

Liquid alternatives beat equities, bonds and hedge funds in 2022 – despite outflows.

Although UCITS-compliant hedge fund strategies suffered slight losses with an average performance of -1.49% in the full-year 2022, they still outperformed equities, bonds and unregulated hedge funds. Nevertheless, the segment also recorded significant outflows.

About the Study

Since 2008, Lupus alpha has been evaluating the universe of absolute return and alternative funds on the basis of data from Refinitiv. The Study covers UCITS-compliant funds with an active management approach that are authorised for distribution in Germany. The Study focuses on market size, development and composition, performance in the investment segment and individual strategies, as well as key risk figures. It evaluates the three levels of aggregation – the overall universe, strategies within the universe, and funds within the strategies – and distinguishes between 15 strategies. The Alt. Long/Short Equity strategy, for example, is made up of 106 funds.

SUMMARY

In 2022, liquid alternatives in Germany proved their worth in a challenging market environment, helping to diversify and limit losses in investor portfolios. Although they suffered slight losses with a performance of -1.49%, they fared considerably better than equities and bonds, and left unregulated hedge funds trailing in their wake. They also demonstrated their robustness in volatile markets with an average maximum loss of -10.38%.

Despite its comparatively strong performance in a difficult year for the capital markets, this investment segment recorded significant net outflows of EUR 17.56 billion. There are many different reasons for this. The rapid rise in interest rates and looming fears of a recession could be felt in fixed-income strategies in 2022, causing their market share to fall further, from roughly 40% as recently as 2020 to only around one-quarter of the market today. While short strategies that rely on declining markets delivered the best average performance over the full year, they were the weakest performers over five years and have lost more than a quarter of their investor funds over the past 12 months. The only strategy to record material net inflows of EUR 2.14 billion was Alt. Equity Market Neutral, which also made a positive contribution to returns.

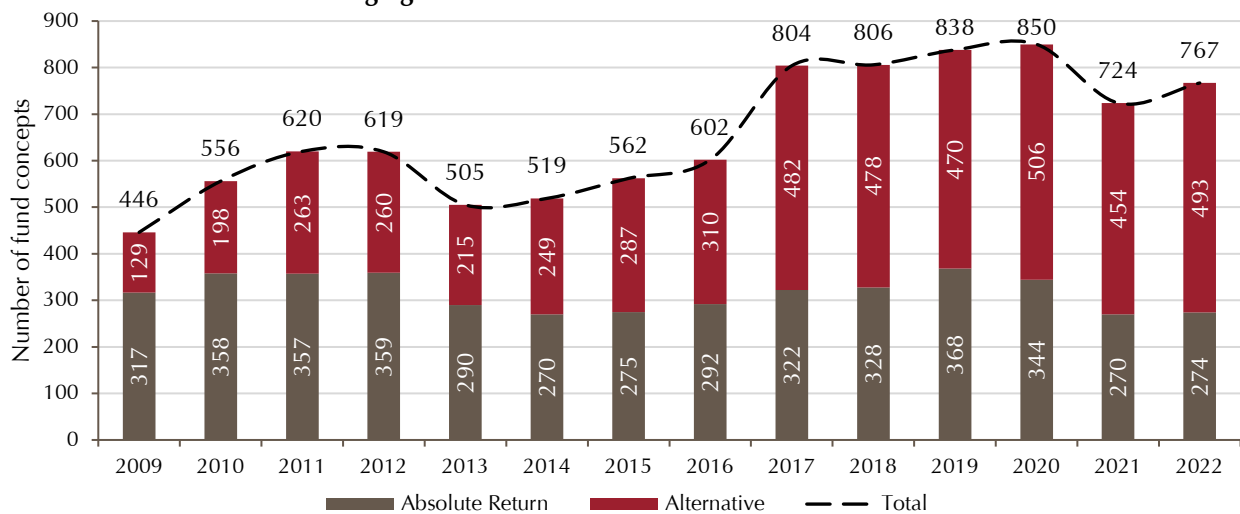
The significant outflows in the evaluated class come as a surprise given its strong performance compared to equities and bonds. After all, liquid alternatives strategies made a significant contribution to diversifying portfolios and limiting losses at overall portfolio level amid a challenging market environment in 2022.

MARKET DEVELOPMENT

Number of funds increases in crisis year

After an initial increase at the midpoint of the year, the range of fund concepts on offer grew further to 767 funds (+5.9%). This growth was primarily driven by alternative concepts at +8.6%, while the number of absolute return concepts remained virtually unchanged from 2021 (+1.5%). Overall, 31 new funds were launched. The universe also grew as new funds were added to the Refinitiv database after receiving their licences for distribution in Germany, for example. **Based on the number of concepts, alternative strategies asserted their dominance further with 493 funds (64%),** pulling further ahead of absolute return concepts with 274 funds (36%).

Number of funds rises in challenging market environment



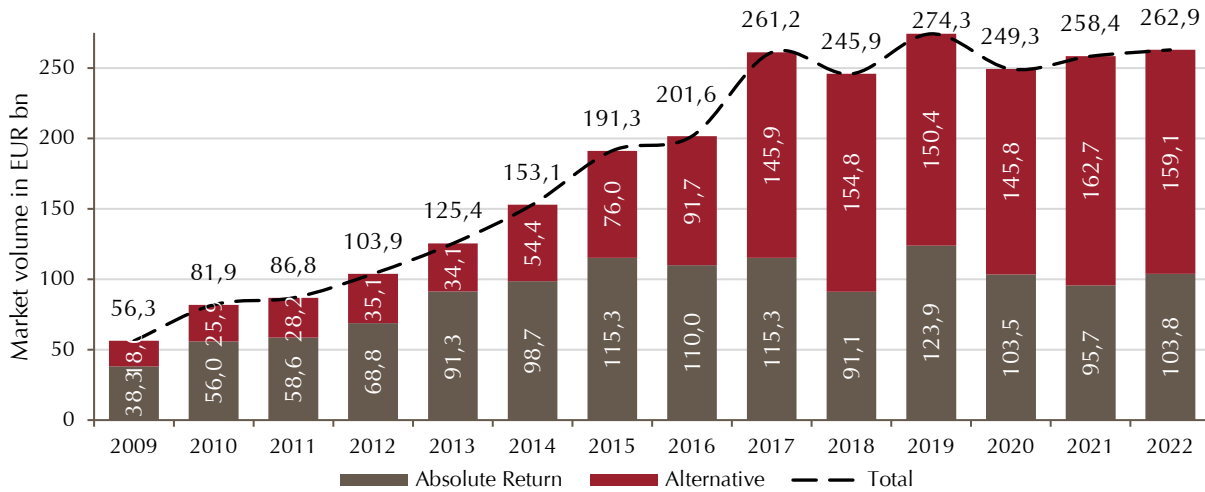
Significant outflows in second half of year

