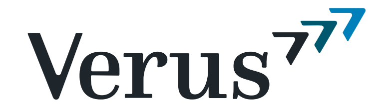
Verus

PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

MARCH 2024

Active Management Environment

Table of Contents



VERUSINVESTMENTS.COM

SEATTLE 206.622.3700
CHICAGO 312.815.5228
PITTSBURGH 412.784.6678
LOS ANGELES 310.297.1777
SAN FRANCISCO 415.362.3484

Introduction 3

Asset class environments 7

Appendix: Supplementary universe charts 44

The active management environment

Our work on active management addresses some shortfalls of the traditional analysis, which uses the median product to describe the active management universe as a whole.

These improvements and insights have allowed us to better understand product behavior and may allow for more informed selection in the future. For first-time readers, an introduction to our active-management research and methodological details can be accessed by visiting https://www.verusinvestments.com/active-management-environment-supporting-material-2/ . For those familiar with the new approach, please read on.

— Even without skilled selection, there are many cases in which active management may help investors achieve better portfolio outcomes in risk and return terms.

— Those better portfolio outcomes may come from additional return or lower risk. Not all investors have the same definition of better outcomes, and the risk/return trade-offs vary by universe.

— Adding skilled selection to the process may create additional value in portfolio construction.

— Fees remain an important part of the active management conversation. Fees and survivorship bias should be taken into account when analyzing active universes.

Using median product (median manager) performance to decide whether active management is beneficial can be misleading. This new tool can help investors make better-informed decisions.

What changed for 2024?

- The past year showed a resilient macroeconomic environment, as risk-assets performed well in the face of slowing economic growth driven by tightening monetary policy across most developed-economy central banks. Inflation continued to move lower as the year progressed, allowing central banks to communicate to the world that rate cuts are likely forthcoming, providing a tailwind for risk-assets. All major asset classes outside of commodities finished the 2023 calendar year with positive returns, an inverse from what investors experienced during 2022.

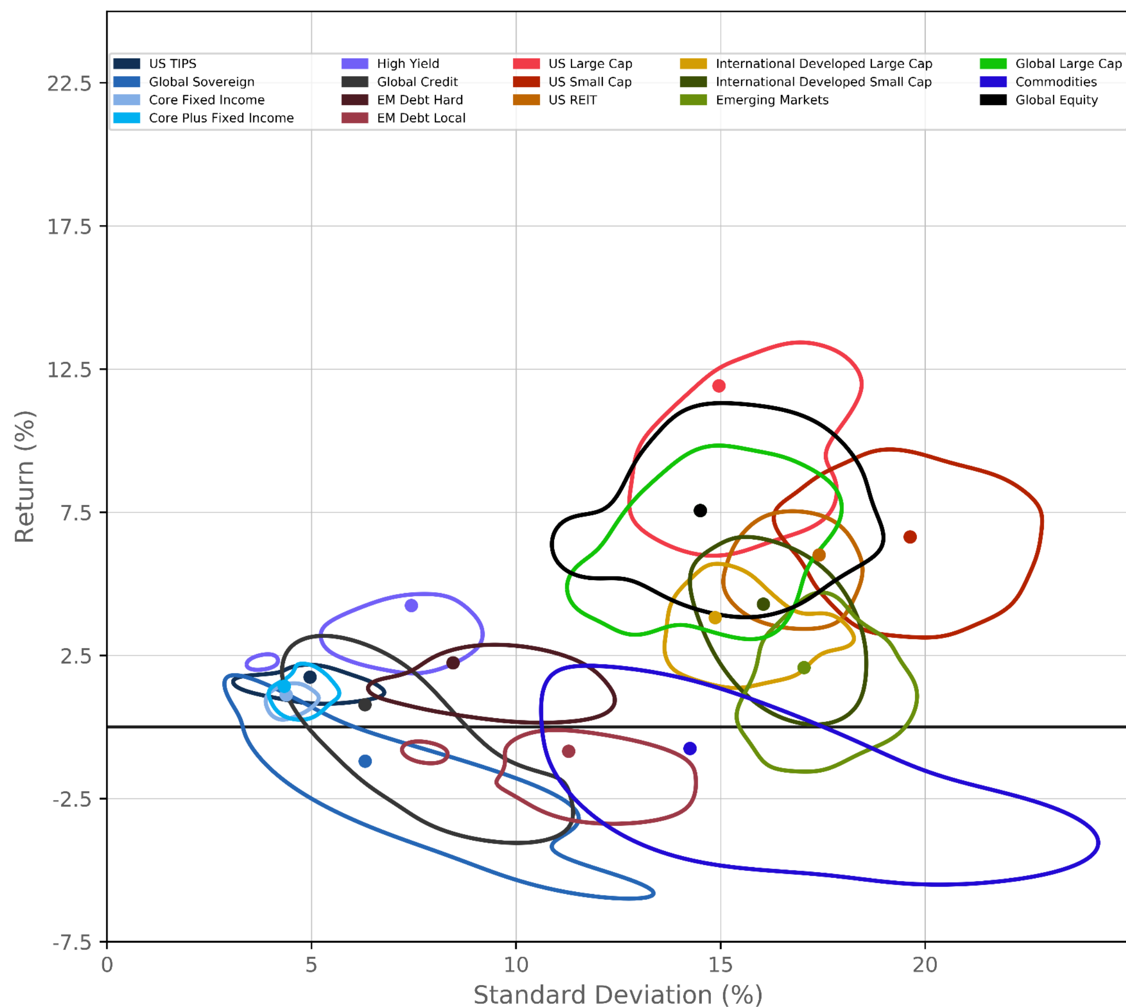
- While positive performance visibly lifted active manager performance over the 3-year period, large losses of 2022 remain a net drag across the longer 5-, 7-, and 10-year time horizons. This is especially visible across fixed income, as asset classes such as core and core plus experienced historically negative returns during 2022.

- The dispersion of manager returns across universes over the past three years has been notable, driven by significant market volatility. It is often the case that over shorter timeframes active dispersion will be wider. Environments of elevated dispersion are often attractive for skilled active managers to deliver differentiated results to their investors. In this year's release we see wider active manager dispersion over shorter time horizons, with narrower dispersion over longer lookback periods. It could be argued that recent years represent a regime shift for active managers, relative to the low dispersion bull market that occurred following the 2008-2009 Global Financial Crisis.

- In many active universes we observe that manager outperformance has been accomplished through risk-reduction rather than risk-taking, as managers are often not compensated for taking risk relative to the benchmark. This can be seen in universe shapes that are flat (active managers are, on average, not compensated for additional risk) or worse, are tilted down and to the right (active managers that took more risk than the benchmark underperformed the benchmark, on average).

The true investment opportunity set

RISK-RETURN REGIONS ACROSS ASSET CLASSES: 10-YEAR RESULTS



This represents 10-year product performance data and 75% contour areas.
Source: eVestment, Verus, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias.

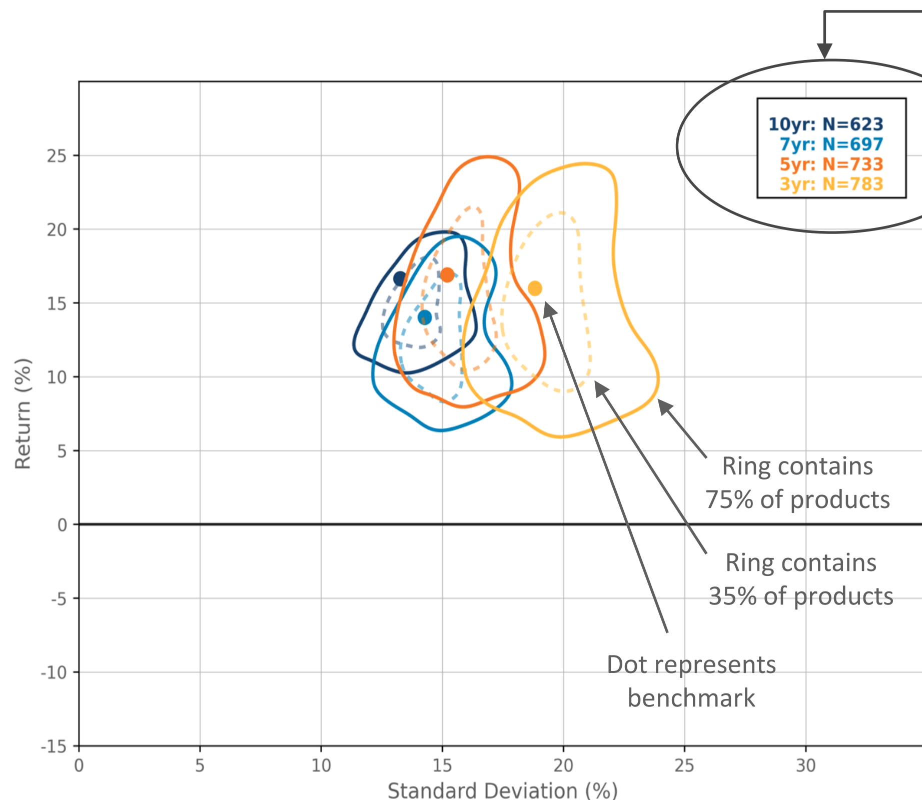
Investors often think of the investment opportunity set as a risk-return chart, in the form of single-point (dot) benchmark risk and return, and possibly single-point median product to represent active management.

However, active management universes in each asset class often have wide distributions and this traditional analysis misses the true universe characteristics. Much of the risk-return surface between -6% and 13% return and between 3% and 24% volatility is covered by various asset class options, and many parts of this space are covered by multiple active management universes.

This year, readers may notice a wider universe dispersion, especially amongst the 3-year lookback period. A volatile macroeconomic environment has led to a wider spectrum of manager returns relative to past publications.

How to read a universe chart

The movement of the universe, the change in shape, and the change of size, all provide information about product behavior.



The number of products included in the analysis provides insight into the robustness of the analysis.

The position of the benchmark relative to the universe may also change through time, representing dynamic structure changes.

Throughout this report, each asset class universe chart is placed at the same position on the page, at the same size, and with the scales of the axes identical. This allows for easy comparison between universes. **In this 2024 edition, we provide an additional slide with a full-sized universe chart for each asset class, to allow a more detailed look at active management performance characteristics**.

Asset class environments

Note: *Universes are defined at the broadest level. Products vary in terms of style and/or treatment of currency exposure. Equity universes include both value and growth styles. International universes may include both products that hedge currency exposure and products that do not hedge currency exposure.*

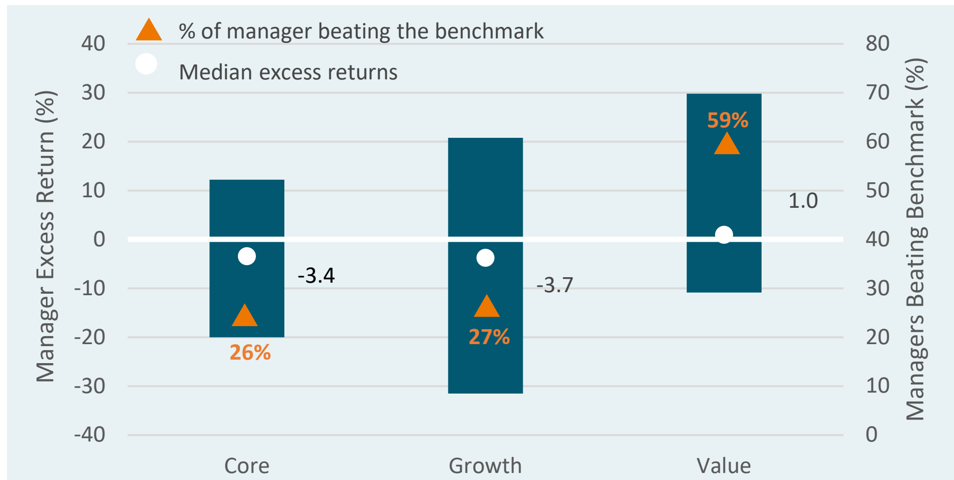
Equities – U.S. large cap

— The data indicates that U.S. large cap equity has functioned as a largely efficient asset class. The trailing 10-year horizon included an extended period of abnormally low interest rates, which likely contributed to dampened earnings volatility and a more challenging environment for active managers. That said, the trailing 3-year time period indicates that active managers have recently produced more positive results.

— Active management data suggest that some managers have been successful in producing higher risk-adjusted returns, particularly over shorter time horizons. However, the majority appear to have elevated risk in attempts to surpass their respective benchmarks. Examining the trailing 7- and 10-year universe shapes, the relationship between higher volatility and the attainment of stronger returns has been weak.

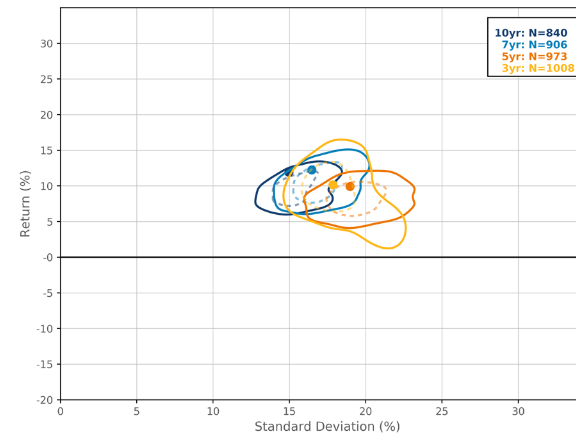
— The environment was very challenging for most large cap managers on a year-to-date basis through September 30, 2023. The median excess return for core and growth managers was -3.4% and -3.7%, respectively, with nearly 75% of the managers in each segment failing to generate positive excess return. On the other hand, value managers posted a median excess return of 1.0%, with 59% of the cohort outperforming the benchmark.

U.S. LARGE CAP UNIVERSE – EXCESS RETURNS (YEAR-TO-DATE)



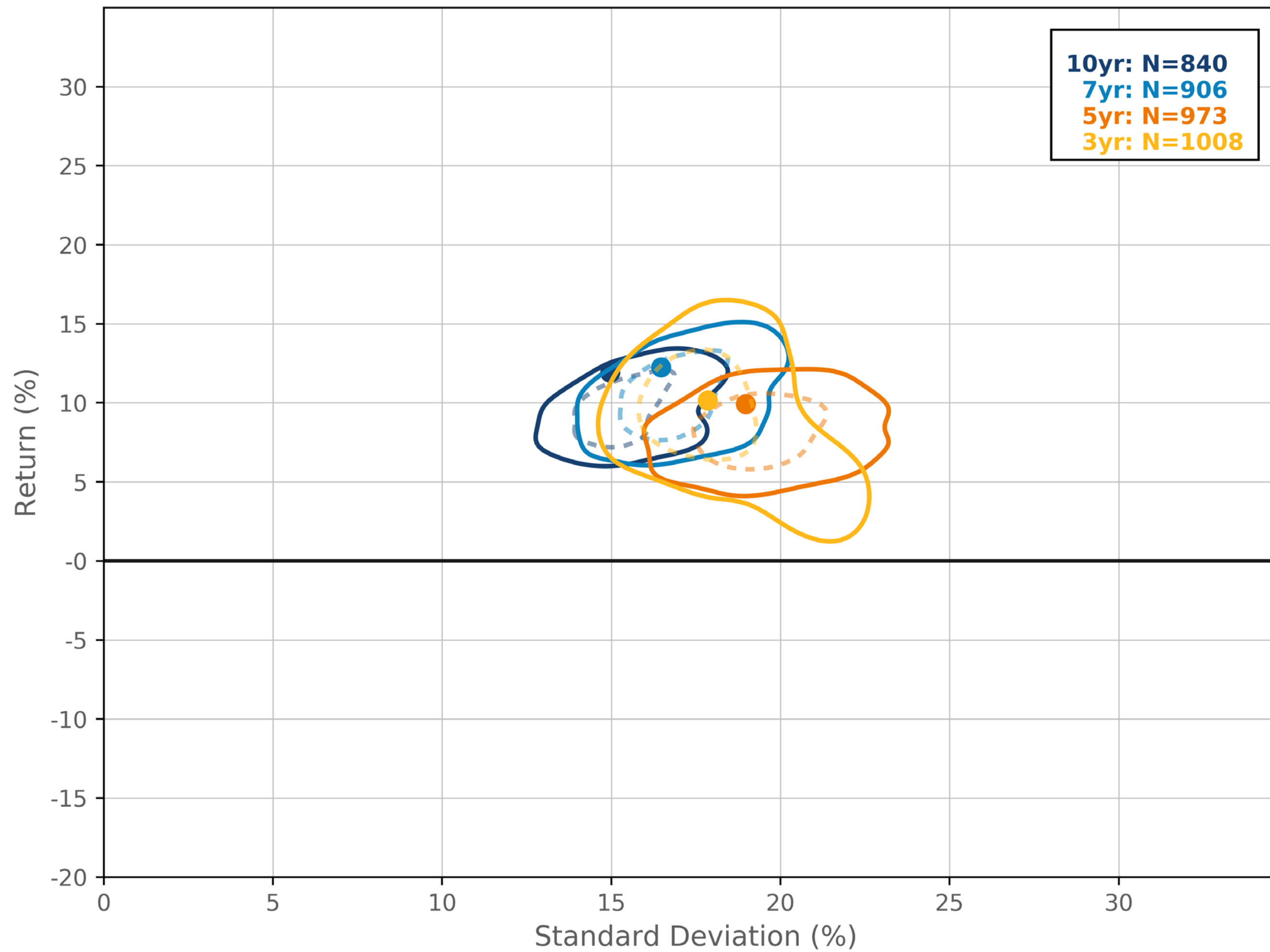
Source: eVestment, as of 9/30/23, gross of fees

U.S. LARGE CAP



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the S&P 500 Index

Equities – U.S. large cap



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the S&P 500 Index

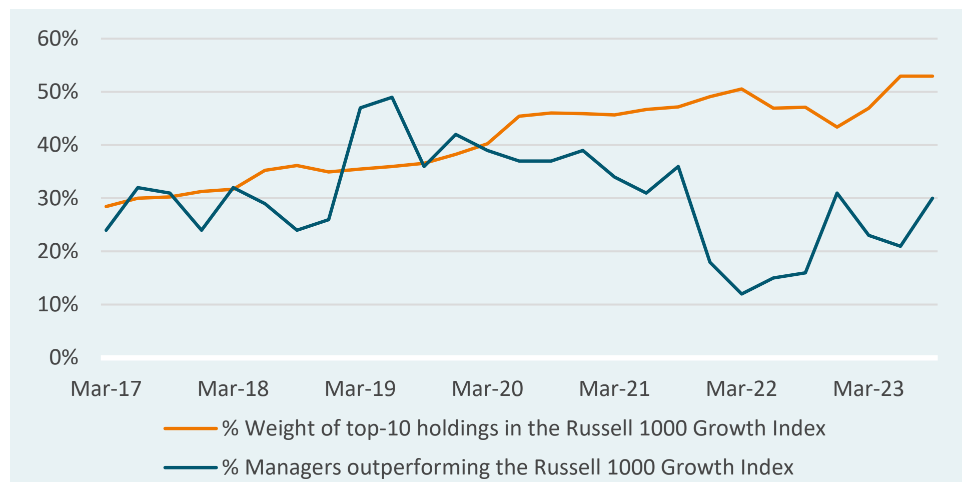
Equities – U.S. large cap growth

— In comparison to the broad U.S. large cap universe presented on the prior page, the data suggest that the growth cohort within the U.S. large cap universe has faced even greater challenges in surpassing the benchmark.

