

THIRD QUARTER 2023

## Liquid Alternatives Industry Monitor

### Summary of Trends and Statistics

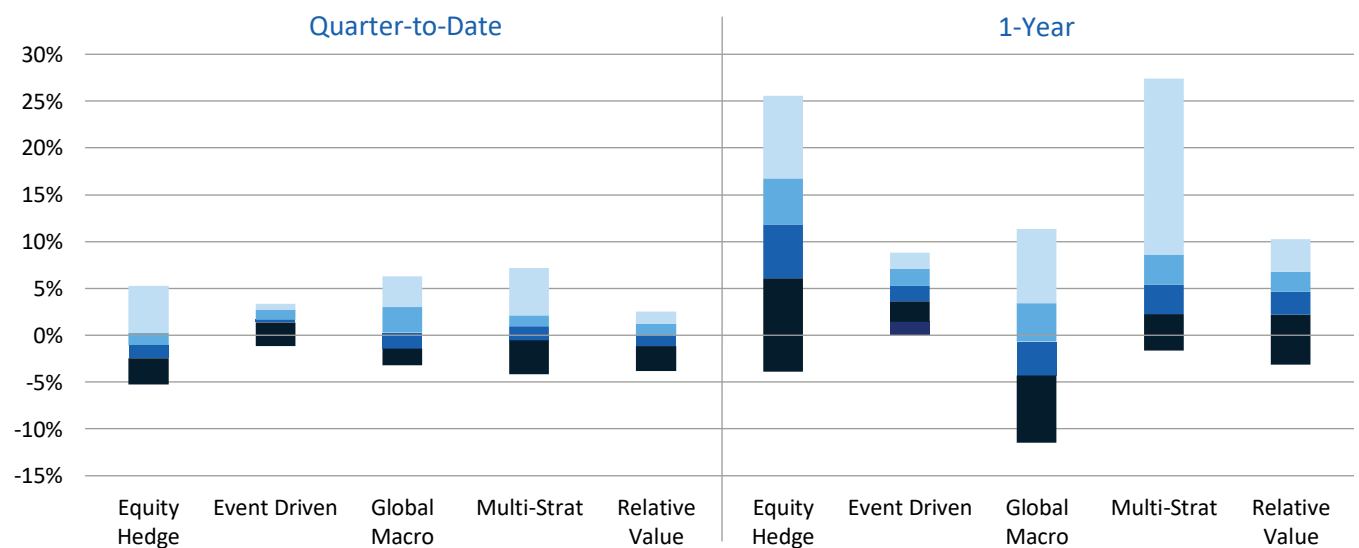
#### Industry Dashboard

Key performance statistics (%)	QTD	YTD	1Y	3Y	5Y	10Y
Wilshire Liquid Alternative Index <sup>SM</sup>	-0.1%	2.5%	4.3%	1.9%	1.4%	1.4%
HFRI Fund Weighted Composite Index	1.0%	4.5%	6.9%	7.0%	5.1%	4.6%
HFRX Global Hedge Fund Index	0.8%	1.5%	1.6%	1.9%	2.0%	1.5%
S&P 500 Index	-3.3%	13.1%	21.6%	10.1%	9.9%	11.9%
Bloomberg U.S. Aggregate Bond Index	-3.2%	-1.2%	0.6%	-5.2%	0.1%	1.1%
Wilshire Liquid Alternative Equity Hedge Index <sup>SM</sup>	-0.5%	5.7%	11.0%	5.7%	3.0%	2.5%
Wilshire Liquid Alternative Event Driven Index <sup>SM</sup>	2.0%	2.2%	3.0%	1.6%	2.1%	1.4%
Wilshire Liquid Alternative Global Macro Index <sup>SM</sup>	0.9%	1.5%	-3.3%	5.5%	3.6%	2.3%
Wilshire Liquid Alternative Multi-Strategy Index <sup>SM</sup>	1.0%	3.6%	6.2%	2.2%	1.0%	1.3%
Wilshire Liquid Alternative Relative Value Index <sup>SM</sup>	-0.9%	0.4%	1.6%	-1.3%	0.1%	0.8%

Sources: Bloomberg, HFR. Data as of 9/30/23. Returns greater than one year are annualized unless otherwise noted. Index returns shown do not represent the results of the actual trading of investable assets. Historical returns are not indicative of future results. It is not possible to invest directly in an index.

