



Low Volatility Investing: Year in Review and Look Ahead

Reflecting on the market events of 2023 through the lens of low volatility investing cannot begin without a quick review of what transpired in the previous year. In 2022, both bond and equity markets suffered double-digit losses, a host of economic and geopolitical events such as the war in Ukraine caused market disruptions, and central banks raised interest rates at a pace and to a level not seen in over 20 years in an effort to combat the inflation that had resulted from significant government spending during the COVID-19 pandemic. While traditional balanced bond/equity investors were challenged by the disappearance of the negative correlation

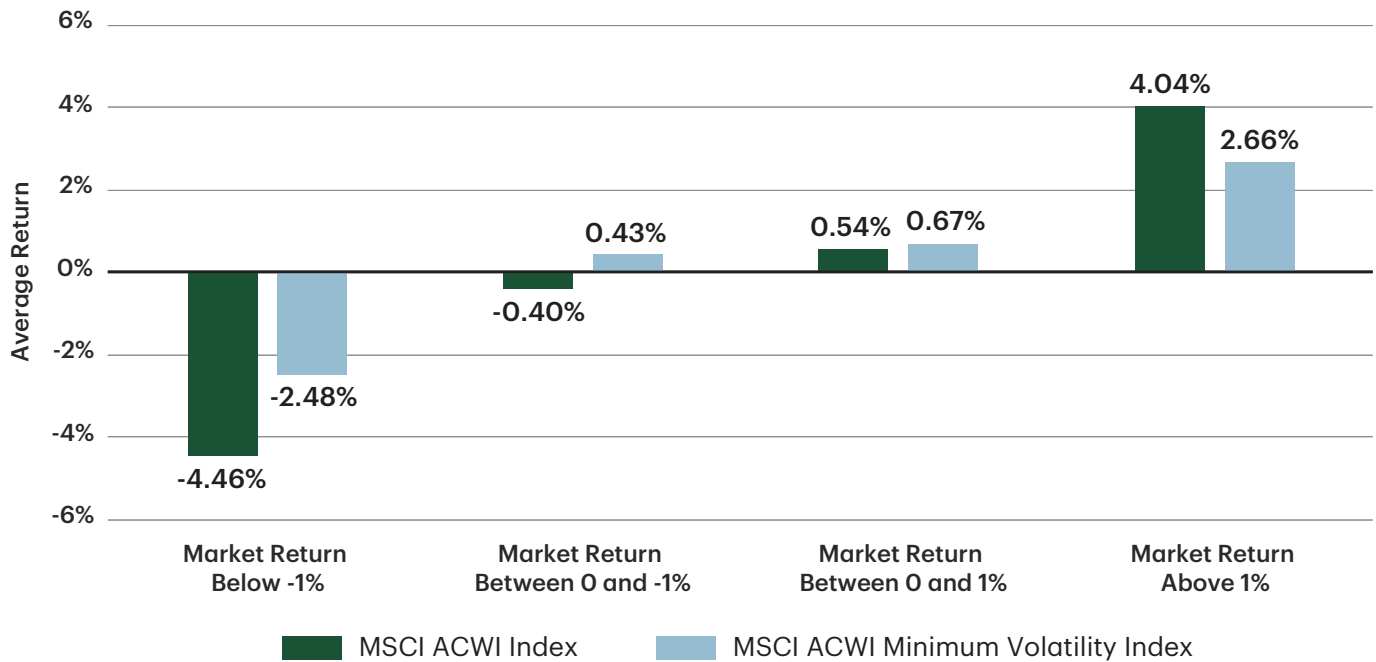
between bonds and equities, investors using low volatility strategies reaped the long-term strategic benefits with above-average downside protection when low volatility strategies proved resilient during the drawdown.

In 2023, we witnessed a turnaround in equity markets fueled by risk taking and concentration in a handful of stocks. This concentration led to positive double-digit performance in global markets and relative headwinds for many types of investors, including those that employ the low volatility style.

Risk-on rallying types of environments, like 2023, are challenging for low volatility strategies, which primarily invest in stable non-cyclical companies. Low volatility strategies are designed to take advantage of the low volatility anomaly and are constructed to have less risk than that of a capitalization-weighted benchmark without

sacrificing long-term returns. As a result, low volatility strategies tend to lag in strong upward moving markets, and lag even more so when those markets are fueled by increased risk taking (Figure 1). Over the long-term investing cycle, low volatility strategies have typically added much of their relative performance in adverse equity markets.

Figure 1: What to Expect in Up and Down Markets for a Low Volatility Investor, an Average Monthly Return Comparison



Source: Bloomberg Finance L.P. Data from December 31, 1998 to December 31, 2023.