— Similar to the broad U.S. large cap universe, looking at longer time periods, the relationship between increased volatility and achieving additional return does not appear to be a strong one. However, over a shorter time period—the trailing 3-year in particular—it appears that some managers have successfully generated superior risk-adjusted returns (relative to the benchmark).

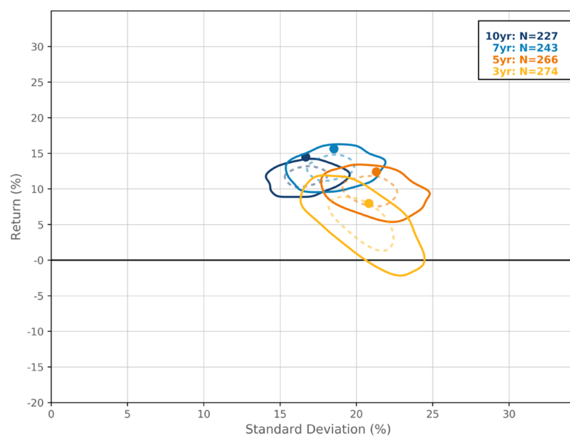
— As depicted in the chart on the left, the Russell 1000 Growth Index has become increasingly concentrated in recent years. With a small cohort of mega-cap stocks driving the market, active managers limited by position sizing are facing difficulties in outperforming the benchmark as they strive to attain diversification through active stock picking across different industries. In early 2017, the benchmark's ten largest constituents accounted for less than 30% of the index's weight. By mid-2023, the benchmark's top-10 share expanded to 53%. During approximately the same period, the percentage of large cap growth managers outperforming the benchmark over a three-year trailing period declined significantly, dropping from a high of 49% in 2019 to a low of 12% in 2022, although the percentage has since rebounded into the 20-30% range.

BENCHMARK CONCENTRATION & MANAGER OUTPERFORMANCE



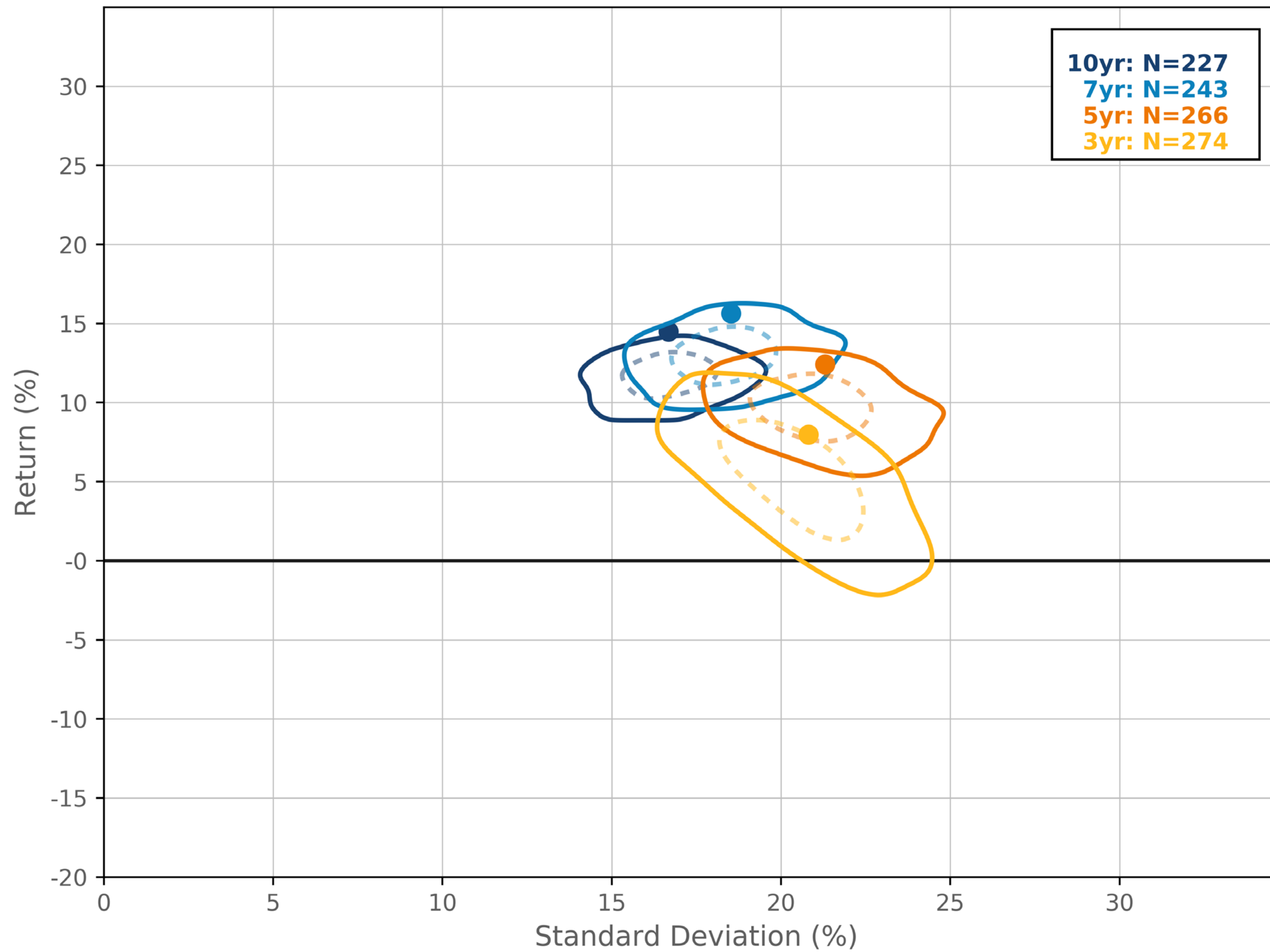
Source: eVestment & MSCI BarraOne, as of 9/30/23, 3-year rolling performance gross of fees

U.S. LARGE CAP GROWTH



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship
Benchmark displayed is the Russell 1000 Growth Index

Equities – U.S. large cap growth



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Russell 1000 Growth Index

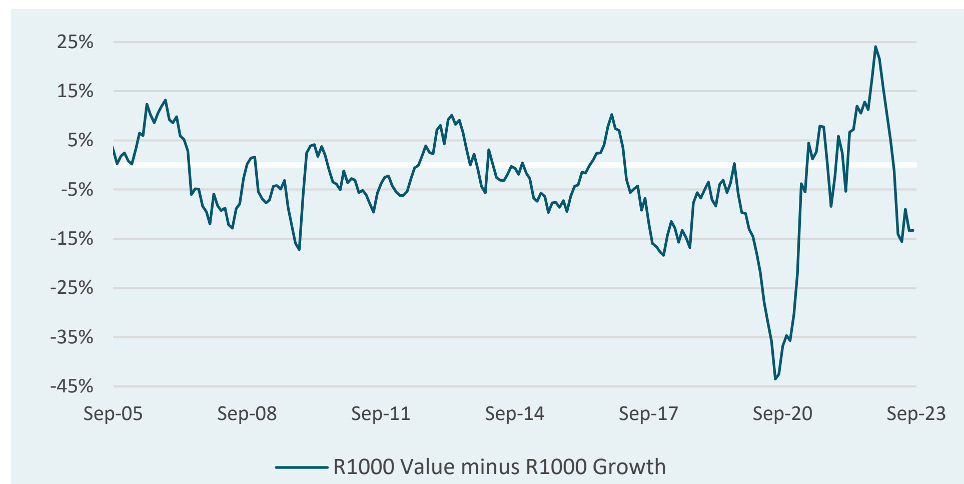
Equities – U.S. large cap value

— In contrast to the broad U.S. large cap universe, the data show that value-focused managers have been more successful in generating positive excess returns. Specifically, we observed the trailing 3- and 5-year periods as the most favorable for active large cap value managers.

— Relative to their growth counterparts, this year's report shows that large cap value managers have had greater success in exceeding their benchmarks in terms of risk-adjusted returns, especially over shorter trailing periods. Furthermore, unlike large cap growth, a significant number of value managers turned higher-than-benchmark volatility into a performance advantage, notably during the trailing 3-year period.

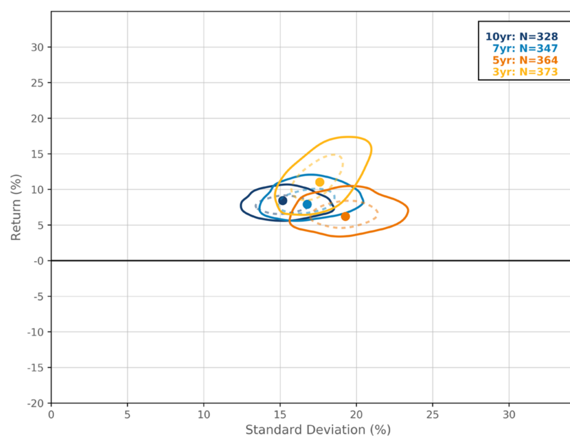
— As shown in the left chart, following a dramatic surge in 2022 that marked the first instance of value outperforming growth in many years, growth made a strong comeback in 2023. This resurgence was driven in large part by the outsized performance of the 'Magnificent Seven' stocks, which carry significant weight in the Russell 1000 Growth Index.

U.S. LARGE CAP VALUE VS U.S. LARGE CAP GROWTH (YOY)



Source: FTSE, Bloomberg, as of 9/30/23

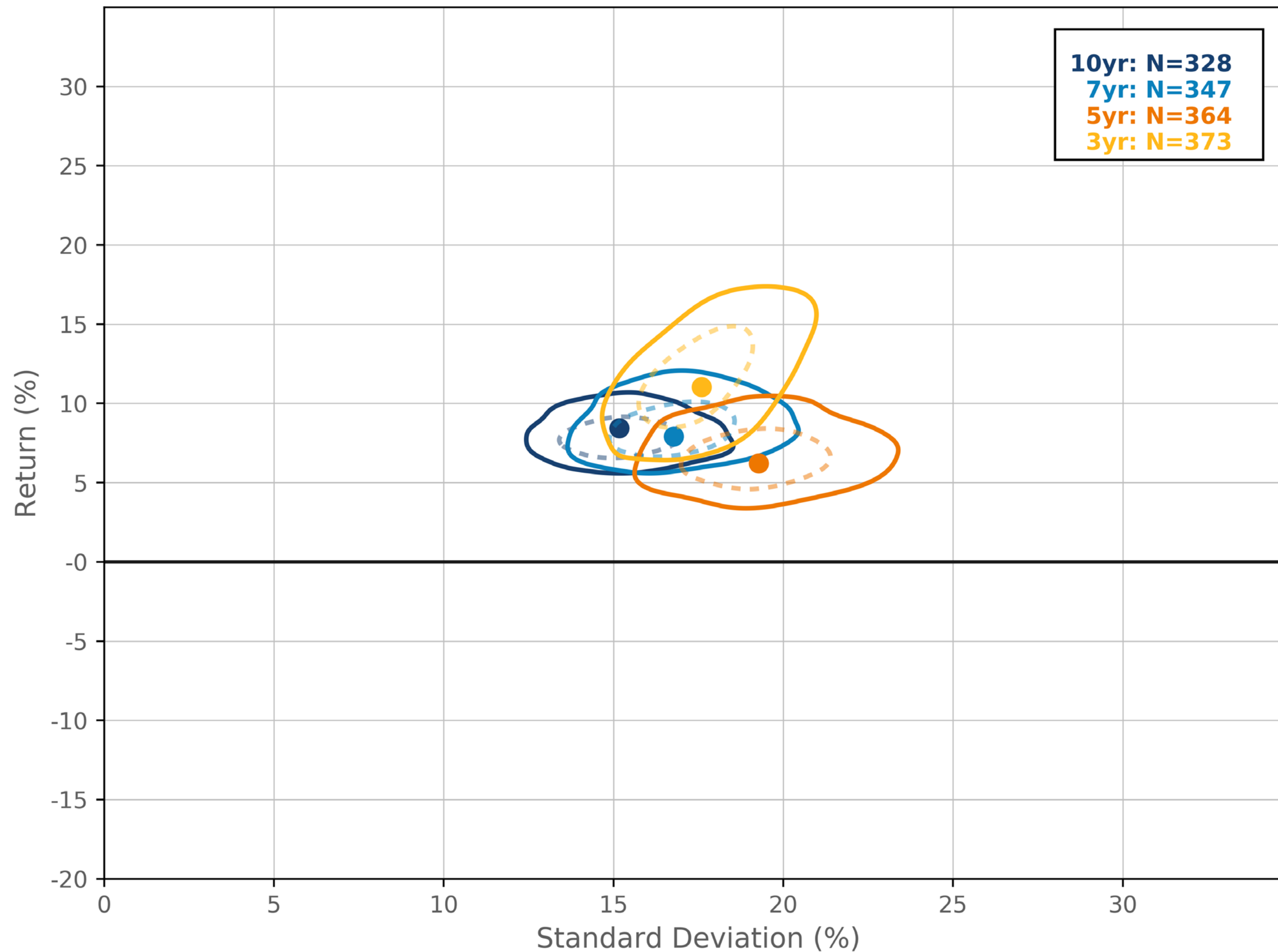
U.S. LARGE CAP VALUE



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Russell 1000 Value Index

Verus

Equities – U.S. large cap value



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Russell 1000 Value Index

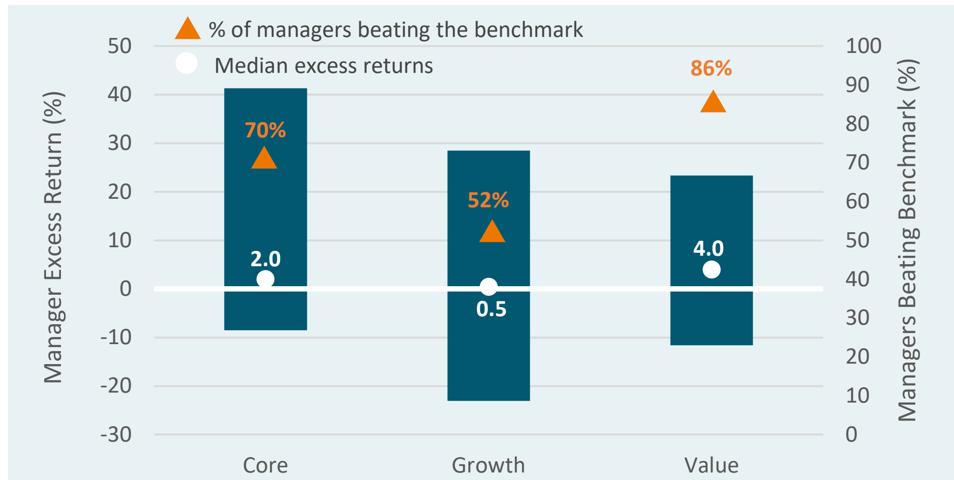
Equities – U.S. small cap

— Relative to their large cap counterparts, the evidence suggests that U.S. small cap managers have demonstrated greater proficiency in generating meaningful excess return over the benchmark during most time periods. Additionally, on a risk-adjusted basis, U.S. small cap managers appear to have achieved this more efficiently than managers in the U.S. large cap space. Broadly speaking, active management appears to have been more efficacious in this space compared to the large cap universe.