#### Dispersion

##### Performance Dispersion by Sub-Strategy as of September 30, 2023



For illustrative purposes only.

# Sub-Sector Performance

## Wilshire Liquid Alternative Equity Hedge Index<sup>SM</sup>

Equity hedge managers navigated a tumultuous quarter marked by initial gains from an ongoing equity rally and Asian market improvements, which were later countered by challenges arising from declining equity markets, unease in global equities, and concerns surrounding Chinese economic data. While short portfolios and market-neutral funds showed some resilience, the overall sentiment reflected a period of adjustment and caution.

Equity hedge managers experienced a challenging September, marked by losses for equity long-short funds due to the bearish backdrop. While short portfolios posted strong returns and equity market-neutral funds ended the month in neutral to slightly positive territory, overall performance was dampened, especially for U.S.-focused funds.

## Wilshire Liquid Alternative Event Driven Index<sup>SM</sup>

Throughout the quarter, event-driven managers experienced generally positive performance, buoyed by developments in significant merger transactions and increased market exposures. Despite facing challenges from market pullbacks, varied earnings results and volatility (particularly surrounding China) allowed managers to adeptly navigate the landscape.

Event-driven managers had a largely positive month in September, with gains driven by both merger arbitrage and credit, despite offsetting losses for directional long special situations positions due to a broader sell-off in equity markets.

## Wilshire Liquid Alternative Global Macro Index<sup>SM</sup>

Macro managers encountered a varied quarter, with positive contributions from energy, agriculture, and risk-on themes counterbalanced by challenges in foreign exchange trading and political and economic uncertainties.

Macro managers experienced a positive September, with gains primarily attributed to short bond positions, following a rise in yields spurred by hawkish central bank commentary and expectations of increased bond supply amid widening government deficits. While themes centered around Japan – including short positions in the Japanese yen and government bonds – yielded benefits, emerging markets themes faced challenges as long bond and FX exposures were pressured by higher real yields and a stronger U.S. dollar.

## Wilshire Liquid Alternative Relative Value Index<sup>SM</sup>

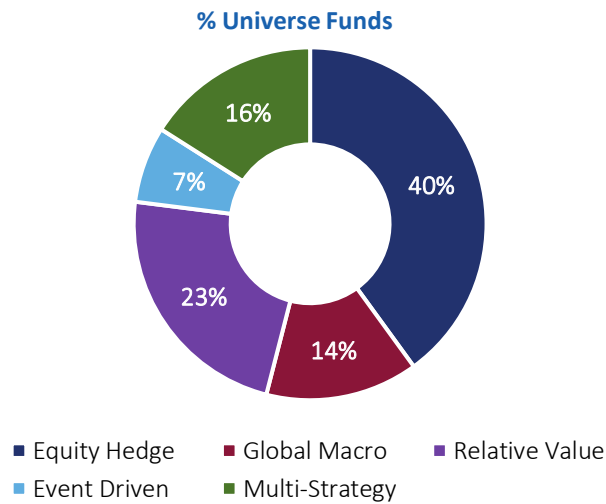
The quarter for relative value managers was characterized by oscillations in performance, with initial benefits from tightening credit spreads and low volatility giving way to heightened volatility in rates and U.S. equities.

In September, relative value strategies faced headwinds due to escalating interest rates and surging market volatility. The significant downturn in the equity market also detracted from some manager performance.

