AllianceBernstein®

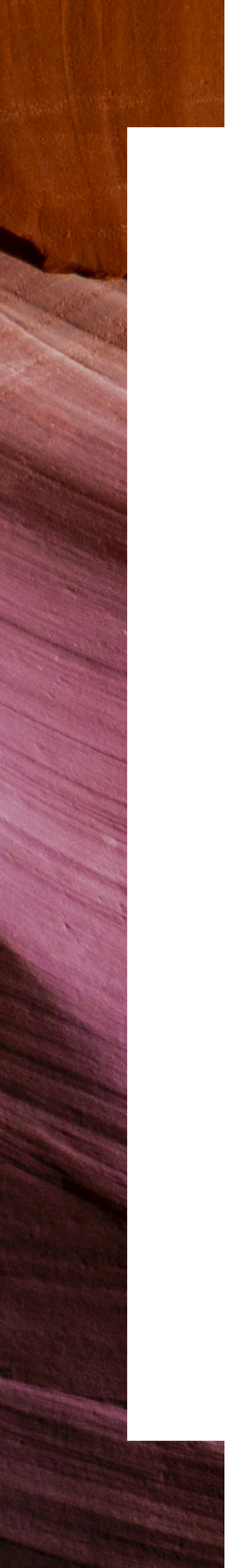
Turning Less into More

How to Improve Equity Outcomes by Reducing Risk

In a world of macroeconomic and market uncertainty, the fear of losing money may deter investors from seeking to capture equity return potential. Is there a way to stay confident when volatility strikes? Equity strategies that target downside risk reduction can help. By seeking to reduce losses in downturns, these portfolios have less ground to regain when the market recovers. Over time, this gentler return pattern can deliver surprisingly resilient returns, helping investors stay in the market through bouts of turbulence.

JUNE 2023

Insights from the AB Strategic Core Equities Investment Team



It's a deeply ingrained investing maxim that risk and return go hand in hand: to get more return, you must accept more risk. So some investors may find it counterintuitive that the opposite is also true: you can take less risk and still beat the market over time. It's a different way of defining investment success that leans on downside defenses in the pursuit of long-term goals.

Meeting investment objectives today requires a fresh mind-set. Investors have been facing an uncertain future of structurally higher inflation and interest rates since last year, when an increase in volatility rattled markets. Macroeconomic uncertainty often creates unstable market conditions that may deter investors from taking more risk to capture return potential.

That creates a troubling conundrum for many investors. Whether an individual saving for retirement, a pension plan facing funding gaps or an insurance company dealing with stiffer capital requirements and asset/liability-matching challenges, investors can't tolerate wild market swings, let alone the prospect of losing money. They need their investments to go the distance.

Strategies that expressly target downside-risk reduction can address many of these needs. These solutions get their performance power from the simple mathematics of lower risk drag and compounding. Stocks that lose less in market downturns have less ground to regain when the market recovers, so they're better positioned to compound off those higher returns in subsequent rallies. Over time, this gentler return pattern can end up ahead of the market.

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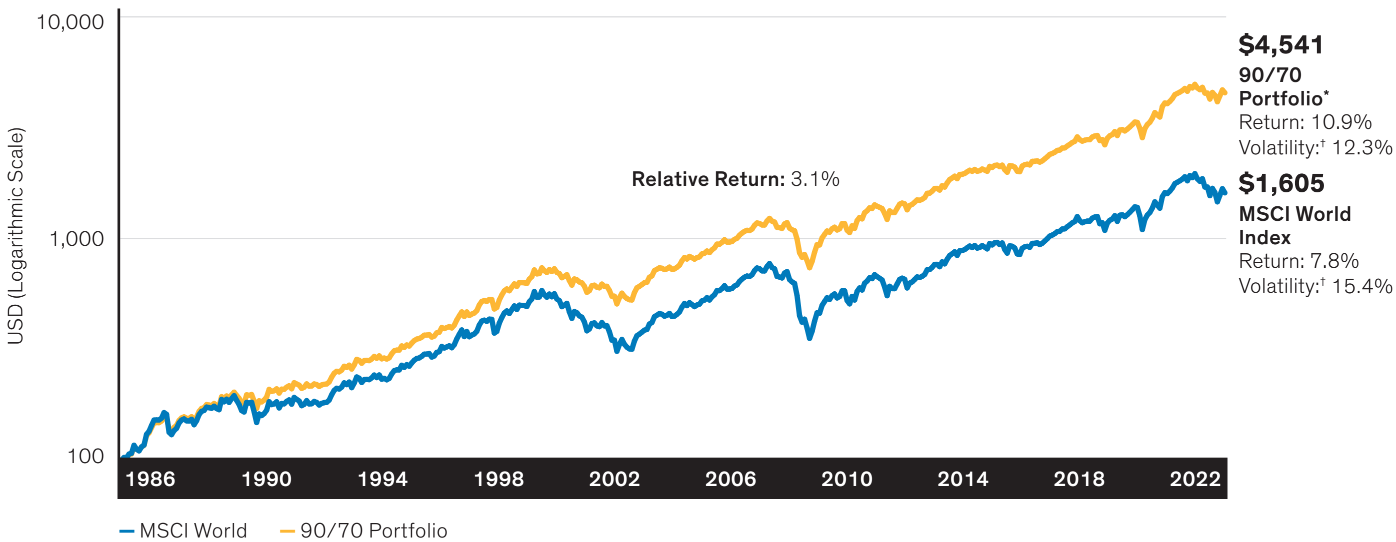
A measure known as upside/downside capture helps explain how preserving capital in the near term can actually drive outperformance over the long term. Imagine a hypothetical global stock portfolio that captured 90% of every market rally and fell only 70% as much as the market during every sell-off. What would the long-term returns of this portfolio look like?

You might think it would underperform; it wouldn't. As *Display 1* illustrates, $100 invested in this portfolio in 1986 would have built up more than $4,541 in capital through 2022 and delivered a smoother ride through the ups and downs of the market. That's approximately 2.8 times more capital than that generated by the MSCI World Index.

It's not easy to build a portfolio that can capture more upside during market rallies than it loses during downturns over time. In our experience, the secret to delivering on the 90%/70% potential lies in finding high-quality stocks with stable trading patterns and attractive prices (QSP).[1] It also requires the ability to nimbly adjust exposures as insights into fundamental attractiveness and risks change.

DISPLAY 1: HOW INVESTORS CAN REDUCE LOSSES IN DOWNTURNS AND STILL BEAT THE MARKET

Growth of $100



Past performance does not guarantee future results. Returns shown are for illustrative purposes and are not representative of any AB fund. It is not possible to invest in an index.

*Performance calculated by multiplying all positive monthly returns (0% or greater) of the MSCI World Index by 90% and all negative returns (less than 0%) by 70%; shown in logarithmic scale.