— Similar to the broad large cap universe, the evidence suggests that more recent trailing time periods (i.e., 3- and 5-year) have been more favorable to active small cap manager outperformance.

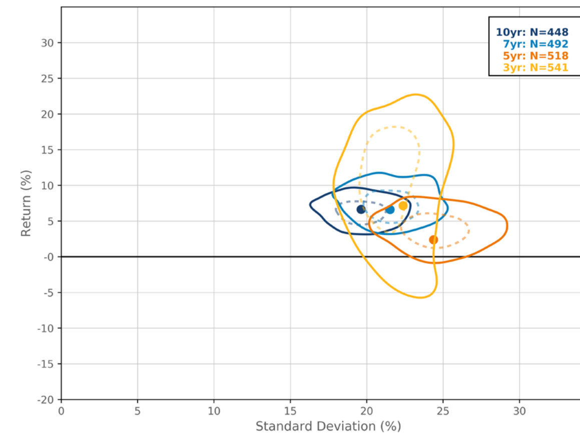
— Year-to-date through September 30, 2023, the active management environment has been significantly more attractive for small cap managers relative to larger cap, with the median core, growth, and value managers outperforming their respective preferred benchmarks on a gross-of-fee basis. Value managers had the most success beating their benchmark, with 86% of the cohort generating positive excess return.

U.S. SMALL CAP UNIVERSE –EXCESS RETURNS (YEAR-TO-DATE)



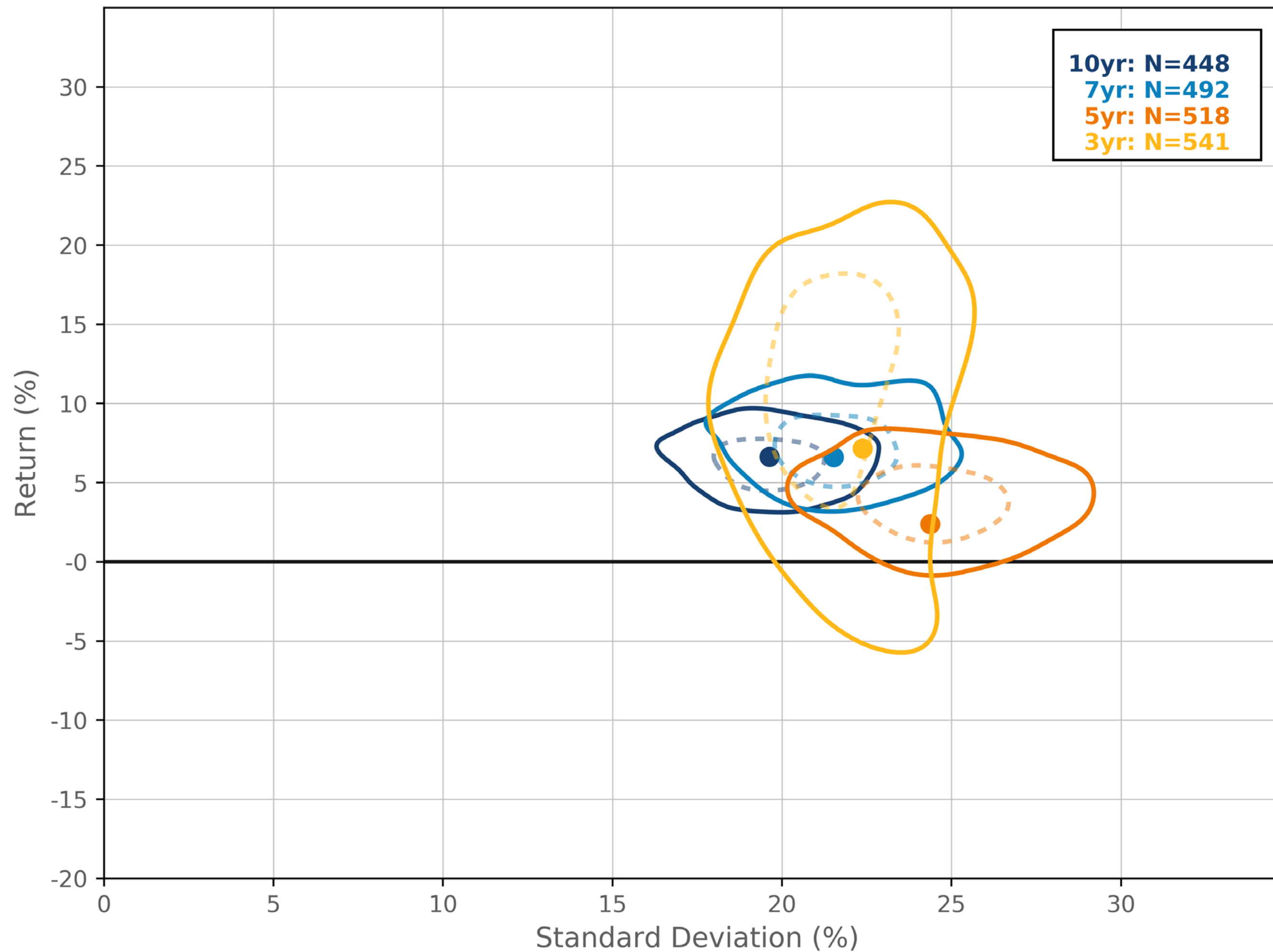
Source: eVestment, as of 9/30/23, gross of fees

U.S. SMALL CAP



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Russell 2000 Index

Equities – U.S. small cap

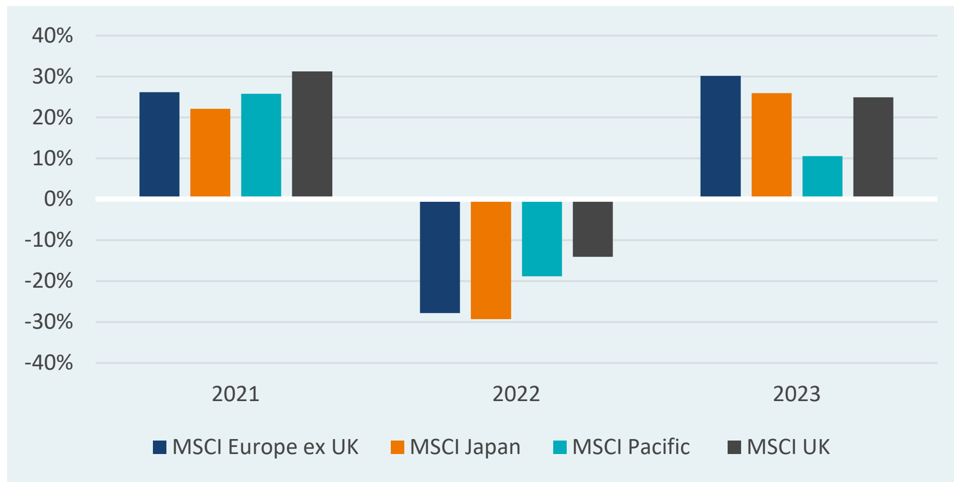


Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Russell 2000 Index

Equities – International developed

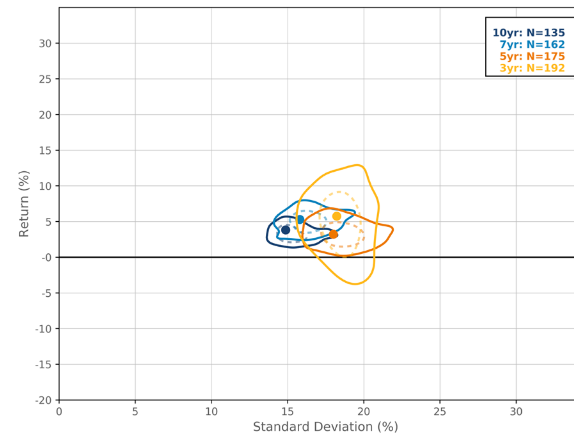
- The data reflects a generally weak relationship between incremental risk-taking and return among non-U.S. developed equity managers. For the 5-year, 7-year, and 10-year periods, a large portion of managers exhibited more risk than the benchmark. The 3-year period, which no longer includes the volatile early pandemic period, shows a more balanced spread of managers exhibiting more, or less, risk than the benchmark.
- The 3-year period illustrates a broad distribution of investment performance with a significant portion of managers, approximately half, registering negative excess return. In fact, many managers who exhibited excess risk to the benchmark generated negative absolute returns over the period, evidence of a challenging market environment punctuated by financial, macroeconomic, and geopolitical influences.
- The lefthand chart illustrates the different regional influences impacting non-U.S. developed market managers during the latest three years. During the first year, there was a fairly narrow spread of return among the regions. As market conditions became more challenging in 2022, the two largest EAFE regions—Europe and Japan—underperformed the U.K. and developed Pacific markets. This pattern reversed throughout most of 2023. Managers were forced to be nimble in regional, sector, and stock selection to be able to outperform the benchmark. When considering an allocation to developed non-U.S. markets, we believe investors should prioritize strategies with good stock selection rather than relying solely on country selection to add value.

INTL. DEVELOPED REGIONAL RETURNS



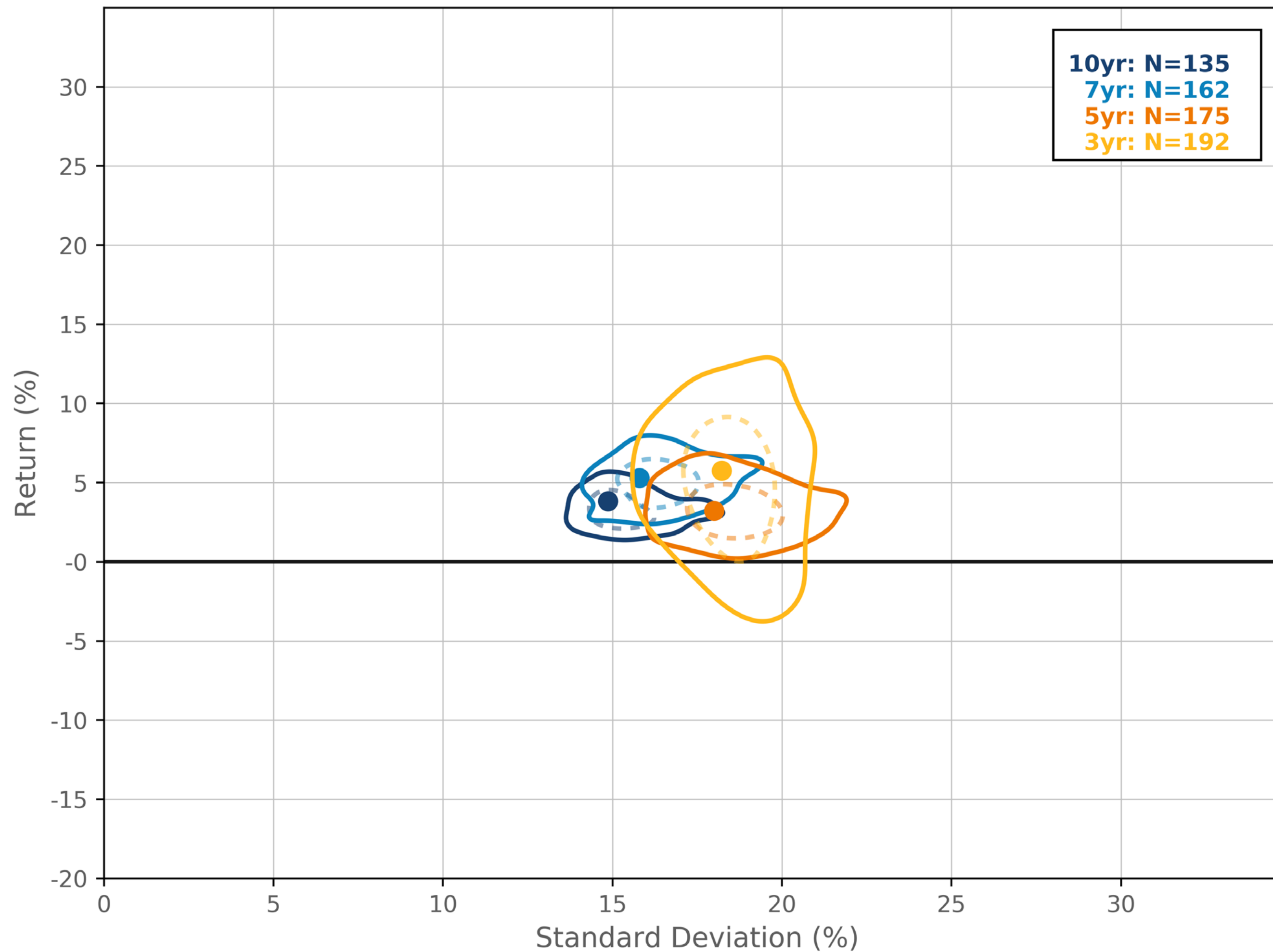
Source: eVestment, as of 9/30/23

INTERNATIONAL LARGE CAP



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the MSCI EAFE Index

Equities – International developed



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the MSCI EAFE Index

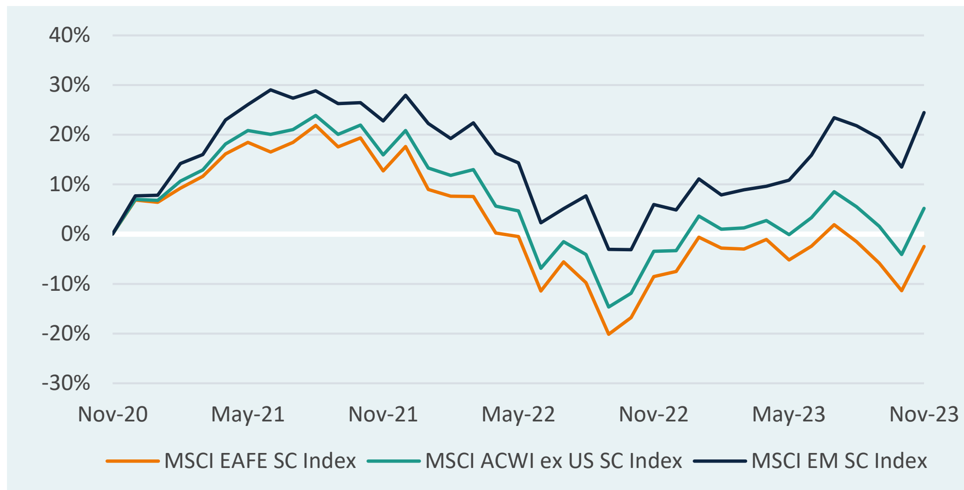
Equities – International developed small cap

— The bottom right chart highlights the negative relationship between non-U.S. developed small cap equity manager returns and the risk they are taking, as all universe shapes exhibit a slightly downward sloping posture (higher risk managers have, on average, delivered less total return). Many of the active managers that posted a standard deviation in excess of the benchmark over 3- and 5-year periods generated a negative absolute return, despite positive benchmark performance.

— Most managers with a trailing 10-year return have failed to outperform the MSCI EAFE Small Cap benchmark, though this relationship improves over shorter periods. Approximately half of all non-U.S. developed small cap managers generated positive relative performance over the last three years, although the dispersion of returns was extremely wide compared to history.

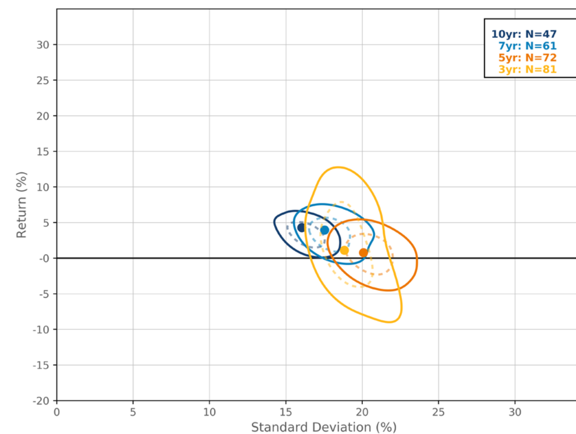
— As the lefthand chart illustrates, emerging-market small cap companies have outpaced developed small cap peers by a wide margin over the trailing 3 years. European small cap companies underperformed over the past 18 months, facing higher inflation and recession concerns compared to that of emerging economies. This regional performance dispersion creates opportunities for those developed small cap managers who have latitude to invest in these inefficient markets.