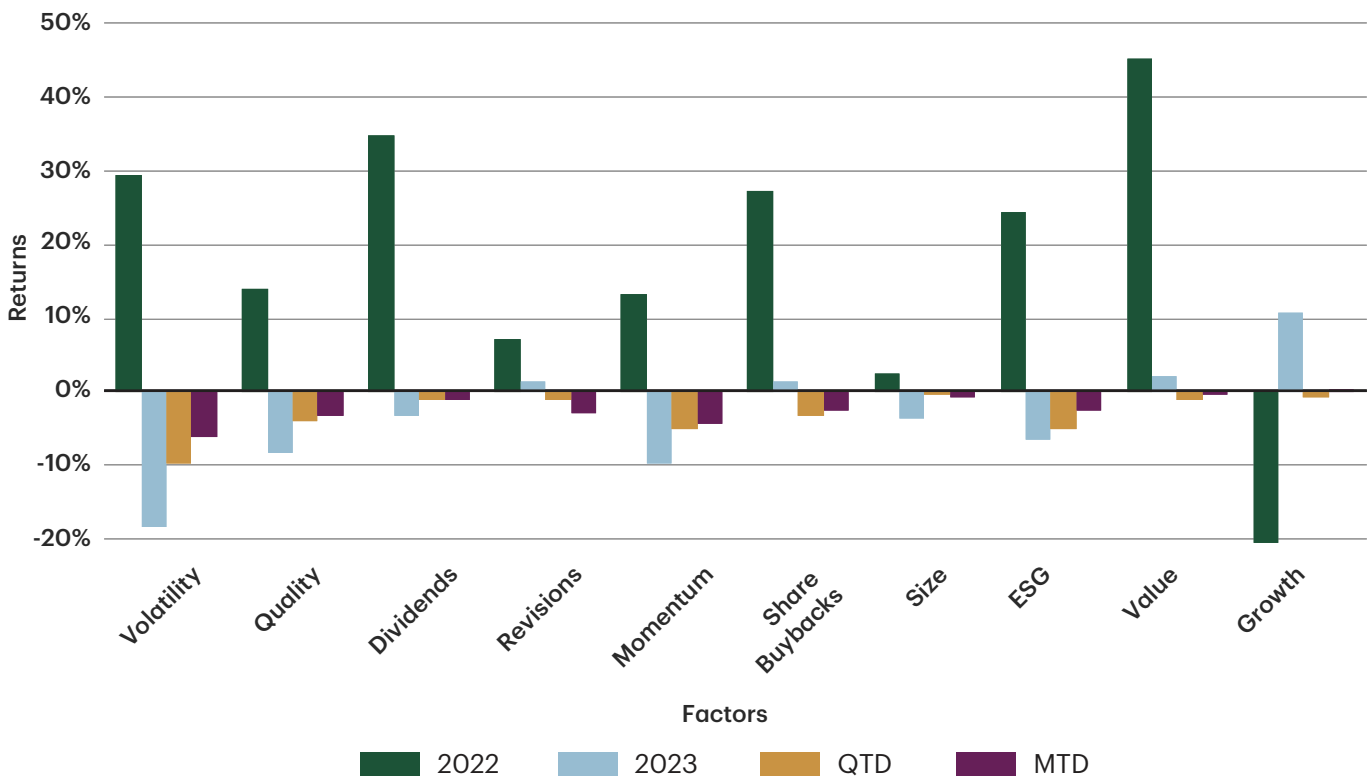


Style Performance: Challenges for Low Volatility

In 2023, much of the performance of the capitalization-weighted benchmark was driven by assets characterized as higher-risk. Equity styles were challenged last year and low volatility was no exception. Compared to 2022 where many equity styles delivered strong returns, with value stocks leading the charge, 2023 style returns paled. Last year, many style factors posted anemic to negative returns, with the most negatively impacted returns being those of the low volatility style (**Figure 2**).

There were brief periods throughout the year where low volatility outperformed, offering its typical defensive characteristics to investors – particularly from late February to early March, when the risk of contagion from the U.S. banking turmoil permeated the markets, and from August to October, when central banks’ messaging of higher-for-longer interest rates temporarily subdued the risk-taking sentiment of investors.

Figure 2: Global Quantile Spread Performance Comparison



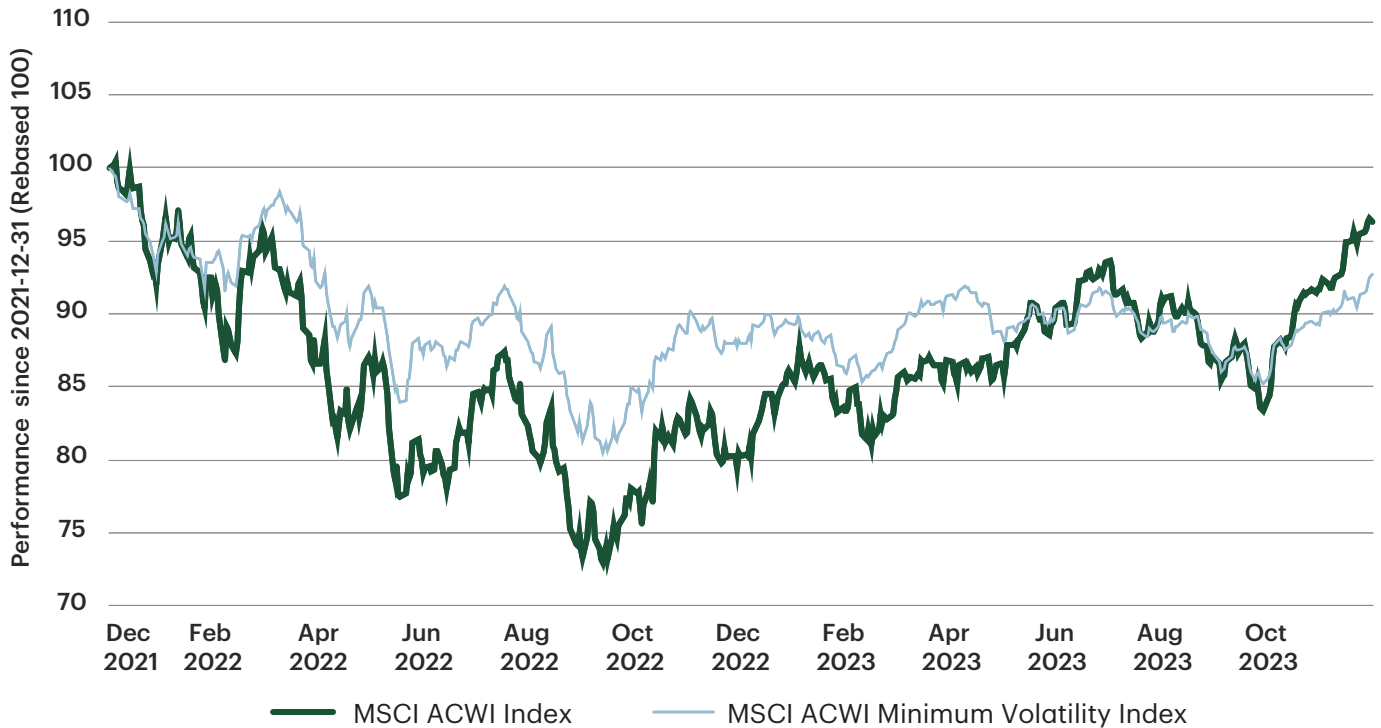
Source: Bloomberg Finance L.P. As of December 31, 2023.

Markets

Investors often get caught up in the “what has happened lately” mindset, which can conflict with the discipline required to build long-term reliable returns. While the headline returns of cap-weighted benchmarks in 2023 were exciting, it’s easy to forget what a dismal year 2022 was for broader equity returns. Looking at the previous two-year period, it is evident that investors in the low volatility style have

arrived at a very similar place as their cap-weighted benchmark counterparts, but with a much smaller drawdown and hopefully without enduring much of the panic that inevitably occurs as markets sell off. Keeping that peak-to-peak return perspective is key to maintaining the discipline of investing in the low volatility style.