Despite comparatively strong performance under challenging market conditions, investors reduced their market exposure and extracted themselves from liquid alternatives strategies. As a result, the year was characterised by significant net outflows from this segment, **with around EUR 17.56 billion flowing out of these strategies overall**, a figure that exceeded the entire previous year's inflows (EUR 15.5 billion). While only EUR 0.95 billion was withdrawn in the first half of the year, outflows in the second half of the year were particularly pronounced at EUR 16.6 billion. It appears that investors lost their confidence and liquidated risk assets in order to reorganise their target asset allocation for 2023 by the end of the year.

Statistical effects: market volume up despite high outflows

Market volume rose slightly (+1.75%) despite a negative performance (-1.49%) and significant net outflows of EUR 17.56 billion. This is primarily due to statistical changes in the fund universe. Of the total market volume, almost 40% was attributable to absolute return funds and around 60% to alternative funds, a similar ratio to previous years. Unlike the market distribution by number of fund concepts, the volume of absolute return funds rose for the first time since 2019, enabling these strategies to increase their share of the market. **Absolute return funds recorded volume growth of 8.4%, while alternative strategies declined by 2.2%** even though the number of fund concepts increased.

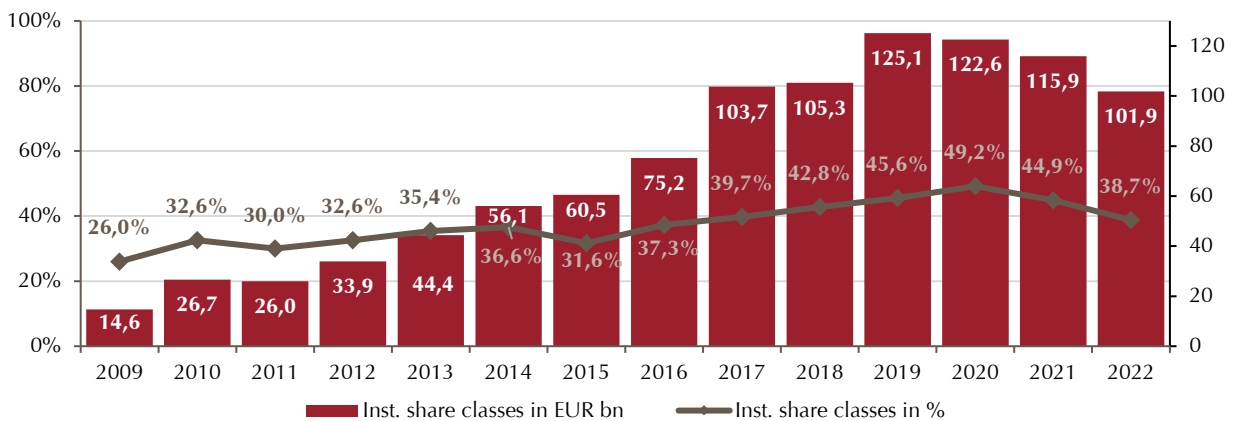
Market volume: Alternative strategies record losses as absolute return funds make gains



Significant reduction in holdings by institutional investors in particular

The number of institutional share classes declined for the second year in a row to 38.7% – more than ten percentage points below their 2020 peak. **The volume of these share classes fell by 12.2% year-on-year to EUR 101.9 billion**, the steepest absolute decline since 2019.

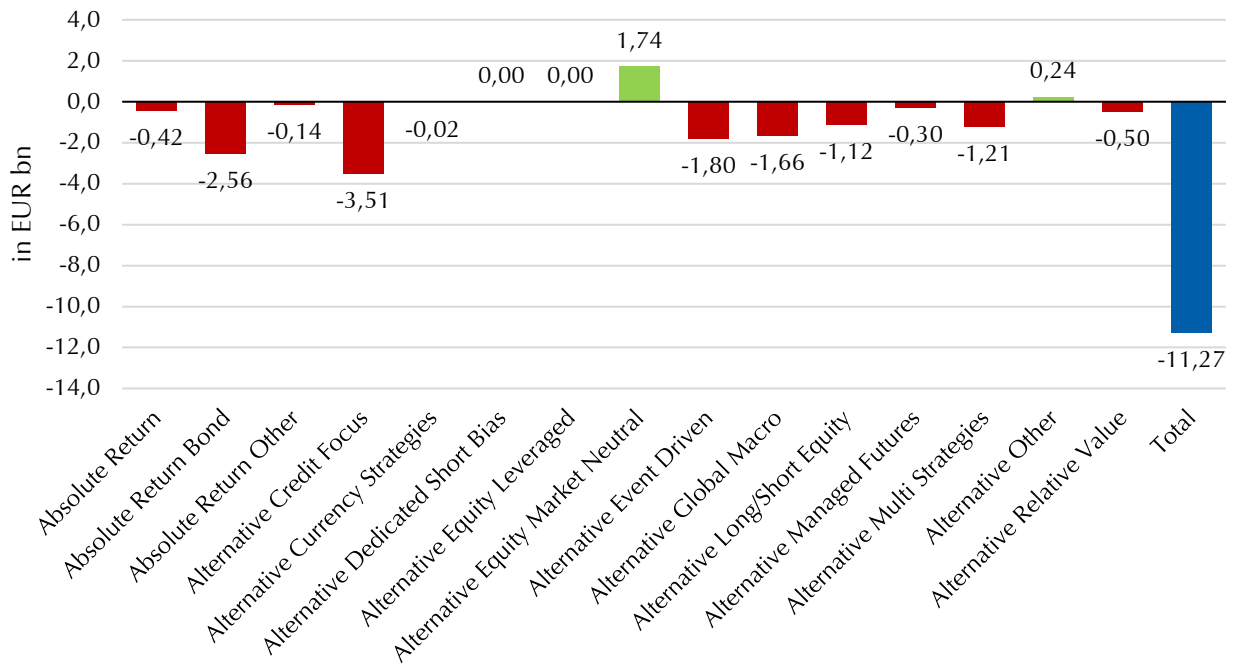
Share of institutional share classes drops for second successive year



