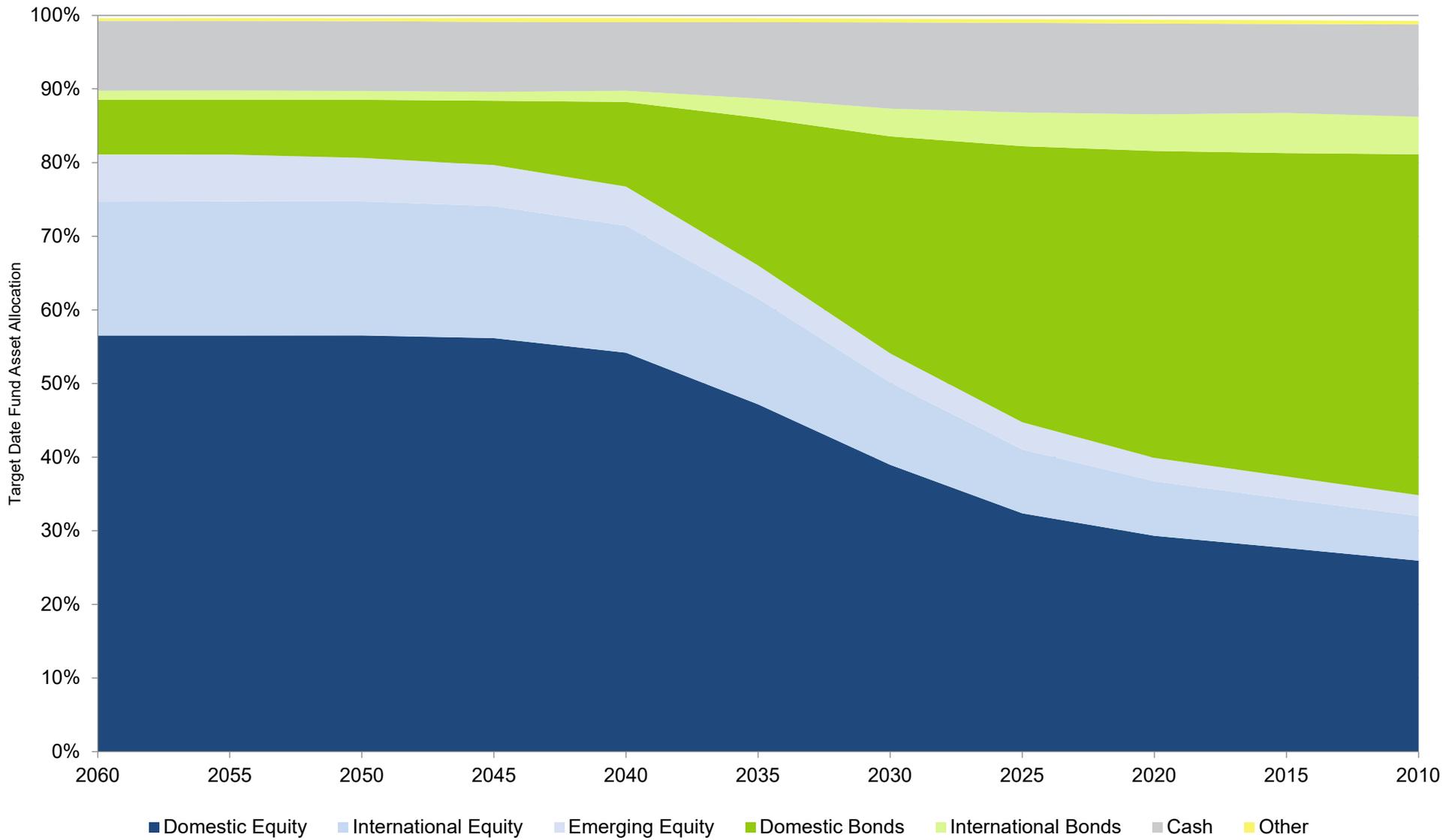
| Asset Class | 2060 | 2055 | 2050 | 2045 | 2040 | 2035 | 2030 | 2025 | 2020 | 2015 | 2010 |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|
| Total Equity | 81% | 81% | 81% | 80% | 77% | 66% | 54% | 45% | 40% | 37% | 35% |
| Domestic Equity | 57% | 57% | 57% | 56% | 54% | 47% | 39% | 32% | 29% | 28% | 26% |
| International Equity | 18% | 18% | 18% | 18% | 17% | 14% | 11% | 9% | 7% | 7% | 6% |
| Emerging Equity | 6% | 6% | 6% | 6% | 5% | 5% | 4% | 4% | 3% | 3% | 3% |
| Total Fixed Income | 9% | 9% | 9% | 10% | 13% | 23% | 33% | 42% | 47% | 49% | 51% |
| Domestic Bonds | 7% | 7% | 8% | 9% | 11% | 20% | 29% | 38% | 42% | 44% | 46% |
| International Bonds | 1% | 1% | 1% | 1% | 2% | 3% | 4% | 5% | 5% | 5% | 5% |
| Cash | 9% | 9% | 9% | 10% | 9% | 10% | 12% | 12% | 12% | 12% | 13% |
| Other | 0% | 0% | 0% | 0% | 1% | 1% | 0% | 0% | 1% | 1% | 0% |
| Total | 100% | 99% | 99% | 99% | 99% |

