STAFF RETIREMENT PLAN

Report on Investment Performance and Policy

2024

Prepared by the Investment Committee of the Staff Retirement Plan

INTERNATIONAL MONETARY FUND

STAFF RETIREMENT PLAN

REPORT ON INVESTMENT PERFORMANCE AND POLICY FOR 2024

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International Monetary Fund

Washington D.C.

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INTRODUCTION

This paper reviews calendar year (CY) 2024 portfolio returns, risk, and asset allocation of the International Monetary Fund (IMF) Staff Retirement Plan (SRP) and summarizes investment management and policy actions taken.

For CY 2024, the SRP generated a 9.8 percent return versus the benchmark return of 9.4 percent. For the year ended 2024, the SRP total asset value increased to $13.8 billion. Moreover, five of the seven asset classes generated positive returns, with Real Assets and Global Fixed Income being the two asset classes to generate negative returns for the year. Once again in 2024, growth sensitive asset classes performed better than income sensitive asset classes. Throughout the year, the Investment Committee (IC) and Investment Office (INV) maintained a long-term market view guided by the strategic asset allocation to achieve the return objectives. On a long-term (i.e., 10-year) basis, the SRP continued to generate returns above the actuarial target return of 5.0 percent.

For most of 2024, investors were driven by risk-on sentiment on the back of stronger-than-expected economic growth, continued disinflation, and central bank policy easing**.** Throughout the year, economic growth in the U.S. and other developed markets was generally stronger than expected as inflationary pressures moderated, along with the continued easing of supply-chain constraints. In the U.S., corporate earnings remained strong, especially for large-cap technology companies expected to benefit from growth in Artificial Intelligence (AI) and its commercial application. Consumer spending proved to be more resilient than anticipated, resulting in less consistent disinflation and less monetary policy easing than expected at the start of the year. Lastly, the electoral outcome of the U.S. presidential election created a positive momentum for the equity market as investors weighed the benefits of expected corporate tax cuts and reduced regulations for U.S. companies while trying to assess the potential risks arising from increasing government debt levels, tariffs on imports from major trading partners, and potentially inflationary fiscal policy. Overall, investor sentiment and market performance during the year fluctuated significantly based on changes in economic strength, pace of disinflation, and their impact on the pace of central bank policy easing.

2024 was another year of exceptionalism for U.S. equities, which outperformed most of the significant global equity markets. U.S. fixed income also delivered positive returns as higher yields and narrowing credit spreads were net positive for the fixed income market. Moreover, higher-yielding, lower-quality credit segments of the fixed income market outperformed the lower-yielding, higher-quality credit segments due to risk-on investor sentiment. Commodities also delivered positive returns due to the rise in geopolitical uncertainty and slower-than-expected pace of disinflation. While gold prices surged more than 26 percent in 2024, oil prices fell by about 4.5 percent, even though geopolitical volatility remained elevated.[1] Commercial real estate activity picked up moderately in 2024, as some real estate sectors performed better in 2024 while other

[1] Brent crude, a global benchmark for oil, was down about 4.5 percent in 2024. West Texas Intermediate (WTI), a benchmark for U.S. crude oil, was down about 3 percent in comparison.

sectors continued to face challenges due to higher interest rates and supply and demand imbalances.

In 2024, key investment management and policy actions conducted by the IC and INV included: (i) completion of the strategic asset allocation (SAA) review; (ii) significant advancement of the implementation of the Environmental, Social, and Governance (ESG) Policy Framework; (iii) continued execution of OIA recommendations; and (iv) ongoing assessment of the fit and efficacy of investment strategies to enhance sector structuring, optimize diversification, and reduce fees.

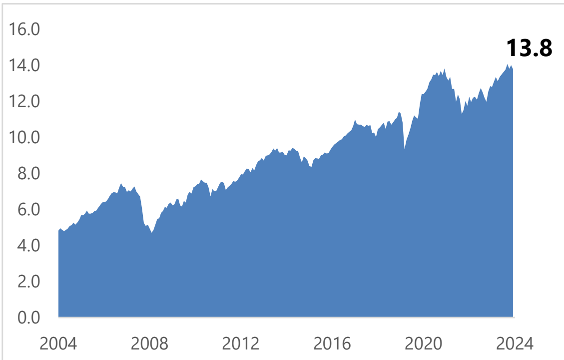
Key work program items planned for 2025 include: (i) gradual implementation of the new 2024 SAA, which is expected to become effective on January 1, 2026; (ii) continued implementation of the ESG Policy Framework; (iii) ongoing execution of OIA recommendations; and (iv) continued adjustments to the investment manager line-up (through consolidation of investment strategies and managers and/or restructuring of existing investment strategies) to enhance portfolio efficiency.

Box 1 provides a snapshot of SRP long-term performance and volatility. See Appendix II for more details on the SRP.

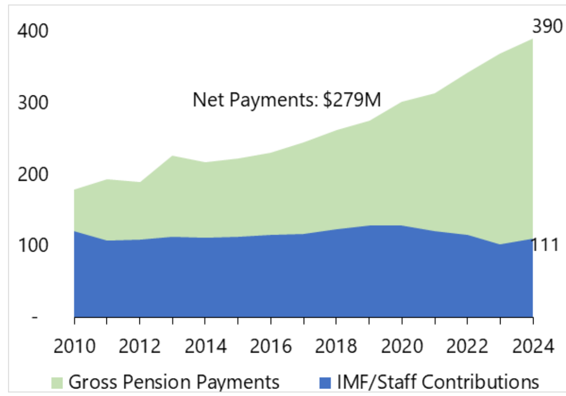
Box 1. SRP at a Glance

(In percent, unless otherwise indicated, and as of end-December 2024)

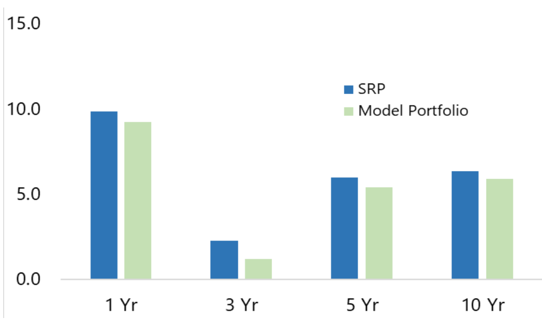
Total Value of the SRP (in billions, USD)



Annual Net Pension Payments (in millions, USD)

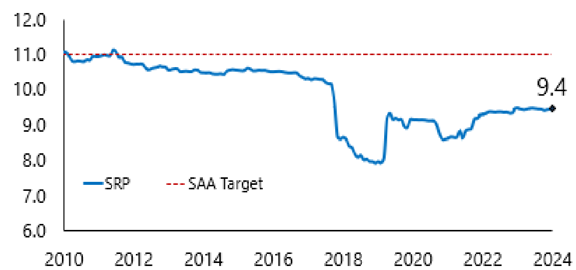


SRP Performance vs Model Portfolio Performance[1]



[1] Model portfolio definition is provided in Appendix V.

SRP 10-Year Rolling Volatility vs. SAA Target[2]



[2] Based on 120-months rolling standard deviation of monthly returns.

SRP Annualized Performance

	1 Year	3 Year	5 Year	10 Year
Nominal				
SRP	9.8	2.2	6.0	6.3
Benchmark	9.4	2.5	5.9	6.1
Excess return	0.4	-0.2	0.1	0.2
Real				
CPI-U	2.9	4.2	4.2	3.0
SRP real return	6.8	-2.0	1.7	3.2

Box 1. SRP at a Glance (concluded)

SRP Performance by Calendar Year

Year	SRP (in millions, USD)	Net Pension Payments (in millions, USD)	Net Pension Payments as a percent of the SRP (in percent)	SRP Return (in percent)	Benchmark Return (in percent)
2024	13,775	279	2.0	9.8	9.4
2023	12,832	266	2.1	12.1	12.6
2022	11,734	227	1.9	-13.2	-12.6
2021	13,804	192	1.4	13.3	10.1
2020	12,389	174	1.4	10.4	12.4
2019	11,415	147	1.3	16.3	17.6
2018	10,002	138	1.4	-4.1	-5.5
2017	10,617	128	1.2	16.1	16.9
2016	9,296	115	1.2	8.8	8.3
2015	8,697	110	1.3	-1.9	-3.1

SRP 10-Year Rolling Performance vs. Actuarial Target Return[3]

[3] The actuarial target return was changed from 6.5 percent to 5.0 percent (nominal) based on the recommendation of actuaries effective April 30, 2016.

Note: Values may not add up due to rounding.
Source: INV Investment Control and Valuation System.

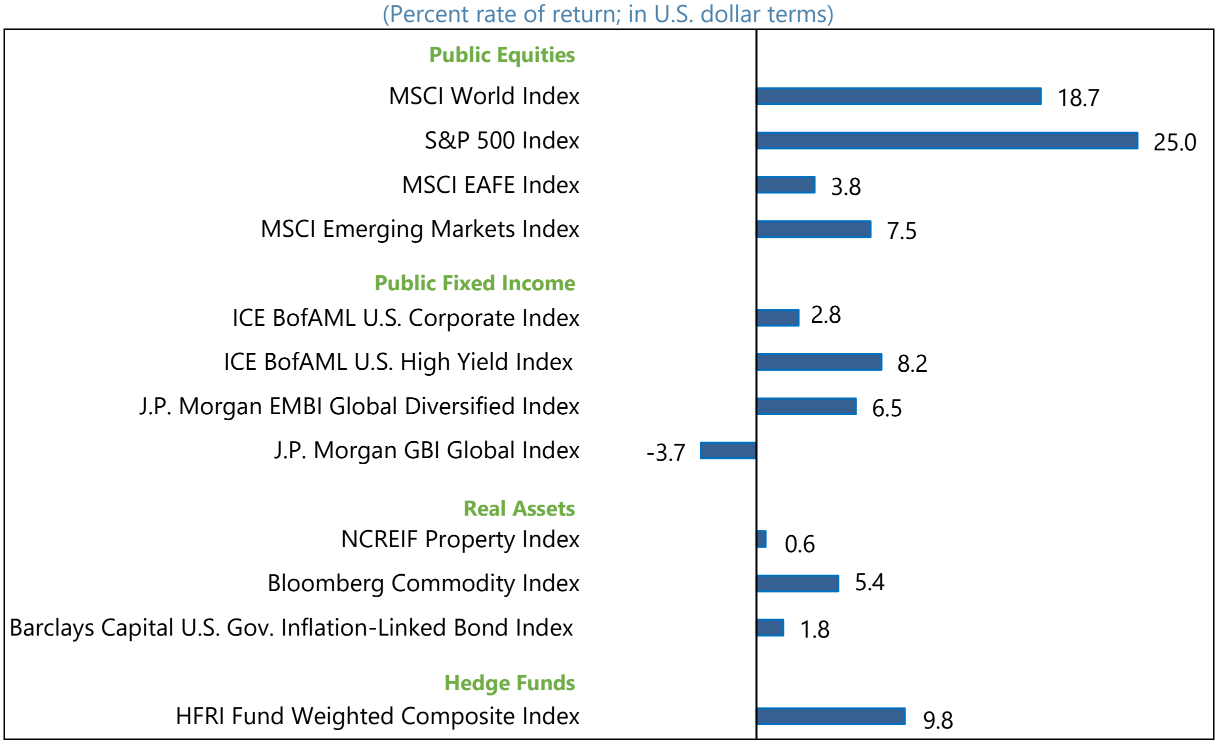
INVESTMENT ENVIRONMENT AND PERFORMANCE

Overall Market Environment

For most of 2024, investors were driven by risk-on sentiment on the back of stronger-than-expected economic growth, continued disinflation, and central bank policy easing. Throughout the year, economic growth in the U.S. and other developed markets was generally stronger than expected as inflationary pressures moderated, along with the continued easing of supply-chain constraints, and the Federal Reserve and other major central banks were on the path of monetary policy easing. In the U.S., corporate earnings remained strong, especially for large-cap technology companies expected to benefit from growth in Artificial Intelligence (AI) and its commercial application, and U.S. consumer spending proved to be more resilient than anticipated, which in turn resulted in less consistent disinflation and less monetary policy easing than discounted at the start of the year. Lastly, the electoral outcome of the U.S. presidential election created positive momentum for the equity market as investors weighed the benefits of expected corporate tax cuts and reduced regulations for U.S. companies while trying to assess the potential risks arising from increasing government debt levels, tariffs on imports from major trading partners, and potentially inflationary fiscal policy. Overall, investor sentiment and market performance during the year fluctuated significantly based on changes in economic strength, pace of disinflation, and their impact on the pace of central bank policy easing.

Figure 1. 2024 Performance of Market Indices

(Percent rate of return; in U.S. dollar terms)



Source: INV Investment Control and Valuation System.

2024 was another year of U.S. exceptionalism for equities, as U.S. equities outperformed most of the significant global equity markets. Risk-on investor sentiment drove U.S. equities to another year of double-digit returns, as investors continued to bet on the growing earnings of large technology companies, and their perceived advantage in commercializing potential new developments in AI. Global equities, as represented by the MSCI World Index, generated a double-digit return of 18.7 percent, with U.S. equities (represented by the S&P 500 Index) generating a significant 25 percent return. The rest of developed market equities (represented by the MSCI World ex-USA Index) only generated a 4.7 percent return, as European equities substantially lagged the performance of U.S. and Japanese equities due to concerns of overall economic weakness and seemingly fragile political stability in major European economies. As of end-December 2024, the U.S. weight of the global equity index reached a high of 74 percent, with Japan coming in at a distant second with a 5.4 percent weight. Emerging market equities continued to lag in performance, as investors favored the relative safety and liquidity of large-cap U.S. stocks.