In absolute terms, **institutional investors withdrew a net EUR 11.2 billion**, around two-thirds of the total funds withdrawn from this segment. The withdrawal of investors from alternative strategies was particularly pronounced at -18.03%. This figure was only -1.09% in the case of absolute return strategies. The largest absolute net outflows from institutional share classes were recorded by fixed-income strategies such as Alt. Credit Focus at EUR 3.51 billion and Abs. Return Bond with EUR 2.56 billion. This is less surprising given that bond strategies saw unprecedented losses in the capital market year of 2022. In addition, the Alt. Event Driven strategy recorded outflows of EUR 1.80 billion.

In a year dominated by high losses for equities and bonds, many investors switched to **risk-off mode**. Forced to meet liquidity requirements, some regulated institutional investors such as pension funds sold the investments that allowed them to realise the smallest losses. This may have been one of the main reasons for redemptions.

Institutional investors withdraw from fixed-income strategies



Only a handful of strategies with positive fund flows

Only four strategies recorded net inflows in the full-year 2022, while 11 strategies saw net outflows.

Pro-rata fund flows by strategy (%)

Top 5

Alternative Equity Market Neutral	27.57%
Absolute Return Other	26.04%
Alternative Equity Leveraged	13.58%
Alternative Other	3.90%
-	-

Flop 5

Alternative Relative Value	-25.89%
Alternative Dedicated Short Bias	-25.61%
Alternative Credit Focus	-21.28%
Alternative Global Macro	-15.60%
Alternative Event Driven	-11.69%

Absolute fund flows (in EUR bn)

Top 5

Alternative Equity Market Neutral	2.14
Alternative Other	0.22
Alternative Equity Leveraged	0.15
Absolute Return Other	0.05
-	-

Flop 5

Alternative Credit Focus	-5.06
Absolute Return Bond	-3.93
Alternative Global Macro	-3.41
Alternative Event Driven	-2.24
Absolute Return	-1.69

Net outflows primarily affect bond, credit and macro strategies

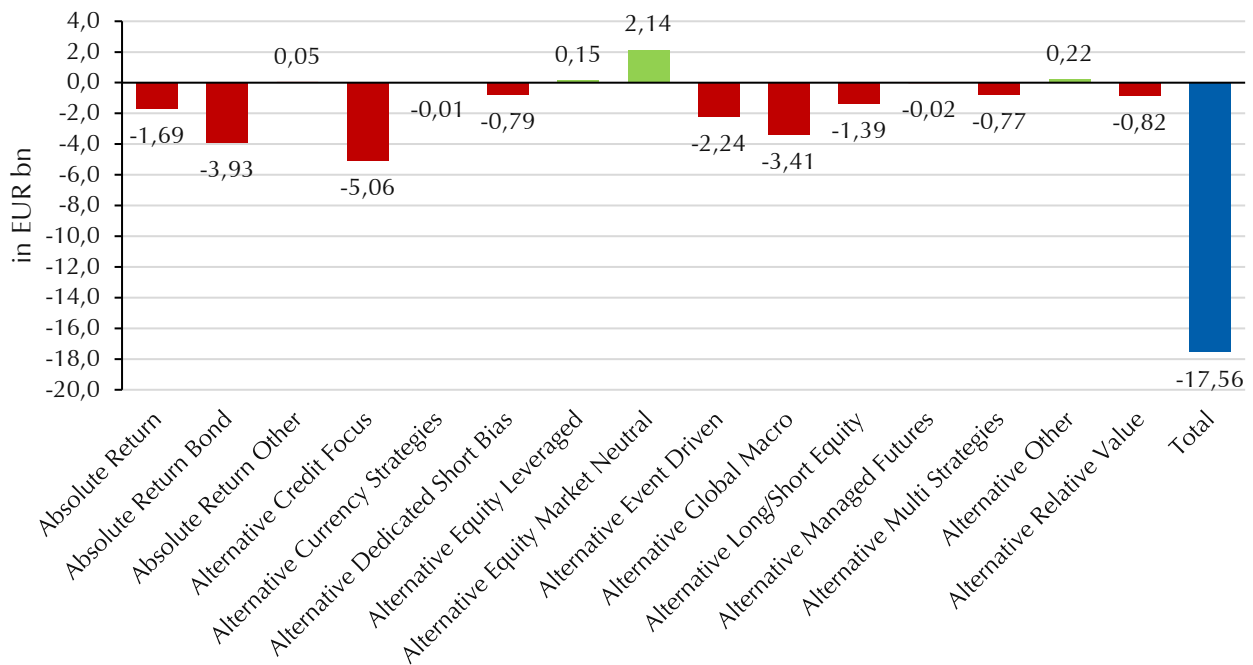
A remarkable EUR 12.40 billion of net outflows were attributable to bond, credit and global macro strategies alone. **Absolute Return Bond strategies** recorded considerable outflows from as early as October 2021, a trend that continued in 2022 as EUR 3.93 billion flowed out of these strategies. **Alt. Credit Focus strategies** lost EUR 5.06 billion in assets under management (-21.28%). These strategies primarily invest in unlisted corporate loans for which both interest rates and the risk of insolvencies

and credit defaults rose sharply. In addition, their variable interest rates (an advantage for investors as rates rise) did not provide sufficient protection against surging inflation during the past year. As a result, credit strategies suffered the most in absolute terms from looming fears of recession and insolvency.

Also **Alt. Global Macro strategies**, which typically incorporate interest rate expectations and other macroeconomic and systemic factors into their strategy, were forced to record enormous outflows of EUR 3.41 billion (-15.60%).

