



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



PERIOD ENDING: December 31, 2024

Investment Performance Review for

San Mateo County Employees' Retirement Association

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THE ECONOMY

- The election of Donald Trump and news of a unified government appears to have positively impacted household and business sentiment. The news has generally been perceived as implying easier business conditions, firmer economic growth, fewer interest rate cuts, and mildly higher inflation.
- U.S. inflation drifted upward during Q4, from 2.4% YoY in September to 2.9% in December. Core inflation (ex-food & energy) was fairly stable at 3.2%. Investors now expect the Fed to cut rates once or twice over the next year. Further increases in the rate of inflation could possibly push the Federal Reserve towards a rate hike—an outcome that would likely spook markets.

EQUITY

- The U.S. (S&P 500 +2.4%) provided a strong quarter while non-U.S. markets lagged. Emerging markets (MSCI EM -8.0%) and international developed (MSCI EAFE -8.1%) both delivered sharp losses, though these losses were caused by currency movements rather than equity weakness. For investors with hedged currency exposure, the MSCI EAFE index produced a +0.1% return.
- Small cap and value both continued to underperform. Small cap trailed large cap by -2.4% in Q4, while value trailed growth by -9.1%. This capped off a year of poor returns for both style factors, underperforming by -13% and -19%, respectively.

FIXED INCOME

- The 10-year U.S. Treasury yield jumped from 3.79% to 4.55% during the quarter, amid growing evidence that the economy may remain hotter than previously believed, and expectations around pro-growth policies of the Trump Administration, as well as the possibility that a tariff spat with trade partners could push inflation upwards.
- Default activity remained low, as the economy was strong and chances of recession have fallen. However, 'distressed exchanges', a renegotiation of debt that does not count as a technical default, have been rising substantially. During the quarter, total distressed credit volume was roughly \$19.4 billion, which marked the second largest quarterly total on record since Q4 2008.

ASSET ALLOCATION ISSUES

- U.S. election results triggered large market movements in early November. Equities rallied along with most risk assets, while treasury yields jumped materially. Although investors have interpreted this news as generally positive for the future, volatility along the way is also likely.
- Implied bond market volatility continued to moderate, following record highs that were achieved during the recent U.S. inflation scare. However, volatility levels remain materially above the longer-term average. We suspect that volatility will be elevated on an ongoing basis as investors are fixated on Federal Reserve actions and communications.

Evidence of a strong U.S. economy, and news of an incoming Trump Administration, have led to shifting expectations around growth, interest rates, and inflation

U.S. economics summary

- In early November, U.S. election results were announced, confirming the election of Donald Trump and a unified government as Republicans took the House and Senate. Household surveys and market movements suggest that the coming years may be characterized by easier business conditions, firmer economic growth, fewer interest rate cuts, and perhaps mildly higher inflation.
- Real GDP growth slowed during Q4, from 3.1% to 2.3% quarter-over-quarter annualized (2.5% year-over-year), but remained fairly robust. Economic growth continues to be supported largely by consumer purchases, with increases in government spending also providing notable support. Investment fell and was the largest drag on the economy.
- The Federal Reserve cut interest rates once in November and again in December—each time by a quarter point. This brought the Fed’s target rate from 4.75-5.00% down to 4.25-4.50%.
- U.S. inflation drifted upward during Q4, from 2.4% YoY in September to 2.9% in December. Core inflation (ex-food & energy) was fairly stable at 3.2%. Investors now expect the Fed to cut rates once or twice over the next full year. Further increases in the rate of inflation could potentially push the Federal Reserve towards a rate hike—an outcome that would likely spook markets.
- The labor market was broadly stable during the quarter. Unemployment remained at 4.1%, while the labor participation rate moved slightly lower. December nonfarm payrolls exceeded expectations, coming in at 256,000, which was 91,000 higher than forecast. Moderate, but stable, labor conditions further eased fears that the rise in unemployment of late-2023 might have indicated a trend towards recession.
- Consumer sentiment has improved materially since the results of the U.S. election became known. In November, small business optimism showed the largest monthly jump since 1980. Significant improvements in sentiment should bode well for household and business spending in the near-term.

	Most Recent	12 Months Prior
Real GDP (YoY)	2.5% 12/31/24	3.2% 12/31/23
Inflation (CPI YoY, Core)	3.2% 12/31/24	3.3% 12/31/23
Expected Inflation (5yr-5yr forward)	2.3% 12/31/24	2.5% 12/31/23
Fed Funds Target Range	4.25–4.50% 12/31/24	5.25–5.50% 12/31/23
10-Year Rate	4.55% 12/31/24	3.88% 12/31/23
U-3 Unemployment	4.1% 12/31/24	3.7% 12/31/23
U-6 Unemployment	7.5% 12/31/24	7.1% 12/31/23

International economics summary

- The Eurozone grew only 0.9% YoY Q3. The region is also expected to show slow growth in 2025, with a +1.2% consensus estimate for the Euro Area. High energy prices have negatively impacted manufacturing and other business activities, while competition from China has also had dire impacts. Once the industrial heart of Europe, Germany’s manufacturing sector faces an uncertain future.
- Inflation has moderated across most global economies, with the European Central Bank (ECB) rounding out the year with its fourth interest rate cut. The ECB has shown a shift in concern away from inflation and towards growth—removing official language regarding keeping rates “sufficiently restrictive.” Economists now expect 4-5 rate cuts during 2025, to a rate level that is believed to be neutral to growth or slightly stimulative.
- After slipping into contractionary territory last quarter, the Japanese economy rebounded in Q3, delivering

growth of +0.5%. This coincided with a slight uptick in inflation, now at 3%. Growth has been assisted by a weak Yen, which makes exports cheaper for other countries to purchase. Domestic consumer demand has also provided a tailwind for growth and led to expectations of a more normal interest rate environment, with the Bank of Japan now expected to increase interest rates to 0.50% by March.

- China was reportedly able to achieve the official GDP growth target in 2024, claiming growth of 5.4% year-over-year, though the economy still faces deep structural issues. China is heavily reliant on exports, which may be interrupted by U.S. tariffs in the case of a trade spat. Home prices continue to fall alongside oversupply and weaker economic conditions. Deflation fears are weighing on consumer spending. Alongside these near-term issues, a declining population poses a multitude of problems to the overall economy, spending, and the housing market.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.5% 12/31/24	2.9% 12/31/24	4.1% 12/31/24
Eurozone	0.9% 9/30/24	2.4% 12/31/24	6.3% 11/30/24
Japan	0.5% 9/30/24	3.0% 12/31/24	2.4% 11/30/24
BRICS Nations	4.5% 9/30/24	2.1% 12/31/24	5.2% 12/31/24
Brazil	4.0% 9/30/24	4.8% 12/31/24	6.1% 11/30/24
Russia	3.1% 9/30/24	9.5% 12/31/24	2.3% 11/30/24
India	5.4% 9/30/24	5.2% 12/31/24	7.1% 12/31/24
China	5.4% 12/31/24	0.1% 12/31/24	5.1% 12/31/24

NOTE: India lacks reliable government unemployment data. Unemployment rate shown above is estimated from the Centre for Monitoring Indian Economy. The Chinese unemployment rate represents the monthly surveyed urban unemployment rate in China.

Equity environment

- Global equities were mixed during Q4. Emerging markets (MSCI EM -8.0%) and international developed (MSCI EAFE -8.1%) delivered poor returns to U.S. investors with unhedged currency exposure, though most of those losses were driven by currency movement. During 2024, large currency moves created a wide gap between U.S. and non-U.S. returns. For example, currency hedged Japanese equities slightly outperformed U.S. (S&P 500 +25.0%, TOPIX +25.8%) but returned only +8.0% on an unhedged basis
- Expectations for interest rate cuts lessened after economic strength and stubborn inflation led the Fed to emphasize that they would not budge on their 2% inflation target. The *higher for longer* interest rate narrative likely contributed to U.S. dollar strength during the quarter.
- S&P 500 earnings growth is expected to be +11.9% for Q4,

which would mark the highest growth rate of the past three years. Financials (+39.5%) led the way, followed by Communication Services (+20.7%), while Energy (-24.6%) was a drag on the index.

- Small cap and value both continued to underperform. Small cap trailed large cap by -2.4% (Russell 2000 +0.3% vs. Russell 1000 +2.7%) in Q4, while growth outperformed value by +9.1% (Russell 1000 Growth +7.1% vs. Russell 1000 Value -2.0%). This capped off a year of poor performance for both of these size and style factors, underperforming by -13% and -19%, respectively.
- Market-priced volatility (Cboe VIX Index) was stable during Q4, beginning the quarter at 16.7% and ending at 17.4%. While the level of volatility has been far less than what was experienced during the spike in August, a few bouts of volatility occurred throughout the quarter.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	2.4%		25.0%	
U.S. Small Cap (Russell 2000)	0.3%		11.5%	
U.S. Equity (Russell 3000)	2.6%		23.8%	
U.S. Large Value (Russell 1000 Value)	(2.0%)		14.4%	
U.S. Large Growth (Russell 1000 Growth)	7.1%		33.4%	
Global Equity (MSCI ACWI)	(1.0%)	1.4%	17.5%	21.0%
International Large (MSCI EAFE)	(8.1%)	0.1%	3.8%	14.1%
Eurozone (EURO STOXX 50)	(8.9%)	(1.4%)	4.1%	12.9%
U.K. (FTSE 100)	(6.8%)	(0.1%)	7.7%	9.9%
Japan (TOPIX)	5.4%	6.7%	8.0%	25.8%
Emerging Markets (MSCI Emerging Markets)	(8.0%)	(4.3%)	7.5%	13.3%

Source: Standard & Poor's, FTSE, MSCI, STOXX, JPX, as of 12/31/24

Domestic equity

U.S. equities outperformed both international and emerging markets, with the S&P 500 ending Q4 up +2.4%. The market rallied in early November following the re-election of President Trump, which seems to have provided an animal spirits boost to sentiment, with markets pricing in firmer growth, a bit higher inflation, and elevated interest rates. Later in December, comments from Fed Chair Jerome Powell led markets to expect fewer rate cuts in 2025, which was received poorly by investors.

Earnings came in above expectations. The S&P 500 delivered year-over-year earnings growth of +5.9% in Q3, greater than the +4.2% growth that was expected going into the quarter. Growth expectations are very bullish for the final quarter of the year, with the S&P 500 forecast to

deliver growth of +11.9%. Financials (+39.5%) are expected to deliver the highest growth, with expectations also lofty for Communication Services (+20.7%) and Information Technology (+12.9%).

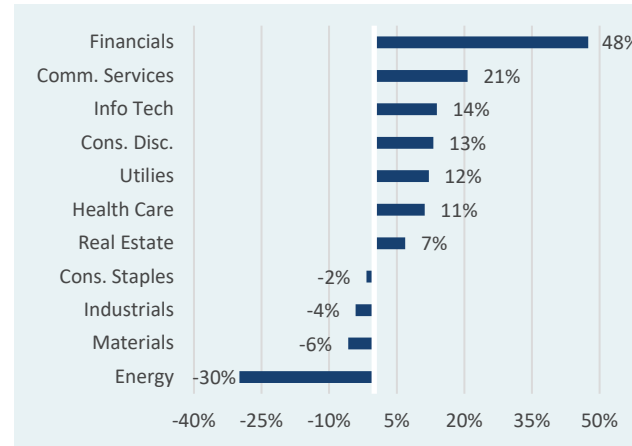
While valuations have been rising throughout the year, they remained at a consistent level over the course of Q4. On top of elevated valuations, U.S. equities are expected to deliver strong earnings growth of 14.8% and 13.6% in 2025 and 2026, respectively. If the U.S. market fails to achieve these estimates, it would place further upward pressure on valuation levels.

S&P 500 PRICE INDEX



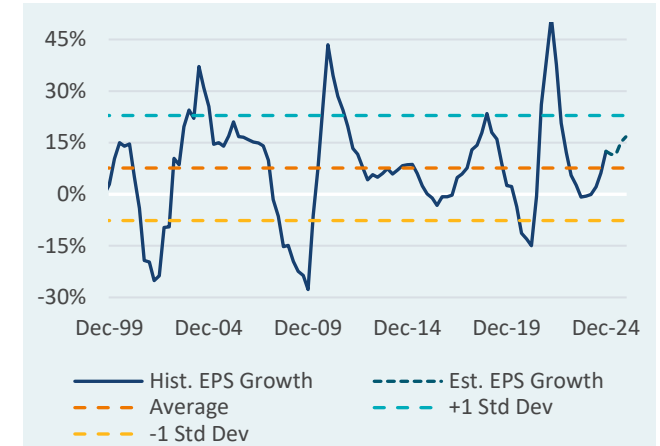
Source: Standard & Poor's, as of 12/31/24

S&P 500 BLENDED EPS GROWTH (YOY)



Source: Factset, as of 12/31/24

S&P 500 EPS GROWTH (YEAR-OVER-YEAR)



Source: Factset, Verus, as of 1/17/25

Domestic equity size & style

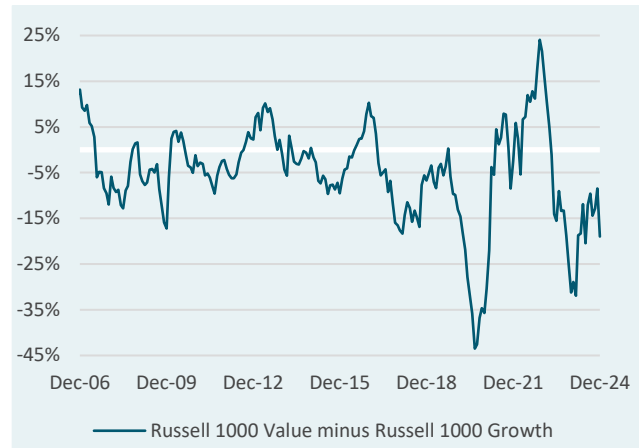
Small cap and value both continued to underperform. Small cap trailed large cap by -2.4% (Russell 2000 +0.3% vs. Russell 1000 +2.7%) in Q4, while growth outperformed value by +9.1% (Russell 1000 Growth +7.1% vs. Russell 1000 Value -2.0%). This capped off a year of poor performance for both of those size and style factors, underperforming by -13% and -19%, respectively.

The Magnificent 7 stocks delivered an exceptional +67.3% during 2024, substantially outperforming the index. However, recent years have shown investors that mega-cap

growth stocks can both act as a big boost to overall index returns or lead the index lower with large losses. The Magnificent 7 stocks delivered 21.7% earnings growth year-over-year in Q4, while the rest of the index reported 9.7% growth, per FactSet. But forecasts are for Magnificent 7 earnings growth to begin to converge with the broader index during 2025 (20.3% year-over-year in Q4 2025 relative to 15.4% overall for the index). If these stocks begin to stand out less from the rest of the S&P 500 in terms of growth, performance may become less differentiated, which could have a notable impact on size and style factor performance.

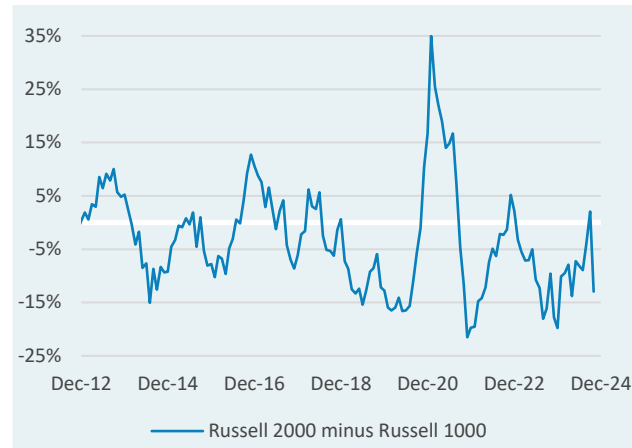
Small cap & value lagged in Q4, lagging in 2024 by -13% and -19%, respectively

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, as of 12/31/24

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE Russell, as of 12/31/24

1-YEAR SIZE & STYLE PERFORMANCE

	Value	Core	Growth
Large Cap	14.4%	24.5%	33.4%
Mid Cap	13.1%	15.3%	22.1%
Small Cap	8.1%	11.5%	15.2%

Source: FTSE Russell, as of 12/31/24

International developed equity

International developed shares (MSCI EAFE -8.1%) underperformed both the U.S. market (S&P 500 +2.4%) and emerging market equities (MSCI EM -8.0%). Most of this underperformance was due to currency movements rather than equity market behavior. On a hedged basis, international developed markets delivered slightly positive returns (+0.1%), with currency contributing losses of -8.2%.

European equities performed very poorly over the course of the quarter, falling -9.7% (MSCI Europe, -2.4% on a hedged basis), and acting as a drag on the overall index. European economies face turmoil due to political instability and a fairly bleak macroeconomic picture. Europe's largest economy, Germany, experienced a second consecutive year of contracting growth. Germany faces high energy costs, weak global demand for its

exports, and risks that its automobile manufacturers are left behind as electric vehicle competition heats up from Chinese and American manufacturers. In early December, the French government fell apart after Prime Minister Michel Barnier was ousted in a no-confidence vote. This followed Mr. Barnier's controversial move to use special powers to force through his budget without a vote.

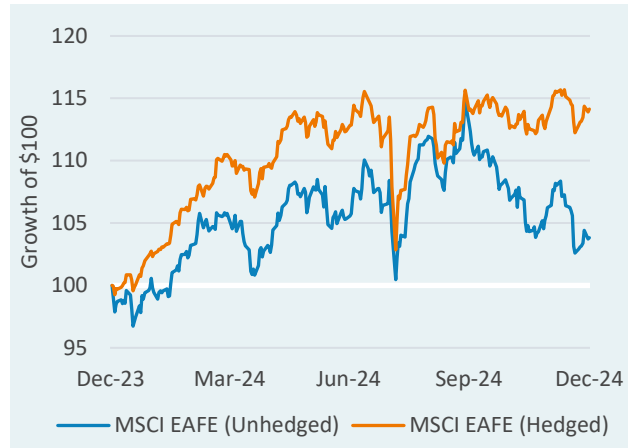
Currency moves also played a major role during the past year. Domestic investors without a currency hedging program lost -10.3% from currency volatility regarding their international equities (MSCI EAFE). The impact from unhedged Japanese asset exposure was particularly extreme—investors without a currency hedging program lost -17.8% from currency moves over the past year (TOPIX Index).

INTERNATIONAL DEVELOPED EQUITY



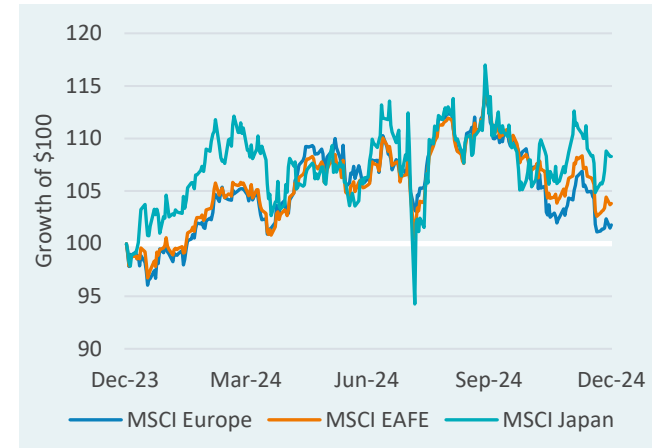
Source: MSCI, as of 12/31/24

MSCI EAFE HEDGED VS UNHEDGED



Source: MSCI, as of 12/31/24

REGIONAL RETURNS OF INTL. DEVELOPED



Source: MSCI, as of 12/31/24

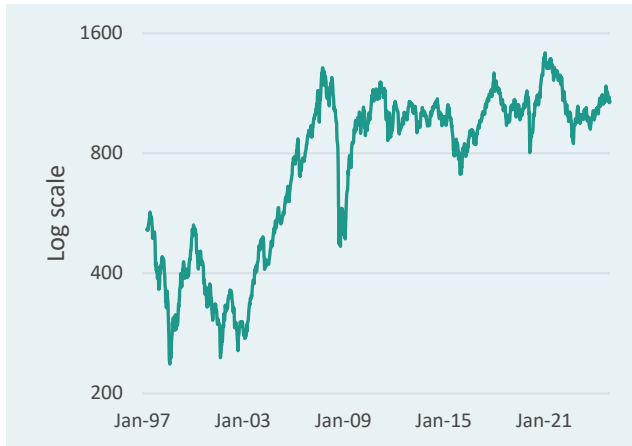
Emerging market equity

Emerging market equities (MSCI EM -8.0%) underperformed U.S. markets (S&P 500 +2.4%) during the quarter, and narrowly outperformed international developed equities (MSCI EAFE -8.1%). While not as drastic as seen across international developed equities, currency movements were also a drag on performance, with the hedged index returning -4.3%.

During 2024, Chinese equities clawed back some of the losses of prior years, gaining +19.4% (MSCI China) relative to the broader index return of +7.5%. The Chinese Communist Party (CCP) has struggled to instill confidence in its citizens to look

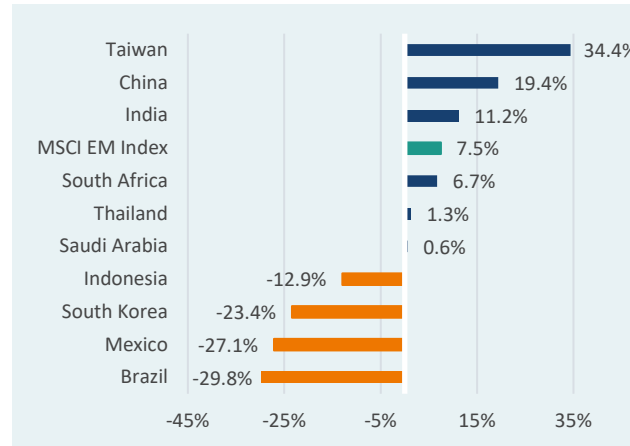
past China's various structural problems, and to have faith in the country's economic future and therefore to spend more freely. A severe drop in residential property prices has had a large impact on confidence, as the average citizen has most of their wealth and retirement savings in home equity. Much of that wealth has disappeared. Investors continue to wait for some sort of aggressive policy response or stimulus from the CCP. In September, major government announcements were made regarding market and economic stimulus, which sent the MSCI China Index up nearly +50%. However, the finer details of those plans were seen as lackluster by investors, and index prices had headed back down towards prior levels.

EMERGING MARKET EQUITY



Source: MSCI, as of 12/31/24

MSCI EM 2024 COUNTRY RETURNS (USD)



Source: MSCI, J.P. Morgan, as of 12/31/24

CHINA'S RALLY HAS PARTIALLY REVERSED



Source: MSCI, as of 12/31/24

Fixed income environment

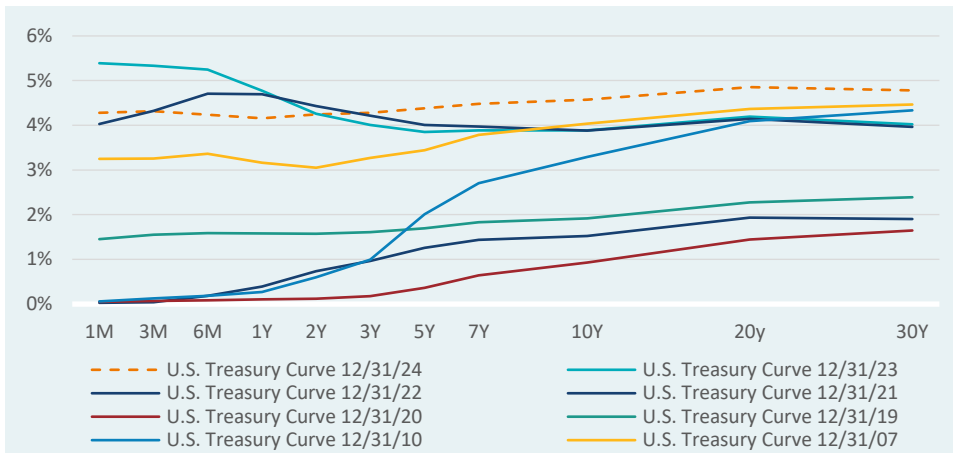
- The Federal Reserve cut interest rates once in November and again in December—each time by a quarter point. This brought the target rate from 4.75-5.00% to 4.25-4.50%. Rate expectations for 2025 have shifted, as better economic growth expectations and firmer inflation will likely lead the Fed towards fewer rate cuts.
- The 10-year U.S. Treasury yield jumped from 3.79% to 4.55% during the quarter, amid growing evidence that the economy may remain hotter than expected, expectations around pro-growth policies of the Trump Administration, as well as the possibility that a tariff spat with trade partners could push inflation upwards.
- Most credit indices delivered negative to slightly positive returns, with rising interest rates impacting duration-sensitive assets. Bank loans, which are much less sensitive to rate movements, returned +2.3%. High yield delivered slightly positive returns of +0.2% while investment grade lost -2.7%.
- Credit spreads were broadly tighter, a reflection of continued strength in the U.S. corporate sector. Lower-quality high yield bond spreads fell by -30bps to 2.7%, while investment grade spreads tightened slightly to 0.8%. Credit spreads across all ratings remain well below long-term historical averages, suggesting investors are confident in the ability of businesses to service debt.
- High yield default activity remained low, falling to 1.1%—down from 2.6% one-year prior. This compares to the long-term annual average of 3.4%. However, distressed exchange activity, particularly among LMEs, has continued to expand. Total distressed credit volume reached \$19.4 billion in Q4, far surpassing the previous quarter of \$13.5 billion. The level of Q4 was the second largest quarterly total on record since Q4 2008, with Q3 of 2024 being the third highest total on record.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	(3.1%)	1.3%
Core Plus Fixed Income (Bloomberg U.S. Universal)	(2.7%)	2.0%
U.S. Treasuries (Bloomberg U.S. Treasury)	(3.1%)	0.6%
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	(9.4%)	(8.0%)
U.S. High Yield (Bloomberg U.S. Corporate HY)	0.2%	8.2%
Bank Loans (S&P/LSTA Leveraged Loan)	2.3%	9.0%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	(7.0%)	(2.4%)
Emerging Market Debt Hard (JPM EMBI Global Diversified)	(1.9%)	6.5%
Mortgage-Backed Securities (Bloomberg MBS)	(3.2%)	1.2%

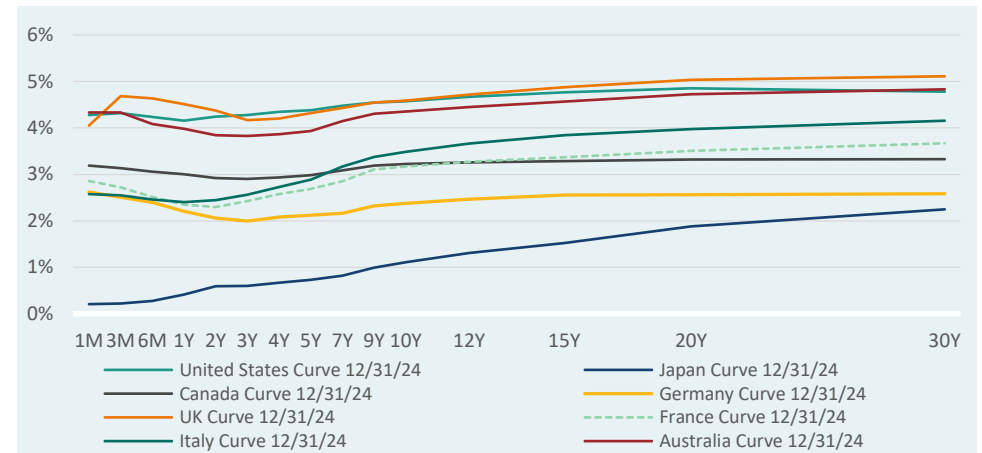
Source: Standard & Poor's, J.P. Morgan, Bloomberg, as of 12/31/24

Yield environment

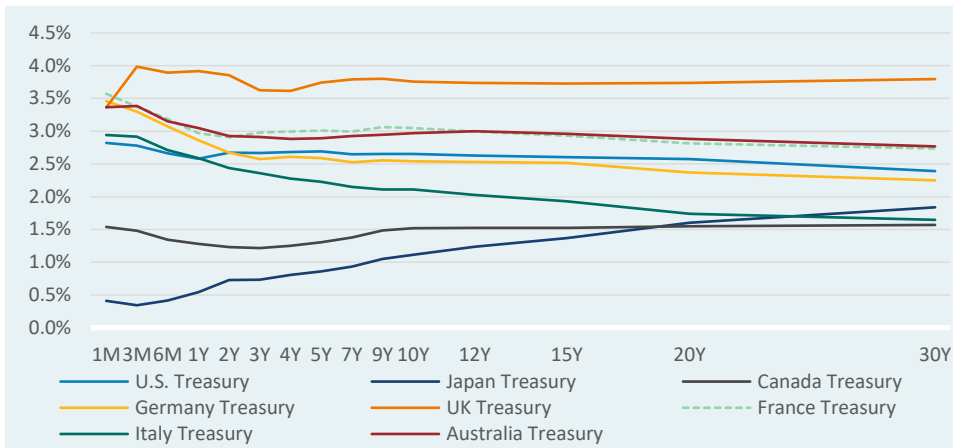
U.S. YIELD CURVE



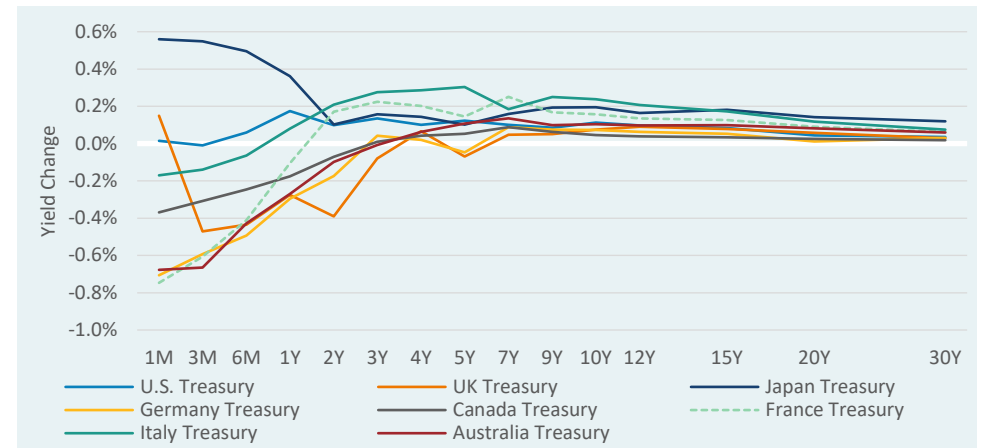
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 12/31/24

Currency

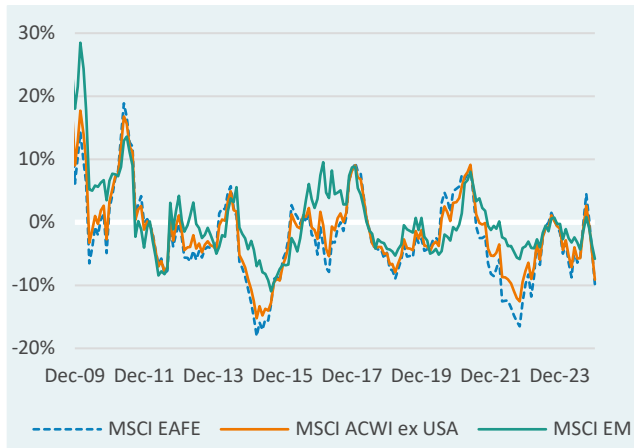
The U.S. dollar gained sharply in value during Q4—the DXY Index rising from 100.8 to 108.5. Strong economic data and evidence of sticky inflation led investors to reassess the number of upcoming Fed rate cuts and helped push up bond yields. Next, ongoing weak economic data in many international markets, as well as central bank rate cuts, created a bleaker outlook for foreign currency strength. Lastly, the U.S. election resulted in a rerating of expectations around the potential strength of the economy and led to some fears of higher inflation, which contributed to higher interest rates (lifting the U.S. dollar).

Dollar strength resulted in losses for investors with unhedged foreign asset exposure. Those without a currency hedging program lost -8.2% from international equities (MSCI EAFE) during Q4, and -10.3% over the past year. The impact from unhedged Japanese asset exposure was particularly

extreme. Investors without a currency hedging program lost -1.3% during the quarter from currency movements, and -17.8% over the past year (TOPIX Index).

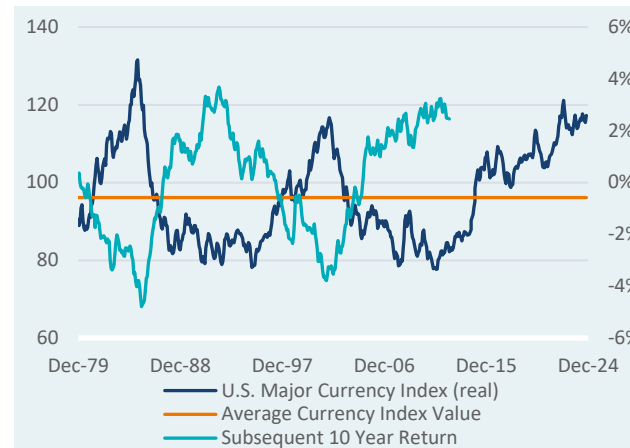
A more thoughtful portfolio approach to currency exposure has provided lower portfolio volatility and higher returns—a rare proposition. This approach involves reducing the uncompensated risk of unhedged foreign currency exposure, and instead of unhedged exposure, making a passive investment in the currency market by investing in currencies with higher interest rates, undervalued currencies, and currencies showing positive price momentum. This approach, represented by the MSCI Currency Factor Mix Index, has offered a positive one-year rolling return over most periods with far lower volatility than an unhedged approach. The past year of intense currency volatility is testament to this approach.