3-YEAR NON-US SMALL CAP INDEX CUMULATIVE RETURN



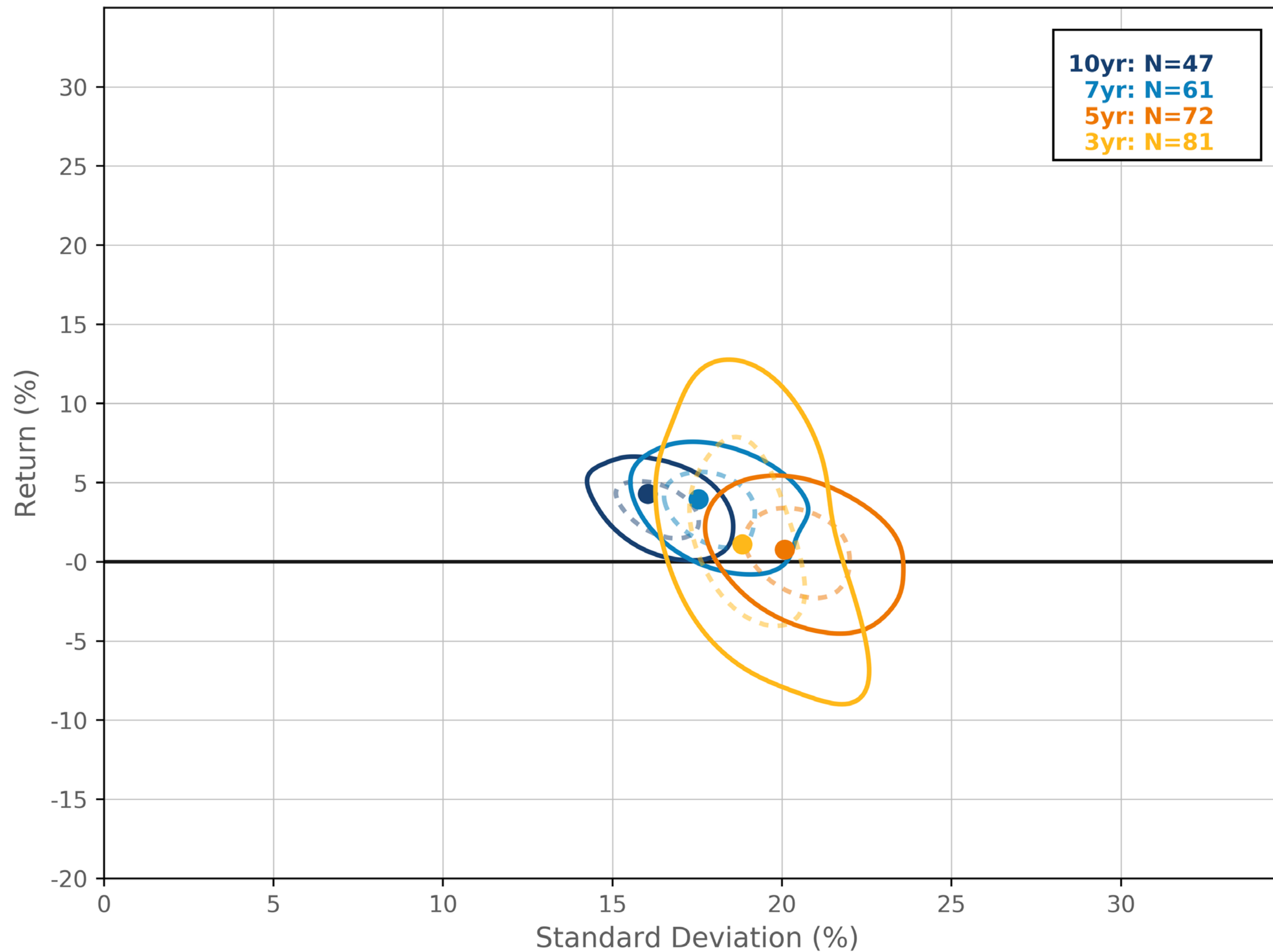
Source: eVestment as of 11/30/23, monthly returns

INTERNATIONAL SMALL CAP



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the MSCI EAFE Small Cap Index

Equities – International developed small cap

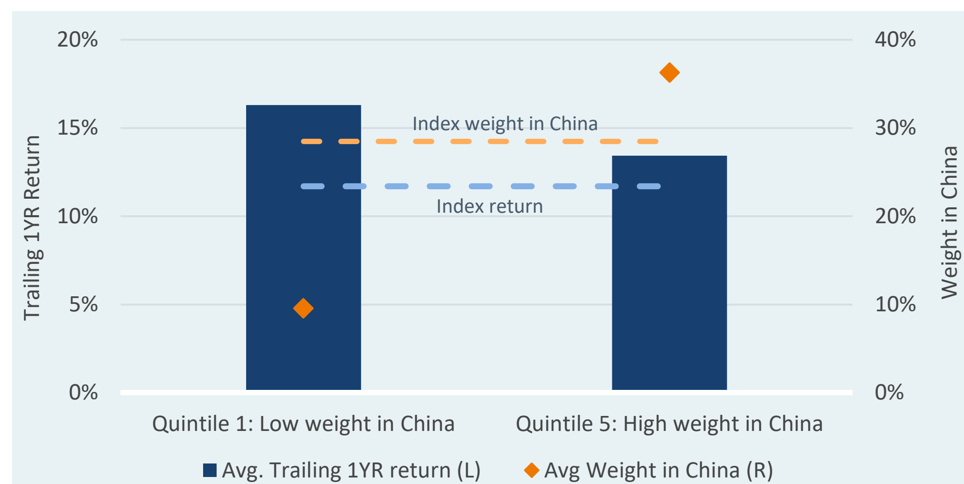


Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the MSCI EAFE Small Cap Index

Equities – Emerging markets

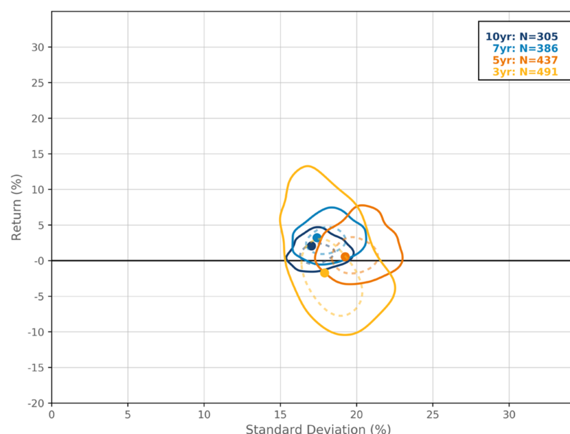
- Over the trailing 3-year period, the distribution of emerging markets equity strategy returns was wide, with top and bottom performers exhibiting an over 20% performance spread. Rising geopolitical tension and active, yet differing, monetary and fiscal policies have driven material differences in country-level performance. For example, in 2023 the MSCI China Index underperformed the MSCI India Index by over 30%.
- Managers in the universe tend to take more risk than the MSCI Emerging Markets Index and over 5- and 7-year trailing periods the relationship between incremental risk-taking and incremental return was visibly positive. However, this pattern has reversed over shorter periods. As investment managers approached 5% excess volatility to the benchmark, excess return generation was very challenged.
- Despite strong underperformance from China, the largest country constituent in the benchmark, active managers were largely able to outperform the MSCI Emerging Markets Index over the trailing year regardless of their active weight in China. The chart on the bottom left highlights how managers who underweighted China by approximately 20% benefitted from a strong performance tailwind; however, even those who maintained an overweight position in China generated positive excess return, on average.

ACTIVE MANAGER PERFORMANCE BY CHINA WEIGHT QUINTILE



Source: eVestment & Bloomberg as of 9/30/23, gross of fees

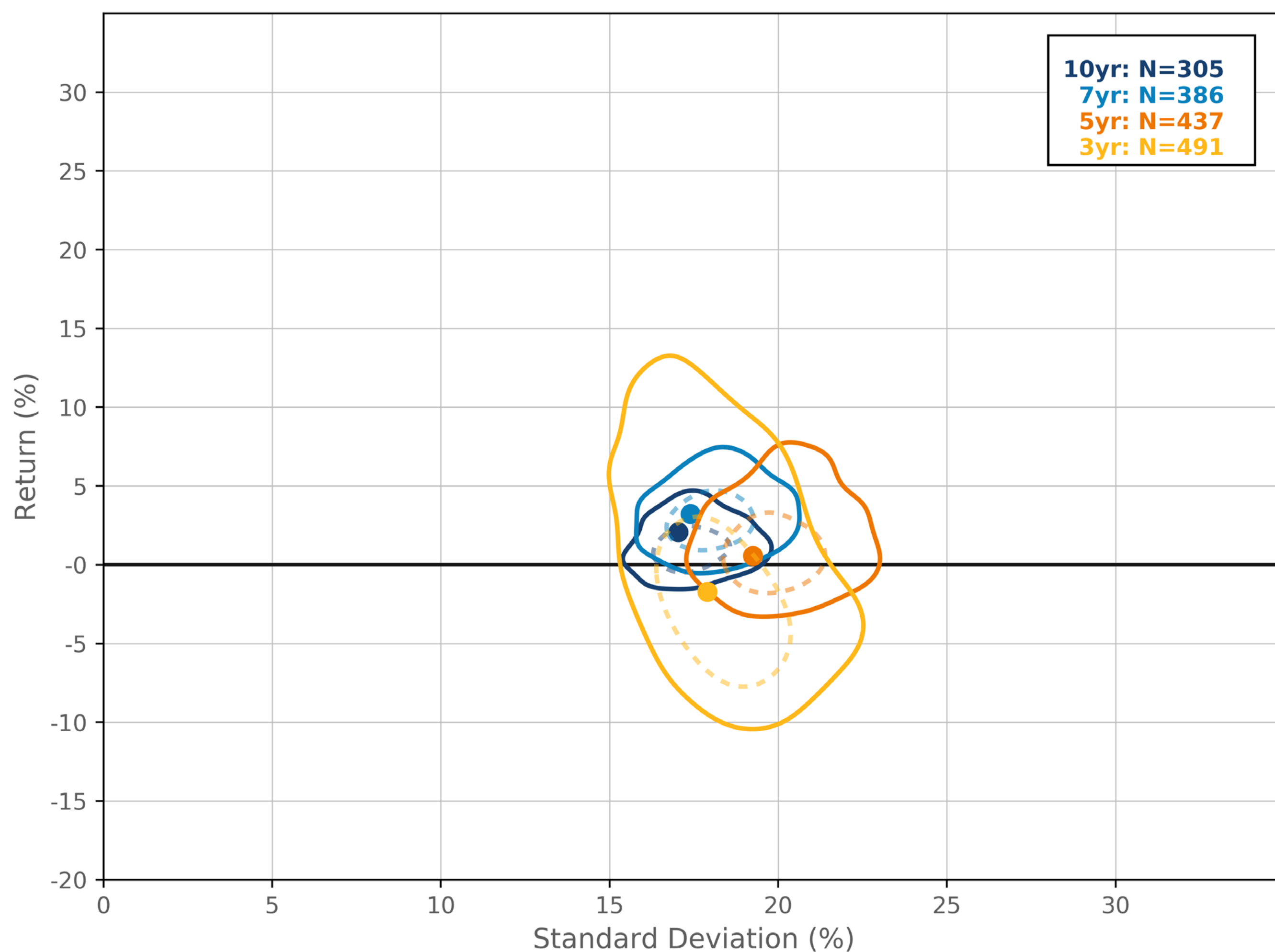
EMERGING MARKETS



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias.

Benchmark displayed is the MSCI Emerging Markets Index

Equities – Emerging markets



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the MSCI Emerging Markets Index

Equities – Global

— Over longer time horizons (i.e., 10- and 7-year), an approximately equal portion of global managers generated excess returns against the benchmark (the MSCI ACWI index). The 5-year period, and even more significantly, the 3-year period, reflect the challenges of active management of global equity with a larger proportion of managers failing to beat the benchmark.

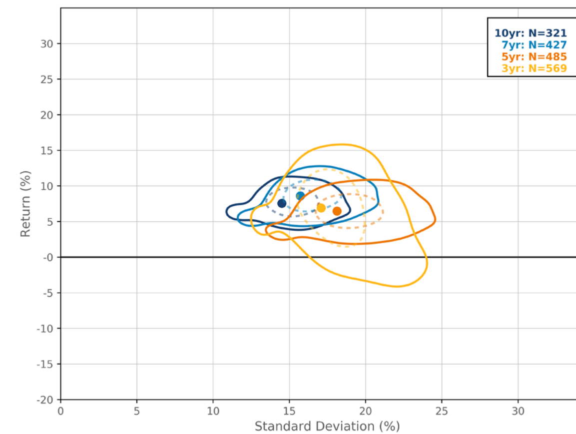
— The relationship between risk and return appears negligible when looking at short and long periods in the bottom-right chart. However, closer examination of the 3-year period reveals a distinct performance advantage to managers exhibiting lower standard deviation, indicating that risk taking has not been rewarded more recently. Balancing a portfolio across style factors is one way to reduce overall risk in the portfolio; during the last three years, managers taking that approach experienced stronger returns.

— The chart on the bottom left uses MSCI and FTSE style indices or factors to examine differing approaches to global equity management. During 2021, growth, value, and quality were rewarded about equally. 2022 brought rising interest rates, market declines, and geopolitical concerns. Value stocks, while they underperformed, were the least penalized of the styles. Growth enjoyed a recovery year-to-date 2023, although we observe that investment approaches combining growth with quality fared best.

GLOBAL EQUITY MANAGER STYLE IMPACT

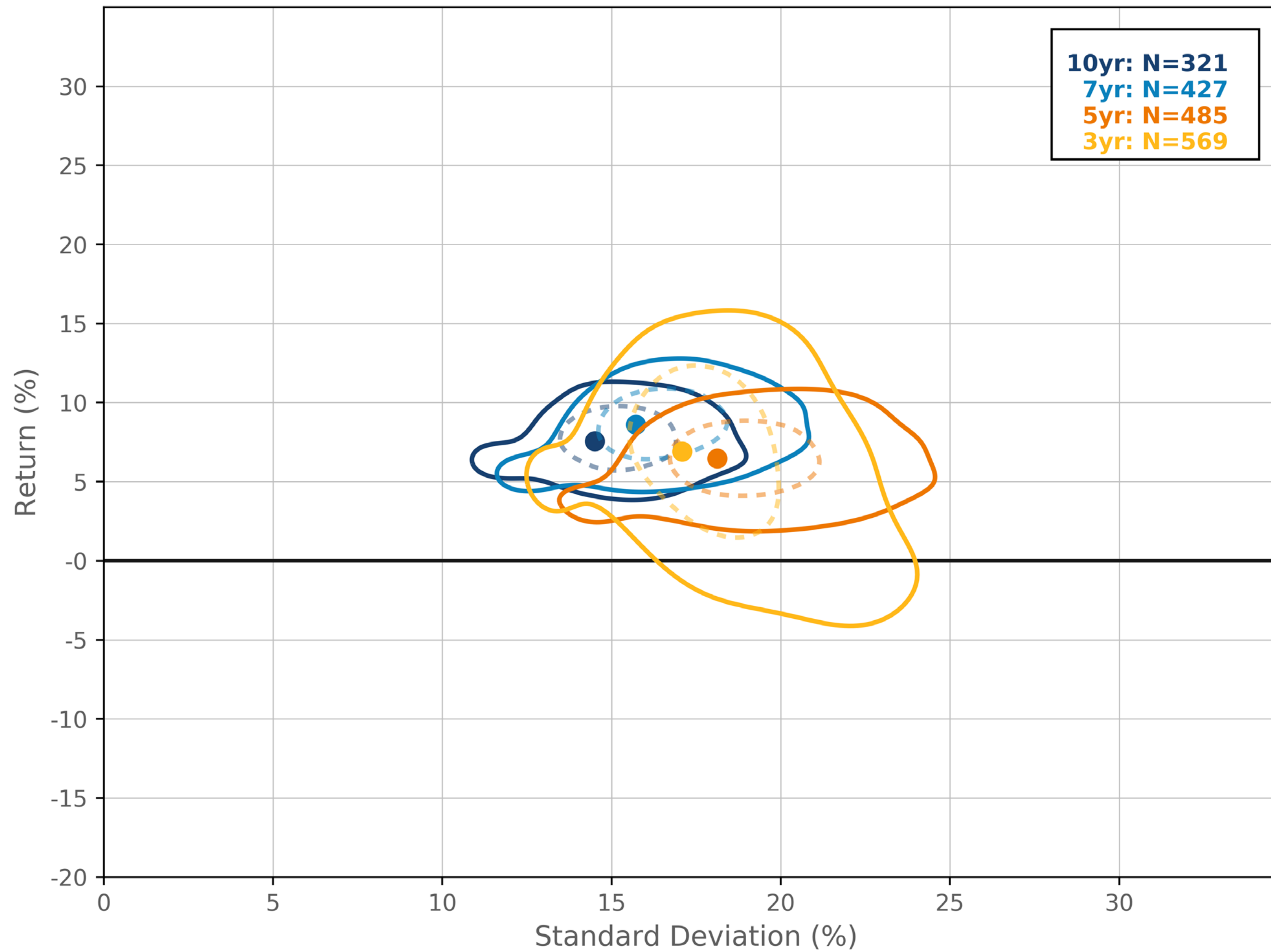
Source: eVestment as of 9/30/23, gross of fees

GLOBAL EQUITY



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the MSCI ACWI Index

Equities – Global



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the MSCI ACWI Index

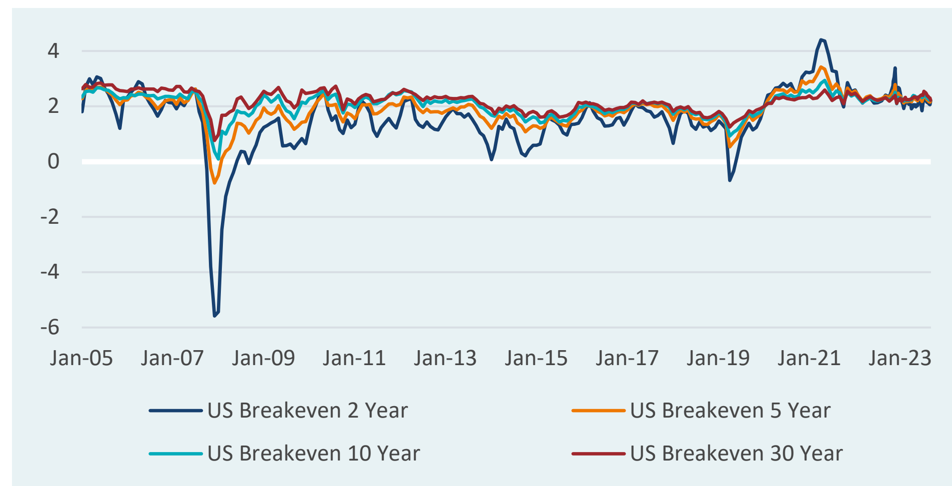
Fixed income – U.S. TIPS

— Over the 3-year period, the U.S. TIPS market experienced a significantly wider distribution of returns relative to longer rolling periods, which is reflected in the chart on the bottom-right of the page. This wider distribution reflects a significant increase in market volatility driven by changes in interest rates, as well as in both realized and expected inflation. Over the past year, U.S. inflation has fallen dramatically, leading to higher real interest rates. TIPS strategies with a longer duration tended to outperform the index over the trailing 3-year period while shorter duration strategies lagged the benchmark.