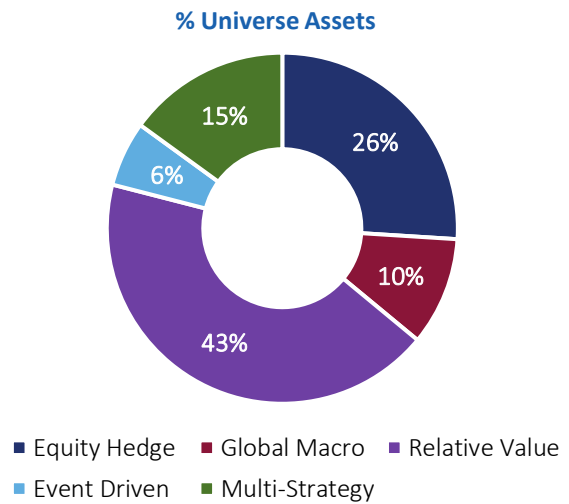
# Liquid Alternatives Universe Overview

## Composition

Fund Count and Assets Under Management by Sub-Sector

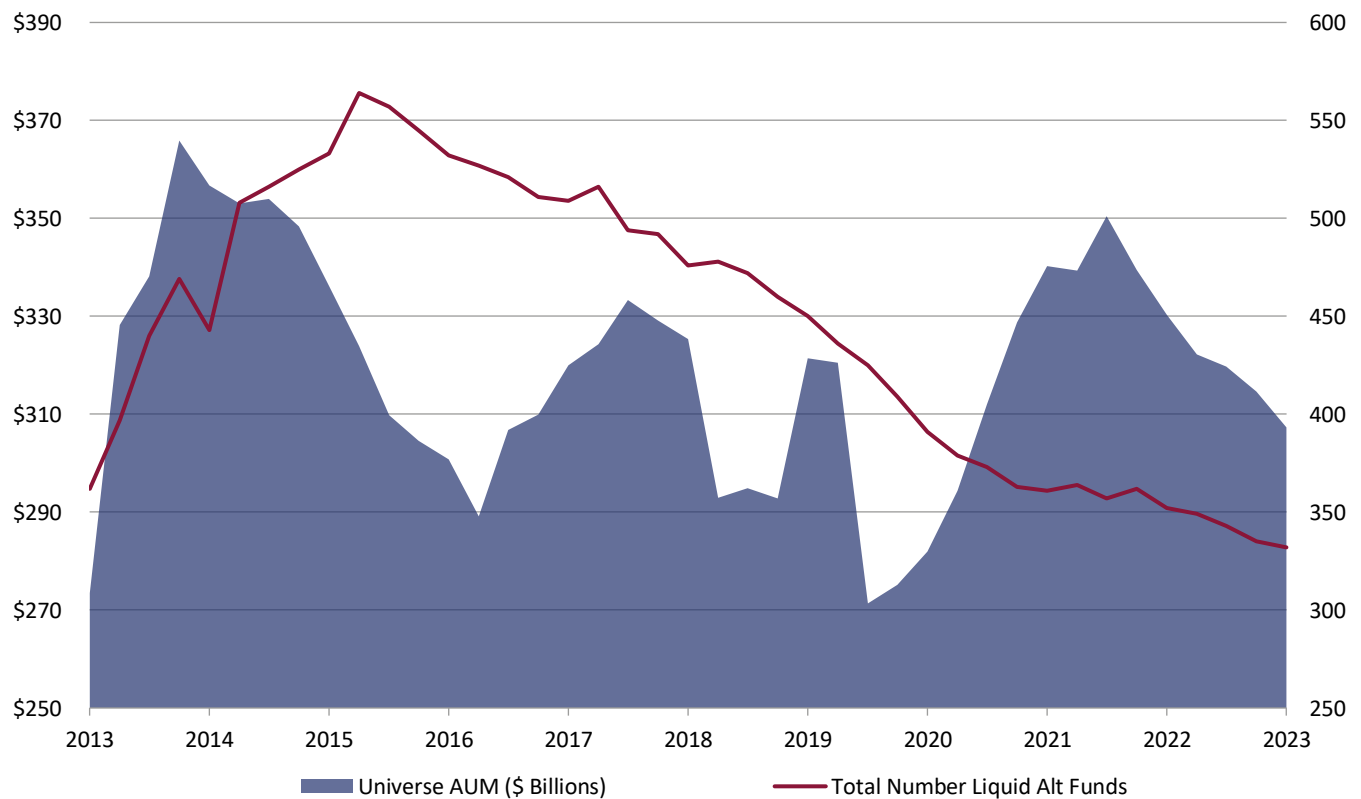


For illustrative purposes only.



For illustrative purposes only.

Trends on Fund Count and Assets Under Management



For illustrative purposes only.

