

# SWIFT

*State Water Implementation Fund for Texas*

TEXAS  TRUST  
TEXAS TREASURY SAFEKEEPING TRUST COMPANY  
COMPTROLLER GLENN HEGAR, CHAIRMAN

## Q1 2023

COMPTROLLER'S INVESTMENT ADVISORY BOARD  
PORTFOLIO REVIEW

MEETING DATE: JULY 26, 2023

*Presented by Anca Ion, CIO*

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# Executive Summary

As of March 31, 2023

## Total Portfolio

In the first quarter of 2023, the SWIFT returned +1.6%, bringing the trailing one-year performance to +0.8%. The fund's Hedged Equity, Global Public Equity, and Private Credit portfolios were the leading performance contributors for the period. The broader portfolio outperformed on a benchmark-relative basis for the quarter, which was driven largely by relative outperformance in the Hedged Equity and Real Estate portfolios. Over the one-year horizon, the portfolio remained ahead of its benchmark, as strong relative returns in the Private Credit, Hedged Equity, and Global Fixed Income portfolios outweighed negative excess returns in the Real Estate and Alternative Fixed Income portfolios. While the portfolio's benchmark-relative outperformance narrowed in 1Q23 compared to recent periods, the aggregate portfolio's performance still leads its benchmark by more than 100 basis points (bps) over the one-year horizon.

The Global Public Equity and Hedged Equity portfolios generated +6.9% and +4.2% for the quarter, respectively, continuing a recovery which began in 4Q22. While Global Public Equity outperformed between the two on an absolute basis, Hedged Equity led the portfolio for the quarter both benchmark-relative and from a performance contribution standpoint given the size of this portfolio as a proportion of SWIFT assets. Within Hedged Equity, we saw strong performance from two European hedge funds in addition to a global TMT strategy, which more than offset negative performance from a US growth strategy and a healthcare strategy. Given the market beta composition of the Global Public Equity portfolio in the SWIFT, this sub-asset class performed right in line with its benchmark. No new allocations were made during the quarter in either of these portfolios, though we did continue to add exposure to the Vanguard Total World Stock Index ETF in January and February as discussed last quarter.

The Private Credit portfolio returned +1.7% for the quarter, underperforming on a benchmark-relative basis (+3.6%). The Distressed portfolio (+2.1%) outpaced the Performing portfolio's return for the period (+1.4%). Performance in the Distressed portfolio was largely driven by allocations to a handful of special situations and distressed strategies focused on investing within the US and Europe. In the Performing portfolio, performance was attributable to a non-sponsored direct lending strategy, a transitional lending strategy, and a healthcare related lending strategy. The one-year performance figures for the Distressed and Performing portfolios were +9.0% and +8.9%, respectively, bringing the one-year return for the combined Private Credit portfolio to +9.0%. We made one new allocation in this portfolio during the quarter to a European distressed and special situations strategy.

The Global Fixed Income portfolio generated a +2.5% for the quarter, which modestly lagged on a benchmark-relative basis (+2.9%). Positive absolute performance for the period was largely attributable to two traditional core-plus fixed income strategies in addition to a separate benchmark agnostic, liquid absolute return allocation. While the one-year performance in the Global Fixed income portfolio remains in unfavorable territory (-3.0%), it is worth emphasizing that the portfolio has outpaced the benchmark (-4.6%) in a period

where rising interest rates have detrimentally impacted bond portfolios broadly. No new allocations were made during the quarter in the public fixed income portfolio, although we did rebalance within various existing relationships.

The Alternative Fixed Income portfolio was flat for the quarter and underperformed on a benchmark-relative basis (+0.0% vs. +0.9% for the benchmark). Over the one-year period, the portfolio (-0.8%) also lagged the benchmark (+0.8%). During the quarter, positive performances from a mid-cap event-driven credit strategy, a fixed income relative value strategy, and a technology-oriented event-driven credit strategy were more than offset by allocations to a European-focused credit hedge fund and global macro strategies. No new allocations were made in the Alternative Fixed Income portfolio during the quarter.

The Real Estate portfolio performed poorly on an absolute basis for the quarter (-2.5%) but managed to outperform from a benchmark-relative perspective (-5.2%). That said, the one-year performance in this portfolio (-1.3%) has lagged materially on a relative basis (+6.5%). The portfolio benefitted from positive performance from one US real estate debt strategy, but underperformance for the quarter was driven by three open-ended funds: a core commercial real estate (CRE) strategy, a core-plus CRE strategy, and an index fund that tracks the performance of the NFI ODCE Index. There were no new allocations made during the quarter in the Real Estate portfolio.

Continuing trends from a tumultuous 2022, investors in 1Q23 remained focused on elevated inflation levels across developed markets, which have been fueled by a number of factors discussed in prior quarters. While inflation metrics seem to suggest mixed signals of moderation in response to monetary tightening, acute banking system weaknesses began to prevail throughout early 2023 as a natural byproduct of the higher interest rate environment. Adding to concerns was the looming US debt ceiling crisis in 2Q23, which seems to have been averted for the time being, as well as the continuous geopolitical risks related to the Russia/Ukraine conflict and increased tensions with China. In the face of such uncertainty, including inflation, economic growth, and the potential impact on earnings, we remain focused on long-term strategic allocation and diversification across quality investment managers.

For the quarter, the top performing portfolios were Global Public Equity (+6.9%), Hedged Equity (+4.2%), and Global Fixed Income (+2.5%).

For the trailing one-year period, the top performing portfolios were Private Debt (+9.0%) and All Asset Strategies (+1.1%).

• Total Portfolio Performance:	Q1 = 1.6%	1yr = 0.8%
• Policy Benchmark:	Q1 = 1.1%	1yr = -0.4%
• Dynamic Benchmark <sup>1</sup> :	Q1 = 1.1%	1yr = -0.3%

<sup>1</sup> The dynamic benchmark performance for the SWIFT is calculated by weighting each portfolio component's benchmark by that component's actual asset allocation at the beginning of each month.

# Asset Class Detail

As of March 31, 2023

## Global Fixed Income

Increased: Baird Core Plus Bond (\$10MM), Janus Henderson Core Plus (\$10MM)  
Decreased: JPMorgan Strategic Income Opp (\$20MM)

The Global Fixed Income portfolio returned +2.5% for the quarter, while its primary benchmark, the Bloomberg Barclays US Universal Index gained +2.9%. Underperformance was driven by the portfolio's slightly shorter duration profile, the result of two tactically lower duration strategies, in a period where interest rate sensitivity was actually a benefit to fixed income portfolios.

As was the case for much of 2022, concerns about inflation and whether or not the Federal Reserve was nearing the end of its rate hiking cycle were top of mind for investors during the first two months of 2023. In early March, shortly after Federal Reserve Chair Powell delivered his most hawkish anti-inflation speech to date, Silicon Valley Bank (SVB) collapsed under the pressure of a weakening balance sheet and rapid depositor outflows. As volatility spiked amid fears of systemic banking failures and damaging credit contraction, US Treasury yields collapsed across the curve and the futures market quickly shifted from anticipating further rate hikes to pricing in multiple interest rate cuts by the end of 2023. The 2-year US Treasury yield fell roughly 130 bps in a span of just two weeks (ending the quarter at 4.03%), while the benchmark 10-year US Treasury yield sank by 70 bps intramonth (ending the quarter at 3.47%).

During the peak of the turmoil, which was ironically driven by the adverse impact of higher short-term interest rates on bank balance sheets, the Federal Reserve quickly stepped in with the Bank Term Funding Program (BTFP), which offered loans to the banking industry in an attempt to strengthen the overall liquidity profiles of the banks. With the banking system characterized as "sound and resilient", policymakers remained steadfast in the fight against inflation, hiking the Federal Funds rate by 25 bps in both early February and late March to a range of 4.75-5.00%.

The broader bond market, as proxied by the Bloomberg Barclays US Aggregate Index, returned +3.0% for the quarter. The Bloomberg Barclays 7-10 Year US Treasury Index gained +3.5%. Investment Grade corporate spreads widened by 8 bps over the quarter (to 138 bps), although the offsetting benefit of declining base yields drove the category's +3.5% return for the quarter. Despite widening late in the period, High Yield spreads tightened by 14 bps over the quarter (to 455 bps) and the index generated a return of +3.6%. Corporate bond issuance was solid in January and February, before falling silent in the risk-off environment of March. Agency RMBS spreads widened to 63 bps given technical selling pressures, underperforming similar duration US Treasuries, and returning +2.5% for the quarter.

The Global Fixed Income portfolio contributed +0.3% for the quarter and -0.3% toward the one-year performance of total SWIFT returns.

• Global Fixed Performance:	Q1 = 2.5%	1yr = -3.0%
• Benchmark:	Q1 = 2.9%	1yr = -4.6%
• Return Contribution:	Q1 = 0.3%	1yr = -0.3%

## Alternative Fixed Income

Increased: None  
Decreased: None

The Alternative Fixed Income portfolio returned +0.0% for the quarter, which represents underperformance compared to its primary benchmark, the HFRI Fund-of-Funds Conservative Index. With markets progressing through an extended period of instability and uncertainty in 1Q23, we captured positive absolute results from seven of the 12 unique strategies deployed across the portfolio. Notably, we are seeing strength in some of last year's underperformers, with the Event-Driven category coming out of the gate remarkably well. Despite some give backs in March, each of the holdings within this group outpaced the sub-category benchmark, led by a credit and special situations fund along with a technology-focused strategy. The Relative Value sleeve provided mixed results, with respectable gains from a non-directional, micro-focused strategy involving G10 interest rates and a convertible arbitrage strategy unfortunately offset by a European-focused credit strategy that fell victim to idiosyncratic losses in the financial sector. A dedicated insurance-linked strategy was up modestly for the quarter but returned only limited cash to the portfolio following its announced wind-down in late 2022. Following highly accretive returns of more than 20% last year, losses generated within Tactical Trading were disappointing. Unable to effectively leverage capabilities across interest rates, equities, commodities, and global currencies (FX), the portfolio's discretionary macro managers struggled alongside a systematically-driven franchise that remained committed to a cautious market view.

