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SEPTEMBER 2025 (6/30/25 ANALYSIS DATE)

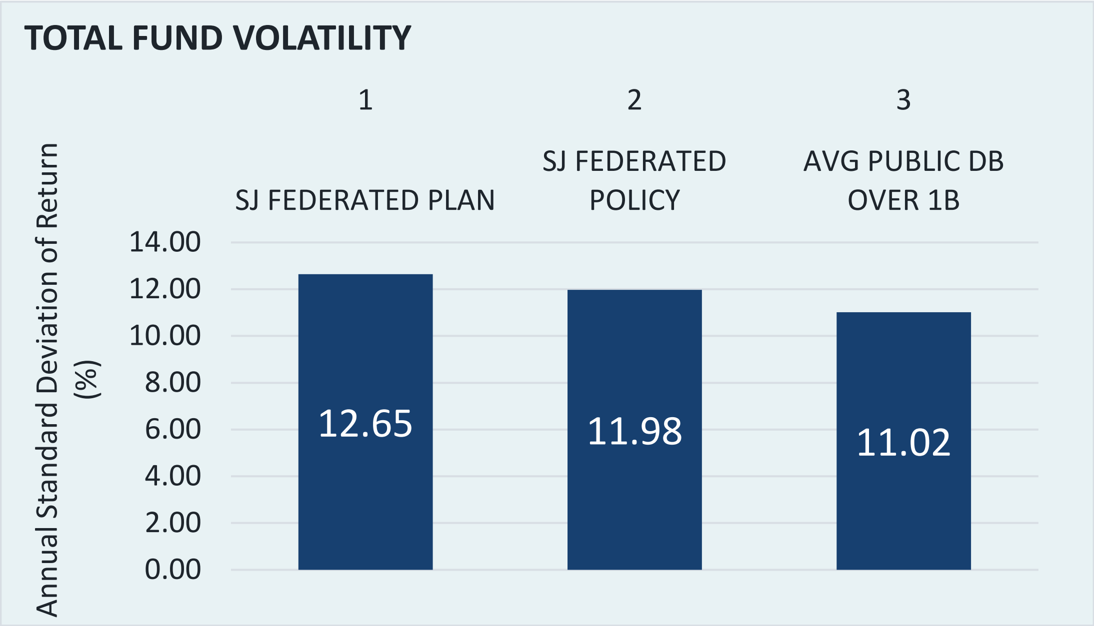
San Jose Federated Retirement Plan – Investment Committee

Quarterly Risk Summary

Summary

- Verus has switched risk model providers from MSCI to Bloomberg
- Risk estimates are higher under the new model, but Federated total fund risk of 12.7% remains below the Board limit of 13%
- The allocations to growth assets are a bit higher than the target weights so the fund is expected to perform slightly worse than the policy benchmark in most historic drawdown scenarios and stress tests
- The average of the three worst off-the-shelf historical scenario drawdowns is 26.5%, within the Board limit of 30%
- In the new model, “inflation” and “hedge fund” risk are captured by equity factors
- High utilization of passive strategies in public markets keeps total active risk low (1%)
- Style factors are often a large driver of active risk. We do not observe any large active style factor exposures in the portfolio