†Annualized standard deviation

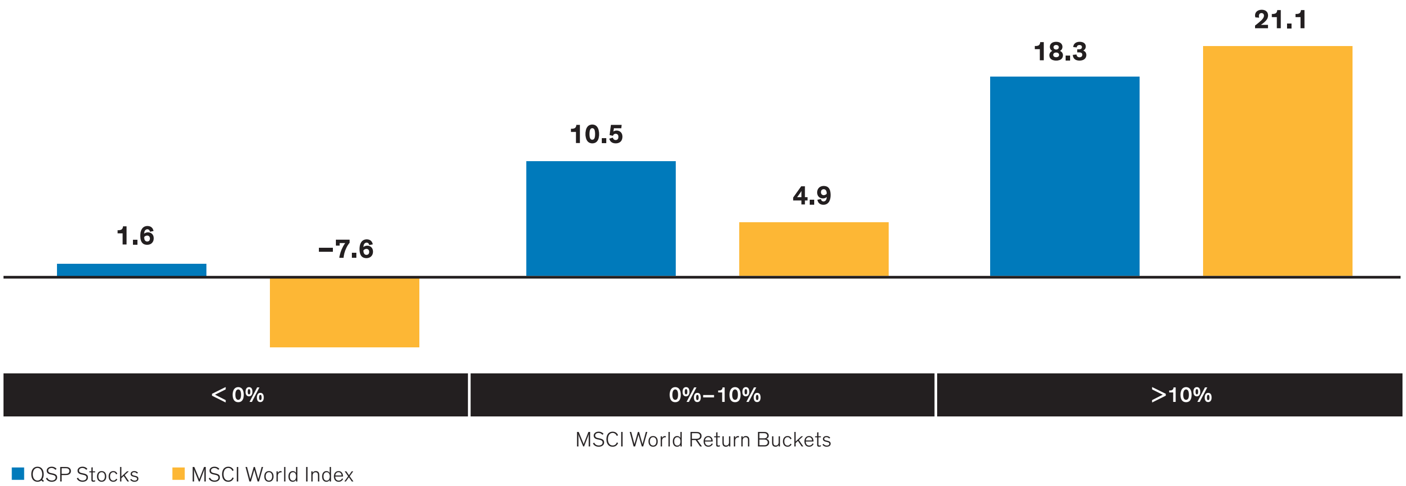
Data from March 31, 1986 (MSCI World Index inception date), through December 31, 2022

As of December 31, 2022 | **Source:** MSCI and AB

1 **Note on methodology:** Our analysis of QSP stocks in this paper uses two methodologies. The Strategic Core Edge methodology, as described in the footnotes of Display 2 and in the analysis of technology stocks on page 6, is used for analysis back to 1990. For longer-term analyses that begin before 1990, we use the AB QSP score, as described in the footnotes of Displays 5 and 6. Since some of the factors used in Strategic Core Edge do not have a history before 1990, we created the AB QSP score using proxies for factors that are not available for longer-term datasets.

DISPLAY 2: IN A VOLATILE WORLD, THE PATTERN OF RETURNS MATTERS MORE

Global Stocks with Attractive Quality, Stability and Price (QSP) Features vs. MSCI World
Average Rolling 12-Month Returns: Jan 2013–Dec 2022 (Percent)



Quality
Companies that typically have high profitability and durable competitive advantages

Stability
Stocks of lower-risk companies with predictable earnings streams often have steadier trading patterns

Price
Attractive valuations are essential; overpaying for downside mitigation can be counterproductive

Past performance does not guarantee future results.

QSP returns are for the quintile of developed global stocks with the highest Strategic Core Edge. Strategic Core Edge is the expected return from a proprietary model combining a number of quality, stability and price factors, with a ratio of approximately one-third for each quality, stability and price component.

Return buckets are based on returns for MSCI World Index.

As of December 31, 2022 | **Source:** MSCI and AB

Stocks like these can help investors capture equity potential while navigating turbulent market conditions. In fact, our universe of global stocks with attractive QSP characteristics delivered returns of 1.6% on average in falling markets over the last decade, when the MSCI World Index fell by 7.6% on average (*Display 2*). In modestly rising market environments, QSP stocks advanced by 10.5%—more than double the broader market.

When carefully selected, stocks like these can create a portfolio with resilience in down markets and solid growth potential in up markets. By understanding how to mitigate the effects of volatility on portfolios, investors can gain the confidence to maintain a core strategic allocation to equities through turbulent times, improving their chances of meeting their long-term goals.

Volatility isn't going away any time soon. The inflation, interest-rate hikes, recession fears and geopolitical threats that emerged in 2022 delivered a shock to economies and companies whose effects are still unfolding. Several stabilizing forces of the pre-COVID era are now gone. As investors adjust to this regime change in global markets, now is the time to strategically prepare for a more volatile future.

The Advantages of Defensive Strategies

Because defensive equity strategies focus on buffering market shocks, they offer the following advantages:

- They help investors stay the course in equities, preventing the tendency to buy high when markets boom and sell too quickly when they slump—missing out on future recoveries.
- They help shield against the corrosive effects of risk drag, which is particularly important for investors who need to start spending their money, or for retirement plans that rely on their investment portfolio to meet payment obligations.
- They provide flexibility in budgeting portfolio risk and allowing for increased allocations to return-seeking strategies.

Pick Your Poison: Relative vs. Absolute Risk

Risk is a slippery concept. It means different things to different people and over different periods of time. Since the introduction of the capital asset pricing model (CAPM) in the mid-1960s, equity risk has largely been defined in relative terms, most often versus a market capitalization-weighted index, such as the S&P 500 or the MSCI World Index. This mind-set is deeply rooted in convention: it's how investors are taught to define success—and what they read in the headlines, amplified by the pervasiveness of market indices.

Investors view relative risk through the lens of the information ratio—defined as relative returns divided by their volatility, or tracking error. This statistic gives investors an easy way to gauge the performance of their portfolios and the skill of their asset managers.

But the preoccupation with relative risk also creates perverse effects. Since risk-taking is measured versus a benchmark, active managers have a strong incentive to stick closely to that benchmark. Growing investor frustration with paying high fees for benchmark-like or worse performance has fueled the popularity of low-cost, passive, cap-weighted index-tracking approaches.

Going passive solves the relative-risk issue, but raises other challenges. Keep in mind that many passive indices organize their holdings based on market capitalization, weighting each stock based on the total value of shares outstanding. But there may be more compelling reasons than size for choosing one stock over another, such as earnings growth, low valuation or price momentum. Whether benchmark-hugging portfolios are managed actively or passively, they can become overexposed to the benchmark's riskier excesses—and to the full magnitude of the inevitable market downdrafts. Indeed, during 2022, investors who held heavy weights in the largest US technology stocks got badly burned when markets turned against the mega-cap technology companies known collectively as the FAANMG stocks (Facebook, Amazon.com, Apple, Netflix, Microsoft and Google). And benchmarks are backward-looking: a portfolio that's tethered too closely to a benchmark will also be tethered too closely to yesterday's winners.

But, in our view, the biggest flaw in focusing on relative risk is that it doesn't solve the real problem: having enough money to meet your long-term goals. You can't spend relative performance.

Given these characteristics, we view strategies that aim to deliver reduced volatility as attractive choices for a core equity allocation. An active, multifaceted approach that combines built-in downside-risk defenses with high fundamental quality and attractive valuation is an effective way to achieve more stable return patterns. And investors can use these strategies in various ways to drive better long-term outcomes.

The Risk That Really Hurts

Market meltdowns are particularly damaging for investors in the post-accumulation phase—retirees living off their nest eggs and defined benefit plans in the runoff stage—especially if these sell-offs happen in the early withdrawal stage.

Rising inflation and higher interest rates are forcing many public and corporate pension plans to rethink how they fill large funding gaps, while insurance companies are grappling with stiffer regulatory and asset/liability-matching challenges (*see* "Insurers Need Insurance for Equity Market Volatility," *page 13*). In our view, generating real returns that can beat inflation over time will be the next big challenge for investors of all types. Portfolios that are vulnerable to volatility will struggle to deliver the goods. Since we haven't seen significant, sustained inflation for more than four decades, few contemporary investors have any experience addressing this problem. And many investors continue to evaluate performance based on relative returns versus a benchmark, rather than absolute returns (*see* "Pick Your Poison: Relative vs. Absolute Risk," *left*). We think this is the wrong prism through which to evaluate risk, particularly for investors focused on reducing volatility.