EFFECT OF CURRENCY (1-YEAR ROLLING)



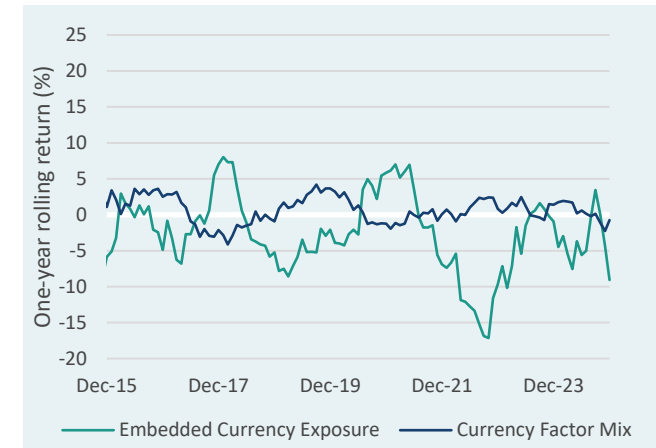
Source: MSCI, Verus, as of 12/31/24

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: FRED, Verus, as of 12/31/24

EMBEDDED CURRENCY VS CURRENCY FACTORS



Source: MSCI, Verus, as of 12/31/24 "Embedded Currency Exposure" is the currency return impact from not hedging currency risk

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	(2.4)	2.4	25.0	25.0	8.9	14.5	13.1
S&P 500 Equal Weighted	(6.3)	(1.9)	13.0	13.0	4.5	10.8	10.3
DJ Industrial Average	(5.1)	0.9	15.0	15.0	7.6	10.6	11.6
Russell Top 200	(1.5)	3.4	27.4	27.4	9.9	15.8	14.0
Russell 1000	(2.8)	2.7	24.5	24.5	8.4	14.3	12.9
Russell 2000	(8.3)	0.3	11.5	11.5	1.2	7.4	7.8
Russell 3000	(3.1)	2.6	23.8	23.8	8.0	13.9	12.5
Russell Mid Cap	(7.0)	0.6	15.3	15.3	3.8	9.9	9.6
Style Index							
Russell 1000 Growth	0.9	7.1	33.4	33.4	10.5	19.0	16.8
Russell 1000 Value	(6.8)	(2.0)	14.4	14.4	5.6	8.7	8.5
Russell 2000 Growth	(8.2)	1.7	15.2	15.2	0.2	6.9	8.1
Russell 2000 Value	(8.3)	(1.1)	8.1	8.1	1.9	7.3	7.1

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	(2.4)	(1.0)	17.5	17.5	5.4	10.1	9.2
MSCI ACWI ex US	(1.9)	(7.6)	5.5	5.5	0.8	4.1	4.8
MSCI EAFE	(2.3)	(8.1)	3.8	3.8	1.6	4.7	5.2
MSCI EM	(0.1)	(8.0)	7.5	7.5	(1.9)	1.7	3.6
MSCI EAFE Small Cap	(2.3)	(8.4)	1.8	1.8	(3.2)	2.3	5.5
Style Index							
MSCI EAFE Growth	(2.8)	(9.1)	2.0	2.0	(2.6)	4.0	5.8
MSCI EAFE Value	(1.8)	(7.1)	5.7	5.7	5.9	5.1	4.3
Regional Index							
MSCI UK	(2.8)	(6.8)	7.5	7.5	5.3	4.4	3.8
MSCI Japan	(0.3)	(3.6)	8.3	8.3	2.8	4.8	6.2
MSCI Euro	(0.4)	(9.4)	2.1	2.1	1.9	5.3	5.2
MSCI EM Asia	0.2	(7.9)	12.0	12.0	(1.6)	3.0	4.8
MSCI EM Latin American	(6.1)	(15.8)	(26.4)	(26.4)	2.1	(3.4)	0.3

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	(1.6)	(2.9)	1.8	1.8	(2.3)	1.9	2.2
Bloomberg US Treasury Bills	0.4	1.2	5.3	5.3	3.9	2.5	1.8
Bloomberg US Agg Bond	(1.6)	(3.1)	1.3	1.3	(2.4)	(0.3)	1.3
Bloomberg US Universal	(1.5)	(2.7)	2.0	2.0	(2.0)	0.1	1.7
Duration							
Bloomberg US Treasury 1-3 Yr	0.2	(0.1)	4.0	4.0	1.4	1.4	1.4
Bloomberg US Treasury Long	(5.3)	(8.6)	(6.4)	(6.4)	(12.0)	(5.2)	(0.6)
Bloomberg US Treasury	(1.5)	(3.1)	0.6	0.6	(2.9)	(0.7)	0.8
Issuer							
Bloomberg US MBS	(1.6)	(3.2)	1.2	1.2	(2.1)	(0.7)	0.9
Bloomberg US Corp. High Yield	(0.4)	0.2	8.2	8.2	2.9	4.2	5.2
Bloomberg US Agency Interm	(0.2)	(0.6)	3.6	3.6	0.5	0.9	1.4
Bloomberg US Credit	(1.9)	(3.0)	2.0	2.0	(2.2)	0.2	2.3

OTHER

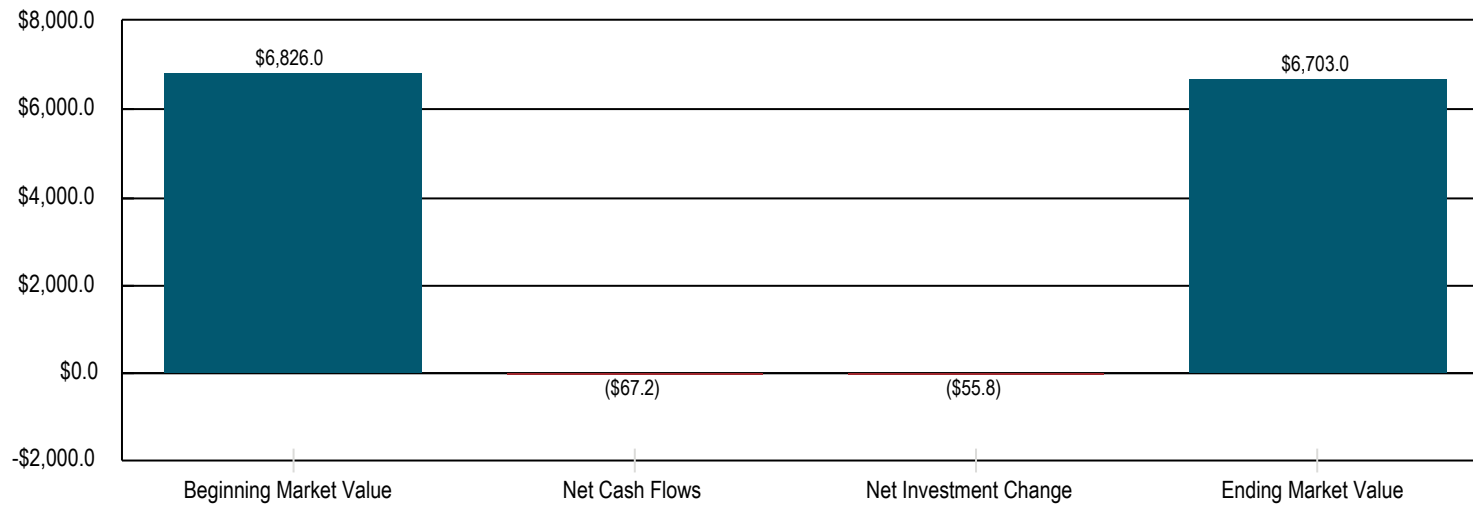
	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	1.0	(0.4)	5.4	5.4	4.1	6.8	1.3
Wilshire US REIT	(7.3)	(5.0)	9.1	9.1	(2.5)	4.5	5.7
CS Leveraged Loans	0.6	2.3	9.1	9.1	6.8	5.7	5.1
S&P Global Infrastructure	(4.5)	(2.5)	15.1	15.1	7.1	5.3	5.9
Alerian MLP	(7.2)	5.6	26.7	26.7	27.2	14.8	3.3
Regional Index							
JPM EMBI Global Div	(1.4)	(1.9)	6.5	6.5	(0.9)	0.1	3.1
JPM GBI-EM Global Div	(1.9)	(7.0)	(2.4)	(2.4)	(1.0)	(1.9)	0.4
Hedge Funds							
HFRI Composite	(0.2)	1.5	8.8	8.8	4.1	6.8	5.2
HFRI FOF Composite	0.5	2.7	9.9	9.9	3.3	5.4	3.9
Currency (Spot)							
Euro	(2.0)	(7.2)	(6.3)	(6.3)	(3.1)	(1.6)	(1.5)
Pound Sterling	(1.5)	(6.6)	(1.8)	(1.8)	(2.6)	(1.1)	(2.2)
Yen	(4.4)	(9.0)	(10.3)	(10.3)	(9.8)	(7.1)	(2.7)

Source: Morningstar, HFRI, as of 12/31/24

Portfolio Reconciliation

	3 Mo	1 Yr
Beginning Market Value	\$6,825,993,126	\$6,189,641,095
Net Cash Flows	-\$67,198,589	-\$72,765,196
Net Investment Change	-\$55,801,464	\$586,117,173
Ending Market Value	\$6,702,993,073	\$6,702,993,073

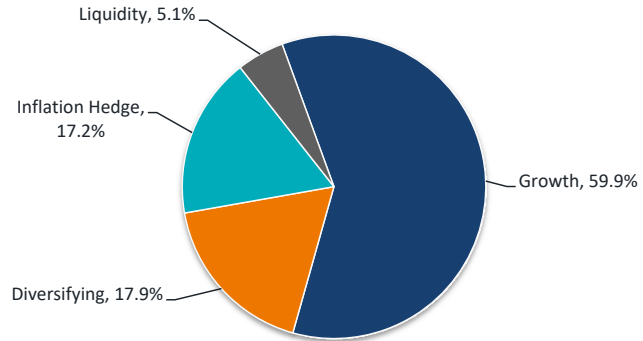
Change in Market Value
Last Three Months



Total Fund
Asset Allocation Analysis

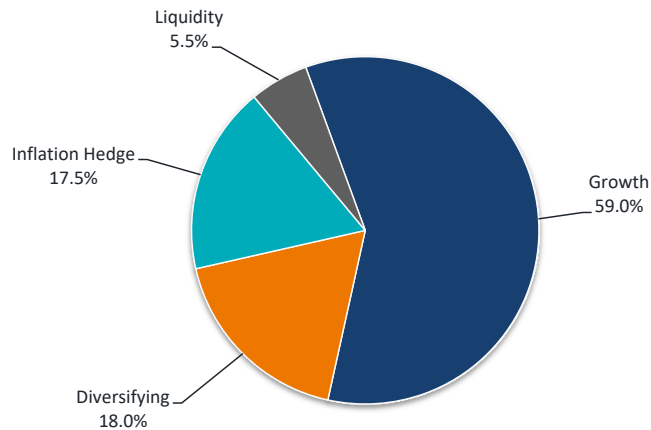
San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Current w/ Overlay



ASSET ALLOCATION	MARKET VALUE W/ OVERLAY	W/ OVERLAY	W/O OVERLAY
Growth	4,017,014,567	59.9%	58.9%
Diversifying	1,197,158,822	17.9%	18.3%
Inflation Hedge	1,149,755,421	17.2%	16.2%
Liquidity	339,064,263	5.1%	6.6%
TOTAL	6,702,993,073	100.0%	100.0%

Target



ASSET ALLOCATION	W/ OVERLAY	TARGET	DIFF
Growth	59.9%	59.0%	0.9%
Diversifying	17.9%	18.0%	-0.1%
Inflation Hedge	17.2%	17.5%	-0.3%
Liquidity	5.1%	5.5%	-0.4%
TOTAL	100.0%	100.0%	0.0%

Total Fund
Risk vs. Return

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Statistics Summary
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	3.2 (38)	7.4 (22)	-0.1 (44)	-0.6 (65)	2.1 (8)
Policy Index	4.5 (8)	8.5 (42)	0.1 (9)	-	0.0
Simple Benchmark	2.2 (74)	10.7 (78)	-0.1 (66)	-0.7 (72)	2.9 (56)
InvMetrics Public DB > \$1B Median	2.9	9.0	-0.1	-0.5	2.7

Statistics Summary
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	6.1 (84)	8.5 (24)	0.4 (53)	-0.5 (94)	2.3 (5)
Policy Index	7.2 (37)	9.0 (30)	0.5 (27)	-	0.0
Simple Benchmark	6.4 (76)	11.0 (69)	0.4 (85)	-0.2 (73)	2.9 (36)
InvMetrics Public DB > \$1B Median	6.9	9.9	0.5	-0.1	3.1

Statistics Summary
10 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	6.5 (72)	7.5 (25)	0.6 (49)	-0.4 (90)	1.8 (1)
Policy Index	7.3 (31)	7.9 (37)	0.7 (33)	-	0.0
Simple Benchmark	6.9 (52)	9.3 (74)	0.6 (67)	-0.1 (50)	2.2 (21)
InvMetrics Public DB > \$1B Median	6.9	8.2	0.6	-0.1	2.5

SamCERA
December 31, 2024

- The Total Fund, net of manager fees, returned -0.9% in the fourth quarter of 2024 and in the ranked 58th percentile among other public plans greater than \$1 billion (median of -0.9%). It lagged the policy index return of 0.6%. The Total Fund ex Overlay returned -0.9% for the quarter. The Total Fund one-year return of 8.8% lagged the policy index return of 12.6% and ranked in the 54th percentile of its peer universe. The three-year return of 3.1% (43rd percentile) beat the median large public plan (2.9%) and lagged the policy index (4.5%).

- Fourth quarter results were enhanced by the following factors:
 1. Fixed income lost -3.8% outperforming the blended benchmark which lost -4.4%. Doubleline slightly outperformed the Bloomberg Aggregate by 30bps.
 2. The Absolute Return portfolio gained 5.7%, which beat the index (2.2%). CFM gained 11.4% and PIMCO MAARS (5.6%) contributed to the outperformance.

- Fourth quarter results were hindered by the following factors:
 1. Private Equity gained 0.4% but failed to keep up with the PME benchmark which gained 7.3% in the 4th quarter.
 2. Baillie Gifford lost -8.9% trailing the MSCI ACWI ex US Growth which lost -7.8%. Stock selection in Japan contributed to the quarterly underperformance.

Total Fund
Performance Summary (Net of Fees)

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo Rank	YTD	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Total Fund**	6,702,993,073	100.0	-0.9 (57)	9.2 (40)	3.8 (47)	9.2 (40)	9.2 (73)	3.2 (38)	6.1 (84)	6.5 (72)
<i>Policy Index</i>			0.5 (5)	12.5 (1)	5.1 (11)	12.5 (1)	12.3 (10)	4.5 (8)	7.2 (37)	7.3 (31)
<i>Simple Benchmark</i>			-1.1 (61)	9.7 (33)	4.1 (36)	9.7 (33)	10.5 (40)	2.2 (74)	6.4 (76)	6.9 (52)
InvMetrics Public DB > \$1B			-0.9	9.0	3.8	9.0	10.1	2.9	6.9	6.9
Total Fund ex Overlay	6,688,257,703	99.8	-0.9 (56)	9.2 (44)	3.8 (50)	9.2 (44)	9.1 (74)	3.1 (40)	6.0 (86)	6.4 (77)
<i>Policy Index</i>			0.5 (5)	12.5 (1)	5.1 (11)	12.5 (1)	12.3 (10)	4.5 (8)	7.2 (37)	7.3 (31)
<i>Simple Benchmark</i>			-1.1 (61)	9.7 (33)	4.1 (36)	9.7 (33)	10.5 (40)	2.2 (74)	6.4 (76)	6.9 (52)
InvMetrics Public DB > \$1B			-0.9	9.0	3.8	9.0	10.1	2.9	6.9	6.9
Growth Portfolio	4,017,014,567	59.9	-1.0	13.4	5.3	13.4	14.1	-	-	-
<i>Blended Growth Index</i>			0.7	18.2	6.2	18.2	19.2	6.8	10.6	-
US Equity	1,721,958,853	25.7	1.9 (55)	23.0 (31)	9.5 (5)	23.0 (31)	21.2 (70)	8.3 (14)	12.4 (66)	11.5 (59)
<i>Blended US Equity Index</i>			2.6 (16)	23.8 (13)	9.0 (16)	23.8 (13)	24.9 (16)	8.0 (23)	13.9 (16)	12.5 (19)
<i>Russell 3000 Index</i>			2.6 (16)	23.8 (13)	9.0 (16)	23.8 (13)	24.9 (16)	8.0 (23)	13.9 (16)	12.5 (15)
BlackRock Russell 1000	1,004,573,089	15.0	2.7 (23)	24.5 (35)	9.0 (16)	24.5 (35)	25.5 (28)	8.4 (40)	14.3 (31)	-
DE Shaw	268,978,757	4.0	4.0 (10)	33.7 (3)	13.2 (1)	33.7 (3)	27.1 (16)	10.6 (11)	14.5 (25)	13.4 (10)
PanAgora Defuseq	271,425,545	4.0	-1.4 (84)	15.0 (82)	8.3 (31)	15.0 (82)	9.2 (99)	5.1 (79)	8.0 (97)	-
<i>Russell 1000 Index</i>			2.7 (22)	24.5 (35)	9.0 (16)	24.5 (35)	25.5 (29)	8.4 (40)	14.3 (31)	12.9 (21)
<i>eV US Large Cap Core Equity Median</i>			1.6	22.0	7.2	22.0	22.4	7.4	13.0	11.7
PGIM Quant Solutions	133,530,892	2.0	-0.8 (62)	11.4 (54)	8.9 (50)	11.4 (54)	16.3 (28)	5.6 (15)	8.8 (60)	-
<i>Russell 2000 Index</i>			0.3 (49)	11.5 (52)	9.6 (40)	11.5 (52)	14.2 (53)	1.2 (70)	7.4 (82)	7.8 (80)
<i>eV US Small Cap Core Equity Median</i>			0.1	11.6	8.9	11.6	14.3	2.4	9.6	8.8
International Equity	1,095,796,445	16.3	-6.4 (14)	6.7 (16)	1.1 (9)	6.7 (16)	11.3 (25)	1.1 (30)	5.0 (26)	5.6 (22)
<i>Blended International Equity Index</i>			-4.3 (4)	9.7 (5)	1.4 (7)	9.7 (5)	12.9 (11)	3.6 (5)	6.3 (10)	6.2 (13)
International Equity x Currency Overlay	1,077,456,009	16.1	-8.3	4.5	0.1	4.5	9.9	0.3	4.4	5.3
<i>Blended International Equity Index</i>			-4.3	9.7	1.4	9.7	12.9	3.6	6.3	6.2
Baillie Gifford	265,952,700	4.0	-8.9 (84)	2.9 (58)	-0.1 (43)	2.9 (58)	6.6 (79)	-7.9 (84)	1.6 (85)	5.0 (87)
<i>MSCI ACWI ex US</i>			-7.5 (60)	6.1 (36)	0.0 (42)	6.1 (36)	11.0 (42)	1.3 (10)	4.6 (48)	5.3 (78)
<i>MSCI ACWI ex US Growth</i>			-7.8 (65)	5.4 (40)	-1.4 (57)	5.4 (40)	9.8 (52)	-2.4 (38)	3.7 (63)	5.7 (66)
Mondrian	267,705,573	4.0	-9.0 (82)	4.7 (46)	1.2 (31)	4.7 (46)	11.7 (38)	3.0 (58)	3.2 (85)	4.1 (72)
<i>MSCI AC World ex USA Value</i>			-7.2 (47)	6.9 (34)	1.6 (30)	6.9 (34)	12.4 (29)	5.1 (29)	5.2 (46)	4.7 (62)
<i>MSCI AC World ex USA Index</i>			-7.5 (53)	6.1 (40)	0.0 (47)	6.1 (40)	11.0 (48)	1.3 (72)	4.6 (58)	5.3 (33)
BlackRock MSCI ACWI EX-US IMI	548,419,200	8.2	-7.7 (71)	5.2 (47)	-0.3 (47)	5.2 (47)	10.3 (52)	0.6 (48)	-	-
<i>MSCI AC World ex USA IMI (Net)</i>			-7.6 (70)	5.2 (45)	0.0 (44)	5.2 (45)	10.3 (52)	0.5 (50)	4.1 (61)	4.9 (68)
Record Dynamic Currency Hedge	18,340,435	0.3	1,938.0	47,621.7	2,113.8	47,621.7	-	-	-	-

* Total Fund and asset class aggregates are ranked in InvMetrics universes. Managers are ranked in eVest (eA) manager universes.

** Includes Parametric Minneapolis manager funded in August 2013

See Appendix for Benchmark History

Total Fund
Performance Summary (Net of Fees)

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo Rank	YTD	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Private Equity***	517,301,501	7.7	0.4 (45)	8.0 (25)	2.2 (43)	8.0 (25)	7.3 (21)	0.9 (68)	17.1 (9)	16.9 (5)
<i>Blended Private Equity Index</i>			7.3 (2)	38.2 (1)	10.7 (1)	38.2 (1)	30.6 (1)	13.4 (1)	18.3 (4)	15.2 (7)
Opportunistic Credit	681,957,769	10.2	1.2	7.9	5.2	7.9	-	-	-	-
<i>Opportunistic Credit Index</i>			0.7	8.6	5.1	8.6	10.9	3.9	4.7	5.2
Public Credit	470,318,439	7.0	1.5	8.9	6.1	8.9	9.6	3.9	4.8	5.6
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.2	8.2	5.5	8.2	10.8	2.9	4.2	5.2
Beach Point Select	121,494,078	1.8	2.7 (2)	10.2 (6)	6.8 (4)	10.2 (6)	11.6 (10)	5.0 (5)	8.1 (1)	-
Brigade Capital	107,478,419	1.6	1.7 (5)	10.7 (3)	7.8 (1)	10.7 (3)	11.2 (14)	3.2 (45)	5.4 (13)	5.2 (21)
One William Street	69,511,252	1.0	2.3 (3)	10.3 (6)	4.5 (61)	10.3 (6)	-	-	-	-
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.2 (56)	8.2 (32)	5.5 (15)	8.2 (32)	10.8 (22)	2.9 (52)	4.2 (40)	5.2 (25)
<i>eV US High Yield Fixed Inc Median</i>			0.2	7.7	4.6	7.7	9.9	3.0	3.9	4.7
PIMCO Diversified	106,318,842	1.6	-0.6 (98)	6.4 (91)	4.4 (75)	6.4 (91)	8.3 (92)	0.4 (99)	1.6 (100)	-
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.2 (66)	8.2 (49)	5.5 (25)	8.2 (49)	10.8 (42)	2.9 (71)	4.2 (66)	5.2 (58)
Eaton Vance Emerging Markets Debt Opportunities Fund	65,515,848	1.0	2.2 (1)	-	6.4 (5)	-	-	-	-	-
<i>JPM EMB (JEMB) Hard Currency/Local Currency 50-50</i>			-4.2 (77)	2.3 (75)	2.6 (71)	2.3 (75)	6.8 (80)	-0.4 (79)	-0.3 (81)	2.1 (80)
<i>eV Emg Mkts Fixed Inc - Blended Currency</i>			-3.1	4.4	3.5	4.4	8.3	0.4	0.8	2.6
Private Credit	211,639,330	3.2	0.7	5.4	3.1	5.4	4.8	4.4	5.5	-
<i>Credit Suisse Leveraged Loan Index 1 Qtr Lag</i>			2.0	9.6	4.0	9.6	11.0	6.3	5.6	4.9
AG CSF ADF II	2,243,608	0.0	0.0	5.2	4.5	5.2	13.2	-	-	-
AG CSF II	24,288,873	0.4	0.0	8.4	4.0	8.4	14.2	-	-	-
Angelo Gordon Credit Solutions	5,953,790	0.1	0.0 (72)	5.6 (95)	3.1 (96)	5.6 (95)	8.9 (81)	4.0 (18)	7.4 (2)	-
Blackrock DL Feeder IX-U	40,239,298	0.6	1.1	4.2	2.6	4.2	6.8	5.9	-	-
Comvest Credit Partners VII	16,142,172	0.2	0.0	-	4.3	-	-	-	-	-
PIMCO Private Income	50,821,986	0.8	1.6	8.6	4.2	8.6	7.8	5.0	7.1	-
TCP Direct Lending VIII	9,825,883	0.1	0.9	4.5	3.0	4.5	6.0	4.5	5.4	-
White Oak Yield	30,469,992	0.5	0.0	8.5	3.9	8.5	6.3	5.3	5.3	-
White Oak YSF V	31,653,727	0.5	0.0 (72)	3.3 (100)	0.0 (100)	3.3 (100)	-3.8 (100)	1.3 (97)	-	-
<i>Credit Suisse Leveraged Loan Index 1 Qtr Lag</i>			2.0 (3)	9.6 (8)	4.0 (80)	9.6 (8)	11.0 (17)	6.3 (4)	5.6 (11)	4.9 (39)
<i>eV US High Yield Fixed Inc Median</i>			0.2	7.7	4.6	7.7	9.9	3.0	3.9	4.7

See Appendix for Benchmark History

***Returns are one-quarter lag, excludes EnCap Energy Capital Fund and Sheridan Production Partners.

Angelo Gordon, Comvest, and White Oak funds as of 9/30/2024 +/- cash flows.

Total Fund
Performance Summary (Net of Fees)

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo Rank	YTD	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Diversifying Portfolio	1,197,158,822	17.9	-1.3	2.8	2.1	2.8	3.9	-	-	-
<i>Blended Diversifying Index</i>			-2.3	2.6	2.3	2.6	4.4	0.5	1.6	2.7
Defensive Fixed Income	843,376,591	12.6	-3.8	0.2	1.6	0.2	3.3	-2.6	-0.3	1.5
<i>Blended Defensive Fixed Income Benchmark</i>			-4.4	-0.6	1.2	-0.6	2.0	-3.3	-0.9	1.1
DoubleLine	267,105,430	4.0	-2.8 (63)	2.9 (59)	2.4 (64)	2.9 (59)	4.8 (55)	-2.0 (75)	-	-
<i>Blmbg. U.S. Aggregate Index</i>			-3.1 (74)	1.3 (82)	2.0 (91)	1.3 (82)	3.4 (76)	-2.4 (94)	-0.3 (66)	1.3 (59)
<i>eV US Securitized Fixed Inc Median</i>			-1.3	4.4	3.0	4.4	5.2	-0.3	0.6	2.0
FIAM Bond	188,480,008	2.8	-3.0 (57)	1.6 (53)	2.0 (60)	1.6 (53)	3.9 (38)	-2.0 (32)	0.5 (14)	2.0 (10)
NISA Core Bond	286,624,547	4.3	-3.2 (88)	1.2 (84)	1.8 (76)	1.2 (84)	3.4 (79)	-2.2 (52)	-	-
<i>Blmbg. U.S. Aggregate Index</i>			-3.1 (63)	1.3 (83)	2.0 (58)	1.3 (83)	3.4 (83)	-2.4 (75)	-0.3 (84)	1.3 (83)
<i>eV US Core Fixed Inc Median</i>			-3.0	1.7	2.0	1.7	3.8	-2.2	0.0	1.6
NISA Long Treasury	99,424,543	1.5	-8.6	-6.4	-1.5	-6.4	-	-	-	-
<i>Blmbg. U.S. Treasury: Long</i>			-8.6	-6.4	-1.5	-6.4	-1.8	-12.0	-5.2	-0.6
Absolute Return	353,782,231	5.3	5.7 (4)	8.7 (75)	3.4 (76)	8.7 (75)	5.0 (82)	5.7 (32)	2.4 (87)	1.2 (86)
<i>Absolute Return Custom Index</i>			2.2 (54)	9.3 (71)	4.6 (67)	9.3 (71)	9.2 (67)	8.0 (7)	6.5 (52)	5.9 (30)
CFM Systematic Global Macro	126,701,264	1.9	11.4 (2)	15.8 (20)	15.9 (4)	15.8 (20)	8.3 (51)	11.0 (17)	-	-
Graham Quant Macro	112,120,724	1.7	-0.8 (67)	1.7 (84)	-10.8 (98)	1.7 (84)	1.8 (84)	6.3 (35)	-	-
PIMCO MAARS Fund LP	114,960,244	1.7	5.6 (11)	13.8 (27)	5.1 (37)	13.8 (27)	10.4 (32)	10.9 (17)	-	-
<i>Absolute Return Custom Index</i>			2.2 (31)	9.3 (48)	4.6 (41)	9.3 (48)	9.2 (44)	8.0 (28)	6.5 (51)	5.9 (51)
<i>eV Alt All Multi-Strategy Median</i>			0.7	9.0	3.8	9.0	8.3	4.4	6.5	5.9
Inflation Hedge	1,149,755,421	17.2	-0.7	3.1	0.7	3.1	-0.2	2.4	3.4	-
<i>Blended Inflation Hedge Index</i>			3.1	7.2	4.9	7.2	1.2	2.6	5.5	5.5
Real Estate	463,905,509	6.9	0.3 (35)	-2.4 (76)	-0.4 (82)	-2.4 (76)	-5.7 (59)	-1.5 (36)	2.2 (52)	5.7 (28)
<i>NCREIF ODCE</i>			1.2 (4)	-1.4 (66)	1.4 (46)	-1.4 (66)	-6.9 (70)	-2.3 (41)	2.9 (36)	5.9 (26)
Harrison Street Core Property	90,459,155	1.3	0.2	-1.3	0.1	-1.3	-3.6	0.8	-	-
Invesco	221,173,192	3.3	0.0	-5.9	-1.1	-5.9	-9.2	-4.0	1.0	5.0
Invesco US Val IV	94,745	0.0	-4.8	-19.1	-5.0	-19.1	-43.4	-43.0	-26.6	-
Invesco US Val V	23,140,796	0.3	0.8	-2.4	0.1	-2.4	-15.3	-11.2	-1.5	-
Invesco US Val VI	24,697,366	0.4	0.0	6.2	-3.9	6.2	-4.4	-	-	-
PGIM RE US Debt Fund	72,361,992	1.1	1.5	6.6	3.2	6.6	6.4	6.3	5.7	-
<i>NCREIF ODCE</i>			1.2	-1.4	1.4	-1.4	-6.9	-2.3	2.9	5.9
Stockbridge Value IV	25,642,165	0.4	0.9	-5.8	-2.1	-5.8	-5.1	3.9	-	-
Stockbridge Value V	6,336,099	0.1	-1.0	-	-2.0	-	-	-	-	-
<i>NCREIF ODCE</i>			1.2	-1.4	1.4	-1.4	-6.9	-2.3	2.9	5.9

*NISA Core Treasury funded 6/15/2023.
See Appendix for Benchmark History
Invesco Val VI as of 9/30/2024 +/- cashflows.

Total Fund
Performance Summary (Net of Fees)

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

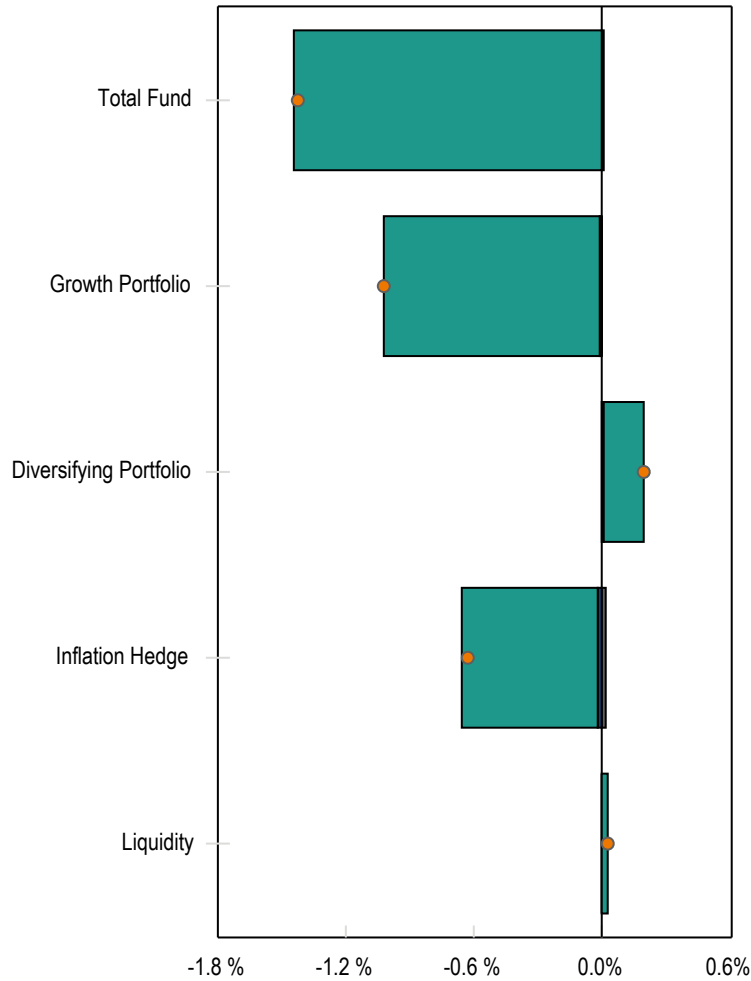
	Market Value	% of Portfolio	3 Mo Rank	YTD	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Private Real Assets	399,740,834	6.0								
<i>Blended Private Real Assets Index</i>			11.2	25.7	13.6	25.7	17.2	10.8	9.6	7.5
<i>Blended Secondary CA Private RA Index</i>			2.0	8.1	4.1	8.1	8.3	11.1	9.5	6.8
Private Real Asset***	268,429,178	4.0	-0.3	8.3	1.0	8.3	6.3	9.1	10.7	-
Brookfield Super-Core Infrastructure Partners	67,511,793	1.0	1.8	10.1	3.7	10.1	9.3	-	-	-
KKR Diversified Core Infrastructure Fund	63,799,863	1.0	2.6	9.0	4.5	9.0	-	-	-	-
Public Real Assets	286,109,077	4.3								
<i>Blended Public Real Assets Index</i>			-4.2	4.1	1.2	4.1	2.0	2.8	4.0	5.1
SSgA Custom Real Assets	286,109,077	4.3	-4.2	4.1	1.3	4.1	2.0	2.8	4.0	-
<i>SSgA Custom Real Assets Index</i>			-4.2	4.1	1.2	4.1	2.0	2.8	4.0	-
Liquidity	339,064,263	5.1								
<i>Blended Liquidity Index</i>			0.2	4.5	2.9	4.5	4.6	-	-	-
Cash Flow-Matched Liquidity	273,760,086	4.1								
<i>Bloomberg U.S. Gov/Credit 1-3 Year Index</i>			0.0	4.4	2.9	4.4	4.5	1.7	1.6	1.6
<i>Bloomberg U.S. Credit 1-3 Year Index</i>			0.1	5.1	3.3	5.1	5.2	2.2	2.0	2.1
Insight Investment*	267,314,341	4.0	0.4	4.8	2.7	4.8	5.1	-	-	-
<i>Bloomberg U.S. Credit 1-3 Year Index</i>			0.1	5.1	3.3	5.1	5.2	2.2	2.0	2.1
County Treasury Pool**	6,445,745	0.1	1.5	3.3	1.5	3.3	3.9	2.9	2.3	2.2
<i>90 Day U.S. Treasury Bill</i>			1.2	5.3	2.6	5.3	5.1	3.9	2.5	1.8
Cash & Cash Overlay	105,875,345	1.6								
<i>90 Day U.S. Treasury Bill</i>			1.2	5.3	2.6	5.3	5.1	3.9	2.5	1.8
General Account	91,132,927	1.4	1.3	5.6	2.7	5.6	5.6	4.4	2.9	2.7
<i>90 Day U.S. Treasury Bill</i>			1.2	5.3	2.6	5.3	5.1	3.9	2.5	1.8

***Returns are one-quarter lag, excludes EnCap Energy Capital Fund and Sheridan Production Partners
See Appendix for Benchmark History
Brookfield as of 9/30/2024 +/- cashflows.