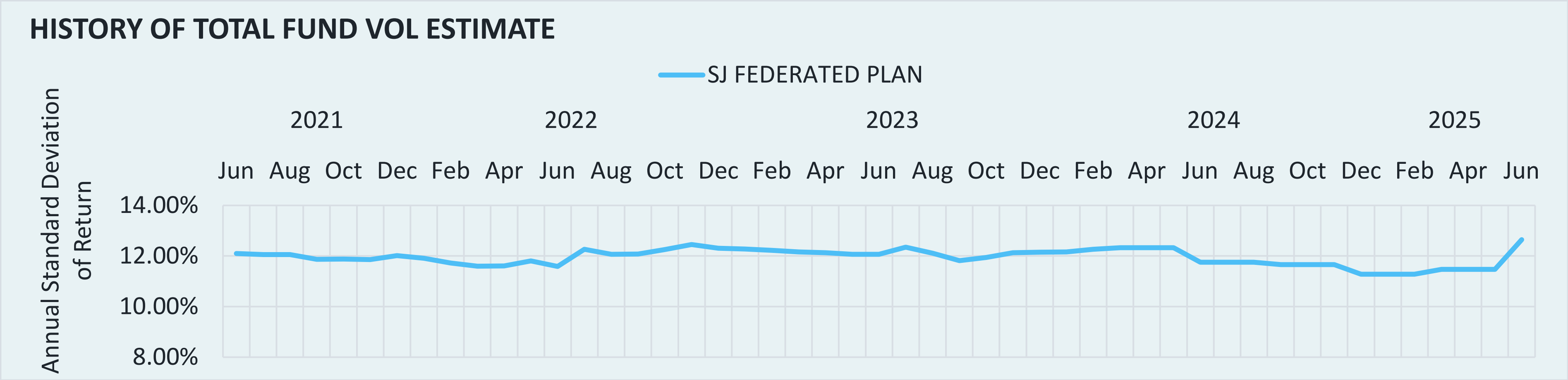
Total fund volatility



The total fund volatility estimate provided by the Bloomberg factor model is a bit higher than the most recent estimate produced by the MSCI model

Total fund volatility is currently higher than that of both the policy index and the peer index

The peer index consists of the reported average asset class allocations of a universe of large public defined benefit plans