Fixed income also delivered positive returns, with higher-yielding fixed income investments outperforming the lower-yielding fixed income investments in a risk-on environment. U.S. investment grade corporate, U.S. high-yield, and emerging market bonds continued to show resilience and generated positive returns, as the Federal Reserve and other major central banks continued the path of monetary policy easing. In December 2024, U.S. Treasury yields increased across most maturities, with longer maturities seeing larger yield increases, even as the Federal Reserve reduced its overnight borrowing rate by 25 basis points. This was mainly due to the Federal Reserve signaling that it is likely to lower the rates only twice in 2025, thereby signaling an implicitly higher terminal rate. High-quality developed market sovereign bonds, represented by the JPMorgan Government Bond Index (GBI) Global, generated a -3.7 percent return, while the JPMorgan GBI U.S. generated a moderate 0.7 percent return.

Commodities (represented by the Bloomberg Commodity Total Return Index) generated a 5.4 percent return. Gold received a lot of investor attention during the year, as it reached record highs (up more than 26 percent), while oil was down for the year despite elevated geopolitical tensions. Real estate (represented by the NCREIF Property Index)[2] generated a positive return of 0.6 percent, reversing the -7.9 percent return in 2023. While commercial real estate continued to face challenges arising from higher interest rates and supply and demand imbalances, the residential, industrial, and retail sectors of the private real estate market started to see a meaningful pick-up in activity, with these property sectors generating returns ranging from 1.5 percent to 5.3 percent, respectively. Office was the only property sector that posted a negative return.

[2] The NCREIF Property Index (NPI) is a quarterly, unleveraged composite total return for private commercial real estate properties (includes Apartment, Hotel, Industrial, Office and Retail properties) held for investment purposes only. Property's return is weighted by its market value and all returns are reported on an unleveraged basis.

Total Portfolio Value[3]

The total value of the SRP at end-December 2024 was about $13.8 billion, a net increase of approximately $943.7 million. This change in asset value reflected a return on the portfolio of about $1.25 billion; net securities lending income of $2.9 million; net pension payouts of $278.9 million; managerial, consulting, custodial and administrative fees of $23.4 million; and (prorated) chargeback fees of $5.1 million for the Investment Office.

Portfolio Returns, Risk, and Asset Allocation[4]

The SRP delivered above the actuarial target return of 5.0 percent on a long-term (10-year) basis, as the strong investment performance in 2024 delivered positive returns in five of the seven asset classes (Table 1).[5] The SRP's 10-year annualized return increased to 6.3 percent from 5.7 percent in 2023. The IC and INV managed asset allocation decisions with a focus on generating the actuarial target return (currently 5 percent nominal and 3 percent real) over the long term (Appendix I). To achieve the return objectives consistently over the long term, the SRP is managed as a globally diversified portfolio of seven distinct asset classes that can help optimize the sources of unrelated return streams. Over the years, this diversified mix of asset classes and investment strategies has served the SRP well in generating the actuarial target return and providing downside protection in times of elevated market volatility and extreme uncertainty.

[3] Managerial, consulting, custodial and administrative fees include only directly invoiced fees paid in 2024. For a detailed summary on investment management fees see Appendix II, Table 3. Chargeback fees reflect actual payments for fiscal year 2024.

[4] Appendix II provides details on the SRP's asset allocation and performance.

[5] The 5.0 percent (or 3.0 percent real) actuarial target return does not account for investment management fees and the cost of running the Investment Office. To cover these expenses, the SAA sets its target return 1.0 percent higher than the 5.0 percent actuarial target return.

Table 1. Annualized SRP Performance by Asset Class
(In percent, nominal terms unless otherwise indicated)

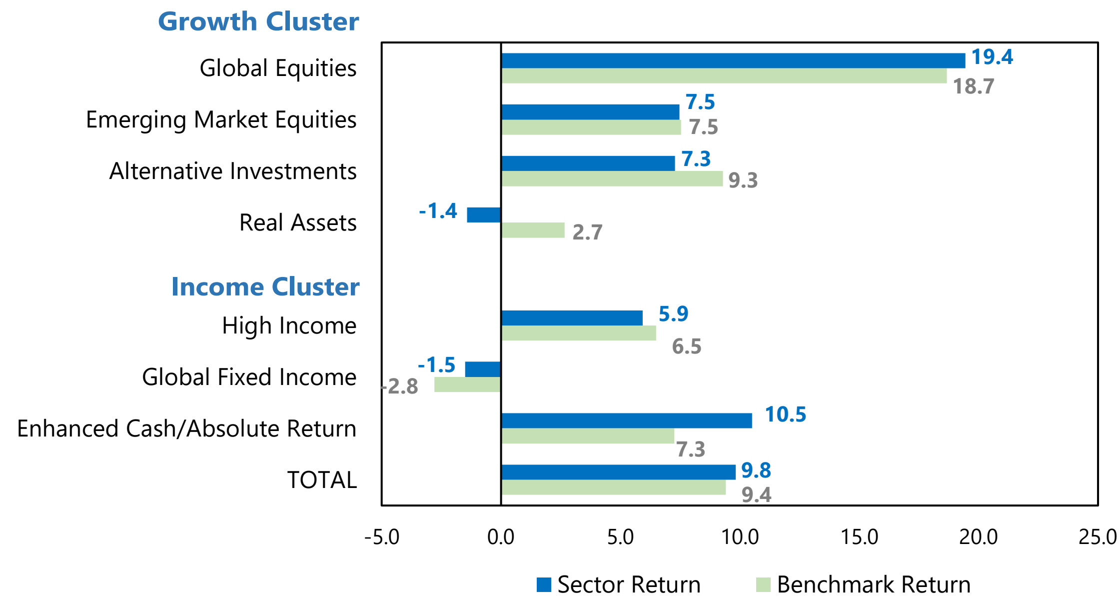
	1-Year	3-Year	5-Year	10-Year
Growth Cluster				
Global Equities	19.4	6.1	11.1	10.2
Emerging Market Equities	7.5	-3.4	1.6	3.0
Real Assets	-1.4	-0.9	2.0	3.0
Alternative Investments	7.3	2.8	8.7	9.7
Income Cluster				
High Income	5.9	1.4	2.7	3.7
Global Fixed Income	-1.5	-4.8	-2.2	0.0
Enhanced Cash/Absolute Return	10.5	6.0	5.4	4.4
Total SRP (nominal)	**9.8**	**2.2**	**6.0**	**6.3**
Actuarial Target Return (nominal)	**5.0**	**5.0**	**5.0**	**5.0**
Total SRP (real)	**6.8**	**-2.0**	**1.7**	**3.2**

Note: Values may not add up due to rounding. The actuarial target return was changed from 6.5 percent to 5.0 percent on April 30, 2016.
Source: INV Investment Control and Valuation System.

In 2024, the SRP generated a 9.8 percent return versus the strategic benchmark return of 9.4 percent (Figure 2).[6] Five of the seven asset classes generated positive returns ranging from 5.9 percent to 19.4 percent during the year. Real Assets and Global Fixed Income were the two asset classes to generate negative returns (i.e., -1.4 and -1.5 percent respectively). Global Equities, with a 36.0 percent weight at year-end, and Enhanced Cash/Absolute Return, with a 10.5 percent weight at year-end, contributed the most to SRP's total return. The more concentrated Model Portfolio (comprised of 66 percent MSCI ACWI IMI, representing a proxy for the Growth Cluster, and 34 percent JPMorgan GBI Global, representing a proxy for the Income Cluster) posted a lower return of 9.2 percent in 2024. In 2024, diversification across asset classes yielded positive value-add for the SRP.

[6] SRP market value is based on end-December 2024 fair values provided by audited or manager/ custodian statements. Hence, they are reported as a mix of gross and net terms. Appendix II, Table 3 provides performance figures for the SRP in both gross and net terms.

Figure 2. 2024 SRP Asset Class and Asset Class Benchmark Returns
(Percent rate of return; in U.S. dollar terms)



Source: INV Investment Control and Valuation System.

Growth Cluster

The Growth Cluster was the greater contributor to total return and ended the year with a 69 percent weight versus the target weight of 66 percent.

- **Global Equities returned 19.4 percent versus the benchmark return of 18.7 percent.** 2024 was another exceptional year of double-digit returns for developed market equities, with U.S. equities contributing significantly to the total performance of the asset class. Overall, Global Equities benefited from an environment supported by strong consumer spending in the U.S., resilient corporate earnings, moderating inflation, and central banks' monetary policy easing. The U.S. weight within the Global Equities index (represented by the MSCI World Index) increased to 74 percent by year-end 2024, from 70 percent in 2023. U.S. equities (represented by the S&P 500 Index) was a significant contributor to total return for Global Equities with a 25 percent return. In comparison, the rest of the developed market equities (represented by the MSCI World ex-USA Index) generated a 4.7 percent return, as European equities substantially lagged the performance of U.S. and Japanese equities due to concerns of overall economic weakness and fragile political stability in major European economies. Investor preference for growth and the exceptional performance of the "Magnificent Seven" stocks remained intact during the year because of their perceived edge in pursuing AI and commercializing its application.[7] In this market environment, SRP's Global Equities' relative positioning contributed

[7] The Magnificent Seven is a term that groups the seven largest technology-focused public companies; and they are Apple, Amazon, Alphabet, Meta Platforms, Microsoft, Nvidia, and Tesla.

to asset class excess returns, as Global Equities was overweight by 4 percent relative to the target weight of 32 percent. (See Appendix I).

Annualized Performance of the Global Equities Sector
(In percent)

	1-Year	3-Year	5-Year	10-Year
Global Equities	19.4	6.1	11.1	10.2
MSCI World Index[1]	18.7	6.3	11.2	9.9
Excess Return	0.8	-0.2	0.0	0.3

[1] The description of the current benchmark is provided in Appendix I.
Note: Values may not add up due to rounding.

- **Emerging Market Equities returned 7.5 percent, in line with the asset class benchmark return.** Rising U.S. yields, the strong U.S. dollar, and the exceptional U.S. equity market performance, were a drag on Emerging Market (EM) Equities performance in 2024. Once again, EM equities (represented by the MSCI Emerging and Frontier Markets Index) significantly underperformed relative to developed market equities. Moreover, there were significant performance differences across EM markets and regions. Asia (represented by the MSCI AC Asia ex-Japan Index)[8] was the best-performing region with a 12.0 percent return for 2024, as China, India, and Taiwan Province of China, which accounted for about 60 percent of the benchmark index, contributed significantly to the total benchmark return. Chinese equities experienced a late-year rally, supported by government stimulus measures and a moderate recovery in consumer spending. India's equity market benefited from its strong economic growth driven by public infrastructure investments and an upswing in household investments in real estate. Taiwan Province of China's technology-heavy equity market benefited from rising global demand for semiconductor chips used in AI technology. On the contrary, South Korean equities experienced a significant sell-off in 2024 (i.e., returned –23.4 percent), due to a political turmoil surrounding the executive branch of the government, economic challenges including declining consumer spending, currency depreciation, and the risk of increased tariffs coming from the U.S., following the U.S. presidential election. Latin America (represented by the MSCI EM Latin America Index) was the weakest performing region and generated a -26.4 percent return, as Brazil—the largest economy in Latin America—faced increased financial uncertainty concerning its debt sustainability, a sharp currency devaluation, and a decline in iron ore prices due to the softening demand from China.

[8] The MSCI AC Asia ex-Japan Index captures large and mid-cap securities in 10 markets in Asia—i.e., China, India, Indonesia, Korea, Malaysia, the Philippines, Taiwan Province of China, Thailand, Hong Kong SAR, and Singapore.

Annualized Performance of the Emerging Market Equities Sector
(In percent)

	1-Year	3-Year	5-Year	10-Year
Emerging Market Equities	7.5	-3.4	1.6	3.0
MSCI Emerging + Frontier Markets Index[1]	7.5	-1.9	1.7	3.6
Excess Return	-0.1	-1.5	-0.1	-0.6

[1] The description of the current benchmark is provided in Appendix I.
Note: Values may not add up due to rounding.

- **Real Assets returned -1.4 percent versus the benchmark return of 2.7 percent.** Real Assets contained a broad mix of both private and public investment strategies, and the overall asset class performance was largely impacted by the weaker-than-expected performance of private investments. Public real asset investments (representing about 58 percent of the asset class at year-end), which included commodities, listed natural resources equity, public infrastructure, public REITs, and U.S. Treasury inflation-protected securities (TIPs), generated a 1.0 percent return during the year. Private real asset investments (representing about 42 percent of the sector), which included private energy, private natural resources, private real estate, and private timber, generated a -5.1 percent return during the year. While commodities (represented by the Bloomberg Commodity Total Return Index) generated a 5.4 percent return, reversing the -7.9 percent return in 2023, the performance of individual commodities in 2024 was more varied depending on market factors. Gold hit all-time highs due to its safe-haven appeal amid increased geopolitical tensions. The energy sector was mixed, with natural gas prices surging to new highs due to expectations of increased global demand, whereas crude oil prices declined moderately due to the softening of global demand. U.S. private real estate (represented by the NCREIF Property Index) started showing some signs of improving prospects compared to 2023, as the index generated a modest 0.6 percent return in 2024 despite the ongoing challenges arising from higher interest rates and continuing supply and demand imbalances. The residential, industrial, retail, and office sectors generated returns ranging from -7.2 percent to 5.3 percent. The retail sector emerged as the best-performing subsector fueled by a resurgence in consumer spending. The office sector was the worst-performing subsector, as it continued to face challenges, as vacancy rates remained high, valuations remained lower due to higher interest rates, and the lack of market activity made price discovery a challenge. U.S. Treasury Inflation-protected securities (TIPs) (represented by the Bloomberg U.S. Government Inflation-Linked All Maturities Total Return Index) performed moderately better than nominal U.S. Treasury bonds with a return of 1.8 percent. While persistent inflation drove the 10-year real yield to increase from about 1.7 percent at the beginning of the year to about 2.2 percent by year-end, the breakeven inflation rate, which represents future inflation expectations, was running lower than the CPI most of the year. Hence holding U.S. TIPs was deemed more attractive than nominal U.S. Treasury bonds in 2024. Negative performance of private real asset investments contributed to most of asset class underperformance.