Total Fund
Performance Attribution

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Attribution Effects
Last Three Months



■ Selection Effect ■ Allocation Effect
■ Interaction Effect ● Total Effects

Performance Attribution

	3 Mo
Wtd. Actual Return	-0.9
Wtd. Index Return	0.5
Excess Return	-1.4
Selection Effect	-1.4
Allocation Effect	0.0
Interaction Effect	0.0

Attribution Summary
Last Three Months

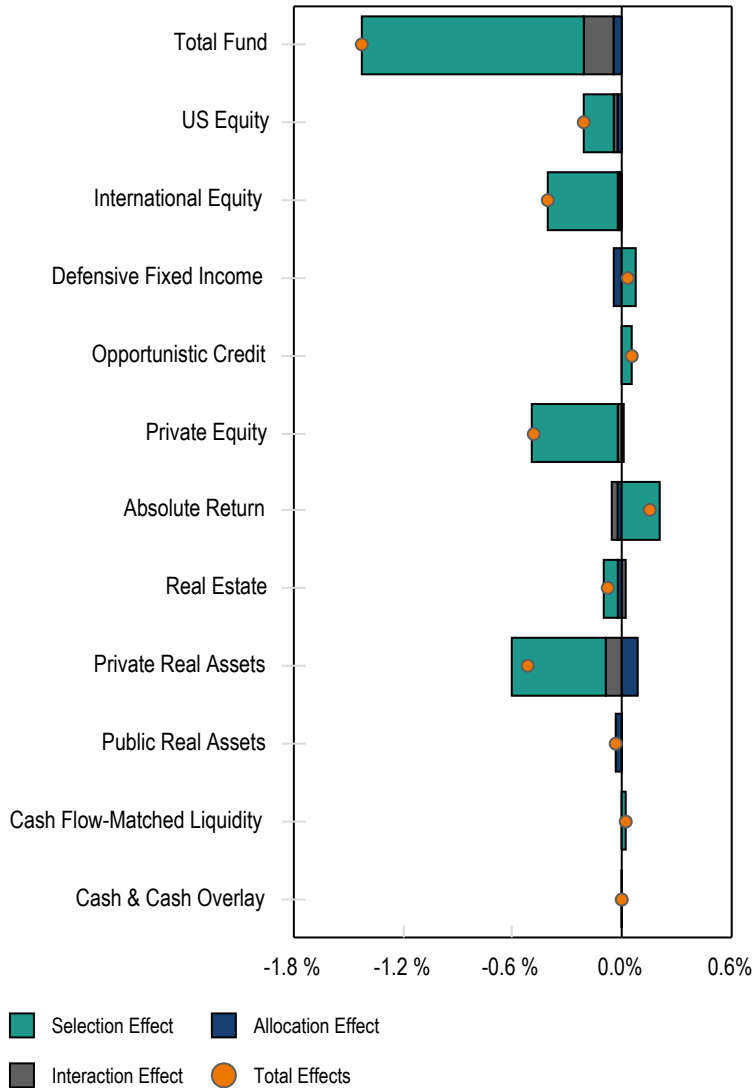
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Growth Portfolio	-1.0	0.7	-1.7	-1.0	0.0	0.0	-1.0
Diversifying Portfolio	-1.3	-2.3	1.0	0.2	0.0	0.0	0.2
Inflation Hedge	-0.7	3.1	-3.8	-0.6	0.0	0.0	-0.6
Liquidity	0.7	0.2	0.5	0.0	0.0	0.0	0.0
Total Fund	-0.9	0.5	-1.4	-1.4	0.0	0.0	-1.4

* Interaction Effects include Residual Effects

Total Fund
Performance Attribution

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Attribution Effects
Last Three Months



Performance Attribution

	3 Mo
Wtd. Actual Return	-0.9
Wtd. Index Return	0.5
Excess Return	-1.4
Selection Effect	-1.2
Allocation Effect	0.0
Interaction Effect	-0.2

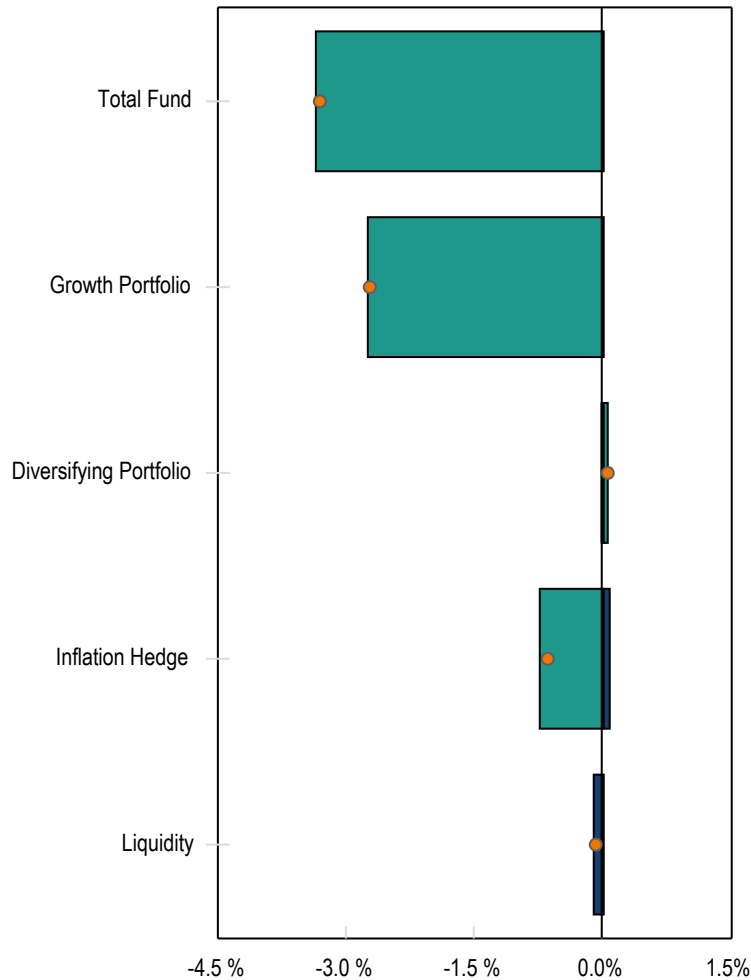
Attribution Summary
Last Three Months

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
US Equity	1.9	2.6	-0.8	-0.2	0.0	0.0	-0.2
International Equity	-6.4	-4.3	-2.1	-0.4	0.0	0.0	-0.4
Defensive Fixed Income	-3.8	-4.4	0.6	0.1	0.0	0.0	0.0
Opportunistic Credit	1.2	0.7	0.5	0.1	0.0	0.0	0.1
Private Equity	0.4	7.3	-6.9	-0.5	0.0	0.0	-0.5
Absolute Return	5.7	2.2	3.5	0.2	0.0	0.0	0.2
Real Estate	0.3	1.2	-0.9	-0.1	0.0	0.0	-0.1
Private Real Assets	0.5	11.2	-10.7	-0.5	0.1	-0.1	-0.5
Public Real Assets	-4.2	-4.2	0.0	0.0	0.0	0.0	0.0
Cash Flow-Matched Liquidity	0.5	0.0	0.5	0.0	0.0	0.0	0.0
Cash & Cash Overlay	1.3	1.2	0.1	0.0	0.0	0.0	0.0
Total Fund	-0.9	0.5	-1.4	-1.2	0.0	-0.2	-1.4

Total Fund
Performance Attribution (1 Year)

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Attribution Effects
One Year



■ Selection Effect ■ Allocation Effect
■ Interaction Effect ● Total Effects

Performance Attribution

	1 Yr
Wtd. Actual Return	9.2
Wtd. Index Return	12.5
Excess Return	-3.3
Selection Effect	-3.3
Allocation Effect	0.0
Interaction Effect	0.0

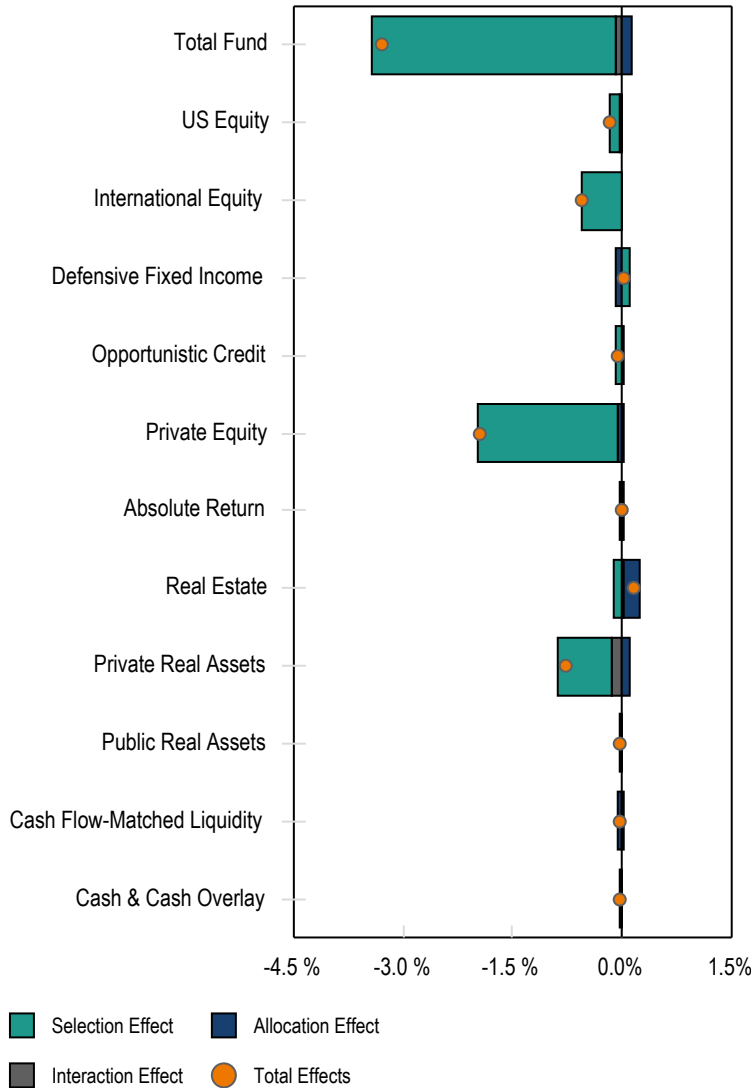
Attribution Summary
One Year

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Growth Portfolio	13.4	18.2	-4.8	-2.7	0.0	0.0	-2.7
Diversifying Portfolio	2.8	2.6	0.2	0.1	0.0	0.0	0.1
Inflation Hedge	3.1	7.2	-4.1	-0.7	0.1	0.0	-0.6
Liquidity	4.8	4.5	0.3	0.0	-0.1	0.0	-0.1
Total Fund	9.2	12.5	-3.3	-3.3	0.0	0.0	-3.3

Total Fund
Performance Attribution (1 Year)

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Attribution Effects
One Year



Performance Attribution

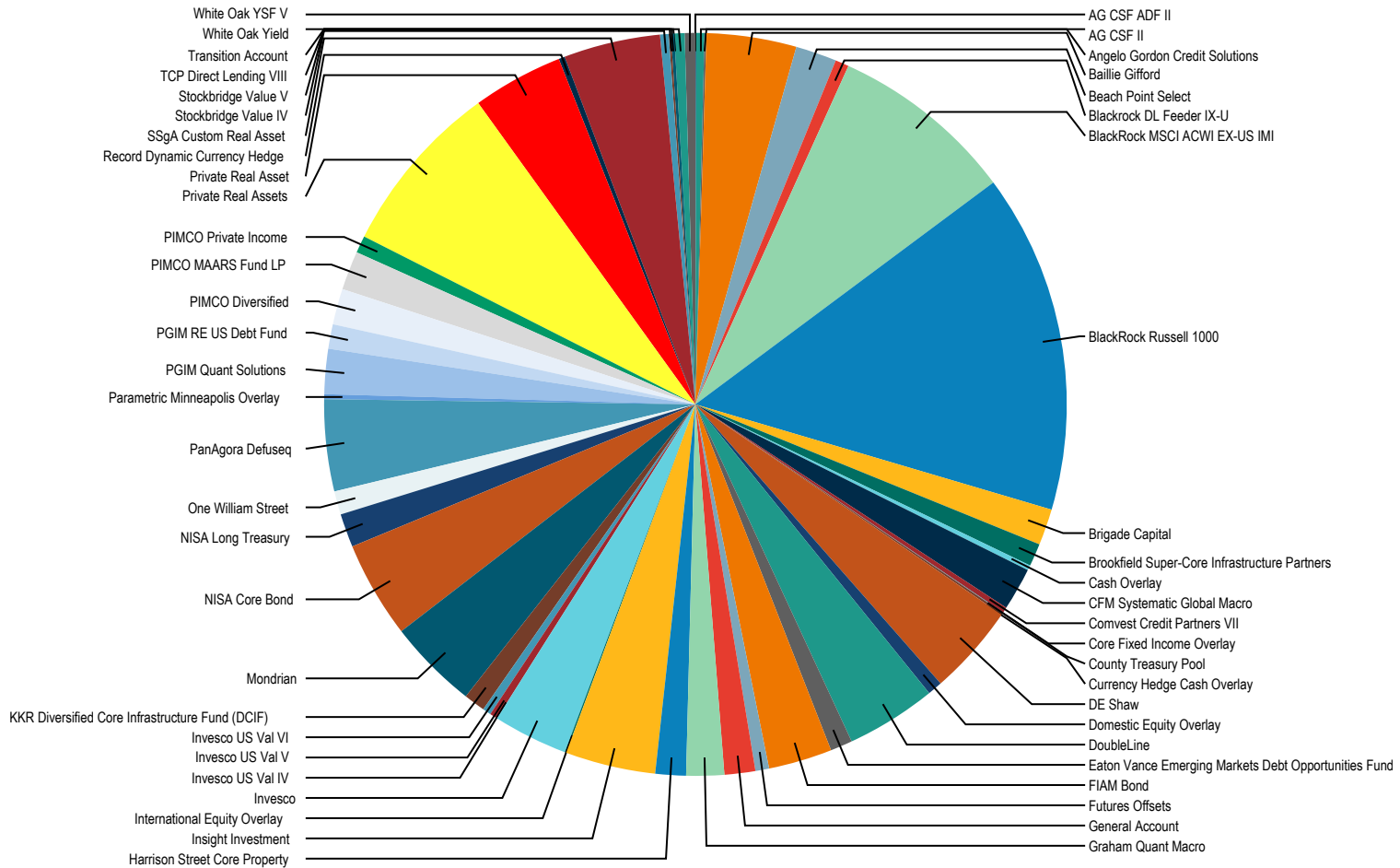
	1 Yr
Wtd. Actual Return	9.2
Wtd. Index Return	12.5
Excess Return	-3.3
Selection Effect	-3.3
Allocation Effect	0.1
Interaction Effect	-0.1

Attribution Summary
One Year

	Actual Weight (%)	Policy Weight (%)	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
US Equity	23.9	23.0	23.0	23.8	-0.8	-0.1	0.0	0.0	-0.2
International Equity	18.3	18.0	6.7	9.7	-3.0	-0.5	0.0	0.0	-0.5
Defensive Fixed Income	13.1	12.5	0.2	-0.6	0.8	0.1	-0.1	0.0	0.0
Opportunistic Credit	10.4	11.0	7.9	8.6	-0.7	-0.1	0.0	0.0	-0.1
Private Equity	6.9	7.0	8.0	38.2	-30.2	-1.9	-0.1	0.0	-2.0
Absolute Return	5.1	6.0	8.7	9.3	-0.6	0.0	0.0	0.0	0.0
Real Estate	7.2	9.0	-2.4	-1.4	-0.9	-0.1	0.2	0.0	0.2
Private Real Assets	5.6	5.0	10.4	25.7	-15.3	-0.7	0.1	-0.1	-0.8
Public Real Assets	3.3	3.0	4.1	4.1	0.1	0.0	0.0	0.0	0.0
Cash Flow-Matched Liquidity	4.7	4.5	4.6	4.4	0.2	0.0	0.0	0.0	0.0
Cash & Cash Overlay	1.6	1.0	5.5	5.3	0.3	0.0	0.0	0.0	0.0
Total Fund	100.0	100.0	9.2	12.5	-3.3	-3.3	0.1	-0.1	-3.3

Total Fund
 Manager Allocation Analysis

San Mateo County Employees' Retirement Association
 Period Ending: December 31, 2024



Total Fund
 Manager Allocation Analysis

San Mateo County Employees' Retirement Association
 Period Ending: December 31, 2024

Name	Market Value	% of Portfolio
BlackRock Russell 1000	\$1,004,573,089	15.0
DE Shaw	\$268,978,757	4.0
PanAgora Defuseq	\$271,425,545	4.0
PGIM Quant Solutions	\$133,530,892	2.0
Domestic Equity Overlay	\$43,450,570	0.6
Baillie Gifford	\$265,952,700	4.0
Mondrian	\$267,705,573	4.0
BlackRock MSCI ACWI EX-US IMI	\$548,419,200	8.2
International Equity Overlay	-\$4,621,464	-0.1
DoubleLine	\$267,105,430	4.0
FIAM Bond	\$188,480,008	2.8
NISA Core Bond	\$286,624,547	4.3
NISA Long Treasury	\$99,424,543	1.5
Core Fixed Income Overlay	\$1,742,063	0.0
AG CSF ADF II	\$2,243,608	0.0
AG CSF II	\$24,288,873	0.4
Angelo Gordon Credit Solutions	\$5,953,790	0.1
Beach Point Select	\$121,494,078	1.8
Brigade Capital	\$107,478,419	1.6
PIMCO Diversified	\$106,318,842	1.6
Eaton Vance Emerging Markets Debt Opportunities Fund	\$65,515,848	1.0
Blackrock DL Feeder IX-U	\$40,239,298	0.6
Comvest Credit Partners VII	\$16,142,172	0.2
PIMCO Private Income	\$50,821,986	0.8
TCP Direct Lending VIII	\$9,825,883	0.1
White Oak Yield	\$30,469,992	0.5
White Oak YSF V	\$31,653,727	0.5
Private Equity	\$517,301,501	7.7

Total Fund
 Manager Allocation Analysis

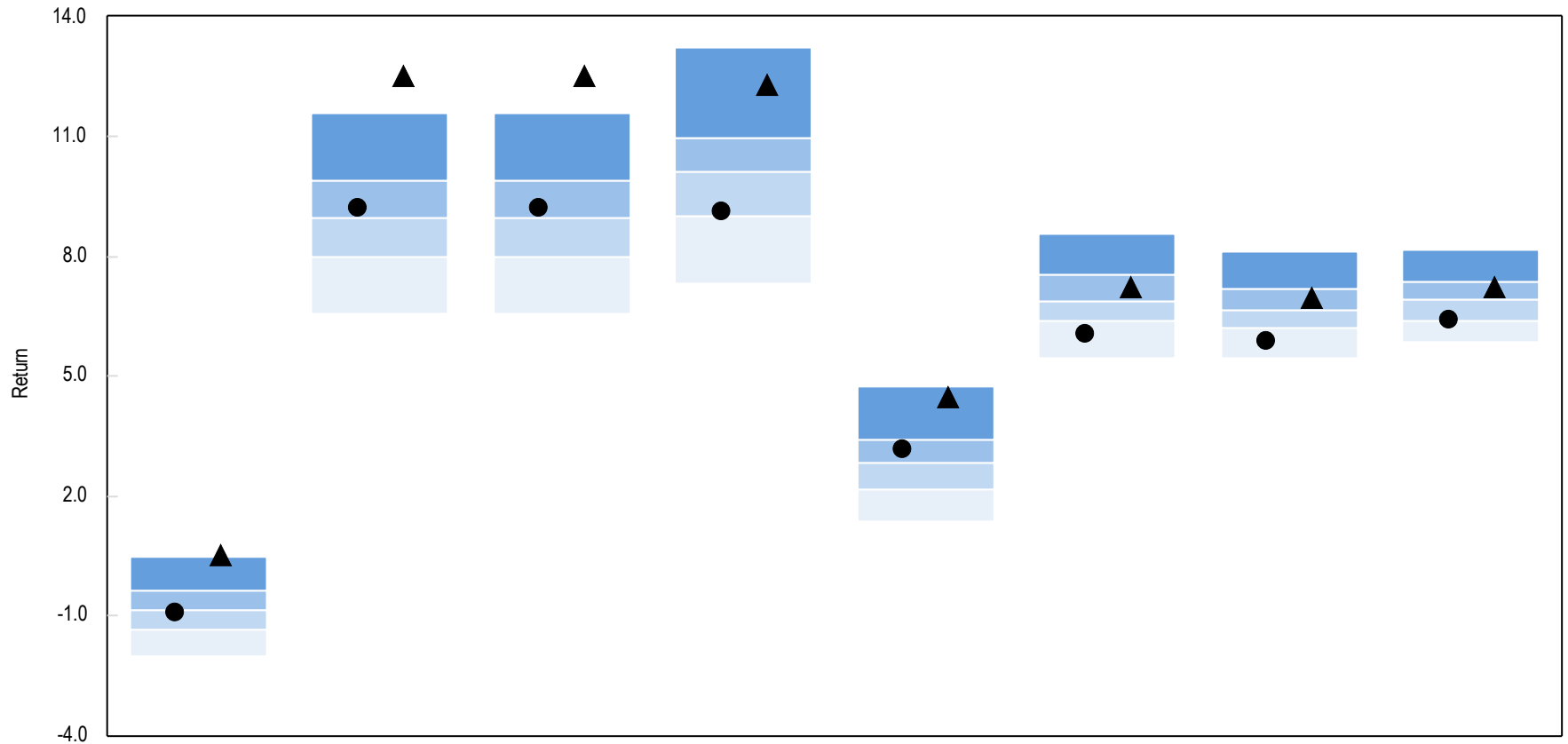
San Mateo County Employees' Retirement Association
 Period Ending: December 31, 2024

Name	Market Value	% of Portfolio
CFM Systematic Global Macro	\$126,701,264	1.9
Graham Quant Macro	\$112,120,724	1.7
PIMCO MAARS Fund LP	\$114,960,244	1.7
Harrison Street Core Property	\$90,459,155	1.3
Invesco	\$221,173,192	3.3
Invesco US Val IV	\$94,745	0.0
Invesco US Val V	\$23,140,796	0.3
Invesco US Val VI	\$24,697,366	0.4
PGIM RE US Debt Fund	\$72,361,992	1.1
Stockbridge Value IV	\$25,642,165	0.4
Stockbridge Value V	\$6,336,099	0.1
Private Real Assets	\$268,429,178	4.0
Brookfield Super-Core Infrastructure Partners	\$67,511,793	1.0
KKR Diversified Core Infrastructure Fund	\$63,799,863	1.0
SSgA Custom Real Asset	\$286,109,077	4.3
Insight Investment	\$267,314,341	4.0
County Treasury Pool	\$6,445,745	0.1
General Account	\$91,132,927	1.4
Cash Overlay	\$14,735,369	0.2
Transition Account	\$7,048	0.0
Futures Offsets	-\$40,571,168	-0.6
Total Fund	\$6,702,993,073	100.0

Total Fund
Peer Universe Comparison

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

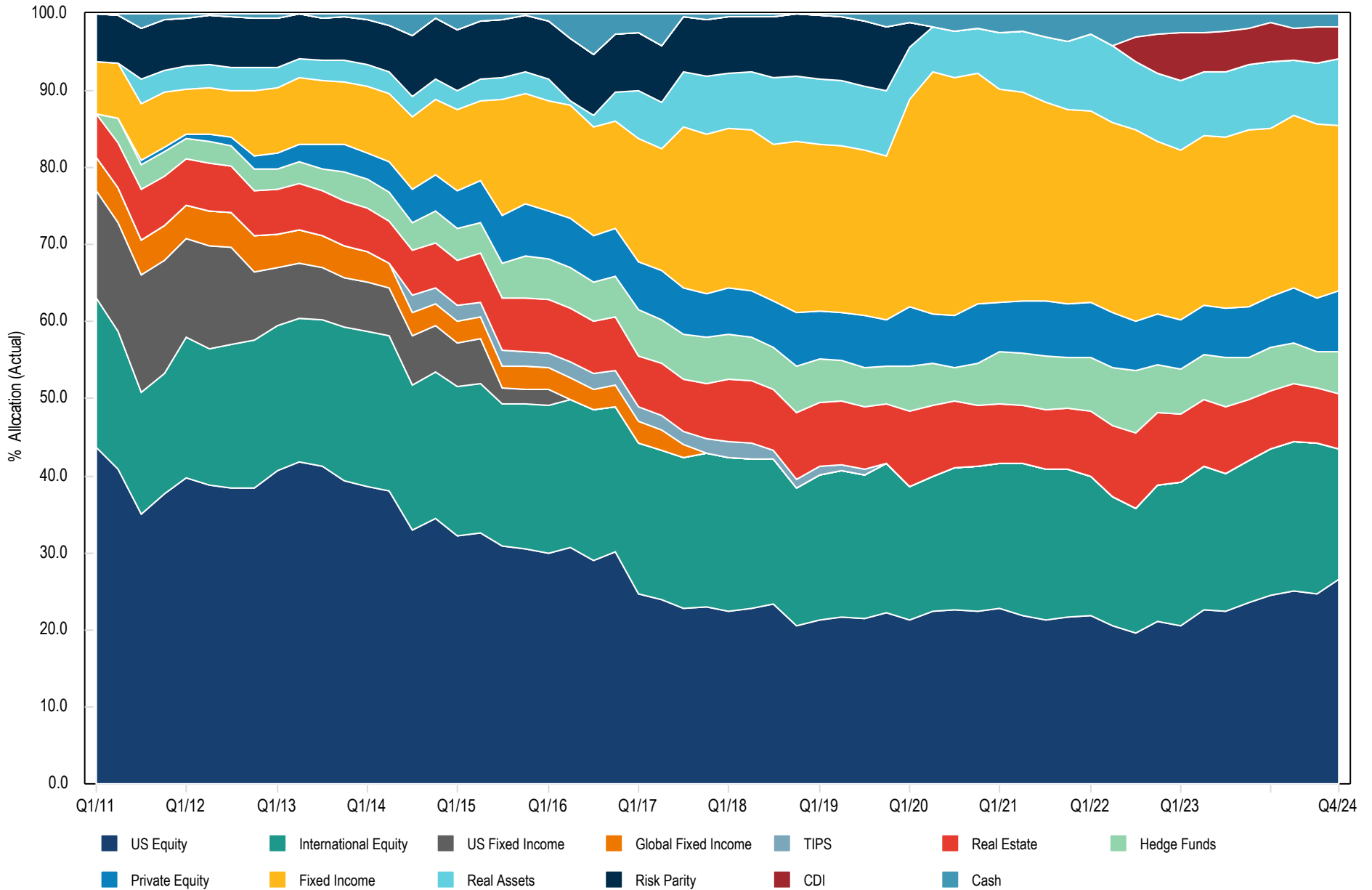
InvMetrics Public DB >\$1B Net Return Comparison

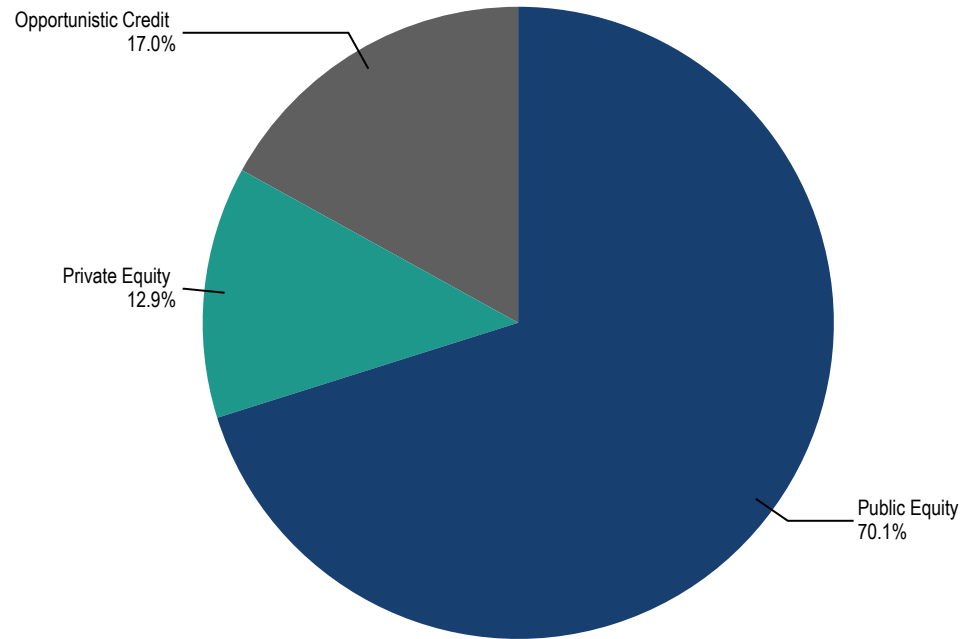


	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
● Total Fund	-0.9 (57)	9.2 (40)	9.2 (40)	9.2 (73)	3.2 (38)	6.1 (84)	5.9 (83)	6.5 (72)
▲ Policy Index	0.5 (5)	12.5 (1)	12.5 (1)	12.3 (10)	4.5 (8)	7.2 (37)	7.0 (36)	7.3 (31)
5th Percentile	0.5	11.6	11.6	13.2	4.8	8.6	8.1	8.2
1st Quartile	-0.4	9.9	9.9	11.0	3.4	7.5	7.2	7.4
Median	-0.9	9.0	9.0	10.1	2.9	6.9	6.7	6.9
3rd Quartile	-1.3	8.0	8.0	9.0	2.2	6.4	6.2	6.4
95th Percentile	-2.0	6.6	6.6	7.3	1.4	5.5	5.5	5.9
Population	104	103	103	102	99	97	95	92