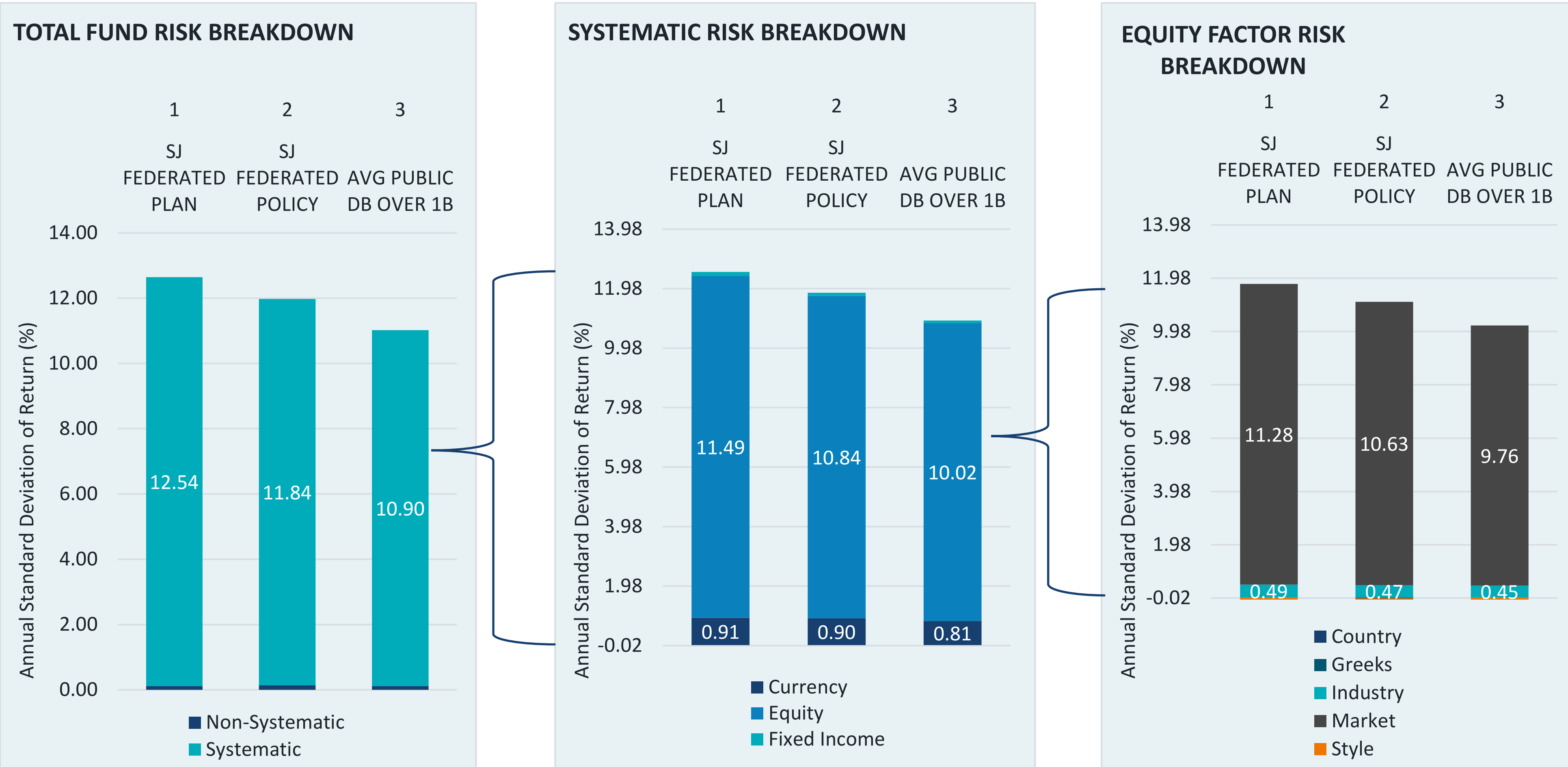


Total fund risk decomposition

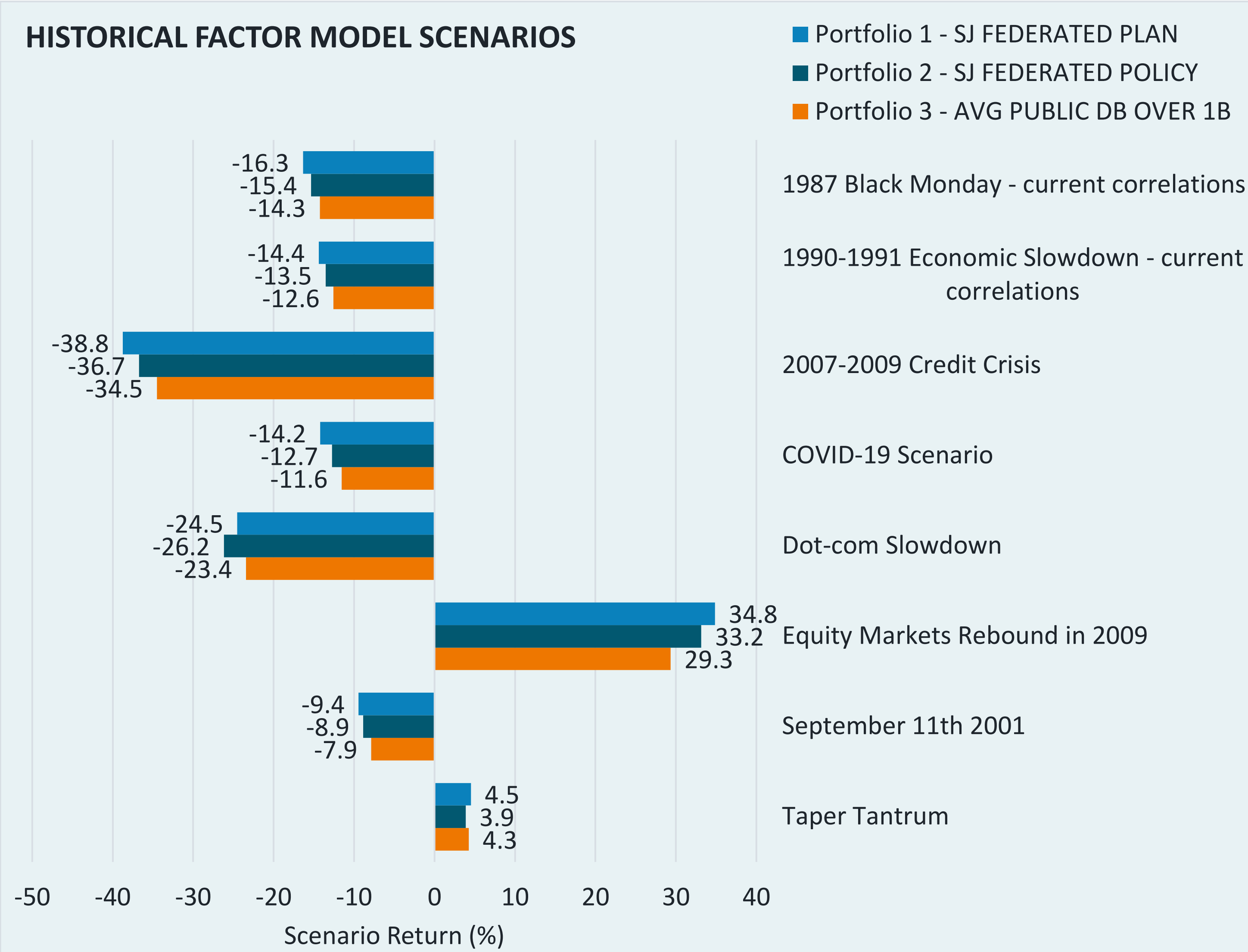
Volatility that is explained by the factor model is called "systematic risk"