Annualized Performance of the Real Assets Sector

(In percent)

	1-Year	3-Year	5-Year	10-Year
Real Assets	-1.4	-0.9	2.0	3.0
Custom Real Assets Index[1]	2.7	0.5	4.2	3.3
Excess Return	-4.1	-1.3	-2.2	-0.3

[1] The description of the current benchmark is provided in Appendix I.

Note: Values may not add up due to rounding.

- **Alternative Investments returned 7.3 percent versus the hurdle rate of 9.3 percent.** Alternative Investments is comprised of a mix of private and public market investments. Private market investments accounted for approximately 79 percent of Alternative Investments (comprised of private income/credit, private emerging markets equity, leveraged buyout (LBO), growth equity and venture capital, and other alternative investments), and public market investments accounted for the remaining 21 percent of the asset class. Unlike public market investments, private market investments generally require a longer-time horizon (typically 5 to 7 years) for value creation, and their calendar year performance can lag the public market performance during periods of strong equity market rallies as valuations of private market investments do not adjust as quickly as public market investments. 2024 brought much-needed financial relief to private markets with the start of monetary policy easing; however, private market fund (capital) raising, investor capital commitments, and private investment exits generally remained weaker than anticipated. Hence, overall private market investment performance in 2024 lagged the performance of public market investments. In this market environment, the subsectors within Alternative Investments generated returns ranging from -2.5 percent to 12.4 percent. Venture and Growth Equity and Other Alternative Investments were the two best-performing subsectors and generated 12.4 and 7.9 percent returns, respectively.[9] Public market alternative investment strategies, which are configured as private investment proxies, generated returns ranging from -0.8 percent to 40.9 percent. Weaker overall performance of private market investments, compared to public market investments, contributed to asset class underperformance.

Annualized Performance of the Alternative Investments Sector

(In percent)

	1-Year	3-Year	5-Year	10-Year
Alternative Investments	7.3	2.8	8.7	9.7
Alternative Investments Hurdle[1]	9.3	2.1	8.6	9.7
Excess Return	-2.0	0.8	0.0	-0.1

[1] The description of the current benchmark is provided in Appendix I.

Note: Values may not add up due to rounding.

[9] The five Alternative Investments subsectors are (a) Private Credit & Income; (b) Emerging Markets Private Equity; (c) Leveraged Buyouts; (d) Venture Capital & Growth Equity; and (e) Other Alternative Investments.

Income Cluster

The Income Cluster ended the year with a 31 percent weight relative to the target weight of 34 percent, as the Growth Cluster was the greater driver of return generation than the Income Cluster in 2024. Hence, a 3 percent underweight to the Income Cluster relative to the target weight contributed positive value-add to the SRP.

- **High Income returned 5.9 percent versus the benchmark return of 6.5 percent.** U.S. high yield bonds outperformed U.S. investment grade corporate bonds in 2024, representing another year of better relative performance. U.S. high yield bonds benefited from tightening credit spreads in a monetary policy easing environment. Moreover, the magnitude of credit spreads narrowing was much greater for U.S. high yield bonds than U.S. investment grade corporate bonds. Even though U.S. Treasury yields increased across most maturities in December 2024, credit spreads across both U.S. investment grade and U.S. high yield bonds ended the year at historical lows. U.S. investment grade corporate bonds (represented by the ICE BofA U.S. Corporate Index) generated a modest 2.8 percent return, whereas U.S. high yield bonds (represented by the ICE BofA U.S. High Yield Index) generated an 8.2 percent return. For U.S. high yield bonds, the lowest credit-rating segment (i.e., CCC credit rating) benefited from increased risk-on investor sentiment, as the CCC-credit rating segment outperformed higher credit-rating segments (i.e., B and BB) with a 16.4 percent return during the year. Emerging market bonds (represented by the JPMorgan EMBI Global Diversified Index) also had a positive year with a 6.5 percent return. The strong U.S. dollar was a drag on the performance of local currency emerging market bonds in 2024, whereas hard currency bonds benefited from monetary policy easing in the U.S. and tightening credit spreads despite increased geopolitical tensions. In this market environment, the SRP's High Income investment strategies generated positive returns ranging from 2.6 to 13.0 percent. Weaker relative performance of two active U.S. high yield strategies, and an active emerging market bond strategy, contributed to asset class underperformance.

Annualized Performance of the High Income Sector

(In percent)

	1-Year	3-Year	5-Year	10-Year
High Income	5.9	1.4	2.7	3.7
Custom High-Income Index[1]	6.5	0.9	2.4	4.0
Excess Return	-0.6	0.5	0.3	-0.3

[1] The description of the current benchmark is provided in Appendix I.

Note: Values may not add up due to rounding.

- **Global Fixed Income returned -1.5 percent versus the benchmark return of -2.8 percent.** Developed market government bond and Chinese government bond strategies generated mixed results, with returns ranging from -7.1 percent to 3.4 percent. Investor expectations for aggressive interest rate cuts by the Federal Reserve and other major central banks in the first half of 2024, did not materialize as anticipated. At the start of 2024, investors expected about six interest rate cuts by the Federal Reserve throughout the year; however, only three rate cuts were made. Furthermore, stronger-than-expected U.S. economic growth, including the stronger-than-expected labor market, and inconsistent disinflation, drove the 2-year U.S. Treasury yield to 5.0 percent in May 2024. As inflationary pressures began to ease in the second half of the year, the Federal Reserve reduced the Federal Funds Rate by 100 basis points in total between September and December 2024. Despite these reductions, U.S. Treasury yields experienced significant yield volatility arising from uncertainty on the trajectory of trade and fiscal policies subject to the outcome of the U.S. elections. By the end of September 2024, the 2-year and 10-year U.S. Treasury yields increased by 60 and 79 basis points respectively, reaching about 4.2 percent and 4.6 percent by year-end. Chinese government bonds performed better than developed market bonds following China's decision to lower interest rates and introduce fiscal stimulus to address their economic slowdown. Hence, the Chinese government bond strategy was the main contributor to asset class outperformance.

Annualized Performance of the Global Fixed Income Sector

(In percent)

	1-Year	3-Year	5-Year	10-Year
Global Fixed Income	-1.5	-4.8	-2.2	0.0
Custom Global Fixed Income Index[1]	-2.8	-5.4	-2.7	-0.2
Excess Return	1.3	0.6	0.5	0.2

[1] The description of the current benchmark is provided in Appendix I.

Note: Values may not add up due to rounding.

- **Enhanced Cash/Absolute Return (ECAR) returned 10.5 percent versus the benchmark return of 7.3 percent**. ECAR is comprised of a mix of non-directional strategies with low correlations to both equity and fixed income markets.[10] The hedge fund universe (represented by the HFRI Fund Weighted Composite Index)[11] welcomed another year of positive performance with a 9.8 percent return despite a lot of uncertainties concerning the eventual outcome of the U.S. elections, elevated geopolitical risks, and falling but persistent inflation. Equity-hedge strategies with net long-equity exposure performed exceptionally well, as the strong U.S. equity market performance provided tailwinds to the sector. Relative value strategies benefited from inconsistent disinflation and the pace of monetary policy easing. Global macro strategies were net beneficiaries of strong equity market performance, declining rates, and volatility in foreign exchange markets. Event-driven strategies benefited from AI-driven demand growth in power utilities and increases in investor activism. Merger arbitrage strategies generated positive returns; however, they were among the weaker-performing sectors, as interest rates remained

[10] Enhanced cash/absolute return strategies are considered non-directional and characterized as having very low market (beta) sensitivity to the underlying equity or fixed income markets. Enhanced cash/absolute return strategies seek to generate an absolute positive return regardless of market direction over an "absolute" risk-free benchmark return, such as a 90-day treasury bill plus some risk premium (i.e., 200 basis points of risk premium per annum for the SRP). In comparison, relative return (or directional) strategies generally move in the same direction as the underlying markets and exhibit high market (beta) sensitivity to the underlying markets, because they seek to add relative value over chosen market benchmarks (e.g., a U.S. equity manager's performance might be benchmarked relative to the S&P 500 Index). More commonly known enhanced cash/absolute return strategies include global macro, equity market long/short, merger arbitrage, convertible bond arbitrage, opportunistic and event-driven, etc.

[11] The Hedge Fund Research, Inc. (HFRI) Fund Weighted Composite Index is a global, equal-weighted index of single-manager hedge funds that report to Hedge Fund Research (HFR) Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of $50 Million under management or $10 Million under management and a twelve (12) month track record of active performance.

higher than expected, and a challenging regulatory environment discouraged larger merger deals from coming to the market. All ECAR investment strategies generated positive returns ranging from 7.2 to 14.0 percent for the year and contributed to asset class outperformance.

Annualized Performance of the Enhanced Cash/Absolute Return Sector

(In percent)

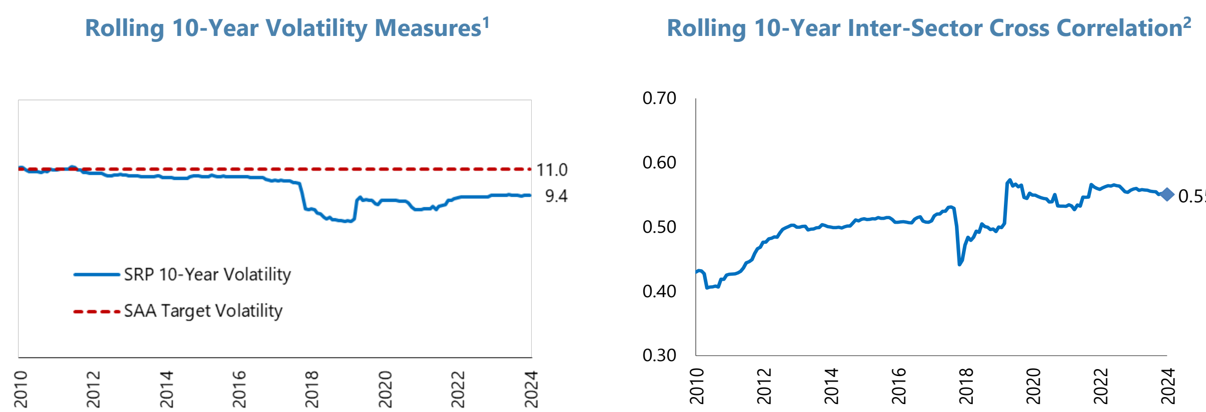
	1-Year	3-Year	5-Year	10-Year
Enhanced Cash/Absolute Return	10.5	6.0	5.4	4.4
90-day T-Bill + 200 bps per annum [1]	7.3	5.9	4.5	3.8
Excess Return	3.3	0.2	0.9	0.6

[1] The description of the current benchmark is provided in Appendix I.
Note: Values may not add up due to rounding.

The SRP's portfolio risk (as measured by the rolling 10-year standard deviation of monthly returns) continued to remain below the long-term strategic target of 11 percent (Figure 3). The long-term 10-year volatility measure ended the year at 9.4 percent. As of end-2024, the SRP's inter-sector cross correlation (measured on a rolling 10-year basis) amongst the seven asset classes was about at 0.55.

Figure 3. SRP Rolling Volatility Measures and Inter-Sector Correlation

(In percent)



Source: INV Investment Control and Valuation System.
[1] Based on 120-months rolling standard deviation of monthly returns.
[2] Based on 120-months rolling inter-sector correlations of monthly returns.

The liquidity profile of the SRP modestly increased from 2023. As of end-2024, approximately 78 percent of the SRP was in liquid, publicly traded securities that can be converted to cash within 30 days, while an additional 7 percent of the SRP can be converted to cash within 45 to 90 days. Overall, the SRP maintained prudent levels of liquidity, which would allow the SRP to effectively manage risk. Moreover, liquidity serves as an effective tool for funding new investments, especially during periods of forced-selling, asset mispricing, and extreme risk aversion arising from market dislocations and heightened uncertainty. Prudent liquidity management safeguards the SRP from becoming a forced seller of sound investments into distressed markets. For additional details on the SRP's liquidity profile, please see Table 2 in Appendix II.

During the year, the SRP maintained a higher allocation to the Growth Cluster relative to the Income Cluster, thereby contributing to higher total return (Table 2). While the seven asset classes remained within the inner bands of their target weights, year-end allocation to the Growth Cluster (comprised of Global Equities, Emerging Market Equities, Real Assets, and Alternative Investments) reached about 69 percent, which was about 3 percent above the target weight for the Growth Cluster.