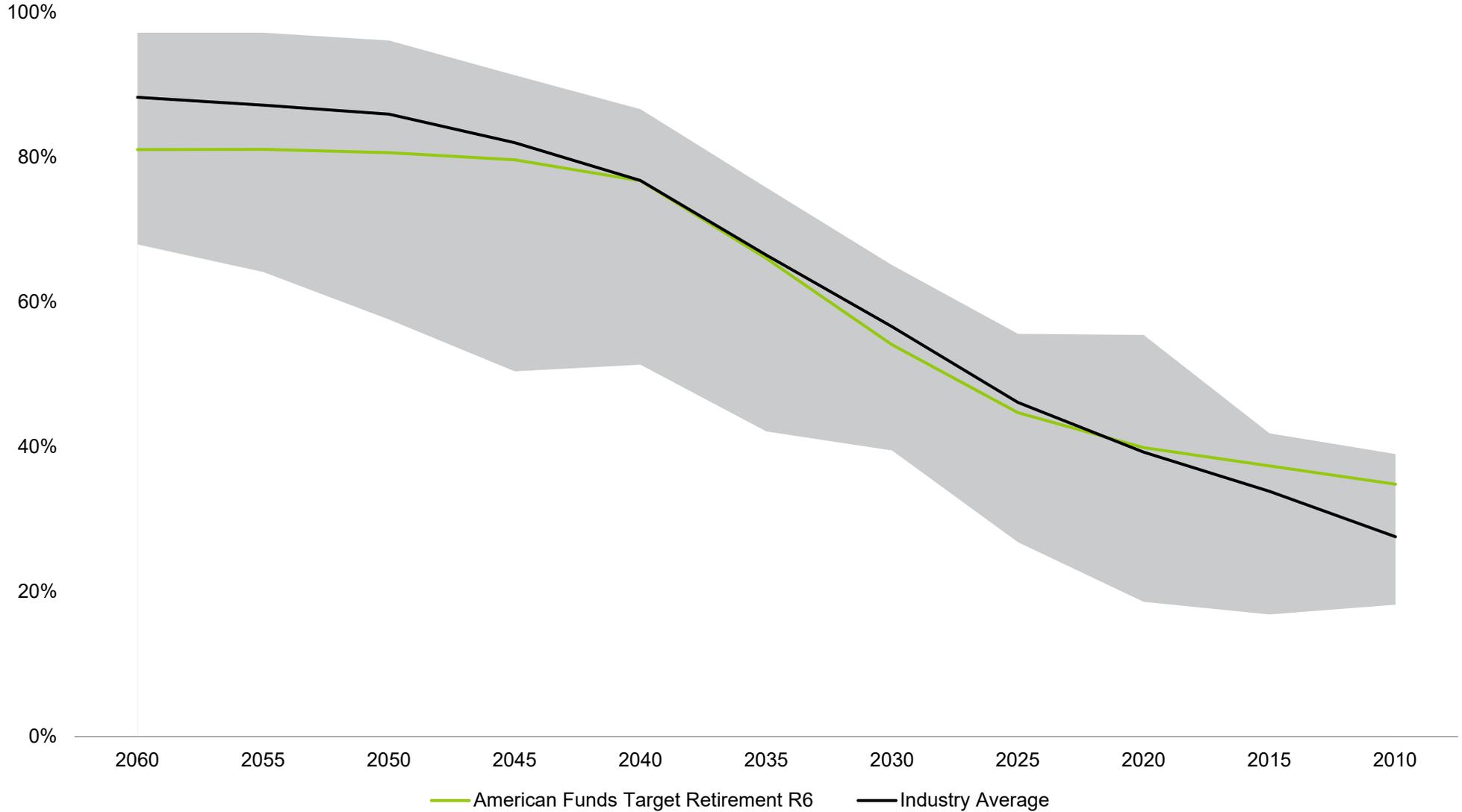
| | |
|----------------------------------|---------------------------|
| Terminal Equity Date: | 30 years after Retirement |
| Active/Passive/Blend Allocation: | Active |

Morningstar Definitions:

1. Cash - The percentage of the fund's assets in cash. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.
2. Other - The percentage of the fund's assets in other instruments. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.







