





AUGUST 2024 (ANALYSIS DATE JUNE 30, 2023)

San Jose Police and Fire Department Retirement Plan – Investment Committee

Quarterly Risk Summary

Summary

- Total risk of 10.7% is well below the board limit of 12%
- High utilization of passive strategies (> 50%) in public markets keeps overall relative and active risk low
- The current portfolio performs slightly better than the policy benchmark in most historic drawdown scenarios and stress tests
- Capital allocations with respect to size and country allocation, two main public equity risk drivers, are close to San Jose's custom benchmark allocations.
- Style factors are typically a large driver of active risk. We do not observe any large active style factor exposures in the portfolio.



Portfolio volatility



Portfolio: 10.7%



Policy: 10.8%



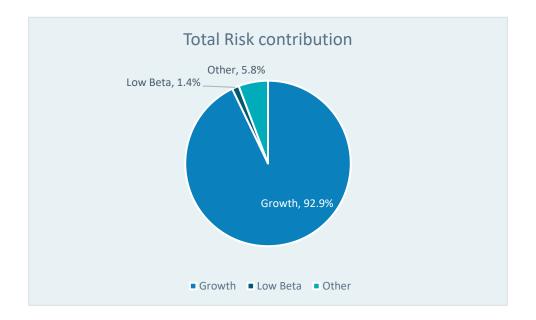
Peer Group: 10.5%



Liability: 10.7%

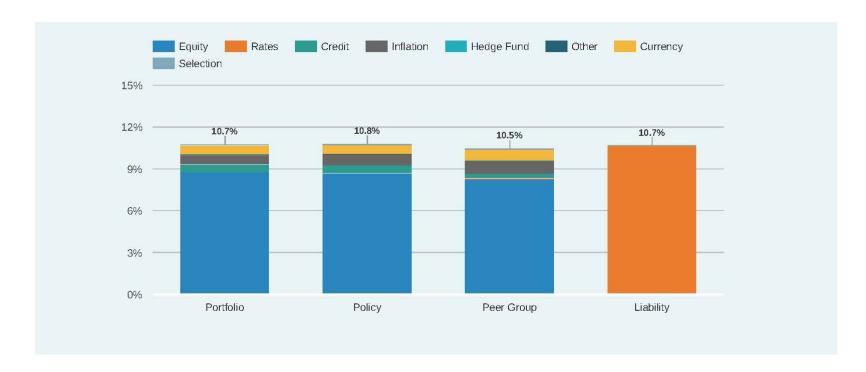
Portfolio volatility is slightly below policy level

Over 90% of portfolio volatility comes from growth assets.





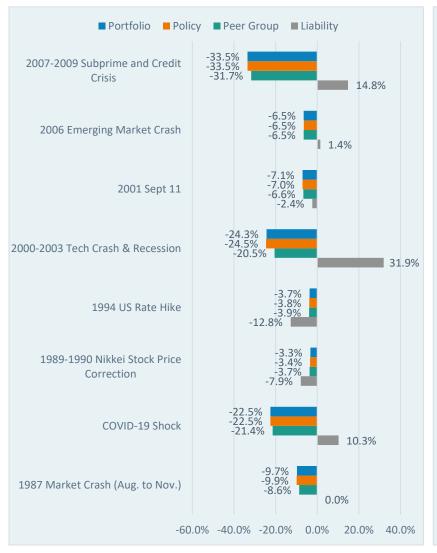
Risk factor decomposition

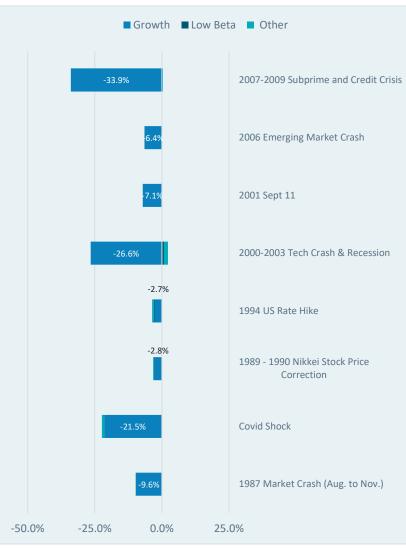


While equity factors are the dominant source of risk in the portfolio, currency, inflation, and credit factors contribute to overall risk



Historical scenarios





Portfolio performs like the policy in most historic scenarios



Stress tests





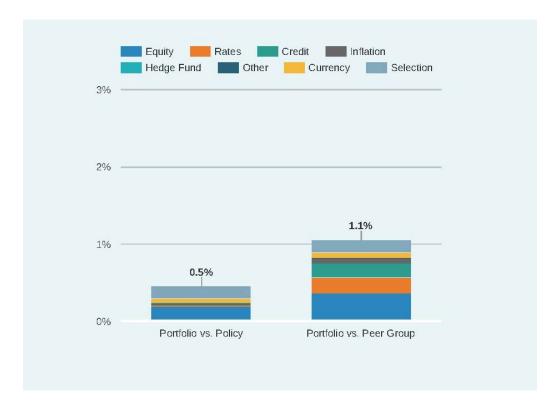
Portfolio is most sensitive to changes in equities and currency markets

Portfolio is less exposed to interest rate risk and credit spread risk

Stress tests are conducted using uncorrelated shocks.