Figure 3: Two-Year Performance of ACWI Minimum Volatility Index vs MSCI ACWI Index



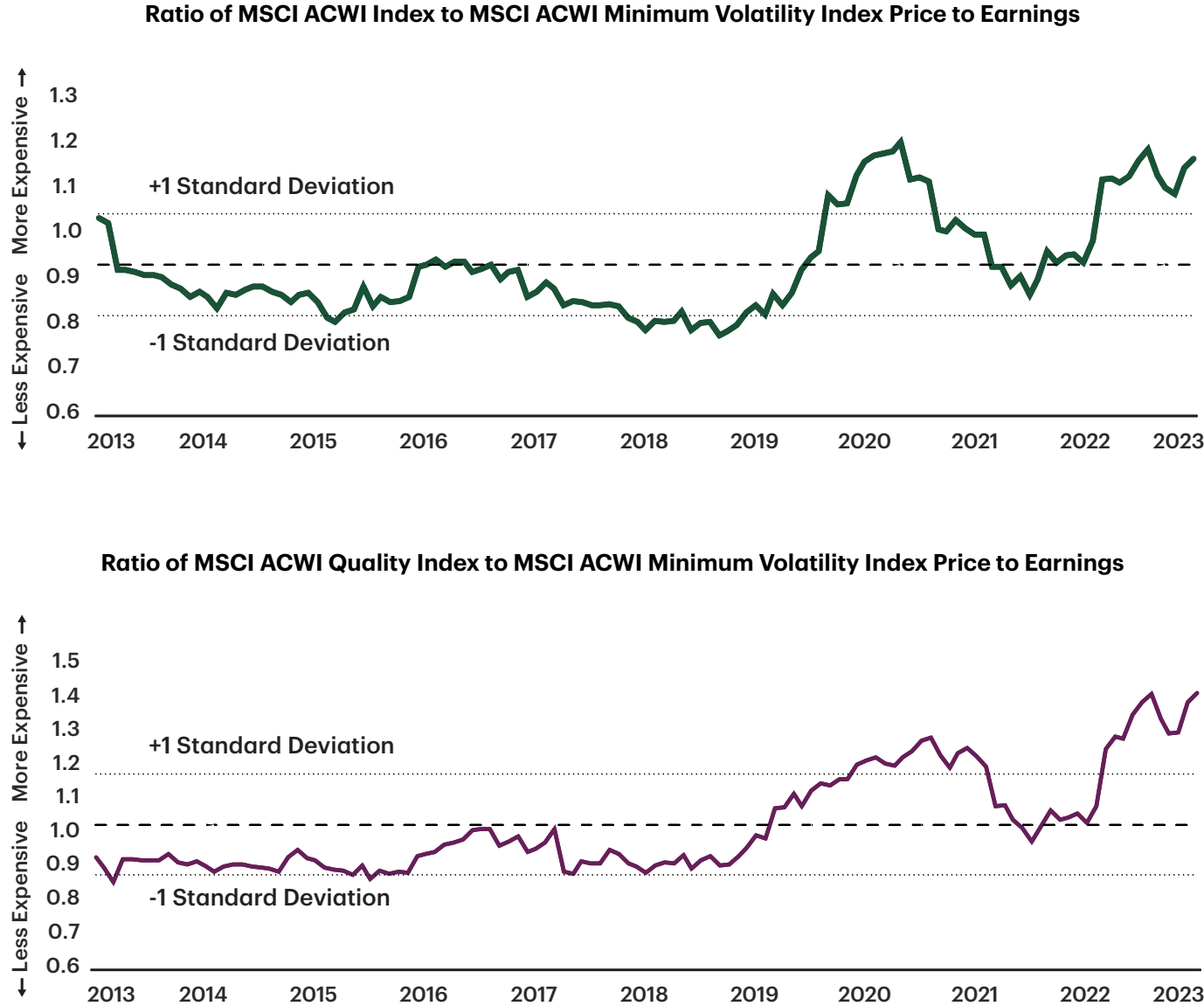
Source: Bloomberg Finance L.P. Data from December 31, 2021 to December 31, 2023.

Looking at the previous two-year period, it is evident that investors in the low volatility style have arrived at a very similar place as their cap-weighted benchmark counterparts, but with a much smaller drawdown and hopefully without enduring much of the panic that inevitably occurs as markets sell off.

The relative performance of the low volatility style in 2023 means that it offers an attractive relative valuation compared to cap-weighted benchmarks such as the MSCI All Country World Index (ACWI). Similar to what investors witnessed in 2021, this offered a good relative entry point for low volatility investing as valuations in the cap-weighted universes could not be sustained for long. For investors concerned about the potential for an

economic slowdown ahead, the quality factor is often also seen as a defensive characteristic. In terms of relative valuations between the quality factor and the low volatility factor, 2023 saw a significant spread between the two. This could offer an advantage to the relative performance of low volatility investing in the battle for defensive investing dollars during a potential drawdown going forward.

Figure 4: Relative Performance of Low Volatility Style



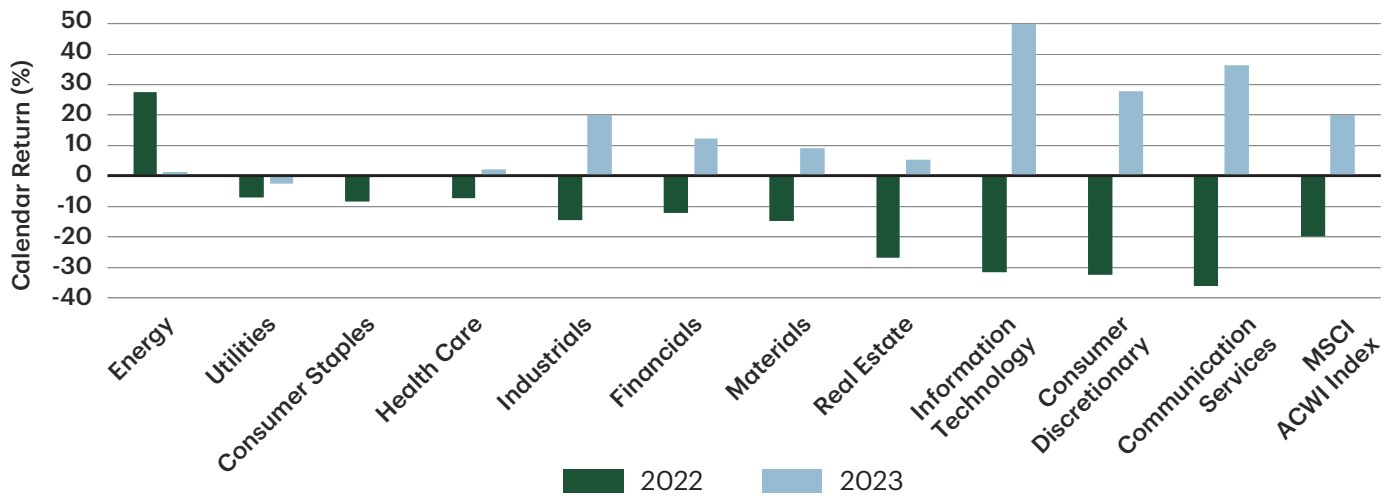
Source: Bloomberg Finance L.P. Data from December 31, 2021 to December 31, 2023.