## Universe Statistics

	Liquid Alternatives Universe	Equity Hedge	Global Macro	Relative Value	Event Driven	Multi- Strategy
# Funds	332	132	47	76	24	53
Universe (#)	100%	40%	14%	23%	7%	16%
Total assets (\$mil)	\$307,368	\$79,669	\$29,514	\$133,443	\$18,009	\$46,733
% Universe (assets)	100%	26%	10%	43%	6%	15%
# Funds with 3 years	307	120	41	71	23	52
Total 3-year assets (\$mil)	\$296,353	\$72,342	\$29,403	\$132,052	\$18,008	\$44,547
# Funds > \$100 million	205	64	27	58	16	40
# Funds launched in last 12 months	5	1	2	1	1	0

## Largest Funds by AUM\$

Equity Hedge	Global Macro	Relative Value	Event Driven	Multi-Strategy
JPMorgan Hedged Equity: \$16.0bn	American Beacon AHL: \$3.6bn	BlackRock Strategic Income Opps: \$35.0bn	BlackRock Event Driven Equity: \$5.8bn	BlackRock Systematic Multi-Strat: \$7.1bn
FPA Crescent: \$9.2bn	PIMCO Trends Managed Futures: \$3.5bn	Calamos Market Neutral Income: \$14.1bn	Merger Investor: \$3.0bn	Catalyst/Millburn Hedge Strategy: \$6.5bn
Gateway: \$6.2bn	Abbey Capital Futures Strategy: \$2.8bn	JPMorgan Strategic Income Opps: \$8.8bn	First Trust Merger Arb: \$2.0bn	Blackstone Alternative Multi-Strat: \$4.0bn
Neuberger Berman Long Short: \$6.1bn	AlphaSimplex Managed Futures: \$2.7bn	Navigator Tactical FI: \$6.5bn	AQR Diversified Arb: \$1.8bn	Goldman Sachs Absolute Ret Trckr: \$3.8bn
JPMorgan Equity Premium: \$5.8bn	LoCorr Macro Strategies: \$1.9bn	Guggenheim Macro Opps: \$5.8bn	BlackRock Global Long/Short Credit: \$1.0bn	JPMorgan Global Allocation: \$2.9bn

As of 9/30/23.

## Activity

### Flows<sup>1</sup>

Liquid alternatives universe assets decreased by \$7.3bn in Q3 2023. New entrants (comprised of new fund launches and reclassifications into the universe) brought in \$33.6mn, while removals (comprised of liquidations and reclassifications out of the universe) created outflows of \$369.1mn. Net capital outflows from the universe totaled \$6.5bn. Performance loss decreased AUM by \$0.5bn.

- \$0.3bn net **inflows** to equity hedge funds
- \$0.3bn net **outflows** from global macro funds
- \$1.8bn net **outflows** from event driven funds
- \$2.2bn net **outflows** from multi-strategy funds
- \$2.5bn net **outflows** from relative value funds

### Fund Universe Changes

- 2 new liquid alternative funds were launched during the quarter
- 0 funds were reclassified into the universe
- 5 funds were liquidated
- 0 funds were acquired
- 0 funds were reclassified out of the universe