- Within the Growth Cluster, Global Equities was the greater contributor to total return because its absolute performance was better than Emerging Market Equities and Real Assets. Overall investor preference for developed market equities and the reduced investor concern for inflation favored Global Equities over Emerging Market Equities and Real Assets. Alternative Investments was also overweight relative to its target weight of 10 percent because the asset class included private investment strategies that could not be rebalanced like public market investments due to the illiquid and private nature of those investment strategies.
- Overall allocation to the Income Cluster (comprised of High Income, Global Fixed Income, and Enhanced Cash/Absolute Return) reached around 31 percent at year-end. Relative underweight for the Income Cluster can be attributed to underweight in Global Fixed Income and Enhanced Cash/Absolute Return (relative to their target weights). Global Fixed Income was the asset class with the lowest return versus High Income and Enhanced Cash/Absolute Return. While Enhanced Cash/Absolute Return had higher absolute performance compared to High Income, it is less liquid than High Income. Hence, High Income was favored over Enhanced Cash/Absolute Return to overweight within the Income Cluster. Between Global Fixed Income and High Income, High Income was overweighted because of the better absolute performance for High Income. Sustained economic growth, a continued decline in inflationary pressures, the Federal Reserve and other central banks' monetary policy easing in 2024 overall favored growth over income.

Table 2. SRP Asset Allocation at Year-End
(In percent)

	Strategic Allocation Target	Inner Bands of Strategic Allocation Target	End-Period Allocation	
			2023	2024
Growth Cluster	**66.0**		**69.1**	**69.2**
Global Equities	32.0	25.5 - 38.5	34.3	36.0
Emerging Market Equities	13.0	6.5 - 19.5	10.7	9.6
Alternative Investments	10.0	2.0 - 18.0	13.0	13.3
Real Assets	11.0	5.0 - 17.0	11.0	10.2
Income Cluster	**34.0**		**30.9**	**30.8**
High Income	11.0	5.0 - 17.0	12.0	11.6
Global Fixed Income	11.0	6.0 - 16.0	7.8	7.5
Enhanced Cash/Absolute Return	12.0	4.5 - 19.5	10.5	10.5
Cash	--	0.0 - 5.0	0.7	1.2

Note: End-period allocation values may not add up due to rounding.
Source: INV Investment Control and Valuation System.

INVESTMENT MANAGEMENT AND POLICY

Key Investment Policy and Portfolio Actions

Several investment policy and portfolio management actions were taken in 2024. Key developments during the year are summarized below:

- **The IC and INV completed the strategic asset allocation (SAA) review in 2024.**[12] The SAA review was undertaken as a series of technical analysis based on mean-variance optimization (MVO), long-term (i.e., 10-year) capital market assumptions (CMAs), and the constellation of current asset prices. All strategic benchmarks were reviewed for efficacy, investability, and practicality, and the rebalancing ranges around each of the seven asset classes were adjusted to better accommodate the changes in the strategic target for each of the seven asset classes. The main findings of the 2024 SAA review are summarized below:
    - **The SAA is structured to target a 6.0 percent return—i.e., comprised of the actuarial target return of 5.0 percent nominal (3.0 percent real with 2.0 percent inflation), and an additional 1.0 percent return to cover investment management fees and the cost of running the Investment Office.**[13] The SAA review analyzed a series of asset allocations that could effectively generate the target return with minimal total volatility and without introducing greater risks (e.g., illiquidity, reduced asset class diversification, manager-specific, exposure concentration, the lack of transparency, control, etc.).
- **The IC and INV reviewed and assessed the changes in CMAs, which represent the long-term expectations for asset returns, volatility, and correlations across asset classes.** CMAs were anchored on a 10-year time horizon and served as a key input into deriving an optimal mix of asset classes that can achieve the target return with minimal volatility (Table 3). Assessing and validating CMAs has many challenges, including the quality of data that leads to the formulation of expected asset class returns. Other CMA challenges include the lack of timeliness, changing asset and asset class compositions, survivorship bias, and time-period and psychological biases (i.e., overconfidence and preferences). CMAs invariably introduce assumptions around expected asset returns, volatilities, and correlations, and in some instances, an exercise in professional judgement may be required to ensure reasonableness. Long-term macroeconomic forecast of inflation and growth rates comprises the fundamental base for formulating asset class return expectations. Regarding inflation, a 2.0 percent inflation rate was assumed for the next 10-year period, which aligns with the pension actuarial assumption for inflation and the Federal Reserve and other major central banks' long-term inflation target. Moreover, assumed long-term growth rates were derived from the IMF World Economic Outlook. The expected return for each asset

[12] There was a total of five SAA meetings held by the IC and INV to complete the SAA review. An external consultant, AON Investments U.S.A. Inc, was retained to assist INV with the SAA review process.

[13] The 5.0 percent (or 3.0 percent real) actuarial target return does not account for investment management fees and the cost of running the Investment Office. For these reasons, the SAA proactively sets its target return 1.0 percent higher (i.e., a 6.0 percent target return) than the assumed 5.0 percent actuarial target return.

class was determined based on historical returns, risk premiums, and the constellation of current asset prices.

Table 3. 2024 SAA Capital Market Assumptions[1]
(In percent)

In Percent	Expected Return	Expected Volatility
Growth Cluster		
Global Equities	7.5	15.0
Emerging Market Equities	7.5	17.0
Alternative Investments	8.5	11.0
Real Assets	6.0	11.0
Income Cluster		
Global Fixed Income	3.5	4.0
High Income	6.0	7.5
Enhanced Cash/Absolute Return	4.5	3.5

[1]The 2024 SAA CMAs were based on a 10-year time horizon.

Source: INV

- **The IC and INV reviewed the strategic benchmarks for all seven asset classes and assessed their efficacy, investability, and practicality (Table 4).** The 2024 SAA review analyzed the efficacy, investability, and practicality of all asset class benchmarks, leading to several modifications to better reflect the investable universe for five of the seven asset classes. The strategic benchmarks for Global Equities and High Income remained unchanged. Benchmark modifications are summarized as follows:
  - **Emerging Market Equities:** The strategic benchmark was revised to exclude frontier markets. This adjustment was made because frontier markets are characterized by their small market capitalization, illiquidity, high transaction costs, foreign ownership restrictions, and limited access, which make it challenging to replicate the benchmark index.
  - **Alternative Investments:** The strategic benchmark was revised as a composite of public market indices that are proxies for various subsectors. The composite benchmark is calculated using normalized SAA weights for Global Equities, Emerging Market Equities, High Income, and Absolute Return. These weights will be reviewed and adjusted as needed during future SAA reviews to ensure that the composite benchmark remains unambiguous, investable, and specified in advance. Moreover, an illiquidity premium will be applied only to private investments, with an expected mix of 70 percent private and 30 percent public investments over the medium term (i.e., over a 5-year period).
  - **Real Assets:** The strategic benchmark was modified by removing the Bloomberg U.S. Government Inflation-Linked All Maturities Total Return Index from the composite

benchmark and moving it to Global Fixed Income. This was done because U.S. Treasury Inflation Protected Securities (TIPs) typically have high sensitivity to nominal U.S. Treasury bonds. Additionally, a private real estate index (i.e., NCREIF), which is not investable, was replaced with an investable public real estate index (i.e., FTSE EPRA NAREIT U.S. REITs Index), which is expected to deliver similar long-term returns as the private index while providing marked-to-market pricing. The new strategic composite benchmark consists of 50 percent FTSE EPRA NAREIT U.S. REITs Index and 50 percent Bloomberg Commodities Total Return Index.

  - **Global Fixed Income:** The strategic benchmark was revised as a composite of the J.P. Morgan Government Bond Index U.S. (GBI US) (65 percent), Bloomberg U.S. Government Inflation-Linked All Maturities Total Return Index (15 percent), and Bloomberg China Treasury 1-10 Years Index (20 percent). The composite benchmark will only include Chinese government bonds as a source of diversification for Global Fixed Income. The new composite benchmark is expected to offer higher yields, lower volatility, and lower correlation between the two bond markets (i.e., U.S. and China) as represented in the composite benchmark, compared to the current composite benchmark, which only includes U.S., European, and Japanese government bond markets.

- **Enhanced Cash/Absolute Return:** The asset class was renamed **Absolute Return** for simplicity, and the risk premium per annum was lowered from 200 basis points to 170 basis points to reflect the current market environment for market-neutral strategies. The risk premium for these strategies, as measured by the HFRI Market Neutral Index, had steadily declined since the introduction of the asset class in 2003. As of December 31, 2023, the 10-year average risk premium was estimated to be 1.7 percent, primarily due to the increasing number of absolute return strategies aiming to generate similar risk premiums. Hence, the strategic benchmark was revised to be 90-day T-bill plus 170 basis points of risk premium per annum.

Table 4. 2024 The Current and New Benchmarks
(In percent)

Sector	Current Benchmarks	New Benchmarks
Global Equities	MSCI World Index	MSCI World Index
Emerging Market Equities	MSCI Emerging + Frontier Markets Index	MSCI Emerging Markets Index
Alternative Investments	Composite of Bloomberg Global Aggregate Corporate Index and Bloomberg Global High Yield Index + Composite of MSCI Emerging Markets Small Cap Index and MSCI Emerging Frontier Markets Africa ex. South Africa Index + MSCI World Small Cap Index + 90-day T-bill + 200 bps The subsector weights are adjusted annually based on actual subsector weights of prior year.	Bloomberg Global High Yield Index + MSCI Emerging Markets Small Cap Index + MSCI World Small Cap Index + 90-day T-bill + 200 bps illiquidity premium per annum on private investments (70% of Alternative Investments Sector) The subsector weights are derived from the normalized SAA target weights for the High Income, Emerging Market Equities, Global Equities, and Absolute Return sectors.
Real Assets	NCREIF Property Index (33.3%), Bloomberg Commodity Total Return Index (33.3%), and Bloomberg US Govt Inflation-Linked All Maturities Total Return Index (33.3%)	FTSE EPRA NAREIT US REITs Index (50%) and Bloomberg Commodities Total Return Index (50%)
Global Fixed Income	J.P. Morgan Government Bond Index Global (80.0%), and J.P. Morgan Government Bond U.S. Index (20.0%)	J.P. Morgan Government Bond U.S. Index (65%), Bloomberg US Govt Inflation-Linked All Maturities Total Return Index (15%), and Bloomberg China Treasury 1-10 Years Index (20%)
High Income	ICE BofA U.S. High-Yield Index (55.0%), ICE BofA U.S. Corporate Index (25.0%), and J.P. Morgan EM Bond Global Diversified Index (20.0%)	ICE BofA U.S. High-Yield Index (55.0%), ICE BofA U.S. Corporate Index (25.0%), and J.P. Morgan EM Bond Global Diversified Index (20.0%)
Absolute Return (fka ECAR)	90-day T-bill + 200 bps risk premium	90-day T-bill +170 bps risk premium per annum

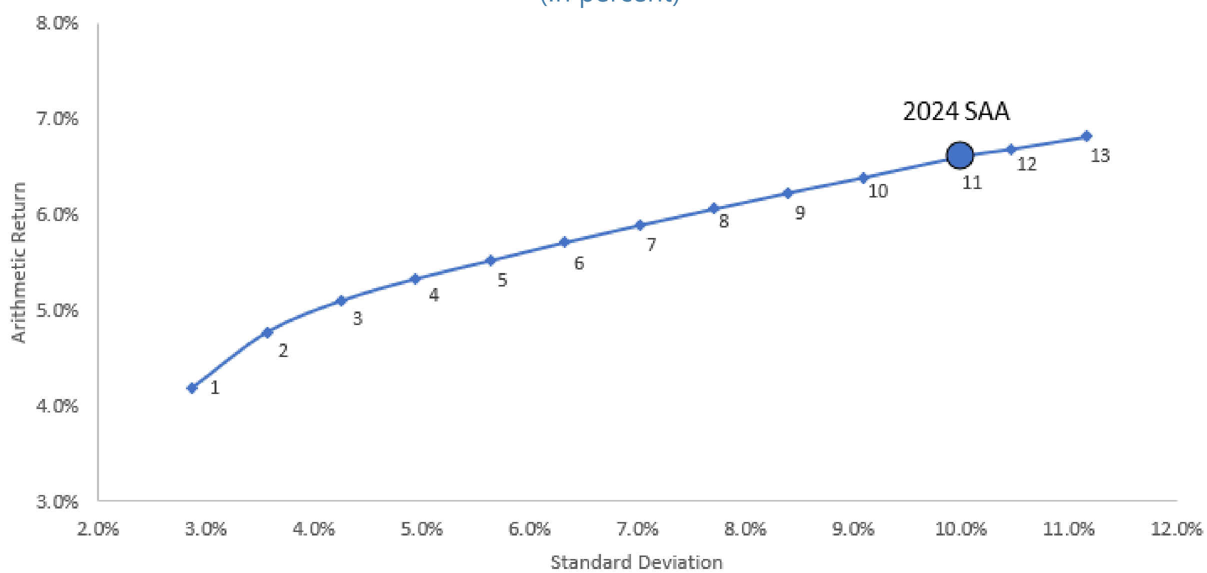
Source: INV

- **Mean-Variance Optimization (MVO) was used to model outputs for the 2024 SAA, based on the updated CMAs (Figure 4).** MVO is a quantitative methodology that provides a structured approach to constructing an optimal portfolio comprised of select asset classes that aims to generate the target return with minimal total volatility. It is grounded in the principle of diversification—i.e., identifying an optimal mix of asset classes based on their expected returns, standard deviations, and correlations. MVO also has several limitations. MVO favors asset classes with higher expected returns and lower volatility, which would yield higher Sharpe ratios.[14] However, favoring asset classes solely based on higher Sharpe ratios would fail to take into account idiosyncratic characteristics of each asset class (e.g., liquidity constraints, illiquidity, investability, investment strategy and investment manager access, rebalancing difficulties, etc.), which could lead to unexpected return and risk outcomes, especially during periods of market turmoil. Additionally, MVO outputs do not consider the diversification benefits that a mix of lowly correlated asset classes could provide across varying market conditions. To address these limitations, constraints (i.e., minimum or maximum target allocation) are introduced to avoid having a small number of asset classes ending up with most of the target allocation. Using updated CMAs, MVO outputs targeting returns of 6.0 percent or higher would allocate greater

[14] The Sharpe ratio measures the excess return per unit of risk. The excess return is defined as a return above the risk-free rate (e.g., a U.S. Treasury yield) and risk is defined as a measure of volatility. Higher Sharpe ratio implies that the investment generated a higher risk adjusted return, and lower Sharpe ratio implies that the investment did not generate adequate returns for the level of risk taken.

weights, up to 100 percent, to Alternative Investments because of its public equity-like returns with low perceived volatility. To construct a balanced SAA, a maximum target allocation for Alternative Investments was introduced primarily based on the current level of allocation, illiquidity risk, challenges with accessing right investments at the right time, and rebalancing difficulties. Moreover, the SAA introduced minimum target allocations to Real Assets (8 percent), Global Fixed Income (10 percent), and Absolute Return (8 percent) after considering their current allocations, the roster of existing investment strategies within each asset class, and various diversification benefits these asset classes could provide across different market environments. The MVO analysis incorporated the above minimum and maximum target allocation constraints to construct an SAA that is expected to deliver the target return of 6 percent with minimal total volatility.