Alt. Equity Market Neutral strategies enjoyed significant popularity in an uncertain market environment. These market-neutral equity strategies with low beta managed to shake off the negative trend in fund flows to record the largest inflows at EUR 2.14 billion, equivalent to growth of 27.57%. These strategies were less exposed to disruption in a turbulent market environment and kept their product promise by recording a positive overall performance for the year.

Hardly any positive changes in net flows at strategy level

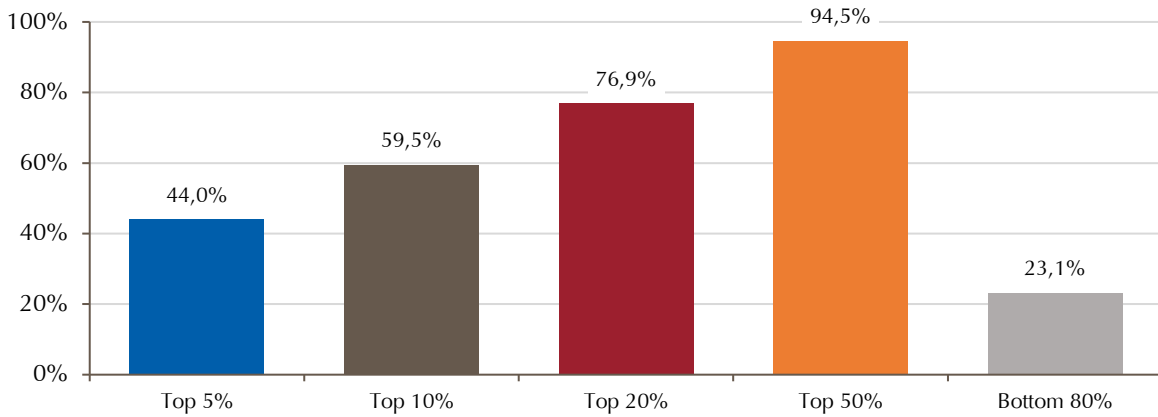


MARKET STRUCTURE

Large funds remain the dominant providers

The picture has hardly changed from our 2021 analysis, with large funds still dominating the market. The top 5% of funds manage more than twice as much capital as the bottom 80%. **As a result, the market continues to be dominated by a few large providers.** This trend is even more pronounced when the market is divided into its upper and lower halves, with the top 50% of funds accounting for 94.5% of capital in the segment while the lower half of funds manage barely 5% of all assets.

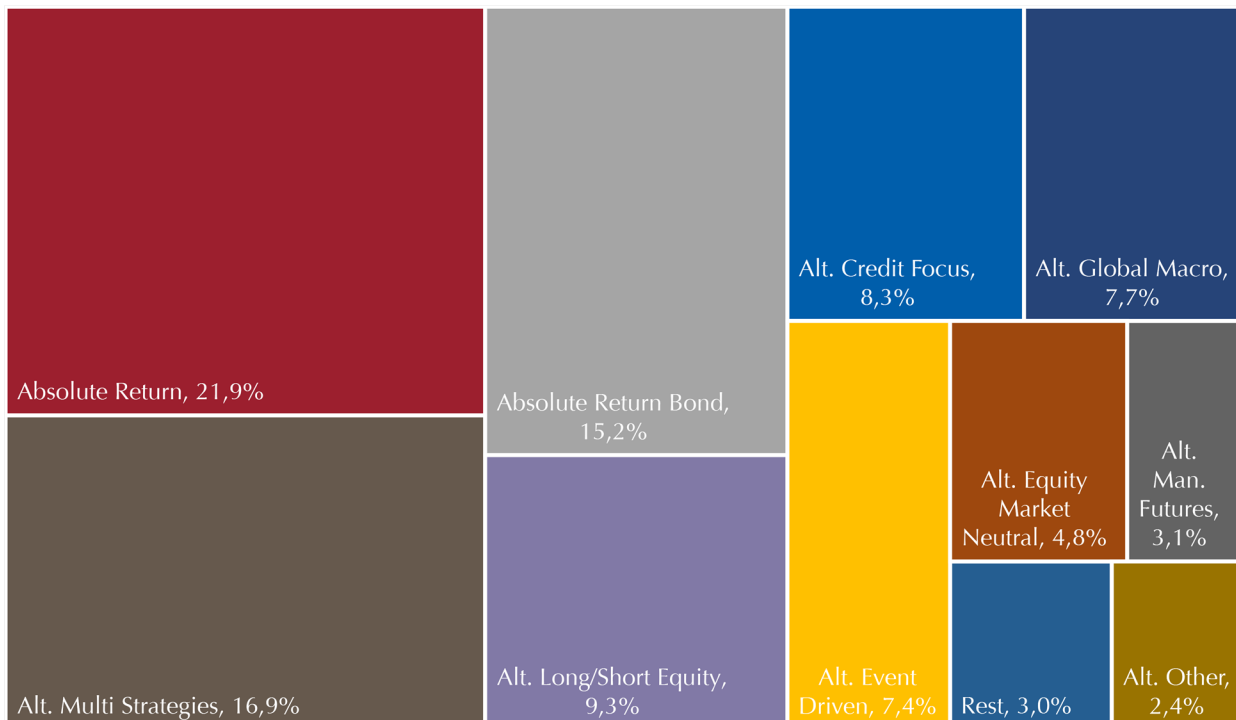
Top 5% of funds account for 44% of total market volume



Absolute Return remains the largest individual strategy

Despite sizeable outflows, **Absolute Return** remains the largest individual strategy with a share of 21.94%. One particularly striking trend is the **downturn in fixed-income strategies** reflected in their shrinking market weighting. While Absolute Return Bond and Alt. Credit Focus collectively accounted for around 40% of the market segment in 2020, their share fell to less than a quarter in 2022 (AR Bond: 15.15% and Alt. Credit Focus: 8.33%). Meanwhile, the **five largest strategies make up over 70% of the overall market** between them. Otherwise, the distribution has only changed slightly compared to the previous year.