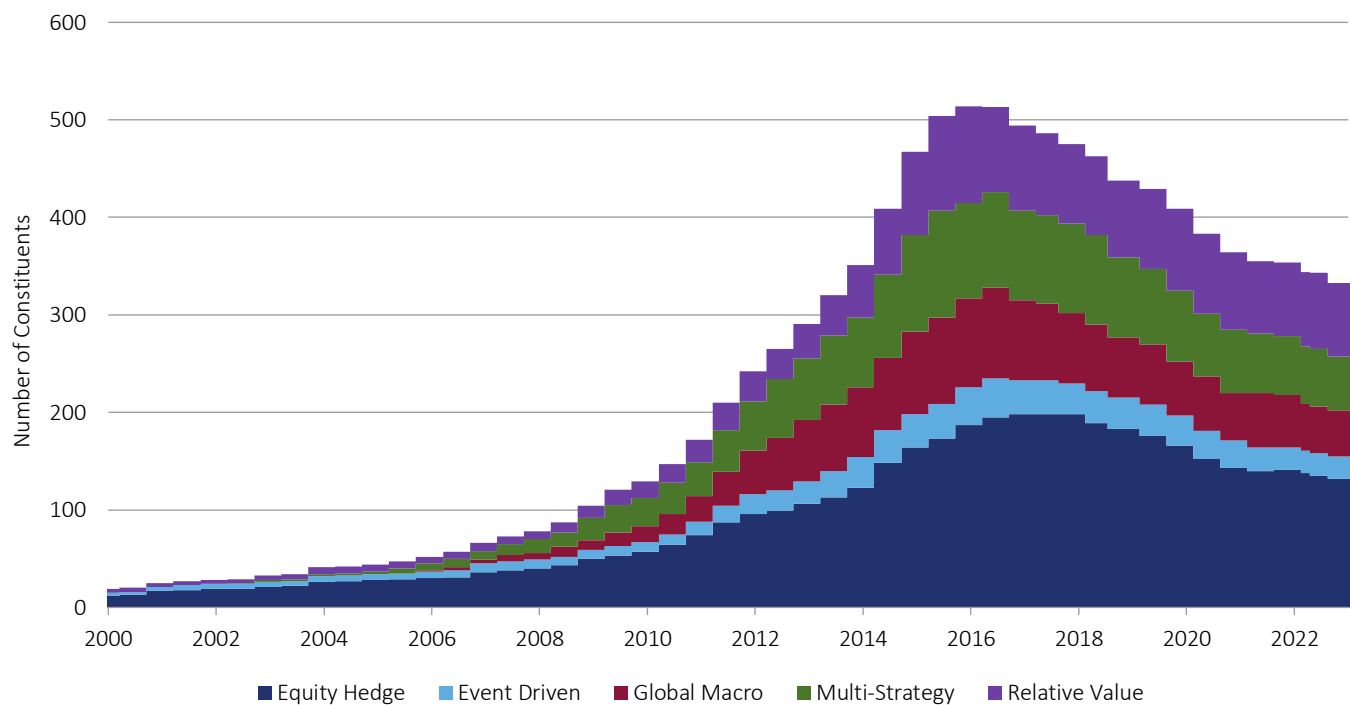
Top 5 Funds by Inflows	Net Inflows	Strategy
JPMorgan Hedged Equity R6	\$0.7bn	Equity Hedge
Eaton Vance Short Duration Strat Inc C	\$0.4bn	Relative Value
Goldman Sachs Absolute Ret Trckr Instl	\$0.3bn	Multi-Strategy
Performance Trust Strategic Bond	\$0.2bn	Relative Value
BlackRock Global Equity Mkt Netrl Instl	\$0.2bn	Equity Hedge

Top 5 Funds by Outflows	Net Outflows	Strategy
BlackRock Systematic Multi-Strat Instl	-\$1.0bn	Multi-Strategy
BlackRock Event Driven Equity Instl	-\$0.9bn	Event Driven
BlackRock Strategic Income Opps Instl	-\$0.6bn	Relative Value
BNY Mellon Global Real Return - I	-\$0.6bn	Multi-Strategy
Calamos Market Neutral Income A	-\$0.5bn	Relative Value

<sup>1</sup> All numbers shown are rounded to nearest hundred million. Totals are calculated using unrounded figures.

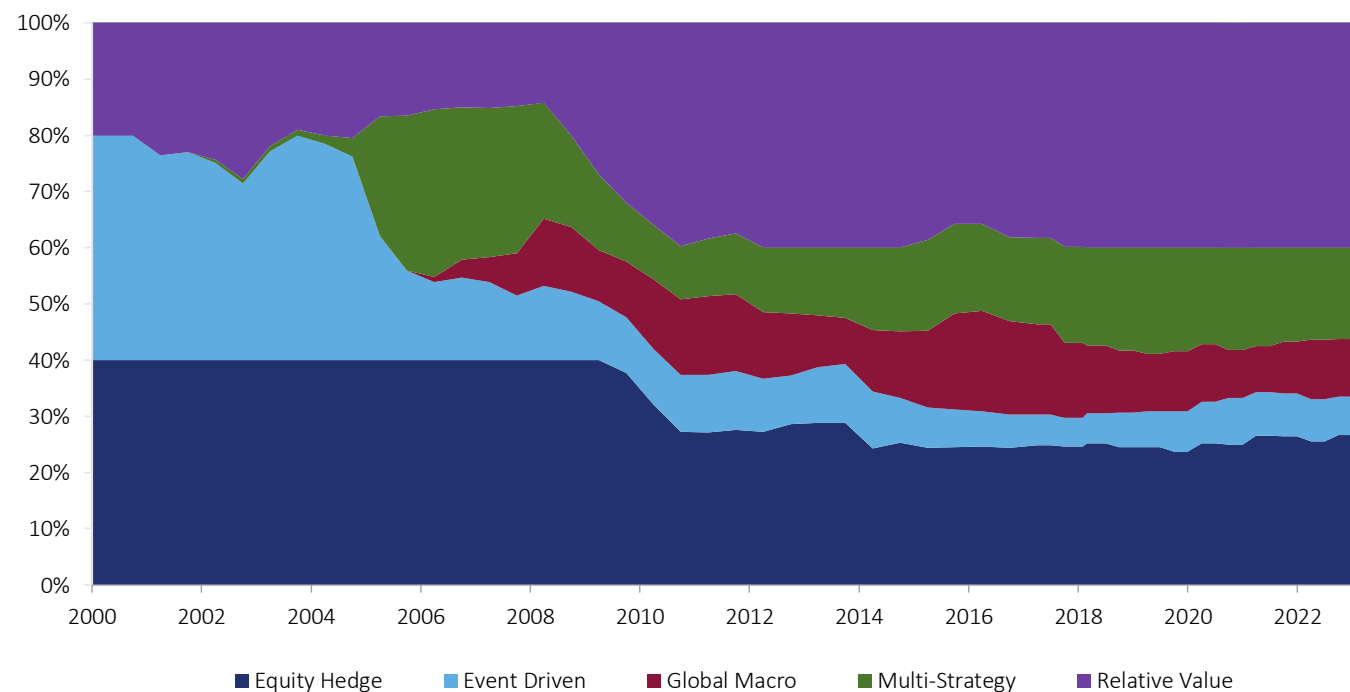
# Wilshire Liquid Alternative Index<sup>SM</sup>