As market participants are forced to metabolize a steady diet of "unprecedented" occurrences, it is important to understand how quickly tail events can be realized. The positive beta captured through interest rate sensitive assets was not transferable to the blended hedge fund portfolio, which by design tends to neutralize this factor unless positioning around it is identified as an explicit source of potential alpha. Thankfully, several managers had been reducing exposure to inflation-oriented themes on the view that most of the upward repricing in front-end US Treasury rates had taken place by early March. That said, few managers were able to implement and/or tactically monetize other portfolio hedges during the rising volatility caused by the concern involving regional banks. An analysis of month-by-month returns per strategy portrays residual sensitivity to broad market risk sentiment, even as obvious directionality is something we have sought to bring down in recent periods.

Dispersion across the Trust Company's owned strategies remained wide-ranging in 1Q23, something we would expect to persist over the next several quarters as the compounding unknowns associated with the macroeconomic and policy environment translate into

# Asset Class Detail

As of March 31, 2023

differentiated views and positioning. Recent communication with portfolio managers reveals a guarded optimism, as they are finding areas of the market offering strong cash-on-cash yields along with upside convexity from discounted pricing. However, as we have yet to see widespread distress or investor capitulation, risk budgets are certainly not running full tilt in case potentially more attractive opportunities emerge. We have continued to prioritize strategy diversification via experienced managers that employ reasonable assumptions and focus on identifiable margins of safety as they seek to balance downside protection with upside participation. As constructed, we believe the portfolio is well-positioned to serve as an attractive complement to traditional fixed income and/or credit betas.

The Alternative Fixed Income portfolio contributed +0.0% for the quarter and -0.1% towards the one-year performance of total SWIFT returns.

• Alt. Fixed Income Performance:	Q1 = 0.0%	1yr = -0.8%
• Benchmark:	Q1 = 0.9%	1yr = 0.8%
• Return Contribution:	Q1 = 0.0%	1yr = -0.1%

## Private Debt

New Commitments: Strategic Value Cap Sol II (\$10MM)

The Private Debt portfolio returned +1.7% for the quarter, bringing the one-year performance to +9.0%. Absolute performance was stable, though the portfolio underperformed on a benchmark-relative basis. That said, over the trailing one-year period, the portfolio strongly outperformed on a benchmark-relative basis (+0.5%).

The Distressed Debt portion of the portfolio generated steady results for the quarter (+2.1%), slightly underperforming its benchmark during the period (+3.6%). The positive performance was largely driven by allocations to opportunistic/special situation strategies focused on purchasing stressed and distressed assets in the US and Europe. The Performing Debt portion of the portfolio generated steady results for the quarter as well (+1.4%), but also underperformed the benchmark for the period. The positive performance largely came from direct lending strategies across non-sponsored, transitional, and healthcare-related opportunities.

Private Debt as an asset class continues to expand at a rapid pace, especially over the last few quarters. The broadly syndicated loan market led by traditional banks have largely been on the sideline for the last year not making new loans, and private debt firms have stepped in to fill this void. Borrowers seeking certainty of capital in a difficult environment and investors seeking higher yields make private credit an attractive asset class today. Elevated interest rates continued to make traditional direct lending more appealing during the quarter as well. Distressed debt managers still have not leaned into new investments in a material way, though the opportunistic/special situations-focused strategies (i.e., providing bridge capital/rescue financing to cash-poor companies, etc.),

which have more flexibility when it comes to lending structures, are seeing an elevated number of investment opportunities due to the stress that is in the market.

The Private Debt portfolio contributed +0.3% for the quarter and +1.5% towards the one-year performance of total SWIFT returns.

• Private Debt Performance (time weighted):	Q1 = 1.7%	1yr = 9.0%
• Benchmark:	Q1 = 3.6%	1yr = 0.5%
• Return Contribution:	Q1 = 0.3%	1yr = 1.5%

## Global Public Equity

Increased: Vanguard Total World Stock Index ETF (\$30MM)

Decreased: None

The Global Public Equity portfolio returned +6.9% for the quarter, bringing one-year performance to -6.1%. The portfolio underperformed slightly on a relative basis for the quarter but outperformed the benchmark over the one-year period, as the benchmark generated +7.0% and -7.7% for the quarter and year, respectively. As mentioned in prior quarters, the Global Public Equity exposure in the SWIFT portfolio is passive and consists of market beta exposure implemented through ownership of global equity market exchange traded funds (ETFs). Positive performance for the quarter was attributable to the portfolio's Vanguard Total World Stock Index ETF, which began replacing the iShares MSCI ACWI Index ETF exposure in December 2022 due to ESG-related matters.

Global equities gained in the first quarter of 2023, with the MSCI ACWI IMI Index up +7.0%, buoyed by receding recession concerns. During the quarter, US equities in the financials, energy, and healthcare sectors lagged, while equities in the technology, communication services, and consumer discretionary sectors performed well. As such, large growth stocks meaningfully outperformed value stocks. Every major market was up for the quarter: S&P 500 (+7.5%); MSCI Europe IMI (+10.2%); MSCI EM IMI (+3.9%); MSCI China IMI (+4.3%).

The collapse of SVB along with further financial sector disruption in Europe caused stocks to dip sharply in March before recovering to finish the month and quarter higher. The Federal Reserve expressed confidence in the resilience of the US banking system as the Federal Reserve ultimately raised the policy rate by 50 bps throughout the quarter, taking borrowing costs to the highest level since 2007. However, economic data for the period indicated that inflation has begun cooling, leading to expectations that the hiking cycle could come to an end at some point this year. Eurozone equities posted strong gains despite volatility in the banking sector, led by the technology, consumer discretionary, and communication services sectors, while the real estate and energy sectors lagged. Emerging markets posted positive returns over the quarter but lagged the developed



# Asset Class Detail

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markets. The start of the year brought optimism within emerging markets given the continued re-opening of China's economy, however, tensions between the US and China re-escalated in February and March, which put pressure on returns in the region.

The Global Public Equity portfolio contributed +0.4% for the quarter and -0.3% toward the one-year performance of total SWIFT fund returns.

- Global Public Equity Performance: Q1 = 6.9%      1yr = -6.1%
- Benchmark: Q1 = 7.0%      1yr = -7.7%
- Return Contribution: Q1 = 0.4%      1yr = -0.3%

## Hedged Equity

Increased: None

Decreased: TRG Alternative EM (\$15MM)

The Hedged Equity portfolio returned +4.2% for the quarter, generating a positive outcome from an absolute return perspective and outperforming on a benchmark-relative basis. While the portfolio's absolute return over the one-year period (-1.3%) is moderately down in a difficult macro environment, it is worth noting that the portfolio has continued to outperform its benchmark (-4.8%) over that time horizon. During the quarter, positive performance was primarily driven by Europe, global TMT, and emerging markets focused strategies. Performance for the one-year period was driven by exposures to the same strategies focused on Europe in addition to a separate European event-driven manager.

Hedge funds proved out their ability to protect capital during the market downturn in 2022 and continued their resurgence from last quarter into 1Q23. Hedge fund managers effectively navigated a historic surge in bank and financial risk, as well as a significant adjustment to the global interest rate outlook. While positive returns generated by hedge funds have come alongside an upswing in broader equity markets, the dispersion between the best and worst performing company-specific equities is getting larger, which can benefit equity-focused hedge funds as a widening dispersion of outcomes allows for opportunities on both the long and the short sides of managers' portfolios. Separately, smaller funds often historically beat larger funds as it relates to performance, mainly because they invest in a more inefficient part of the market while sticking to their best ideas. Notably, larger funds have significantly outperformed their smaller peers in the current market environment, driven by recent outperformance from larger index constituents, which are more often held in the portfolios of larger hedge fund managers.

The Hedged Equity portfolio contributed +0.9% for the quarter and -0.3% towards the one-year performance of total SWIFT returns.

- Hedged Equity Performance: Q1 = 4.2%      1yr = -1.3%
- Benchmark: Q1 = 1.2%      1yr = -4.8%
- Return Contribution: Q1 = 0.9%      1yr = -0.3%

## Real Estate

New Commitments: None

The Real Estate portfolio returned -2.5% for the quarter, modestly outperforming the benchmark. Investments in diversified North American real estate equity platforms struggled during the quarter, while real estate debt strategies remained relatively flat.

Sector-level fundamental data showed signs of a slowdown, but market conditions were still generally healthy throughout the quarter. Vacancy rates in three of the four major property types increased in 1Q23. Industrial, apartment, and office vacancy rates increased by 70 bps, 20 bps, and 50 bps, respectively, during the quarter. Open-air retail vacancy rates remained flat after seven consecutive quarters of decline.

Transaction volume continues to decline from upward pressure on cap rates and limited debt financing availability. Transaction volume was down -55.9% in 1Q23 relative to the same period last year. US non-agency CMBS issuance volume also decreased during the quarter by -79.5% from 2022 levels. Multi-family and industrial real estate continue to see the most transaction activity, making up 51.7% of all volume in 1Q23.

Office occupiers began shedding both jobs and space during the quarter, with major tech and finance firms announcing mass layoffs globally. Legacy office assets continue to bear the brunt of demand declines as buildings built prior to 2015 lost 350 million square feet of occupancy in 1Q23.

The Real Estate portfolio contributed -0.4% for the quarter and -0.2% toward the one-year performance of total SWIFT returns.