1. Industry Range (Gray Bar) - Represents the equity allocation range of the Target Date Funds in the universe.

2. Industry Average - The average equity allocation of the investments included in the universe.



Fee and Expense Summary

Voya requires 0.03% in revenue from the plan assets annually.

AndCo Consulting bills quarterly. The fee structure is \$60,000 per annum, paid in quarterly cash payments.

Plan Demographics

| | |
|---|---------------|
| Total Assets* | \$189,899,315 |
| Number of Participants with a Balance (active and terminated) | 3,264 |

Expense Type Estimates (annual)

| | Percent of Assets | Dollar Cost | % Cost |
|-------------------------|-------------------|-----------------|--------|
| Voya Recordkeeping fees | 0.03% | \$56,970 | 0.03% |
| AndCo Consulting fees | | \$60,000 | 0.03% |

Total plan expenses **\$ 116,970** **0.06%**

Revenue Sharing Estimates (annual)

| | | |
|-------------------------------------|-------|-----------|
| Revenue from participant annual fee | 0.08% | \$151,919 |
|-------------------------------------|-------|-----------|

Net plan fee surplus (annual)

\$34,950 **0.02%**

Annual average total plan recordkeeping and administrative cost per participant (gross)**

\$46.54

*Does not include outstanding loan values

**All revenue sharing monies are reimbursed to the participant accounts that utilize those funds. This policy was implemented on 1/1/18.



Weighted Fee and Revenue Sharing Evaluation

| | Market Value | Expense Ratio | Expense Ratio Weighted Fee | Revenue Sharing | *Revenue Sharing \$ |
|---|----------------------|---------------|----------------------------|-----------------|---------------------|
| American Funds EuroPacific Growth (RERGX) | \$4,983,401 | 0.46% | \$22,924 | 0.00% | \$0 |
| Allspring Small Co Growth (WSCRX) | \$2,245,018 | 0.86% | \$19,307 | 0.00% | \$0 |
| Vanguard Small Cap Index (VSMAX) | \$3,803,059 | 0.05% | \$1,902 | 0.00% | \$0 |
| AMG Managers Skyline Special Equities (SKSEX) | \$2,024,360 | 1.13% | \$22,875 | 0.25% | \$5,061 |
| Hartford Mid Cap (HIMCX) | \$7,946,201 | 0.69% | \$54,829 | 0.25% | \$19,866 |
| Vanguard Mid Cap Index (VIMAX) | \$6,628,090 | 0.05% | \$3,314 | 0.00% | \$0 |
| AF Growth Fund of America (RGAGX) | \$15,105,930 | 0.29% | \$43,807 | 0.00% | \$0 |
| Allspring Disciplined US Core (EVSIX) | \$11,748,180 | 0.48% | \$56,391 | 0.15% | \$17,622 |
| Vanguard Institutional Index (VINIX) | \$19,498,502 | 0.04% | \$7,799 | 0.00% | \$0 |
| American Century Equity Income (AEUDX) | \$7,047,267 | 0.58% | \$40,874 | 0.00% | \$0 |
| American Funds Target 2060-2010 R6 | \$17,144,261 | 0.33% | \$57,262 | 0.00% | \$0 |
| American Funds American Balanced (RLBGX) | \$7,093,386 | 0.25% | \$17,733 | 0.00% | \$0 |
| PIMCO High Yield (PHIYX) | \$2,194,685 | 0.56% | \$12,290 | 0.00% | \$0 |
| PIMCO Foreign Bond USD-Hedged (PFORX) | \$522,679 | 0.51% | \$2,666 | 0.00% | \$0 |
| Hartford Total Return Bond (HIABX) | \$3,498,103 | 0.50% | \$17,491 | 0.25% | \$8,745 |
| Voya Fixed Account | \$78,416,193 | 0.00% | \$0 | 0.00% | \$0 |
| TOTAL | \$189,899,315 | 0.20% | \$381,464 | 0.03% | \$51,294 |

*All revenue sharing monies are reimbursed to the participant accounts that utilize those funds. This policy was implemented on 1/1/18.