Figure 4. 2024 Strategic Asset Allocation Efficient Frontier
(In percent)



Source: INV and AON Investments U.S.A. Inc

- **The IC approved a new SAA that is expected to deliver the target return with minimal total volatility.** The new SAA moderately increases the weight of the Growth Cluster relative to the Income Cluster, thereby changing the split between the Growth Cluster and the Income Cluster to 68/32 from 66/34 (Table 5). Compared to the current SAA, the 2024 SAA increases target weights for Global Equities and High Income, while reducing target weights for Emerging Market Equities, Real Assets, Alternative Investments, Global Fixed Income, and Absolute Return. Within the Growth Cluster, the target weight for Global Equities was increased by shifting target weights from Emerging Market Equities, Real Assets and Alternative Investments, as Global Equities has an expected return higher than the SAA target return and consistently delivered its target return over the long-term. Alternative Investments' target weight was reduced despite its higher expected return relative to Global Equities because of significant illiquidity risk, the lack of transparency, and challenges around accessing right investments at the right time in private markets. Within the Income Cluster, the target weight for High Income was increased by reducing target weights for Global Fixed Income and Absolute Return because of High Income's higher expected return compared to the other two asset classes. Overall, the new SAA is expected to deliver the 6.0 percent target return with the implied long-term volatility of 10.0 percent.

Table 5. 2024 Strategic Asset Allocation
(In percent)

	2024 SAA			2017 SAA		
	Strategic Allocation Target	Inner Bands of Strategic Allocation Target	Outer Bands of Strategic Allocation Target	Strategic Allocation Target	Inner Bands of Strategic Allocation Target	Outer Bands of Strategic Allocation Target
Growth Cluster	**68.0**			**66.0**		
Global Equites	44.0	39.0 - 49.0	36.5 – 51.5	32.0	25.5 - 38.5	22.5 - 41.5
Emerging Market Equities	8.0	3.0 - 13.0	0.5 – 15.5	13.0	6.5 - 19.5	3.5 - 22.5
Real Assets	8.0	1.0 - 15.0	0.0 – 16.0	11.0	5.0 - 17.0	2.0 - 20.0
Alternative Investments	8.0	1.0 - 15.0	0.0 - 16.0	10.0	2.0 - 18.0	0.0 - 20.0
Income Cluster	**32.0**			**34.0**		
Global Fixed Income	10.0	2.0 - 18.0	0.0 - 20.0	11.0	6.0 - 16.0	3.5 - 18.5
High Income	14.0	6.0 - 22.0	2.0 - 26.0	11.0	5.0 - 17.0	2.0 - 20.0
Absolute Return	8.0	1.0 - 15.0	0.0 - 16.0	12.0	4.5 - 19.5	1.0 - 23.0

Source: INV

- **The IC and INV reviewed the rebalancing bands and rebalancing trigger points.** INV has traditionally relied on the range rebalancing methodology to manage the rebalancing of the SRP. The range rebalancing methodology is governed by both inner and outer bands, which was first adopted during the 2002 SAA review. Introduction of inner and outer bands was intended to serve as a sound technical basis for INV to efficiently handle the day-to-day management of investments and operations with a degree of independence while ensuring asset allocations do not deviate excessively from the SAA. With the range rebalancing methodology, rebalancing is automatically triggered when an asset class allocation is at the risk of exceeding the inner band ranges. If an asset class is expected to benefit the SRP by targeting allocation levels beyond the inner band ranges, then an explicit IC approval is required to execute such rebalancing decision. Outer bands represent the absolute minimum and maximum allocation limits for the SRP. Rebalancing trigger points help to establish how much allocation deviations are allowed for each asset class (relative to individual asset class SAA target weights) to ensure that the SRP could generate the target return with minimal total volatility. Rebalancing trigger points are calibrated taking into account investor risk tolerance, trading costs, volatility of the asset class, volatility of the rest of the portfolio, and the correlation between an asset class and the rest of the portfolio.
- **The IC and INV will transition to the new SAA during 2025 as much as practicable, and the new SAA will become effective on January 1, 2026.** The SAA rebalancing bands provide the

flexibility to over/underweight based on market developments. Moreover, INV will monitor any meaningful changes in long-term CMAs on a regular basis and will periodically assess the need for an interim or full-scale SAA review if the market environment and global developments call for it, to ensure the ongoing efficacy of the SAA.

Key Operational Actions

Several operational tasks were reviewed and addressed in 2024. Key details are summarized below:

- **The implementation of OIA audit recommendations progressed well.** The 2022 OIA audit aimed to evaluate the effectiveness of governance, risk management, and internal controls over SRP's investment activities. A comprehensive action plan was finalized in early 2023, comprising 8 main recommendations with 32 action items. By the end of 2024, about 91 percent of the action items (29 in total) were completed. The remaining three action items are scheduled for completion in 2025. Key 2024 OIA deliverables are summarized below:

  1. **Active Risk Budgeting**
     - Finalized the risk attribution report, initially developed in 2023, to enhance risk measurement and reporting.
  2. **Portfolio Construction and Sector Benchmarks**
     - Implemented a procedure to periodically assess the material changes to long-term capital market assumptions (CMAs) and review the overall efficacy of the strategic asset allocation (SAA).
     - Provided greater details on the rationale behind setting allocation constraints for certain asset classes within the SAA optimization process.
     - Developed forward looking estimates during the SAA review to assess the likelihood of meeting the SAA target return.
     - Re-evaluated the ECAR (renamed as Absolute Return) sector benchmark as part of the recent SAA review.
  3. **Approach to ESG, Sustainability, and Stewardship**
     - Developed an ESG Implementation Plan, including carbon emissions measurement for Global Equities and Emerging Market Equities.
  4. **Custody Bank Key Performance Indicators (KPIs)**
     - Established formal KPIs with the master custody bank and initiated annual tracking and monitoring.

- **INV progressed on opening sub-custody accounts in emerging markets.** In collaboration with the master custody bank and the Legal Department (LEG), INV concluded the multi-year process of opening segregated sub-custody accounts in all markets that are included in the

MSCI Emerging Markets Index.[15] During 2024, INV opened sub-custody accounts in United Arab Emirates (UAE) and Kuwait. Opening these sub-custody accounts allows the SRP to directly access the local markets and hold securities in the name of the SRP for better protection.

Environmental, Social, Governance (ESG) Developments

In 2024, INV significantly advanced the implementation of the ESG Policy Framework by making substantial progress on all four core ESG practices. Key developments are summarized below:

1. Enhanced ESG Integration

- **INV continued to strengthen its investment due diligence process by incorporating ESG considerations in investment manager hiring and strategy evaluation.** ESG considerations are an important component of the investment due diligence and investment manager selection process. To evaluate how effectively investment managers integrate material ESG considerations into their processes, INV enhanced the ESG due diligence process. This included enhancing the assessment of investment managers' corporate ESG policies and practices, analyzing portfolio managers' approaches to ESG integration, and understanding the financial impact of these considerations on the overall SRP.

- **INV continued expanding the scope of research related to thematic investments.** As part of its continuing effort to identify investment opportunities and strengthen risk management, INV expanded the scope of research related to thematic investments, including impact investments.

- **INV continued to formalize ESG language in investment management agreements (IMAs).** In collaboration with the Legal Department, INV continued to formalize ESG expectations in IMAs through the inclusion of relevant legal language in IMAs for public market investments and side letters for private market investments, with some exceptions (e.g., hedge funds).

2. Expanded ESG and Climate Change Analytical Framework

- **INV expanded its analytical framework to measure, monitor and analyze a range of ESG metrics, including carbon emissions, climate scenario analysis, and ESG ratings.** Measuring and monitoring ESG metrics, including those related to climate change, helps make better informed decisions, better manage risks, and identify potential investment opportunities. INV, in collaboration with an external consultant:
    - **Measured carbon emissions for SRP's Global Equities and Emerging Market Equities using best available data.** Preliminary analysis showed that as of end-December 2024, carbon emissions from both asset classes were lower than their respective benchmarks.

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[15] As of December 31, 2024, the MSCI Emerging Markets Index includes: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Kuwait, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Saudi Arabia, South Africa, Taiwan Province of China, Thailand, Turkey and United Arab Emirates.

  - **Analyzed how the SRP's SAA benchmarks and target weights would perform under various climate change scenarios.** Climate change scenario analysis can help understand and prepare for the potential impact of climate change on various asset classes and their financial performance. Each scenario assessed different assumptions regarding climate policy, timing, coordination, temperature, and technological advancements. Preliminary results indicate that the SRP is well-positioned to achieve its long-term return under most scenarios.

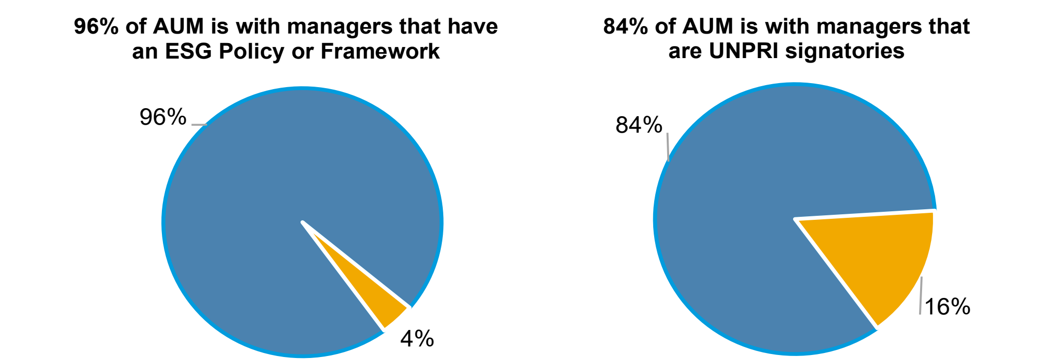
  - **Measured ESG ratings for SRP's Global Equities and Emerging Market Equities using best available data and the MSCI ESG ratings.** Preliminary analysis shows that as of end-December 2024, both asset classes are in line with their respective benchmarks.

- **INV enhanced ESG data collection and analysis.** INV continued to enhance the data collection process from investment managers to strengthen reporting, monitoring, and engagement.

3. Increased engagement with investment managers on ESG and climate change

- **INV continued to monitor and assess investment managers' ESG practices.** To better understand the evolution of these practices, INV proactively increased its engagement with investment managers.

Figure 5. Percent of SRP's Assets under Management (AUM) with Managers that Have an ESG Policy or Framework and/or Are UNPRI Signatories



Note: Based on responses from the Annual Compliance Questionnaire.

- **Approximately 96 percent of the SRP's total assets were under management by investment managers who had an ESG policy or framework in place.** It is worth noting that each investment manager's ESG policy and framework vary considerably in scope, materiality, and subjectivity, which makes objective analysis, cross comparison, and data aggregation a significant challenge.

- **Approximately 84 percent of the SRP's assets under management are with investment managers who are signatories to the United Nations Principles for Responsible Investment (UNPRI).** The SRP may invest with small boutique investment managers who often lack the size, scale and funding needed to comply with the UNPRI's signatory reporting requirements. While these investment managers may not be UNPRI signatories, many of them have ESG and sustainability polices in place and integrate these considerations into their investment decision-making and risk management practice.

- **INV continued to engage investment managers on ESG and climate change topics, including the divergence in ESG regulations in Europe and the U.S.** In 2024, the European Union advanced the Corporate Sustainability Reporting Directive (CSRD) and the Corporate Sustainability Due Diligence Directive (CSDDD), emphasizing extensive disclosures. Meanwhile, the U.S. Securities and Exchange Commission (SEC) faced delays in finalizing its climate disclosure rules, reflecting deep polarization over ESG disclosures. This regulatory divergence may create complexities for global companies navigating the disclosure compliance requirements across different jurisdictions. INV is engaging with investment managers to assess potential risks and investment opportunities for the SRP.