Systematic risk is broken down by major factor group, with equity factors dominant

Market factors dominate within equity factors



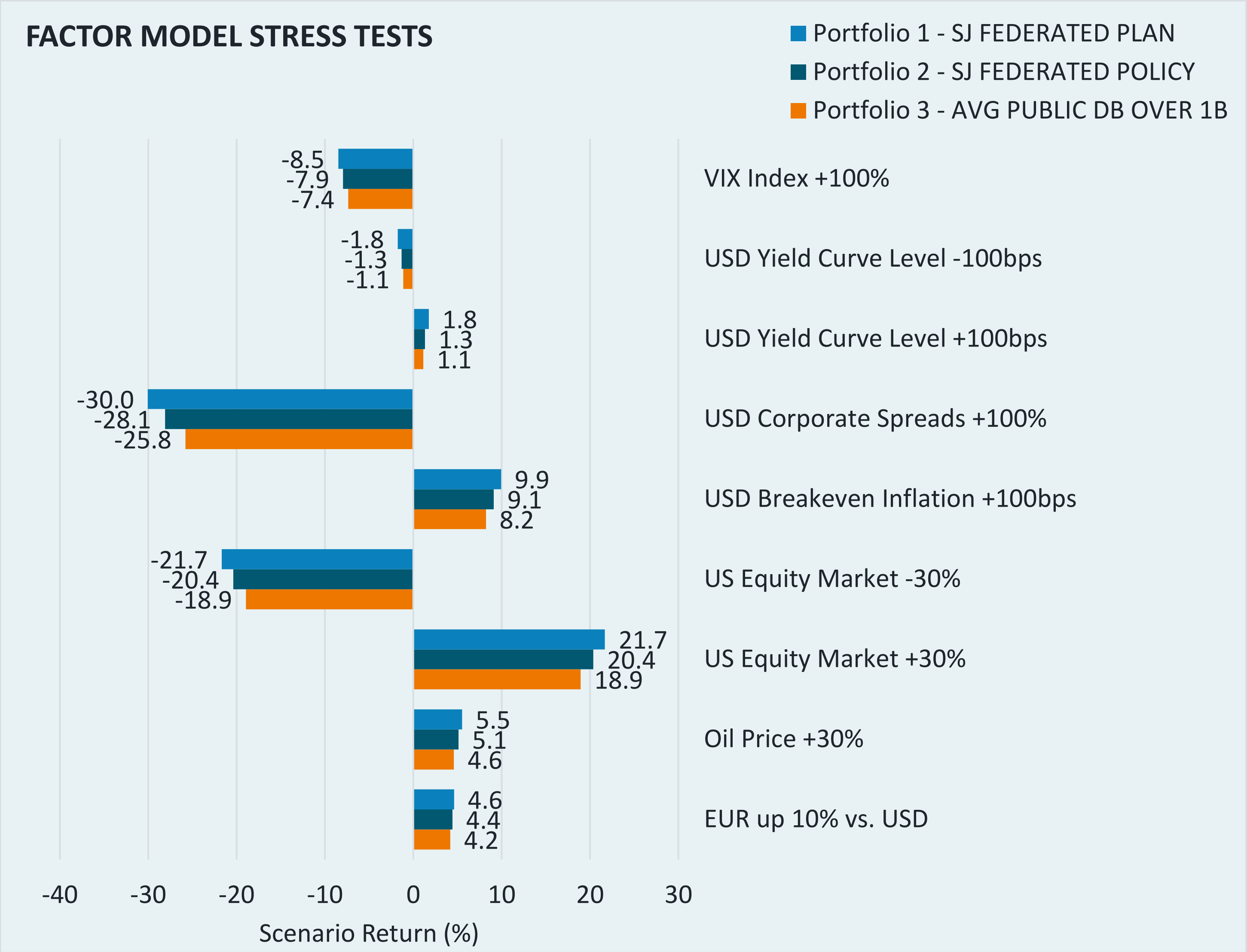
Historical scenarios



The fund is expected to do slightly worse than the policy index in a majority of these historical drawdown scenarios

The average of the three worst off-the-shelf historical scenario drawdowns is 26.5%, within the Board limit of 30%

Stress tests



The fund is expected to do slightly worse than the policy index in equity market and credit factor shocks and slightly better in recovering equity markets

Active risk

Like the total risk estimate, the total active risk estimate provided by the Bloomberg model appears to be a bit higher than that provided by the MSCI model

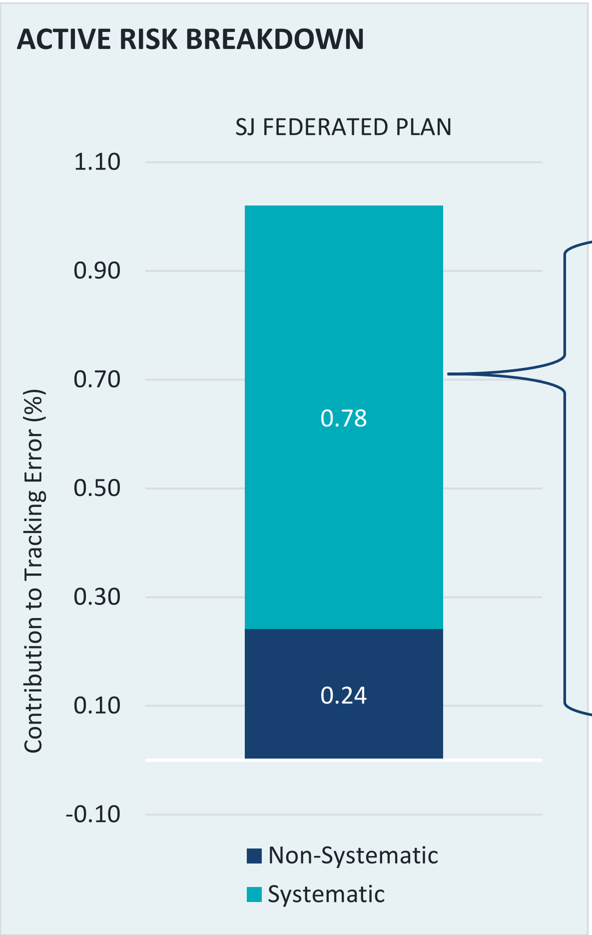
However, it does not meaningfully exceed previous measurements