— Historically, U.S. TIPS have been a relatively efficient asset class, with a limited active opportunity set. This is reflected in a much narrower distribution of outcomes over the longer 5-, 7-, and 10-year periods, relative to other fixed income classes. While the 7- and 10-year returns show a slightly elongated shape compared to the 5-year period, there appears to be little evidence that active managers broadly possess the ability to generate excess returns per unit of risk within the active TIPS universe.

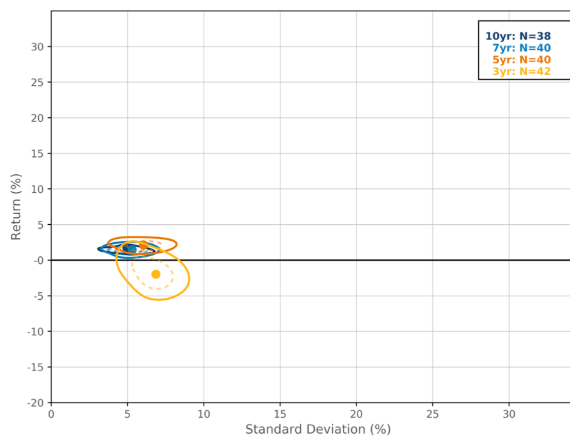
— While active management opportunities within the asset class appear to be limited, exposure to TIPS may still provide valuable diversification compared to traditional core bonds, especially for those clients concerned about potential future inflation.

U.S. BREAKEVEN INFLATION RATES



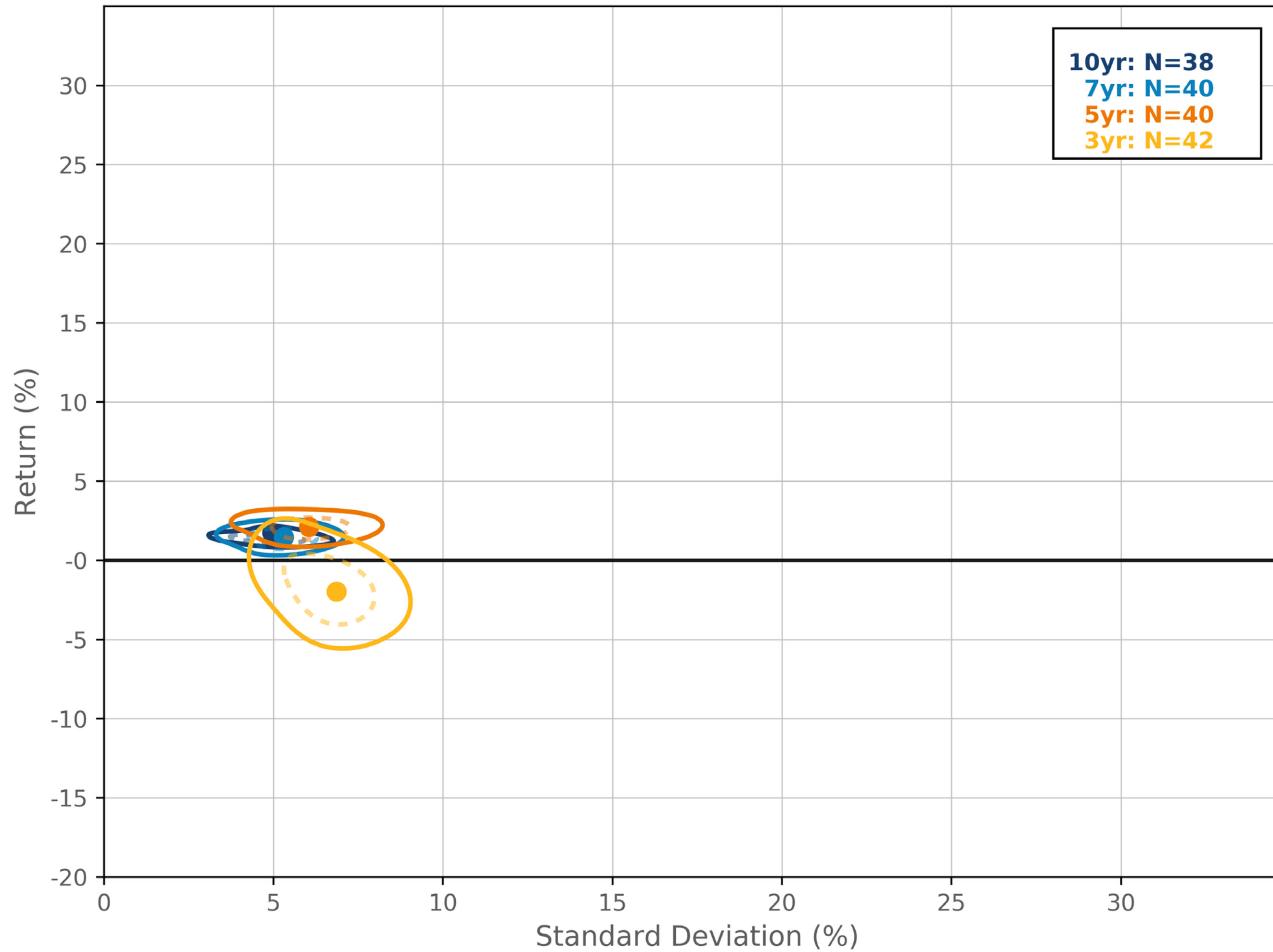
Source: Bloomberg, as of 11/30/23

U.S. TIPS



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg U.S. TIPS Index

Fixed income – U.S. TIPS



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg U.S. TIPS Index

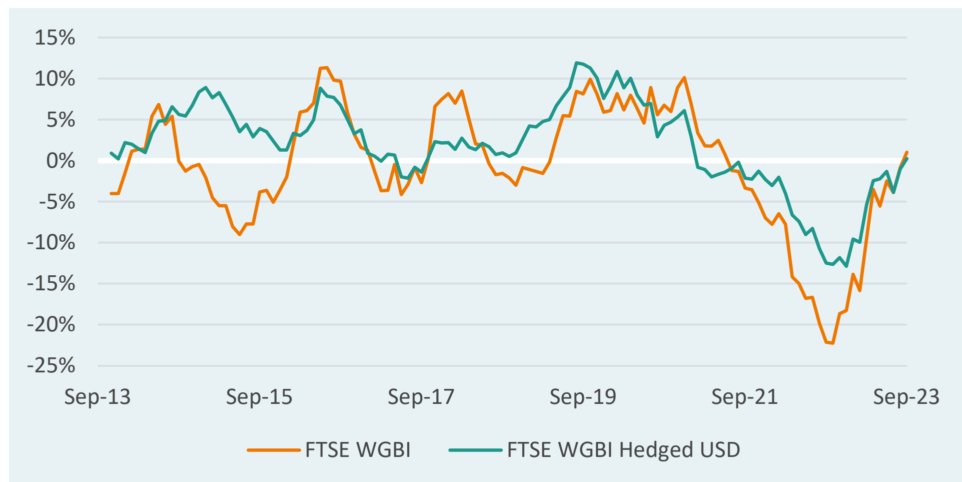
Fixed income – Global sovereign

— Within the global sovereign active management universe, dispersion amongst managers has increased significantly over the recent 3-year period relative to other periods examined. This was driven primarily by a notable increase in developed market interest rate volatility, combined with wider currency fluctuations. All periods observed show a negative slope to the universe chart, with the highest degree of dispersion and negative tilt occurring during the most recent period. This shows that higher-risk active products did not benefit from higher volatility within the global sovereign universe.

— The scope and opportunity set within the active global sovereign universe is not homogeneous, with exposures to credit and currencies varying across strategies. The extent to which active strategies deviate by credit or currency exposures relative to the FTSE World Government Bond Index (WGBI) has played a large role in dispersion within the universe recently.

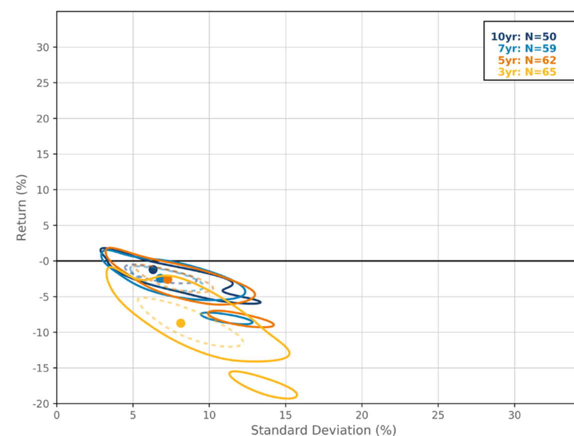
— The pace of interest rate hikes by developed market central banks slowed in 2023 with the U.S. Federal Reserve, Bank of England, and European Central Bank all pausing during the third quarter. Yields of many 10-year bonds also peaked shortly thereafter and began falling during the fourth quarter as investors began to anticipate interest rate cuts sometime in 2024. Despite continuing challenges, recent performance has improved, aided by elevated yields, declining inflation, and the potential for lower interest rates and/or central bank rate cuts, which could create a more favorable environment for active management.

12-MONTH ROLLING PERFORMANCE



Source: eVestment, as of 9/30/23

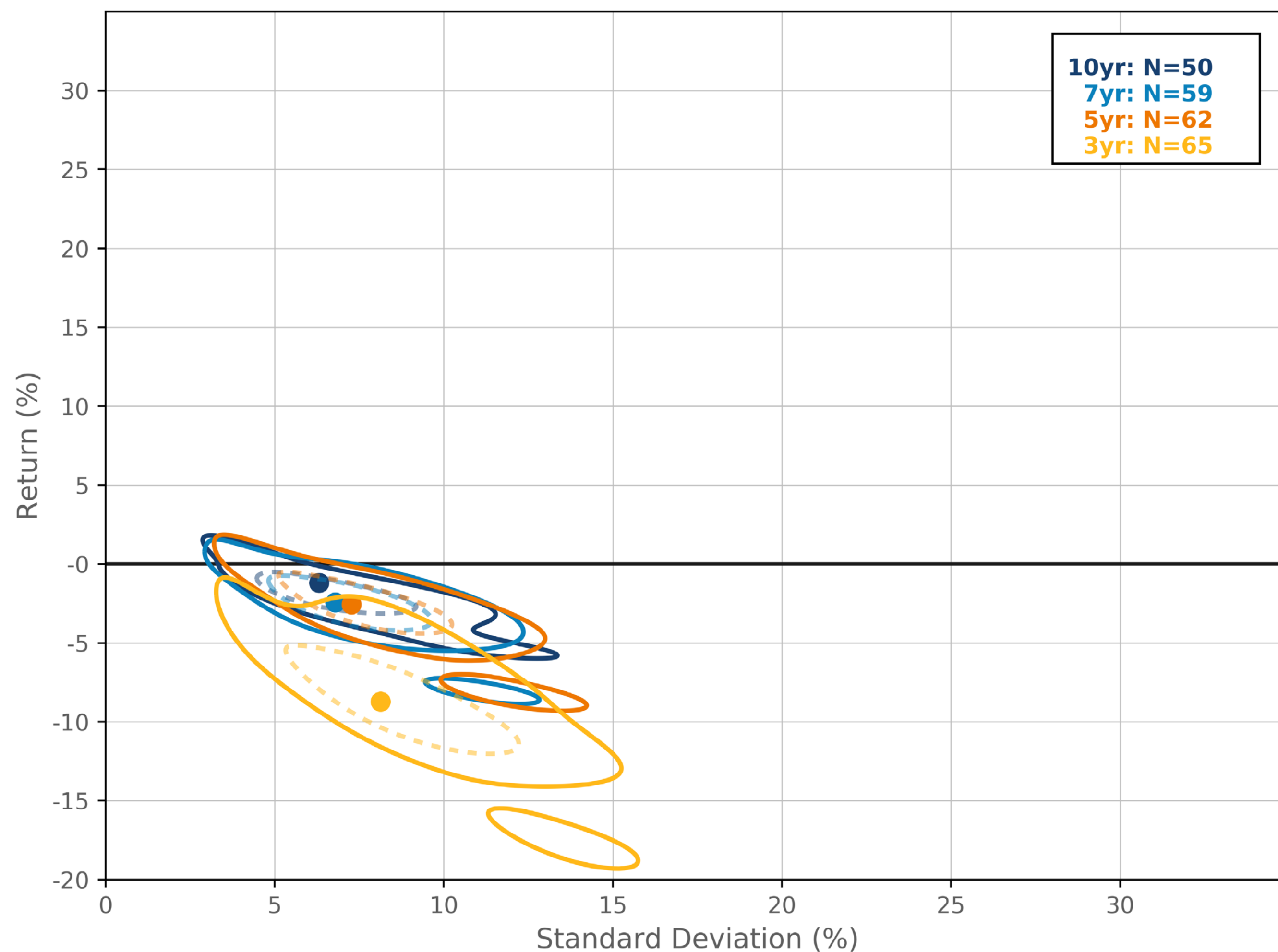
GLOBAL SOVEREIGN



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the FTSE WGBI

Verus

Fixed income – Global sovereign



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the FTSE WGBI

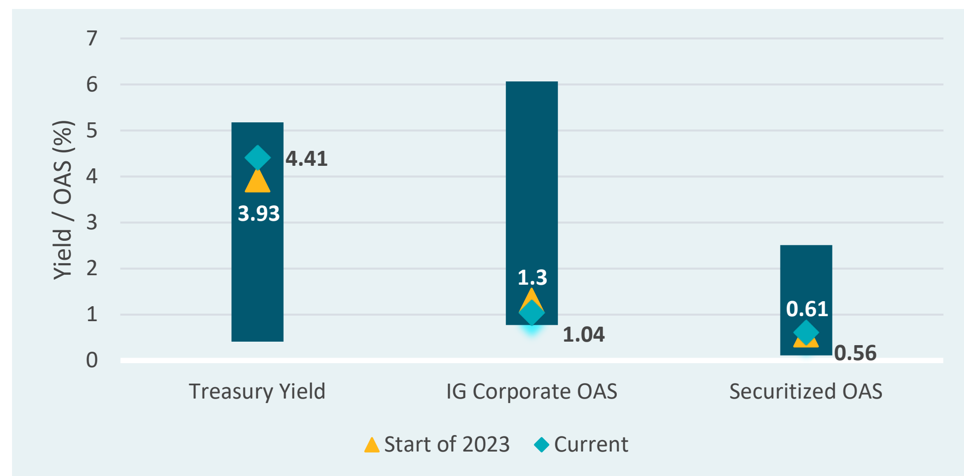
Fixed income – U.S. core

— The U.S. core universe has historically exhibited very low dispersion among active managers, with minimal differentiation from the benchmark regarding both risk and return. The distribution of outcomes over longer trailing periods has been normal, as demonstrated by the even, circular distributions shown in the bottom-right chart. Historically, the core universe has exhibited no tilt, indicating a minimal relationship between additional risk and additional return. Over the 3-year period, the universe has shown a negative tilt, indicating that managers who took less risk than the benchmark *outperformed* the benchmark.

— Year-to-date, there has been minimal variation in performance across the components of the U.S. Aggregate index. While the U.S. Treasury yield component increased by roughly 0.50%, the Federal Reserve began signaling an end to rate hikes that dominated market returns in 2022. This, combined with minimal spread movement in both the corporate and securitized components, led manager performance to be dominated by their duration positioning relative to the index.