4. Increased collaboration with Institutional Investors

- **To gain insights into peer ESG practices and increase collaboration, INV conducted an ESG Peer Review Survey among select institutional investors.** The survey indicated that while peer considerations of ESG risks and opportunities differ based on their institutional objectives and assets under management, the SRP is broadly in line with its peers for major ESG considerations, including having an ESG Policy or Framework, relying on an ESG integration approach, measuring carbon emissions, and incorporating ESG language in investment management agreements. Also, the survey showed only 2 out of the 11 survey respondents are UNPRI signatories.

INV will continue with implementing and enhancing the ESG Policy Framework. The implementation of ESG principles is an ongoing initiative that entails considerable time and resources. Nevertheless, the IC and INV remain committed to incorporating ESG considerations into the investment decision-making process to ensure the long-term sustainability of the SRP.

Advisory Group[16]

The thirty-eighth meeting of the Advisory Group (AG) to the Investment Committee of the SRP was held in hybrid mode on October 31, 2024. The AG provided general views and expertise on diversification, market environment, and investment opportunities. The IC and INV also sought AG views on portfolio rebalancing, the strategic asset allocation review, and ESG considerations. Key points raised are highlighted below.[17]

Investment Policy

- AG members noted that the SRP's 12.1 percent return in CY 2023 surpassed the target of 5.0 percent, driven by stronger-than-expected growth and falling inflation. AG members emphasized the importance of maintaining a long-term market view, staying fully invested, and managing risk through portfolio rebalancing. Concerns were raised around the market's private equity valuations and venture capital markdowns. AG members expressed comfort with the overall portfolio positioning but suggested increasing the cash (i.e., liquidity) position to be able to act opportunistically.

- The inclusion of global bonds in the portfolio was questioned, with "treasury plus" suggested as a better option when U.S. treasuries offer the highest yields and other global government bonds are highly correlated. Chinese government bonds have lower yields and help diversify portfolio risks. AG members also noted that infrastructure and energy investments with good cash yields could be an interesting opportunity.

Market Environment and Investment Return Drivers

- AG members discussed the near-term economic environment and markets, noting concerns about elevated levels of liquidity, inflation, and global political risks**.** Fiscal stimulus and deficit spending are expected to keep interest rates higher for longer, making it difficult to reduce inflation with high debt issuance by the U.S. government. Significant declines in listed and private real estate valuations due to higher interest rates were discussed. No asset class appears cheap given the high levels of liquidity in the market, and the market does not fully account for global political risks. Inflation is more ingrained than acknowledged, and immigration is a significant issue for public sentiment.

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[16] AG members are not fiduciaries to the SRP and serve voluntarily. The AG meetings do not constitute investment advice. According to the terms of reference, there is no allowance for the SRP to invest with AG members' firms while they are serving on the AG. Moreover, there is no quid pro quo expectation that the SRP shall invest with AG members' firms after they step down from the AG.

[17] AG members attending the meeting were (1) Paul Gould, Managing Director, Allen & Company, Inc; (2) Virginie Maisonneuve, Global CIO Equity, Allianz Global Investors; (3) George Siguler, Founding Partner and the Executive Chairman, Siguler Guff & Company; (4) Robert Steers, Co-Founder & Executive Chairman, Cohen & Steers, Inc.; (5) Peter Wilby, Managing Partner, Co-CIO, Stone Harbor Investment Partners; and (6) Helen Zhu, Managing Director and CIO, Nan Fung Trinity. Additionally, the special guest attending the meeting from ARK Investment Management LLC was Catherine D. Wood (Founder, CEO and CIO).

- AG members agreed that not many assets are priced cheaply, except for some idiosyncratic areas. Non-U.S. assets are relatively cheap, especially in emerging markets. Technology, Media, and Telecommunications (TMT) companies, and parts of consumer discretionary have traded down, reflecting market concerns for a coming recession. Private equity has the potential for a good vintage this year, despite high levels of "dry powder".[18] AG members also discussed the current state of commercial real estate, noting that office space remains problematic, but retail presents a strong contrarian opportunity. In contrast, industrial real estate, which was the top-property type for the past decade, may not continue to perform as well due to excess supply.
- A Guest provided an overview of AI and disruptive innovations, noting the potential for AI to be highly disruptive and deflationary**.** The Guest emphasized the transformative impact of AI and discussed the potential benefits of AI in improving productivity and reducing the work week. Technologies are now ready, and costs have decreased substantially. AG members asked about the social cost of productivity gains, job displacement, and the mix of jobs that will be dislocated by AI. Technology historically creates more jobs than it displaces and offers the potential for new job types to emerge.

Strategic Asset Allocation

- AG members noted that the EM equity universe has become a smaller market, with different challenges for various regions. While EM will have gross domestic product (GDP) growth, they are not as investable as previously thought. AG members suggested reducing allocation to EM or combining it with other opportunistic investments. AG members noted that if there was a change in the U.S. Administration, it would be extremely negative for EM, and the market would wait for clarity. However, this could create a decent entry point after a selloff.
- AG members warned of the cyclical upward movements in recent years, and advised caution on bonds, with spreads at all-time lows. The yield curve may steepen post-election, which would benefit U.S. Treasury bonds. Tariffs imposed by the potential Trump administration could lead to China devaluing its currency along with many diverse outcomes, all depending on the outcome of the election.
- AG members emphasized the importance of not concentrating asset classes, and the need for the capacity to rebalance given the uncertainty in the world. While having the right SAA may be an important decision, having good asset managers is also crucial. AG members recommended staying liquid to take advantage of market dislocations. They noted that governments might inflate their way out of debt, with rates staying higher for longer. AG members acknowledged AI's potential disinflationary impact, but also noted other offsetting forces.

[18] Dry powder refers to the amount of investor capital that has been legally committed by investors (i.e., limited partner) to a limited partnership (LP) and has not yet been called by the investment manager (i.e., general partner) to make investments.

ESG Considerations

- AG members noted a strong reaction in the U.S. against ESG, and acknowledged the challenges of ESG, noting the difficulty in pinning down consultants on metrics, which often include significant disclaimers. AG members discussed the importance of distinguishing between genuine ESG considerations and superficial claims, and the potential for ESG considerations to have a positive impact on generating alpha (i.e., excess return) if they lead to the selection of companies with superior growth trajectories. AG members pointed out that all the "green" funds from the last five years have performed poorly, indicating a cost to ESG investing. Outside of top developed market companies, ESG ratings are often arbitrary or non-existent.

Investment Office Budget

For FY2025 (the fiscal year ended April 30, 2025), the costs of running the Investment Office were $6.9 million, primarily representing $5.9 million in salary costs (measured at standard cost) and approximately $1.0 million in costs related to travel, information services, contractual services, supplies, and other administrative expenses (Appendix III).[19] The administrative cost represents 4.0 basis points based on the highest combined asset value from the prior five calendar year period (i.e., end-December 2024). Per the chargeback arrangement (and subject to reconciliation and finalization), the administrative cost will be reimbursed to the IMF at the beginning of FY2026.

WORK PROGRAM

For 2025, the following work program initiatives are expected:

- **The IC and INV will begin the implementation of the SAA, which becomes effective on January 1, 2026.** The SRP will be repositioned broadly in line with the new SAA completed in 2024. This would entail reallocation of capital among existing investment strategies as well as introducing additional investment strategies that would complement the core investments around each asset class.
- **INV will continue to implement the ESG Policy Framework, focusing on all four core ESG practices.** Four core ESG practices include ESG integration, analytical framework, manager engagement, and collaboration with other institutional investors. INV will continue to streamline its investment due diligence process, expand the scope of research related to thematic investments, update ESG legal language in investment management agreements, and enhance ESG data collection and analytics. INV will also continue monitoring and assessing investment managers' ESG practices and proactively engage with investment managers on ESG and climate change topics.

[19] Information technology costs are borne by the central Information Technology budget. Cost calculations are as of April 30, 2025.

- **The IC and INV will continue implementing OIA's recommendations.** The IC and INV will continue to work towards completing the implementation of the remaining three action items. Extensive deliberation by the IC and collaboration with LEG will be required for some of the remaining action items. In particular, INV will draft, discuss, and finalize key foundational documents, including Investment Policy Statement (IPS) and Terms of Reference (ToR), and engage an external service provider to conduct a benchmarking analysis of the master custody bank.

- **INV will continue to assess and review the appropriateness of all existing investment strategies, and whenever deemed optimal, add new investment strategies to expand unrelated return streams**. The fit and efficacy of each investment strategy are under review in light of evolving market conditions. Additionally, sector structuring will be reviewed and adjusted as necessary to ensure that the mix of investment strategies for the SRP continues to broaden unrelated return streams. In seeking to build and maintain a resilient portfolio structure, INV will focus on the target return, long-term horizons, ability to bear risk, and maintaining appropriate liquidity levels.

Appendix I. SRP Investment Strategy

Unlike many U.S.-based pension plans which tend to be concentrated in U.S. equities and U.S. bonds, the SRP has pursued a very broad set of investment opportunities and is structured as a globally diversified portfolio across seven asset classes. The global, multiple-asset-class approach taken by the SRP exploits a central insight of modern financial theory; namely, that portfolio risk can be minimized for any targeted rate of return through the inclusion of a broad selection of asset classes—since risky asset classes often behave differently as regional and global economic, financial, and political events unfold.

In devising the SRP's long-term or strategic asset allocation, the Investment Committee (IC) and Investment Office (INV) consider both quantitative and qualitative factors and analysis. Quantitatively, mean-variance optimization is used to identify asset class combinations whose expected returns exceed all others with the same level of risk. Inputs to this analysis include the expected rate of return of each asset class being considered, the risk (as measured by standard deviation of returns) of each asset class to one another—and, importantly, informed market judgment about how these expected returns, risks, and correlations might differ from history going forward. This quantitative process is complemented by various qualitative considerations, including numerous difficult-to-measure characteristics of the underlying asset classes, such as illiquidity, labor intensity, alternative risk measures (skewness, downside protection), benchmark concentration, active management opportunities, and the speed with which returns might be realized.

Ultimately, this quantitative and qualitative analysis yields a set of feasible and technically "efficient" (i.e., the highest expected return for a given level of risk) portfolios, and the SRP's strategic asset allocation is chosen from among these by identifying that portfolio which is most likely to meet the SRP's target rate of return (i.e., a return consistent with funding the SRP's pension liabilities over a reasonable medium-term period—broadly defined as a full market cycle). In selecting such an allocation, the equity-like nature of the liabilities is considered, and an allocation which is likely to generate such equity-like returns is chosen. Such a "spread-immunization" approach seeks to minimize the volatility of IMF contributions to the SRP around the target level (notionally, 14 percent of gross pensionable remuneration).

As such, the strategic asset allocation is intended to embody the preferred risk-return trade-off of the SRP, and takes into account the SRP's capacity to take risk, the length of time available for investments to achieve the expected returns, the relatively low liquidity needs of the SRP, and the SRP's long time horizon. The Investment Committee and Investment Office are guided by this strategic asset allocation—and, hence, strategic benchmark—in structuring the investments of the SRP. Departures from the strategic allocation are considered and permitted both to accommodate tactical or opportunistic investments if a sector appears to be overvalued or undervalued, and to avoid the high transactions costs associated with overly frequent rebalancing. The strategic asset allocation—and hence the target weights for each of the SRP's main asset classes—is reviewed approximately every five years. The most recent review was concluded in 2017 and became effective in 2018.

The overall performance of the SRP is evaluated against a weighted average of the relevant rate-of-return indices for each asset class. The weights employed are the strategic asset allocation weights, while the relevant indices are industry standard measures of performance (or composites thereof). The performance of each sector is measured against an appropriate asset class/sector benchmark. The strategic weights and benchmarks for the SRP are as follows:

Asset Class	**Weight** (in percent)	***Benchmark***	**Description**
Global Equity	32.0	*MSCI World Index*	Free float-adjusted market capitalization index that is designed to measure global developed market equity performance in 23 developed countries in North America, Europe, and the Asia/Pacific Region.
Emerging Market Equities	13.0	*MSCI Emerging + Frontier Markets (EFM) Index*	Market-value weighted free-float with net dividends re-invested adjusted index that is designed to measure broad equity market performance across 27 Emerging Markets and 27 Frontier Markets.
High Income	11.0	*Composite index comprised of:*	
		(a) ICE BofAML U.S. High-Yield Index (55.0 percent)	The ICE BofAML U.S. High Yield Index is designed to benchmark the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market.
		(b) ICE BofAML U.S. Corporate Index (25.0 percent)	The ICE BofAML U.S. Corporate Index tracks the performance of U.S. dollar denominated investment grade corporate debt publicly issued in the U.S. domestic market.
		(c) J.P. Morgan Emerging Markets Bond Index Global Diversified (20.0 percent)	The J.P. Morgan EMBI Global Diversified tracks total returns for U.S. dollar denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities.