Creating a portfolio that can consistently cushion downside losses and beat the market over time requires a disciplined focus on a few key features. We believe that identifying stocks with QSP characteristics is the key to unlocking the power of lower-volatility equity portfolios. The starting point for investors is to develop a clear definition of each component and broaden their perspectives on how to source stocks with strong QSP credentials. By finding companies with consistent earnings and cash flow, we can identify stocks with more consistent prices.

Quality: Durable Businesses Are Everywhere

You may think that only companies in traditional safe-haven or defensive sectors—consumer staples, healthcare and utilities—would make the grade in this type of portfolio. But standout business models are everywhere.

So what are some examples of resilient business models? Look for companies that enjoy well-defended competitive advantages, which enable them to maintain high and predictable profitability for longer than the market expects. Sources of this sustainable profitability can range from an entrenched network effect to a difficult-to-replicate service, a beloved brand or a low-cost production process.

Examples include tech enablers such as Paychex, which provides payroll services for small- and medium-size businesses. Based in Rochester, New York, Paychex enjoys high recurring revenue as a result of its strong client retention due to high switching costs. Dutch information services group Wolters Kluwer enjoys a resilient business model by virtue of its proprietary data assets. As a publisher of professional journals and a provider of high-value-added, often essential software and solutions, 80% of its business is based on a recurring revenue model. The company has also improved its margins and bolstered its competitive advantage over time through its transition from print to digital services.

These types of business advantages are particularly important when inflation is high. Rising prices pressure companies on both the cost and income side of their businesses. In a world of higher inflation, the advantages of quality are greater than usual. Companies with pricing power, which may derive from their intellectual capital or brand, are well placed to overcome inflationary pressures. While companies can't control inflation, some business areas give them more control over their fates than their rivals have.

We believe that high-quality companies that are good stewards of capital, with strong and consistent cash flows, have more ways to protect their margins even as input costs increase. Pricing power—an important quality feature in any market—is an essential attribute: it allows companies to pass rising costs through to their customers without worrying about taking a hit to demand. A dominant payment-processing company such as Mastercard will naturally see its fees increase as inflation rises, while its position as one of the leading players in an oligopolistic industry should help prevent a demand backlash. What's more, inflation increases the price of goods and services purchased with credit cards. As Mastercard's fees are based on the dollar volume of transactions, inflation directly helps increase its revenues.

Measures of profitability, such as return on assets or return on invested capital, are important quality indicators and strong predictors of future earnings power. Similarly, companies that demonstrate capital discipline and a low volatility of returns relative to the market will be prized in a rising-rate environment. Companies that we call "quality compounders" have successful business models and sustainable earnings, backed by good capital stewardship and positive ESG behavior (see "An ESG Focus Sharpens Fundamental Conviction in Stock Selection," *page 10*). A company's intangible assets, such as its brand, R&D and patents, are also valuable features, particularly in times of stress (*Display 3*). These attributes support compound earnings gains from consistent growth drivers through market cycles, which can provide companies with unexpected sources of offense for portfolios, even in sectors that are typically seen as defensive, such as healthcare.

Similarly, quality business models can provide companies with unexpected sources of defense. For example, technology companies aren't typically seen as defensive, yet platform-based businesses enjoy recurring sources of revenue. We believe that sourcing a mix of defensive and offensive features in a broad range of companies can help create a portfolio with an attractive upside/downside capture profile (see "Redefining Offense and Defense in Equities: Technology and Healthcare," *page 6*).

DISPLAY 3: HOW HIGH-QUALITY BUSINESS MODELS SHAPE OFFENSE AND DEFENSE FOR INVESTORS

Unexpected Sources of Defense	Unexpected Sources of Offense
Platform with Network Effects	**Innovation Patents/Research & Development**
Recurring Stable Revenue	**Secular Winners**
Mission-Critical Expert Solutions Proprietary Data/Analytics	**Brands**

Source: AB

Stability: Lower Beta Adds a Safety Net

Investors can also offset slowing growth with stability. Stable companies have a cushion on the downside because they typically have lower beta—sensitivity to the broader market—than traditional growth firms. Fundamental research can unearth companies with hallmarks of stability across a broad array of sectors, not only in traditionally defensive areas such as utilities and consumer staples, but also within more cyclically oriented industries such as financials, energy and information technology.

In finance textbooks, the value of an asset is defined as a function of its future cash flows and the discount rate, which itself is a function of interest rates. It's also affected by the perceived variability of a company's cash-flow potential; greater uncertainty around cash flows will raise the discount rate and lower a stock's valuation. So, anything that can provoke uncertainty around a company's cash flows may become a source of volatility. Uncertainty can be derived from three sources: a company's business model, its debt position (or leverage) and its sensitivity to exogenous shocks from the macroeconomy or geopolitics.

Our research shows that companies with a higher volatility of cash flows also tend to have more volatile stock returns (*Display 4*). This means that the structure of a company's business model can also be a source of volatility, and its income statement may offer important clues about its resilience or underlying volatility.

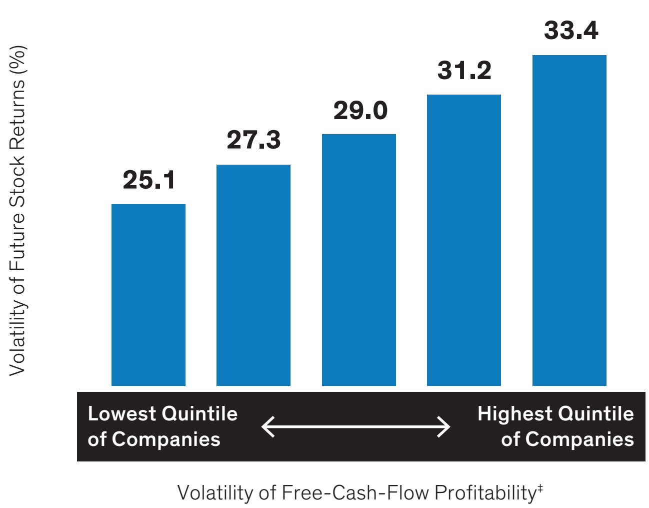
Shares of companies with more predictable earnings patterns than others tend to offer stability, even in times of limited visibility. Our research suggests that companies like these tend to outperform the market over time, with better risk characteristics, which lends stability to a portfolio and improves Sharpe ratios, a key measure of risk-adjusted returns.

It's important to actively monitor companies for firm-specific risks that might threaten their fundamental stability and/or increase price volatility in the short term. This extra scrutiny helps weed out companies that may be headed for uncharacteristic periods of erratic stock performance. These risks could include an unexpected acquisition, a shift in top management or new regulatory requirements.