Fixed-income strategies with less than 25 percent market share

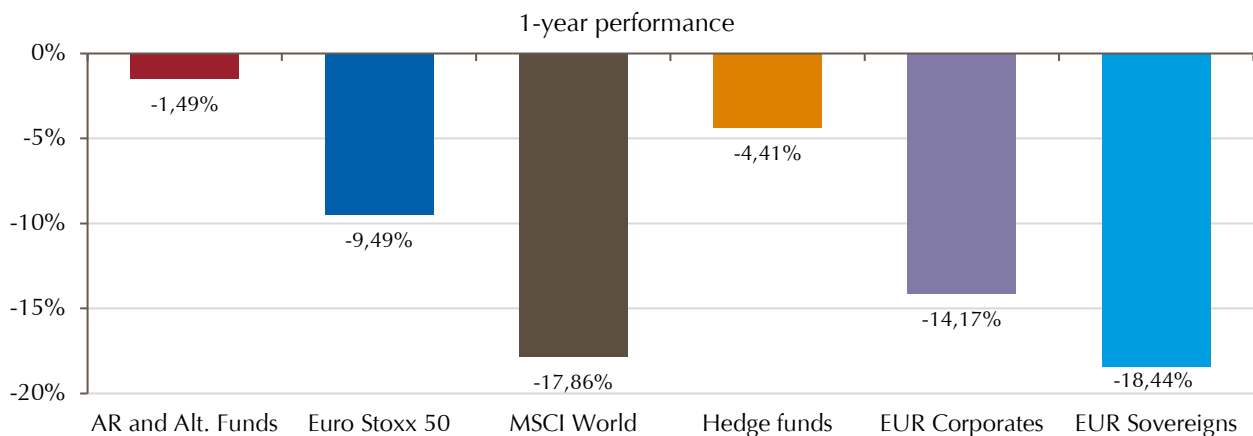


PERFORMANCE OVER 1 YEAR

Liquid alternative strategies leave other asset classes trailing in their wake

Liquid alternatives demonstrated their strengths compared to other asset classes during the challenging trading year of 2022. Although they ended the year with slightly negative performance of -1.49%, they significantly outperformed global equities, government and corporate bonds and unregulated hedge funds. Often managed in an extremely flexible way, many of these strategies are less dependent on the direction of the market, which means they can buck the general market trend and generate a profit even in falling markets. As a result, UCITS-compliant hedge fund strategies underscored their advantages for portfolio diversification and kept losses at the overall portfolio level to a minimum. This performance contrasts with the considerable outflows from the evaluated investment universe.

Liquid alternatives impress in challenging market environment

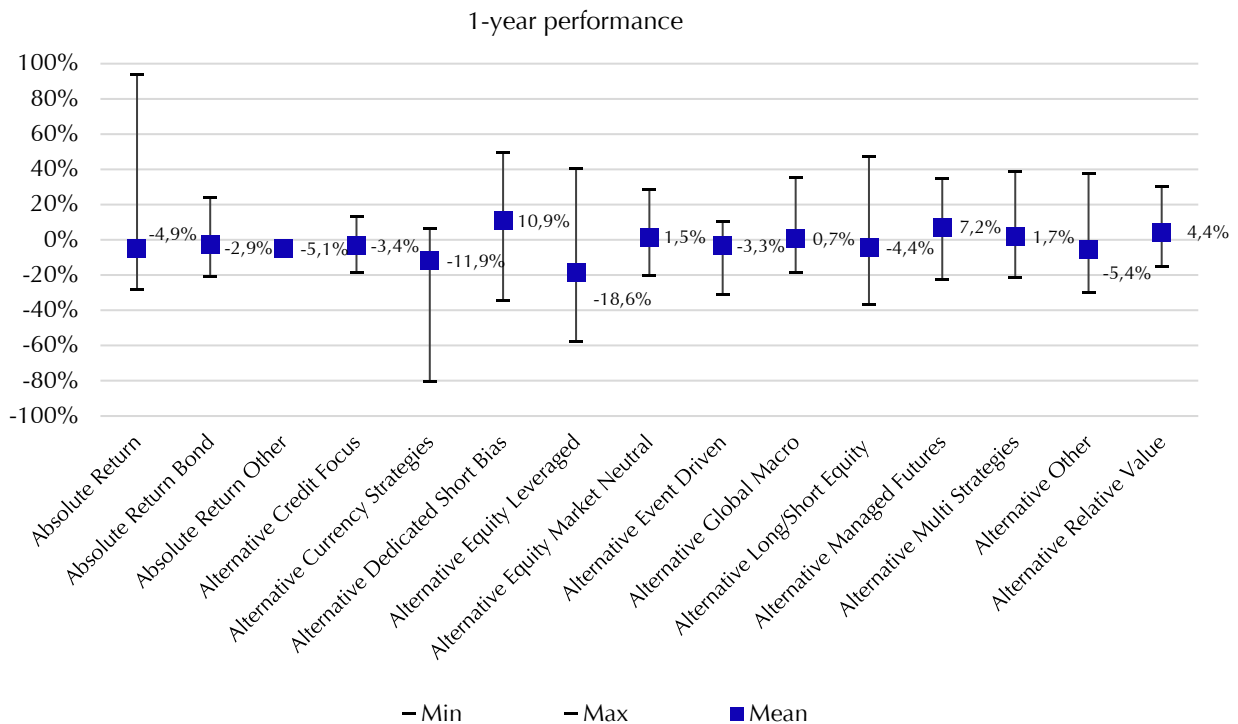


Strategy analysis:

Huge spread in performance – manager selection decisive

The following chart compares the average annual performance of the individual strategies. **At 10.9%, the strongest performance was recorded by Alt. Dedicated Short Bias**, which profits from declining markets. Another good performer at 7.2% was Alt. Managed Futures, with trading strategies that profit from both rising and falling prices irrespective of the market. **Bringing up the rear is Alt. Equity Leveraged with -18.6%**. The broad dispersion of returns between strategies shown by the black bars underscores the **importance of rigorous manager selection**. The greater the dispersion between the funds within a given strategy, the more important it becomes to select an exceptional manager. The spread of returns is particularly pronounced for Absolute Return strategies, but also for Alt. Equity Leverages, Alt. Currency Strategies and Alt. Dedicated Short Bias.