- Real Estate Performance: Q1 = -2.5%      1yr = -1.3%
- Benchmark: Q1 = -5.2%      1yr = 6.5%
- Return Contribution: Q1 = -0.4%      1yr = -0.2%

## All Asset Strategies

Increased: None

Decreased: None

The All Asset Strategies portfolio returned +1.4% for the quarter. This portfolio performed well on an absolute and benchmark-relative basis (+1.1%) for the period. This portfolio consists of two funds – a multi-strategy hedge fund and a short duration private markets fund. Both strategies generated positive performance for the quarter.

The All Asset Strategies portfolio contributed +0.1% for the quarter and +0.0% towards the one-year performance of total SWIFT returns.

# Asset Class Detail

As of March 31, 2023

- All Asset Strategies Performance: Q1 = 1.4%      1yr = 1.1%
- Benchmark: Q1 = 1.1%      1yr = -0.3%
- Performance Contribution: Q1 = 0.1%      1yr = 0.0%

## Risk

In equity markets, the S&P 500 returned +7.5% during 1Q23, though nearly all the positive return attribution was observed in January. Realized equity volatility was moderate, with nearly half of the trading days in the quarter involving S&P 500 moves of more than 1%, but with only two trading days having moves of more than 2%. The CBOE VIX Index (a market-based measure of equity market implied volatility) remained within a roughly five point range throughout most of the quarter, with the only notable exception being the regional banking disturbance in mid-March, during which the VIX closed above 26 twice. Currency implied volatility and interest rate volatility followed a similar path to the VIX, with both fairly range-bound early in the quarter, before increasing noticeably in mid-March. High yield spreads also took a similar path, though declined more slowly at the end of the quarter relative to the VIX.

In the SWIFT portfolio, the overall risk level as measured by Value at Risk (VaR) increased by 23 bps from December to March, with little change in the measured risk of the policy portfolio. The increase in VaR for the quarter was driven by both asset allocation changes and manager behavior. The changing asset allocation increased VaR by 12 bps, as the portfolio reduced cash to increase Global Public Equity exposure. The impact of manager behavior also increased VaR by 12 bps, largely caused by increases in net exposure levels in the Hedged Equity portfolio, especially the funds with European exposure.

Looking forward, market commentary seems largely focused on both the Federal Reserve policy and the challenges observed in the banking system. Pressure in the banking market was first noted with the failed equity raise and subsequent seizure of SVB, then subsequently spread to other regional banks, and was punctuated by Credit Suisse being purchased by UBS, which included a wipe out of Credit Suisse's contingent capital instruments. While still early, actions taken and coordinated by regulators have seemingly calmed market participants. That said, even prior to the recent events, extensive commentary had noted the difficulty the Federal Reserve may have in balancing its desire to reduce inflation, while also preventing a meaningful economic contraction. More recently, it has been noted that the need to provide liquidity (in order to ensure confidence in the banking system) may increase the difficulty of an already delicate balancing act, and thus the risk of a policy error remains elevated.

Elsewhere, the correlation between bonds and equities continues to be monitored, and when measured with daily returns during 1Q23, the correlation was effectively zero. Equity markets have seemingly shrugged off negative news, and some still find current

valuations unsustainable. Geopolitical risk has seemingly taken a back seat to banking issues, but concern remains, notably with the Russia/Ukraine conflict and China's geopolitical ambitions. Moreover, as mentioned previously, some suggest relying on the Federal Reserve's policy response as a market put may add fragility to the financial system and note that the central bank may not be able to provide such support given current inflation levels.

# Asset Allocation Summary

As of March 31, 2023

Asset Class	Strategy	Number of Funds <sup>1, 2</sup>	Number of Managers <sup>1, 2</sup>	Current Market Value	Weight	Target Weight
<b>Fixed Income</b>		<b>54</b>	<b>37</b>	<b>\$956,701,558</b>	<b>54.7%</b>	<b>55.0%</b>
	Cash	2	2	232,508,982	13.3%	10.0%
	Global Fixed Income (ex-Cash)	4	4	178,820,116	10.2%	10.0%
	Alternative Fixed Income	12	12	251,918,531	14.4%	15.0%
	Private Debt	36	20	293,453,930	16.8%	20.0%
<b>Equity</b>		<b>9</b>	<b>8</b>	<b>\$469,056,459</b>	<b>26.8%</b>	<b>30.0%</b>
	Global Public Equity	1	1	112,353,115	6.4%	5.0%
	Hedged Equity	7	6	354,351,740	20.3%	25.0%
	Private Equity	1	1	2,351,603	0.1%	0.0%
<b>Real Assets</b>		<b>7</b>	<b>6</b>	<b>\$237,962,270</b>	<b>13.6%</b>	<b>15.0%</b>
	Real Estate	7	6	230,962,270	13.6%	15.0%
<b>Strategic All Asset</b>		<b>2</b>	<b>2</b>	<b>\$85,871,989</b>	<b>4.9%</b>	<b>0.0%</b>
	All Asset Strategies	2	2	85,871,989	4.9%	0.0%
<b>Total Portfolio</b>		<b>72</b>	<b>52</b>	<b>\$1,749,592,276</b>	<b>100.0%</b>	<b>100.0%</b>

<sup>1</sup> Does not include funds in wind down or redemption.

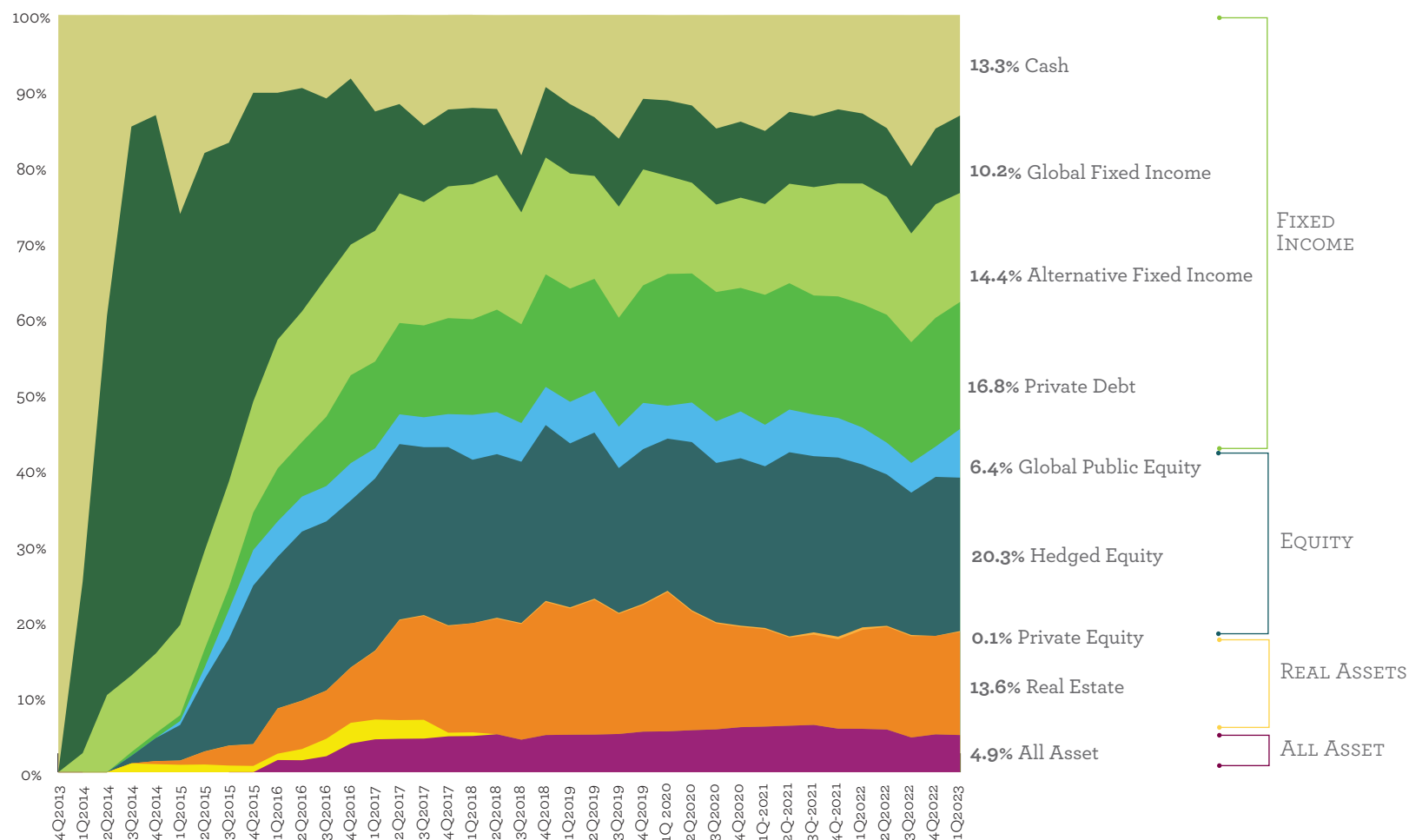
<sup>2</sup> Manager count for aggregates are less than sum of components due to managers with multiple strategy allocations.