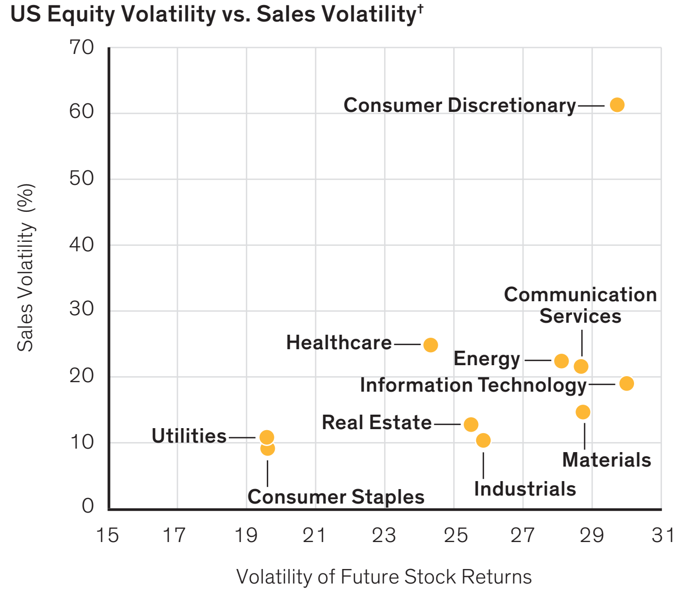
DISPLAY 4: STABLE CASH FLOWS AND SALES FOSTER MORE STABLE STOCK RETURNS

2000–2023

US Company Cash-Flow Volatility vs. Future Stock-Return Volatility (Percent)*



US Equity Volatility vs. Sales Volatility†



Historical analysis does not guarantee future results.

*Future stock-return volatility is measured as the standard deviation of absolute monthly returns, over the next two years, annualized, with group averages reported. Volatility of past cash-flow variability is measured by the cash-flow standard deviation divided by the cash-flow mean over the past four years. Stocks are grouped according to their past cash-flow variability. Universe is Russell 1000 excluding financials. Returns from CRSP, financial data from S&P Compustat for January 1, 2000, through March 31, 2023

†Sales volatility is the volatility in sales growth.

‡Volatility measured by the coefficient of variation, which is the standard deviation of (free cash flow/assets) / median (free cash flow/assets)

As of March 31, 2023 | **Source:** Center for Research in Security Prices (CRSP), FactSet, International Data Corporation, S&P Compustat and AB

Redefining Offense and Defense in Equities: Technology and Healthcare

Investors tend to have deeply ingrained beliefs about what performs best in various market conditions—often with good reason. But sometimes, common knowledge becomes obsolete and drawing broad conclusions can lead to missed opportunities.

Typically, the information technology sector is a bellwether of bullish market sentiment. When growth stocks are in favor, technology stocks have historically offered up supersize returns, albeit often with volatility and downside risk to match. Hypergrowth stocks, which often have little or no profits, have been particularly volatile.

Technology's Reliable Stalwarts

But many of the high-quality, profitable tech companies that operate behind the scenes don't face the same risks as the consumer-facing giants. Often overlooked, for example, are lower-profile technology enablers and payment services firms that have sustainable business models and large, recurring revenue streams. While it might sound counterintuitive, we believe that select technology stocks with these attributes exhibit defensive characteristics, which can help buffer spikes in market volatility.

Are technology stocks inherently volatile? These stocks generally exhibit high beta, which suggests that they're riskier (*Display, below left*). Yet the sector isn't uniform. About 26% of MSCI World technology stocks have a beta lower than 1.0 *(Display, below middle*), meaning their trading patterns are less volatile than the market. So investors have plenty of options to find stability in technology stocks. Indeed, tech stocks with strong QSP attributes fell by much less than the broader sector in the 2022 downturn (*Display, below right*).

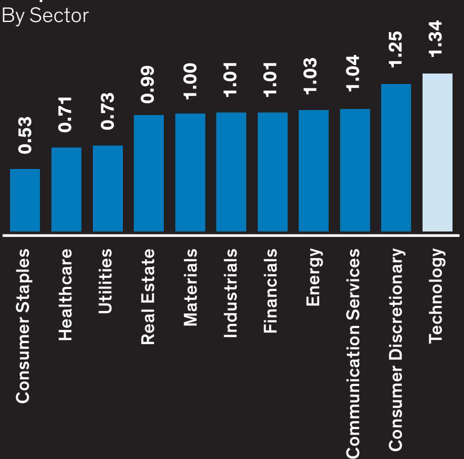
The Healthcare Innovation Boom

Healthcare, too, is outgrowing its traditional role as a purely defensive play. Healthcare stocks have consistently outperformed in down markets over the last two decades, including in 2022.

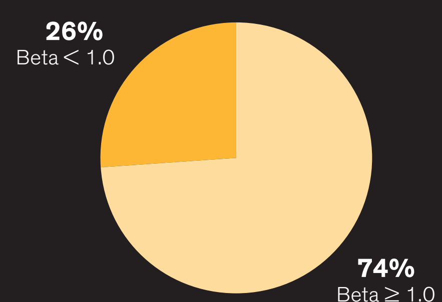
What may come as a surprise, though, is that healthcare stocks also outpaced the global index, even when stocks rebounded in the fourth quarter of 2022. By doing so, they provided a level of offense that is not usually expected of a defensive sector. In fact, over the past 10 years, healthcare has captured around 90% of the upside of broad global markets. What's behind this shift? In a word, innovation. New drug development technology, personalized medicine, telehealth and robotics are providing strong growth drivers to the sector, alongside its inherently defensive characteristics.

DEFENSIVE TECH STOCKS: LOOK FOR LOW-BETA NAMES WITHIN THE HIGH-BETA SECTOR

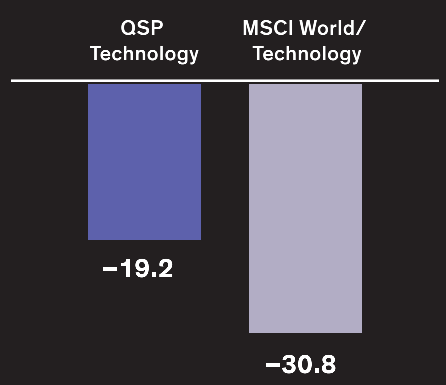
Adaptive Beta*
By Sector



Global Technology Stocks
Total = 183 Stocks



Technology Performance
Absolute Returns, Full-Year 2022 (Percent)†



Past performance is not necessarily indicative of future results.

*Based on GICS sectors in MSCI World Index. Adaptive beta is AB's proprietary measure for measuring the volatility of stocks and markets. Stocks with a beta lower than 1 are considered to be less risky than the market.

†QSP returns are for the quintile of developed global stocks with the highest Strategic Core Edge. Strategic Core Edge is the expected return from a proprietary model combining a number of quality, stability and price factors, with a ratio of approximately one-third for each quality, stability and price component. QSP technology returns are for the information technology stocks in the quintile of stocks with the highest Strategic Core Edge. An investor cannot invest directly in an index or average, and the index does not include sales charges or operating expenses associated with an investment in a mutual fund, which would reduce total returns.

As of December 31, 2022 | **Source:** MSCI and AB

Price: Valuation Underpins Defensive Potential

Market volatility in 2022 also provided a painful reminder of the importance of focusing on valuations. In the run-up to the downturn, many technology companies became very expensive. Yet their lofty valuations didn't stop many investors from continuing to pile into these stocks, as their consistent gains at the time created a false impression that they were perennial winners with defensive benefits.

It ended in tears. When the market reversed, investors discovered that what goes up too high often comes crashing down. Investors should always consider whether a stock's valuation appears to be rooted in reality or fantasy, even if the underlying business looks solid.

This principle is especially important when investing in defensive stocks. During times of stress, certain companies that are widely seen as having defensive characteristics may become popular—and expensive. Crowded trades form that could become very risky if the trend unwinds and investors rush for the exits all at once. In other words, investors could end up paying a hefty price for the insurance provided by a seemingly safer allocation, only to discover that its defensive features were a mirage.