Sector Returns: Zeros to Heroes

Markets experienced significant sector rotation in 2023. The Energy sector was the top-performing sector in 2022 and the only sector to provide positive performance over the calendar year. However, in 2023, Energy became one of the most challenged

sectors. Conversely, the Communication Services, Consumer Discretionary and Information Technology sectors went from laggards to leaders in 2023, buoyed by the performance of a select few stocks, the so-called magnificent stocks (**Figure 5**).

Figure 5: Sector Performance of the MSCI ACWI Index

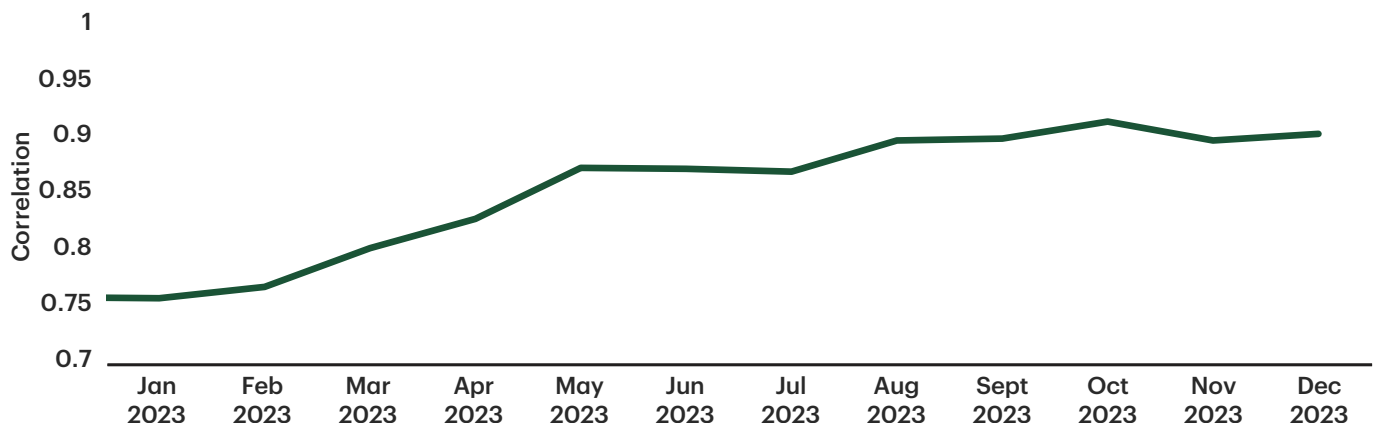


Source: Bloomberg Finance L.P. Data from calendar year 2022 vs 2023.

The return leadership in 2023 happened mostly due to investors rewarding technology-related companies for cutting costs and a frenzy around themes related to generative AI. The resulting strong sector rotation increased the correlations of

defensive sectors (**Figure 6**) over 2023 as investors treated all defensive sectors similarly and raced to chase returns in more growth-oriented sectors.

Figure 6: Average Pairwise 12-month Sector Correlation Between MSCI ACWI Utilities, Health Care and Consumer Staples



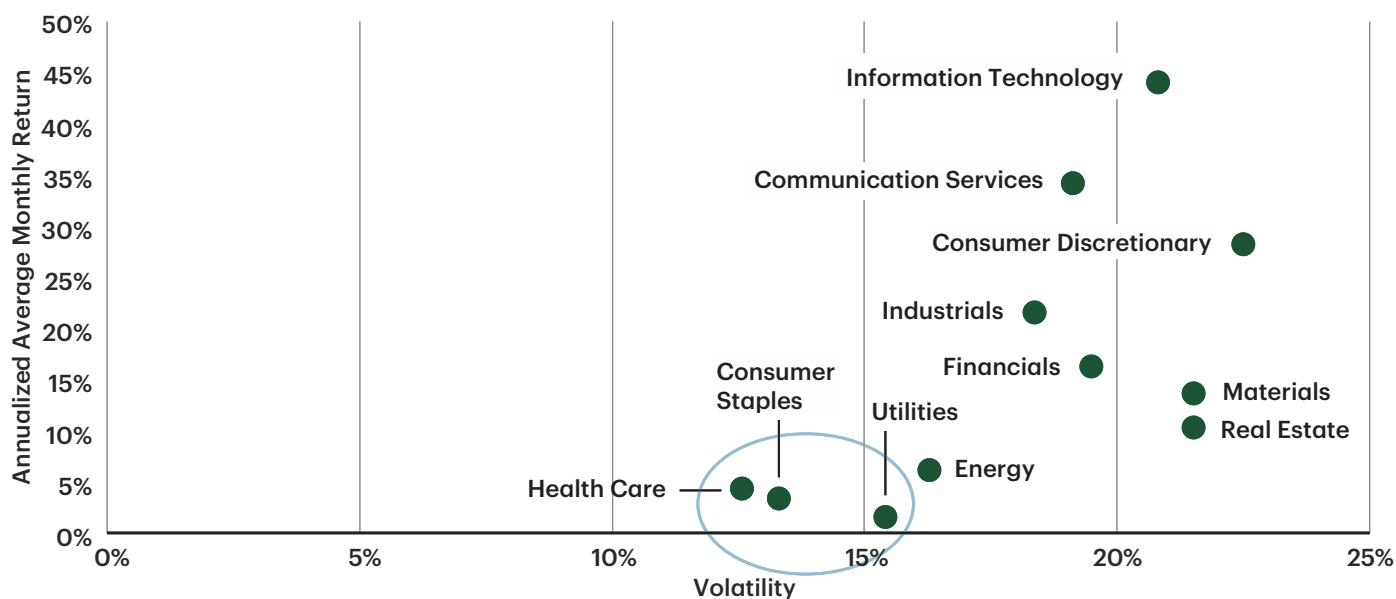
Source: Bloomberg Finance L.P. Monthly data from 2021 to 2023.



Low volatility strategies invest in companies with lower volatility and are, therefore, inclined to underweight sectors that traditionally encompass stocks with comparatively more volatile price returns, such as the Energy sector and the Information Technology sector. By design, low volatility strategies tend to have more exposure to defensive sectors such as Utilities, Consumer Staples, Health Care and traditional telecoms within Communication Services.

This sector exposure was unfavourable for low volatility strategies in 2023, as their positioning relative to cap-weighted indices with overweight in Utilities and underweight in Information Technology was a drag on relative performance. **Figure 7** also shows the dispersion of returns that occurred between the higher volatile sectors in MSCI ACWI Index and their more defensive counterparts.

Figure 7: MSCI ACWI Return vs Volatility for 2023



Source: Bloomberg Finance L.P. Monthly data from 2021 to 2023.