# Asset Allocation Evolution

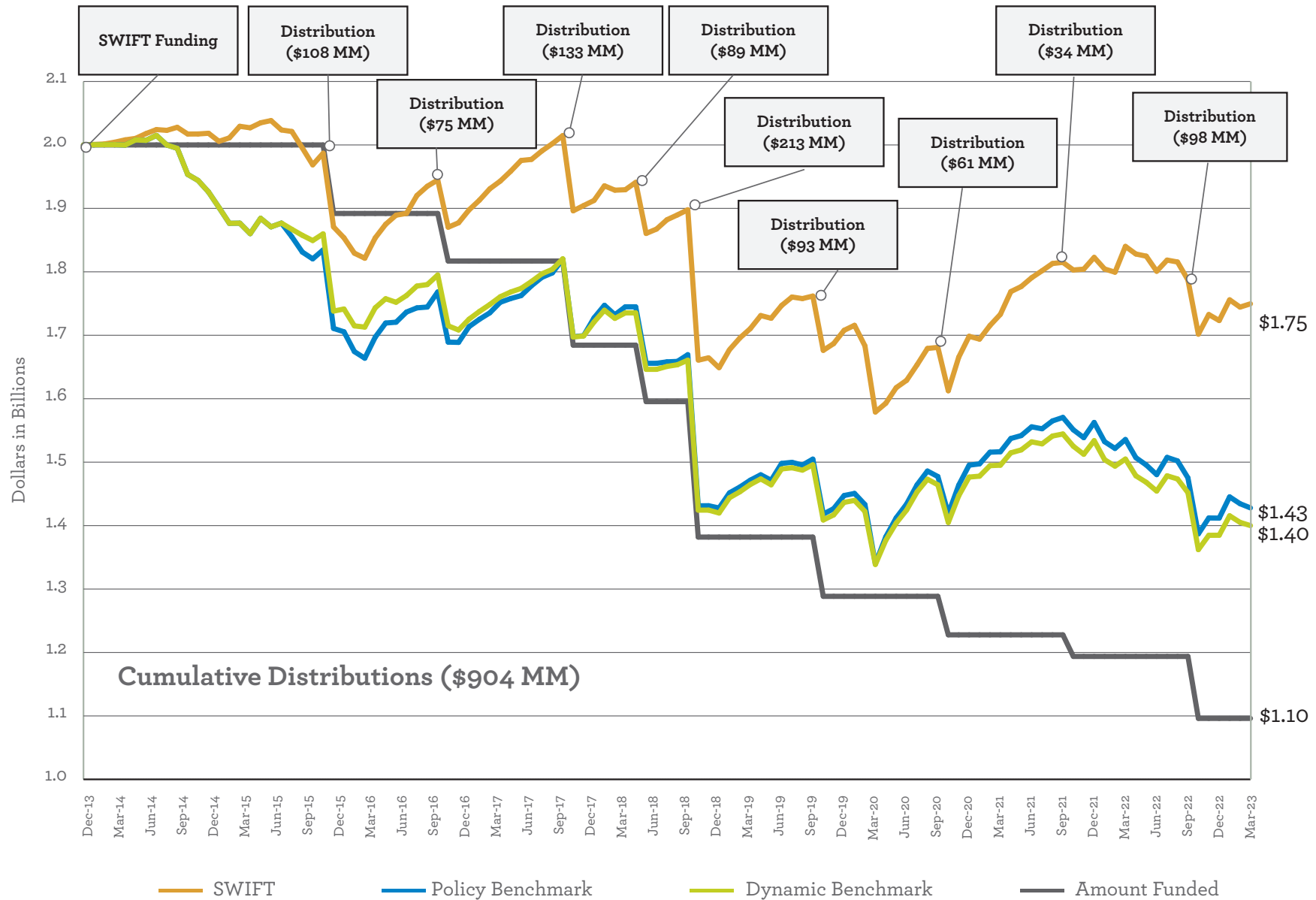
As of March 31, 2023

Total AUM: \$1,749,592,276



# SWIFT Portfolio Market Value

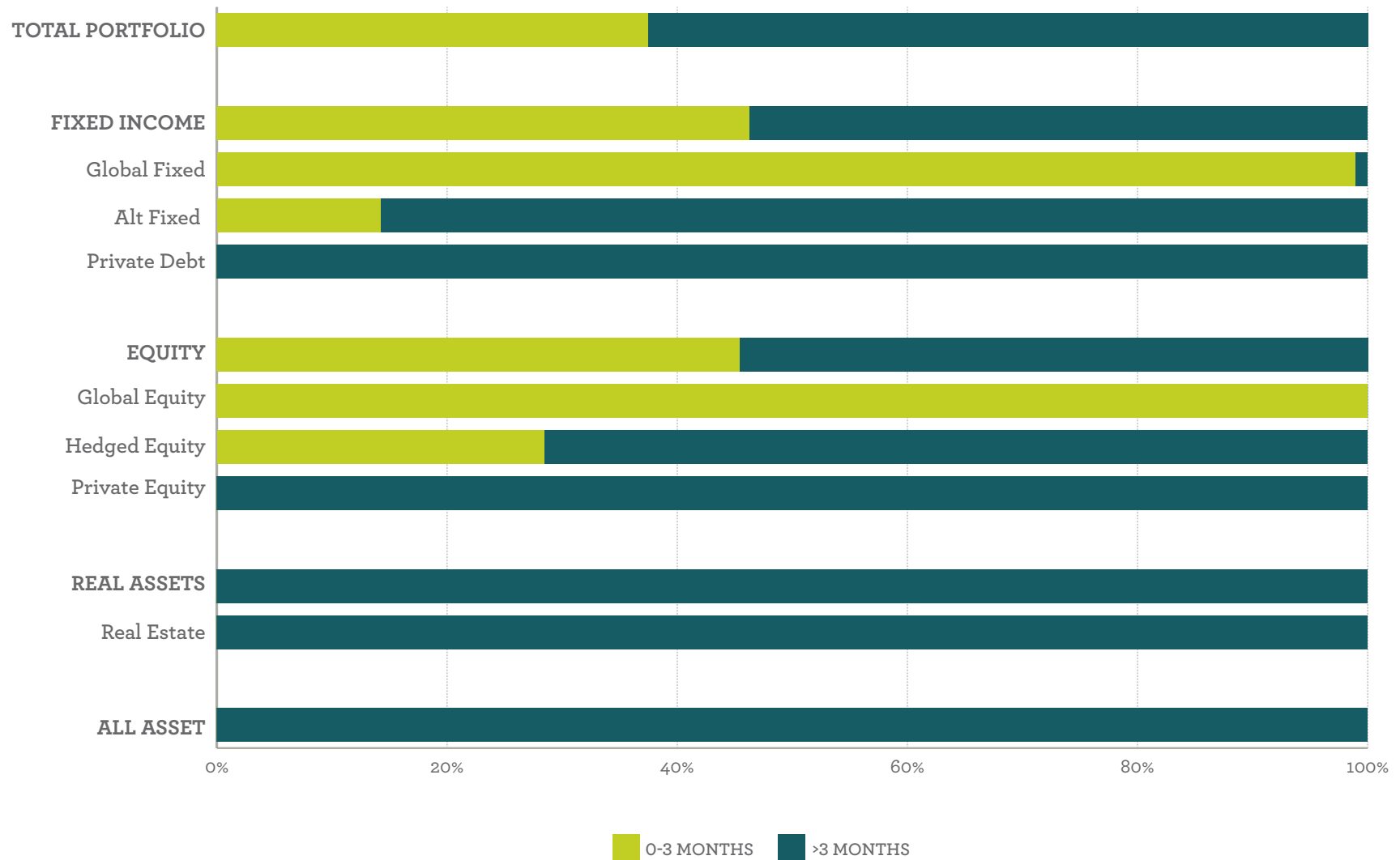
As of March 31, 2023





# Portfolio Liquidity<sup>1,2</sup>

As of March 31, 2023

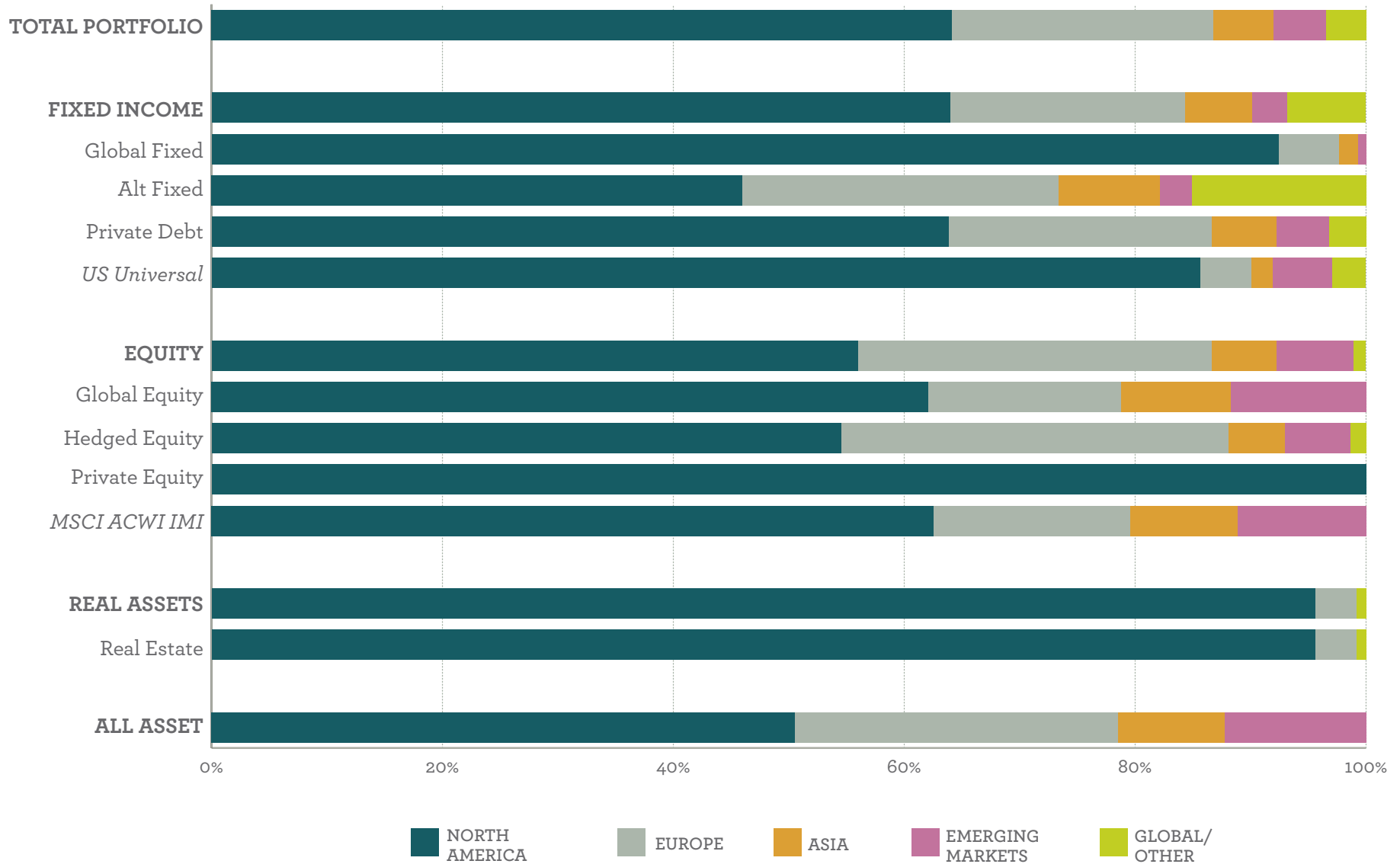


<sup>1</sup> Projected liquidity takes hard lock, notice and payout periods into consideration.