Total Fund
Asset Allocation History

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024



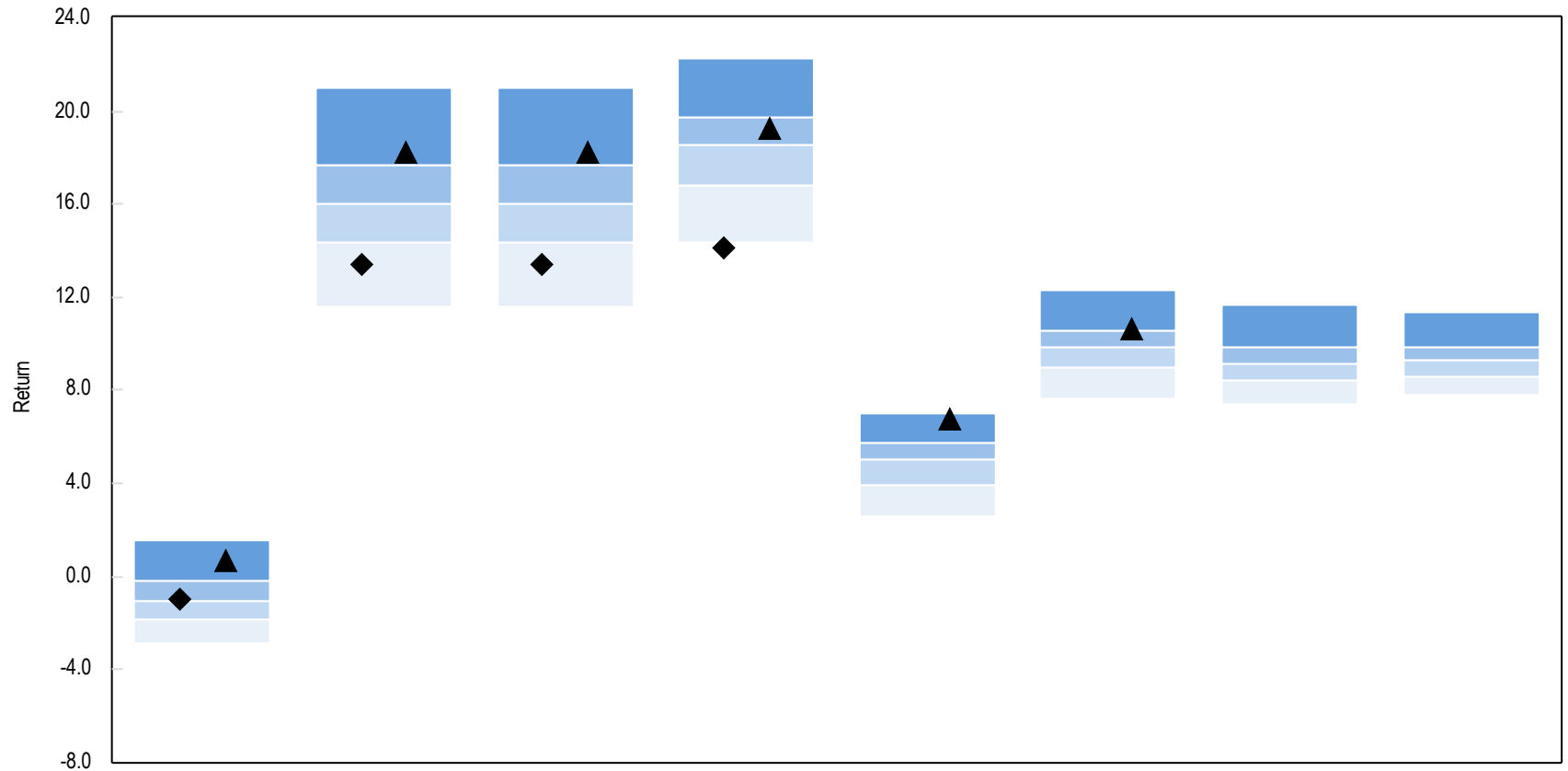


	Actual \$	Actual %	Manager Contribution to Excess Return %
US Equity	\$1,721,958,853	42.9%	-0.3%
International Equity	\$1,095,796,445	27.3%	-0.7%
Private Equity	\$517,301,501	12.9%	-0.8%
Opportunistic Credit	\$681,957,769	17.0%	0.1%
Actual vs. Policy Weight Difference			-0.1%
Total	\$4,017,014,567	100.0%	-1.7%

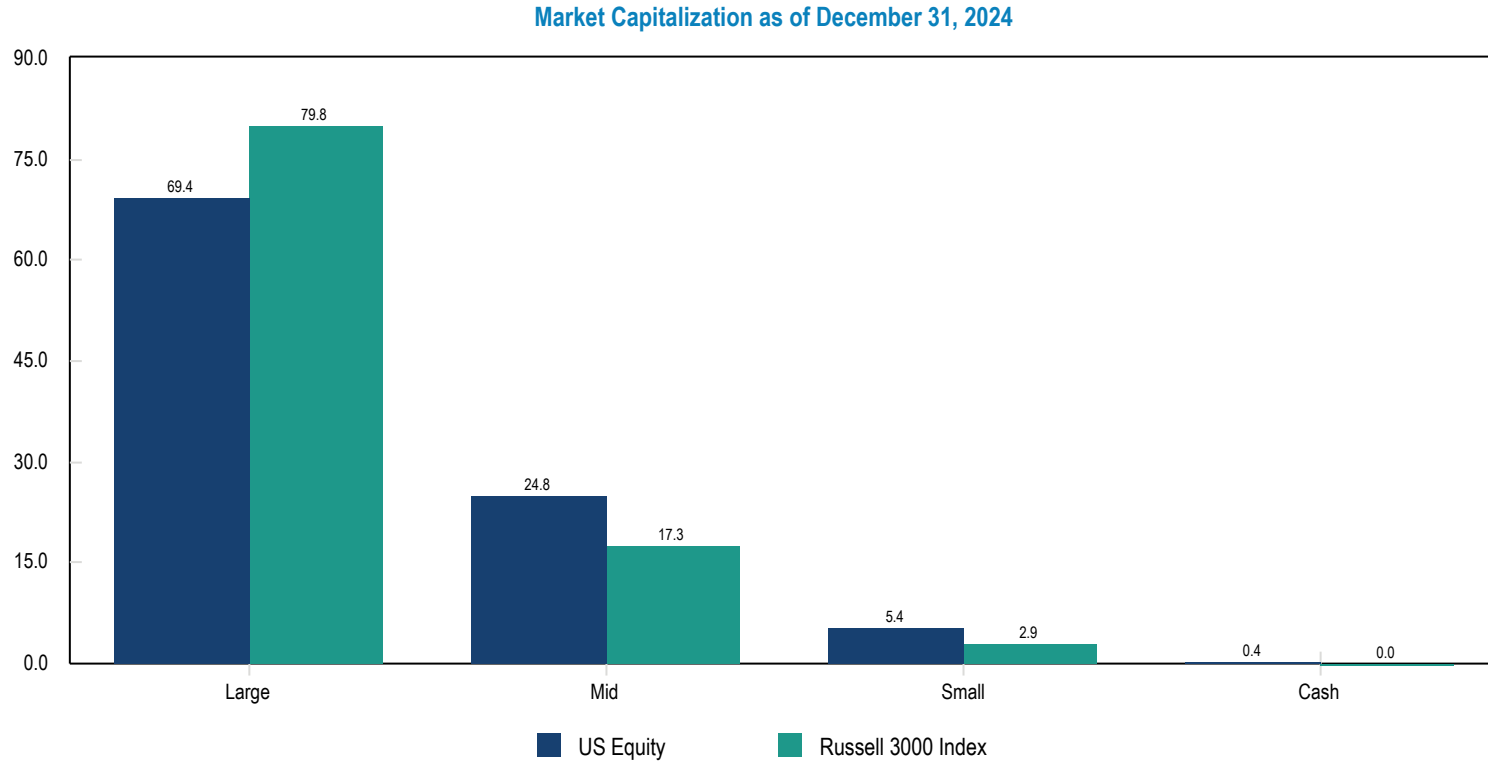
Statistics Summary
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Growth Portfolio	13.4	6.1	1.3	-1.9	2.3
<i>Blended Growth Index</i>	18.2	6.7	1.8	-	0.0
US Equity	23.0	11.0	1.5	-0.4	1.6
<i>Blended US Equity Index</i>	23.8	10.9	1.6	-	0.0
International Equity	6.7	8.1	0.2	-1.1	2.4
<i>Blended International Equity Index</i>	9.7	6.5	0.7	-	0.0
Private Equity	8.0	7.3	0.4	-1.7	15.4
<i>Blended Private Equity Index</i>	38.2	12.1	2.4	-	0.0
Opportunistic Credit	7.9	2.2	1.1	-0.5	1.3
<i>Opportunistic Credit Index</i>	8.6	2.4	1.4	-	0.0

InvMetrics All DB US Eq Net Return Comparison



	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
◆ Growth Portfolio	-1.0 (48)	13.4 (86)	13.4 (86)	14.1 (96)	-	-	-	-
▲ Blended Growth Index	0.7 (10)	18.2 (19)	18.2 (19)	19.2 (34)	6.8 (8)	10.6 (24)	-	-
5th Percentile	1.6	21.0	21.0	22.2	7.0	12.3	11.6	11.4
1st Quartile	-0.2	17.7	17.7	19.8	5.8	10.5	9.8	9.9
Median	-1.0	16.0	16.0	18.6	5.1	9.9	9.1	9.3
3rd Quartile	-1.9	14.4	14.4	16.8	3.9	9.0	8.4	8.6
95th Percentile	-2.9	11.6	11.6	14.4	2.6	7.7	7.4	7.8
Population	255	248	248	243	235	200	173	97



US Equity
Equity Only Summary Statistics

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Characteristics

	Portfolio	Benchmark
Number of Stocks	2,000	2,973
Wtd. Avg. Mkt. Cap \$M	773,696.4	951,637.8
Median Mkt. Cap \$M	4,615.0	2,247.5
Price/Earnings ratio	24.9	26.2
Current Yield (%)	1.4	1.3
Beta (5 Years, Monthly)	0.9	1.0
Price/Book ratio	4.2	4.7
Return on Equity (%)	7.7	8.4

Top Holdings

Best Performers

Worst Performers

	(%)		Return (%)		Return (%)
Apple Inc	5.2	Scholar Rock Holding Corp	439.6	Applied Therapeutics Inc	-89.9
Microsoft Corp	4.9	Kodiak Sciences Inc	281.2	Perspective Therapeutics Inc	-76.1
NVIDIA Corporation	4.5	UniQure NV	258.2	Keros Therapeutics Inc	-72.7
Amazon.com Inc	2.6	RealReal Inc (The)	248.1	PACS Group Inc	-67.2
Tesla Inc	1.7	Poseida Therapeutics Inc	235.7	Sunnova Energy International Inc	-64.8
Alphabet Inc	1.6	Porch Group Inc	220.5	Editas Medicine Inc	-62.8
Meta Platforms Inc	1.5	Rocket Lab USA Inc	161.8	Biomea Fusion Inc	-61.6
Broadcom Inc	1.4	Applied Optoelectronics Inc	157.6	AnaptysBio Inc	-60.5
Eli Lilly and Co	1.1	Astera Labs Inc	152.8	TransMedics Group Inc	-60.3
Berkshire Hathaway Inc	1.1	Cerence Inc	149.2	Tango Therapeutics Inc	-59.9

US Equity Performance Attribution vs. Russell 3000 Index

	Attribution Effects				Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.2	0.2	0.0	0.0	4.6	-0.8	3.9	3.5
Materials	-0.2	0.0	-0.2	0.0	-9.5	-10.8	4.4	2.7
Industrials	-0.2	-0.2	0.0	0.0	-4.0	-1.7	9.8	9.8
Consumer Discretionary	0.0	-0.1	0.1	0.0	11.5	12.2	11.0	10.4
Consumer Staples	0.0	0.0	-0.1	0.0	-2.3	-2.8	6.7	5.6
Health Care	0.2	0.1	0.1	0.0	-8.5	-9.7	11.3	11.8
Financials	-0.1	-0.1	-0.1	0.0	6.9	7.6	12.5	13.6
Information Technology	0.0	0.1	-0.1	0.0	6.2	5.9	25.4	29.0
Communication Services	-0.1	-0.1	0.0	0.0	7.9	8.8	8.2	8.4
Utilities	-0.1	0.0	-0.1	0.0	-4.1	-5.3	4.0	2.4
Real Estate	0.0	0.0	0.0	0.0	-7.2	-7.6	2.6	2.8
Other	0.0	0.0	0.0	0.0	2.5	0.0	0.1	0.0
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Total	-0.4	0.1	-0.5	0.1	2.3	2.6	100.0	100.0

U.S. Effective Style Map



Characteristics

	Portfolio	Benchmark
Number of Stocks	1,008	1,007
Wtd. Avg. Mkt. Cap \$M	991,494.1	998,331.5
Median Mkt. Cap \$M	15,175.3	15,175.3
Price/Earnings ratio	26.6	26.6
Current Yield (%)	1.3	1.3
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	4.9	4.9
Return on Equity (%)	8.7	8.6

Top Holdings

Best Performers

Worst Performers

	(%)		Return (%)		Return (%)
Apple Inc	6.6	Astera Labs Inc	152.8	Capri Holdings Ltd	-50.4
NVIDIA Corporation	5.8	AppLovin Corporation	148.1	Celanese Corp	-48.8
Microsoft Corp	5.8	Trump Media & Technology Group Corp	112.2	Rocket Cos Inc	-41.3
Amazon.com Inc	3.8	Palantir Technologies Inc	103.3	Enphase Energy Inc	-39.2
Meta Platforms Inc	2.4	SoFi Technologies Inc	95.9	Moderna Inc	-37.8
Tesla Inc	2.1	Amer Sports Inc	75.3	Acadia Healthcare Co Inc	-37.5
Alphabet Inc	2.0	MicroStrategy Inc	71.8	Viking Therapeutics Inc	-36.4
Broadcom Inc	1.9	United Airlines Holdings Inc	70.2	10x Genomics Inc	-36.4
Alphabet Inc	1.7	New Fortress Energy Inc	66.3	Monolithic Power Systems Inc	-35.9
Berkshire Hathaway Inc	1.5	Twilio Inc	65.7	AES Corp (The)	-35.1

Characteristics

	Portfolio	Benchmark
Number of Stocks	124	1,007
Wtd. Avg. Mkt. Cap \$M	126,311.2	998,331.5
Median Mkt. Cap \$M	37,133.8	15,175.3
Price/Earnings ratio	20.9	26.6
Current Yield (%)	2.5	1.3
Beta (5 Years, Monthly)	0.8	1.0
Price/Book ratio	2.8	4.9
Return on Equity (%)	2.7	8.6

Top Holdings

Best Performers

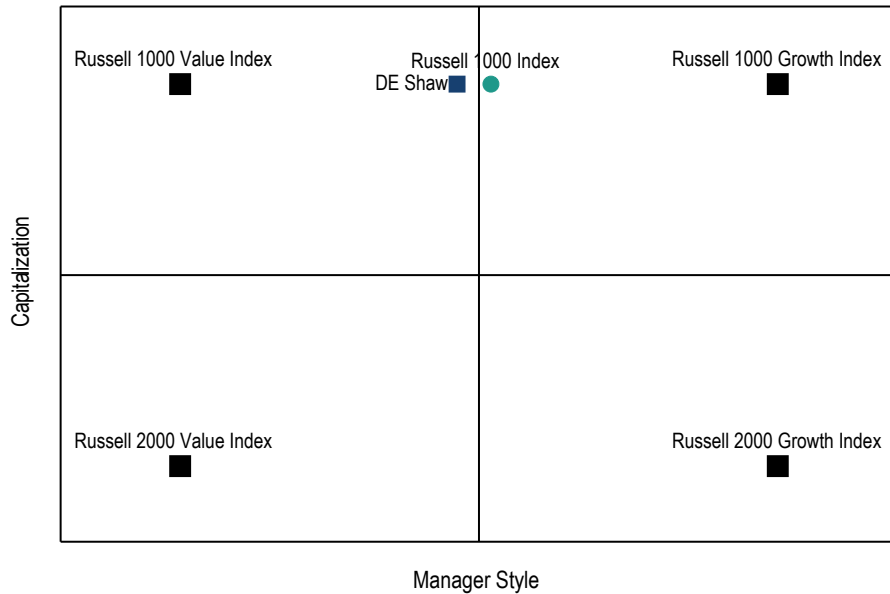
Worst Performers

	(%)		Return (%)		Return (%)
Packaging Corp Of America	2.1	GE Vernova Inc	29.1	Elevance Health Inc	-28.8
T-Mobile US Inc	2.0	Kinder Morgan Inc.	25.5	Seaboard Corp	-22.5
AT&T Inc	1.9	Expand Energy Corporation	21.8	Crown Castle Inc	-22.3
AptarGroup Inc.	1.9	Williams Cos Inc. (The)	19.6	Nordson Corp	-20.3
Sonoco Products Co	1.8	Fox Corp	17.9	Amgen Inc	-18.5
IDACORP Inc.	1.8	Grand Canyon Education Inc	15.5	Mettler-Toledo International Inc	-18.4
OGE Energy Corp	1.8	Intra-Cellular Therapies Inc	14.1	Mondelez International Inc	-18.3
Verizon Communications Inc	1.8	Cisco Systems Inc	12.1	Danaher Corp	-17.3
Fox Corp	1.8	Gilead Sciences Inc	11.1	Cooper Cos Inc (The)	-16.7
Chevron Corp	1.8	Apellis Pharmaceuticals Inc	10.6	Zoetis Inc	-16.4

PanAgora Defuseq Performance Attribution vs. Russell 1000 Index

	Attribution Effects				Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.8	0.5	-0.1	0.4	13.0	-0.7	6.6	3.4
Materials	-0.5	0.1	-1.0	0.3	-6.5	-11.4	9.5	2.6
Industrials	-0.3	-0.2	0.0	0.0	-4.7	-2.2	9.9	9.4
Consumer Discretionary	-1.2	-1.2	-0.1	0.2	1.6	12.9	9.0	10.4
Consumer Staples	-0.9	-0.2	-0.4	-0.3	-6.9	-3.0	12.7	5.7
Health Care	0.4	0.4	0.0	0.0	-6.4	-9.9	11.1	11.5
Financials	-0.8	-0.8	-0.2	0.2	1.9	7.9	9.4	13.4
Information Technology	-1.2	-1.7	-0.6	1.2	0.0	5.8	9.3	29.8
Communication Services	-0.3	-0.3	0.1	0.0	5.8	9.0	9.6	8.7
Utilities	-0.4	0.1	-0.8	0.3	-2.4	-5.4	12.0	2.4
Real Estate	0.1	-0.1	0.2	0.1	-12.6	-7.8	1.0	2.7
Total	-4.1	-3.5	-3.0	2.4	-1.3	2.7	100.0	100.0

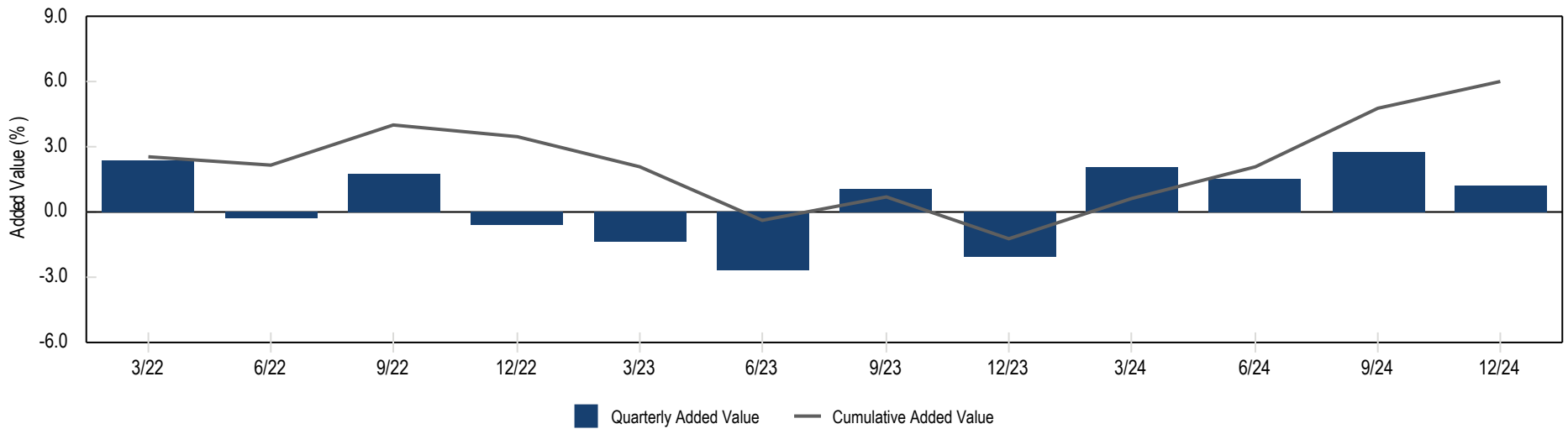
U.S. Effective Style Map



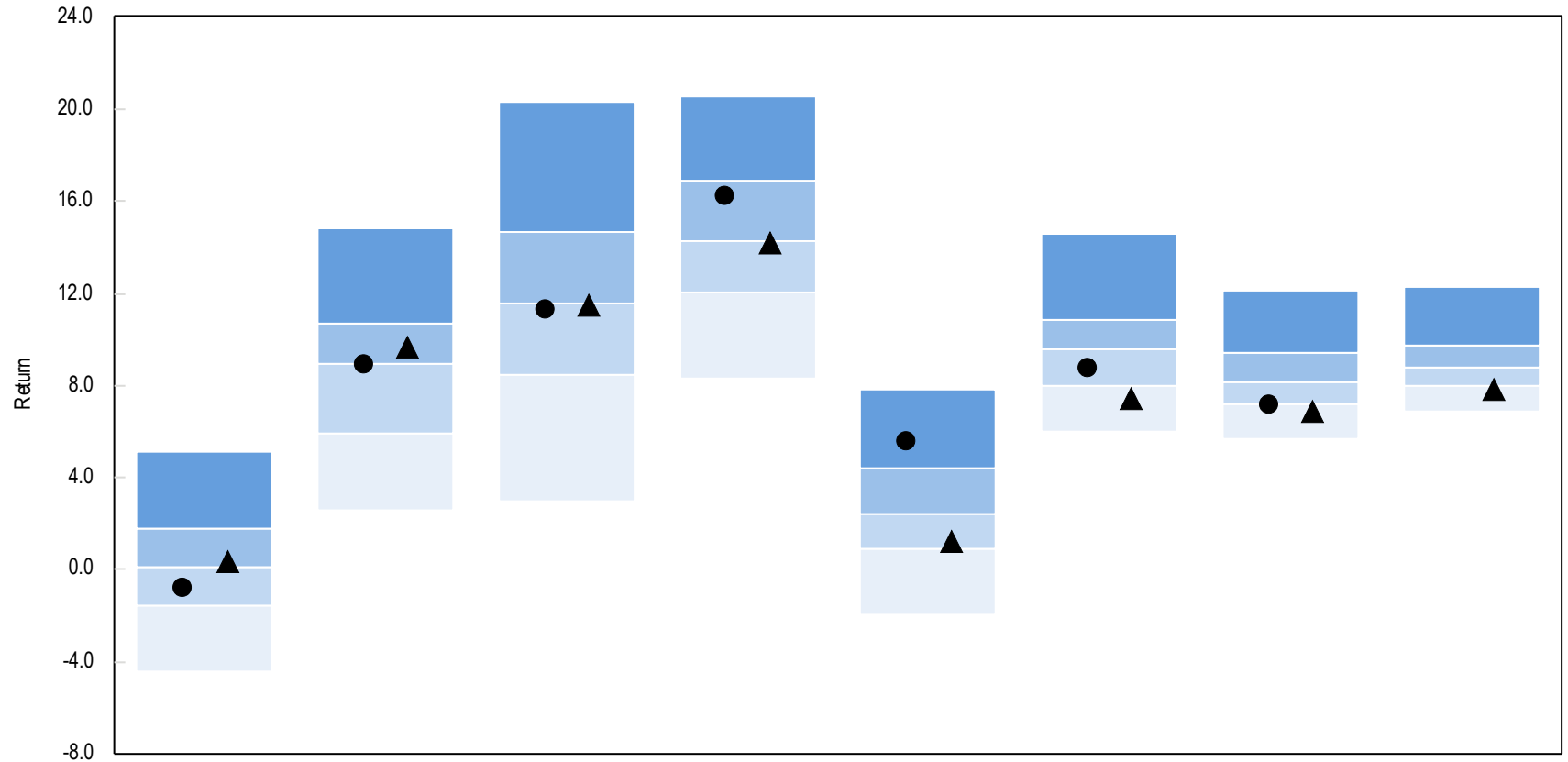
Growth of a Dollar



Quarterly and Cumulative Excess Performance



eV US Small Cap Core Equity Net Return Comparison



	3 Mo	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
● PGIM Quant Solutions	-0.8 (62)	8.9 (50)	11.4 (54)	16.3 (28)	5.6 (15)	8.8 (60)	7.2 (77)	-
▲ Russell 2000 Index	0.3 (49)	9.6 (40)	11.5 (52)	14.2 (53)	1.2 (70)	7.4 (82)	6.9 (82)	7.8 (80)
5th Percentile	5.1	14.8	20.4	20.6	7.8	14.6	12.1	12.3
1st Quartile	1.8	10.7	14.7	16.9	4.4	10.8	9.4	9.8
Median	0.1	8.9	11.6	14.3	2.4	9.6	8.2	8.8
3rd Quartile	-1.5	5.9	8.5	12.1	0.9	8.0	7.2	8.0
95th Percentile	-4.5	2.6	3.0	8.4	-1.9	6.0	5.7	6.9
Population	190	190	190	187	179	171	165	145

Characteristics

	Portfolio	Benchmark
Number of Stocks	331	1,966
Wtd. Avg. Mkt. Cap \$M	3,272.7	3,588.3
Median Mkt. Cap \$M	2,210.2	960.3
Price/Earnings ratio	15.9	17.8
Current Yield (%)	1.2	1.3
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	2.2	2.5
Return on Equity (%)	6.7	4.1

Top Holdings

Best Performers

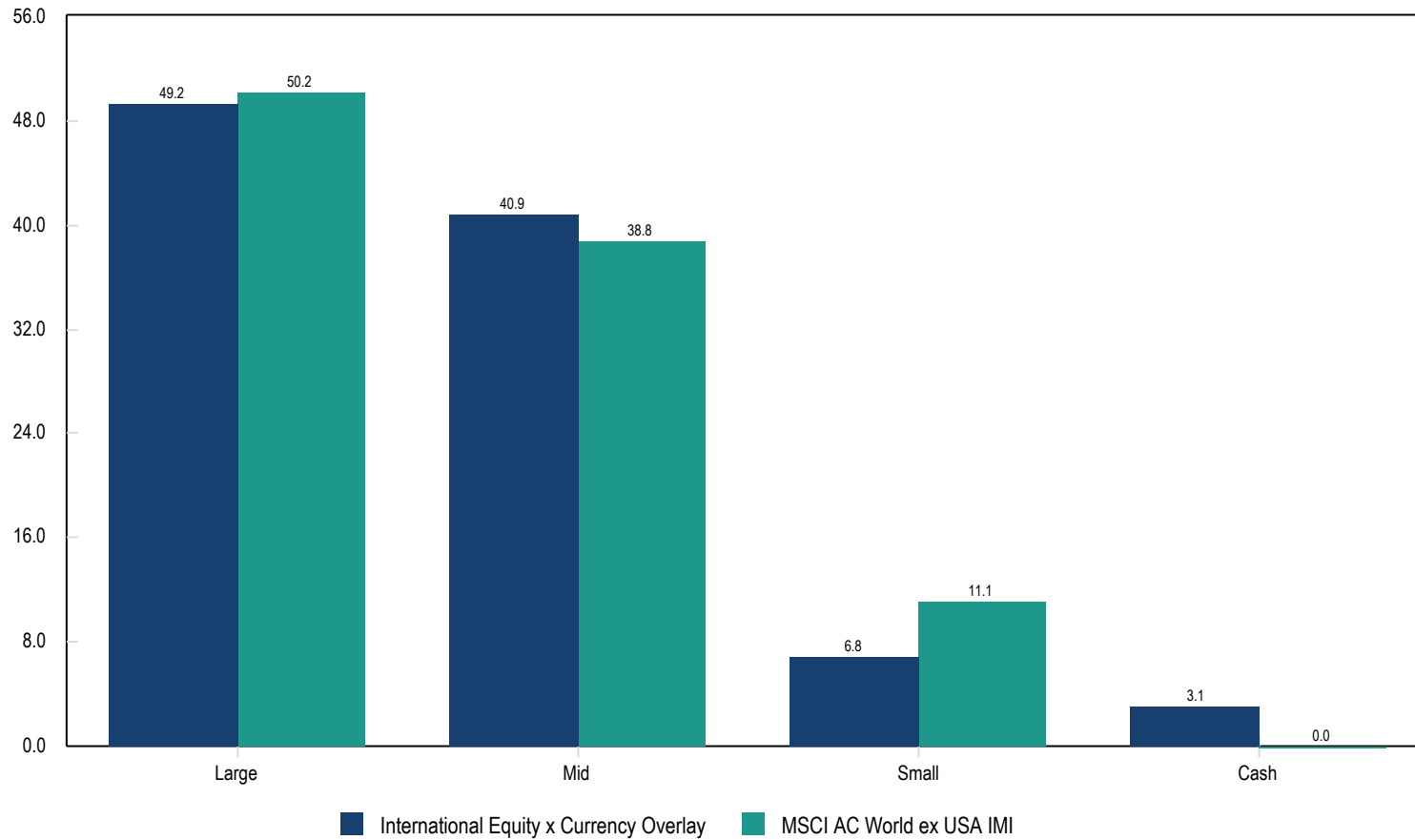
Worst Performers

	(%)		Return (%)		Return (%)
Rocket Lab USA Inc	1.1	Rocket Lab USA Inc	161.8	Editas Medicine Inc	-62.8
ACI Worldwide Inc	0.9	GeneDx Holdings Corp	81.1	Fate Therapeutics Inc	-52.9
Frontdoor Inc	0.9	Brinker International Inc.	72.9	Sutro Biopharma Inc	-46.8
Fluor Corp	0.9	SelectQuote Inc	71.4	Diversified Healthcare Trust	-44.9
Intapp Inc	0.9	Remitly Global Inc	68.6	Nkarta Inc	-44.9
Rambus Inc	0.9	Tarsus Pharmaceuticals Inc	68.3	Enanta Pharmaceuticals Inc	-44.5
SkyWest Inc	0.8	MiMedx Group Inc	62.8	Service Properties Trust	-44.1
Brinker International Inc.	0.8	United Natural Foods Inc	62.4	DMC Global Inc	-43.4
Piper Sandler Cos	0.8	Hippo Holdings Inc	58.6	Solid Biosciences Inc	-42.6
Mr. Cooper Group Inc	0.8	Genesco Inc.	57.3	Relay Therapeutics Inc	-41.8

PGIM Quant Solutions Performance Attribution vs. Russell 2000 Index

	Attribution Effects				Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.1	-0.1	0.0	0.0	-5.1	-2.7	4.7	5.3
Materials	-0.1	-0.1	0.0	0.0	-6.5	-4.7	5.3	4.5
Industrials	-0.3	-0.3	0.0	0.0	2.2	4.1	17.2	17.0
Consumer Discretionary	0.3	0.3	0.0	0.0	1.4	-1.7	9.5	10.0
Consumer Staples	0.4	0.3	0.0	0.1	17.5	5.5	3.2	2.8
Health Care	0.7	0.6	0.1	0.0	-4.0	-7.6	16.8	17.5
Financials	0.2	0.2	0.0	0.0	4.7	3.5	18.1	18.0
Information Technology	-0.7	-0.7	0.1	0.0	4.3	9.7	13.4	12.8
Communication Services	0.0	0.0	0.0	0.0	1.4	0.5	2.2	2.7
Utilities	0.0	0.0	0.0	0.0	-4.4	-4.6	3.6	2.8
Real Estate	0.0	-0.1	0.0	0.0	-7.0	-6.1	5.7	6.5
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total	0.4	0.2	0.1	0.0	0.7	0.3	100.0	100.0

Market Capitalization as of December 31, 2024



See appendix for the market capitalization breakpoints.