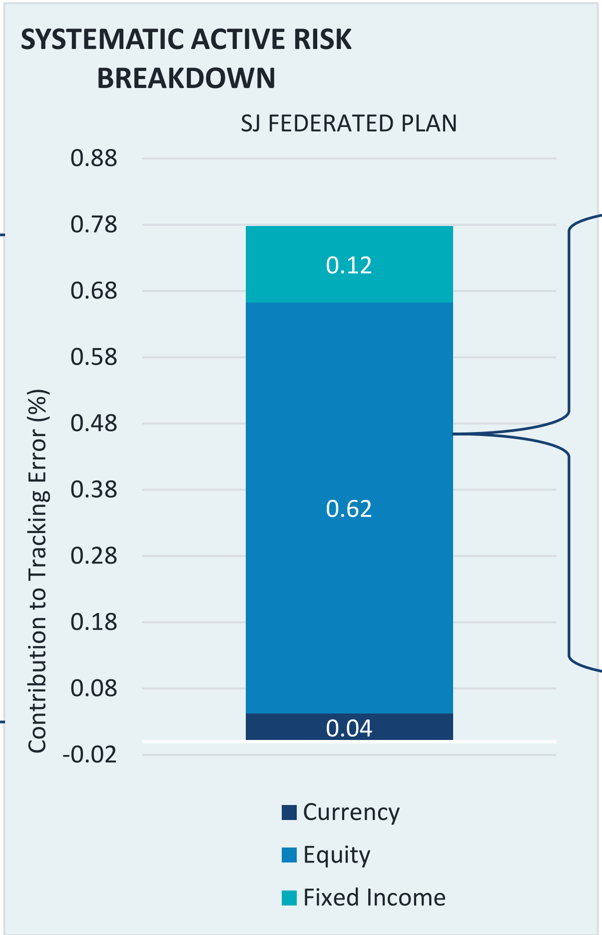
Active risk decomposition

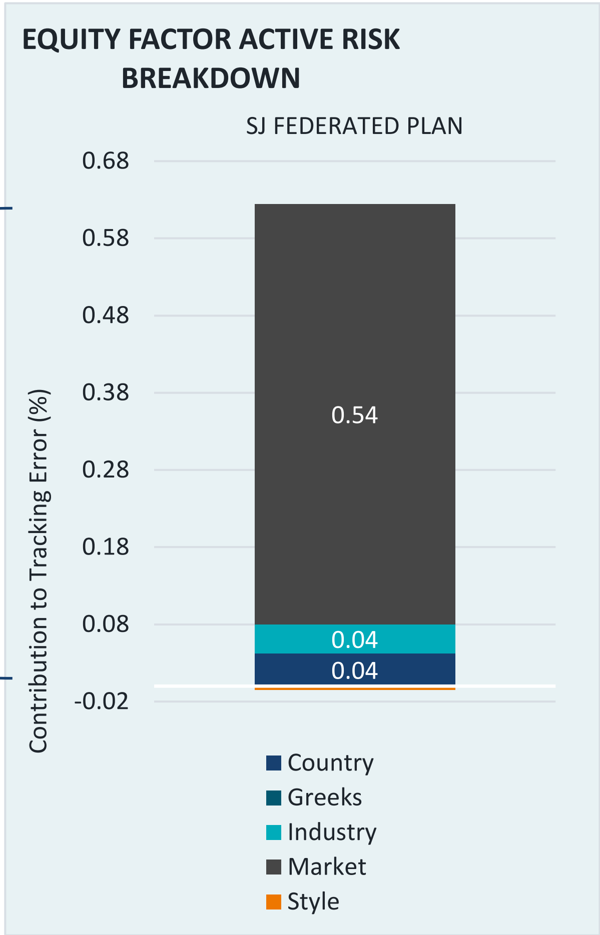
Less active risk is explained by the factor model as "systematic" risk