<sup>2</sup> Liquidity data as provided by managers.

# Portfolio Geographic Allocation<sup>1</sup>

As of March 31, 2023



<sup>1</sup> Calculated using gross exposures.

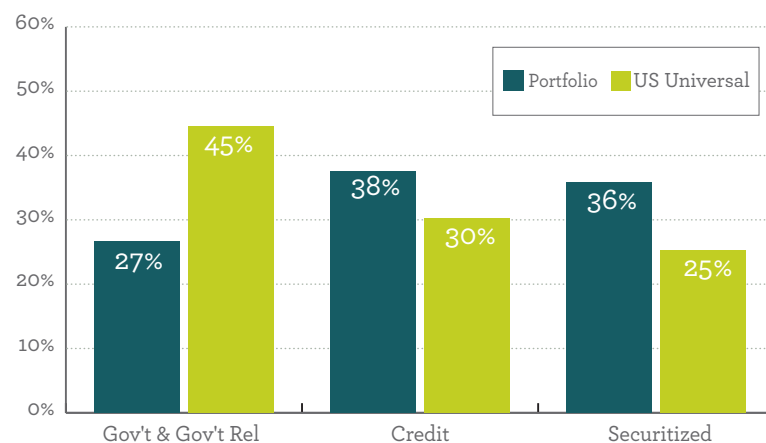
# Fixed Income Summary

As of March 31, 2023

Strategy	Market Value	Portfolio Weight	Standard Deviation <sup>1</sup>	Sharpe Ratio <sup>1</sup>	% Positive Months <sup>1</sup>	US Universal		HFRI Conservative		MSCI ACWI IMI	
						Beta <sup>1</sup>	Correlation <sup>1</sup>	Beta <sup>1</sup>	Correlation <sup>1</sup>	Beta <sup>1</sup>	Correlation <sup>1</sup>
Cash	\$232,508,982	13.3%	-	-	-	-	-	-	-	-	-
Global Fixed Income (ex-cash)	\$178,820,116	10.2%	5.1%	-0.1	47.2%	0.8	1.0	0.6	0.4	0.2	0.7
<i>US Universal</i>			6.3%	-0.5	44.4%	-	-	0.6	0.3	0.3	0.7
Alternative Fixed Income	\$251,918,531	14.4%	6.7%	1.1	63.9%	-0.3	-0.3	0.6	0.3	0.0	0.1
<i>HFRI FoF: Conservative</i>			3.2%	2.0	75.0%	0.2	0.3	-	-	0.1	0.7
Private Debt	\$293,453,930	16.8%	-	-	-	-	-	-	-	-	-
<b>Total Fixed Income</b>	<b>\$956,701,558</b>	<b>54.7%</b>	<b>1.8%</b>	<b>2.4</b>	<b>91.7%</b>	<b>0.0</b>	<b>0.1</b>	<b>0.3</b>	<b>0.4</b>	<b>0.0</b>	<b>0.4</b>

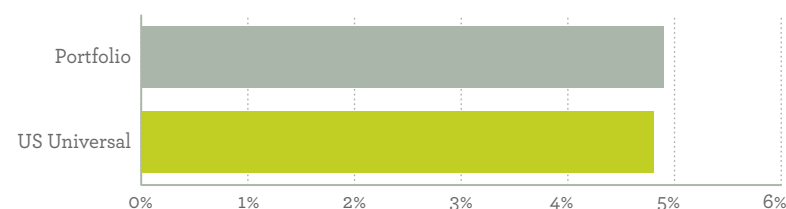
<sup>1</sup> Trailing 36 months.

Sector Allocation<sup>1</sup>  
ex-cash

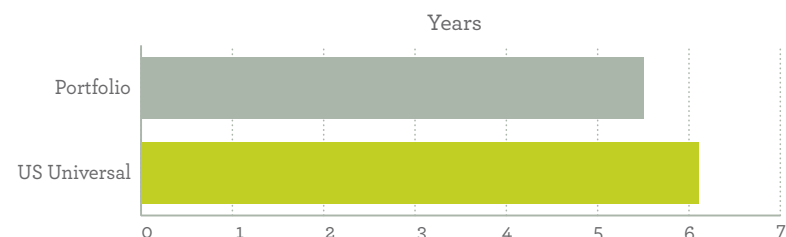


<sup>1</sup> Calculated using gross exposures

Yield



Duration



# Private Debt Detail

As of March 31, 2023

Strategy	Number of Current Fund Commitments	Portfolio Weight	Commitments	Unfunded Commitments	Total Contributions <sup>1</sup>	Distributions	Remaining Value <sup>2</sup>	Total Value
Performing	19	9.1%	\$397,534,285	\$96,993,780	\$453,330,938	\$385,999,727	\$158,705,188	\$544,704,916
Distressed	17	7.7%	\$303,796,748	\$142,988,731	\$236,165,041	\$154,914,186	\$134,948,741	\$289,662,927
<b>Total Private Debt</b>	<b>36</b>	<b>16.8%</b>	<b>\$701,331,033</b>	<b>\$239,982,511</b>	<b>\$689,495,978</b>	<b>\$540,913,914</b>	<b>\$293,453,930</b>	<b>\$834,367,843</b>

<sup>1</sup>Total Contributions include fees and expenses that may not reduce or lower unfunded commitments.

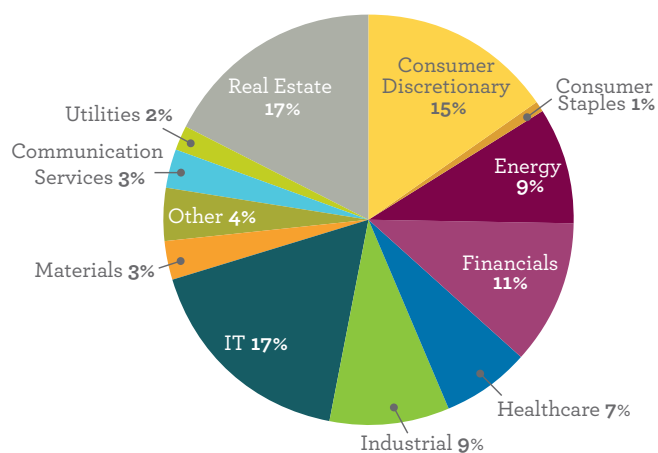
<sup>2</sup>Remaining Value is equal to the last actual reported capital account value plus subsequent capital calls less subsequent distributions through the indicated date, with no valuation changes.

Strategy	Distributed/Paid In (DPI)	Total Value/Paid In (TVPI)	1 Year IRR	ITD IRR	Time Weighted Returns		
					1 Year	3 Year	5 Year
Performing	0.85	1.20	9.3%	8.2%	8.9%	9.5%	8.6%
Distressed	0.66	1.23	9.1%	7.6%	9.0%	10.7%	7.0%
<b>Total Private Debt</b>	<b>0.78</b>	<b>1.21</b>	<b>9.3%</b>	<b>8.0%</b>	<b>9.0%</b>	<b>10.2%</b>	<b>8.1%</b>