Plan Sponsor

- Usually, the employer
- Online account usage
- May delegate responsibilities to a Board/Committee, including the designation 'Named Fiduciary'
- Retirement readiness

Plan Administrator

- Oversee Plan operations; commonly supported by a third-party administrator (TPA)
- May be a single individual or designated Board/Committee
- May delegate to TPA serving as a fiduciary 3(16) plan administrator, but retains fiduciary responsibility
- Prepare and provide participant notices such as blackouts, terminations, fee disclosures and benefit statements
- Maintain qualified status of the Plan through amendments, restatements and filing required reports
- Administer loans, hardship distributions, payroll changes and other participant events

Plan Trustee

- May be a single individual, a designated Board/Committee, or a third-party serving in either a directed or discretionary manner
- Safekeep Plan assets
- May delegate to a 3(21) advisor and/or 3(38) investment manager but retains fiduciary responsibility
- Prudently select and monitor service providers
- Ensure expenses paid by the Plan are reasonable and pursue monies owed to the Plan
- Follow participant directions consistent with Plan guidelines

Advisor

- Plan consultant
- Assist in education
- Assist with Plan conversions
- Assist in the addition and monitoring of other service providers
- Coordinate with various service providers

Investment Advisor (3(21))

- Render investment advice for a fee, on a regular basis, that will serve as the primary basis of committee investment decisions
- Assist with drafting, maintaining and executing the investment policy statement
- Advise on fund menus and provides ongoing monitoring
- Recommend changes in accordance with the investment policy statement
- No administrative responsibilities

Investment Manager (3(38))

- “Discretionary” fiduciary
- Power to manage, acquire and dispose of Plan assets
- Assist with drafting, maintaining and executing the investment policy statement
- Determine the fund menu
- Authority to change investment options in accordance with the investment policy statement

Attorney

- Provide interpretations on retirement plan provisions
- Create legal Plan documents, summary plan descriptions (when applicable) and other forms
- Prepare forms required for plan qualification purposes
- IRS and DOL audit support
- Consulted during plan level changes

Independent Auditor

- Offer an opinion on Plan assets
- Audit financial statements / payroll information
- Assist in the confirmation of Plan sponsor tax status
- Coordinate with TPAs and Recordkeepers on compliance issues found in audit

Recordkeeper

- Handling and processing of participant “money-in” and “money-out” transactions
- Invest / track participant fund positions according to participant elections
- Create required notices and report to participants and the Plan Sponsor
- Provide participants with account access and updating system with daily investment pricing

Third Party Administrator

- Services commonly performed by the recordkeeper
- Determine participant eligibility
- Perform nondiscrimination testing and top-heavy testing required
- Monitor limits (compensation, deferral, deductions) and annual additions/catchups
- Assure Plan operation is in compliance with Plan documents and regulations
- Preparing participant notices and disclosures

| Quarterly | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Follow procedures, including documentation of all meetings and decisions | Yes | Yes | Yes | |
| Review of plan investments and compliance with investment policy statement | Yes | Yes | Yes | |
| Fiduciary education | Yes | Yes | Yes | |
| Periodically | | | | |
| Investment policy statement review | No | No | No | |
| Review QDIA selection | Yes | Yes | Yes | |
| Plan fee analysis | Yes | Yes | Yes | |
| Plan recordkeeping & administration services review | Yes | Yes | Yes | |
| Employee education review | Yes | Yes | Yes | |
| Review of ancillary products, if applicable (self-directed brokerage, managed accounts, etc.) | | Yes | | |
| Other Projects | | | | |



| Fund Information | | Fund Investment Policy | |
|----------------------------------|-----------------------------|---|--|
| Portfolio Manager : Team Managed | Ticker : | The Fund seeks long-term growth of capital. The Fund invests at least 80% of its assets in common stocks of mid-capitalization companies. The Fund may invest up to 20% of its total assets in securities of foreign issuers and non-dollar securities. | |
| PM Tenure : | Inception Date : 07/14/1997 | | |
| Fund Assets : - | Portfolio Turnover : 28% | | |

| Comparative Performance - Trailing | | | | | | | | | | | | | | |
|---|-------|------|--------|------|--------|------|------|------|------|------|------|------|-------|------|
| | QTR | | YTD | | 1 YR | | 3 YR | | 5 YR | | 7 YR | | 10 YR | |
| Hartford Mid Cap (HIMCX) | -5.25 | (75) | -30.40 | (97) | -26.82 | (99) | 0.75 | (96) | 4.80 | (57) | 7.71 | (45) | 10.25 | (17) |
| Russell Midcap Index | -3.44 | (32) | -24.27 | (89) | -19.39 | (90) | 5.19 | (42) | 6.48 | (22) | 8.79 | (16) | 10.30 | (16) |
| IM U.S. Mid Cap Core Equity (MF) 1st Quartile | -3.25 | | -18.69 | | -10.53 | | 6.30 | | 6.39 | | 8.40 | | 9.67 | |
| IM U.S. Mid Cap Core Equity (MF) Median | -4.32 | | -20.76 | | -14.07 | | 4.68 | | 5.27 | | 7.43 | | 8.80 | |
| IM U.S. Mid Cap Core Equity (MF) 3rd Quartile | -5.35 | | -22.47 | | -16.30 | | 3.40 | | 3.74 | | 6.53 | | 7.78 | |