## Constituent Count



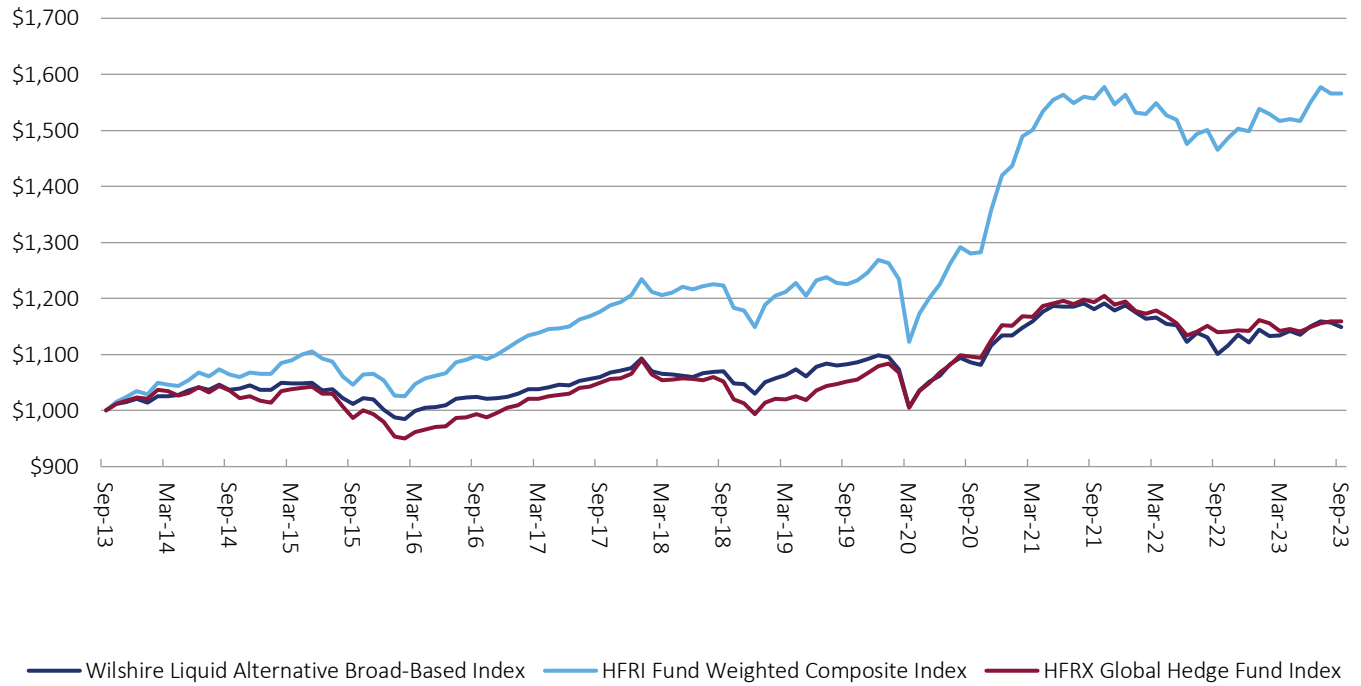
Source: Wilshire. Data as of 9/30/23. Index constituent count is based on Wilshire's bi-annual reconstitution. For illustrative purposes only.