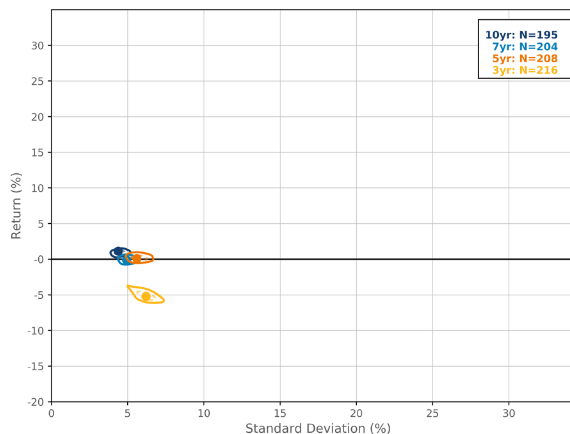
— Recently, the U.S. Aggregate index suffered deeply negative absolute returns, which impacted the entirety of the manager universe over the 3-year period. Over longer periods, the universe showed both positive and negative absolute returns, with most managers underperforming the benchmark over the 10-year period on a net-of-fees basis. Despite limited product dispersion, we believe that some active U.S. core strategies are well-equipped to effectively manage risk and liquidity in market drawdowns.

U.S. AGGREGATE BOND INDEX SECTOR YIELD/OAS RANGES SINCE 2000



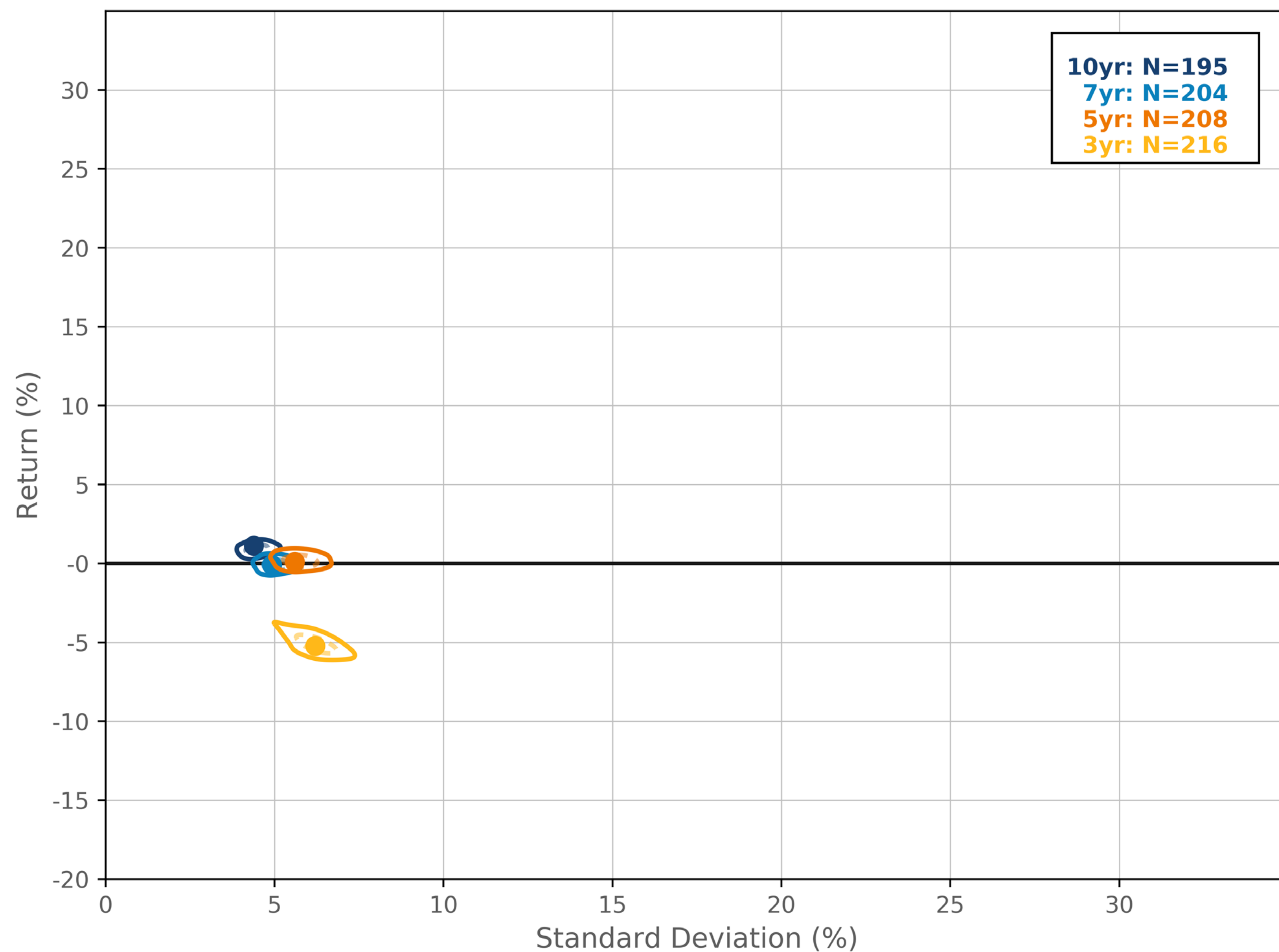
Source: Barclays Live as of 9/30/23.

U.S. CORE



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg U.S. Aggregate Index

Fixed income – U.S. core



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg U.S. Aggregate Index

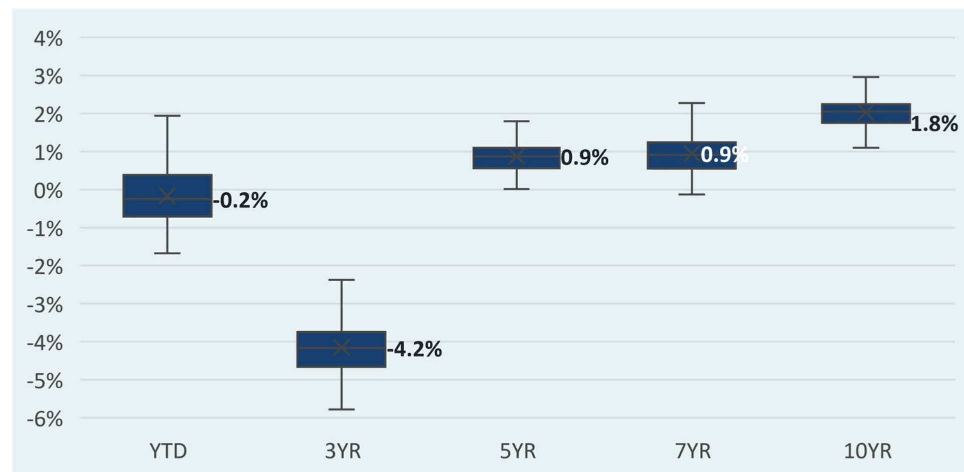
Fixed income – U.S. core plus

— Over the 3-year lookback, the U.S. core plus asset class has reflected negative returns on an absolute basis in tandem with the core bond space. This asset class was also impacted by deeply negative performance in 2022. Unlike most previous periods where nearly all active managers took on greater risk than the benchmark, with the aim of increasing returns, the past three years have been unique. Many managers reduced risk in credit and securitized to take advantage of higher yields on treasuries, an approach that was not possible in the recent low-rate environment.

— Historically, core plus managers have typically underweighted U.S. Treasury and government bonds and overweighted positions in spread sectors, including out-of-benchmark allocations to high yield and emerging market debt. Due to elevated market volatility in the trailing 3-year period, less dynamic core plus managers that leaned too far into or away from credit risk over the entire period experienced underperformance that hampered relative returns. Additionally, over the longer 5-, 7-, and 10-year periods, more dynamic core plus managers have been able to outperform the benchmark and deliver positive absolute returns.

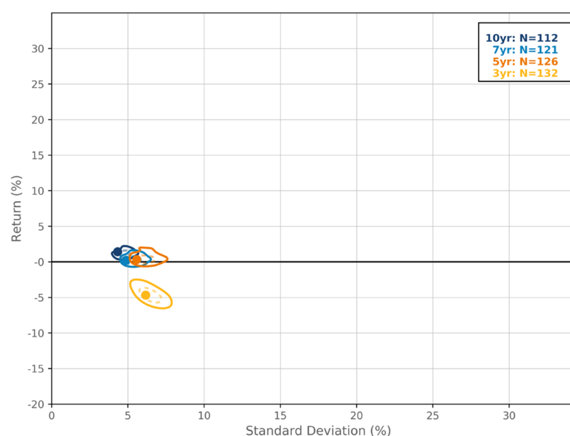
— While dispersion among U.S. core plus strategies has been relatively narrow, markets environments such as what was experienced in 2023 have strengthened our belief that quality active core plus strategies may be well-equipped to effectively manage liquidity and avoid idiosyncratic risks. This can often be achieved through diligent security selection and sector rotation, as different market environments can reward different components of the universe.

CORE PLUS ACTIVE MANAGER UNIVERSE EXCESS RETURNS



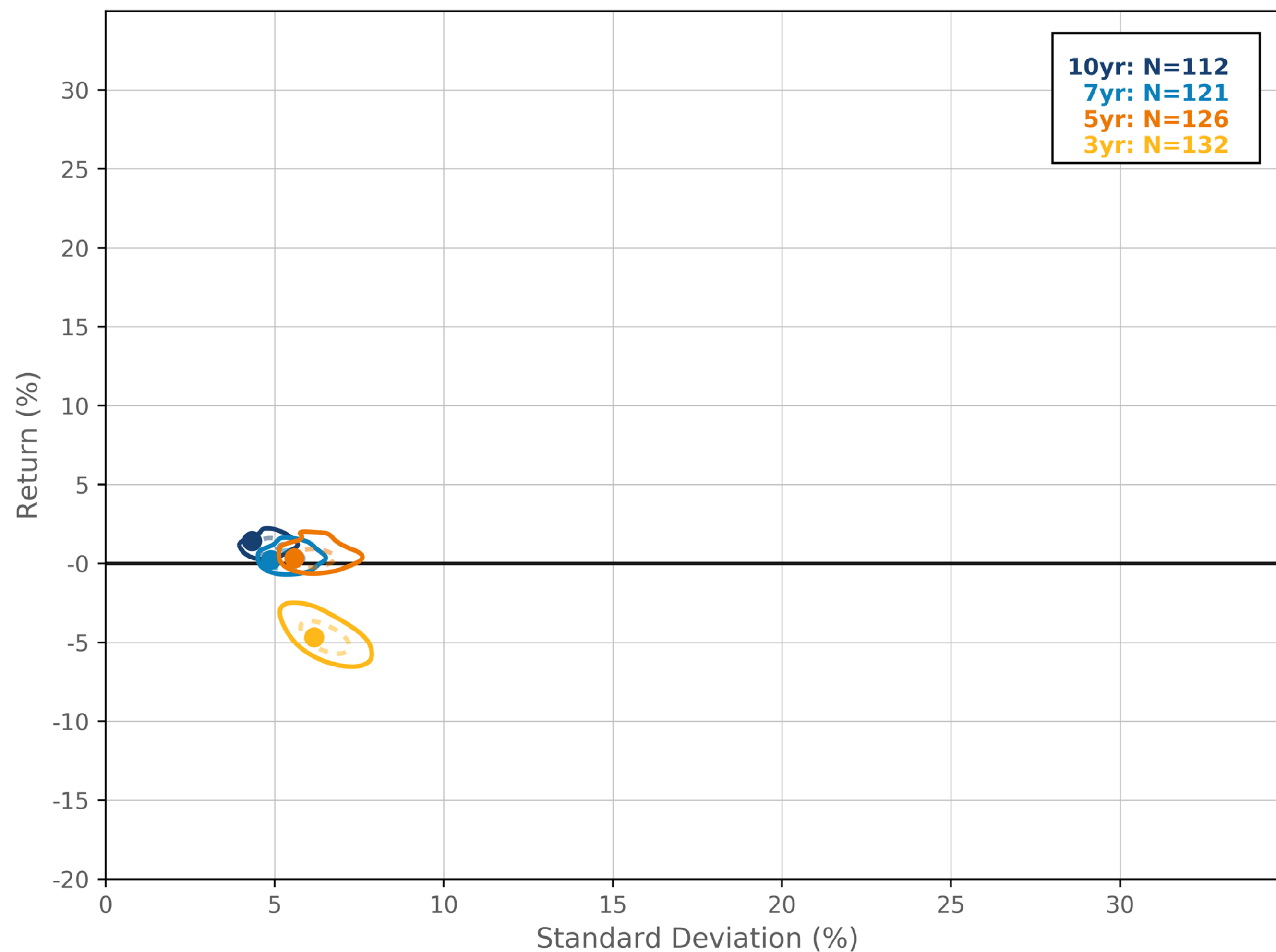
Source: eVestment, as of 9/30/23, Benchmark: Bloomberg US Universal, gross of fees

CORE PLUS



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg U.S. Universal Index

Fixed income – U.S. core plus

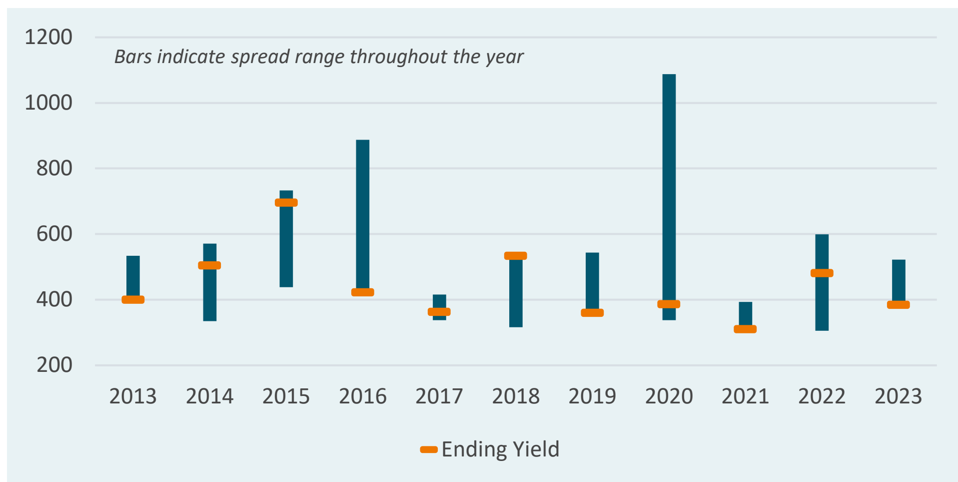


Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg U.S. Universal Index

Fixed income – U.S. high yield

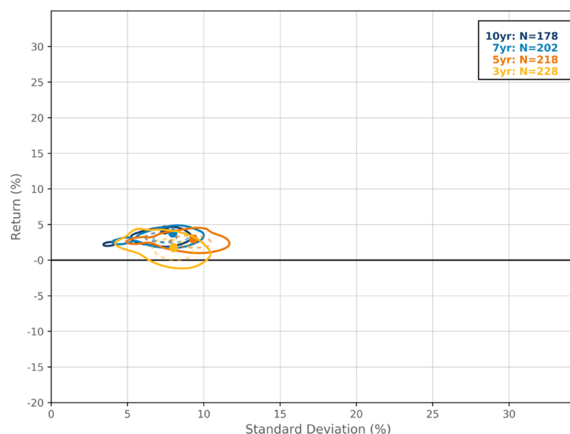
- Historically, actively managed high-yield strategies tend to demonstrate greater dispersion around the benchmark compared to more interest rate-sensitive core and core plus products. However, more recently over the shorter 3-year period, dispersion of both risk and return within the universe has fallen. In terms of performance, during the 3- and 5-year periods, dispersion around the benchmark was symmetrical, indicating the number of strategies adding value was generally in line with the number of strategies underperforming the benchmark. Strategies that were positioned with lower duration were more likely to outperform in that environment. Over the longer 7- and 10-year periods, the benchmark appeared at the top of the universe with few strategies succeeding in outperformance.
- Over the 3-year period, the universe chart was slightly downward sloping, suggesting that those managers who took on more risk than the benchmark underperformed in total return. Over the longer-term 7- and 10-year periods, the universe chart was relatively flat with no discernible relationship between added risk and added return.
- Exposure to high yield has the potential to both increase diversification and add returns to traditional core fixed income portfolios while benefiting from skilled managers who can identify bonds with attractive valuations and positive fundamentals, while avoiding deteriorating credits.