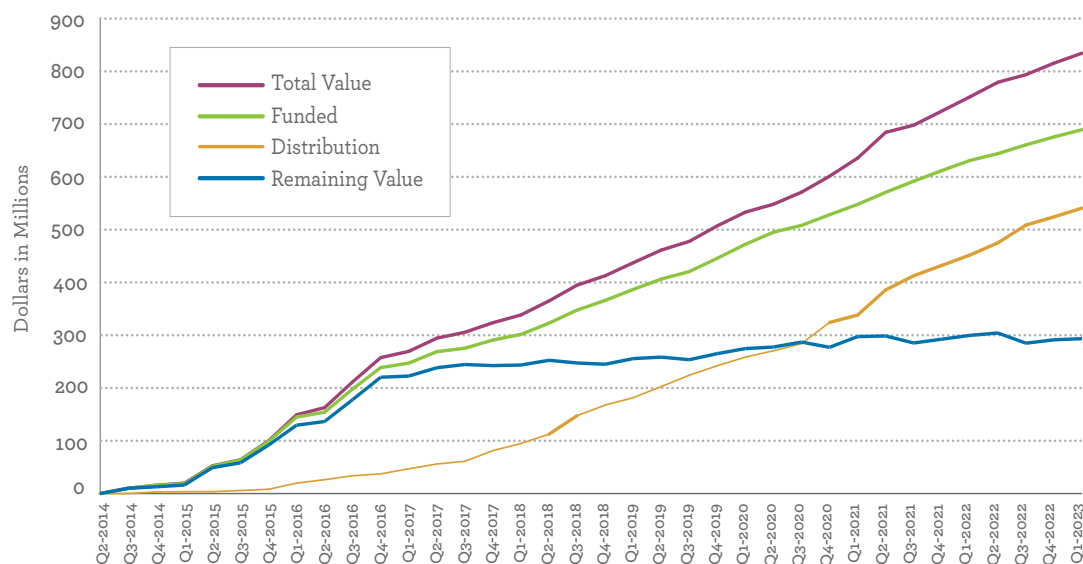
*Private Debt Blend*

*0.5% 8.3% 4.9%*

## Sector Allocation



## Cash Flow & Valuation History





# Equity Summary

As of March 31, 2023

Strategy	Market Value	Portfolio Weight	Standard Deviation <sup>1</sup>	Sharpe Ratio <sup>1</sup>	% Positive Months	MSCI ACWI IMI		HFRI FoF Strategic	
						Beta <sup>1</sup>	Correlation <sup>1</sup>	Beta <sup>1</sup>	Correlation <sup>1</sup>
Global Equity	\$112,353,115	6.4%	19.7%	1.0	63.9%	1.0	0.9	1.7	0.7
<i>MSCI ACWI IMI</i>			18.2%	0.8	63.9%	-	-	1.8	0.8
Hedged Equity	\$354,351,740	20.3%	11.0%	0.8	55.6%	0.6	0.9	1.2	0.9
<i>HFRI FoF: Strategic</i>			8.5%	0.8	58.3%	0.4	0.8	-	-
Private Equity	\$2,351,603	0.1%	-	-	-	-	-	-	-
<b>Total Equity</b>	<b>\$469,056,459</b>	<b>26.8%</b>	<b>11.8%</b>	<b>1.0</b>	<b>61.1%</b>	<b>0.6</b>	<b>1.0</b>	<b>1.2</b>	<b>0.9</b>

<sup>1</sup> Trailing 36 months.

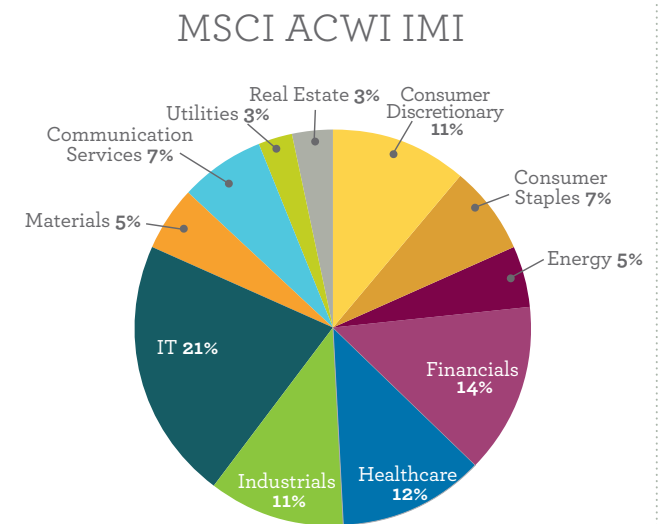
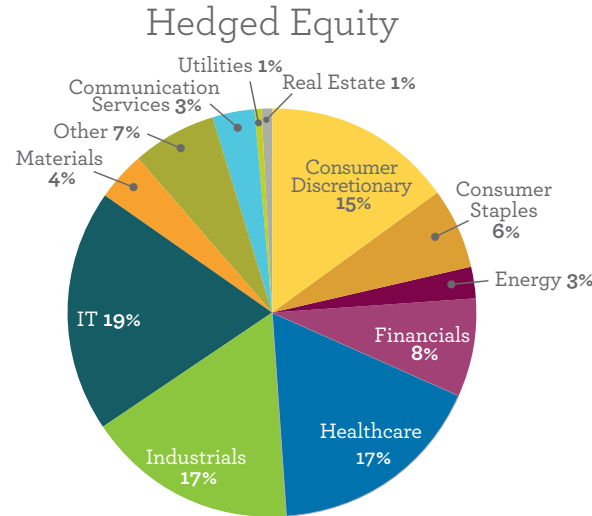
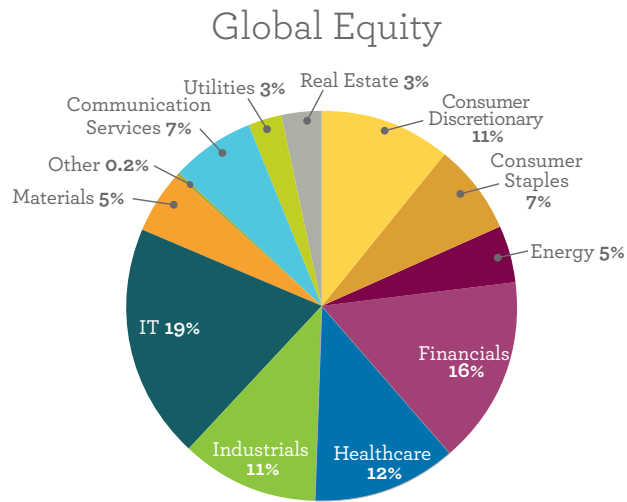
Strategy	Number of Fund Commitments	Commitments	Unfunded Commitments	Total Contributions <sup>1</sup>	Distributions	Remaining Value <sup>2</sup>	Total Value
<b>Total Private Equity</b>	<b>1</b>	<b>\$7,500,000</b>	<b>\$0</b>	<b>\$3,107,673</b>	<b>\$9,941,725</b>	<b>\$2,351,603</b>	<b>\$12,293,328</b>

<sup>1</sup> Total Contributions include fees and expenses that may not reduce or lower unfunded commitments.

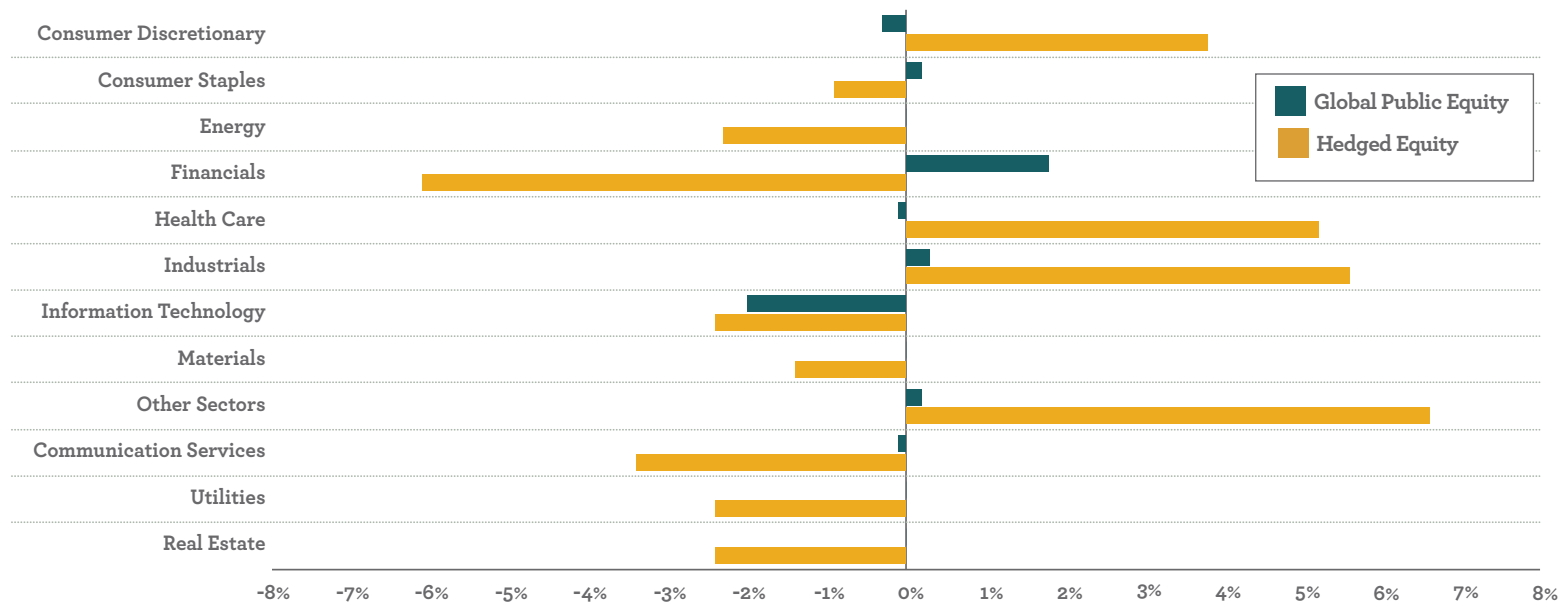
<sup>2</sup> Remaining Value is equal to the last actual reported capital account value plus subsequent capital calls less subsequent distributions through the indicated date, with no valuation changes.

# Equity Detail

As of March 31, 2023



## Sector Under/Over Allocation<sup>1</sup>



<sup>1</sup> Relative to MSCI ACWI IMI

# Real Estate Summary

As of March 31, 2023

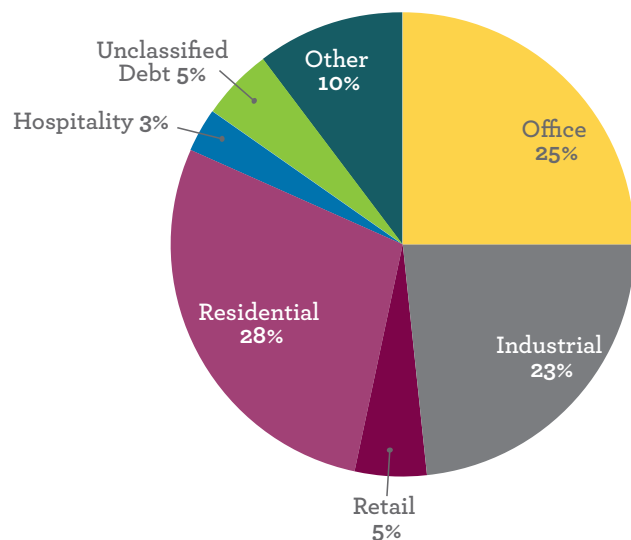
Strategy	Number of Current Fund Commitments	Portfolio Weight	Commitments	Unfunded Commitments	Total Contributions <sup>1</sup>	Distributions	Remaining Value <sup>2</sup>	Total Value
Real Estate	7	13.6%	\$344,000,000	\$14,404,877	\$447,119,932	\$327,600,359	\$237,962,270	\$565,562,629

<sup>1</sup>Total Contributions include fees and expenses that may not reduce or lower unfunded commitment.