2022: Alt. Dedicated Short Bias records best average performance



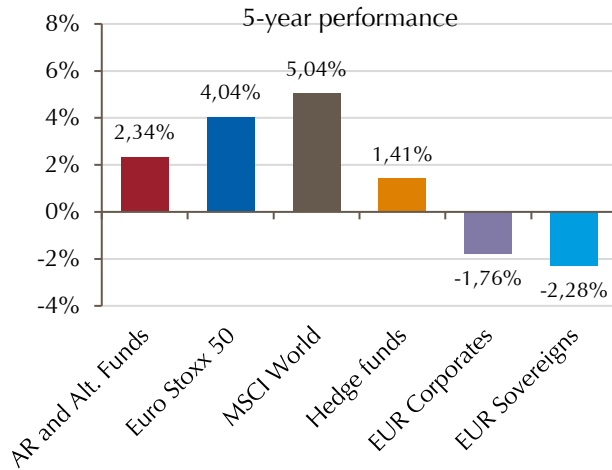
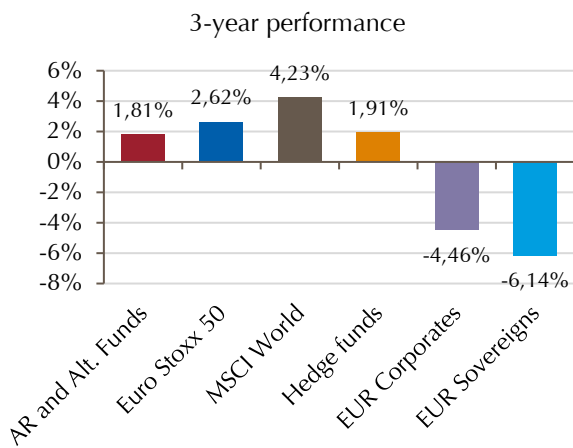
PERFORMANCE OVER 3 AND 5 YEARS

Yield difference to equities falls in the medium term

Both liquid alternatives strategies and equities deliver positive returns in the medium to long term. While liquid alternatives are almost on a par with unregulated hedge funds over three years, they leave these funds in their wake over five years. However, global and European equity investments beat all other asset classes over a longer observation period. The performance difference between liquid alternatives and equities shrank significantly over the past year due to weak equity performance.

Although the bond markets are considered to be safer and less prone to fluctuations, they are the worst performers of all of the evaluated asset classes over both three and five years, with considerable negative returns. However, this is also linked to the sharp rise in interest rates and the exceptionally high price losses associated with this during 2022.

Liquid alternatives lag equities but significantly outperform bonds in the longer term

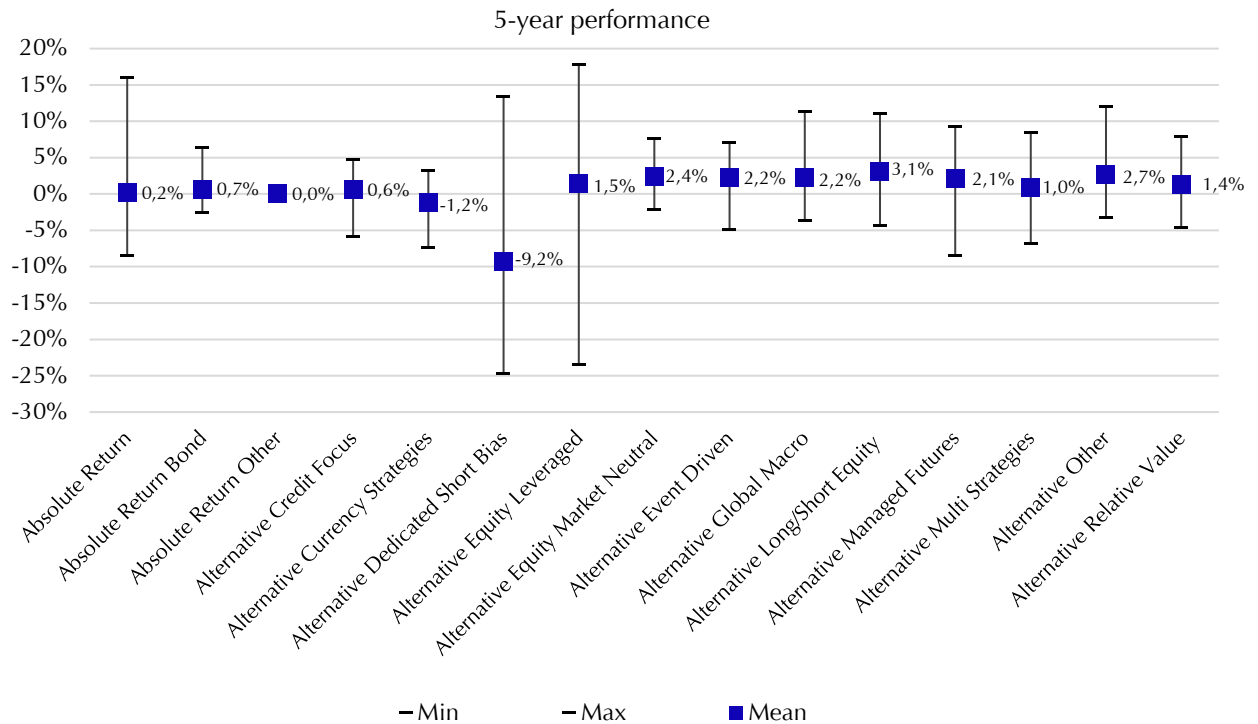


Long-term comparison: 2022's winning strategy bringing up the rear

Despite their broad appeal to investors during the calendar year under review, **Alt. Dedicated Short Bias** strategies delivered below-average performance in the generally favourable equity market environment of the past few years, trailing well behind all other approaches at -9.2% on average over a five-year period.