HIGH YIELD OPTION ADJUSTED SPREAD RANGES



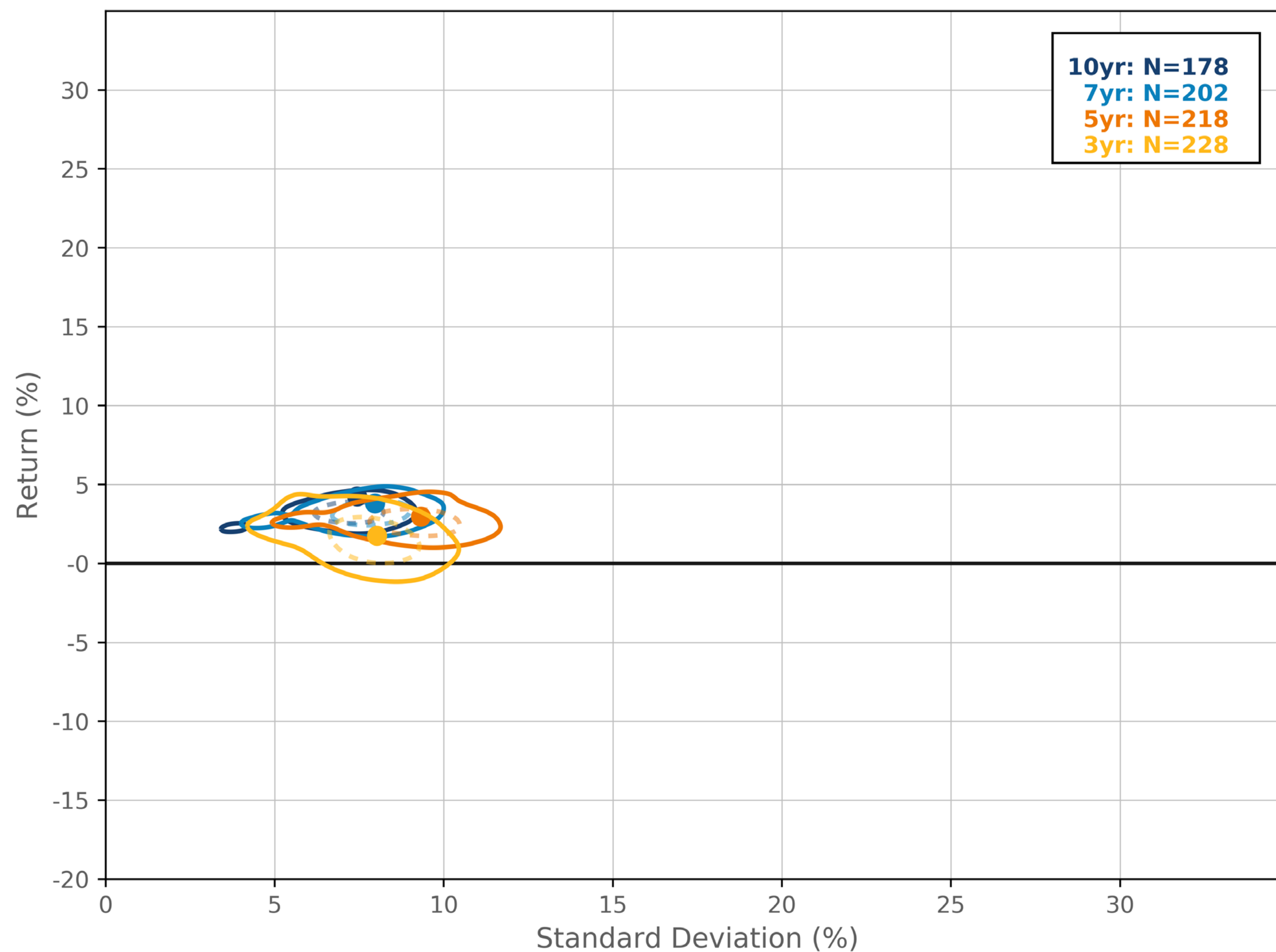
Source: Barclays, as of 9/30/23

U.S. HIGH YIELD



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg U.S. Corporate High Yield Index

Fixed income – U.S. high yield



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg U.S. Corporate High Yield Index

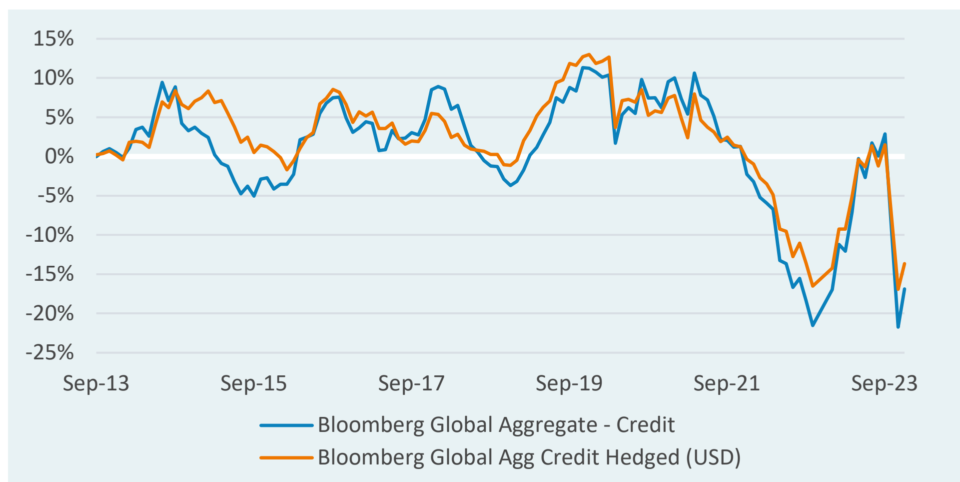
Fixed income – Global credit

— The global credit universe is relatively heterogenous with strategies managing against more than 50 different benchmarks. Strategies tend to have varying exposures across both developed and emerging market corporate debt, foreign currency risk, as well as a wide range of credit quality. This has led to wide universe dispersion with an irregular performance distribution over the periods shown below. Recent dispersion has increased significantly, driven by greater uncertainty regarding global growth, the path of interest rates, geopolitical tensions, and increased currency volatility.

— While the range of outcomes has varied considerably throughout the universe, there has been a strong negative relationship between risk and return in all time periods shown, as managers have not been compensated for taking on additional risk within the global credit universe. We have observed that, historically, most of the strategies within the active universe were able to produce excess returns over the Bloomberg Global Aggregate – Credit Index on a net-of-fee basis. However, those strategies that took on greater risk than the benchmark were much less likely to outperform.

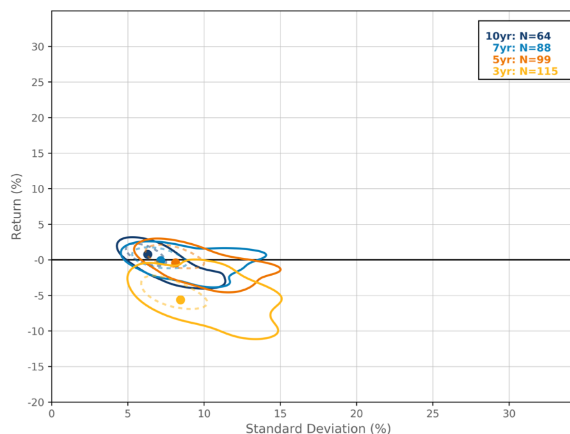
— Currency risk remains a significant consideration when investing in global credit portfolios. Over the rolling 1-year period ending September 2023, the hedged version of the Bloomberg Global Aggregate Credit Index outperformed the unhedged version of the same index by roughly 3.3%. As such, we believe it is important to evaluate unhedged global credit managers on their currency management skill as well as their skill in managing bonds.

12-MONTH ROLLING PERFORMANCE



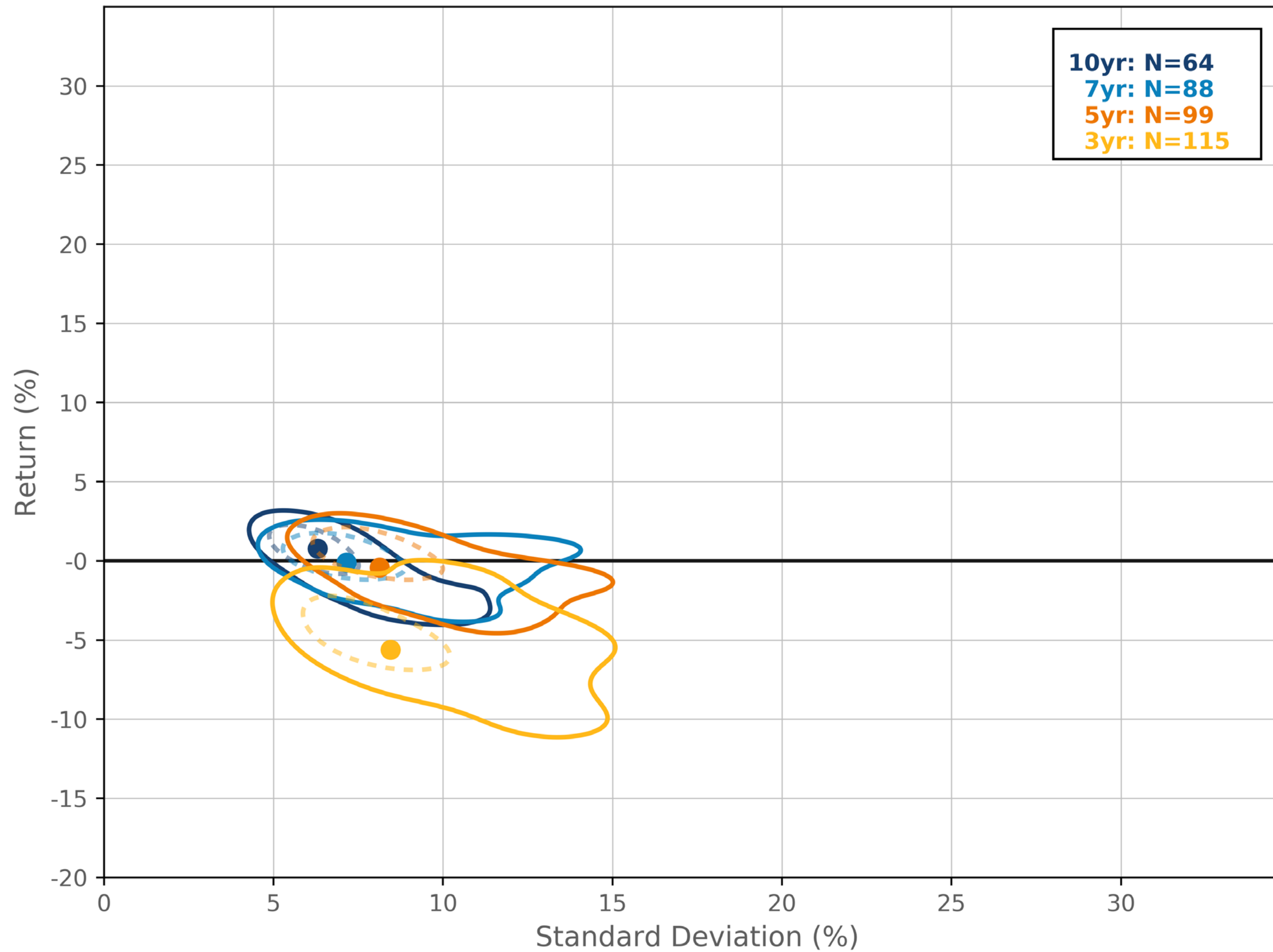
Source: eVestment, as of 9/30/23

GLOBAL CREDIT



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg Global Aggregate – Credit

Fixed income – Global credit



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg Global Aggregate - Credit

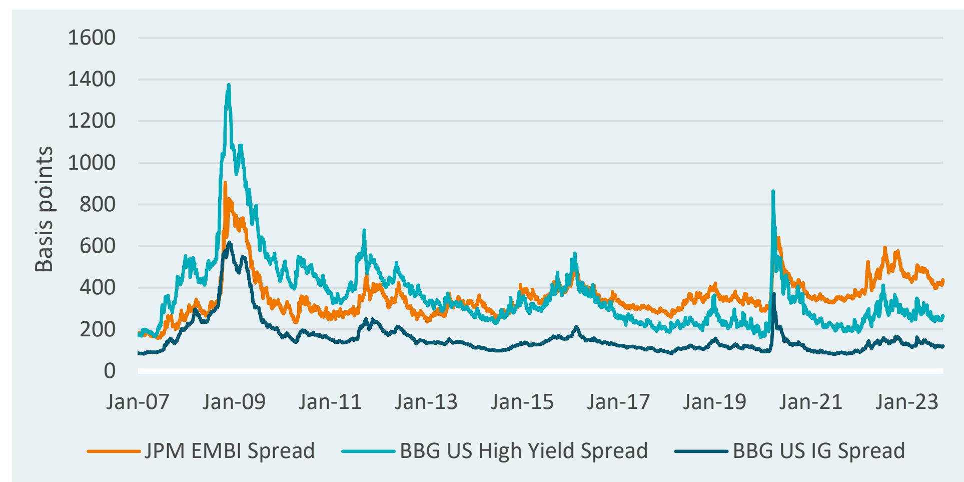
Fixed income – Emerging market debt (hard currency)

— Over the 3-, 5-, and 7-year periods, active universes exhibited a downward-sloping tilt, indicating a negative relationship between total risk and total return amongst strategies within the emerging market debt hard currency universe. Over the 10-year period, dispersion across the universe was narrower and managers struggled to add value relative to the benchmark regardless of the risk taken.

— Relative to longer time horizons, dispersion increased significantly over the 3-year period. This was likely primarily driven by uncertainty around inflation, the impact of rising U.S. interest rates, elevated geopolitical tensions, and weaker-than-expected global growth. Despite heightened volatility during the period, managers struggled to outperform the benchmark on a net-of-fee basis. Active environment was also less favorable over longer-term lookback periods, with only a small subset of strategies delivering outperformance over the benchmark.

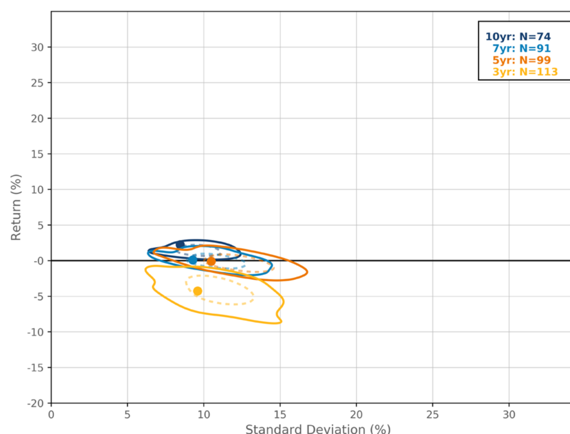
— Hard currency emerging market bonds trade on a spread over comparable U.S. Treasury bonds, similar to U.S. investment grade and high-yield bonds. While idiosyncratic country risk is high, the combination of incremental spread and potential diversification make the asset class a compelling choice for investors seeking higher returns.

EMD HARD CURRENCY SPREADS VERSUS US CREDIT



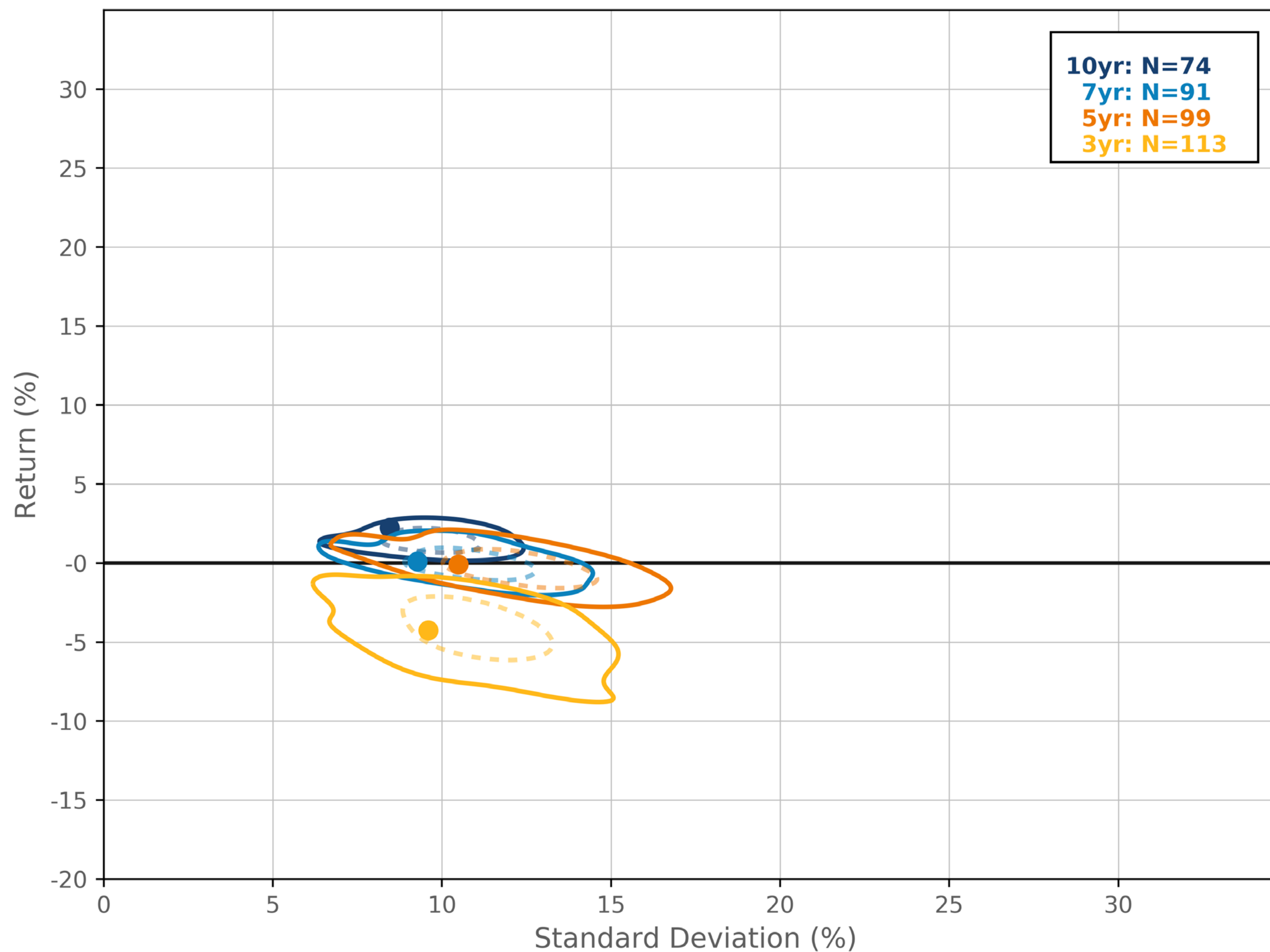
Source: Bloomberg as of 9/30/23

EMERGING MARKET DEBT (HARD)



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the J.P. Morgan EMBI Global Diversified Index

Fixed income – Emerging market debt (hard currency)



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the J.P. Morgan EMBI Global Diversified Index

Fixed income – Emerging market debt (local currency)

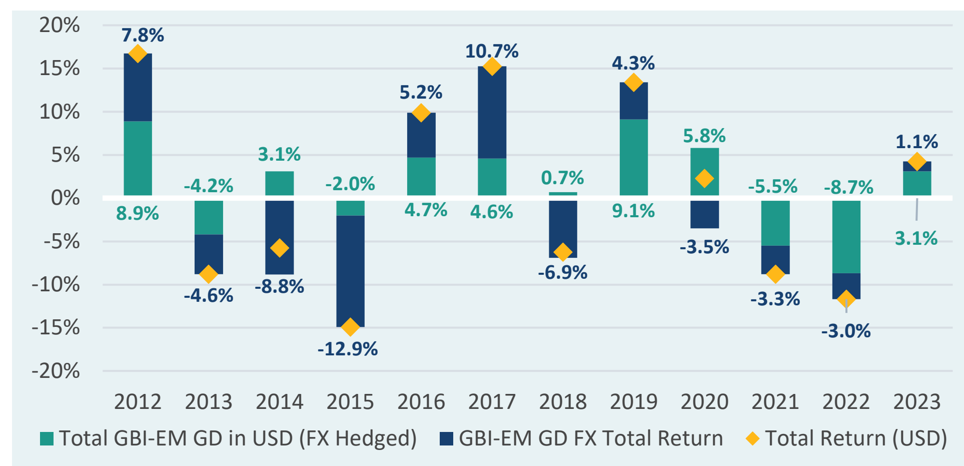
— Over 5-, 7-, and 10-year periods, we observed a relatively neutral relationship between risk and return with little evidence that active local currency strategies have added value on a risk-adjusted basis. More recently during the trailing 3-year period, local currency EMD strategies exhibited a slightly positive relationship between total risk and total return as incremental risk taking has added value relative to the benchmark.