That's why we believe identifying high-quality, shock-resistant companies isn't enough when building a defensive portfolio. To tilt the scale even more to the upside, the next step is to determine whether those characteristics are already being fully appreciated by the market or are trading at relatively attractive valuations. Staying alert to valuations is another way to improve return potential and avoid expensive, vulnerable pockets of the market.

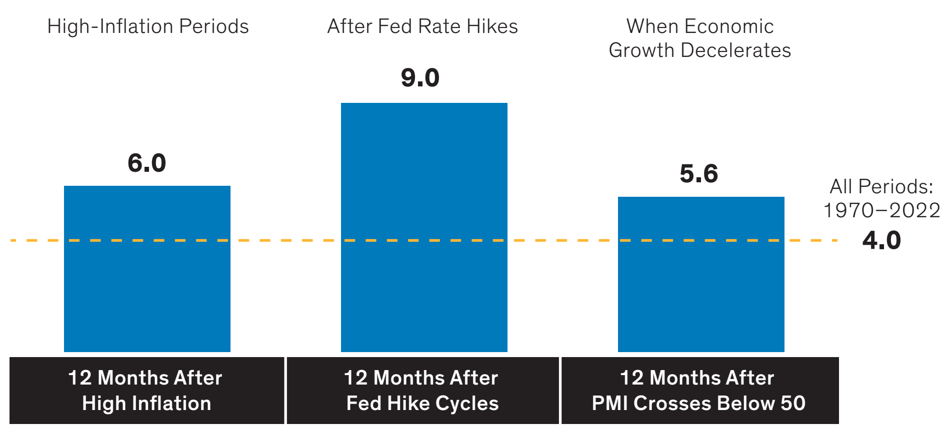
Quality + Stability + Price (QSP): A Powerful Combination

Companies that embody the QSP sweet spot can be found across diverse sectors and industries. In healthcare, for example, Danish pharmaceutical company Novo Nordisk is well known for its diabetes treatments, and has also launched an obesity drug. We believe this product opens up a long-term quality growth opportunity that isn't fully reflected in the company's valuation as of early 2023. In financials, Nordea, the largest bank in the Nordics, is well capitalized and focused on cutting costs and improving margins. These features bolster the quality of the firm's business, which we believe could provide stability in uncertain macroeconomic conditions.

Our research shows that an effective defensive strategy should be grounded in company fundamentals and focus on firms that exhibit the characteristics of quality (consistent cash flows and measures of profitability, such as return on invested capital), stability (a low volatility of returns relative to the market) and attractive pricing that make them less susceptible to wide market swings. By combining built-in downside defenses with the traits of high fundamental quality, such a strategy seeks to deliver better risk-adjusted returns.

DISPLAY 5: QSP STOCKS ADDRESS THREE KEY CURRENT RISKS

Average Annualized Relative Returns of US QSP Stocks: Jan 1970–Dec 2022 (Percent)



Past performance does not guarantee future results.

Average forward 12-month equally weighted USD returns of QSP stocks with a first-quintile AB QSP score at the start of each month, relative to the equally weighted returns of the universe. The AB QSP score is calculated as follows: [(1/3) Quality {return on assets Z-score} + (1/3) Stability {-AB Adaptive Beta Z-score} + (1/3) Price {earnings/price Z-score}].

Universe is the Russell 1000 (since its inception of January 1, 1984) and the largest 1,000 US stocks in the AB research universe prior to the Russell 1000 inception.

"High-inflation periods" are when the 12-month change in the US Consumer Price Index is in the top tercile. "After Fed rate hikes" refers to 10 12-month periods of US Federal Reserve interest-rate hiking cycles. "When economic growth decelerates" refers to 17 12-month periods after the US Manufacturing PMI fell below 50.

As of December 31, 2022 | **Source:** Compustat, Federal Reserve Economic Data, Russell Investments and AB

Putting QSP to the Test: Inflation and Recessions

To test the efficacy of this approach, we conducted a historical analysis of performance during periods of macroeconomic stress from the 1970s to today.

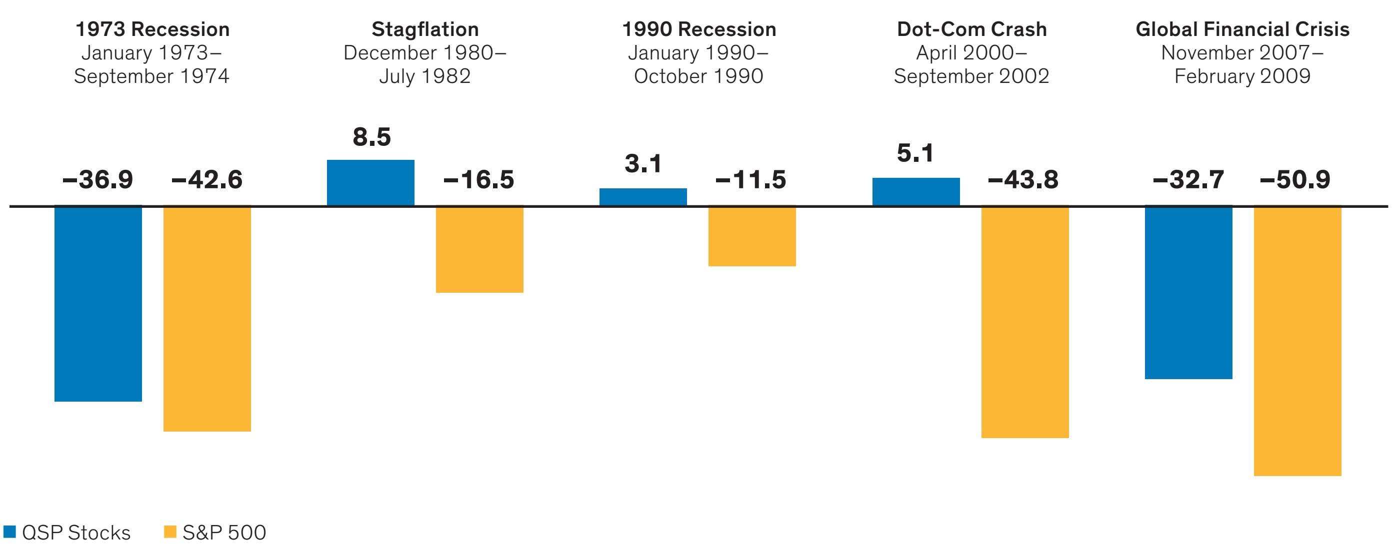
Our research suggests that companies in the top quintile of US stocks based on our QSP universe can help address three key risks investors are facing in 2023. Stocks that scored high on QSP features performed better than the broader market in past periods of extreme inflation, after interest-rate hikes by the US Federal Reserve, and in periods of slowing economic growth (*Display 5, page 7*). In high-inflation periods from 1970 through 2022, QSP stocks outperformed the S&P 500 by 6.0% annualized. QSP outperformance was even more pronounced after Fed rate hikes and during periods of slowing economic growth, at 9.0% and 5.6%, respectively.

Zooming in on specific recessions, we found that our universe of QSP stocks did well during different types of economic shocks (*Display 6*). For example, during the stagflation from 1980 to 1982, QSP stocks rose by 8.5% annualized while the S&P 500 fell by 16.5%. And in the global financial crisis, when US equities fell by nearly 51%, QSP stocks declined by 32.7%—cushioning losses during a catastrophic market collapse. We've observed similar trends in global stocks during economic slowdowns and recessions.