## Sub-Strategy Weights Over Time



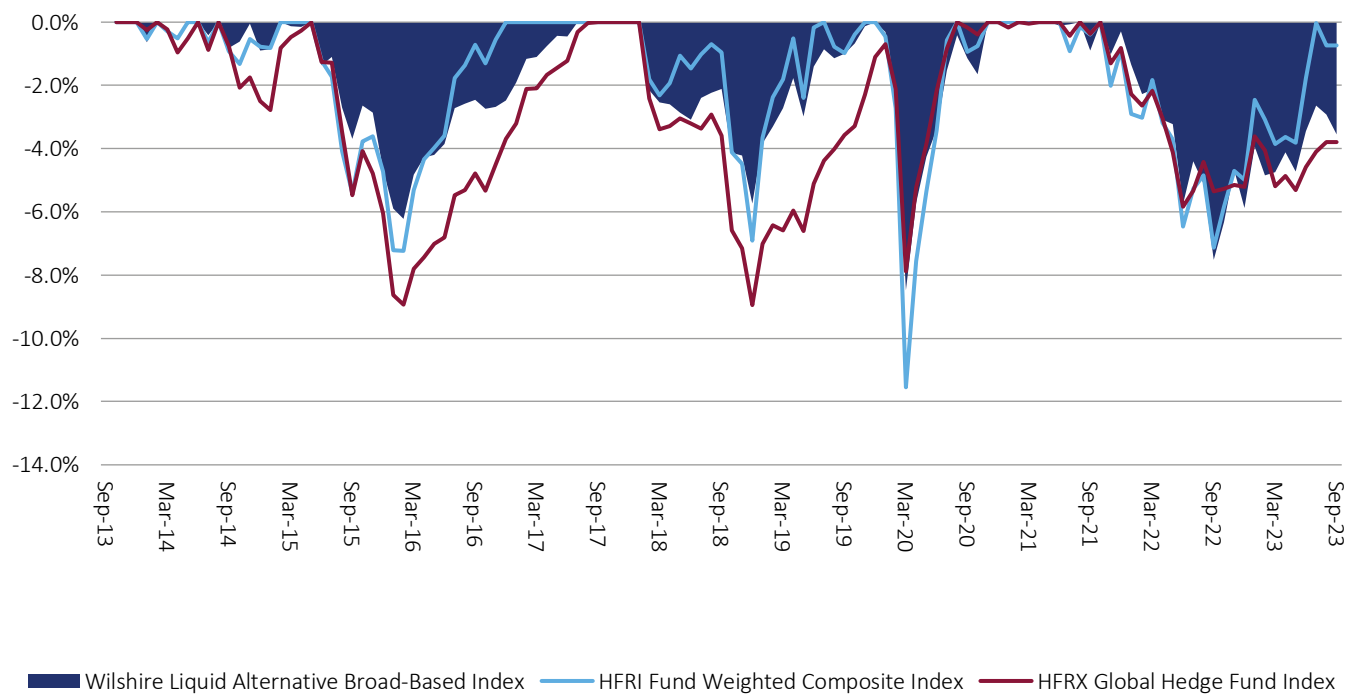
Source: Wilshire. Data as of 9/30/23. Weightings are based on Wilshire's bi-annual reconstitution. For illustrative purposes only.

## 10-Year Returns



Source: Wilshire. Growth of \$1,000 for the 10-year period ending 9/30/23. For illustrative purposes only.

## 10-Year Drawdowns



Sources: Wilshire, HFRI. Drawdowns are for the 10-year period ending 9/30/23. For illustrative purposes only.

## Index Definitions

**Bloomberg U.S. Aggregate Bond Index** – The Bloomberg Aggregate Bond Index or "the Agg" is a broad-based fixed-income index used by bond traders and the managers of mutual funds and exchange-traded funds (ETFs) as a benchmark to measure their relative performance.