International Equity x Currency Overlay
Equity Only Summary Statistics

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Characteristics

	Portfolio	Benchmark
Number of Stocks	6,440	6,321
Wtd. Avg. Mkt. Cap \$M	90,754.5	92,687.4
Median Mkt. Cap \$M	2,027.5	2,013.4
Price/Earnings ratio	15.5	15.6
Current Yield (%)	2.9	3.0
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	2.6	2.5
Return on Equity (%)	5.0	4.7

Top Holdings

Best Performers

Worst Performers

	(%)		Return (%)		Return (%)
Taiwan Semiconductor Man.	3.2	Kingsoft Cloud Holdings Limited	250.6	Casino Guichard Perrachon	-66.2
United Overseas Bank Ltd	1.5	Bitdeer Technologies Group	176.8	Amvis Holdings Inc	-65.6
ASML Holding NV	1.1	CAL-Comp Electronics (Thailand) Public Co Ltd	156.2	Kum Yang Co Ltd	-64.0
Tencent Holdings LTD	1.1	Mesoblast Ltd	136.5	Cosmo AM&T Co Ltd	-63.5
Sony Group Corporation	1.0	Dalipal Holdings Ltd	125.2	SoftwareONE Holding AG	-62.0
Banco Santander SA	0.8	Advanced Energy Solution Holding Co Ltd	120.3	Vistry Group PLC	-59.1
Allianz SE	0.8	Shinsung Delta Company Ltd	119.0	C&C International Co Ltd	-56.8
Lloyds Banking Group PLC	0.8	Cambricon Technologies Corporation Limited	118.7	Ecopro Materials Co Ltd	-56.7
GSK plc	0.8	Canggang Railway Limited	97.9	Clarity Pharmaceuticals Ltd	-55.6
Enel Ente Nazionale	0.7	Dynapack International Technology Corp	94.9	Better Collective A/S	-54.7

International Equity x Currency Overlay
Equity Sector Attribution

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

International Equity x Currency Overlay Performance Attribution vs. MSCI AC World ex USA IMI

	Attribution Effects				Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1	0.1	0.0	0.0	-4.6	-7.0	4.4	4.8
Materials	0.1	0.0	0.1	0.0	-16.5	-16.0	6.2	7.7
Industrials	-0.3	-0.3	0.0	0.0	-9.0	-7.0	17.5	15.0
Consumer Discretionary	0.1	0.1	0.0	0.0	-6.8	-8.0	11.8	11.4
Consumer Staples	-0.1	0.0	0.0	0.0	-12.6	-12.0	8.2	7.2
Health Care	-0.1	-0.1	0.0	0.0	-14.3	-13.4	8.6	9.0
Financials	-0.4	-0.3	-0.1	0.0	-4.2	-2.7	18.5	20.9
Information Technology	-0.1	-0.2	0.1	0.0	-3.6	-2.1	13.8	12.5
Communication Services	0.1	0.0	0.0	0.0	-5.5	-6.3	5.7	5.3
Utilities	-0.1	0.0	0.0	0.0	-13.6	-12.3	3.5	3.2
Real Estate	0.1	0.0	0.1	0.0	-12.2	-12.2	1.5	3.0
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total	-0.6	-0.7	0.1	0.0	-8.1	-7.5	100.0	100.0

International Equity x Currency Overlay vs. MSCI AC World ex USA IMI

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	
Australia	3.1	4.8	-13.3	-11.6	-0.1	0.1	0.0	0.0
Austria	0.4	0.2	-22.6	-4.9	0.0	0.0	0.0	-0.1
Belgium	0.6	0.6	-19.6	-13.6	0.0	0.0	0.0	0.0
Brazil	1.7	1.3	-19.7	-19.4	0.0	0.0	0.0	0.0
Canada	5.3	7.5	0.8	-1.8	0.2	-0.1	-0.1	0.0
Chile	0.3	0.1	-9.9	-6.8	0.0	0.0	0.0	0.0
China	6.6	6.5	-8.4	-6.5	-0.1	0.0	0.0	-0.1
Colombia	0.0	0.0	5.0	5.1	0.0	0.0	0.0	0.0
Czech Republic	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0
Denmark	1.4	2.0	-14.3	-20.6	0.1	0.1	0.0	0.2
Egypt	0.0	0.0	-9.9	-9.8	0.0	0.0	0.0	0.0
Finland	0.4	0.7	-13.2	-13.6	0.0	0.0	0.0	0.0
France	5.8	6.0	-12.6	-11.0	-0.1	0.0	0.0	-0.1
Germany	5.0	5.1	-8.8	-6.0	-0.1	0.0	0.0	-0.1
Greece	0.1	0.1	-6.2	-6.2	0.0	0.0	0.0	0.0
Hong Kong	2.5	1.8	-10.9	-9.5	0.0	0.0	0.0	0.0
Hungary	0.0	0.1	-1.8	-1.9	0.0	0.0	0.0	0.0
India	4.8	6.4	-7.3	-9.4	0.1	0.0	0.0	0.1
Indonesia	0.5	0.5	-16.7	-15.3	0.0	0.0	0.0	0.0
Ireland	1.2	0.8	-14.8	-18.8	0.0	-0.1	0.0	0.0
Israel	0.3	0.7	14.8	14.8	0.0	-0.1	0.0	-0.1
Italy	2.1	1.6	-9.6	-6.0	-0.1	0.0	0.0	-0.1
Japan	15.7	15.2	-7.2	-4.1	-0.5	0.0	0.0	-0.5
Kazakhstan	0.0	0.0	-9.2	0.0	0.0	0.0	0.0	0.0
Korea	2.7	3.1	-19.7	-18.9	0.0	0.0	0.0	0.0
Kuwait	0.1	0.2	1.5	1.6	0.0	0.0	0.0	0.0
Malaysia	0.4	0.5	-6.8	-5.3	0.0	0.0	0.0	0.0
Malta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	0.8	0.5	-8.6	-9.9	0.0	0.0	0.0	0.0
Netherlands	4.3	3.2	-12.3	-9.1	-0.1	0.0	0.0	-0.2
New Zealand	0.1	0.2	-4.6	-4.5	0.0	0.0	0.0	0.0
Norway	0.2	0.5	-6.0	-6.0	0.0	0.0	0.0	0.0
Peru	0.1	0.0	0.9	-0.7	0.0	0.0	0.0	0.0

International Equity x Currency Overlay
Equity Performance Attribution

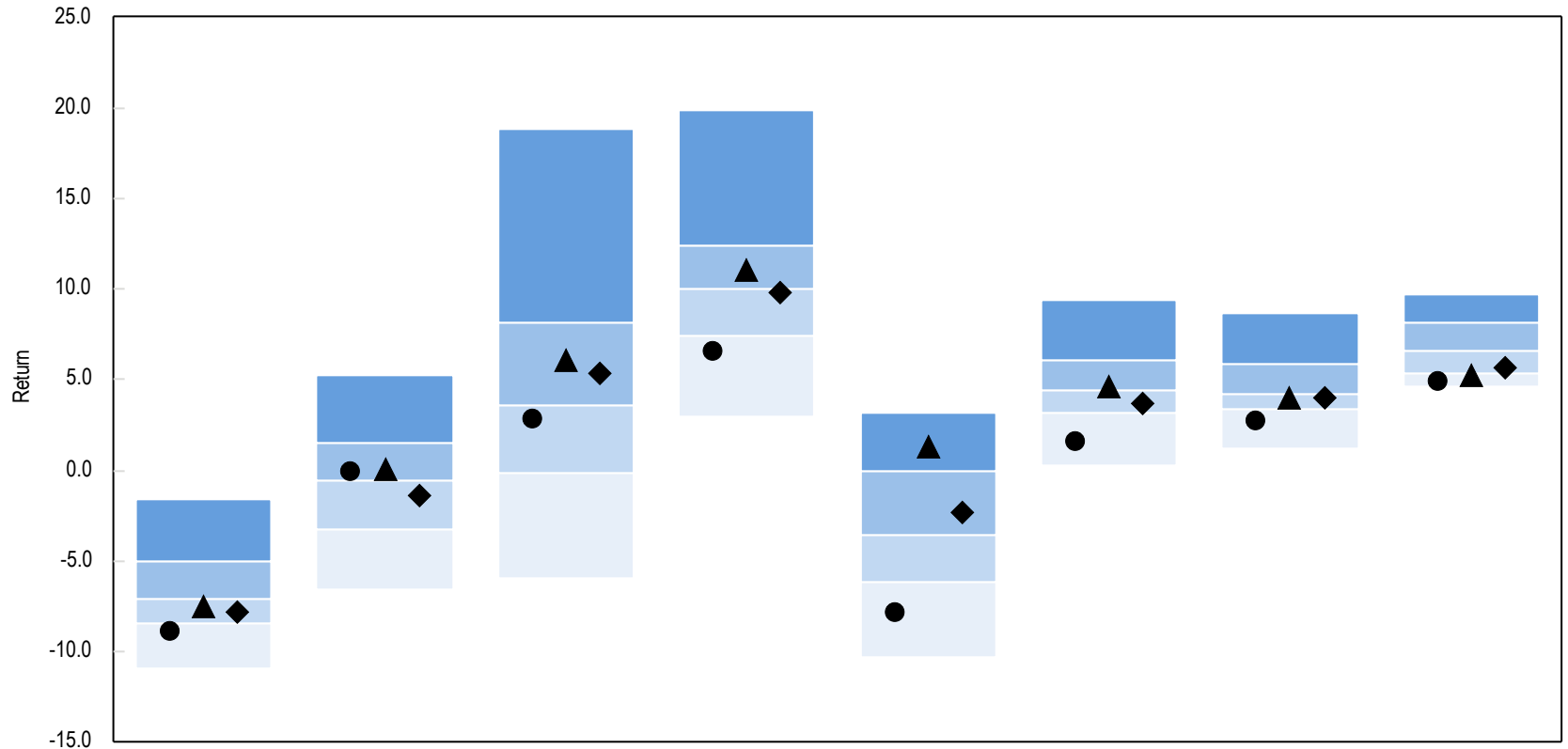
San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

	Weights		Performance		Selection Effects	Attribution Effects		Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark		Country Effects	Interaction Effects	
Philippines	0.1	0.2	-12.6	-12.6	0.0	0.0	0.0	0.0
Poland	0.1	0.3	-9.6	-9.6	0.0	0.0	0.0	0.0
Portugal	0.4	0.1	-4.7	-15.0	0.0	0.0	0.0	0.0
Qatar	0.1	0.2	-0.2	-0.2	0.0	0.0	0.0	0.0
Saudi Arabia	0.9	1.1	-2.1	-2.3	0.0	0.0	0.0	0.0
Singapore	1.7	1.1	4.5	1.3	0.0	0.1	0.0	0.1
South Africa	0.5	0.9	-10.5	-10.5	0.0	0.0	0.0	0.0
Spain	1.5	1.6	-8.9	-9.7	0.0	0.0	0.0	0.0
Sweden	3.0	2.3	-14.9	-13.4	0.0	0.0	0.0	-0.1
Switzerland	4.8	6.0	-10.3	-12.0	0.1	0.1	0.0	0.1
Taiwan	5.2	5.4	4.0	1.9	0.1	0.0	0.0	0.1
Thailand	0.3	0.5	-8.3	-11.3	0.0	0.0	0.0	0.0
Turkey	0.1	0.2	-0.7	-0.3	0.0	0.0	0.0	0.0
United Arab Emirates	0.3	0.3	6.6	8.3	0.0	0.0	0.0	0.0
United Kingdom	12.5	8.9	-6.6	-6.8	0.0	0.0	0.0	0.1
United States	0.3	0.1	-16.9	-11.9	0.0	0.0	0.0	0.0
Other	1.2	0.4	-6.2	-11.7	0.0	0.0	0.0	0.0
Cash	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	-8.1	-7.5	-0.4	0.0	-0.1	-0.6

International Equity x Currency Overlay vs. MSCI AC World ex USA IMI

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	
Americas	8.4	9.7	-5.0	-4.9	0.0	0.0	0.0	-0.1
Asia Pacific	43.8	46.2	-7.1	-6.6	-0.3	0.0	0.0	-0.3
EMEA	46.3	43.7	-9.7	-9.0	-0.3	0.0	0.0	-0.4
Other	1.2	0.4	-6.2	-11.7	0.0	0.0	0.0	0.0
Cash	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	-8.1	-7.5	-0.6	-0.1	0.0	-0.6

eV ACWI ex-US Growth Equity Net Return Comparison



	3 Mo	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
● Baillie Gifford	-8.9 (84)	-0.1 (43)	2.9 (58)	6.6 (79)	-7.9 (84)	1.6 (85)	2.7 (86)	5.0 (87)
▲ MSCI ACWI ex US	-7.5 (60)	0.0 (42)	6.1 (36)	11.0 (42)	1.3 (10)	4.6 (48)	4.0 (59)	5.3 (78)
◆ MSCI ACWI ex US Growth	-7.8 (65)	-1.4 (57)	5.4 (40)	9.8 (52)	-2.4 (38)	3.7 (63)	4.0 (58)	5.7 (66)
5th Percentile	-1.6	5.2	18.9	19.9	3.1	9.4	8.7	9.7
1st Quartile	-5.0	1.5	8.1	12.4	-0.1	6.1	5.9	8.2
Median	-7.1	-0.5	3.6	10.1	-3.5	4.4	4.2	6.7
3rd Quartile	-8.4	-3.3	-0.1	7.4	-6.2	3.2	3.4	5.4
95th Percentile	-11.0	-6.6	-6.0	3.0	-10.3	0.3	1.2	4.6
Population	103	103	103	103	101	96	86	72

Characteristics

	Portfolio	Benchmark
Number of Stocks	84	2,058
Wtd. Avg. Mkt. Cap \$M	122,751.7	107,605.8
Median Mkt. Cap \$M	26,907.7	9,818.2
Price/Earnings ratio	17.0	15.8
Current Yield (%)	1.8	3.0
Beta (5 Years, Monthly)	1.1	1.0
Price/Book ratio	3.5	2.5
Return on Equity (%)	7.0	4.7

Top Holdings

Best Performers

Worst Performers

	(%)		Return (%)		Return (%)
Taiwan Semiconductor Man.	6.9	Wise plc	48.2	Shiseido Co Ltd	-33.8
United Overseas Bank Ltd	3.2	Shopify Inc	32.7	Unicharm Corporation	-31.0
ASML Holding NV	2.5	Burberry Group PLC	30.5	Shimano Inc	-27.8
Auto Trader Group plc	2.0	Trainline Plc	22.5	Alibaba Group Holding Ltd	-25.1
Games Workshop Group PLC	2.0	Spotify Technology SA	21.4	Anheuser-Busch InBev SA/NV	-24.6
Tencent Holdings LTD	2.0	MakeMyTrip Ltd	20.8	Raia Drogasil SA	-23.3
DSV A/S	1.9	Recruit Holdings Co Ltd	16.5	BHP Group Ltd	-23.2
Cie Financiere Richemont	1.9	Games Workshop Group PLC	16.4	Samsung Electronics Co Ltd	-23.2
Recruit Holdings Co Ltd	1.8	Taiwan Semiconductor Man.	8.8	Remy Cointreau SA	-22.4
Shopify Inc	1.8	United Overseas Bank Ltd	6.1	Sartorius AG	-20.8

Baillie Gifford Performance Attribution vs. MSCI AC World ex USA Index

	Attribution Effects				Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.2	-0.6	0.0	0.5	-19.4	-7.2	1.2	5.0
Materials	0.3	-0.1	0.3	0.0	-18.0	-17.2	3.5	7.1
Industrials	-0.8	-0.5	0.0	-0.3	-10.7	-7.1	23.1	13.8
Consumer Discretionary	0.3	0.3	0.0	0.1	-5.8	-8.0	14.1	11.3
Consumer Staples	-0.9	-0.4	-0.2	-0.2	-18.5	-12.4	11.3	7.4
Health Care	0.2	0.0	0.2	0.0	-13.9	-13.9	6.6	9.4
Financials	-0.6	-0.4	-0.4	0.1	-4.6	-2.8	14.7	22.5
Information Technology	0.2	-0.1	0.4	0.0	-2.4	-1.7	19.1	12.8
Communication Services	0.0	0.0	0.0	0.0	-6.0	-6.3	6.5	5.6
Utilities	0.2	0.0	0.2	0.0	0.0	-12.7	0.0	3.2
Real Estate	0.1	0.0	0.1	0.0	0.0	-11.7	0.0	1.9
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	-1.2	-1.8	0.6	0.1	-8.7	-7.5	100.0	100.0

Baillie Gifford vs. MSCI AC World ex USA Index

	Weights		Performance			Attribution Effects		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects
Australia	1.2	4.6	-23.2	-11.2	-0.6	0.1	0.4	0.0
Austria	0.0	0.1	0.0	0.6	0.0	0.0	0.0	0.0
Belgium	1.4	0.5	-24.6	-12.9	-0.1	0.0	-0.1	-0.2
Brazil	1.8	1.4	-20.0	-19.1	0.0	0.0	0.0	-0.1
Canada	2.8	7.7	12.2	-1.6	1.1	-0.3	-0.7	0.1
Chile	0.8	0.1	-10.4	-6.7	0.0	0.0	0.0	0.0
China	5.5	7.2	-10.6	-6.7	-0.3	0.0	0.1	-0.2
Colombia	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
Czech Republic	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Denmark	1.5	2.1	2.6	-21.6	0.5	0.1	-0.1	0.5
Egypt	0.0	0.0	0.0	-8.8	0.0	0.0	0.0	0.0
Finland	0.0	0.7	0.0	-12.8	0.0	0.0	0.0	0.0
France	4.1	6.6	-15.3	-11.0	-0.3	0.1	0.1	-0.1
Germany	2.0	5.6	-13.5	-5.7	-0.4	-0.1	0.3	-0.2
Greece	0.0	0.1	0.0	-6.1	0.0	0.0	0.0	0.0
Hong Kong	4.2	1.8	-14.2	-9.9	-0.1	-0.1	-0.1	-0.2
Hungary	0.0	0.1	0.0	-2.2	0.0	0.0	0.0	0.0
India	3.4	5.8	0.6	-10.8	0.7	0.1	-0.3	0.5
Indonesia	0.0	0.5	0.0	-16.0	0.0	0.0	0.0	0.0
Ireland	3.4	0.8	-12.8	-19.2	0.1	-0.3	0.2	-0.1
Israel	0.0	0.5	0.0	14.2	0.0	-0.1	0.0	-0.1
Italy	0.0	1.6	0.0	-6.9	0.0	0.0	0.0	0.0
Japan	14.5	14.0	-14.8	-3.7	-1.6	0.0	-0.1	-1.6
Korea	1.0	3.1	-23.2	-19.4	-0.1	0.3	0.1	0.2
Kuwait	0.0	0.2	0.0	1.2	0.0	0.0	0.0	0.0
Malaysia	0.0	0.4	0.0	-6.8	0.0	0.0	0.0	0.0
Mexico	1.4	0.6	-11.0	-10.5	0.0	0.0	0.0	0.0
Netherlands	8.9	3.6	-12.3	-9.0	-0.1	-0.1	-0.2	-0.4
New Zealand	0.0	0.2	0.0	-3.6	0.0	0.0	0.0	0.0
Norway	0.0	0.4	0.0	-5.1	0.0	0.0	0.0	0.0
Peru	0.0	0.1	0.0	-1.5	0.0	0.0	0.0	0.0
Philippines	0.0	0.2	0.0	-13.8	0.0	0.0	0.0	0.0
Poland	0.0	0.2	0.0	-10.2	0.0	0.0	0.0	0.0

	Weights		Performance			Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects		
Portugal	1.1	0.1	-3.0	-19.3	0.0	-0.1	0.2	0.1	
Qatar	0.0	0.2	0.0	-0.1	0.0	0.0	0.0	0.0	
Saudi Arabia	0.0	1.1	0.0	-2.0	0.0	-0.1	0.0	-0.1	
Singapore	2.8	1.1	6.1	3.7	0.0	0.2	0.0	0.3	
South Africa	0.0	0.9	0.0	-11.8	0.0	0.0	0.0	0.0	
Spain	0.0	1.7	0.0	-9.7	0.0	0.0	0.0	0.0	
Sweden	7.5	2.1	-15.9	-13.3	-0.1	-0.3	-0.1	-0.5	
Switzerland	4.8	6.5	-6.4	-11.9	0.4	0.1	-0.1	0.3	
Taiwan	7.0	5.2	6.2	3.4	0.1	0.2	0.1	0.4	
Thailand	0.0	0.4	0.0	-10.1	0.0	0.0	0.0	0.0	
Turkey	0.0	0.2	0.0	-3.1	0.0	0.0	0.0	0.0	
United Arab Emirates	0.0	0.3	0.0	9.0	0.0	-0.1	0.0	-0.1	
United Kingdom	15.1	8.9	-3.8	-6.2	0.2	0.1	0.2	0.4	
United States	0.8	0.1	-18.4	-20.3	0.0	-0.1	0.0	-0.1	
Other	3.2	0.3	-8.2	-10.9	0.0	-0.1	0.1	0.0	
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total	100.0	100.0	-8.7	-7.5	-0.5	-0.5	-0.2	-1.2	

Baillie Gifford vs. MSCI AC World ex USA Index

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	
Americas	7.6	9.9	-5.4	-4.8	-0.1	-0.1	0.0	-0.1
Asia Pacific	39.4	44.5	-8.1	-6.5	-0.7	-0.1	0.1	-0.7
EMEA	49.8	45.3	-9.7	-9.1	-0.3	-0.1	0.0	-0.4
Other	3.2	0.3	-8.2	-10.9	0.0	-0.1	0.1	0.0
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	-8.7	-7.5	-1.0	-0.3	0.1	-1.2

Characteristics

	Portfolio	Benchmark
Number of Stocks	116	1,201
Wtd. Avg. Mkt. Cap \$M	48,723.3	72,708.4
Median Mkt. Cap \$M	26,431.4	9,747.7
Price/Earnings ratio	13.4	11.7
Current Yield (%)	4.2	4.4
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	1.9	1.7
Return on Equity (%)	3.2	3.7

Top Holdings

Best Performers

Worst Performers

	(%)		Return (%)		Return (%)
Sony Group Corporation	3.4	Guangdong Investment Ltd	34.5	Lg Chem Ltd	-41.8
Lloyds Banking Group PLC	3.3	Panasonic Holdings Corporation	20.3	Hypera SA	-38.2
Banco Santander SA	3.2	Mediatek Incorporation	16.2	Lg Chem Ltd	-37.7
Enel Ente Nazionale	3.0	Heidelberg Materials AG	13.4	Andritz AG, Graz	-28.6
GSK plc	3.0	Imperial Brands PLC	12.0	Kingfisher PLC	-27.0
Fujitsu Ltd	2.9	South Bow Corp	11.2	Evonik Industries AG	-26.1
TC Energy Corp	2.8	Sony Group Corporation	10.4	Itausa S A	-25.5
Allianz SE	2.8	ADNOC Gas plc	10.4	Alibaba Group Holding Ltd	-25.1
United Overseas Bank Ltd	2.8	Taiwan Semiconductor Man.	8.8	Itau Unibanco Holding SA	-24.6
Snam SPA	2.7	TC Energy Corp	8.8	Pernod Ricard SA	-23.8

Mondrian Performance Attribution vs. MSCI AC World ex USA Value

	Attribution Effects				Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.7	0.8	0.0	-0.1	1.9	-7.8	6.7	8.1
Materials	0.3	0.0	0.2	0.0	-17.2	-17.6	5.7	8.1
Industrials	-0.5	-0.3	0.0	-0.2	-10.0	-7.1	17.4	9.5
Consumer Discretionary	0.5	0.5	-0.1	0.1	-5.2	-10.7	10.2	8.1
Consumer Staples	0.4	0.4	0.0	0.0	-4.7	-10.6	7.2	6.5
Health Care	-0.6	-0.2	-0.3	-0.1	-16.3	-13.4	10.3	6.2
Financials	-2.0	-2.0	-0.9	1.0	-7.8	-1.8	17.4	33.9
Information Technology	-0.4	-0.3	0.1	-0.2	-9.4	-5.3	11.0	6.0
Communication Services	0.2	0.2	0.0	0.0	-3.2	-6.3	5.8	5.3
Utilities	-0.3	-0.1	-0.1	0.0	-14.9	-12.7	7.6	5.5
Real Estate	0.1	0.0	0.1	0.0	0.0	-11.7	0.0	3.0
Cash	0.1	0.0	0.1	0.0	0.0	0.0	0.7	0.0
Total	-1.5	-1.1	-0.8	0.4	-8.9	-7.4	100.0	100.0

Mondrian vs. MSCI AC World ex USA Value

	Weights		Performance			Attribution Effects		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects
Australia	1.3	4.5	-17.8	-14.4	-0.2	0.2	0.1	0.2
Austria	1.2	0.2	-28.6	3.3	-0.1	0.1	-0.3	-0.3
Belgium	0.0	0.4	0.0	-10.9	0.0	0.0	0.0	0.0
Brazil	2.2	1.2	-19.7	-16.2	0.0	-0.1	0.0	-0.2
Canada	3.0	8.2	3.9	-1.8	0.5	-0.3	-0.3	-0.1
Chile	0.2	0.1	-12.8	-7.9	0.0	0.0	0.0	0.0
China	8.0	6.9	-10.0	-6.7	-0.2	0.0	0.0	-0.3
Colombia	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0
Czech Republic	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0
Denmark	0.0	0.4	0.0	-13.8	0.0	0.0	0.0	0.0
Egypt	0.0	0.0	0.0	-5.1	0.0	0.0	0.0	0.0
Finland	0.3	1.2	-11.4	-12.2	0.0	0.0	0.0	0.0
France	7.2	6.4	-13.8	-11.2	-0.2	0.0	0.0	-0.2
Germany	8.3	6.7	-11.1	-8.6	-0.2	0.0	0.0	-0.2
Greece	0.0	0.1	0.0	-6.0	0.0	0.0	0.0	0.0
Hong Kong	2.4	1.9	-7.0	-7.1	0.0	0.0	0.0	0.0
Hungary	0.0	0.1	0.0	-4.4	0.0	0.0	0.0	0.0
India	2.3	5.8	-4.3	-11.4	0.4	0.1	-0.2	0.3
Indonesia	1.1	0.5	-18.0	-17.3	0.0	-0.1	0.0	-0.1
Ireland	0.0	0.4	0.0	-5.0	0.0	0.0	0.0	0.0
Israel	0.0	0.5	0.0	21.3	0.0	-0.1	0.0	-0.1
Italy	5.0	2.1	-12.0	-5.4	-0.1	0.1	-0.2	-0.3
Japan	18.0	13.8	-6.6	-3.0	-0.5	0.2	-0.2	-0.5
Kazakhstan	0.1	0.0	-9.2	0.0	0.0	0.0	0.0	0.0
Korea	3.6	3.3	-20.2	-19.3	0.0	0.0	0.0	-0.1
Kuwait	0.0	0.2	0.0	-0.1	0.0	0.0	0.0	0.0
Malaysia	0.5	0.5	-9.9	-7.7	0.0	0.0	0.0	0.0
Mexico	0.7	0.6	-1.9	-10.2	0.0	0.0	0.0	0.1
Netherlands	2.0	1.9	-23.0	-11.1	-0.2	0.0	0.0	-0.2
New Zealand	0.0	0.1	0.0	-6.7	0.0	0.0	0.0	0.0
Norway	0.0	0.6	0.0	-6.5	0.0	0.0	0.0	0.0
Peru	0.4	0.1	1.3	1.3	0.0	0.0	0.0	0.0
Philippines	0.0	0.2	0.0	-16.7	0.0	0.0	0.0	0.0

Mondrian
Equity Performance Attribution

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

	Weights		Performance			Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects		
Poland	0.0	0.2	0.0	-8.6	0.0	0.0	0.0	0.0	
Portugal	0.4	0.1	-3.0	-30.1	0.0	-0.1	0.1	0.0	
Qatar	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
Saudi Arabia	1.2	1.1	-1.5	-2.1	0.0	0.0	0.0	0.0	
Singapore	1.9	1.0	6.1	-1.4	0.1	0.1	0.1	0.2	
South Africa	0.0	0.9	0.0	-12.8	0.0	0.1	0.0	0.1	
Spain	2.7	2.5	-7.9	-9.2	0.0	0.0	0.0	0.0	
Sweden	0.0	1.5	0.0	-8.0	0.0	0.0	0.0	0.0	
Switzerland	3.1	7.1	-10.1	-11.8	0.1	0.2	-0.1	0.2	
Taiwan	3.0	4.5	6.9	-4.0	0.5	-0.1	-0.2	0.3	
Thailand	0.0	0.4	0.0	-11.3	0.0	0.0	0.0	0.0	
Turkey	0.0	0.2	0.0	-4.3	0.0	0.0	0.0	0.0	
United Arab Emirates	0.7	0.3	4.8	22.2	-0.1	0.1	-0.1	0.0	
United Kingdom	17.4	10.9	-8.7	-4.8	-0.4	0.2	-0.3	-0.5	
Other	1.0	0.2	4.9	-0.6	0.0	0.1	0.0	0.1	
Cash	0.7	0.0	0.0	0.0	0.0	0.1	0.0	0.1	
Total	100.0	100.0	-8.9	-7.4	-0.5	0.7	-1.6	-1.5	

Mondrian vs. MSCI AC World ex USA Value

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	
Americas	6.5	10.1	-5.2	-3.9	-0.1	-0.1	0.0	-0.2
Asia Pacific	42.1	43.3	-7.5	-7.7	0.1	0.0	0.0	0.1
EMEA	49.7	46.3	-10.9	-7.9	-1.4	0.0	-0.1	-1.5
Other	1.0	0.2	4.9	-0.6	0.0	0.1	0.0	0.1
Cash	0.7	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total	100.0	100.0	-8.9	-7.4	-1.4	0.0	0.0	-1.5

BlackRock MSCI ACWI EX-US IMI Performance Attribution vs. MSCI AC World ex USA IMI (Net)

	Attribution Effects				Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0	0.0	0.0	0.0	-7.1	-7.0	4.8	4.8
Materials	0.0	0.0	0.0	0.0	-15.9	-16.0	7.7	7.7
Industrials	0.0	0.0	0.0	0.0	-7.0	-7.0	14.9	15.0
Consumer Discretionary	0.0	0.0	0.0	0.0	-8.0	-8.0	11.4	11.4
Consumer Staples	0.0	0.0	0.0	0.0	-11.8	-12.0	7.2	7.2
Health Care	0.0	0.0	0.0	0.0	-13.3	-13.4	8.8	9.0
Financials	0.0	0.0	0.0	0.0	-2.7	-2.7	20.9	20.9
Information Technology	0.0	0.0	0.0	0.0	-2.1	-2.1	12.6	12.5
Communication Services	0.0	0.0	0.0	0.0	-6.4	-6.3	5.3	5.3
Utilities	0.0	0.0	0.0	0.0	-12.2	-12.3	3.3	3.2
Real Estate	0.0	0.0	0.0	0.0	-12.2	-12.2	3.0	3.0
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total	0.0	0.0	0.0	0.0	-7.5	-7.5	100.0	100.0

Characteristics

	Portfolio	Benchmark
Number of Stocks	6,414	6,321
Wtd. Avg. Mkt. Cap \$M	92,232.5	92,687.4
Median Mkt. Cap \$M	2,014.2	2,013.4
Price/Earnings ratio	15.6	15.6
Current Yield (%)	3.0	3.0
Beta (3 Years, Monthly)	1.0	1.0
Price/Book ratio	2.5	2.5
Return on Equity (%)	4.7	4.7

Top Holdings

Best Performers

Worst Performers

	(%)		Return (%)		Return (%)
Taiwan Semiconductor Man.	2.7	Kingsoft Cloud Holdings Limited	250.6	Casino Guichard Perrachon	-66.2
Tencent Holdings LTD	1.2	Bitdeer Technologies Group	176.8	Amvis Holdings Inc	-65.6
ASML Holding NV	0.9	CAL-Comp Electronics (Thailand) Public Co Ltd	156.2	Kum Yang Co Ltd	-64.0
Novo Nordisk A/S	0.9	Mesoblast Ltd	136.5	Cosmo AM&T Co Ltd	-63.5
SAP SE	0.8	Dalipal Holdings Ltd	125.2	SoftwareONE Holding AG	-62.0
Toyota Motor Corp	0.7	Advanced Energy Solution Holding Co Ltd	120.3	Vistry Group PLC	-59.1
Astrazeneca PLC	0.7	Shinsung Delta Company Ltd	119.0	C&C International Co Ltd	-56.8
Nestle SA, Cham Und Vevey	0.7	Cambricon Technologies Corporation Limited	118.7	Ecopro Materials Co Ltd	-56.7
Shell Plc	0.6	Canggang Railway Limited	97.9	Clarity Pharmaceuticals Ltd	-55.6
Roche Holding AG	0.6	Dynapack International Technology Corp	94.9	Better Collective A/S	-54.7

BlackRock MSCI ACWI EX-US IMI vs. MSCI AC World ex USA IMI (Net)

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	
Australia	4.8	4.8	-11.6	-11.6	0.0	0.0	0.0	0.0
Austria	0.2	0.2	-5.0	-4.9	0.0	0.0	0.0	0.0
Belgium	0.6	0.6	-13.6	-13.6	0.0	0.0	0.0	0.0
Brazil	1.3	1.3	-19.4	-19.4	0.0	0.0	0.0	0.0
Canada	7.6	7.5	-1.8	-1.8	0.0	0.0	0.0	0.0
Chile	0.1	0.1	-6.8	-6.8	0.0	0.0	0.0	0.0
China	6.5	6.5	-6.5	-6.5	0.0	0.0	0.0	0.0
Colombia	0.0	0.0	5.0	5.1	0.0	0.0	0.0	0.0
Czech Republic	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0
Denmark	2.0	2.0	-20.6	-20.6	0.0	0.0	0.0	0.0
Egypt	0.0	0.0	-9.9	-9.8	0.0	0.0	0.0	0.0
Finland	0.7	0.7	-13.6	-13.6	0.0	0.0	0.0	0.0
France	5.9	6.0	-11.0	-11.0	0.0	0.0	0.0	0.0
Germany	4.9	5.1	-6.0	-6.0	0.0	0.0	0.0	0.0
Greece	0.1	0.1	-6.2	-6.2	0.0	0.0	0.0	0.0
Hong Kong	1.8	1.8	-9.5	-9.5	0.0	0.0	0.0	0.0
Hungary	0.1	0.1	-1.8	-1.9	0.0	0.0	0.0	0.0
India	6.8	6.4	-9.4	-9.4	0.0	0.0	0.0	0.0
Indonesia	0.5	0.5	-15.3	-15.3	0.0	0.0	0.0	0.0
Ireland	0.8	0.8	-18.8	-18.8	0.0	0.0	0.0	0.0
Israel	0.7	0.7	14.8	14.8	0.0	0.0	0.0	0.0
Italy	1.6	1.6	-6.0	-6.0	0.0	0.0	0.0	0.0
Japan	15.1	15.2	-4.1	-4.1	0.0	0.0	0.0	0.0
Korea	3.2	3.1	-18.9	-18.9	0.0	0.0	0.0	0.0
Kuwait	0.2	0.2	1.5	1.6	0.0	0.0	0.0	0.0
Malaysia	0.5	0.5	-5.2	-5.3	0.0	0.0	0.0	0.0
Malta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	0.5	0.5	-9.9	-9.9	0.0	0.0	0.0	0.0
Netherlands	3.2	3.2	-9.1	-9.1	0.0	0.0	0.0	0.0
New Zealand	0.2	0.2	-4.6	-4.5	0.0	0.0	0.0	0.0
Norway	0.5	0.5	-6.0	-6.0	0.0	0.0	0.0	0.0
Peru	0.0	0.0	-0.8	-0.7	0.0	0.0	0.0	0.0
Philippines	0.2	0.2	-12.6	-12.6	0.0	0.0	0.0	0.0