Fast forward to 2022, when the historical benefits of the QSP approach were seen during especially traumatic market conditions, as stocks in many regions fell by more than 20% during the year. Quality on its own fared poorly in 2022, but quality stocks with stability and attractive valuations performed better, while also mitigating risk. This performance differential was particularly striking in the case of technology. Low-volatility strategies that sought to balance risk and return through bottom-up stock selection across traditional defensives—as well as sourcing stability from sectors such as technology, financials and energy—had more levers to pull to manage volatility. We believe dynamic defensive strategies will be especially important if market volatility becomes more prevalent in the coming years (*see* "Will the Future Be More Volatile for Equity Investors," *page 9*).

DISPLAY 6: A RECIPE FOR RISK REDUCTION IN DEEP RECESSION ENVIRONMENTS

Absolute Returns, USD Annualized (Percent)



Past performance does not guarantee future results.

For the period from January 1970 through June 30, 2022. Universe is the US large-cap universe. QSP returns are average cap-weighted returns for stocks with a first-quintile AB QSP score at the start of each month. The AB QSP score is calculated as follows: [(1/3) Quality {return on assets Z-score} + (1/3) Stability {-AB Adaptive Beta Z-score} + (1/3) Price {earnings/price Z-score}].

As of September 30, 2022 | **Source:** S&P Compustat and AB

Will the Future Be More Volatile for Equity Investors?

It's hard to remember just how calm the last decade was for equity markets. But from a historical perspective, that period looks like an anomaly. If volatility becomes more common in the future, strategies that help reduce downside risk should become integral to equity allocations.

Investors were stunned by the scale of the 2022 downturn. To some extent, the pain was magnified by the relative calm of the past decade. Even considering the sharp but brief pandemic-induced crash in early 2020, global equities were less volatile in the past decade than they were over the previous 26 years. Our research shows that over the last 10 years the MSCI World Index was down only 21% of the time versus 26% of the time from 1986 through 2012 (*Display*).

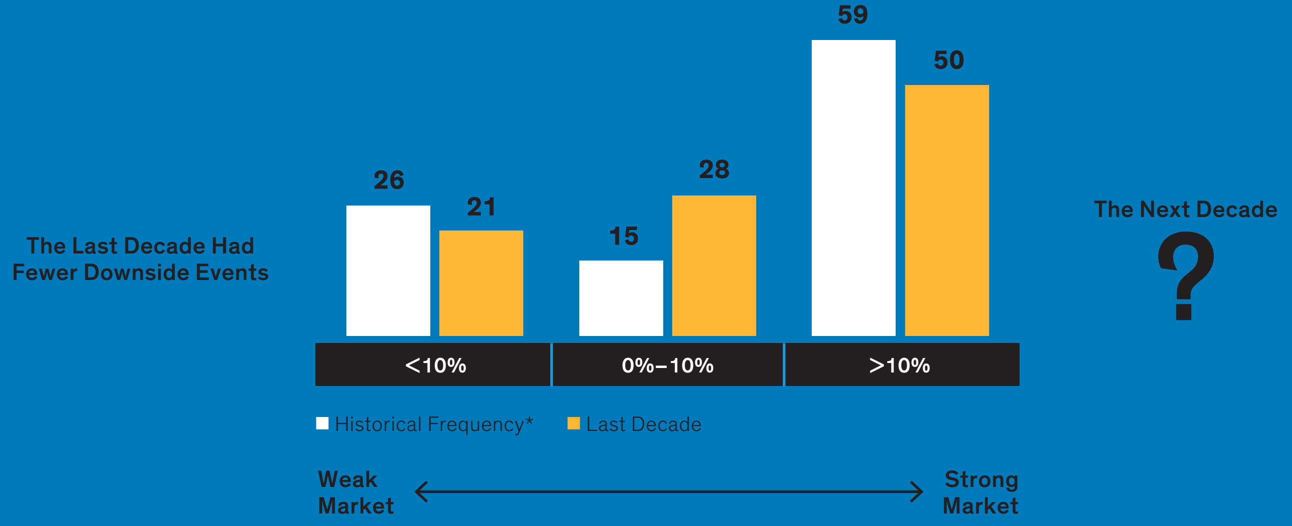
Moderate gains were practically a mirror image of that. About 28% of the time over the past decade, equities were up by as much as 10%—a historically strong run. Big rallies—with gains exceeding 10%—were less frequent over the past decade than over the longer term.

Nobody knows what the future holds. But given the current macroeconomic and geopolitical stress, as well as less support from central banks, it doesn't take a big stretch of the imagination to expect more volatility in the next 10 years than in the recent past—in line with longer-term trends.

EQUITY MARKETS HAVE BEEN RELATIVELY CALM IN RECENT YEARS

Global Stocks (MSCI World)

Frequency of Rolling 12-Month Returns (Percent)



Past performance is no guarantee of future results.

Return buckets are based on returns for the MSCI World Index. Forward 12-month returns are calculated monthly with the frequency calculated across all months in the period.

*****From MSCI World inception on March 31, 1986, to December 31, 2012

As of December 31, 2022 | **Source:** MSCI and AB

How to Use Risk Reduction to Lift Returns

In a world of more frequent and acute market volatility, equity strategies with less risk and more stable return patterns can help investors make better strategic decisions in two ways:

1. They prevent the counterproductive tendency of investors to time the market.
2. They free up risk budgets, allowing them to be used for reducing overall portfolio risk or boosting return potential.

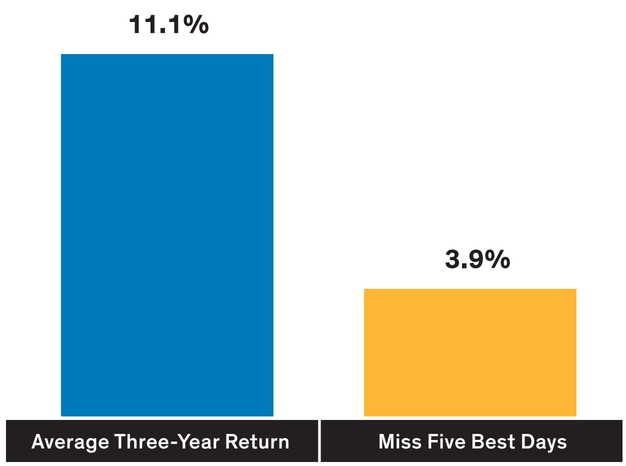
Timing the Markets Is a Dangerous Tactic

When markets turn unruly, investors may be tempted to rush for the exits. But history teaches us that this response (and most efforts to time markets) tends to be costly. Investors risk locking in losses and missing out on the market's eventual recovery.

Investors in US stocks who missed the five best days of US market performance from 1988 to 2021 would have forfeited significant returns (*Display 7*). During that period, the average annualized three-year return of the S&P 500 was 11.1%. If you extract the five best market days from that period, the return falls to 3.9%. That's a big price to pay for trying to predict market inflection points, which is extremely difficult to do. With a portfolio that falls less than the market during downturns, the pain of losses during a downturn is lessened, making it easier to stick with an allocation through turbulence.

DISPLAY 7: TIMING THE MARKET MEANS GETTING OUT AND GETTING BACK IN

S&P 500 Rolling Three-Year Returns, Annualized, 1988-2022



Past performance is no guarantee of future results.