**HFR Global Hedge Fund Index** – The HFRX Global Hedge Fund Index is designed to be representative of the overall composition of the hedge fund universe. It is comprised of all eligible hedge fund strategies; including but not limited to convertible arbitrage, distressed securities, equity hedge, equity market neutral, event driven, macro, merger arbitrage, and relative value arbitrage. The strategies are asset weighted based on the distribution of assets in the hedge fund industry. Hedge Fund Research, Inc. (HFR) utilizes a UCITSIII compliant methodology to construct the HFRX Hedge Fund Indices. The methodology is based on defined and predetermined rules and objective criteria to select and rebalance components to maximize representation of the Hedge Fund Universe. HFRX Indices utilize state-of-the-art quantitative techniques and analysis; multi-level screening, cluster analysis, Monte-Carlo simulations and optimization techniques ensure that each Index is a pure representation of its corresponding investment focus.

**HFR Fund Weighted Composite Index** – The HFR Fund Weighted Composite Index is a global, equal-weighted index of single-manager funds that report to 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. The HFR Fund Weighted Composite Index does not include Funds of Hedge Funds.

**S&P 500 Index®** – The S&P 500® is widely regarded as the best single gauge of large-cap U.S. equities. The index includes 500 leading companies and covers approximately 80% of available market capitalization.

**Wilshire Liquid Alternative Index<sup>SM</sup>** – The Wilshire Liquid Alternative Index<sup>SM</sup> measures the collective performance of the five Wilshire Liquid Alternative strategies that make up the Wilshire Liquid Alternative Universe. Created in 2014, with a set of time series of data beginning on December 31, 1999, the Wilshire Liquid Alternative Index (WLIQA) is designed to provide a broad measure of the liquid alternative market by combining the performance of the Wilshire Liquid Alternative Equity Hedge Index (WLIQAEH), Wilshire Liquid Alternative Global Macro Index (WLIQAGM), Wilshire Liquid Alternative Relative Value Index (WLIQARV), Wilshire Liquid Alternative Multi-Strategy Index (WLIQAMS), and Wilshire Liquid Alternative Event Driven Index (WLIQAED). Its objective is to provide a representative baseline for how the liquid alternative investment category performs as a whole.

**Wilshire Liquid Alternative Equity Hedge Index<sup>SM</sup>** – The Wilshire Liquid Alternative Equity Hedge Index<sup>SM</sup> measures the performance of the equity hedge strategy component of the Wilshire Liquid Alternative Index. Equity hedge investment strategies predominantly invest in long and short equities. Its objective is to provide a broad measure of the equity hedge sub-strategy of the liquid alternative market.

**Wilshire Liquid Alternative Event Driven Index<sup>SM</sup>** – The Wilshire Liquid Alternative Event Driven Index<sup>SM</sup> measures the performance of the event driven strategy component of the Wilshire Liquid Alternative Index. Event driven strategies predominantly invest in companies involved in corporate transactions such as mergers, restructuring, distressed, buy backs, or other capital structure changes. Its objective is to provide a broad measure of the event driven sub-strategy of the liquid alternative market.

**Wilshire Liquid Alternative Global Macro Index<sup>SM</sup>** – The Wilshire Liquid Alternative Global Macro Index<sup>SM</sup> measures the performance of the global macro strategy component of the Wilshire Liquid Alternative Index. Global macro strategies predominantly invest in situations driven by the macro-economic environment across the capital structure as well as currencies and commodities. Its objective is to provide a broad measure of the global macro sub-strategy of the liquid alternative market.

**Wilshire Liquid Alternative Multi-Strategy Index<sup>SM</sup>** – The Wilshire Liquid Alternative Multi-Strategy Index<sup>SM</sup> measures the performance of the multi-strategy strategy component of the Wilshire Liquid Alternative Index. Multi-strategy strategies invest in multiple alternative managers/fund of funds and replication strategies. Its objective is to provide a broad measure of the multi-strategy sub-strategy of the liquid alternative market.

**Wilshire Liquid Alternative Relative Value Index<sup>SM</sup>** – The Wilshire Liquid Alternative Relative Value Index<sup>SM</sup> measures the performance of the relative value strategy component of the Wilshire Liquid Alternative Index. Relative value strategies are focused on the valuation discrepancy in the relationships between markets or securities. Its objective is to provide a broad measure of the relative value sub-strategy of the liquid alternative market.



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