While most strategies generated positive returns, only six strategies achieved an average long-term performance of more than 2%. At the same time, the average annualised performance of the various strategies was much more closely correlated over a longer observation period than it was over one year. Although the spread of returns between different funds within each strategy also narrowed, it is still clear that **good manager selection is ultimately the only way to achieve investment success.**

5-year performance: the longer the observation period, the more closely correlated the strategies are



RISK ASSESSMENT

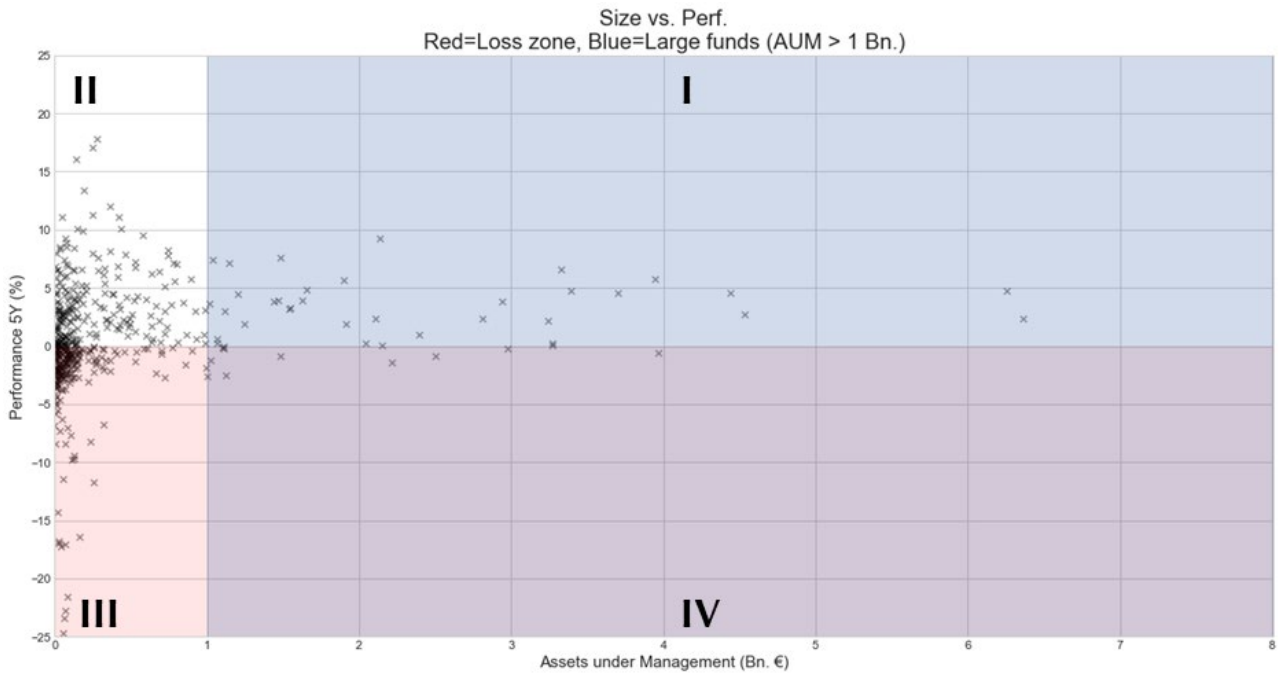
Large funds offer solid long-term performance, but with lower return potential

475 of the 767 funds have a track record of five or more years. These funds are included in the chart below and are divided into four quadrants, with the horizontal axis representing fund size while the vertical axis shows annualised performance over a five-year period. The red area highlights funds that are recording losses. The blue labelling denotes large funds with a volume of more than EUR 1 billion.

Generally speaking, around **45% of the evaluated funds generate a positive long-term return** for their investors (**quadrants I and II**). While large funds in particular mostly achieve a positive performance, they rank in mid-table in terms of returns, with most falling within a range between 0% and 5%. Accordingly, while an investment in a flagship fund like these carries a comparatively low risk of loss, it also offers limited upside potential.

By contrast, **the fund subsegment with volumes up to EUR 1 billion** shows a much greater spread of returns (**quadrants II and III**). The white quadrant in the upper left-hand corner still includes 219 small funds, some of which generate extremely good returns over five years. However, identifying these funds requires rigorous due diligence on the part of the fund manager.

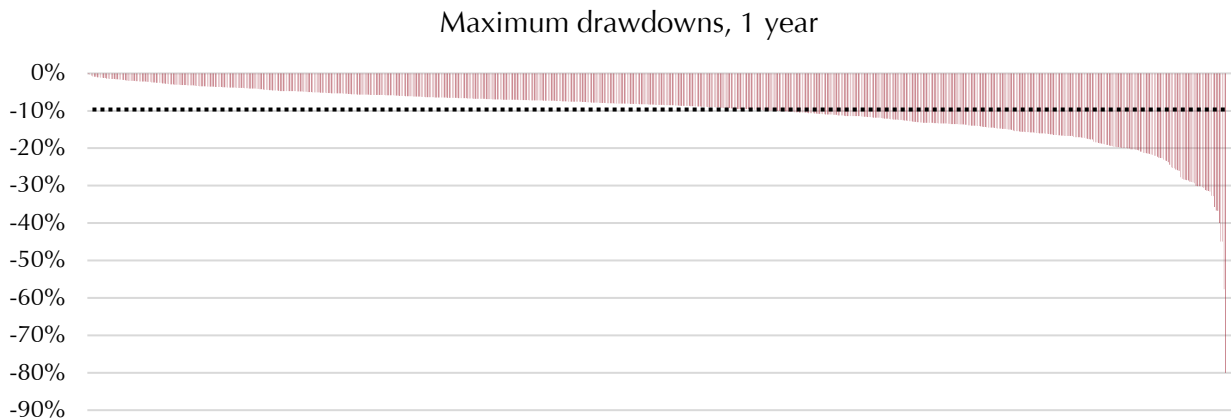
Relationship between fund size and performance p.a.



Investor nerves spared as liquid alternatives strategies effectively limit maximum losses in 2022

Looking at maximum drawdowns, it is clear that liquid alternatives have managed to effectively limit losses. **At an average of -10.38%, the highest loss** any investor was forced to absorb for the evaluated funds in 2022 **was significantly lower than that recorded by equities and bonds**. On average, only traditional hedge funds were able to limit losses more effectively. Given the exceptionally challenging market environment, this meant that liquid alternatives spared the nerves of their investors, with 60% of funds reporting a maximum loss of 10% or less (dotted line). While the average maximum drawdown increases over a three and five-year period (-15.46% over three years and -17.50% over five years), it remains well below that of equities.