Active systematic risk is also mostly equity risk

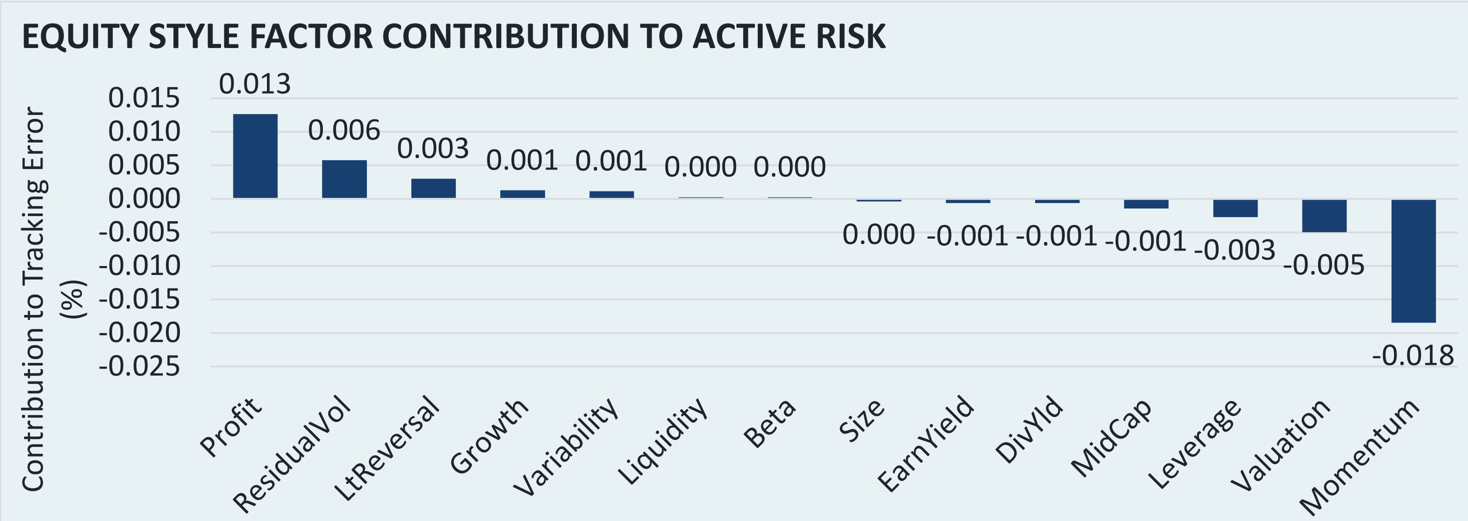
Market factors also dominate within active equity risk