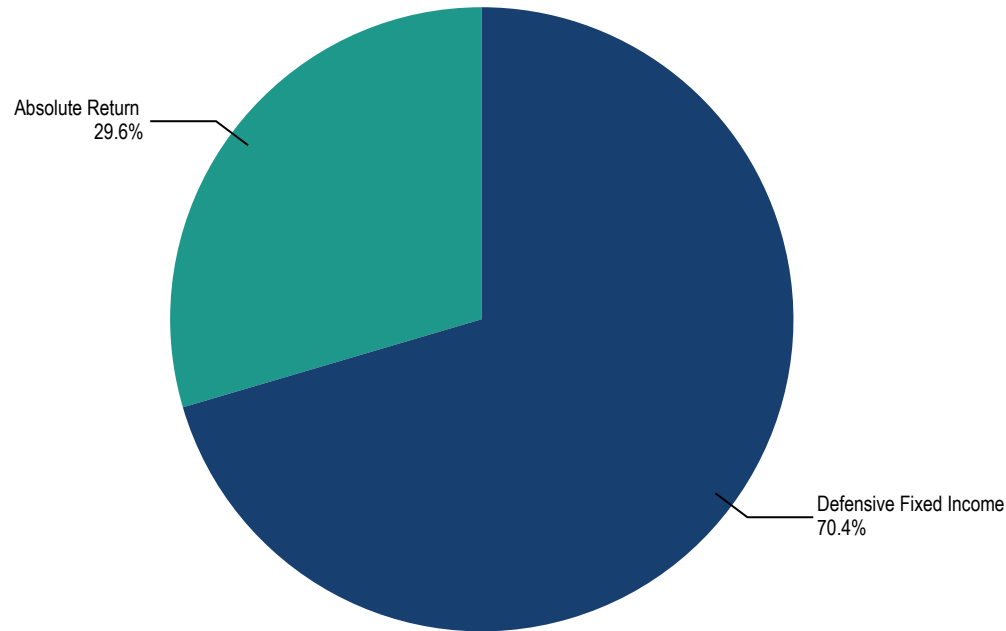
BlackRock MSCI ACWI EX-US IMI
Equity Performance Attribution

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	
Poland	0.3	0.3	-9.6	-9.6	0.0	0.0	0.0	0.0
Portugal	0.1	0.1	-15.0	-15.0	0.0	0.0	0.0	0.0
Qatar	0.2	0.2	-0.2	-0.2	0.0	0.0	0.0	0.0
Saudi Arabia	1.1	1.1	-2.4	-2.3	0.0	0.0	0.0	0.0
Singapore	1.1	1.1	1.1	1.3	0.0	0.0	0.0	0.0
South Africa	0.9	0.9	-10.5	-10.5	0.0	0.0	0.0	0.0
Spain	1.6	1.6	-9.7	-9.7	0.0	0.0	0.0	0.0
Sweden	2.3	2.3	-13.4	-13.4	0.0	0.0	0.0	0.0
Switzerland	5.5	6.0	-12.0	-12.0	0.0	0.0	0.0	0.0
Taiwan	5.4	5.4	1.9	1.9	0.0	0.0	0.0	0.0
Thailand	0.7	0.5	-8.3	-11.3	0.0	0.0	0.0	0.0
Turkey	0.2	0.2	-0.7	-0.3	0.0	0.0	0.0	0.0
United Arab Emirates	0.3	0.3	8.3	8.3	0.0	0.0	0.0	0.0
United Kingdom	8.8	8.9	-6.7	-6.8	0.0	0.0	0.0	0.0
United States	0.1	0.1	-11.8	-11.9	0.0	0.0	0.0	0.0
Other	0.4	0.4	-11.6	-11.7	0.0	0.0	0.0	0.0
Cash	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	-7.5	-7.5	0.0	0.0	0.0	0.0

BlackRock MSCI ACWI EX-US IMI vs. MSCI AC World ex USA IMI (Net)

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	
Americas	9.8	9.7	-4.9	-4.9	0.0	0.0	0.0	0.0
Asia Pacific	46.8	46.2	-6.6	-6.6	0.0	0.0	0.0	0.0
EMEA	42.9	43.7	-9.0	-9.0	0.0	0.0	0.0	0.0
Other	0.4	0.4	-11.6	-11.7	0.0	0.0	0.0	0.0
Cash	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	-7.5	-7.5	0.0	0.0	0.0	0.0



	Actual \$	Actual %	Manager Contribution to Excess Return %
Defensive Fixed Income	\$843,376,591	70.4%	0.4%
Absolute Return	\$353,782,231	29.6%	0.9%
Actual vs. Policy Weight Difference			-0.3%
Total	\$1,197,158,822	100.0%	1.0%

Diversifying Portfolio
Risk vs. Return (1 Year)

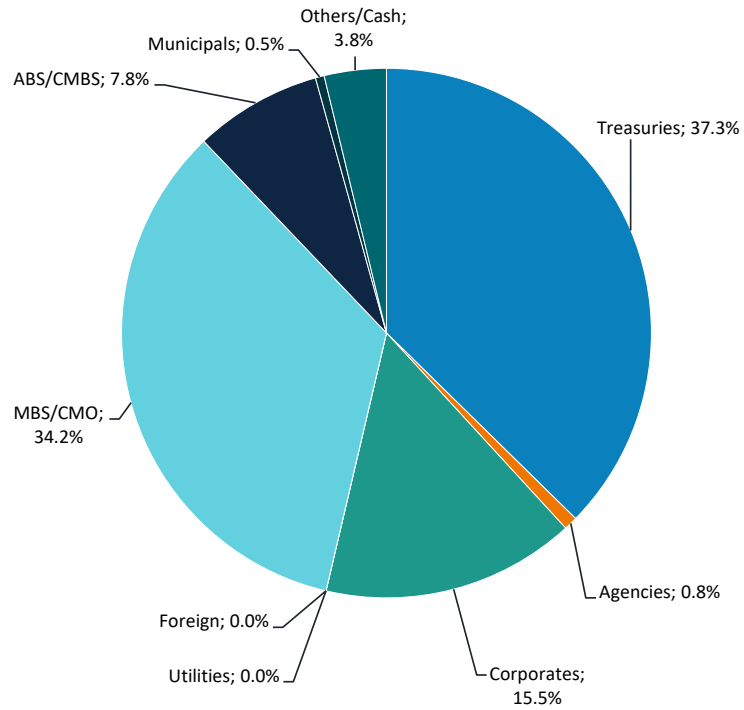
San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Statistics Summary
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Diversifying Portfolio	2.8	4.6	-0.5	0.1	2.3
<i>Blended Diversifying Index</i>	2.6	4.8	-0.5	-	0.0
Defensive Fixed Income	0.2	6.6	-0.7	1.4	0.6
<i>Blended Core Fixed Income Benchmark</i>	-0.6	7.1	-0.8	-	0.0
Absolute Return	8.7	8.1	0.4	0.0	8.1
<i>Absolute Return Custom Index</i>	9.3	0.2	20.6	-	0.0

Defensive Fixed Income
Bond Sector Allocation

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024



Sector	Account Weight	Bloomberg Aggregate	
		Weight	Difference
Treasuries	37.3%	44.0%	-6.6%
Agencies	0.8%	4.4%	-3.5%
Corporates	15.5%	24.4%	-8.9%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS/CMO	34.2%	24.8%	9.4%
ABS/CMBS	7.8%	2.0%	5.8%
Municipals	0.5%	0.0%	0.5%
Others/Cash	3.8%	0.5%	3.3%
TOTAL	100.0%	100.0%	0.0%

Defensive Fixed Income
Bond Summary Statistics

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Portfolio Characteristics			Bloomberg Aggregate
		Portfolio	
Total Number of Securities			
Total Market Value	\$	841,634,528	
Current Coupon		4.54	3.40
Yield to Maturity		5.35	4.89
Average Life		10.11	8.33
Duration		6.95	5.88
Quality		AA	AA

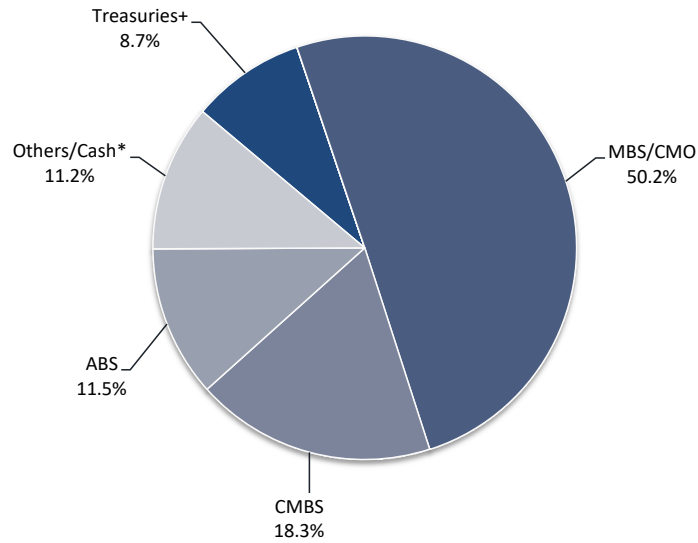
Yield to Maturity	
Range	% Held
0.0 - 5.0	49.4
5.0 - 7.0	45.6
7.0 - 9.0	3.5
9.0 - 11.0	0.9
11.0 - 13.0	0.3
13.0+	0.2
Unclassified	0.2

Average Life	
Range	% Held
0.0 - 1.0	3.5
1.0 - 3.0	11.8
3.0 - 5.0	15.2
5.0 - 10.0	43.2
10.0 - 20.0	12.5
20.0+	13.8
Unclassified	0.1

Duration	
Range	% Held
0.0 - 1.0	12.6
1.0 - 3.0	13.1
3.0 - 5.0	22.4
5.0 - 7.0	17.3
7.0 - 10.0	10.4
10.0+	24.1
Unclassified	0.1

Quality	
Range	% Held
Govt (10)	41.6
Aaa (10)	24.5
Aa (9)	11.8
A (8)	8.8
Baa (7)	12.1
Below Baa (6-1)	0.3
Other	0.9

Coupon	
Range	% Held
0.0 - 5.0	70.8
5.0 - 7.0	25.1
7.0 - 9.0	3.0
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	1.1



Sector	Account Weight	Bloomberg Aggregate Weight	Difference
Treasuries ⁺	8.7%	44.0%	-35.3%
Agencies	0.0%	4.4%	-4.4%
Corporates	0.0%	24.4%	-24.4%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS/CMO	50.2%	24.8%	25.4%
CMBS	18.3%	0.0%	18.3%
ABS	11.5%	2.0%	9.6%
Municipals	0.0%	0.0%	0.0%
Others/Cash*	11.2%	0.5%	10.7%
TOTAL	100.0%	100.0%	0.0%

+ May include TIPS allocation.

* Includes CLOs.

Portfolio Characteristics		
	Portfolio	
Total Number of Securities		275
Total Market Value	\$	267,105,430
Current Coupon		6.15
Yield to Maturity		5.91
Average Life		7.60
Duration		5.69
Quality		AA

Bloomberg Aggregate	
	3.40
	4.89
	8.33
	5.88
	AA

Yield to Maturity		
Range	% Held	
0.0 - 5.0	20.0	
5.0 - 7.0	66.8	
7.0 - 9.0	10.2	
9.0 - 11.0	2.0	
11.0 - 13.0	0.5	
13.0+	0.5	
Unclassified	0.0	

Average Life		
Range	% Held	
0.0 - 1.0	5.9	
1.0 - 3.0	9.2	
3.0 - 5.0	16.3	
5.0 - 10.0	53.4	
10.0 - 20.0	10.9	
20.0+	4.4	
Unclassified	0.0	

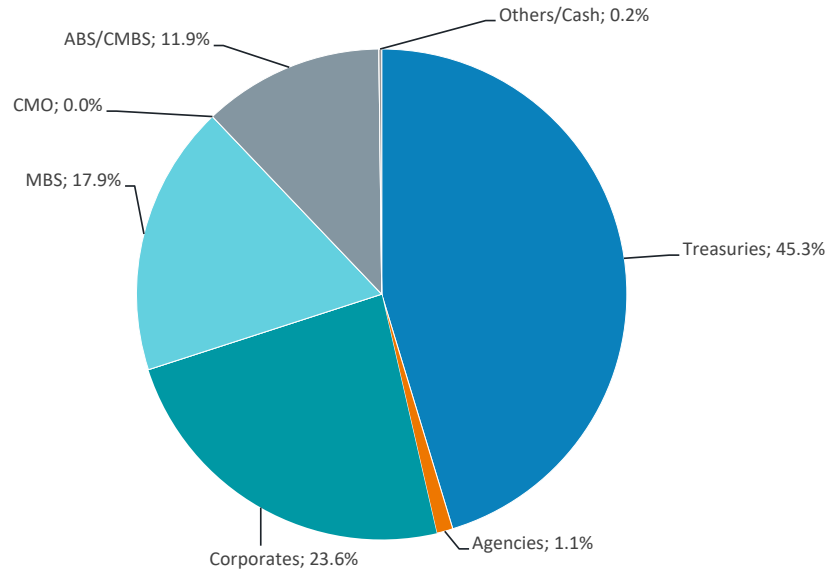
Duration		
Range	% Held	
0.0 - 1.0	28.2	
1.0 - 3.0	14.4	
3.0 - 5.0	28.8	
5.0 - 7.0	13.2	
7.0 - 10.0	3.9	
10.0+	11.6	
Unclassified	0.0	

Quality		
Range	% Held	
Govt (10)	19.5	
Aaa (10)	52.2	
Aa (9)	4.3	
A (8)	8.6	
Baa (7)	11.8	
Below Baa (6-1)	0.7	
Other	2.9	

Coupon		
Range	% Held	
0.0 - 5.0	49.5	
5.0 - 7.0	39.7	
7.0 - 9.0	7.9	
9.0 - 11.0	0.0	
11.0 - 13.0	0.0	
13.0+	0.0	
Unclassified/Cash	2.9	

FIAM Bond Duration Pool
Bond Sector Allocation

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024



Sector	Bloomberg Aggregate		
	Account Weight	Weight	Difference
Treasuries	45.3%	44.0%	1.3%
Agencies	1.1%	4.4%	-3.3%
Corporates	23.6%	24.4%	-0.7%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	17.9%	24.8%	-7.0%
CMO	0.0%	0.0%	0.0%
ABS/CMBS	11.9%	2.0%	9.9%
Municipals	0.0%	0.0%	0.0%
Others/Cash	0.2%	0.5%	-0.3%
TOTAL	100.0%	100.0%	0.0%

FIAM Bond Market Duration Pool
Bond Summary Statistics

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Portfolio Characteristics		Portfolio	Bloomberg Aggregate
Total Number of Securities		533	
Total Market Value	\$	188,480,008	
Current Coupon		4.21	3.40
Yield to Maturity		5.39	4.89
Average Life		9.03	8.33
Duration		6.06	5.88
Quality		AA-	AA

Yield to Maturity	
Range	% Held
0.0 - 5.0	54.7
5.0 - 7.0	42.8
7.0 - 9.0	0.8
9.0 - 11.0	1.1
11.0 - 13.0	0.5
13.0+	0.0
Unclassified	0.0

Average Life	
Range	% Held
0.0 - 1.0	2.6
1.0 - 3.0	9.8
3.0 - 5.0	17.6
5.0 - 10.0	53.1
10.0 - 20.0	4.6
20.0+	12.0
Unclassified	0.27

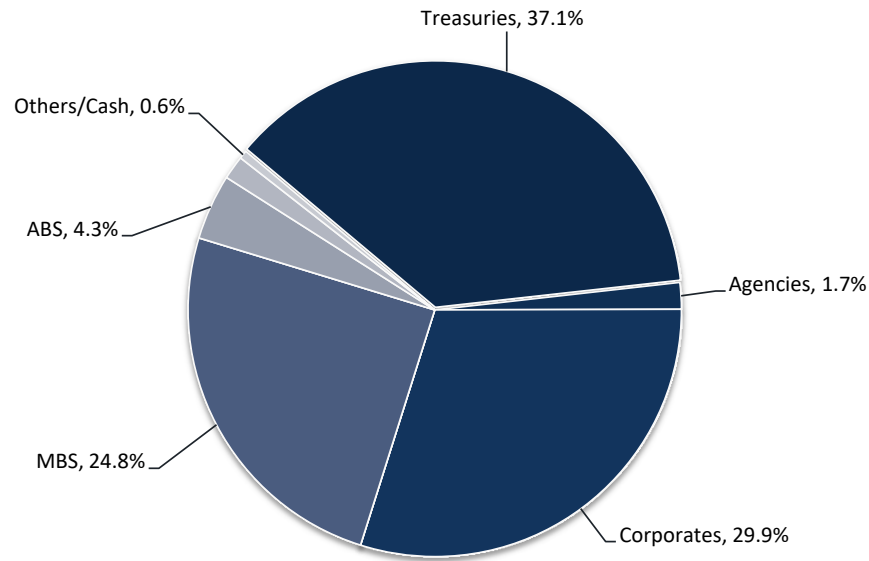
Duration	
Range	% Held
0.0 - 1.0	11.8
1.0 - 3.0	7.1
3.0 - 5.0	24.6
5.0 - 7.0	26.2
7.0 - 10.0	15.7
10.0+	14.3
Unclassified	0.27

Quality	
Range	% Held
Govt (10)	46.4
Aaa (10)	25.4
Aa (9)	3.0
A (8)	7.4
Baa (7)	17.5
Below Baa (6-1)	0.3
Other	0.00

Coupon	
Range	% Held
0.0 - 5.0	76.7
5.0 - 7.0	22.4
7.0 - 9.0	0.9
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	

NISA Core Bond Duration Pool
Bond Sector Allocation

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024



Sector	Account Weight	Bloomberg Aggregate	
		Weight	Difference
Treasuries	37.1%	44.0%	-6.9%
Agencies	1.7%	4.4%	-2.6%
Corporates	29.9%	24.4%	5.5%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	24.8%	24.8%	0.0%
CMO	0.0%	0.0%	0.0%
ABS	4.3%	2.0%	2.3%
Municipals	1.6%	0.0%	1.6%
Others/Cash	0.6%	0.5%	0.1%
TOTAL	100.0%	100.0%	0.0%

NISA Core Bond Market Duration Pool
Bond Summary Statistics

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Portfolio Characteristics		
		Portfolio
Total Number of Securities		591
Total Market Value	\$	286,624,547
Current Coupon		3.81
Yield to Maturity		4.96
Average Life		8.90
Duration		6.06
Quality		Aa2

Bloomberg Aggregate	
Current Coupon	3.40
Yield to Maturity	4.89
Average Life	8.33
Duration	5.88
Quality	AA

Yield to Maturity	
Range	% Held
0.0 - 5.0	55.9
5.0 - 7.0	43.5
7.0 - 9.0	0.1
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified*	0.5

Average Life	
Range	% Held
0.0 - 1.0	3.0
1.0 - 3.0	19.7
3.0 - 5.0	17.8
5.0 - 10.0	42.1
10.0 - 20.0	8.3
20.0+	9.1
Unclassified	0.0

Duration	
Range	% Held
< 1.0	3.0
1.0 - 3.0	20.5
3.0 - 5.0	22.8
5.0 - 7.0	21.4
7.0 - 10.0	16.0
10.0+	16.3
Unclassified	0.0

*Unclassified includes a 0.65% cash position

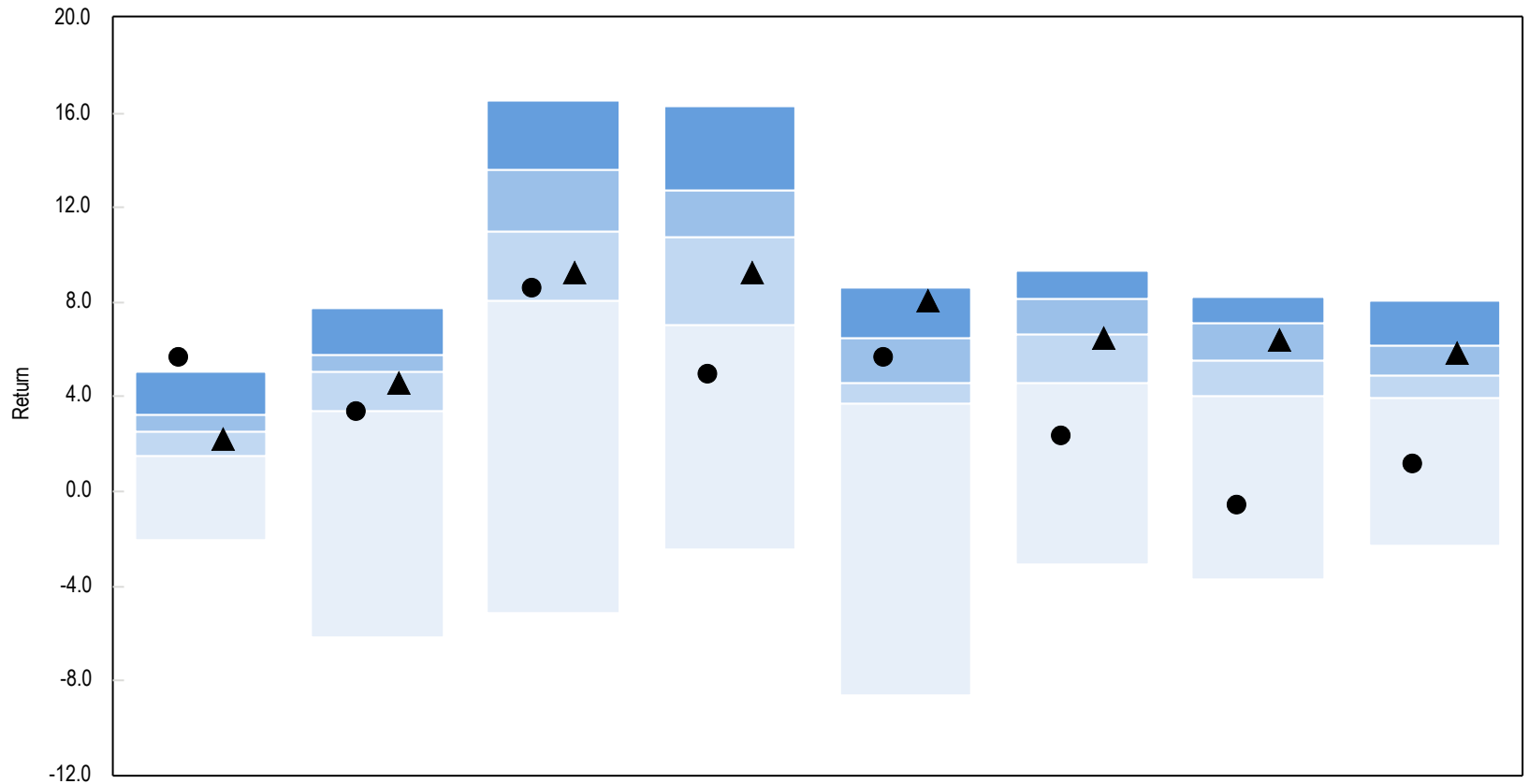
Quality	
Range	% Held
Govt* (10)	38.9
Aaa (10)	6.6
Aa (9)	28.7
A (8)	12.9
Baa (7)	13.0
Below Baa (6-1)	0.0
Other	0.0

Coupon	
Range	% Held
0.0 - 5.0	76.8
5.0 - 7.0	21.9
7.0 - 9.0	0.8
9.0 - 10.0	0.0
10.0+	0.0
Unclassified	0.5

Absolute Return
Peer Universe Comparison

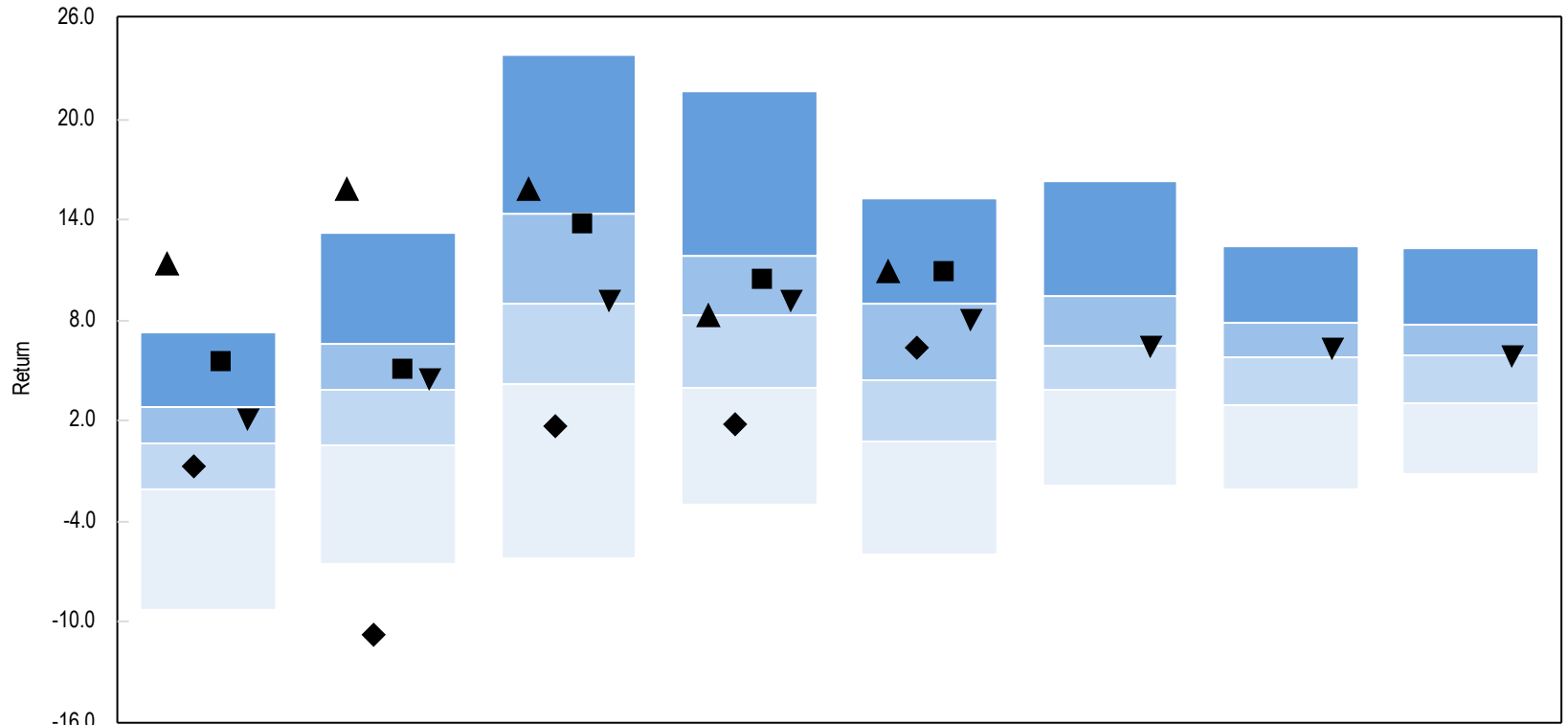
San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

InvMetrics All DB Hedge Funds Net Return Comparison



	3 Mo	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
● Absolute Return	5.7 (4)	3.4 (76)	8.7 (75)	5.0 (82)	5.7 (32)	2.4 (87)	-0.5 (90)	1.2 (86)
▲ Absolute Return Custom Index	2.2 (54)	4.6 (67)	9.3 (71)	9.2 (67)	8.0 (7)	6.5 (52)	6.4 (38)	5.9 (30)
5th Percentile	5.1	7.8	16.5	16.3	8.6	9.3	8.2	8.1
1st Quartile	3.2	5.8	13.6	12.8	6.5	8.1	7.1	6.1
Median	2.5	5.1	11.0	10.7	4.6	6.6	5.6	4.9
3rd Quartile	1.5	3.4	8.1	7.0	3.7	4.6	4.0	4.0
95th Percentile	-2.0	-6.2	-5.1	-2.5	-8.6	-3.1	-3.7	-2.3
Population	158	156	151	140	131	112	83	68

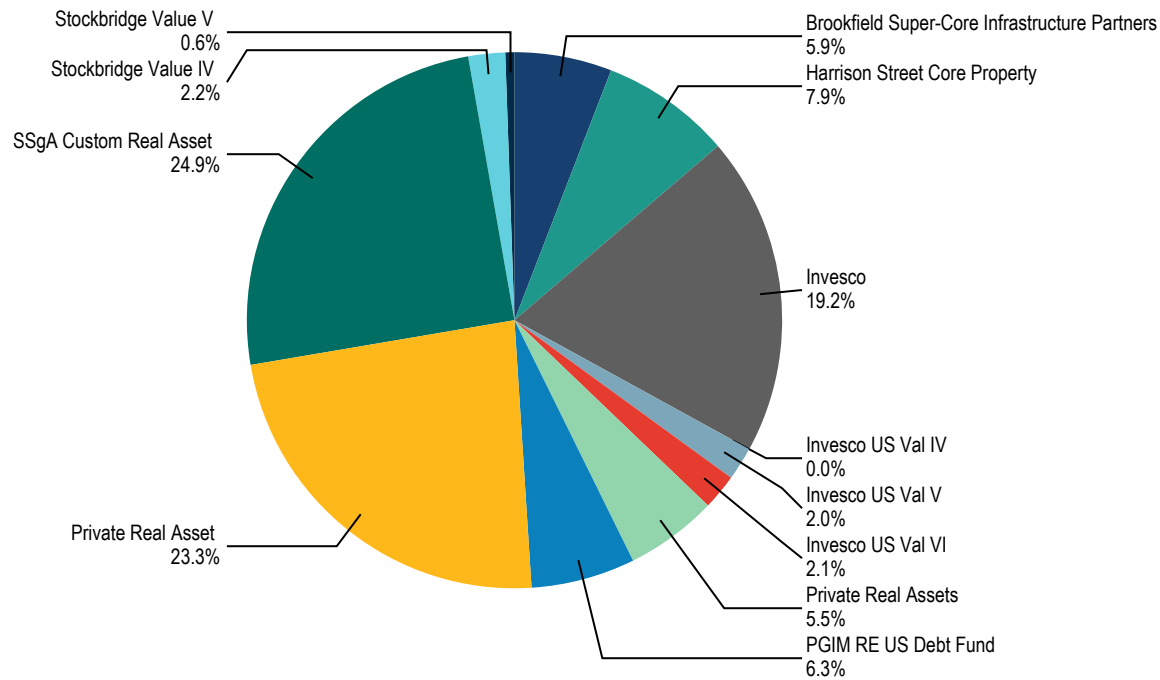
eV Alt All Multi-Strategy Net Return Comparison



	3 Mo	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
▲ CFM Systematic Global Macro	11.4 (2)	15.9 (4)	15.8 (20)	8.3 (51)	11.0 (17)	-	-	-
◆ Graham Quant Macro	-0.8 (67)	-10.8 (98)	1.7 (84)	1.8 (84)	6.3 (35)	-	-	-
■ PIMCO MAARS Fund LP	5.6 (11)	5.1 (37)	13.8 (27)	10.4 (32)	10.9 (17)	-	-	-
▼ Absolute Return Custom Index	2.2 (31)	4.6 (41)	9.3 (48)	9.2 (44)	8.0 (28)	6.5 (51)	6.4 (43)	5.9 (51)
5th Percentile	7.3	13.2	23.8	21.7	15.3	16.3	12.4	12.4
1st Quartile	2.8	6.7	14.3	11.9	9.0	9.5	7.8	7.8
Median	0.7	3.8	9.0	8.3	4.4	6.5	5.8	5.9
3rd Quartile	-2.0	0.6	4.2	4.0	0.8	3.8	3.0	3.1
95th Percentile	-9.2	-6.5	-6.2	-3.0	-5.9	-1.9	-2.1	-1.1
Population	279	278	277	265	251	216	188	159

Inflation Hedge
 Manager Allocation Analysis

San Mateo County Employees' Retirement Association
 Period Ending: December 31, 2024



	Actual \$	Actual %	Manager Contribution to Excess Return %
Harrison Street Core Property	\$90,459,155	7.9%	-0.1%
Invesco	\$221,173,192	19.2%	-0.2%
Invesco US Val IV	\$94,745	0.0%	0.0%
Invesco US Val V	\$23,140,796	2.0%	0.0%
Invesco US Val VI	\$24,697,366	2.1%	0.0%
PGIM RE US Debt Fund	\$72,361,992	6.3%	0.0%
Stockbridge Value IV	\$25,642,165	2.2%	0.0%
Stockbridge Value V	\$6,336,099	0.6%	0.0%
Private Real Asset	\$268,429,178	23.3%	-2.7%
Brookfield Super-Core Infrastructure Partners	\$67,511,793	5.9%	-0.6%
KKR Diversified Core Infrastructure Fund	\$63,799,863	5.5%	-0.5%
SSgA Custom Real Asset	\$286,109,077	24.9%	-0.4%
Actual vs. Policy Weight Difference			0.7%
Total	\$1,149,755,421	100.0%	-3.8%

Inflation Hedge
Risk vs. Return

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Statistics Summary
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Inflation Hedge	2.4	4.5	-0.3	-0.1	5.3
Blended Inflation Hedge Index	2.6	7.2	-0.1	-	0.0
Real Estate	-1.5	5.3	-0.9	0.3	2.4
NCREIF ODCE	-2.3	7.1	-0.8	-	0.0
Invesco	-4.0	7.1	-1.0	-1.1	1.5
NCREIF ODCE	-2.3	7.1	-0.8	-	0.0
Invesco US Val IV	-43.0	32.4	-1.6	-1.5	31.0
NCREIF ODCE	-2.3	7.1	-0.8	-	0.0
Invesco US Val V	-11.2	14.2	-1.0	-0.7	11.7
NCREIF ODCE	-2.3	7.1	-0.8	-	0.0
PGIM RE US Debt Fund	6.3	0.7	2.6	1.2	6.9
NCREIF ODCE	-2.3	7.1	-0.8	-	0.0
Private Real Assets	9.8	7.0	0.8	-0.1	17.5
Blended Private Real Assets Index	10.8	16.6	0.5	-	0.0
Public Real Assets	2.8	12.3	0.0	0.0	0.4
Blended Public Real Assets Index	2.8	12.2	0.0	-	0.0
SSgA Custom Real Asset	2.8	12.3	0.0	0.0	0.4
SSgA Custom Real Asset Index	2.8	12.2	0.0	-	0.0