| Comparative Performance - Calendar | | | | | | | |
|---|------------|------------|------------|------------|------------|------------|------------|
| | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 |
| Hartford Mid Cap (HIMCX) | 9.91 (100) | 25.10 (7) | 32.87 (16) | -7.44 (12) | 24.47 (2) | 11.98 (72) | 1.60 (6) |
| Russell Midcap Index | 22.58 (68) | 17.10 (17) | 30.54 (31) | -9.06 (21) | 18.52 (25) | 13.80 (57) | -2.44 (31) |
| IM U.S. Mid Cap Core Equity (MF) 1st Quartile | 28.72 | 14.20 | 31.35 | -9.97 | 18.51 | 18.23 | -1.68 |
| IM U.S. Mid Cap Core Equity (MF) Median | 25.73 | 8.44 | 28.59 | -11.64 | 14.94 | 14.51 | -3.74 |
| IM U.S. Mid Cap Core Equity (MF) 3rd Quartile | 21.53 | 3.24 | 25.60 | -14.53 | 12.36 | 11.25 | -6.51 |

| Comparative Performance - Quarterly | | | | | | | |
|---|-------------|-------------|-----------|------------|-----------|-----------|------------|
| | Jun-2022 | Mar-2022 | Dec-2021 | Sep-2021 | Jun-2021 | Mar-2021 | Dec-2020 |
| Hartford Mid Cap (HIMCX) | -18.09 (98) | -10.32 (99) | 5.15 (92) | -3.52 (97) | 2.98 (97) | 5.20 (95) | 26.17 (2) |
| Russell Midcap Index | -16.85 (91) | -5.68 (77) | 6.44 (80) | -0.93 (52) | 7.50 (3) | 8.14 (83) | 19.91 (43) |
| IM U.S. Mid Cap Core Equity (MF) 1st Quartile | -11.52 | -1.65 | 8.95 | -0.19 | 6.10 | 13.16 | 21.74 |
| IM U.S. Mid Cap Core Equity (MF) Median | -13.63 | -4.08 | 8.20 | -0.87 | 5.14 | 10.47 | 19.44 |
| IM U.S. Mid Cap Core Equity (MF) 3rd Quartile | -15.27 | -5.65 | 6.74 | -1.72 | 4.08 | 8.77 | 17.53 |

| MPT Stats | | | | Ranking vs. IM U.S. Mid Cap Core Equity (MF) 4 Quarters Rolling Periods | | | | | |
|--------------------|-------|-------|-------|---|------|-----------|-----------|---------|---------|
| | 1 YR | 3 YR | 5 YR | Periods | 5-25 | 25-Median | Median-75 | 75-95 | |
| Standard Deviation | 22.02 | 23.46 | 21.21 | Hartford Mid Cap (HIMCX) | 28 | 15 (54%) | 5 (18%) | 2 (7%) | 6 (21%) |
| Downside Risk | 19.98 | 16.30 | 14.68 | Russell Midcap Index | 28 | 11 (39%) | 10 (36%) | 5 (18%) | 2 (7%) |

| vs. Russell Midcap Index | | | |
|--------------------------|--------|--------|--------|
| Alpha | -8.43 | -4.22 | -1.64 |
| Beta | 1.03 | 1.01 | 1.03 |
| Down Market Capture | 114.05 | 107.02 | 106.38 |
| Information Ratio | -2.41 | -0.92 | -0.31 |
| Tracking Error | 3.84 | 4.56 | 4.53 |
| Up Market Capture | 84.88 | 92.78 | 99.96 |

| Ranking vs. IM U.S. Mid Cap Core Equity (MF) 12 Quarters Rolling Periods | | | | | |
|--|---------|----------|-----------|-----------|---------|
| | Periods | 5-25 | 25-Median | Median-75 | 75-95 |
| Hartford Mid Cap (HIMCX) | 28 | 25 (89%) | 0 (0%) | 0 (0%) | 3 (11%) |
| Russell Midcap Index | 28 | 25 (89%) | 2 (7%) | 1 (4%) | 0 (0%) |

| vs. 90 Day U.S. Treasury Bill | | | |
|-------------------------------|-------|------|------|
| Sharpe Ratio | -1.31 | 0.12 | 0.27 |

| Ranking vs. IM U.S. Mid Cap Core Equity (MF) 20 Quarters Rolling Periods | | | | | |
|--|---------|-----------|-----------|-----------|--------|
| | Periods | 5-25 | 25-Median | Median-75 | 75-95 |
| Hartford Mid Cap (HIMCX) | 28 | 26 (93%) | 0 (0%) | 2 (7%) | 0 (0%) |
| Russell Midcap Index | 28 | 28 (100%) | 0 (0%) | 0 (0%) | 0 (0%) |