As of December 31, 2022 | **Source:** Bloomberg, Lipper, S&P and AB

An ESG Focus Sharpens Fundamental Conviction in Stock Selection

Investors around the world are increasingly focused on environmental, social and governance (ESG) factors. As we believe ESG factors are financially material and can affect all types of companies, an ESG analysis is an important component of our fundamental research when searching for companies that score high for QSP features.

For an ESG analysis to be effective, we believe third-party metrics aren't enough. That's why we believe proprietary research should integrate ESG factors in a wider quantitative and fundamental analysis of a company. Integrating ESG involves identifying financially material ESG issues and then researching and assessing their impact on business and financial measures, such as revenues, margins, cash flows, valuations and cost of capital. Investors must then determine whether the associated risks and opportunities have been priced into the valuation of a company's shares.

For example, we studied two UK insurers, both of which benefited from favorable domestic business conditions. Both had similar ESG ratings by MSCI. But through our ESG research, we uncovered issues that MSCI didn't raise, particularly regarding the financial product safety of one of the insurers. Our research on regulatory risk concluded that this company had an above-average risk of overcharging, whereas its competitor was better positioned by virtue of its business model, which focused on price-comparison websites to market its products.

In the energy sector, US-based Xcel Energy offers a wide range of energy products and services. Our ESG research noted the positive effects of the company's efforts to decarbonize its asset base while it develops new transmission infrastructure to connect more clean energy to the power grid. Xcel's renewable businesses are also poised to benefit from incentives in the US Inflation Reduction Act. Integrating these ESG angles into our fundamental research indicated that Xcel plays an important role in energy transition, which should bolster its long-term growth potential.

After adding a portfolio company, another important avenue for developing ESG insights is engagement with management. We engaged with the management of Ahold Delhaize, one of the world's largest food retail groups, and discovered that the company is ahead of its targets to reduce Scope 1 and 2 carbon emissions derived directly from its business. The company is also taking Scope 3 emissions seriously within its supply chain—particularly those from agricultural suppliers. Through our engagements, we found that Ahold is translating its ESG commitment into action, which we believe also helps support positive business outcomes.

Freeing Up Risk Budgets

Being active doesn't always mean accepting higher risk. Because a QSP strategy tends to work best when other active approaches are less effective, it offers diversifying benefits that can be used as a source of uncorrelated alpha or for more efficient risk budgeting.

In a total portfolio, this risk reduction can be used to enhance the risk/reward trade-off.

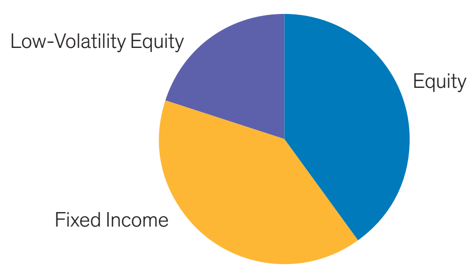
Display 8 illustrates how this can be done. To diversify the equity bucket, investors can pair an active QSP-focused low-volatility equity portfolio with other equity strategies, such as a higher-beta quality growth portfolio. This combination can potentially improve the risk/reward ratio for the overall allocation.

Investors seeking to reduce risk in their portfolios might be focused on their fixed-income or multi-asset allocations. But if they add a low-volatility equity portfolio to the mix, we believe investors can improve their overall return potential, with only a modest increase in risk. A low-volatility portfolio also offers a low correlation to bonds, which means the overall allocation is positioned to perform in changing market environments.

For many investors, anxiety about losing money is their primary concern after the recent market crises. Traditional diversification and equity-benchmark-sensitive strategies were less effective than investors expected in limiting losses during the 2022 market collapse, when almost all assets fell sharply. Today, with inflation running high and the need to take more risk to meet long-term goals, mitigating losses in falling markets takes on added importance.

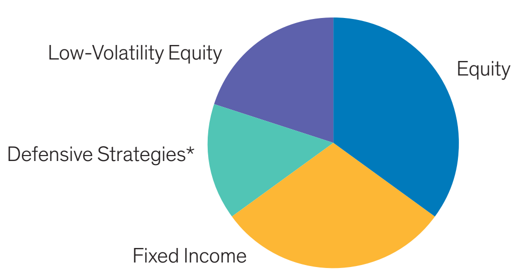
DISPLAY 8: HOW TO USE LOWER-VOLATILITY EQUITIES IN ASSET ALLOCATION

As an Equity Diversifier



- Diversifies equity bucket, as a complement to growth equity strategies
- Aims to reduce risk and to improve the risk/reward ratio
- Frees up risk budget for higher-return strategies

To Complement Other Defensive Strategies



- Potential to improve overall return
- Modest increase in risk
- Low correlation to bonds

For illustrative purposes only. There can be no assurance that the strategy will achieve its investment objectives.

*For example, multi-asset and market-neutral strategies.

Source: AB

Four Principles to Effectively Deploy Defensive Equities

The demand for a more effective, shock-resistant equity strategy has given rise to equity solutions that focus more intently on absolute risk and return. Against this backdrop, more investors are turning to approaches that seek to capture the paradoxical outperformance tendencies of high-quality, less volatile company fundamentals.

We think a strategy that explicitly focuses on QSP is the way to go. It's not easy to carry out this type of strategy, but by actively trading off between the fundamental traits of quality and stability, and remaining sensitive to valuation, we believe it's possible to construct a portfolio that can prosper in rallies and weather periodic bouts of volatility, leading to better long-term outcomes with less pain along the way. The following four principles can guide investors in creating portfolios of low-volatility stocks based on QSP characteristics.

1. **Develop a Dynamic Defense**
   Every downturn is different, so the defensive script must change accordingly. When devising a defensive strategy, old playbooks may be obsolete. Consider current market behaviors, sensitivities and new forces of change that could redefine the essence of safety.
2. **Cast a Wider Net for Stable Companies**
   Preconceived notions of how to source stability can be restrictive. Companies in sectors such as utilities, consumer staples and healthcare have typically provided stability in volatile markets. But broadening the sources of stability can help diversify risk and return potential. We've found stable companies in industries ranging from industrials to technology, which aren't typically places investors search for safety.
3. **Steer Clear of Unpredictable Forces**
   Geopolitical risk and macroeconomic developments simply cannot be predicted with certainty. So it's not prudent to take a directional bet on them as part of a defensive equity investing strategy. The war in Ukraine, election results and regulatory actions are other examples of risks that can't be forecast. Of course, these events have a big impact on companies and markets. So when researching a stock, investors should assess how significant the business's exposure is to an unpredictable risk—and avoid companies that appear to be especially vulnerable to things that can't be controlled .
4. **Don't Lose Your Nerve**
   When markets are falling and turbulent, it's easy to lose your nerve. Even the best-planned strategy may feel flimsy when losses are mounting. But selling equity positions in a falling market means locking in losses and forfeiting recovery potential. And since it's almost impossible to time market inflection points, investors who sell risk missing the best days of a rebound, which can dramatically impair long-term returns.

Lower-volatility equity strategies can help create a smoother journey that makes it easier to stay in equities. But they require clear parameters and processes for finding companies that can weather tough environments, along with an open mind to adapt to the changing conditions driving markets.

To harness the full benefits of this strategy, we believe investors must be willing to free themselves from the tyranny of benchmarks and adopt a new way of defining investment success that leans on absolute risk and return potential in the pursuit of long-term goals. In a fast-changing world, an active defensive equity allocation—rooted in research yet capable of adapting to new conditions—can provide investors with the confidence to stick with equities through volatile times and improve long-term outcomes.