Market Concentration: The Magnificent Seven

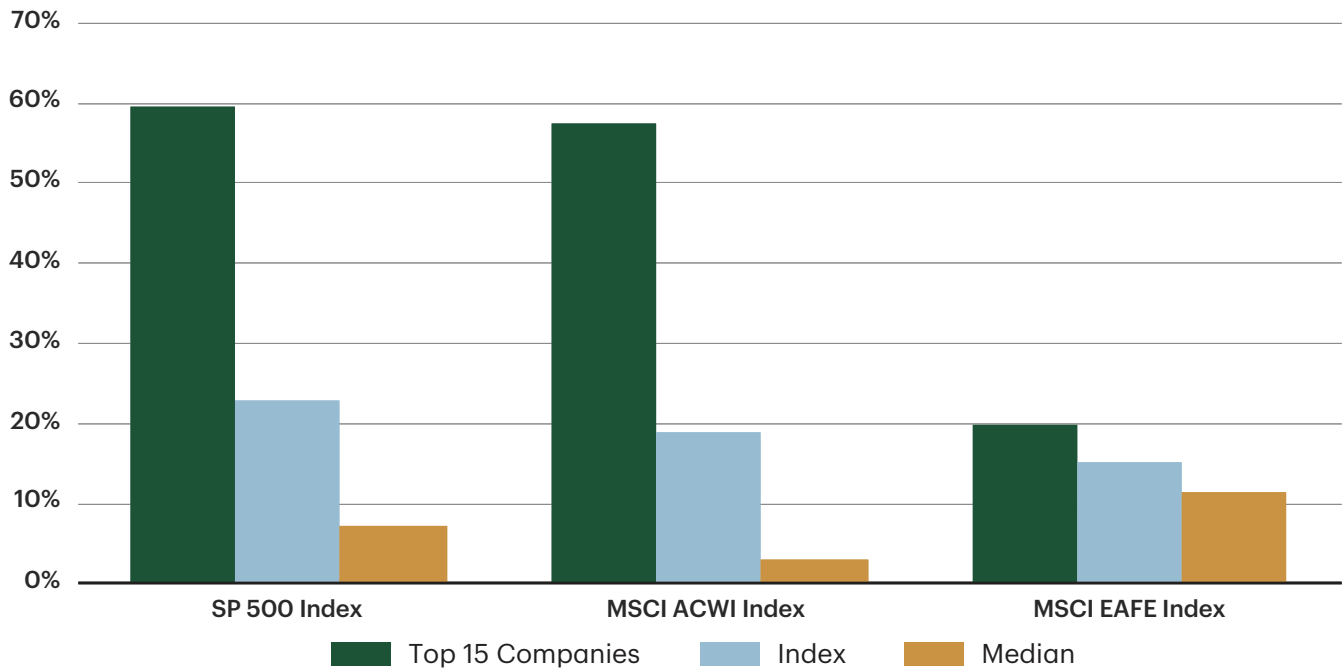
A handful of companies known as The Magnificent Seven emerged as noteworthy adversaries not only to low volatility investors but to many investors that construct portfolios which are agnostic to cap-weighted indexes. Over 45% of the returns in the MSCI ACWI Index could be attributed to seven of the 2,921 constituents, namely Apple Inc., NVIDIA Corp., Amazon Inc., Meta Platforms Inc., Tesla Inc. and Alphabet Inc.¹ When viewed through the lens of volatility, most of these companies fall within the spectrum of higher volatility on a relative basis.

Low volatility strategies that are focused on absolute risk reduction are designed to minimize exposure to more volatile stocks and as a result have little to no exposure to the market-dominating names.

Traditionally, quantitative strategies bet on a wider range of names and are less likely to take concentrated bets in only a handful of stocks to promote proper diversification.

The sheer magnitude of the difference between the returns of the top 15 companies and the median company as seen in **Figure 8** reveals just how much these names drove the returns for the cap-weighted benchmark. The median company, as depicted by the orange bars, shows that save the magnificent few, most companies within these cap-weighted benchmarks returned in the low single digits, which lines up with the performance of most low volatility strategies.

Figure 8: Year-to-date Performance of Top 15 vs Index and Median Stock



Source: FactSet Research Analysis Inc. Data from December 30, 2022 to December 29, 2023.

Note: Top 15 return is calculated with an arithmetic mean. Data is presented in CAD.

¹Source: TD Asset Management Inc., MSCI Inc., FactSet. From December 31, 2022 to December 31, 2023.