| Portfolio Characteristics | | | Top Ten Equity Holdings | | | | |
|---------------------------|---------------|----------------|--------------------------|----------|-----------|----------|-------------|
| | Portfolio | Benchmark | | Port. Wt | Bench. Wt | Qtr Rtrn | Contr. Rtrn |
| Wtd. Avg. Mkt. Cap (\$) | 9,405,194,206 | 19,180,336,513 | Genpact Ltd | 2.3 | 0.1 | 3.6 | 0.1 |
| Median Mkt. Cap (\$) | 7,960,257,725 | 8,605,547,245 | NVR Inc. | 2.0 | 0.1 | -0.4 | 0.0 |
| Price/Earnings ratio | 15.6 | 15.1 | IDEX Corp | 2.0 | 0.2 | 10.4 | 0.2 |
| Price/Book ratio | 2.7 | 2.8 | United Therapeutics Corp | 1.9 | 0.1 | -11.1 | -0.2 |
| 5 Yr. EPS Growth Rate (%) | 17.2 | 16.6 | Jazz Pharmaceuticals plc | 1.9 | 0.1 | -14.6 | -0.3 |
| Current Yield (%) | 0.8 | 1.8 | Axon Enterprise Inc | 1.8 | 0.1 | 24.2 | 0.4 |
| Beta (5 Years, Monthly) | 1.03 | 1.00 | Credit Acceptance Corp | 1.8 | 0.0 | -7.5 | -0.1 |
| Number of Stocks | 96 | 824 | WEX Inc | 1.8 | 0.1 | -18.4 | -0.3 |
| | | | M&T Bank Corp | 1.8 | 0.4 | 11.3 | 0.2 |
| | | | Inari Medical Inc | 1.8 | 0.0 | 6.8 | 0.1 |

| Buy and Hold Sector Attribution - 1 Qtr | | | | | | | | Ten Best Performers | | | |
|---|--------------|--------------|--------------|--------------|-------------|--------------|--------------|---------------------|-----------|-----------|-------------|
| | Allocation | | Performance | | Sector | Attribution | | Port. Wt | Bench. Wt | Qtr. Rtrn | Contr. Rtrn |
| | Portfolio | Benchmark | Portfolio | Benchmark | | Stock | Total | | | | |
| Communication Services | 3.0 | 4.0 | -32.69 | -8.00 | 0.05 | -0.81 | -0.76 | 1.0 | 0.0 | 68.0 | 0.7 |
| Consumer Discretionary | 10.7 | 11.2 | -2.09 | -2.64 | -0.01 | 0.06 | 0.05 | 1.5 | 0.0 | 51.0 | 0.8 |
| Consumer Staples | 0.0 | 3.7 | 0.00 | -6.41 | 0.11 | 0.00 | 0.11 | 0.6 | 0.0 | 50.5 | 0.3 |
| Energy | 4.9 | 4.9 | 1.34 | 1.23 | -0.04 | -0.03 | -0.07 | 0.3 | 0.3 | 37.2 | 0.1 |
| Financials | 10.2 | 13.4 | -3.63 | -1.76 | -0.10 | -0.15 | -0.25 | 1.6 | 0.1 | 36.8 | 0.6 |
| Health Care | 17.2 | 10.6 | -6.80 | -6.72 | -0.18 | -0.03 | -0.20 | 1.7 | 0.0 | 34.9 | 0.6 |
| Industrials | 20.0 | 14.9 | 2.11 | 0.01 | 0.18 | 0.41 | 0.58 | 0.5 | 0.0 | 28.2 | 0.1 |
| Information Technology | 25.3 | 16.7 | -8.14 | -1.10 | 0.20 | -1.79 | -1.59 | 1.1 | 0.0 | 25.3 | 0.3 |
| Materials | 4.5 | 6.3 | -0.56 | -5.65 | 0.04 | 0.23 | 0.27 | 1.8 | 0.1 | 24.2 | 0.4 |
| Real Estate | 1.9 | 8.5 | -6.89 | -9.26 | 0.39 | 0.04 | 0.43 | 0.1 | 0.1 | 22.0 | 0.0 |
| Utilities | 2.4 | 5.9 | -10.88 | -5.54 | 0.06 | -0.12 | -0.05 | | | | |
| Total | 100.0 | 100.0 | -4.92 | -3.43 | 0.70 | -2.19 | -1.50 | | | | |