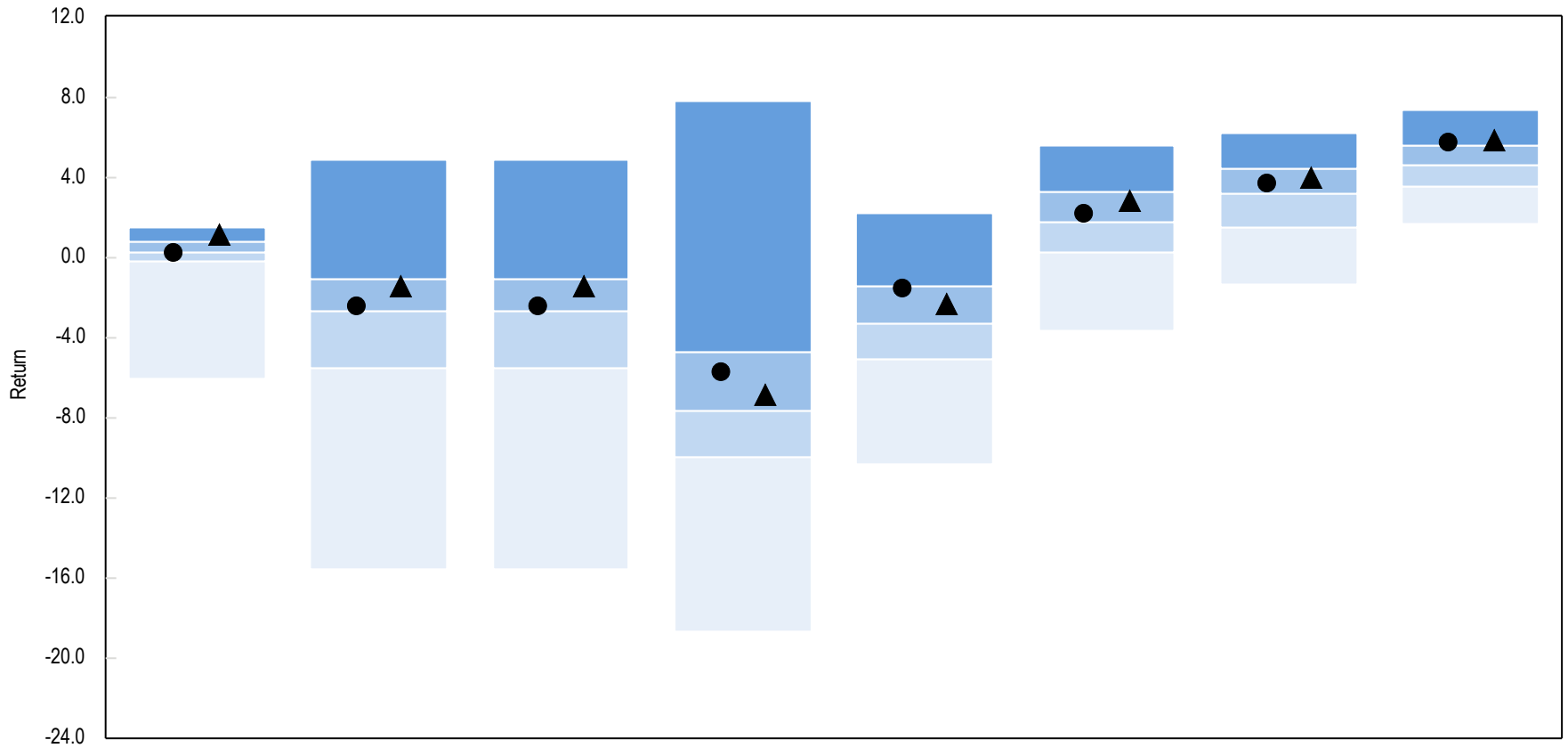
Inflation Hedge
Risk vs. Return

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Statistics Summary
5 Years

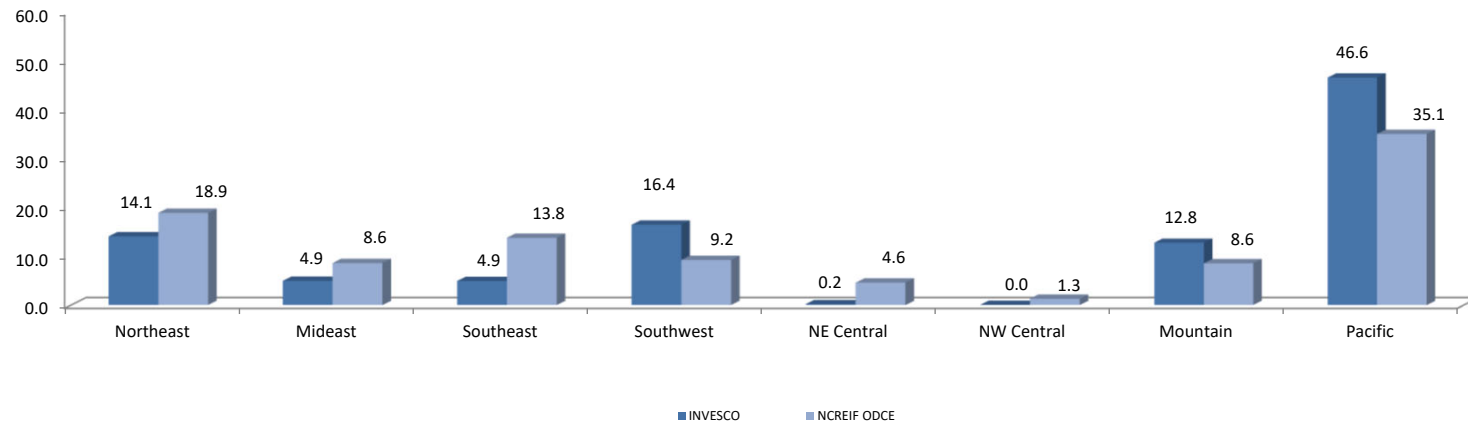
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Inflation Hedge	3.4	6.2	0.2	-0.4	4.9
Blended Inflation Hedge Index	5.5	7.5	0.4	-	0.0
Real Estate	2.2	5.7	0.0	-0.3	2.6
NCREIF ODCE	2.9	7.5	0.1	-	0.0
Invesco	1.0	7.7	-0.1	-0.9	2.1
NCREIF ODCE	2.9	7.5	0.1	-	0.0
Invesco US Val IV	-26.6	26.7	-1.1	-1.2	25.0
NCREIF ODCE	2.9	7.5	0.1	-	0.0
PGIM RE US Debt Fund	5.7	1.0	2.8	0.3	7.4
NCREIF ODCE	2.9	7.5	0.1	-	0.0
Private Real Assets	11.2	10.5	0.8	0.0	20.6
Blended Private Real Assets Index	9.6	19.0	0.5	-	0.0
Public Real Assets	1.8	16.7	0.0	-0.6	3.2
Blended Public Real Assets Index	4.0	14.8	0.2	-	0.0
SSgA Custom Real Asset	4.0	14.6	0.2	-0.1	0.7
SSgA Custom Real Asset Index	4.0	14.8	0.2	-	0.0

InvMetrics All DB All Real Estate Net Return Comparison

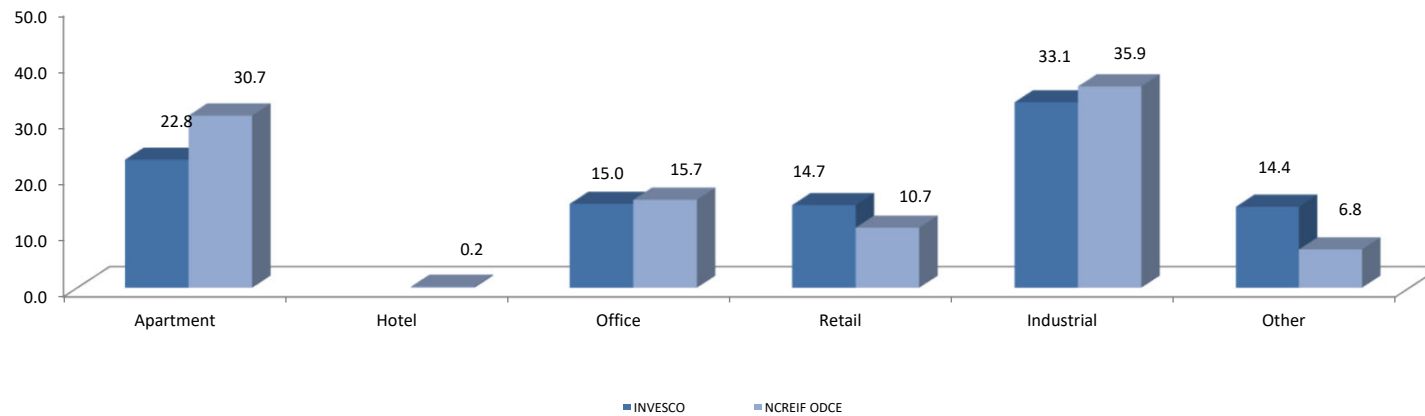


	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
● Real Estate	0.3 (49)	-2.4 (47)	-2.4 (47)	-5.7 (34)	-1.5 (27)	2.2 (42)	3.7 (39)	5.7 (21)
▲ NCREIF ODCE	1.2 (16)	-1.4 (31)	-1.4 (31)	-6.9 (42)	-2.3 (35)	2.9 (32)	4.0 (34)	5.9 (20)
5th Percentile	1.5	4.9	4.9	7.8	2.2	5.6	6.2	7.3
1st Quartile	0.8	-1.0	-1.0	-4.7	-1.4	3.3	4.4	5.6
Median	0.3	-2.6	-2.6	-7.6	-3.3	1.7	3.2	4.6
3rd Quartile	-0.2	-5.5	-5.5	-9.9	-5.1	0.3	1.5	3.6
95th Percentile	-6.1	-15.6	-15.6	-18.7	-10.3	-3.6	-1.3	1.7
Population	193	190	190	188	178	157	136	97

Geographic Diversification



Property Diversification



Cash & Cash Overlay
Risk vs. Return

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

Statistics Summary
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
County Treasury Pool	2.9	1.9	-0.5	-0.5	2.0
90 Day U.S. Treasury Bill	3.9	0.6	-	-	0.0
Cash & Cash Overlay	4.3	0.6	2.3	2.3	0.2
90 Day U.S. Treasury Bill	3.9	0.6	-	-	0.0
General Account	4.4	0.5	3.5	3.5	0.1
90 Day U.S. Treasury Bill	3.9	0.6	-	-	0.0

Acadian Asset Management – MAARS Fund

Acadian Multi-Asset Absolute Return (MAARS) strategy was inceptioned in November 2017. MAARS targets a volatility of 6%-8% and a return of cash plus 5%. This is a multi-factor strategy that aims to exploit behavioral inefficiencies within and across global markets and is designed to be diversifying, dynamic and defensive. It is market neutral, implemented using long and short positions across five primary asset classes (equity, fixed income, currency, commodities, and volatility) and over 100 underlying assets with a focus on liquid instruments. Return forecasts incorporate asset-specific and macroeconomic insights and are utilized to harvest active returns from within and across asset classes through market selection and directional positioning. The strategy integrates risk and return across asset classes. Avoidance of downside events is highlighted in the approach with a greater weighting in their models allocated to down market beneficiaries, such as quality factors, and asymmetric positioning which reduces positions when risk rises. Differentiated attributes of this are its approach and weighting to commodities and its volatility sleeve which can incorporate long volatility.

Angelo, Gordon & Co. – Credit Solutions

The Angelo Gordon (AG) Credit Solutions Fund (CSF) expects to hold concentrated positions of 5-8% of NAV (averaging 30 positions over the life of the Fund with recycling). The Fund is targeting a net 15% IRR with a 5-7% current yield. The Fund should be 70% concentrated in the U.S. with the balance in Europe. Finally, while the opportunities can be sourced from both the public markets and the private markets, AG is finding compelling sources of return at this time through structuring new privately placed secured term loans out of public investments made by the firm. CSF will address corporate credit-based opportunities created in three main areas: 1) trading-based price dislocations that reduce creation multiples (price through the debt that must be repaid before value accrues to other stakeholders) while generating high current income; 2) opportunities in issuers tied to industries directly impacted by COVID-19 where the market's perception of the impact differs from the actual impact; and 3) corporate debt issuers that will be materially impacted by the pandemic and will need to restructure, but whose creation value is materially lower than the issuer's intrinsic value.

Angelo, Gordon & Co. – CSF (Annex) Dislocation II

The Angelo Gordon Annex Dislocation Fund II (ADFII)'s investment aim is to target senior securities of world-class businesses with irreplaceable assets and strong cash flow profiles which, because of market stress, can be purchased at a material discount to what they believe is a company's long-term intrinsic value. ADFII will invest opportunistically in securities or claims of companies in North America and Europe for which prices have, in Angelo Gordon's view, dislocated from long term fundamentals due to situational market volatility and stress.

Angelo, Gordon & Co. – Credit Solutions II

Like its predecessor funds, the Angelo Gordon (AG) Credit Solutions Fund II (CSF II) is an all-weather, solutions-based strategy that targets net returns of 14+% with 5-7% current yield. The Fund will invest in single-name opportunities where price movements and credit documents afford creative financing solutions. This could include companies with upcoming debt maturities, working capital issues, or inefficient capital structures that are inflating financing costs. In these cases, AG will seek to work with management and other creditors to structure a bespoke transaction that avoids bankruptcy and solves the issue for the company in exchange for debt securities with conservative attachment points and healthy yield. While the opportunities are likely to be sourced 75% from the public markets and 25% from the private markets, the "solutions" will likely be private products. During periods of dislocation, the Fund can pivot towards trading-oriented strategies where there is not a need for additional financing, such as sourcing debt in the secondary markets at discounts to intrinsic value. CSF II expects to hold concentrated positions of 5-8% of NAV (averaging 30 positions over the life of the Fund with recycling). The fund should be 70% concentrated in the U.S. with the balance in Europe.

Baillie Gifford – ACWI ex US Focus Equities

ACWI ex US Focus is a fundamental growth strategy. Research is organized primarily by regional teams, with each member of the ACWI ex US Focus Portfolio Construction Group representing a regional team. Four global sector groups also contribute research. Baillie Gifford conducts approximately 2000 company meetings annually both in Edinburgh and onsite. Companies are evaluated on their growth opportunity relative to the average company, their ability to execute on that opportunity, and the degree to which probability of future success is already valued by the market. Baillie Gifford's basic philosophy is that share prices ultimately follow earnings. They believe that the stock market has a recurring tendency to under-appreciate the value of long-term compound growth. The process seeks to add value through use of proprietary fundamental research to identify companies exhibiting some combination of sustained above average growth, and attractive financial characteristics. The portfolio generally holds 60-90 stocks, with country and sector weights +/-10% relative to the index and stock weights +/- 5% relative to the index.

Beach Point Capital Management, L.P. - Beach Point Select Fund

Beach Point Select Fund is a commingled fund vehicle within the firm's Opportunistic Credit strategy. This fund focuses on off-the-run, complex, and less-liquid securities. It is a best ideas portfolio of distressed debt, special situations, private/direct loans, catalyst-driven high yield bonds and bank loans, and credit-informed equities with a North American and European focus. The Select Fund differs from other funds and accounts in the Opportunistic Credit strategy by pursuing a more concentrated portfolio and emphasizing a higher percentage of less-liquid/private investments. Beach Point invests up and down the entire capital structure and it constructs portfolios with a bottom-up, research-driven approach that also takes into account top-down macro considerations. Its investment process includes idea generation, detailed credit analysis, relative value decision making and investment selection, portfolio construction and on-going monitoring. The ultimate goal of its investment process is to produce a well-diversified investment portfolio with limited downside risk and substantial upside potential.

BlackRock – MSCI ACWI ex US IMI Index

The ACWI ex US IMI Index Fund seeks to replicate the return of the MSCI ACWI ex US IMI Index. This index represents the developed equity markets outside of North America, including small cap equity. BlackRock monitors their funds daily to ensure that additions and deletions to the indexes, mergers and acquisitions, restructurings and other capitalization changes are made to the fund in such a way as to minimize tracking error and transactions costs.

BlackRock – Russell 1000 Index

The Russell 1000 Index Fund tracks large U.S. companies and achieve broad diversification with low costs by fully replicating the Russell 1000 Index. BlackRock monitors their funds daily to ensure that additions and deletions to the indexes, mergers and acquisitions, restructurings and other capitalization changes are made to the fund in such a way as to minimize tracking error and transactions costs.

BlackRock (formerly Tennenbaum Capital Partners) - Direct Lending Funds VIII and IX

TCP Direct Lending Fund VIII is a private investment fund managed by Tennenbaum Capital Partners ("TCP"). The Fund is designed to continue TCP's successful strategy of investing in privately-originated, performing senior secured debt primarily in North America-based companies with target enterprise values between \$100 million and \$1.5 billion. The Fund will include positions in 1st lien, 2nd lien and unitranche debt, with a preference for floating-rate debt, which TCP believes provides better flexibility to adapt to market conditions. TCP's direct lending strategy has generated attractive investment opportunities across market cycles, as evidenced by the Firm's prior direct lending track record. Fund VIII targets an unlevered annual yield of approximately 9-12%, with its return primarily driven by current income. SamCERA committed \$35 million to DLF VIII in June 2016 in its unlevered fund sleeve and \$35 million to the DLF IX in June 2019.

Brigade – Opportunistic Credit

Opportunistic Credit is a fundamental, bottom-up strategy focused on high yield corporate bonds and bank loans with tactical allocations to structured securities, convertibles, and other sectors of the bond markets as they become attractive on a relative value basis. While performing credits represent the majority, Brigade will invest up to 35% of the portfolio in distressed securities and restructuring situations if these types of opportunities are attractive on a risk-adjusted basis and the timing is right with respect to the credit cycle. The portfolio is comprised of mostly North American issuers, but they are not restricted geographically and expect to have a moderate allocation to Europe over time. Although the portfolio is generally long-only, Brigade has the ability to implement a limited amount of tactical macro hedges.

CFM - Systematic Global Macro

Capital Fund Management (CFM) Systematic Global Macro (SCM) is a directional strategy that takes long and short positions in liquid future and forwards across 130+ markets and across equities, bonds, currencies, and commodities. It is a new strategy that draws on model signals from existing strategies at the firm – Discus (diversified CTA), CFM ISTrends (trend following) and CFM ISTrend Equity Capped (defensive trend following) - and SamCERA is a seed investor with an attractive fee. SGM's objective is to provide absolute returns that are uncorrelated with traditional asset classes over a long time horizon with an annualized volatility target between 8% and 12%. SGM uses a diverse set of trading strategies that are based on factors (momentum, value, carry, macro and sentiment) across asset classes. These technical and fundamental factors operate at different time scales and can have varying degrees of influence on performance depending on market and economic conditions. An additional global macro defensive overlay is combined with these outputs in constructing the final portfolio. CFM uses a form of portfolio construction known as agnostic risk parity to ensure that the SGM portfolio is diversified on an out-of-sample basis. The goal of SGM is to generate consistent returns while limiting drawdowns.

DE Shaw – DE Shaw US Broad Market Core Alpha Extension Fund

The D. E. Shaw group believes that there exist some market inefficiencies that may be identified through quantitative analysis, advanced technology, and the insight of practitioners. Identifying these inefficiencies involves a process of hypothesis formulation, testing, and validation. Importantly, to avoid data-mining, the hypothesis formulation precedes the analysis of the historical data. D.E. Shaw's Structured Equity strategies rely largely on quantitative and computational investment techniques developed by the D. E. Shaw over the last two decades in the course of research conducted for purposes of managing the firm's hedge funds. D.E. Shaw's investment process involves a suite of quantitative models, each designed to capitalize on a distinct and uncorrelated set of market inefficiencies. Some of these models are technical in nature and involve price and volume inputs. Other models rely on fundamental data, such as figures gleaned from corporate balance sheets or income statements. Still others, again quantitative, anticipate or react to a particular corporate event or set of events. These models typically operate with forecast horizons of a few weeks to many months. The ability to trade on shorter-term signals distinguishes D.E. Shaw from many of its long only and 130/30 peers. Portfolio construction involves the use of a proprietary optimizer which runs dynamically throughout the trading day. The portfolio is broadly diversified with several hundred long and short positions. Over- and under-weighting of sectors and industries relative to the benchmark will be quite modest, with the intention that most of the alpha be generated by security selection. The US Broad Market Core Alpha Extension Fund is a 130/30 strategy which maintains a beta that is approximately neutral to the Russell 1000 Index.

DoubleLine – Securitized Income

The DoubleLine Securitized Income strategy is an actively managed, liquid, long only, intermediate-term fixed income product. The primary objective of the strategy is to seek and maximize current income and total return by utilizing a combination of Agency MBS and structured credit. The DoubleLine Structured Products team aims to offer clients investment grade exposure to both interest rate duration and credit spread to provide a more attractive total return profile compared to the benchmark. Securitized Income seeks to maximize income and total return by investing across the structured products universe, focusing on agency mortgage-backed securities (MBS) and investment grade securitized credit. DoubleLine takes a barbelled approach to investing in the securitized market, and they will separate rates from credit and will adjust the allocations to both at the based on the economic cycle and opportunities. Duration positioning is achieved through Agency MBS, Agency CMBS, and treasuries while credit exposure is attained through all areas of structured credit.

Eaton Vance – Emerging Markets Debt Opportunities Fund

Eaton Vance's Emerging Market Debt Opportunities (EMDO) strategy utilizes a combination approach to build a portfolio of fixed income securities that is highly diversified across geographies, issuers, credit quality, and currencies to achieve a higher expected return relative to the benchmark with similar volatility.

Fidelity (FIAM) – Broad Market Duration Separate Account

Pyramis' Broad Market Duration (BMD) investment strategy seeks to achieve absolute and risk-adjusted returns in excess of the BC U.S. Aggregate Index, focusing its investment in US Treasuries, agencies, investment grade corporate bonds, mortgage-backed and asset-backed securities. The BMD commingled pool can also hold small, opportunistic positions in out-of-benchmark securities, such as inflation-linked bonds. The investable universe includes all US dollar denominated, investment grade debt securities. The BMD investment approach emphasizes issuer and sector valuation and individual security selection. Through the integration of fundamental and quantitative research and trading, the BMD strategy is implemented in a team environment. Risk management technology is utilized to explicitly quantify benchmark exposures on a daily basis, and Pyramis uses the same analytical framework to assess both index and portfolio risk. Tracking error should range between 40 and 60 basis points per annum over the benchmark, and stringent portfolio construction risk control rules are strictly adhered to.

Graham – Quant Macro Fund

Graham Quant Macro ("GQM") is a directional, long and short strategy that utilizes fundamental and price-based indicators to establish return forecasts across global interest rates, foreign exchange, stock indices and commodities. The strategy incorporates a variety of submodels that generate macro fundamental forecasts, assess yield and earnings differentials, compare current valuations relative to historic fair value, and analyze directional price trends across markets. Quantitative risk management and portfolio construction techniques are used to diversify risk across the portfolio and enhance risk-adjusted returns. Historically, the average holding period has been approximately eight to ten weeks, although the sub-models will make daily adjustments to positions. The strategy is designed to have low correlation to traditional markets and other alternative strategies and has the potential to provide significant portfolio diversification benefits.

Harrison Street Core Property

Based in Chicago, Harrison Street's exclusive focus since inception in 2005 has been investing in non-core property sectors of the real estate market. The Harrison Street Core Fund is an open-end fund that invests primarily in stabilized education, healthcare, and self-storage real estate assets in the United States using modest leverage with an emphasis on generating current income. The focus on these alternative property types is intended to concentrate on areas of the real estate market that are less GDP sensitive with demand drivers that are more demographic driven such as aging populations, education growth and healthcare delivery. Each of these areas tend to be less tied to the business cycle, have fragmented ownership and more operationally intensive. The fund acts as a diversifier within real estate portfolios with sector exposures that are not a typical focus of other core ODCE funds.

INVESCO Realty Advisors – INVESCO Core Equity, LLC

SamCERA is a founding member of INVESCO's open-end Core Equity real estate fund and rolled its separate account properties into the fund. INVESCO Core Equity, LLC (the "Fund") is a perpetual life, open-end vehicle which invests in a diversified portfolio of institutional quality office, retail, industrial and multifamily residential real estate assets. The Fund buys core properties that are located within the United States, typically requiring an investment of \$10 million or more. The portfolio cannot be more than 30% leveraged.

INVESCO Realty Advisors – INVESCO US Val IV, V, & VI

Invesco has provided SamCERA with Core Real Estate exposure since 2004 through the Invesco Core Equity Fund. The Invesco real estate team manages around \$62B in assets with investments and offices around the globe. Invesco Value Fund's looks to acquire fundamentally sound but broken "core" assets that can be repositioned into institutional-quality, income producing properties. Investments are limited to direct equity interests in office, multi-family, retail and industrial properties across the US. The Fund is expected to be geographically concentrated in U.S. gateway cities and top 25 Metropolitan Statistical Areas (MSA's). Invesco Value Fund's provide a complement to the more conservative Invesco Core Fund and offers the potential of enhanced returns to the SamCERA Real Estate portfolio.

Insight Investments – Cash Flow Matched Liquidity

Insight is the fixed income sleeve of Mellon Capital. The strategy seeks to invest in short duration fixed income securities that match the negative cash flows of the Plan (similar to an LDI plan). Insight receives estimates of three years of cash flows from the actuarial report. Once a year, if market conditions allow, SamCERA will re-invest "year 3" net cash flows. Insight uses their credit analysis team for analyzing all credits or potential investments to the fund.

Mondrian Investment Partners – International Equity

Mondrian is a value-oriented, defensive manager whose investment philosophy is based on the principle that investments must be evaluated for their fundamental long-term value. The firm's philosophy involves three stated investment objectives: 1) provide a rate of return meaningfully greater than the client's domestic rate of inflation, 2) structure client portfolios that preserve capital during protracted international market declines, and 3) provide portfolio performance that is less volatile than benchmark indices and other international managers. Mondrian applies typical value screening criteria to a universe of 1,500 stocks, from which 500 are selected for more detailed work. Through fundamental research, and the deliberations of the Investment Committee, the universe is further reduced to a list of 150 stocks. The investment team conducts detailed fundamental analysis on the remaining stocks, a process which includes applying the firm's dividend discount model consistently across all markets and industries. Mondrian also uses a purchasing power parity model to give an accurate currency comparison of the value of the stocks under consideration. The firm will only consider buying stocks in countries with good investor protection practices and relatively simple repatriation procedures. A computer-based optimization program is employed in the portfolio construction process. Mondrian's portfolio holds 80-125 issues.

NISA – Core Bond

NISA applies a risk-controlled approach to all of its fixed income portfolios. This approach does not permit large bets or positions that generate significant tracking error versus the benchmark. Instead, NISA invests in a large number of small, diversified, active positions which seek tight tracking error to the chosen benchmark. Benchmark weight is a significant consideration when constructing and managing portfolios. The investment strategy is comprised of strategic (top-down) and tactical (bottom-up) decisions. Strategic decisions include sector selection and yield curve positioning while tactical decisions include industry and security selection and trading activity. Review of both strategic and tactical decisions is continual. The amount of portfolio risk budget devoted to one aspect versus the other will change as market conditions warrant. In general, strategic decisions change relatively infrequently, while tactical decisions, especially security selection, will change fairly often as market conditions provide opportunities. Over a typical market cycle, the bottom-up is expected to contribute to 70% of value-added while top-down is roughly 30%.

NISA – Long Treasury

A passive implementation of long treasuries managed to the Bloomberg Long Treasury Index. This strategy seeks to replicate the characteristics of its benchmark.

PanAgora Asset Management – Defensive U.S. Equity Low Volatility

PanAgora's Defensive Equity strategy seeks to harness the 'low-volatility premium' through a systematic, factor-based investment approach focused on achieving market-like returns with less risk. This is accomplished by leveraging PanAgora's proprietary Risk Parity portfolio construction methodology, which seeks to efficiently capture the equity premium associated with low volatility, while taking minimal unintended risks. Since the firm's inception, PanAgora has been using quantitative techniques to integrate fundamental insights with large amounts of dynamic market data. They score individual securities on a factor basis and also on a diversification basis, in the context of a broadly diversified portfolio. The portfolio construction process optimizes the portfolio around the intended factor exposure (volatility) while maintaining equal risk contribution across sectors (ex., overweight utilities and consumer staples, underweight financials and technology). Shorter term volatility and longer term correlation analysis is combined in the approach. The result for the US Defensive Equity strategy is a portfolio expected to have lower volatility (beta around 0.65-0.75), and similar returns relative to the capitalization-weighted benchmark over a full market cycle. PanAgora expects the strategy to participate in approximately 75% of up markets and 55% in down markets.

Parametric Overlay – Cash Overlay and Currency Hedge

Parametric's cash overlay program is an efficient way for SamCERA to maintain its target asset allocation in a systematic fashion through cash securitization at the fund and manager level transition/reallocation support and asset class rebalancing back to target within defined bands. The cash overlay program is invested synthetically using liquid futures with cash balances reviewed daily. A combination of large and small cap futures implementation is the proxy for private equity. SamCERA's investment guidelines initially allowed only for cash overlay. Rebalancing was added to the SamCERA program in January 2014. Cash overlay and rebalancing is expected to add 10-20 bps to the portfolio over time. The purpose of the currency is first and foremost to lower portfolio risk and secondarily to add incremental performance.

PIMCO Diversified

PIMCO's Diversified Income (DI) Fund is a multi-sector strategy that invests across a broad spectrum of global credit market sectors, including investment grade and high yield corporate debt, as well as emerging markets. The allocation among these will vary based on PIMCO's assessment of global trends and relative valuations. This active and dynamic approach allows for increased responsiveness in asset allocation to changing economic and market conditions while remaining anchored by PIMCO's investment process and longer-term orientation. The ability to invest globally helps to improve diversification and may allow investors to benefit from differences in business cycles across regions and credit quality trends across credit sectors. PIMCO's DI investment strategy seeks to provide high yield-like returns with lower volatility against a blended index (1/3 Bloomberg Barclays Global Agg Credit ex-EM; 1/3 BofA Merrill Lynch BB-B rated Developed Markets High Yield; 1/3 JPMorgan EMBI Global). The fund allows for a duration band of 3-8 years. The team focuses its investments into these groups: credit strategies (investment grade, high yield, emerging markets and non-core credits including MBS, municipals and other govt-related sectors); duration strategies (U.S. and non-U.S. duration) and currencies (tactical non-USD exposure).

PIMCO – MAARS

PIMCO MAARS is an alternative risk premia strategy that looks for risks associated with: (1) Supply and Demand Constraints, (2) Behavioral Biases, and (3) Asymmetric Risks (event risk). As reflected in the design of the MAARS strategies, PIMCO believes that alternative risk premia strategies are best implemented using a systematic approach that minimizes the discretionary inputs in day-to-day portfolio management. MAARS places a greater emphasis and weighting on global interest rates, currencies and commodities and a lesser emphasis on equities than many of its Alt Beta peers. Relative to Alt Beta peers, the strategy's rates and currency (FX) models are particularly robust, reflective of PIMCO's core competency and long history managing these asset classes using derivative instruments.

PIMCO Private Income Fund

PIMCO Private Income Fund (PIF) uses an opportunistic and flexible approach to global private credit. PIF provides a total return oriented global credit exposure utilizing both top-down sector relative value and bottom up security selection. The strategy invests across private residential, commercial, corporate and specialty finance markets. PIMCO's Private Income Fund (PIF) is targeting 8-12% net returns with income providing most of the fund's returns. The Private Income Investment Committee (IC) identifies market themes and direction for their relative value framework, and sector specialists provide recommendations to the PM team within that construct. PIF has the ability to invest throughout the capitalization structure. The fund can use a moderate amount of leverage to enhance portfolio returns (1.5 times with a hard cap of 2 times).

PGIM RE Debt

PGIM Real Estate US Debt Fund (PREDS) focuses on a loan origination strategy with a mix of 20% senior long duration loans on stable assets, 60% senior short/medium duration loans on stable and transitional assets, and 20% mezzanine mid/long duration debt. SamCERA was a founding investor in the PREDS strategy which invests in US commercial real estate debt in an open-ended vehicle with a return target of 7-8% (gross) coming from stable current income. The fund makes investments in first lien mortgages and mezzanine debt. First lien mortgages can be floating rate or fixed rate, but only floating rate loans will use leverage. Subordinate investments (mezzanine debt and preferred equity) will be limited by design. The fund can source and invest in secondary loans through a variety of Prudential real estate professionals, but the primary focus will be on direct origination through the real estate finance team.

PGIM Quantitative Solutions – Small-Cap Core

Quantitative Management Associates (QMA) utilizes a bottom-up quantitative framework in order provide a diversified exposure to core U.S. small-cap stocks, while attempting to produce consistent outperformance versus the benchmark with moderate tracking error levels. QMA uses an adaptive, systematic investment process to exploit opportunities created by mispriced securities to consistently add value over long time periods. Bottom-up stock selection drives exposure to key sources of alpha (valuation, growth, and quality). The QMA stock selection model adapts to changes in company growth rates and market environments by putting more emphasis on valuation for slowly growing companies, and more emphasis on future growth projections for companies with higher projected growth rates.

Record Dynamic Currency

Record is one of the world's largest and longest standing currency managers. The Record Dynamic Currency Hedging program uses a systematic process which exploits inefficiencies in the FX markets. The strategy focuses on currencies' tendency to trend, in an explicable, repeatable way.

State Street Global Advisors (SSgA) Custom Real Asset

SSgA Custom Real Asset portfolio uses a portfolio of liquid real assets to proxy private real assets. The portfolio is comprised of equal weightings of the Bloomberg Roll Select Commodity Index, S&P Global Mid-Large Cap Natural Resources Index, S&P Global Infrastructure Index, and Bloomberg Barclays TIPS Index. SSgA provides beta exposure through these underlying liquid components which can be customized to changing client needs (ex., TIPS was added in May 2020 with the other three parts of the portfolio reduced pro-rata). The portfolio is used to fund upcoming private real asset mandates.