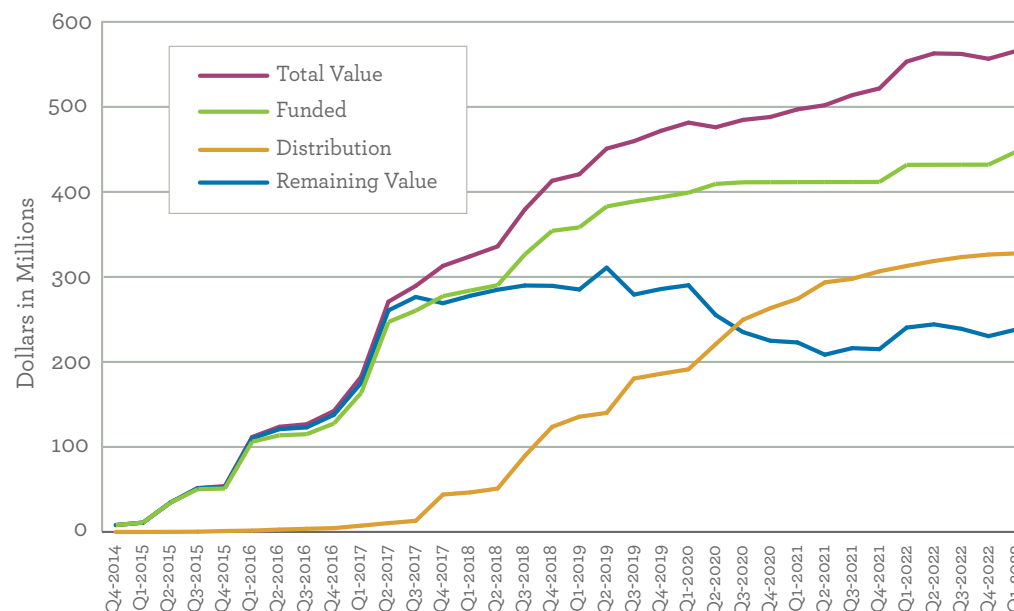
<sup>2</sup>Remaining Value is equal to the last actual reported capital account value plus subsequent capital calls less subsequent distributions through the indicated date, with no valuation changes.

Strategy	Distributed/Paid In (DPI)	Total Value/Paid In (TVPI)	1 Year IRR	ITD IRR	Time Weighted Returns		
					1 Year	3 Year	5 Year
Real Estate	0.73	1.26	-1.3%	7.4%	-1.3%	6.2%	6.7%
<i>Real Estate Blend</i>					6.5%	9.0%	7.7%

## Sector Allocation



## Cash Flow & Valuation History



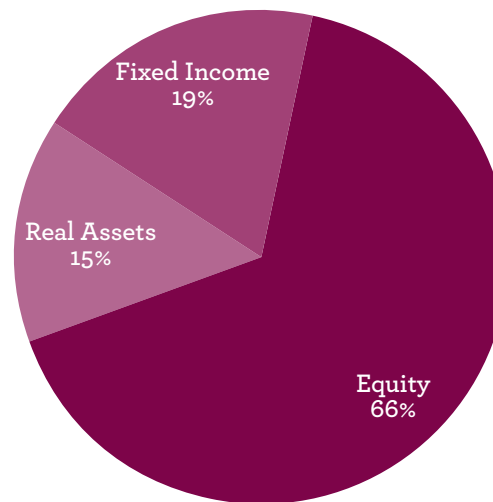
# All Asset Strategies

As of March 31, 2023

Strategy	Market Value	Portfolio Weight	Standard Deviation <sup>1</sup>	Sharpe Ratio <sup>1</sup>	Downside Deviation <sup>1</sup>	Max Drawdown <sup>1</sup>	% Positive Months <sup>1</sup>	Total Policy Benchmark	
								Beta <sup>1</sup>	Correlation <sup>1</sup>
Multi-Strategy	\$85,871,989	4.9%	5.0%	2.0	3.9%	-3.7%	69.4%	0.6	0.6
<b>All Asset Total</b>	<b>\$85,871,989</b>	<b>4.9%</b>	<b>5.0%</b>	<b>2.0</b>	<b>3.9%</b>	<b>-3.7%</b>	<b>69.4%</b>	<b>0.6</b>	<b>0.6</b>
<i>SWIFT Policy Benchmark</i>			4.7%	1.2	3.8%	-5.6%	63.9%	-	-

<sup>1</sup> Trailing 36 months.