| Buy and Hold Style Attribution - 1 Qtr | | | | | | | | Ten Worst Performers | | | |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------------|-----------|-----------|-------------|
| | Allocation | | Performance | | Style | Attribution | | Port. Wt | Bench. Wt | Qtr. Rtrn | Contr. Rtrn |
| | Portfolio | Benchmark | Portfolio | Benchmark | | Stock | Total | | | | |
| Large Growth | 0.0 | 1.6 | 0.00 | 9.05 | -0.04 | 0.00 | -0.04 | 0.6 | 0.1 | -34.2 | -0.2 |
| Large Neutral | 0.0 | 1.5 | 0.00 | 10.79 | -0.09 | 0.00 | -0.09 | 0.9 | 0.0 | -34.1 | -0.3 |
| Large Value | 0.0 | 1.4 | 0.00 | 1.93 | 0.11 | 0.00 | 0.11 | 0.6 | 0.0 | -34.1 | -0.2 |
| Mid Growth | 6.4 | 9.0 | 17.59 | 10.63 | -0.15 | 0.57 | 0.41 | 1.2 | 0.1 | -33.7 | -0.4 |
| Mid Neutral | 28.1 | 25.3 | 2.66 | 6.46 | 0.01 | -1.44 | -1.44 | 1.1 | 0.1 | -31.6 | -0.4 |
| Mid Value | 20.0 | 21.4 | 6.96 | 5.16 | 0.04 | 0.53 | 0.58 | 0.6 | 0.1 | -31.3 | -0.2 |
| Small Growth | 3.5 | 0.3 | -7.72 | -2.73 | -0.38 | -0.23 | -0.61 | 0.9 | 0.0 | -30.6 | -0.3 |
| Small Neutral | 4.0 | 0.6 | 6.55 | 4.57 | -0.10 | 0.10 | -0.01 | 0.4 | 0.0 | -29.6 | -0.1 |
| Small Value | 33.0 | 31.8 | -10.20 | -7.47 | -0.05 | -0.97 | -1.02 | 0.1 | 0.0 | -29.1 | 0.0 |
| Unclassified | 5.1 | 7.1 | 15.14 | -1.33 | -0.02 | 0.62 | 0.61 | 1.0 | 0.1 | -27.0 | -0.3 |
| Total | 100.0 | 100.0 | -4.92 | -3.43 | -0.67 | -0.83 | -1.50 | | | | |



Historical Activity

Sep-2020

Hotchkis & Wiley Mid Cap Value (HWMIX) fund removed from the fund line-up.

Jan-2020

The Custom Target Date funds were replaced with the American R6 Target Date funds.

Jun-2019

The MassMutual Guaranteed Interest Account was replaced by the Voya Fixed Account. The returns are MassMutual until 1Q2019, Voya thereafter.
The Record Keeper was changed in 2Q2019 from Mass Mutual to Voya.

Jul-2017

The Hartford Small Company Fund (HIASX) was replaced by Wells Fargo Small Company Growth Fund (WSCRX).

Nov-2016

The Hartford Capital Appreciation Fund (HIACX) was replaced by the Wells Fargo Disciplined US Core Fund (EVSIX).

The Deutsche Real Assets Fund (AAAVX) was removed from the Plans. The remaining balances were mapped into the American Funds American Balanced Fund (RLBGX).

The Plan added WCAB Models 2015, 2025, 2035, 2045, 2055, and 2060. The 2010 Model was replaced by the Income Model.

Dec-2015

The Plan was converted to the Mass Mutual platform. The following funds were changed:

The SSGA Index Fund were replaced by Vanguard Index Funds.
The Hartford Balanced was replaced by American Funds Balanced.
American Century Equity Income shares changed from ACIIX to AEUDX.
Deutsche Alternative Asset Allocation shares changed from AAAAX to AAAVX.

Sep-2014

Lord Abbett Mid Cap Value closes 9/3/14. Assets will map to the Hotchkis & Wiley Mid Cap Value Fund on September 5, 2014.

Oct-2013

Pimco Foreign Bond (US Hedged) (PFORZ) was added to the fund lineup.

Apr-2011

The LifePath Funds were removed from the fund line-up.

Mar-2011

The Barclays LifePath Target Date Funds will be mapped to the Hartford Advisors HLS Fund.

Oct-2010



The following funds were moved to new share classes as follows:

American Funds EuroPacific Growth to R6 shares
SSgA Russell Small Cap to A shares
Lord Abbett Mid Cap Value to I shares
SSgA S&P Mid Cap Index to A shares
American Funds Growth Fund of America to R6 shares
SSgA S&P 500 Index to A shares
Pimco High Yield to Institutional shares.

Dec-2009

The LifePath 2010 fund was wrapped in with the Life Path Retirement Fund.

Sep-2009

Barclays merged with BlackRock. The LifePath funds took the BlackRock name.

Feb-2009

The Following new investment choices were added to the Plans:

American Century Capital, DFA Intl. Small Cap Value, DWS Alternative Asset Allocation, Lazard Emerging Markets, Lord Abbett Mid Cap Value.

Sep-2007

The Hartford Index HLS was replaced by the SSgA S&P 500 Flagship fund in the third quarter 2007. The TCW Opportunity Fund was renamed to the TCW Relative Value Small Cap Fund.