60% of funds report a maximum loss of 10% or less



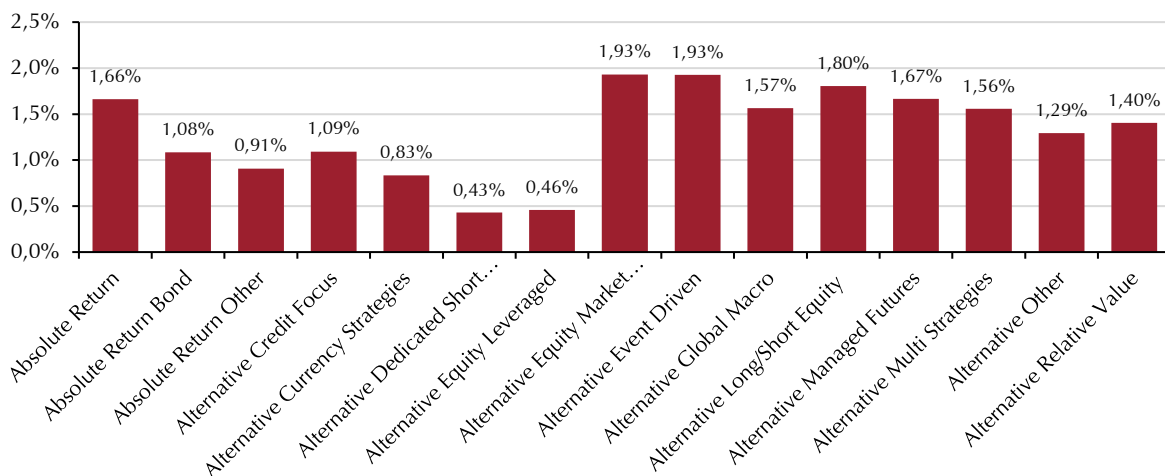
Extreme year in capital markets takes its toll: Almost a quarter of funds with positive Sharpe ratio

In a year of extreme geopolitical and economic events, only around a quarter of funds achieved a positive Sharpe ratio and kept their product promise. This is consistent with slightly negative average returns in this investment segment. In 2021, 79% of funds achieved a positive Sharpe ratio, with almost half managing this feat over a three and five-year period. Prior to the coronavirus pandemic in 2020, the long-term average was 73%.

Costs largely unchanged

Costs have remained largely stable on average across all strategies since 2018, amounting to 1.56% in 2021 (2017: 1.62%). While this figure is currently slightly lower at around 1.50%, it is still in line with the long-term average. There are more significant differences between strategies depending on the investment-related risks of each strategy.

Average TER by strategy: higher risk, higher costs



Glossary

Absolute Return	Funds characterised by a highly regulated market environment and an absolute return target. They aim to add value in every market environment. They are usually measured against a risk-free or cash benchmark instead of a traditional long-only benchmark.
Absolute Return Bond	Funds that pursue positive return targets in all market situations and primarily invest in debt securities. Products with the words “Absolute Return” added to their name or investment objective may be included in this category. In this case, the benchmark is usually a risk-free or cash benchmark instead of a traditional long-only market index.
Alternative Credit Focus	Funds that invest in structured credit products and whose investment process is characterised by either fundamental credit analysis, quantitative approaches or (market) opportunities.
Alternative Currency Strategies	Funds that invest in global currencies to exploit arbitrage opportunities (carry, momentum, fundamental opportunities). They use short-dated money market instruments and derivatives to achieve their objectives. Funds that invest the majority of their assets in cryptocurrencies also fall into this category.
Alternative Dedicated Short Bias	Funds that maintain a net short profile on the market on an ongoing basis. This category also includes funds that exclusively take short positions.
Alternative Equity Market Neutral	Funds seeking to generate consistent returns regardless of market phases. The portfolio is also managed with a net market exposure of zero.
Alternative Event Driven	Funds that aim to exploit price inefficiencies caused by a business transaction (e.g. insolvency, acquisition, spinoff, etc.) in accordance with their sales prospectus. Event-driven funds can invest in a variety of instruments with different risk structures (e.g. equities, credit instruments, derivatives).
Alternative Global Macro	Funds that make global investment decisions based on economic theories. These strategies typically base their decisions on interest rate expectations, expectations concerning political developments, and other macroeconomic and systemic factors. Global macro funds typically use a wide range of instruments and investment universes to implement their investment ideas.
Alternative Long/Short Equity	This strategy uses both long and short positions in equities, equity options and equity index options. The portfolio manager can decide whether the net position of their fund is positive or negative depending on their market view.
Alternative Managed Futures	Funds that primarily invest in a portfolio of futures contracts and aim to generate positive returns that are independent from the market in any situation with limited volatility. Their investment approaches consist of proprietary trading strategies that can include both long and short positions.
Alternative Multi Strategy	Funds that aim to generate an overall return by managing several different hedging strategies. These funds typically follow a quantitative approach and seek to identify opportunities where there are changes to the long-term risk-adjusted relationship between two securities.
Alternative Relative Value	These funds use option and arbitrage strategies on highly correlated pairs of securities to exploit price differentials. In such cases, the funds sell the more expensive security (short position) while taking a long position in the relatively cheap security.
Alternative Equity Leveraged	Funds designed to generate more than 100% of the daily performance of a benchmark index. They use a customised combination of futures contracts, derivatives and leveraged products to achieve this.

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About Lupus alpha

As an independent, owner-operated asset management company, Lupus alpha has been synonymous with innovative, specialised investment solutions for over 20 years. As one of Germany's European small and mid-cap pioneers, Lupus alpha is one of the leading providers of volatility strategies as well as collateralised loan obligations (CLOs). Global convertible bond strategies complete its specialised product range. The Company manages a volume of approximately EUR 13.5 billion for institutional and wholesale investors.

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