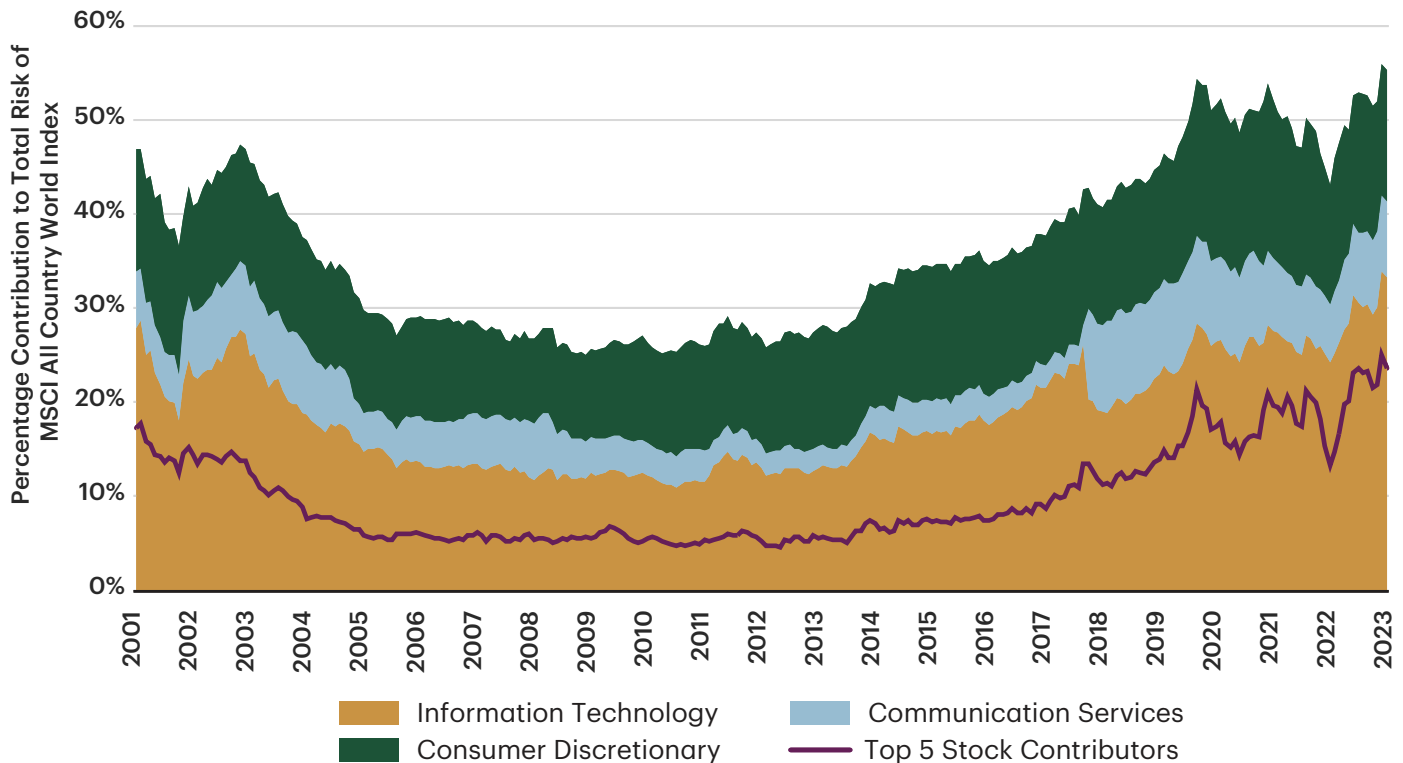
Risk: The Concentration We Don't See

No discussion on the performance of equity markets in 2023 can be complete without speaking about The Magnificent Seven and the fact that the returns of global cap-weighted benchmarks were concentrated in a select few. What is equally if not more important to recognize is that the concentration of risk within cap-weighted benchmarks were at all-time highs last year.

As seen in **Figure 9**, the contribution of the five top contributors to the risk of MSCI ACWI (which is made of more than 2,900 names) stood at over 23.5% as at December 29, 2023. However,

the weight of these names in the ACWI index was only 13.4%². Additionally, the contribution of the Information Technology, Communications Services and Consumer Discretionary sectors to the risk of the Index stood at 55.3%, even though they represented only 41.6% of the capitalization weight in the Index. What is clear is that risk was neither evenly distributed nor proportionally distributed to the capitalization weights of the constituents in the Index. Nearly 50% of the risk resided in just over forty percent of the cap-weighted benchmark.

Figure 9: MSCI All Country World Index Risk Contribution by Sector



Source: TD Asset Management Inc., Bloomberg Finance L.P. As of December 29, 2023.

Low volatility portfolios are built to distribute risk more evenly and as such are not subject to the high concentration of risk that we witnessed last year. As a result, they are potentially better insulated from a market correction.

² As of December 29, 2023 - Apple (4.47%), Microsoft Corp (3.95%), Amazon (2.10%), NVIDIA (1.82%), Tesla Motors (1.06%)

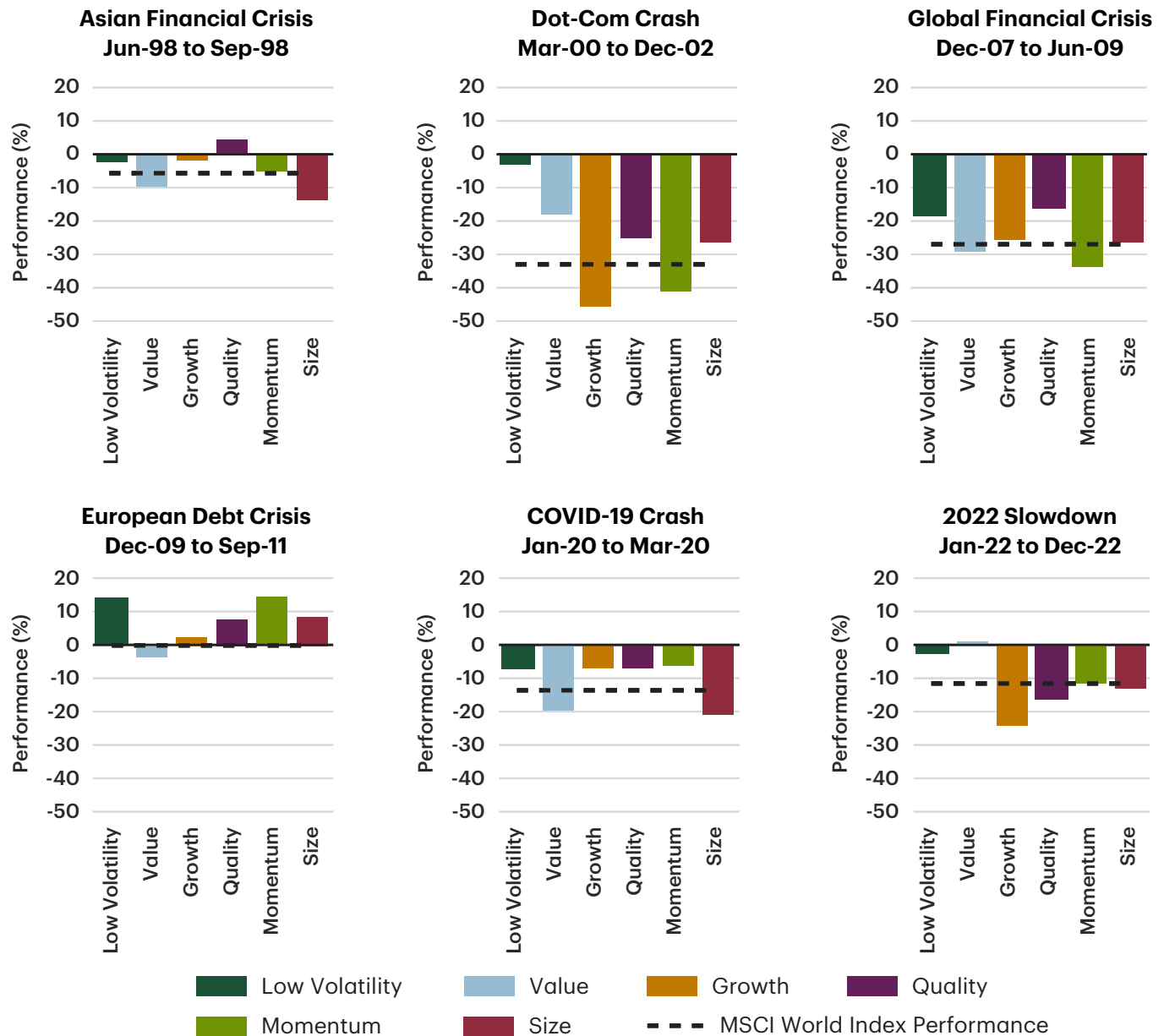
De-risking: Downside Protection of Low Volatility

Diversification is a critical tool in any investment professional's toolbox and plays an important role in reducing risk, but it is often forgotten until it is needed most. Low volatility strategies, by design, are less risky than other equity styles and have lower correlations to those styles when looking at their downside returns.