Jun-2007

The American Century Ultra Fund was removed from the fund lineup during the second quarter 2007.

Mar-2005



Changes to the fund lineup started on March 1, 2005 and concluded on March 31, 2005. Below is a list of the funds that were retained and a list of funds that were added to the lineup.

Retained Funds:

Hartford Small Company HLS
Skyline Special Equities Portfolio, Hartford Mid-Cap HLS
American Century Ultra, Hartford Capital Appreciation
Hartford Index HLS
American Century Equity Income
Hartford Advisors HLS
Hartford Total Return Bond HLS
General "Declared Interest"

Introduced Funds:

American Funds EuroPacific
TCW Opportunity
Artisan Mid-Cap
Hotchkis & Wiley Mid-Cap Value
American Funds Growth Fund
PIMCO High Yield
General Account (Declared)
Barclays Global Investors LifePath.

Common Index Definitions

The S&P 500® Index is a broad based unmanaged index of 500 stocks, which is widely recognized as representative of the equity market in general.

The Russell 1000® Index measures the performance of those 1,000 largest companies in the Russell 3000® Index, which represents approximately 92% of the total market capitalization of the Russell 3000® Index.

The Russell 1000® Value Index measures the performance of those Russell 1000® Index companies with lower price-to-book ratios and lower forecasted growth values.

The Russell 1000® Growth Index measures the performance of those Russell 1000® Index companies with higher price-to-book ratios and higher forecasted growth values.

The Russell 2000® Index, an unmanaged index, measures the performance of the 2,000 smallest companies in the Russell 3000® Index.

The Russell 2000® Value Index measures the performance of those Russell 2000® Index companies with lower price-to-book ratios and lower forecasted growth values.

The Russell 2000® Growth Index measures the performance of those Russell 2000® Index companies higher price-to-book ratios and higher forecasted growth values.

The Russell 3000® Index includes the 3,000 largest U.S.-traded stocks.

The Russell 3000® Value Index includes stocks from the Russell 3000® Index with lower price-to-book ratios and lower expected growth rates.

The Russell 3000® Growth Index includes companies that display signs of above average growth. The index is used to provide a gauge of the performance of growth stocks in the U.S.

The Russell Midcap® Index, an unmanaged index, measures the performance of the 800 smallest companies in the Russell 1000® Index.

The Russell Midcap® Value Index measures the performance of those Russell Midcap® Index companies with lower price-to book value ratios and lower forecasted growth values.

The Russell Midcap® Growth Index measures the performance of those Russell Midcap® Index companies with higher price-to book ratios and higher forecasted growth values.

The Russell Developed® Index measures the performance of the investable securities in developed countries globally across all market capitalization ranges.

The Bloomberg Barclays Intermediate Treasury Index includes Treasuries with maturities between 1 and 10 years.

The Bloomberg Barclays Aggregate Bond Index, is a market capitalization-weighted intermediate term index, meaning the securities in the index are weighted according to the market size of each bond type. Most U.S. traded investment grade bonds are represented. Municipal bonds, and Treasury Inflation-Protected Securities are excluded, due to tax treatment issues. The index includes Treasury securities, Government agency bonds, Mortgage-backed bonds, Corporate bonds, and a small amount of foreign bonds traded in U.S. The Bloomberg Barclays US Aggregate Bond Index is an index.

The BofA Merrill Lynch U.S. High Yield Index tracks the performance of below investment grade, but not in default, US dollardenominated corporate bonds publicly issued in the US domestic market, and includes issues with a credit rating of BBB or below, as rated by Moody's and S&P.



| | |
|---------------------------------------|---|
| Active Return | - Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period. |
| Alpha | - A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market. |
| Beta | - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk. |
| Consistency | - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance. |
| Distributed to Paid In (DPI) | - The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against. |
| Down Market Capture | - The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance |
| Downside Risk | - A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product. |
| Excess Return | - Arithmetic difference between the manager's performance and the risk-free return over a specified time period. |
| Excess Risk | - A measure of the standard deviation of a portfolio's performance relative to the risk free return. |
| Information Ratio | - This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio. |
| Public Market Equivalent (PME) | - Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index. |
| R-Squared | - The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark. |
| Return | - Compounded rate of return for the period. |
| Sharpe Ratio | - Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance. |
| Standard Deviation | - A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period. |
| Total Value to Paid In (TVPI) | - The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life |
| Tracking Error | - This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark. |
| Treynor Ratio | - Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance. |
| Up Market Capture | - The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance. |



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AndCo uses time-weighted calculations which are founded on standards recommended by the CFA Institute. The calculations and values shown are based on information that is received from custodians. AndCo analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides AndCo with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides AndCo with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause AndCo to believe that the information presented is significantly misstated.

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