Active risk factor decomposition



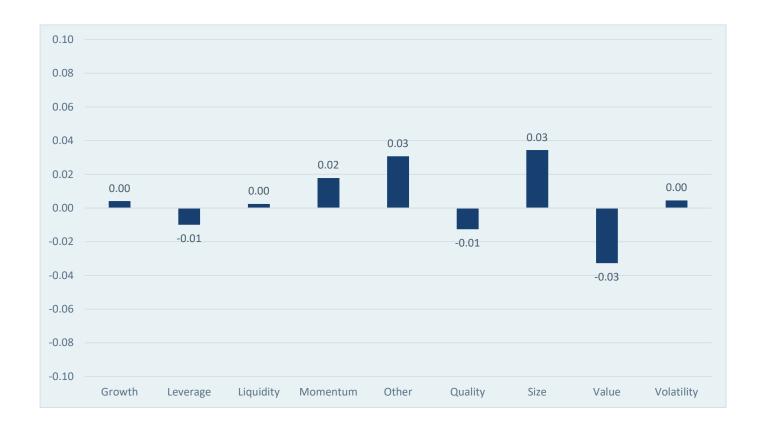
Active risk (or tracking error) provides insight into amount of excess performance we expect to see in portfolio

Active risk profile has shifted to reflect more 'beta' versus idiosyncratic exposures





Active public equity style factor exposures



The largest active style factor exposures are Size and Value

None exceed $\pm - 0.2$

Values greater than 0.2 are generally considered significant



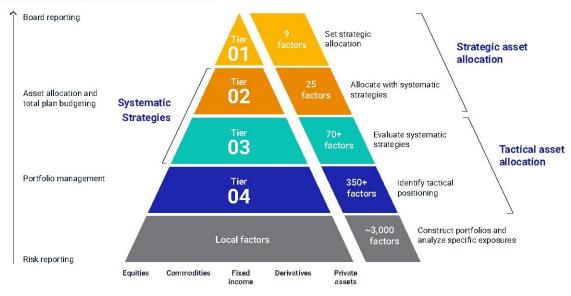
Appendix



About the model

- The City of San Jose Retirement Services currently uses the MSCI Barra Multi-Asset Class Model (MAC.XL)
- MAC was built specifically for multi-asset class portfolios like pension funds (older models were built for stock and bond portfolio managers)
- The "XL" version represents the longest available investment horizon (8-year "half-life")
- Each security in the portfolio is modeled as a combination of common variables called "factors"
- Thousands of factor "exposures" are added-up at various levels or "tiers"
- The nine Tier 1 factors shown in this report are most appropriate for committee oversight
- Style factors, aka Tier 3, are also of interest when examining active risk

The MSCI Multi-Asset Class Factor Model



Source: MSCI



Active style factor (Tier 3) descriptions

| Style Factor | Description | Intrepretation |
|--------------|---|---|
| Size | Captures the return differences between large-cap stocks and small-cap stocks | A positive exposure indicates large capitalization. A negative exposure indicates small capitalization. |
| Value | Explains the return component attributable to a stock's book-to-price ratio, and earnings yield. | A positive exposure indicates an undervalued stock. A negative exposure indicates an overvalued stock. |
| Yield | Explains the return component attributable to a stock's dividend yield | A positive exposure indicates a higher dividend yield. A negative exposure indicates a lower dividend yield. |
| Momenturm | Explains the return differences of stocks based on their relative performance over the trailing 6-12 months | A positive exposure indicates a high medium-term momentum (good recent performance). A negative exposure indicates a low medium-term momentum (poor recent performance) |
| Quality | Captures common variation in stock returns due to differences in the level of company leverage | A positive value indicates high leverage. A negative value indicates low leverage |
| Volatility | Explains returns associated with high volatility stock | A positive exposure indicates a high volatility. A negative exposure indicates a low volatility. |
| Liquidity | Describes return differences of stocks based on their relative trading activity | ve A positive exposure indicates a high liquidity. A negative exposure indicates a low liquidity. |
| Growth | Describes return differences of stocks based on their prospects for sales or earnings growth | A positive exposure indicates a high historical/predicted growth. A negative exposure indicates a low historical/predicted growth. |
| Macro | Describes return differences of stocks based on sensitivity t commodities (Oil/Gold) and foreign exchange rates | to A positive exposure indicates high sensitivity to macro factors. A negative exposure indicates low sensitivity to these factors. |



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