Asset Class	**Weight** (in percent)	***Benchmark***	**Description**
Real Assets	11.0	*Composite index comprised of:*	
		(a) NCREIF Property Index (33.3 percent)	The National Council of Real Estate Fiduciaries (NCREIF) National Property Index is an index of total returns of U.S. commercial real estate held by tax-exempt institutional investors (foundations, endowments, and pension funds) that are also members of NCREIF.
		(b) Bloomberg Commodity Total Return Index (formerly known as Dow-Jones-UBS Commodity Index (33.3 percent)	The Bloomberg Commodity Total Return Index seeks to provide a highly liquid benchmark offering broad exposure to commodities as an asset class.
		(c) Bloomberg US Govt Inflation-Linked All Maturities Total Return Index (33.3 percent)	The Bloomberg U.S. Government Inflation-Linked Bond Index measures the performance of the U.S. Treasury Inflation Protected Securities (TIPS) market. The U.S. Government Inflation-Linked Bond Index is subset of the flagship Bloomberg World Government Inflation-Linked Bond (WGILB) index and U.S. TIPS represent the largest component of the WGILB Index.
Global Fixed Income	11.0	*Composite index comprised of:*	
		(a) J.P. Morgan Government Bond Index Global (80 percent)	J.P. Morgan Government Bond Index Global measures performance across global high-quality sovereign fixed-income (bond) markets.
		(b) J.P. Morgan Government Bond US Index (20 percent)	J.P. Morgan Government Bond US Index measures performance of U.S. sovereign fixed-income (bond) markets.

Asset Class	**Weight** (in percent)	***Benchmark***	**Description**
Alternative Investments	10.0	*Composite Index plus 200 bps illiquidity premium per annum comprised of:* *(a) Composite of Bloomberg Global Aggregate Corporate Index (50 percent) and Bloomberg Global High Yield Index (50 percent)* *(b) Composite of MSCI Emerging Markets Small Cap Index (66.7 percent) and MSCI Emerging Frontier Markets Africa ex. South Africa Index (33.3 percent)* *(c) MSCI World Small Cap Index* *(d) MSCI World Small Cap Index* *(e) 90-day T-bill + 200 bps risk premium per annum*	The Alternative Investments sector benchmark is a weighted composite benchmark of five subsector benchmarks plus 200 basis points of illiquidity premium per annum. Each subsector is represented by a public market index or composite of public market indices that best represents its unique risk and return characteristics over the long-term. Once a year (at September quarter-end), the subsector weights are measured and reset for the following calendar year to calculate the weighted average of all subsector benchmarks. The Alternative Investments sector can include both public and private investments. Public investment valuations are reported monthly while private investment valuations are reported quarterly. Hence, the proportion of public investments relative to private investments is also measured and reset once a year (at September quarter-end). The weight of public market investments is then used in the following calendar year to reduce the timing impact of the intra-quarter sector benchmark reporting. The five subsectors are (a) Private Credit & Income; (b) Emerging Markets Private Equity; (c) Leveraged Buyouts; (d) Venture Capital & Growth Equity; and (e) Other Alternative Investments. The Alternative Investments sector composite benchmark went into effect on January 1, 2023.

Asset Class	**Weight** (in percent)	***Benchmark***	**Description**
Enhanced Cash/ Absolute Return	12.0	*T-bill plus 200 basis points per annum*	The Enhanced Cash/Absolute Return benchmark is constructed by compounding the sum of the monthly T-bill as measured by the Merrill Lynch 91-day treasury bill index, and the monthly equivalent of an annual 200 basis points. The annualized 200 basis points is intended to reflect the expectation for value added for the set of strategies (on a combined basis) within the sector and as compensation for manager-and strategy-specific risk.
Overall SRP	100.0	*a composite benchmark*	A composite of monthly weighted average of sector benchmarks. Individual weights are strategic target weights for each asset class.

Appendix II. SRP Asset Allocation and Performance

Table 1. Summary of SRP Results

	ASSET LEVELS		HISTORICAL PERFORMANCE				CURRENT PERIOD PERFORMANCE Periods ending Dec. 31, 2024							VOLATILITY	
	Mkt Val US$, M	Percent of SRP	2021	2022	2023	YTD	1 mo	3 mos	1 yr	3 yrs	5 yrs	7 yrs	10 yrs	3 yrs	5 yrs
Global Equities	**4,957.1**	**36.0**	**21.4**	**-19.1**	**23.7**	**19.4**	**-2.2**	**0.3**	**19.4**	**6.1**	**11.1**	**10.1**	**10.2**	**16.6**	**17.9**
MSCI World Index			**21.8**	**-18.1**	**23.8**	**18.7**	**-2.6**	**-0.2**	**18.7**	**6.3**	**11.2**	**10.2**	**9.9**	**16.9**	**17.9**
S&P 500 Index			28.7	-18.1	26.3	25.0	-2.4	2.4	25.0	8.9	14.5	13.8	13.1	17.4	18.2
MSCI EAFE Index			11.3	-14.5	18.2	3.8	-2.3	-8.1	3.8	1.6	4.7	4.1	5.2	16.8	17.8
MSCI Europe Index			16.3	-15.1	19.9	1.8	-2.4	-9.7	1.8	1.2	4.9	4.3	5.0	17.8	19.4
MSCI Japan Index			1.7	-16.6	20.3	8.3	-0.3	-3.6	8.3	2.8	4.8	4.0	6.2	16.0	15.8
Emerging Equities	**1,323.3**	**9.6**	**-0.4**	**-22.2**	**7.8**	**7.5**	**-0.3**	**-7.5**	**7.5**	**-3.4**	**1.6**	**0.8**	**3.0**	**17.0**	**18.2**
MSCI Emerging + Frontier Markets (EFM) Index [1]			**-2.3**	**-20.2**	**9.8**	**7.5**	**-0.1**	**-7.9**	**7.5**	**-1.9**	**1.7**	**1.4**	**3.6**	**17.6**	**18.4**
MSCI Emerging Markets (EM) Index			-2.5	-20.1	9.8	7.5	-0.1	-8.0	7.5	-1.9	1.7	1.4	3.6	17.7	18.5
MSCI China Index			-21.7	-21.9	-11.2	19.4	2.7	-7.7	19.4	-6.1	-3.4	-2.5	1.9	32.8	28.0
MSCI EM Latin America Index			-8.1	8.9	32.7	-26.4	-6.1	-15.8	-26.4	2.1	-3.4	-1.1	0.3	24.6	29.9
High Income	**1,597.4**	**11.6**	**2.9**	**-11.8**	**11.6**	**5.9**	**-0.9**	**-1.3**	**5.9**	**1.4**	**2.7**	**3.2**	**3.7**	**8.2**	**9.8**
Composite High Income Index			**2.3**	**-13.5**	**11.7**	**6.5**	**-1.0**	**-1.0**	**6.5**	**0.9**	**2.4**	**3.3**	**4.0**	**8.7**	**9.3**
ICE BofA ML U.S. High-Yield Index (55.0%)			5.4	-11.2	13.5	8.2	-0.4	0.2	8.2	2.9	4.0	4.5	5.1	8.6	9.4
ICE BofA ML U.S. Corporate Index (25.0%)			-1.0	-15.4	8.4	2.8	-1.8	-2.8	2.8	-2.0	0.5	1.9	2.5	9.2	8.8
J.P. Morgan EM Bond Global Diversified Index (20.0%)			-1.8	-17.8	11.1	6.5	-1.4	-1.9	6.5	-0.9	0.1	1.5	3.1	11.0	11.6
Real Assets	**1,408.0**	**10.2**	**20.0**	**0.6**	**-1.8**	**-1.4**	**-3.1**	**-3.8**	**-1.4**	**-0.9**	**2.0**	**2.7**	**3.0**	**7.5**	**11.8**
Composite Real Assets Index			**16.9**	**2.8**	**-4.0**	**2.7**	**-0.1**	**-0.8**	**2.7**	**0.5**	**4.2**	**3.8**	**3.3**	**6.2**	**6.4**
NCREIF Property Index (33.3%)			17.7	5.5	-7.9	0.6	0.3	0.9	0.6	-0.8	3.2	4.1	5.7	2.8	3.1
Bloomberg Commodity Total Return Index (33.3%)			27.1	16.1	-7.9	5.4	1.0	-0.4	5.4	4.1	6.8	4.1	1.3	14.5	15.8
Barclays Capital U.S. Govt. Inflation-Linked Bond Index (33.3%)			6.0	-12.6	3.8	1.8	-1.6	-3.0	1.8	-2.6	1.8	2.3	2.2	7.5	6.6
Alternative Investments	**1,838.2**	**13.3**	**26.9**	**-9.5**	**12.0**	**7.3**	**-0.5**	**0.4**	**7.3**	**2.8**	**8.7**	**9.3**	**9.7**	**7.0**	**13.9**
AI Sector Composite Benchmark + 200 bps p.a. [2]			**20.2**	**-16.4**	**16.4**	**9.3**	**-2.2**	**-1.9**	**9.3**	**2.1**	**8.6**	**8.6**	**9.7**	**14.3**	**16.5**
Global Fixed Income	**1,039.3**	**7.5**	**-3.3**	**-14.9**	**2.9**	**-1.5**	**-1.9**	**-4.6**	**-1.5**	**-4.8**	**-2.2**	**-0.5**	**0.0**	**7.4**	**6.5**
Composite Global Fixed Income Index			**-5.7**	**-16.3**	**4.1**	**-2.8**	**-2.4**	**-5.3**	**-2.8**	**-5.4**	**-2.7**	**-1.1**	**-0.2**	**8.8**	**7.4**
J.P. Morgan Government Global Bond Index (80.0%)			-6.5	-17.3	4.0	-3.7	-2.7	-5.9	-3.7	-6.1	-3.2	-1.6	-0.6	9.4	7.9
J.P. Morgan Government Global Bond Index U.S. (20%)			-2.6	-12.2	4.3	0.7	-1.5	-3.0	0.7	-2.7	-0.5	0.7	1.0	6.6	5.9
Enhanced Cash/Absolute Rtn	**1,446.4**	**10.5**	**6.9**	**0.5**	**7.4**	**10.5**	**1.3**	**2.6**	**10.5**	**6.0**	**5.4**	**5.4**	**4.4**	**2.9**	**4.1**
90-day T-bill + 200 bps risk premium			**2.0**	**3.5**	**7.0**	**7.3**	**0.6**	**1.6**	**7.3**	**5.9**	**4.5**	**4.4**	**3.8**	**0.6**	**0.7**
Cash	**163.7**	**1.2**	**0.0**	**1.7**	**5.2**	**5.3**	**0.4**	**1.2**	**5.3**	**4.1**	**2.5**	**2.4**	**1.9**	**0.6**	**0.7**
90-day T-bill			0.0	1.5	5.0	5.3	0.4	1.2	5.3	3.9	2.5	2.4	1.8	0.6	0.7
TOTAL	**13,775.2**	**100.0**	**13.3**	**-13.2**	**12.1**	**9.8**	**-1.4**	**-1.4**	**9.8**	**2.2**	**6.0**	**5.9**	**6.3**	**9.8**	**11.7**
Benchmark composite			**10.1**	**-12.6**	**12.6**	**9.4**	**-1.4**	**-1.9**	**9.4**	**2.5**	**5.9**	**5.8**	**6.1**	**10.5**	**11.0**
Model Portfolio [3]			9.3	-17.8	15.4	9.2	-2.7	-2.8	9.2	1.2	5.4	5.4	5.9	13.6	13.5
SRP Real Return			**5.9**	**-18.6**	**8.5**	**6.8**	**-1.4**	**-1.5**	**6.8**	**-2.0**	**1.7**	**2.2**	**3.2**	**10.2**	**11.9**

Source: INV Investment Control and Valuation System.

[1] Prior to January 2018, MSCI EM Index.

[2] Starting in 2023, dynamic composite of public indices based on the proportion of private and public assets in Alternative Investments sector and subsector weights as of Q3 of prior year. 2018-2022: MSCI ACWI IMI + 200bps per annum. 2013-2017: MSCI World Index (59.1%) + MSCI EM Index (22.7%) + Composite High Income Index (18.2%) + 350 bps per annum of illiquidity premium.

[3] Model portfolio definition is provided in Appendix V.

Table 2. SRP Liquidity Profile
(In percent of portfolio at end-December)

Liquidity Tier[1]	2020	2021	2022	2023	2024
Liquidity Tier 1: T+0 (same day)	1.4	2.3	2.1	2.1	3.2
Liquidity Tier 2: T+ (1 to 15 days)	74.8	72.6	67.8	67.7	66.9
Liquidity Tier 3: T+ (15 to 30 days)[2]	5.7	5.3	6.2	5.4	8.1
Liquidity Tier 4: T+ (45 to 90 days)	2.9	5.2	8.1	10.0	7.1
Liquidity Tier 5: T+ (3 to 5 years)[3]	15.1	14.7	15.8	14.8	14.7

Source: INV Investment Control and Valuation System.

[1] The SRP did not have investments with liquidity period of 31 to 44 days.

[2] Liquidity tiers 3 and 4 typically represent a limited partnership structure that invests in public market investments. Some may provide unlimited monthly liquidity, and others may have limited and/or gated liquidity windows.

[3] Liquidity tier 5 typically represents a limited partnership structure that invests in private markets without a predetermined liquidity window. When deemed necessary, investors can sell illiquid tier 5 investments in the secondary market usually with a significant discount to net asset value (NAV).

Table 3. SRP Gross and Net Returns and Investment Management Fees

The estimated SRP gross-of-fees return in 2024 was 10.5 percent, and the estimated net-of-fees return was 9.6 percent. Starting in 2023, investment management fees were captured based on when the fees are incurred rather than when they were paid, thereby matching management and performance fees to the time period the investment return is generated.[1] Investment management fees were calculated based on asset values reported by the master custody bank or collected directly from investment managers; and in some instances, investment management and performance fee figures were estimates provided by investment managers.