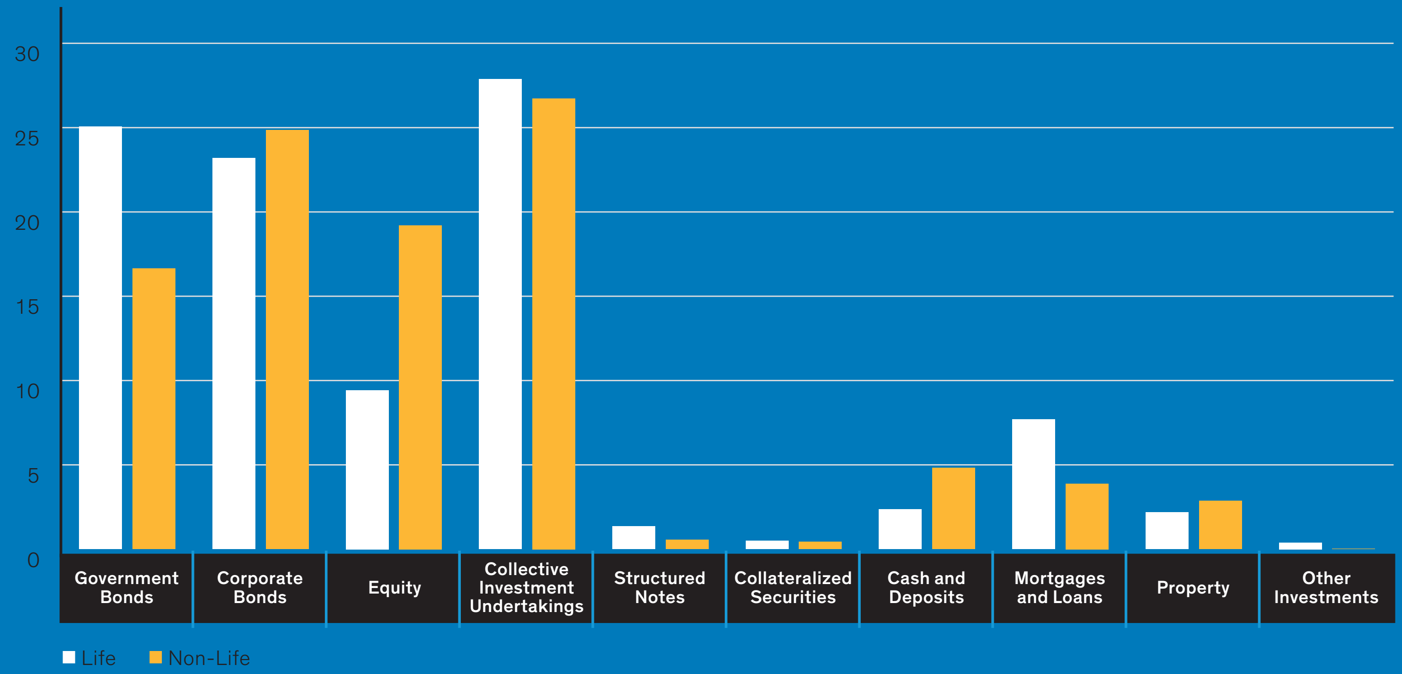
Insurers Need Insurance for Equity Market Volatility

For insurance companies, finding effective remedies for equity market volatility could help resolve a key asset-allocation challenge. While insurers are predominantly fixed-income investors, they maintain allocations to equities to help generate attractive returns.

Allocations to stocks vary in different segments of the industry. In Europe, for example, life insurers, with a longer duration and a higher predictability of outgoings, have relatively low allocations to equities—just shy of 10% on average (*Display*). Property and casualty (P&C) firms have shorter-duration outgoings, so they can afford to take a more barbelled approach. These firms tend to hold fixed-income assets with relatively short durations, which are generally more liquid and low yielding, as well as cash to support outgoings. At the same time, P&C firms also maintain a larger allocation to risk-seeking assets for return generation, with just under 20% of their assets in equities on average.

INSURERS ALLOCATE RELATIVELY LITTLE TO EQUITIES

European Insurers' Asset Allocation: 3Q 2022 (Percent)



Past performance and current analysis do not guarantee future results.

As of September 30, 2022 | **Source**: European Insurance and Occupational Pensions Authority and AB

Insurers are sophisticated investors that consider multiple objectives—not just risk and return—when making allocation decisions. We believe low-volatility equities offer two important advantages for insurers' equity allocations:

1. They reduce the volatility of their solvency position. Fixed income is predominant because its value is sensitive to the same key factor of its liabilities: interest rates. The volatility of rates is absorbed through its net impact on both assets and liabilities. In contrast, equities introduce additional volatility to the solvency position because stock market moves can have a dramatic impact on an insurer's assets, but little impact on the size of its liabilities (unit-linked aside). Lower-volatility equities can help tame instability in the solvency position in turbulent markets.

   Higher capital requirements add limitations to insurers' allocations. But within an equity allocation, insurers can benefit from taking a lower volatility approach than the broad market. Though it wouldn't diminish the capital requirement, it could help mitigate the volatility of an insurer's net asset/liability position—addressing a key sensitivity of insurers and their stakeholders.

2. They provide strategic positioning for long-term returns. Insurers are generally long-term investors. As a result, they can place greater emphasis on optimal long-term returns and don't have to be as sensitive to the short-term relative performance of their equity strategy against the broad equity market. Our analysis shows that low-volatility equities can deliver incremental improvements to long-term returns with reduced volatility, though relative returns may lag the benchmark during up markets.

The Accounting Imperative

Beyond the economic outcomes of their allocations, insurers care about accounting impacts as well. In our view, insurers that are subject to IFRS accounting (e.g., European and Asian insurers) have a clear incentive to consider lower-volatility options over and above broad market equity strategies. Historically, insurers could absorb unrealized gains and losses in other comprehensive income (OCI); i.e., through the balance sheet, rather than suffering the effects of volatility on the income statement. However, with the onset of IFRS 9 in January 2023, insurers are disincentivized from taking the unrealized gains and losses within OCI.

Now, unrealized gains and losses on equity allocations are generally taken through the profit and loss statement. But this means that equity allocations now create more income statement volatility—a big concern for numerous stakeholders. Insurers still want to improve economic returns where the risk budget allows, but they also wish to limit income statement volatility. Low-volatility equities can help resolve these concerns by curbing downside market capture, in our view.

Don't Get Tangled in Derivatives

Of course, there are other ways for insurers to combat equity risk. For example, some strategies seek to limit the downside risk of a broad equity mandate through systematic derivative overlays, which aim to exploit the strong alignment of lower-volatility equities and insurers' objectives.

However, we think these solutions are extremely complex, which may explain why they haven't generated much traction. Insurers would need to operationally account for and manage the derivatives, and thoroughly understand how those derivatives might behave in different scenarios. They would also need to assess the solvency capital requirement against the strategy. While this isn't impossible, it adds layers of complexity to an insurer's already formidable risk-management agenda.

Defensive Equities Can Solve the Conundrum

In our view, a strategy that seeks to achieve lower volatility by allocating to equities with attractive QSP characteristics can achieve the same objectives without the additional complexity that comes with derivative overlays. By strategically combining a low-vol equity strategy with an insurers' fixed income holdings, we believe an insurer can bolster its risk-adjusted return potential, position its portfolio for long-term needs and reduce short-term accounting risks.

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