Stockbridge Value IV

Stockbridge Value IV will implement a value-added strategy that will seek to own assets that are undervalued, underutilized, and/or not operating to their full potential. The manager will add value with their internal asset management team through active strategies including additional capital investment, leasing, recapitalization, renovation and/or development. The fund will target three to five year holding periods for investments, with disposition taking place after the completion of the value-add strategy. The fund will target 15 to 25 mid-sized investments, diversified by geography and property type. The strategy will target 21 markets in the United States in which the firm has boots on the ground coverage with dedicated acquisitions professionals and asset managers responsible for knowing each market extensively with a vast network of relationships.

White Oak - White Oak Yield Spectrum Fund/Fund V

The White Oak Yield Spectrum Fund's objective is to earn substantial current income by originating, extending, and/or investing in a diversified portfolio of primarily senior secured corporate credit and debt instruments consisting of term loans, asset-based loans and equipment leases and loans issued by small to middle-market companies located primarily in the United States and Canada. It focuses on providing self-originated deals for predominantly non-sponsored, privately-held borrowers.

Total Plan Policy Index	As of															
	7/1/23	3/1/23	10/1/22	7/1/22	2/1/21	1/1/21	7/1/20	4/1/20	10/1/19	7/1/19	4/1/19	1/1/19	10/1/18	4/1/18	10/1/17	
60/40 MSCI World/Bloomberg Global Aggregate (RP)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	
91 Day T-Bills	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Blended Opportunistic Index	11.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Bloomberg US Govt/Credit 1-3 Yr. TR	4.5%	4.5%	4.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Bloomberg Aggregate	9.5%	12.5%	13.5%	16.5%	18.0%	21.0%	21.0%	18.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	
Bloomberg BA Intermediate HY	0.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	8.0%	8.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	
Bloomberg Long Treasury	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Bloomberg TIPS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Blended Public Real Assets	3.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	0.0%	
Blended Private Real Assets	5.0%	5.0%	4.0%	4.0%	4.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	8.0%	
Libor +4% (HF)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	
SOFR +4% (HF)	6.0%	7.0%	7.0%	7.0%	7.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
MSCI ACWI ex US IMI 100% Hedged (Net)	9.0%	9.5%	9.5%	9.5%	9.5%	9.0%	9.0%	9.0%	9.0%	7.6%	5.7%	3.8%	1.9%	0.0%	0.0%	
MSCI ACWI ex-US IMI (Net)	9.0%	9.5%	9.5%	9.5%	9.5%	9.0%	9.0%	9.0%	9.0%	11.4%	13.3%	15.2%	17.1%	19.0%	19.0%	
NCREIF ODCE	9.0%	9.0%	9.0%	9.0%	9.0%	10.0%	10.0%	9.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	
Russell 3000	23.0%	21.0%	21.0%	21.0%	22.0%	21.0%	21.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	21.0%	21.0%	
Russell 3000 +3% (PE)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	
Russell 3000 +3% 1Q Lag (PE)	7.0%	7.0%	7.0%	7.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	7.0%	0.0%	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Simple Benchmark	As of			
	7/1/23	3/1/23	10/1/22	7/1/22
MSCI ACWI IMI	59.0%	57.0%	57.0%	57.0%
Bloomberg US Aggregate	18.5%	19.5%	20.5%	23.5%
NFI ODCE	17.0%	18.0%	17.0%	17.0%
Bloomberg 1-3 Yr Govt/Credit Index	5.5%	5.5%	5.5%	2.5%
	100.0%	100.0%	100.0%	100.0%

Public Equity Benchmark	As of:																				
	7/1/23	7/1/22	2/1/21	7/1/20	10/1/19	7/1/19	4/1/19	1/1/19	10/1/18	10/1/17	2/1/17	10/1/16	9/1/16	1/1/16	1/1/14	10/1/10	5/1/07	6/1/00	3/1/99	9/1/98	1/1/96
MSCI ACWI ex-US	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	34.0%	31.3%	23.1%	0.0%	0.0%	0.0%
MSCI ACWI ex US IMI 100% Hedged (Net)	22.0%	23.8%	23.2%	23.1%	22.5%	18.5%	13.9%	9.3%	4.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI ACWI ex-US IMI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	47.5%	45.2%	40.4%	41.7%	41.7%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI ACWI ex US IMI (Net)	22.0%	23.8%	23.2%	23.1%	22.5%	27.8%	32.4%	37.0%	41.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Russell 1000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	48.0%	52.8%	55.2%	61.5%	35.5%	33.3%	33.3%
Russell 1000 Value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	8.4%	0.0%
Russell 2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	12.0%	13.2%	13.5%	15.4%	24.2%	25.0%	25.0%
Russell 3000	56.1%	52.5%	53.7%	53.9%	55.0%	53.7%	53.7%	53.7%	53.7%	52.5%	54.8%	59.6%	58.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
S&P 500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

US Equity Benchmark	As of:						
	9/1/16	1/1/16	6/1/00	3/1/99	9/1/98	7/1/96	1/1/95
Russell 1000	0.0%	85.7%	80.0%	52.0%	50.0%	50.0%	69.0%
Russell 1000 Value	0.0%	0.0%	0.0%	12.0%	12.5%	0.0%	0.0%
Russell 2000	0.0%	14.3%	20.0%	36.0%	37.5%	37.5%	14.0%
Russell 3000	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
S & P 500	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	17.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

International Equity Benchmark	As of:								
	10/1/19	7/1/19	4/1/19	1/1/19	10/1/18	10/1/17	1/1/14	6/1/00	1/1/96
MSCI ACWI ex US	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
MSCI ACWI ex US IMI 100% Hedged (Net)	50.0%	40.0%	30.0%	20.0%	10.0%	0.0%	0.0%	100.0%	0.0%
MSCI ACWI ex US IMI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
MSCI ACWI ex US IMI (Net)	50.0%	60.0%	70.0%	80.0%	90.0%	100.0%	0.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Defensive Fixed Income Benchmark	As of:	
	7/1/23	7/1/22
Bloomberg U.S. Aggregate Index	76.0%	100.0%
Bloomberg U.S. Treasury Long Index	24.0%	0.0%
	100.0%	100.0%

Opportunistic Credit Benchmark	As of:	
	7/1/23	7/1/22
Bloomberg US Corporate HY	73.0%	0.0%
Credit Suisse Leveraged Loan Index 1 Qtr Lag	27.0%	0.0%
Bloomberg BA Intermediate HY	0.0%	100.0%
	100.0%	100.0%

Public Credit Benchmark	As of:		
	7/1/23	1/1/14	12/1/09
Bloomberg US Corporate HY	100.0%	0.0%	100.0%
Bloomberg BA Intermediate HY	0.0%	100.0%	0.0%
Bloomberg Credit BAA	0.0%	0.0%	100.0%
	100.0%	100.0%	100.0%

Private Credit Benchmark	As of:		
	7/1/23	1/1/14	12/1/09
Credit Suisse Leveraged Loan Index 1 Qtr Lag	100.0%	0.0%	0.0%
Bloomberg US Corporate HY	0.0%	0.0%	100.0%
Cliffwater Direct Lending Index	0.0%	100.0%	0.0%
Bloomberg Credit BAA	0.0%	0.0%	100.0%
	100.0%	100.0%	100.0%

Private Equity Benchmark		As of:	
	4/1/18	10/1/10	
Russell 3000 +3% 1Q Lag	100.0%	0.0%	
Russell 3000 +3%	0.0%	100.0%	
	100.0%	100.0%	

Absolute Return Benchmark		As of:	
	1/1/21	10/1/10	
Libor +4%	0.00%	100.00%	
SOFR +4%	100.0%	0.0%	
	100.0%	0.0%	

Inflation Hedge Benchmark		As of:								
	3/1/23	2/1/21	7/1/20	4/1/20	10/1/19	4/1/18	2/1/17	10/1/16	4/1/16	
Bloomberg TIPS	0.00%	0.00%	0.00%	0.00%	5.88%	11.1%	12.5%	14.3%	14.3%	
Bloomberg Commodity	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%	21.4%	
CPI + 5% (RA)	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%	14.3%	
Blended Public Real Assets	22.22%	23.53%	23.53%	35.29%	35.29%	33.3%	0.0%	0.0%	0.0%	
Blended Private Real Assets	27.78%	23.53%	17.65%	11.77%	11.77%	11.1%	43.8%	35.7%	0.0%	
NCREIF ODCE	50.00%	52.94%	58.82%	52.94%	47.06%	44.4%	43.8%	50.0%	50.0%	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Public Real Assets Benchmark		As of:		
	5/1/20	10/1/16	1/1/14	
Bloomberg Roll Select Commodity	25.0%	34.0%	0.0%	
S&P Global Large-MidCap Commodity and Resources	25.0%	33.0%	0.0%	
S&P Global Infrastructure	25.0%	33.0%	0.0%	
CPI + 5%	0.0%	0.0%	100.0%	
Bloomberg TIPS	25.0%	0.0%	0.0%	
	100.0%	100.0%	100.0%	

Private Real Assets Benchmark		As of:			
	1/1/21	4/1/18	10/1/16	1/1/14	
Bloomberg Roll Select Commodity	0.00%	0.00%	34.00%	0.0%	
S&P Global Large-MidCap Commodity and Resources	0.00%	0.00%	33.00%	0.0%	
S&P Global Infrastructure	0.00%	0.00%	33.00%	0.0%	
50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL	0.00%	100.00%	0.00%	0.0%	
75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL	100.00%	0.00%	0.00%	0.0%	
CPI + 5%	0.00%	0.00%	0.00%	100.0%	
	100.0%	100.0%	100.0%	100.0%	

Private RA Secondary Benchmark		As of:	
	9/1/14		
Cambridge Associates Private Natural Resources 1 Qtr Lag	50.0%		
Cambridge Associates Private Infrastructure 1 Qtr Lag	50.0%		
	100.0%		

Real Estate Benchmark		As of:		
	1/1/09	6/1/00	7/1/96	
10 Year Treasury +2%	0.0%	0.0%	100.0%	
NCREIF ODCE	100.0%	0.0%	0.0%	
NCREIF Property	0.0%	100.0%	0.0%	
	100.0%	100.0%	100.0%	

Liquidity Benchmark		As of:	
	10/1/22	7/1/22	
Bloomberg US Govt/Credit 1-3 Yr. TR	81.8%	60.0%	
91 Day T-Bills	18.2%	40.0%	
	100.0%	100.0%	

Baillie Gifford Benchmark	As of:	
	1/1/14	5/1/12
MSCI ACWI ex-US	100.0%	0.0%
MSCI EAFE	0.0%	100.0%
	100.0%	100.0%

Baillie Gifford Secondary Benchmark	As of:	
	1/1/14	5/1/12
MSCI ACWI ex-US Growth	100.0%	0.0%
MSCI EAFE Growth	0.0%	100.0%
	100.0%	100.0%

Brigade Secondary Benchmark	As of:	
	8/1/10	
Bloomberg High Yield	50.0%	
Credit Suisse Leveraged Loans	50.0%	
	100.0%	

PIMCO Diversified	As of:	
	9/1/17	
JPMorgan EMBI Global	33.333%	
BofAMLBB-BRatedDvlpdMktsHYHdgUSD	33.333%	
Global Agg Credit Ex EM USD hedged	33.334%	
	100.0%	

SSgA Custom Real Assets	As of:	
	5/1/20	11/1/16
Bloomberg Roll Select Commodity	25.00%	33.33%
S&P Global Large-MidCap Commodity and Resources	25.00%	33.33%
S&P Global Infrastructure	25.00%	33.34%
Bloomberg TIPS	25.00%	0.00%
	100.0%	100.0%

Baillie Gifford

First \$25 million:	0.60% per annum
Next \$75 million:	0.50% per annum
Next \$300 million:	0.40% per annum
Thereafter:	0.30% per annum

BlackRock-Russell 1000 Index Fund

On All Assets:	0.01% per annum
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BlackRock-MSCI ACWI ex US IMI Index Fund

On All Assets:	0.045% per annum
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DoubleLine

On All Assets:	0.30% per annum
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NISA

First \$500 million:	0.15% per annum
Next \$1 billion:	0.125% per annum
Next \$1 billion:	0.105% per annum
Next \$1.5 billion	0.085% per annum
Thereafter:	0.065% per annum

Eaton Vance

On All Assets:	0.54% per annum
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FIAM Bond

First \$50 million:	0.25% per annum
Next \$50 million:	0.20% per annum
Next \$100 million:	0.125% per annum
Thereafter:	0.10% per annum

PanAgora Asset Management

First \$50 million:	0.25% per annum
Next \$50 million:	0.15% per annum
Thereafter:	0.10% per annum

Parametric Overlay

First \$50 million:	0.12% per annum
Next \$100 million:	0.10% per annum
Thereafter:	0.05% per annum
Plus monthly reporting fee of \$1500	

PIMCO Diversified

On All Assets:	0.75% per annum
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PGIM Quantitative Solutions

First \$100 million:	0.55% per annum
Next \$100 million:	0.53% per annum
Thereafter:	0.49% per annum

Mondrian Investment Partners

First \$50 million:	1.00% per annum
Next \$150 million:	0.19% per annum
Thereafter:	0.33% per annum

Insight Investment

First \$200 million:	0.09% per annum
Next \$300 million:	0.08% per annum
Thereafter:	0.06% per annum

Manager Compliance (Net)

Fund Name	Benchmark	Rule 1	Rule 2	Rule 3
Acadian US MGD V	Russell 1000 Index	-	-	-
DE Shaw	Russell 1000 Index	✓	✓	✓
PanAgora Defuseq	Russell 1000 Index	✗	✗	✗
PGIM Quant Solutions	Russell 2000 Index	✓	✗	✓
Baillie Gifford	MSCI ACWI ex US	✗	✗	✗
Mondrian	MSCI AC World ex USA Value	✗	✗	✗
DoubleLine	Blmbg. U.S. Aggregate Index	-	-	-
FIAM Bond	Blmbg. U.S. Aggregate Index	✓	✓	✓
NISA Core Bond	Blmbg. U.S. Aggregate Index	-	-	-
NISA Long Treasury	Blmbg. U.S. Treasury: Long	-	-	-
AG CSF ADF II	Blmbg. U.S. Corp: High Yield Index	-	-	-
AG CSF II	Blmbg. U.S. Corp: High Yield Index	-	-	-
Angelo Gordon Credit Solutions	Blmbg. U.S. Corp: High Yield Index	-	-	-
Beach Point Select	Blmbg. U.S. Corp: High Yield Index	✓	✓	✓
Brigade Capital	Blmbg. U.S. Corp: High Yield Index	✓	✓	✓
PIMCO Diversified	Blmbg. U.S. Corp: High Yield Index	-	✗	-
One William Street	Blmbg. U.S. Corp: High Yield Index	-	-	-
Eaton Vance Emerging Markets Debt Opportunities Fund	JPM EMB (JEMB) Hard Currency/Local Currency 50-50	-	-	-
CFM Systematic Global Macro	Absolute Return Custom Index	-	-	-
Graham Quant Macro	Absolute Return Custom Index	-	-	-
PIMCO MAARS Fund LP	Absolute Return Custom Index	-	-	-

Rule 1 - Manager has underperformed the benchmark index for the five year period.

Rule 2 - Manager has underperformed the 50th percentile in the appropriate style universe for the five year period

Rule 3 - Excess 5 Year Sharpe Ratio vs. Benchmark is positive.

Manager Compliance (Gross)

Fund Name	Benchmark	Rule 1	Rule 2	Rule 3
Acadian US MGD V	Russell 1000 Index	-	-	-
DE Shaw	Russell 1000 Index	✓	✓	✓
PanAgora Defuseq	Russell 1000 Index	✗	✗	✗
PGIM Quant Solutions	Russell 2000 Index	✓	✗	✓
Baillie Gifford	MSCI ACWI ex US	✗	✗	✗
Mondrian	MSCI AC World ex USA Value	✗	✗	✗
DoubleLine	Blmbg. U.S. Aggregate Index	-	-	-
FIAM Bond	Blmbg. U.S. Aggregate Index	✓	✓	✓
NISA Core Bond	Blmbg. U.S. Aggregate Index	-	-	-
NISA Long Treasury	Blmbg. U.S. Treasury: Long	-	-	-
AG CSF ADF II	Blmbg. U.S. Corp: High Yield Index	-	-	-
AG CSF II	Blmbg. U.S. Corp: High Yield Index	-	-	-
Angelo Gordon Credit Solutions	Blmbg. U.S. Corp: High Yield Index	-	-	-
Beach Point Select	Blmbg. U.S. Corp: High Yield Index	✓	✓	✓
Brigade Capital	Blmbg. U.S. Corp: High Yield Index	✓	✓	✓
PIMCO Diversified	Blmbg. U.S. Corp: High Yield Index	-	✗	-
One William Street	Blmbg. U.S. Corp: High Yield Index	-	-	-
Eaton Vance Emerging Markets Debt Opportunities Fund	JPM EMB (JEMB) Hard Currency/Local Currency 50-50	-	-	-
CFM Systematic Global Macro	Absolute Return Custom Index	-	-	-
Graham Quant Macro	Absolute Return Custom Index	-	-	-
PIMCO MAARS Fund LP	Absolute Return Custom Index	-	-	-

Rule 1 - Manager has underperformed the benchmark index for the five year period.

Rule 2 - Manager has underperformed the 50th percentile in the appropriate style universe for the five year period

Rule 3 - Excess 5 Year Sharpe Ratio vs. Benchmark is positive.

Total Fund
Performance Summary (Gross of Fees)

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Total Fund**	6,702,993,073	100.0	-0.8 (54)	3.9 (47)	9.4 (39)	9.4 (73)	3.4 (34)	6.3 (80)	6.7 (67)
Policy Index			0.5 (5)	5.1 (8)	12.5 (1)	12.3 (11)	4.5 (13)	7.2 (44)	7.3 (42)
Simple Benchmark			-1.1 (65)	4.1 (42)	9.7 (33)	10.5 (45)	2.2 (77)	6.4 (79)	6.9 (58)
Total Fund ex Overlay	6,688,257,703	99.8	-0.8 (52)	3.9 (48)	9.4 (42)	9.2 (74)	3.3 (37)	6.2 (80)	6.6 (73)
Policy Index			0.5 (5)	5.1 (8)	12.5 (1)	12.3 (11)	4.5 (13)	7.2 (44)	7.3 (42)
Simple Benchmark			-1.1 (65)	4.1 (42)	9.7 (33)	10.5 (45)	2.2 (77)	6.4 (79)	6.9 (58)
Growth Portfolio	4,017,014,567	59.9	-1.0	5.4	13.6	14.3	-	-	-
Blended Growth Index			0.7	6.2	18.2	19.2	6.8	10.6	-
US Equity	1,721,958,853	25.7	2.0 (56)	9.6 (4)	23.2 (31)	21.4 (72)	8.5 (12)	12.6 (69)	11.7 (64)
Blended US Equity Index			2.6 (20)	9.0 (21)	23.8 (16)	24.9 (20)	8.0 (27)	13.9 (21)	12.5 (28)
Russell 3000 Index			2.6 (20)	9.0 (21)	23.8 (16)	24.9 (20)	8.0 (27)	13.9 (21)	12.5 (25)
BlackRock Russell 1000	1,004,573,089	15.0	2.7 (26)	9.0 (22)	24.5 (38)	25.5 (34)	8.4 (46)	14.3 (38)	-
DE Shaw	268,978,757	4.0	4.4 (7)	13.7 (1)	34.5 (2)	27.7 (17)	11.0 (11)	14.9 (28)	14.0 (10)
PanAgora Defuseq	271,425,545	4.0	-1.4 (86)	8.4 (34)	15.1 (85)	9.3 (98)	5.3 (82)	8.2 (98)	-
Russell 1000 Index			2.7 (25)	9.0 (21)	24.5 (38)	25.5 (35)	8.4 (46)	14.3 (39)	12.9 (40)
PGIM Quant Solutions	133,530,892	2.0	-0.6 (60)	9.2 (47)	12.0 (47)	16.9 (25)	6.2 (12)	9.5 (53)	-
Russell 2000 Index			0.3 (49)	9.6 (40)	11.5 (52)	14.2 (53)	1.2 (70)	7.4 (82)	7.8 (80)
International Equity	1,095,796,445	16.3	-6.3 (15)	1.2 (10)	7.0 (21)	11.5 (29)	1.4 (31)	4.9 (37)	5.7 (37)
Blended International Equity Index			-4.3 (5)	1.4 (9)	9.7 (6)	12.9 (15)	3.6 (7)	6.3 (14)	6.2 (22)
Baillie Gifford	265,952,700	4.0	-8.8 (85)	0.1 (49)	3.4 (61)	7.1 (84)	-7.5 (85)	2.1 (90)	5.4 (96)
MSCI ACWI ex US			-7.5 (65)	0.0 (49)	6.1 (41)	11.0 (52)	1.3 (16)	4.6 (62)	5.3 (96)
MSCI ACWI ex US Growth			-7.8 (67)	-1.4 (60)	5.4 (45)	9.8 (61)	-2.4 (44)	3.7 (77)	5.7 (91)
Mondrian	267,705,573	4.0	-8.9 (83)	1.4 (30)	5.1 (52)	12.1 (44)	3.4 (66)	3.5 (87)	4.5 (83)
MSCI AC World ex USA Value			-7.2 (49)	1.6 (29)	6.9 (40)	12.4 (40)	5.1 (39)	5.2 (64)	4.7 (78)
MSCI AC World ex USA Index			-7.5 (59)	0.0 (60)	6.1 (43)	11.0 (63)	1.3 (83)	4.6 (76)	5.3 (61)
BlackRock MSCI ACWI EX-US IMI	548,419,200	8.2	-7.7 (74)	-0.2 (57)	5.2 (55)	10.4 (66)	0.7 (57)	-	-
MSCI AC World ex USA IMI (Net)			-7.6 (71)	0.0 (50)	5.2 (55)	10.3 (68)	0.5 (60)	4.1 (81)	4.9 (93)
Record Dynamic Currency Hedge	18,340,435	0.3	1,940.6	2,132.0	48,106.4	-	-	-	-

Total Fund
Performance Summary (Gross of Fees)

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Private Equity***	517,301,501	7.7	0.4 (46)	2.2 (45)	8.0 (25)	7.3 (26)	0.9 (68)	17.1 (11)	16.9 (6)
<i>Blended Private Equity Index</i>			7.3 (2)	10.7 (1)	38.2 (1)	30.6 (1)	13.4 (1)	18.3 (7)	15.2 (8)
Opportunistic Credit	681,957,769	10.2	1.2	5.2	7.9	-	-	-	-
<i>Opportunistic Credit Index</i>			0.7	5.1	8.6	10.9	3.9	4.7	5.2
Public Credit	470,318,439	7.0	1.5	6.1	9.0	9.7	4.0	4.9	5.8
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.2	5.5	8.2	10.8	2.9	4.2	5.2
Beach Point Select	121,494,078	1.8	2.7 (2)	6.8 (5)	10.2 (8)	11.6 (22)	5.0 (11)	8.1 (2)	-
Brigade Capital	107,478,419	1.6	1.7 (4)	7.8 (1)	10.7 (6)	11.2 (29)	3.2 (62)	5.4 (16)	5.4 (41)
One William Street	69,511,252	1.0	2.3 (3)	4.5 (73)	10.3 (8)	-	-	-	-
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.2 (66)	5.5 (25)	8.2 (49)	10.8 (42)	2.9 (71)	4.2 (66)	5.2 (58)
PIMCO Diversified	106,318,842	1.6	-0.6 (98)	4.4 (75)	6.4 (91)	8.3 (92)	0.4 (99)	1.6 (100)	-
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.2 (66)	5.5 (25)	8.2 (49)	10.8 (42)	2.9 (71)	4.2 (66)	5.2 (58)
Eaton Vance Emerging Markets Debt Opportunities Fund	65,515,848	1.0	2.2 (1)	6.4 (5)	-	-	-	-	-
<i>JPM EMB (JEMB) Hard Currency/Local Currency 50-50</i>			-4.2 (77)	2.6 (71)	2.3 (75)	6.8 (80)	-0.4 (79)	-0.3 (81)	2.1 (80)
Private Credit	211,639,330	3.2	0.7	3.1	5.4	4.8	4.4	5.5	-
<i>Credit Suisse Leveraged Loan Index 1 Qtr Lag</i>			2.0	4.0	9.6	11.0	6.3	5.6	4.9
AG CSF ADF II	2,243,608	0.0	0.0	4.5	5.2	13.2	-	-	-
AG CSF II	24,288,873	0.4	0.0	4.0	8.4	14.2	-	-	-
Angelo Gordon Credit Solutions	5,953,790	0.1	0.0 (72)	3.1 (96)	5.6 (95)	8.9 (81)	4.0 (18)	7.4 (2)	-
<i>Credit Suisse Leveraged Loan Index 1 Qtr Lag</i>			2.0 (3)	4.0 (80)	9.6 (8)	11.0 (17)	6.3 (4)	5.6 (11)	4.9 (39)
Blackrock DL Feeder IX-U	40,239,298	0.6	1.1	2.6	4.2	6.8	5.9	-	-
Comvest Credit Partners VII	16,142,172	0.2	0.0	4.3	-	-	-	-	-
PIMCO Private Income	50,821,986	0.8	1.6	4.2	8.6	7.8	5.0	7.1	-
TCP Direct Lending VIII	9,825,883	0.1	0.9	3.0	4.5	6.0	4.5	5.4	-
White Oak Yield	30,469,992	0.5	0.0	3.9	8.5	6.3	5.3	5.3	-
White Oak YSF V	31,653,727	0.5	0.0 (80)	0.0 (100)	3.3 (99)	-3.8 (100)	1.3 (98)	-	-
<i>Credit Suisse Leveraged Loan Index 1 Qtr Lag</i>			2.0 (4)	4.0 (87)	9.6 (16)	11.0 (32)	6.3 (4)	5.6 (13)	4.9 (76)

Total Fund
Performance Summary (Gross of Fees)

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Diversifying Portfolio	1,197,158,822	17.9	-1.3	2.2	2.9	4.0	-	-	-
<i>Blended Diversifying Index</i>			-2.3	2.3	2.6	4.4	0.5	1.6	2.7
Defensive Fixed Income	843,376,591	12.6	-3.8	1.7	0.4	3.5	-2.4	-0.1	1.7
<i>Blended Core Fixed Income Benchmark</i>			-4.4	1.2	-0.6	2.0	-3.3	-0.9	1.1
DoubleLine	267,105,430	4.0	-2.8 (61)	2.6 (62)	3.2 (58)	5.1 (53)	-1.7 (75)	-	-
<i>Blmbg. U.S. Aggregate Index</i>			-3.1 (75)	2.0 (95)	1.3 (92)	3.4 (83)	-2.4 (97)	-0.3 (78)	1.3 (70)
FIAM Bond	188,480,008	2.8	-3.0 (64)	2.0 (74)	1.8 (63)	4.1 (45)	-1.8 (46)	0.7 (24)	2.2 (19)
NISA Core Bond	286,624,547	4.3	-3.2 (92)	1.9 (85)	1.4 (92)	3.6 (87)	-2.0 (64)	-	-
<i>Blmbg. U.S. Aggregate Index</i>			-3.1 (77)	2.0 (80)	1.3 (96)	3.4 (94)	-2.4 (91)	-0.3 (96)	1.3 (99)
NISA Long Treasury	99,424,543	1.5	-8.6	-1.5	-6.4	-	-	-	-
<i>Blmbg. U.S. Treasury: Long</i>			-8.6	-1.5	-6.4	-1.8	-12.0	-5.2	-0.6
Absolute Return	353,782,231	5.3	5.7 (4)	3.4 (77)	8.7 (74)	5.0 (83)	5.7 (38)	2.4 (88)	1.2 (86)
<i>Absolute Return Custom Index</i>			2.2 (54)	4.6 (69)	9.3 (72)	9.2 (69)	8.0 (13)	6.5 (60)	5.9 (32)
CFM Systematic Global Macro	126,701,264	1.9	11.4 (3)	15.9 (6)	15.8 (23)	8.3 (49)	11.0 (18)	-	-
Graham Quant Macro	112,120,724	1.7	-0.8 (54)	-10.8 (100)	1.7 (77)	1.8 (85)	6.3 (38)	-	-
PIMCO MAARS Fund LP	114,960,244	1.7	5.6 (9)	5.1 (29)	13.8 (29)	10.4 (41)	10.9 (19)	-	-
<i>Absolute Return Custom Index</i>			2.2 (25)	4.6 (32)	9.3 (52)	9.2 (47)	8.0 (28)	6.5 (56)	5.9 (47)
Inflation Hedge	1,149,755,421	17.2	-0.6	0.9	3.5	0.2	2.7	3.7	-
<i>Blended Inflation Hedge Index</i>			3.1	4.9	7.2	1.2	2.6	5.5	5.5
Real Estate	463,905,509	6.9	0.5 (35)	0.0 (86)	-1.7 (70)	-5.1 (60)	-0.9 (27)	2.8 (37)	6.3 (25)
<i>NCREIF ODCE</i>			1.2 (9)	1.4 (54)	-1.4 (69)	-6.9 (72)	-2.3 (37)	2.9 (36)	5.9 (30)
Harrison Street Core Property	90,459,155	1.3	0.4	0.6	-0.3	-2.6	1.8	-	-
Invesco	221,173,192	3.3	0.0	-0.9	-5.5	-8.8	-3.6	1.3	5.4
Invesco US Val IV	94,745	0.0	-4.8	-5.0	-19.1	-42.9	-42.3	-25.8	-
Invesco US Val V	23,140,796	0.3	1.1	0.6	-1.4	-14.4	-10.3	-0.5	-
Invesco US Val VI	24,697,366	0.4	0.0	-3.7	6.9	-3.6	-	-	-
PGIM RE US Debt Fund	72,361,992	1.1	1.7	3.6	7.4	7.3	7.1	6.4	-
<i>NCREIF ODCE</i>			1.2	1.4	-1.4	-6.9	-2.3	2.9	5.9
Stockbridge Value IV	25,642,165	0.4	1.3	-1.4	-4.5	-3.8	5.6	-	-
Stockbridge Value V	6,336,099	0.1	-1.0	-2.0	-	-	-	-	-
<i>NCREIF ODCE</i>			1.2	1.4	-1.4	-6.9	-2.3	2.9	5.9

*NISA Core Treasury funded 6/15/2023.
See Appendix for Benchmark History

Total Fund
Performance Summary (Gross of Fees)

San Mateo County Employees' Retirement Association
Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Private Real Assets***	399,740,834	6.0	0.5	2.1	10.4	7.3	9.9	11.2	8.5
<i>Blended Private Real Assets Index</i>			11.2	13.6	25.7	17.2	10.8	9.6	7.5
<i>Blended Secondary CA Private RA Index</i>			2.0	4.1	8.1	8.3	11.1	9.5	6.8
Private Real Asset	268,429,178	4.0	-0.3	1.0	8.3	6.3	9.1	10.7	-
Brookfield Super-Core Infrastructure Partners	67,511,793	1.0	1.8	3.7	10.1	9.3	-	-	-
KKR Diversified Core Infrastructure Fund (DCIF)	63,799,863	1.0	2.6	4.5	9.0	-	-	-	-
Public Real Assets	286,109,077	4.3	-4.2	1.4	4.3	2.2	3.0	2.0	-
<i>Blended Public Real Assets Index</i>			-4.2	1.2	4.1	2.0	2.8	4.0	5.1
SSgA Custom Real Assets	286,109,077	4.3	-4.2	1.4	4.3	2.2	3.0	4.2	-
<i>SSgA Custom Real Assets Index</i>			-4.2	1.2	4.1	2.0	2.8	4.0	-
Liquidity	339,064,263	5.1	0.7	2.7	4.9	5.2	3.9	2.6	-
<i>Blended Liquidity Index</i>			0.2	2.9	4.5	4.6	-	-	-
Cash Flow-Matched Liquidity	273,760,086	4.1	0.5	2.6	4.7	5.0	-	-	-
<i>Bloomberg U.S. Gov/Credit 1-3 Year Index</i>			0.0	2.9	4.4	4.5	1.7	1.6	1.6
<i>Bloomberg U.S. Credit 1-3 Year Index</i>			0.1	3.3	5.1	5.2	2.2	2.0	2.1
Insight Investment*	267,314,341	4.0	0.4	2.8	4.8	5.2	-	-	-
<i>Bloomberg U.S. Credit 1-3 Year Index</i>			0.1	3.3	5.1	5.2	2.2	2.0	2.1
County Treasury Pool**	6,445,745	0.1	1.5	1.5	3.3	3.9	2.9	2.3	2.2
<i>90 Day U.S. Treasury Bill</i>			1.2	2.6	5.3	5.1	3.9	2.5	1.8
Cash & Cash Overlay	105,875,345	1.6	1.3	2.7	5.6	5.7	4.4	2.9	2.0
<i>90 Day U.S. Treasury Bill</i>			1.2	2.6	5.3	5.1	3.9	2.5	1.8
General Account	91,132,927	1.4	1.4	2.8	5.7	5.7	4.4	2.9	2.7
<i>90 Day U.S. Treasury Bill</i>			1.2	2.6	5.3	5.1	3.9	2.5	1.8

***Returns are one-quarter lag, excludes EnCap Energy Capital Fund and Sheridan Production Partners
See Appendix for Benchmark History

Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: $\text{Portfolio Return} - [\text{Risk free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk free Rate})]$.

Benchmark R squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R squared, the more appropriate the benchmark is for the manager.

Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book to Market: The ratio of book value per share to market price per share. Growth managers typically have low book to market ratios while value managers typically have high book to market ratios.

Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price to Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price to earnings ratios whereas value managers hold stocks with low price to earnings ratios.

R Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: $\text{Portfolio Excess Return} / \text{Portfolio Standard Deviation}$.

Sortino Ratio: Measures the risk adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

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