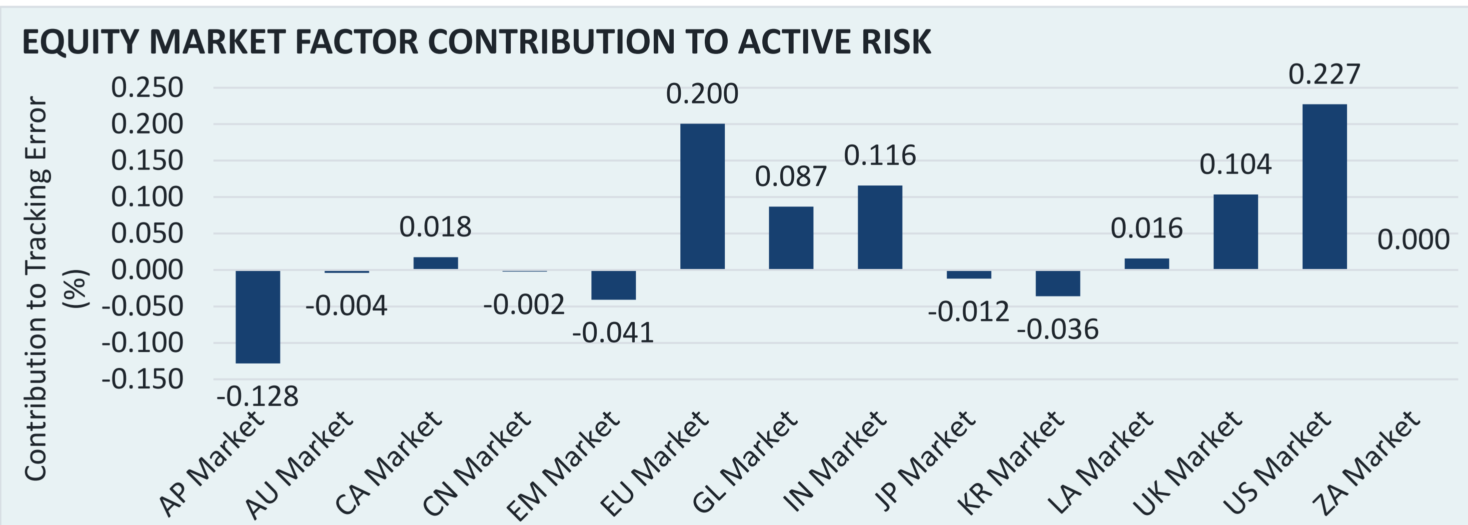




Equity factor active risk



Due to the fund's use of passive public equity strategies, style factor contribution to total active risk remains very small



There may be a small degree of US and EU bias in the global equity allocation

Appendix

Stress test definitions

Scenario Name	Scenario Type	Scenario Desc
2007-2009 Credit Crisis	Historical Scenarios	2007-2009 Credit Crisis (02/22/2007 to 03/09/2009)
Sep-Oct 2008	Historical Scenarios	Sep-Oct 2008 (09/12/2008 to 10/27/2008)
Dot-com Slowdown	Historical Scenarios	Dot-com Slowdown (03/10/2000 to 10/09/2002).
Taper Tantrum	Historical Scenarios	This scenario covers the 2013 Fed's announcing their intention to taper its quantitive easing program, and the subsequent surge in treasury yields.
September 11th 2001	Historical Scenarios	Scenario that focuses on the period around the terrorist attacks on September 11th 2001. (due to only weekly data, Wed to Wed, in the model during this period).
1987 Black Monday - current correlations	Historical Scenarios	Uses a US Equity Market factor of -22.6% with current correlations.
COVID-19 Scenario	Historical Scenarios	COVID-19 Scenario (12/25/2019 - 04/09/2020)
Equity Markets Rebound in 2009	Historical Scenarios	Global equity markets rebound following 2008 drawdown. Use Historical risk factor returns from 03/04/2009-06/01/2009.
2007-2008 Oil Price Run-up	Historical Scenarios	2007-2008 Oil Price Run-up (01/18/2007 to 07/03/2008)
1990-1991 Economic Slowdown - current correlations	Historical Scenarios	Uses a US Equity Market factor shock of -19.9% with current correlations
EUR up 10% vs. USD	Stress Tests	EUR up 10% vs. USD, propagated to other currencies and equity factors via correlation.
US Equity Market +30%	Stress Tests	US Equity Market +30%
US Equity Market -30%	Stress Tests	US Equity Market -30%
USD Yield Curve Level +100bps	Stress Tests	USD Yield Curve Level +100bps
USD Yield Curve Level -100bps	Stress Tests	USD Yield Curve Level -100bps
USD Corporate Spreads +100%	Stress Tests	USD Corporate Spreads +100%
US 10yr treasury +100bps with propagation	Stress Tests	This scenario shocks the US Treasury curves parallel +100bps, and uses the Bloomberg Multi-Asset Factor Model to propagate that shock to other curves and asset classes (Equities, Bonds, CDS, IRS etc.)
USD Breakeven Inflation +100bps	Stress Tests	USD Breakeven Inflation +100bps
VIX Index +100%	Stress Tests	VIX Index +100%
Oil Price +30%	Stress Tests	Oil Price +30%

Notices & disclosures