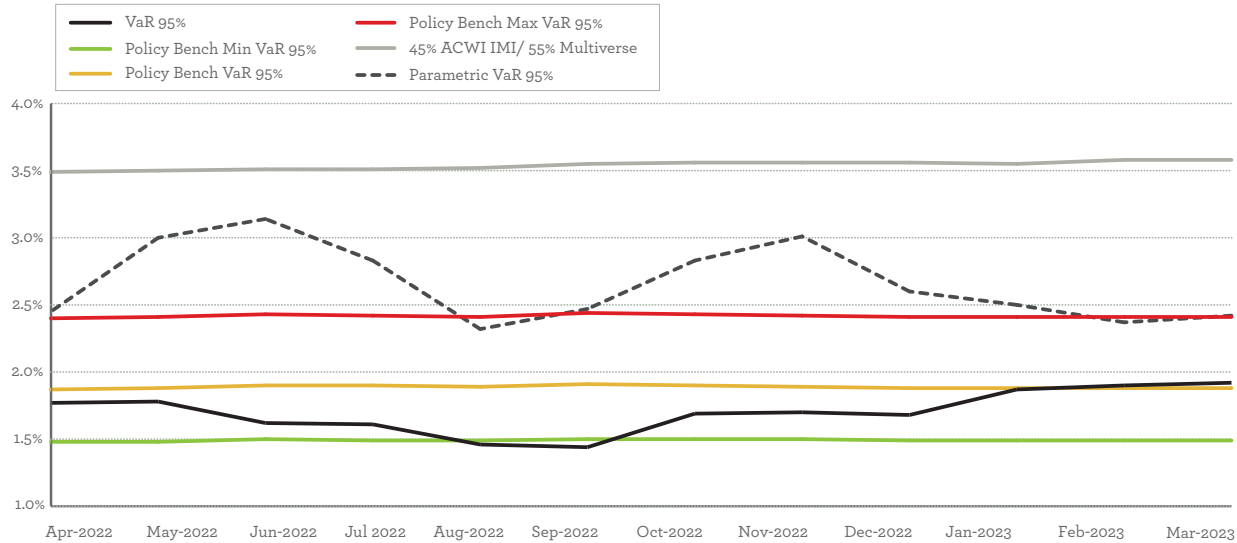
## All Asset Breakdown



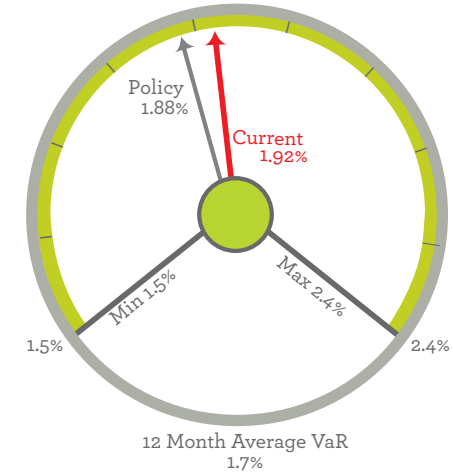
# Value at Risk (VaR) Analysis

As of March 31, 2023

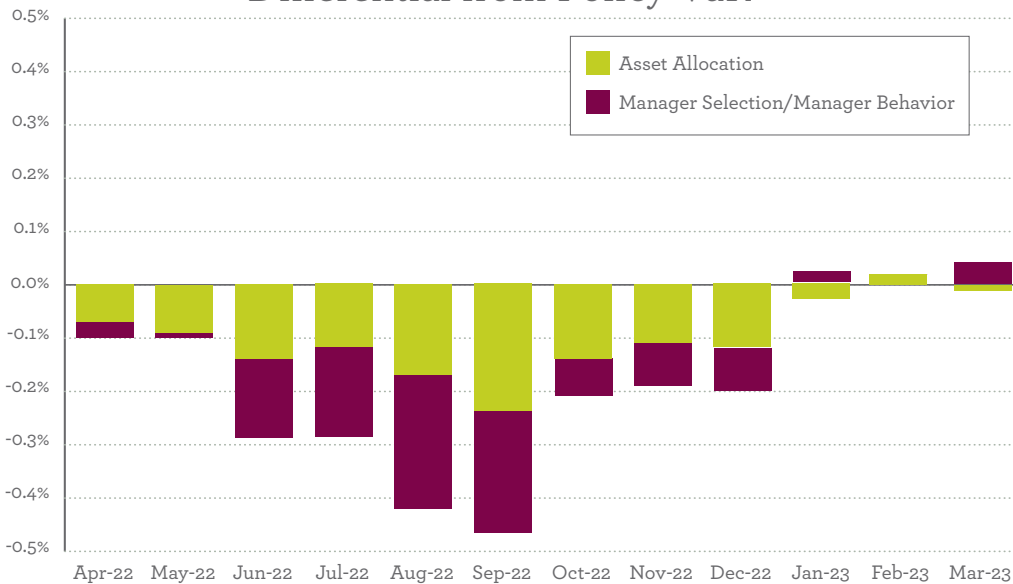
## Twelve Month History



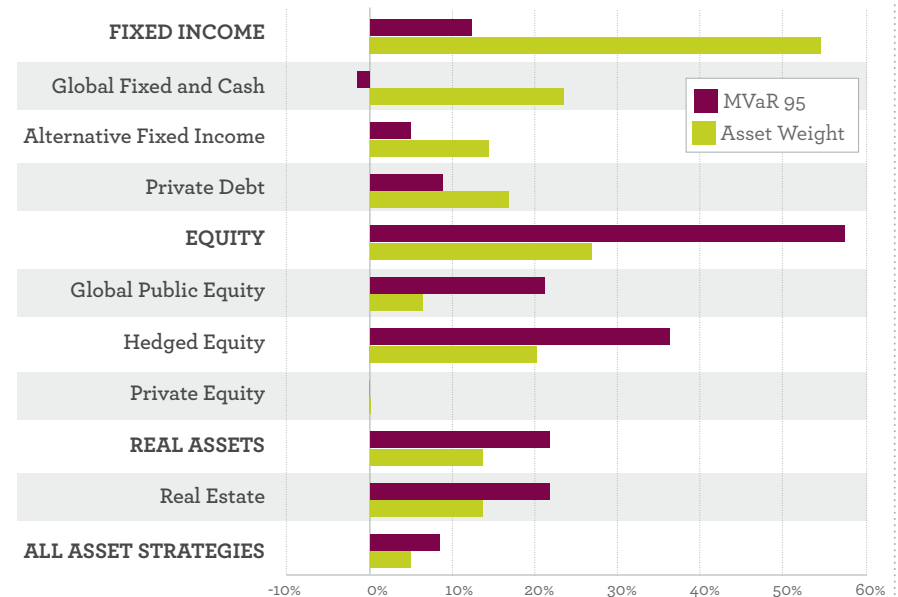
## VaR as a Percent of Market Value (One Month, 95% Confidence)



## Differential from Policy VaR



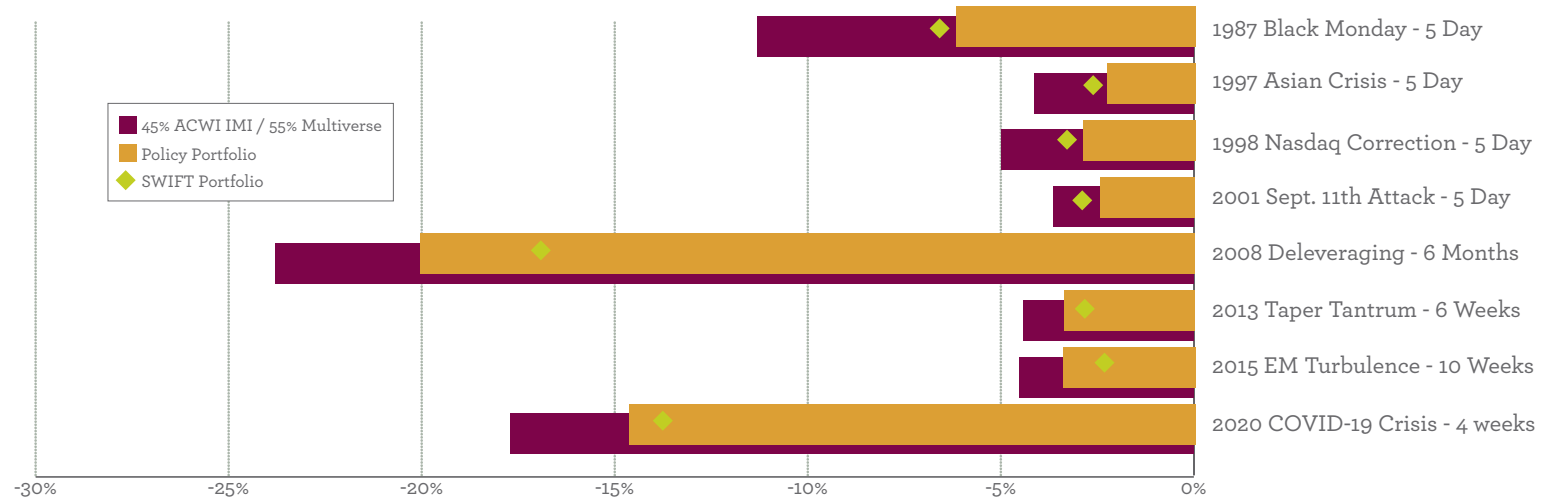
## VaR Contribution



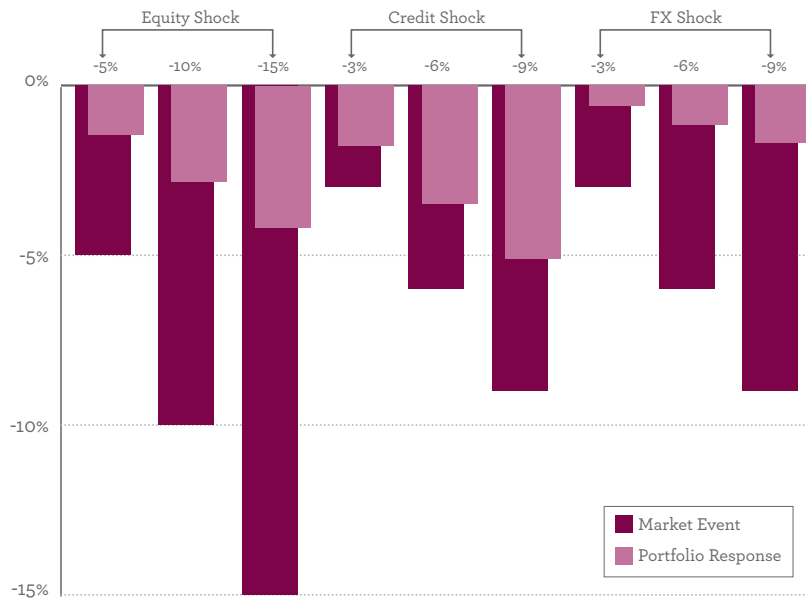
# Portfolio Risk Summary

As of March 31, 2023

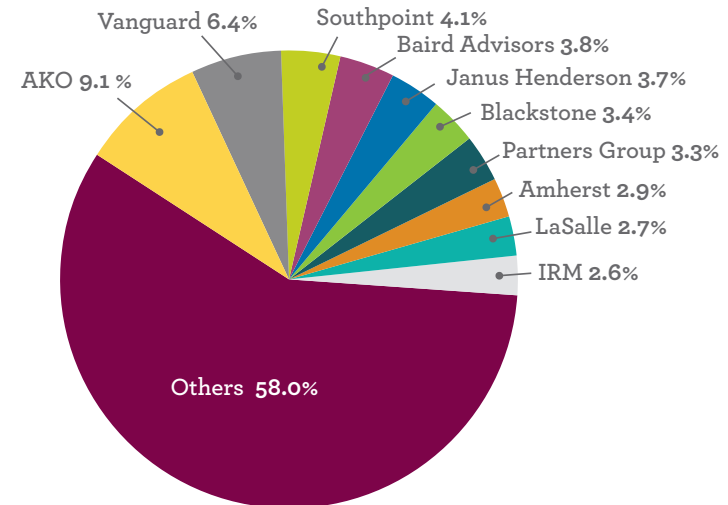
## Scenario Analysis



## Monthly Portfolio Tail Risk Profile



## Manager Concentration





# SWIFT Performance Table

As of March 31, 2023

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2013												0.0%	<b>0.0%</b>
2014	0.0%	0.1%	0.2%	0.1%	0.4%	0.3%	-0.1%	0.3%	-0.5%	0.0%	0.1%	-0.6%	<b>0.3%</b>
2015	0.3%	0.9%	-0.1%	0.4%	0.2%	-0.7%	-0.1%	-1.3%	-1.3%	1.0%	-0.4%	-1.1%	<b>-2.2%</b>
2016	-1.3%	-0.4%	1.8%	1.2%	0.8%	0.1%	1.5%	0.8%	0.5%	0.0%	0.4%	1.1%	<b>6.6%</b>
2017	0.8%	1.0%	0.6%	0.8%	0.9%	0.1%	0.7%	0.6%	0.7%	0.8%	0.4%	0.4%	<b>8.1%</b>
2018	1.2%	-0.3%	0.1%	0.6%	0.5%	0.4%	0.8%	0.4%	0.4%	-1.3%	0.2%	-0.9%	<b>2.0%</b>
2019	1.8%	1.1%	0.9%	1.2%	-0.2%	1.2%	0.8%	-0.1%	0.2%	0.5%	0.7%	1.3%	<b>9.6%</b>
2020	0.5%	-1.9%	-6.2%	0.9%	1.6%	0.7%	1.5%	1.6%	0.1%	-0.5%	3.3%	2.0%	<b>3.4%</b>
2021	-0.3%	1.3%	1.0%	2.1%	0.5%	0.8%	0.6%	0.6%	0.1%	1.2%	0.1%	1.0%	<b>9.6%</b>
2022	-1.0%	-0.3%	2.3%	-0.6%	-0.2%	-1.3%	1.0%	-0.1%	-1.5%	0.7%	1.8%	-0.5%	<b>0.2%</b>
2023	1.9%	-0.6%	0.3%										<b>1.6%</b>



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