In our recent article [De-risking Portfolios with Low Volatility Equities](#), we showed that low volatility as a style factor has provided downside protection in several periods of significant equity market return drawdowns. However, in each individual

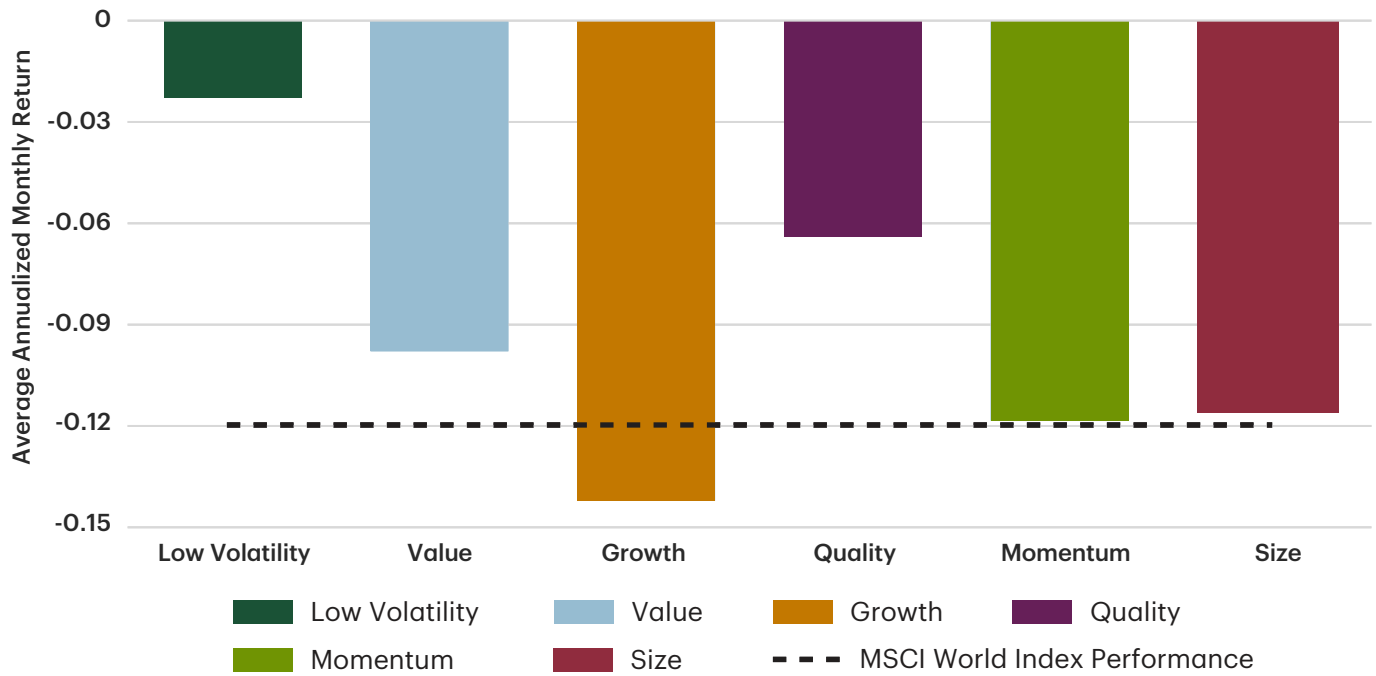
period it was not necessarily the top-performing factor. Despite that, when averaging out over these crises, the performance of the low volatility style far outpaced the remaining styles in providing downside protection and capital preservation in times of market stress. Given the unlikely ability for an investor to successfully time or predict the cause of the next crisis, an allocation to low volatility is the most prudent investment decision for weathering the next downturn while still capturing the equity premium over the long term (**Figure 10**).