Investment Management Fees

	2020	2021	2022	2023	2024
Asset Based Management Fees					
Separately managed investment accounts (invoiced)					
In millions of dollars	$19.5	$23.7	$30.3	$20.2	$20.1
In basis points of period average assets	17.9	17.9	24.5	15.9	14.4
Comingled investment accounts (deducted directly from the corpus)					
In millions of dollars	$26.7	$33.4	$38.7	$40.2	$42.0
In basis points of period average assets	24.6	25.2	34.5	32.6	30.2
Performance Fees					
Separately managed investment accounts (invoiced)					
In millions of dollars	$0.0	$0.0	$9.2	$0.0	$0.0
In basis points of period average assets	0.0	0.0	7.4	0.0	0.0
Comingled investment accounts (deducted directly from the corpus)					
In millions of dollars	$27.6	$83.9	$15.2	$37.7	$33.2
In basis points of period average assets	25.4	63.5	12.3	30.6	23.9
Other Fees (NT Custodian Management Fees, ChargeBack, Consultant Fees)[2]					
In millions of dollars	$5.7	$5.5	$5.9	$6.8	$7.6
In basis points of period average assets	5.3	4.5	5.0	5.4	5.5
Total Fees					
In millions of dollars	$79.5	$146.5	$99.3	$104.9	$102.9
In basis points of period average assets	73.2	111.1	83.7	82.7	74.1

Source: INV Investment Control and Valuation System.

[1] Prior to 2023, gross of fees and net of fees returns were calculated based on payment date.
[2] Other Fees include asset custody fees and the cost of running the Investment Office.

Appendix III. Investment Office Budget

Table 1. Investment Office Budget Outturn
(In millions of U.S. dollars, unless otherwise indicated)

	FY2021 Outturn	FY2022 Outturn	FY2023 Outturn	FY2024 Outturn	FY2025 Outturn[4]
Investment Office[1]	4.5	5.0	6.1	6.8	6.9
SRP	3.6	4.0	4.8	5.4	5.5
Cost at five-year high asset value (in basis points)[2]	2.9	2.9	3.5	4.0	4.0
Cost at end-December of prior calendar year (in basis points)[3]	2.9	2.9	4.1	4.2	4.0

Source: INV Investment Control and Valuation System.

[1] In addition to the SRP, the Investment Office manages other assets on behalf of the IMF.

[2] Cost calculation is based on the highest combined asset value from the prior five calendar year period.

[3] Cost calculation is based on the combined asset value at end-December of prior calendar year.

[4] Cost calculations are as of April 30, 2025.

Appendix IV. Performance of Market Indices

Table 1. 2024 Total Annual Return (%)

U.S. Dollars

Market Index	Total Return (%)
Global Equities	
MSCI ACWI Index (N)	17.49
MSCI ACWI Index (G)	18.02
MSCI ACWI ex US Index (N)	5.53
MSCI ACWI ex US Index (G)	6.09
MSCI World Index (N)	18.67
MSCI World Small Cap Index (N)	8.15
MSCI EAFE Index (N)	3.82
MSCI EAFE Small Cap Index (N)	1.82
U.S. Equities	
S&P 500 Index	25.02
Russell Top 200® Index	27.44
Russell 1000® Index	24.51
Russell 1000® Growth Index	33.36
Russell 1000® Value Index	14.37
Russell 2000® Index	11.54
Russell 2000® Growth Index	15.15
Russell 2000® Value Index	8.05
Russell 3000® Index	23.81
Russell Microcap® Index	13.70
European Equities	
FTSE® All-Share Index	7.54
MSCI Europe Small Cap Index (N)	-0.96
MSCI Europe ex UK Index (N)	0.15
MSCI UK Index (N)	7.54
Asian Equities	
MSCI AC Asia ex Japan (N)	11.96
MSCI AC Asia ex Japan (G)	12.51
MSCI AC Asia Pacific (N)	9.56
MSCI AC Asia Pacific (G)	10.01
MSCI Pacific ex Japan Index (N)	4.59
MSCI Japan Index (N)	8.31
TOPIX Small Index	2.63
Emerging Market Equities	
MSCI Emerging Markets Index (N)	7.50
MSCI Emerging Markets Index (G)	8.05
MSCI EM Asia Index (N)	11.96
MSCI EM Asia Index (G)	12.56
MSCI EM Latin America (N)	-26.38
MSCI EM Latin America (G)	-26.02
MSCI EM Europe & Middle East Index (N)	5.55
MSCI EM Europe & Middle East Index (G)	5.84
MSCI EM Small Cap Index (N)	4.79
MSCI EM Small Cap Index (G)	5.23
MSCI China A Onshore (N)	11.59
CSI 300 Index	16.50
MSCI South Africa Index (N)	6.72
MSCI South Africa Index (G)	7.41
MSCI Frontier Markets (N)	9.42
MSCI Frontier Markets Index (G)	9.92

Market Index	Total Return (%)
Real Estate	
FTSE® NAREIT All Equity REITs Index	4.92
FTSE® EPRA/NAREIT Europe RE Index	-8.79
FTSE® EPRA/NAREIT Developed RE Index	2.00
FTSE® EPRA/NAREIT Developed ex N. Am RE	-7.83
FTSE® EPRA/NAREIT Asia RE Index	-7.45
Commodities and Natural Resources	
S&P GSCI	9.25
S&P 500 Energy	5.72
Bloomberg Commodity Total Return Index	5.38
MSCI World Energy Index (N)	2.70
MSCI World Natural Resources (N)	-1.37
S&P Global Natural Resources (N)	-8.85
S&P NA Natural Resources Index	8.11
Fixed Income and Cash	
BBG Aggregate Bond Index	1.25
BBG Long-Term Govt/Credit Bond	-4.15
BBG Long-Term Govt Bond Index	-6.37
BBG Municipal Bond Index	1.05
BBG Muni Mngd Money Shrt Intm (1-10)	-0.17
BBG US TIPS Index	1.84
BofA ML 91-Day Treasury Bills	5.25
FTSE 10 Yr Treasury Bond Index	-1.67
BofA ML U.S. High Yield Master II	8.22
BBG Long-Term Credit Corp Bond	-1.95
JPM Global Govt Bond Index	-3.65
BBG US Long Credit Index	-2.01
Master Limited Partnerships	
Alerian MLP	24.41
S&P MLP Index	26.79

Sources: Alerian, Barclays, Bloomberg Index Services Limited, Bloomberg L.P., BofA Merrill Lynch, Dow Jones Indexes, Frank Russell Company, FTSE Fixed Income LLC, FTSE International Limited, FTSE International, EPRA, NAREIT, J.P. Morgan Securities, Inc., MSCI Inc., Shanghai Stock Exchange, Standard & Poor's, Thomson Reuters Datastream.
Notes: FTSE Fixed Income LLC, FTSE International Limited.
MSCI provides two sets of total return data, gross and net of dividend taxes; indexes with (G) are gross of dividend taxes, those with (N) are net. BBG Barc represents the Bloomberg Barclays indices.

*Capital change only.
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Appendix V. Glossary of Terms

1. Actuarial Target Return. The actuarial target return is the discount rate used for calculating actuarial assets and liabilities and the annual contribution rate, which are presented annually in the Actuarial Valuation Report for the SRP.

2. SAA Target Return. The SAA target return includes the actuarial target return plus an additional 1.0 percent return to cover investment management fees and the cost of running the Investment Office.

3. Model Portfolio. A model portfolio represents simplified portfolio construction based on allocation between growth (i.e., global equities) and income (i.e., global fixed income). The SRP's current strategic asset allocation allocates 66 percent (of the allocation) to broadly growth-oriented investments and the remaining 34 percent to broadly income-oriented investments. Hence, the SRP's model portfolio assumes investing 66 percent (of the allocation) in the MSCI ACWI Investable Market Index (IMI) and the remaining 34 percent in the JPMorgan Government Bond Index (GBI) Global. The MSCI ACWI Investable Market Index (IMI) captures large, mid, and small cap representation across 23 Developed Markets (DM) and 25 Emerging Markets (EM). The JPMorgan Government Bond Index (GBI) Global tracks the performance of fixed-rate, liquid, and investable e local currency treasury bonds issued by core developed markets.

4. Convertible Bond Arbitrage Strategies. A convertible bond arbitrage strategy is an example of a market neutral strategy (see below) that typically involves taking a long position in a convertible bond and a short position in the underlying stock. The convertible bond arbitrage strategy seeks to profit from the pricing inefficiencies between the convertible bond and the stock.

5. Equity Hedge Strategies. An equity hedge strategy may be global or country-specific, taking a long position in attractive stocks while hedging against equity market downturns by shorting overvalued stocks or stock indices. A relative-value hedge fund takes advantage of price inefficiencies.

6. Event Driven and Opportunistic Strategies. An event driven and opportunistic strategy is most often used by hedge funds that seek to take advantage of temporary mispricing caused by corporate events such as mergers and acquisitions, restructurings, spinoffs, takeovers, regulatory changes, and bankruptcies.

7. Index Overlay Strategies. An index overlay strategy seeks to generate returns of a market index without owning the underlying securities, and this is executed by equitizing cash (using cash collateral and a notionally equivalent amount in exchange-traded futures). By way of illustration, combining $100 million of cash (invested at the risk-free rate) with $100 million of S&P 500 futures contracts generates a return equivalent to investing $100 million in a physical S&P 500 index fund. Index overlays are an efficient cash management and risk management tool for institutional investors to minimize cash-drag and transaction costs. The institutional strategic asset allocation (SAA) framework typically does not have a target allocation (and if so, it is a small allocation) to cash to minimize the cash-drag on portfolio performance (i.e., the opportunity cost of not being fully invested in the market in favor of holding cash). However, institutional investors need timely access to cash to fulfill contractual obligations (i.e., making benefits payments, paying investment management fees and expenses, meeting capital drawdown requests, managing business expenses, etc.). Since exchange-traded futures are very liquid, cash collateral supporting an index overlay can be de-equitized quicker than selling underlying securities to raise cash without incurring the transaction costs of selling multiple securities.

8. Global Macro Strategies. A global macro strategy is most often used by hedge funds that invest according to their interpretation of global economic events and their macroeconomic principles. Global macro portfolio's holdings may include long and short positions in equity, fixed income, currency, commodities, and futures markets.

9. Market Neutral Strategies. Market neutral strategies seek to avoid certain forms of market risk, typically with using hedging techniques. In general, a market neutral strategy seeks to generate positive returns independent of the market environment and avoids market risk by making both short and long investments. At the portfolio level, the value of short positions (which pay off if the investment declines in value) will roughly equal the value of long positions (which pay off if the investment rises in value)—if markets rise, then gains from long positions will offset losses from short positions and vice-versa.

Appendix VI. SRP Committee Memberships

(As of June 2025)

Pension Committee

Members	Alternates
Managing Director, *Chairperson*, *ex officio*	Deputy Managing Director
Mr. Leonardo Madcur	Mr. Óscar A. Hendrick
Mr. Ouattara Wautabouna	Mr. Oumar Diakite
Mr. Seong-Wook Kim	Mr. Mark Blackmore
Mr. Yigit Korkmaz Yaşar	Mr. Christian Just
Mr. Matt Davies (staff)	Mr. Olivier Fleurence (staff)
Mr. Martin Schindler (staff)	Mr. Alan Kenneth Warburton (staff)

Ms. Evridiki Tsounta, *Secretary*

Investment Committee

Mr. Alfred Kammer, *Chair*
Ms. Uma Ramakrishnan, *Vice Chair*
Mr. Jihad Azour
Ms. Oya Celasun
Ms. Anna Ilyina
Mr. Bernard Lauwers
Ms. Mahvash Saeed Qureshi
Mr. Rodrigo Valdes
Mr. Derek Lee Bills, *Secretary*

Investment Office Staff

Mr. Derek Lee Bills, *Head, Investment Office*
Ms. Toshie Kabuto, *Deputy Chief, Asset Allocation*
Mr. Tareq Al-Moualem, *Senior Investment Officer*
Ms. Katharina Dickel, *Senior Investment Officer*
Mr. Joon Jeon, *Senior Investment Officer*
Ms. Lidija Joseph, *Senior Investment Officer*
Ms. Suchitra Kumarapathy, *Senior Investment Officer*
Mr. Arunkumar Krishnasamy Vadivelu, *Senior Investment Officer*
Ms. Vanessa Diaz Montelongo, *Investment Officer*
Mr. Nikita Baranov, *Senior Investment Officer, Quantitative Investment and Risk Analysis*
Mr. Jianhua Peng, *Senior Investment Officer, Quantitative Investment and Risk Analysis*
Ms. Xiaobo Shao, *Investment Officer*
Mr. Dev Asnani, *Investment Research Analyst*

Ms. Raka De, *Investment Research Analyst*
Mr. Joseph Kamal, *Investment Research Analyst*
Ms. Grace A. Cruz, *Lead Administrative Coordinator*
Ms. Nirmaleen Felicia Jayawardane, *Lead Administrative Coordinator*
Ms. Julia Zampara, *Projects Analyst*

Advisory Group

Mr. Paul Gould, *Managing Director, Allen & Company, LLC*
Mr. Martin L. Leibowitz, *President, Advanced Portfolio Studies LLC (APS)*
Ms. Virginie Maisonneuve, *Global Chief Investment Officer Equity, Allianz Global Investors*
Mr. George W. Siguler, *Founding Partner and Executive Chairman, Siguler Guff & Company*
Ms. Cathie Wood, *Founder, CEO and CIO, ARK Investment Management LLC*
Ms. Helen Zhu, *Managing Director and Chief Investment Officer, Nan Fung Trinity*