Figure 10.1: Style Performance During Crises

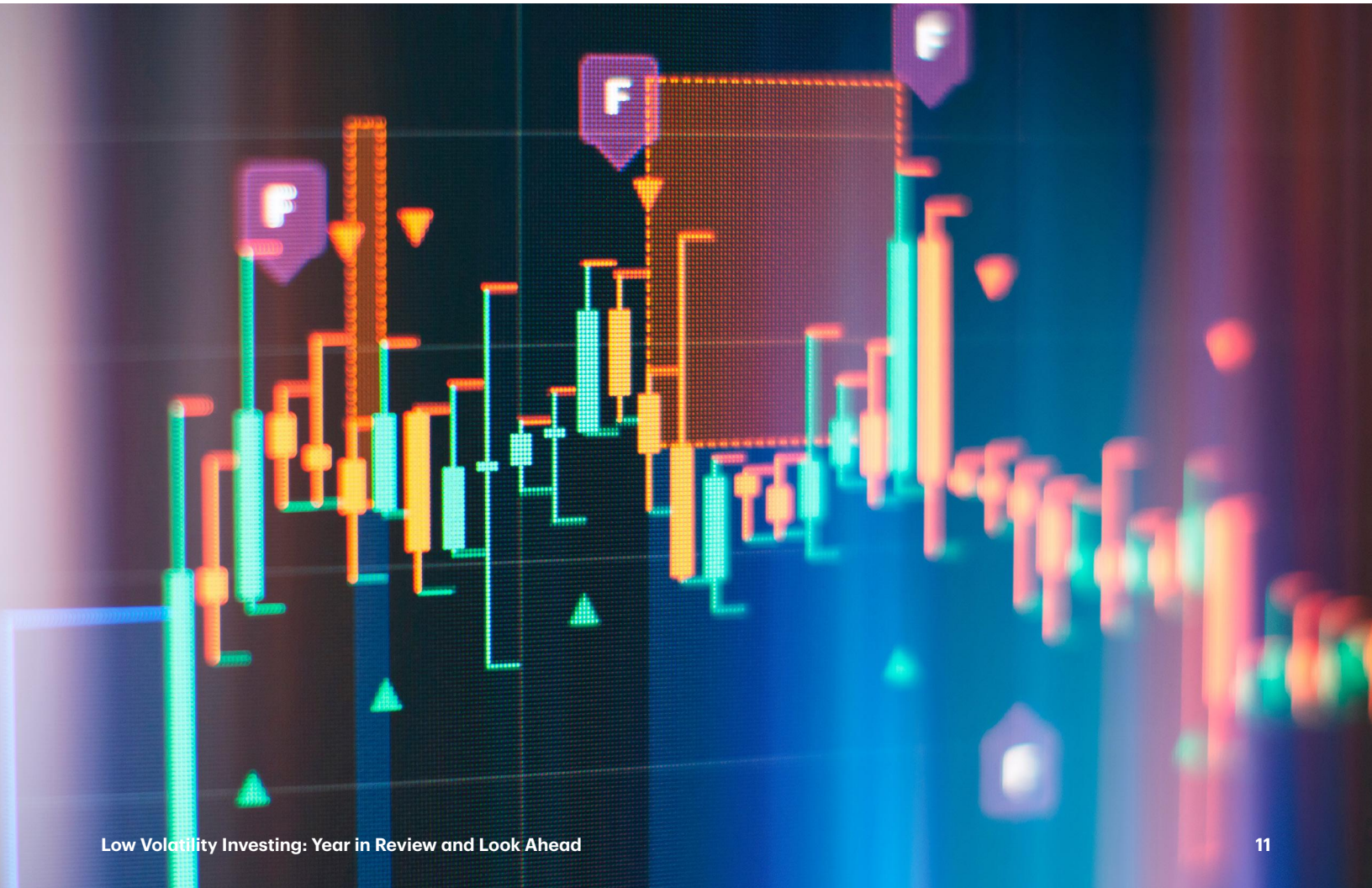


Source: TD Asset Management Inc., MSCI Inc. As of May 31, 2023.

Figure 10.2: Average Performance Across Crises



Source: TD Asset Management Inc., MSCI Inc. As of May 31, 2023.



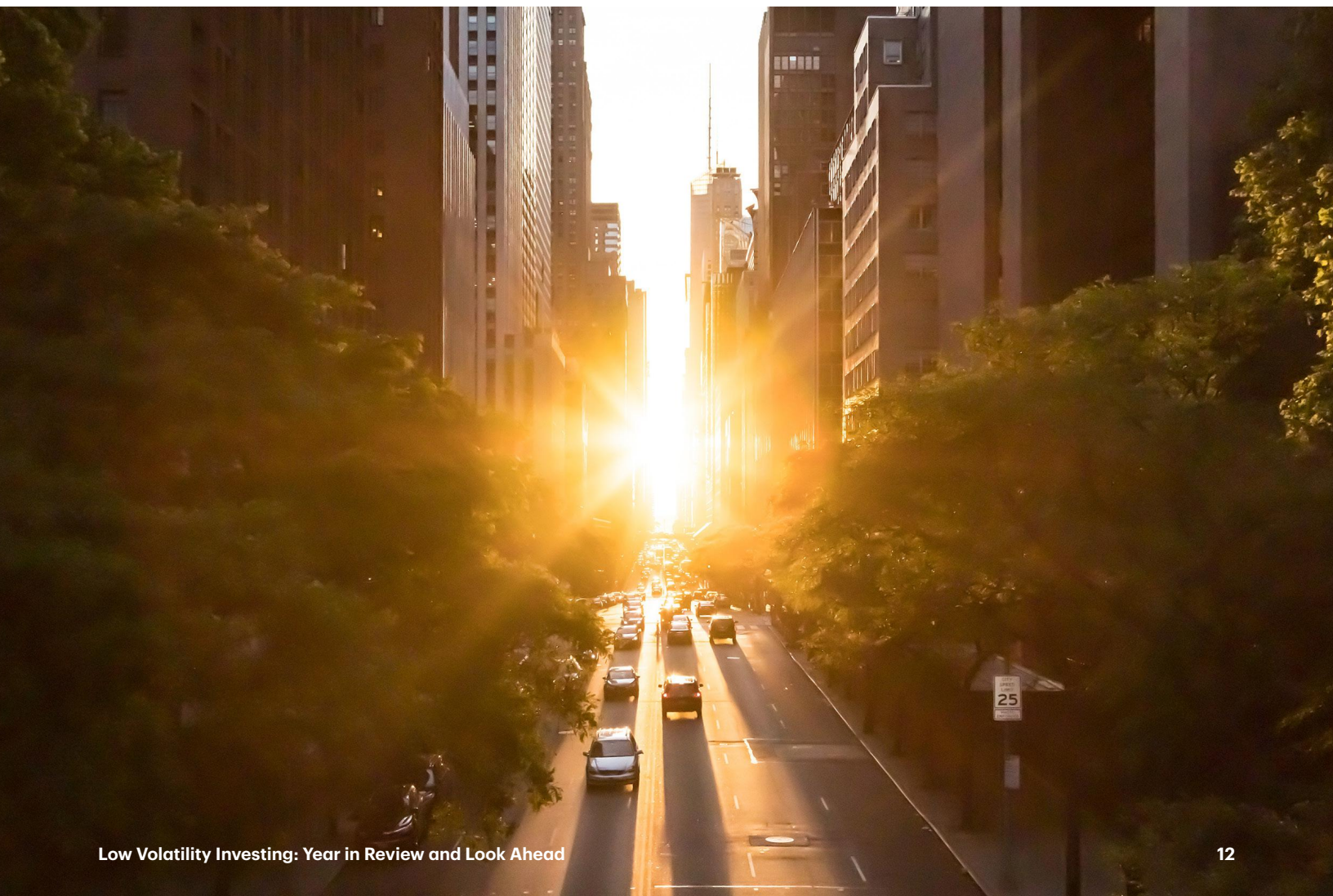
Looking Ahead: Global Economic Health, Deconcentration, Recession or Soft Landing

Investors may be tempted to take advantage of the recent stock market rebound in the hope that it will continue. However, the phenomenon of a meteoric increase in market concentration in a handful of volatile and expensive securities, which is behind this recent surge, is the same phenomenon that makes markets extremely vulnerable. This same phenomenon took place in 2020 and ended in the double-digit market declines of 2022. However, unlike 2020, today interest rates are significantly higher and their definitive impact remains to be seen.

Despite the optimistic outlook in early 2024, investors remain cautious about whether companies can meet the strong earnings expectations forecasted for next year. While the U.S. Federal Reserve's pivot points towards possible rate cuts next year, persistently weak economic data raises concerns about the economy potentially entering a recession in 2024. With market concentration at

historical highs, market volatility and high dispersion in stock returns among capitalization-weighted indices will continue to be important themes in 2024 as investors continue to grapple between a hard and soft landing.

This is why building a more diversified portfolio, staying away from the excesses of capitalization-weighted indices, and being attentive to the valuation and quality of the securities purchased are all measures that are more essential today than they were a year ago. These are also measures that are at the heart of the construction of our low volatility strategies. Even if they penalize us in markets such as those observed in 2023, they are what allow us to deliver better risk-adjusted returns in the long term. We remain confident in our approach and the current market euphoria does not diminish the decades of empirical evidence in favour of low volatility strategies. ■



Low Volatility



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