— Dispersion across the universe has increased recently, primarily due to exposures to lower-quality credits which were negatively impacted by slowing economic growth, heightened geopolitical tensions, and increasing currency volatility. Over the 3-year period, a majority of managers showed greater total portfolio risk resulting in relative outperformance compared to the benchmark. While relative performance has improved overall, challenges remain including potentially higher than expected inflation, continued U.S. dollar strength, and concerns about the rate of economic expansion.

— Local currency-denominated emerging market debt can provide a degree of diversification for multi-asset portfolios, primarily due to foreign currency exposure. However, the asset class has historically exhibited higher volatility compared to developed market bonds, a result of geopolitical risk, idiosyncratic country-specific event risk, and other factors.

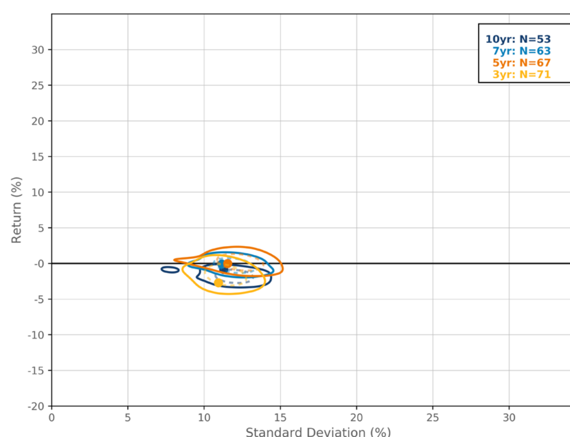
— The Federal Reserve slowed the pace of interest rate raises in 2023, resulting in a weaker U.S. Dollar, which benefited investors during the first three months of 2023. The foreign currency component of local EMD strategies added approximately 1.2%, with Latin America exhibiting the strongest region performance.

ANNUAL CURRENCY IMPACT ON INDEX RETURNS



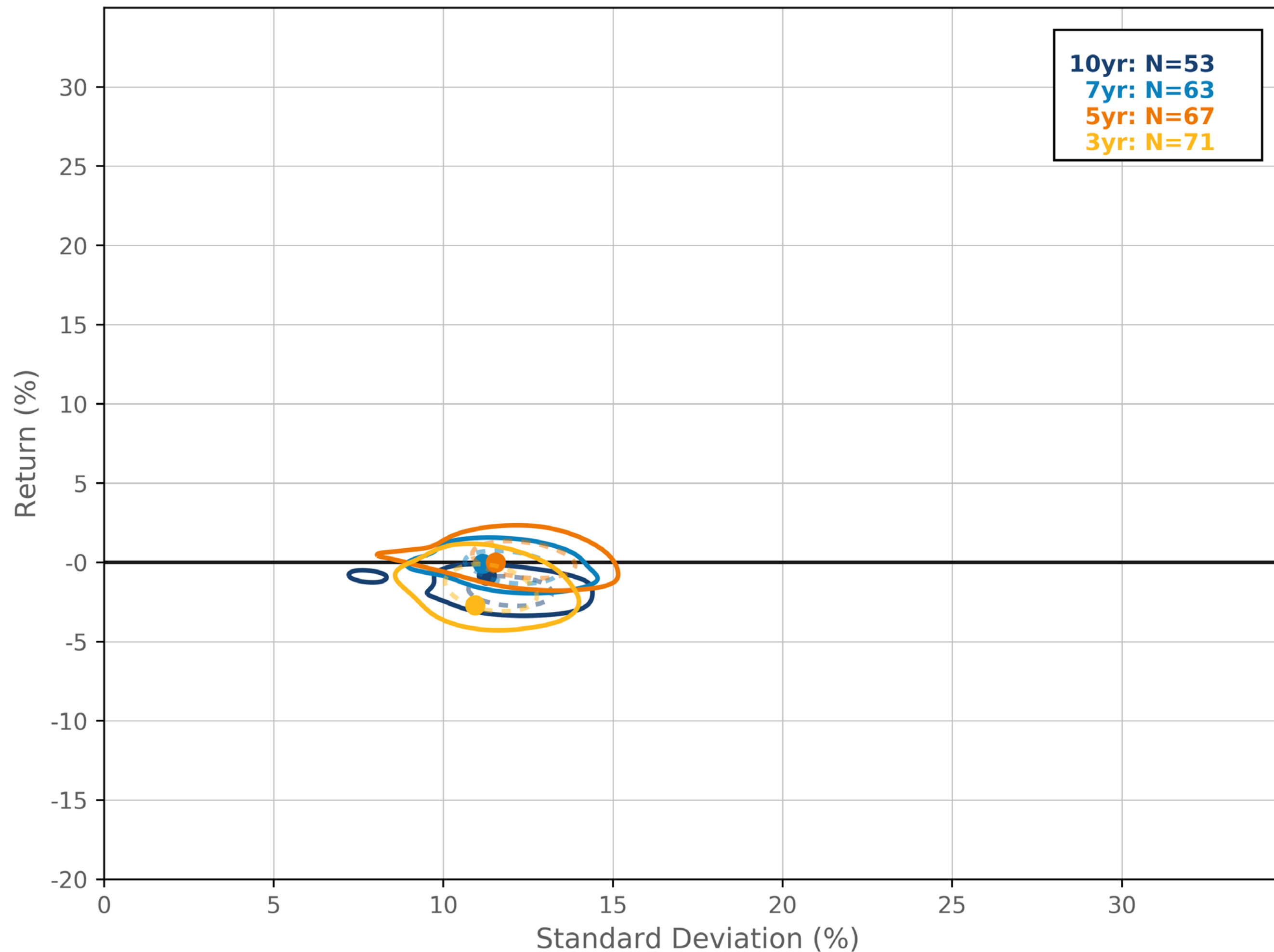
Source: JP Morgan, as of 9/30/23

EMERGING MARKET DEBT (LOCAL)



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the J.P. Morgan GBI-EM Global Diversified Index

Fixed income – Emerging market debt (local currency)



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the J.P. Morgan GBI-EM Global Diversified Index

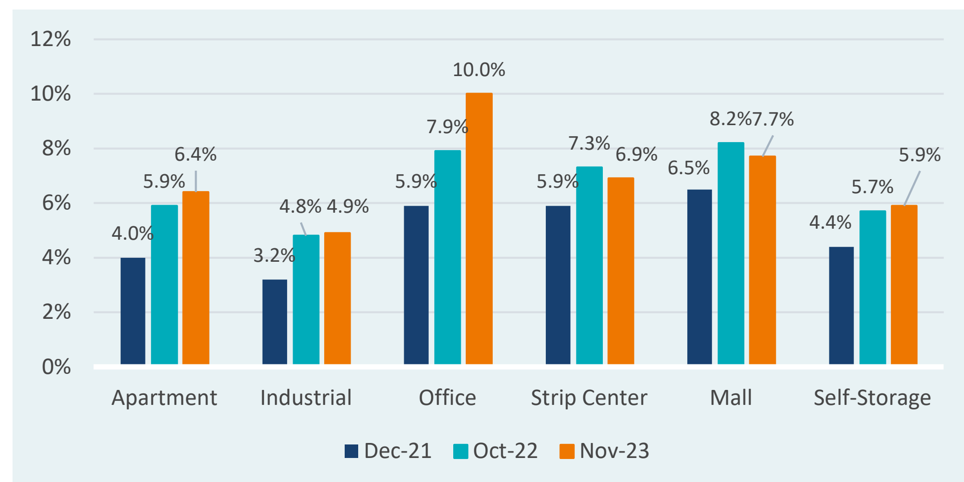
U.S. REITs

— Over longer time periods, active REIT management has broadly provided the benefit of volatility reduction rather than the generation of excess returns. During the most recent three-year time period, however, active management has generally underperformed the benchmark. This is likely due to the extreme volatility of the benchmark and rebalancing effects.

— REITs continued to underperform broad equities in 2023, although performance was positive (Wilshire REIT +16.1% vs S&P 500 +26.3%). The rising interest rate environment, and higher yields more generally, have been key drivers of the underperformance of REITs. The chart on the bottom left shows the extent of implied cap rate movements, by property type, since the end of 2021.

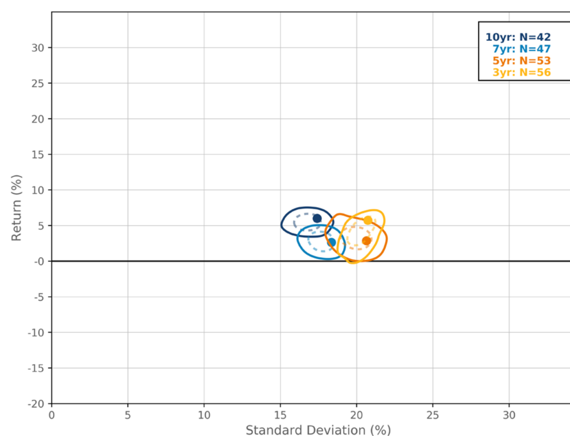
— Sector dispersion has continued to be very high. Fundamental challenges in the office sector due to changes in workplace trends following the pandemic have led to significant valuation adjustments and steep rises in implied cap rates to over 10%. Retail, on the other hand, which has seen fundamental headwinds over the last decade, showed signs of improvement in 2023 as many of those assets had already taken mark-down and seen a slowing of new supply.

IMPLIED CAP RATES – REIT SECTORS



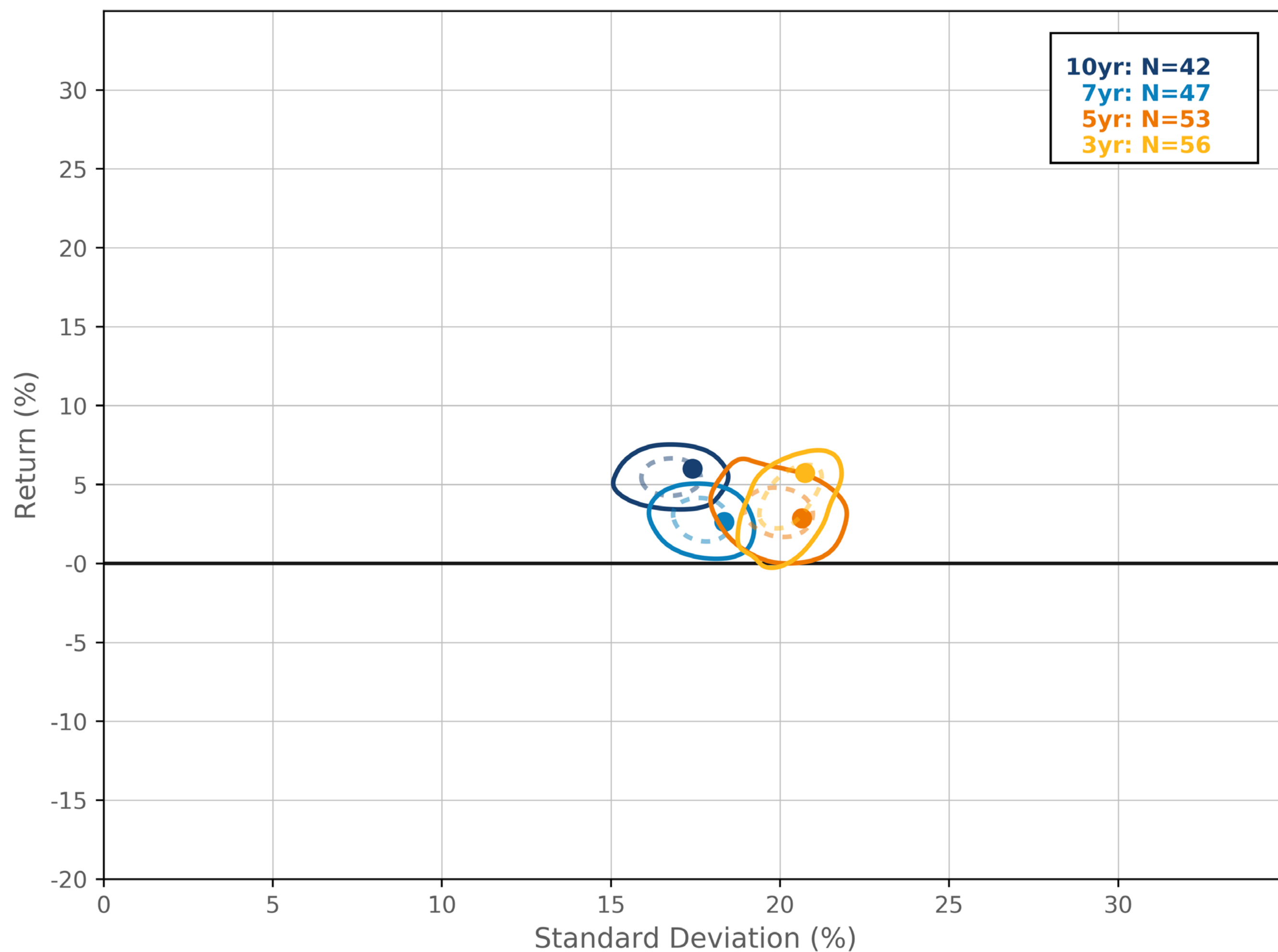
Source: Angelo Gordon, Cohen & Steers, as of 11/30/23

U.S. REITS



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Wilshire REIT Index

U.S. REITs



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Wilshire REIT Index

Commodities

— Active management in the commodity space tends to exhibit wide variation regarding the risk characteristics of strategies. This may be partly a reflection of the variety of manager styles. Strategies which look to mitigate negative roll yield and contango through term-structure management have continued to add value over standard indexes, on average.

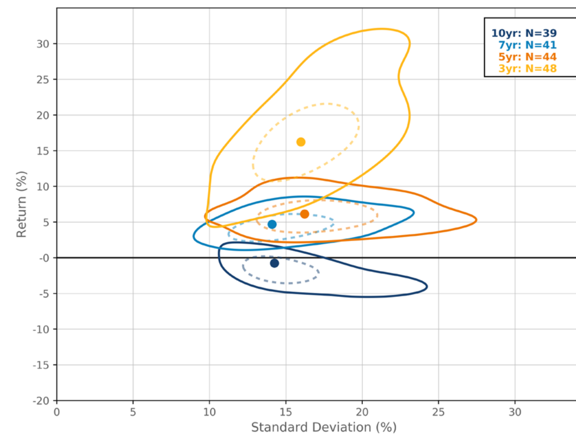
— Over the longest time period, the data suggests a negative relationship between risk and return as strategies with higher volatility levels have tended to underperform. That trend reversed over the most recent three-year period, however, as a more traditional profile is represented (higher risk levels have led to higher returns), although dispersion has been very high due to volatility within the asset class.

— The roll yield component has, in recent decades, provided a headwind to overall commodity returns. However, in 2021, the roll yield moved from near historically negative territory into positive territory, providing a tailwind to futures-based commodity strategies since.

12-MONTH ROLL YIELD

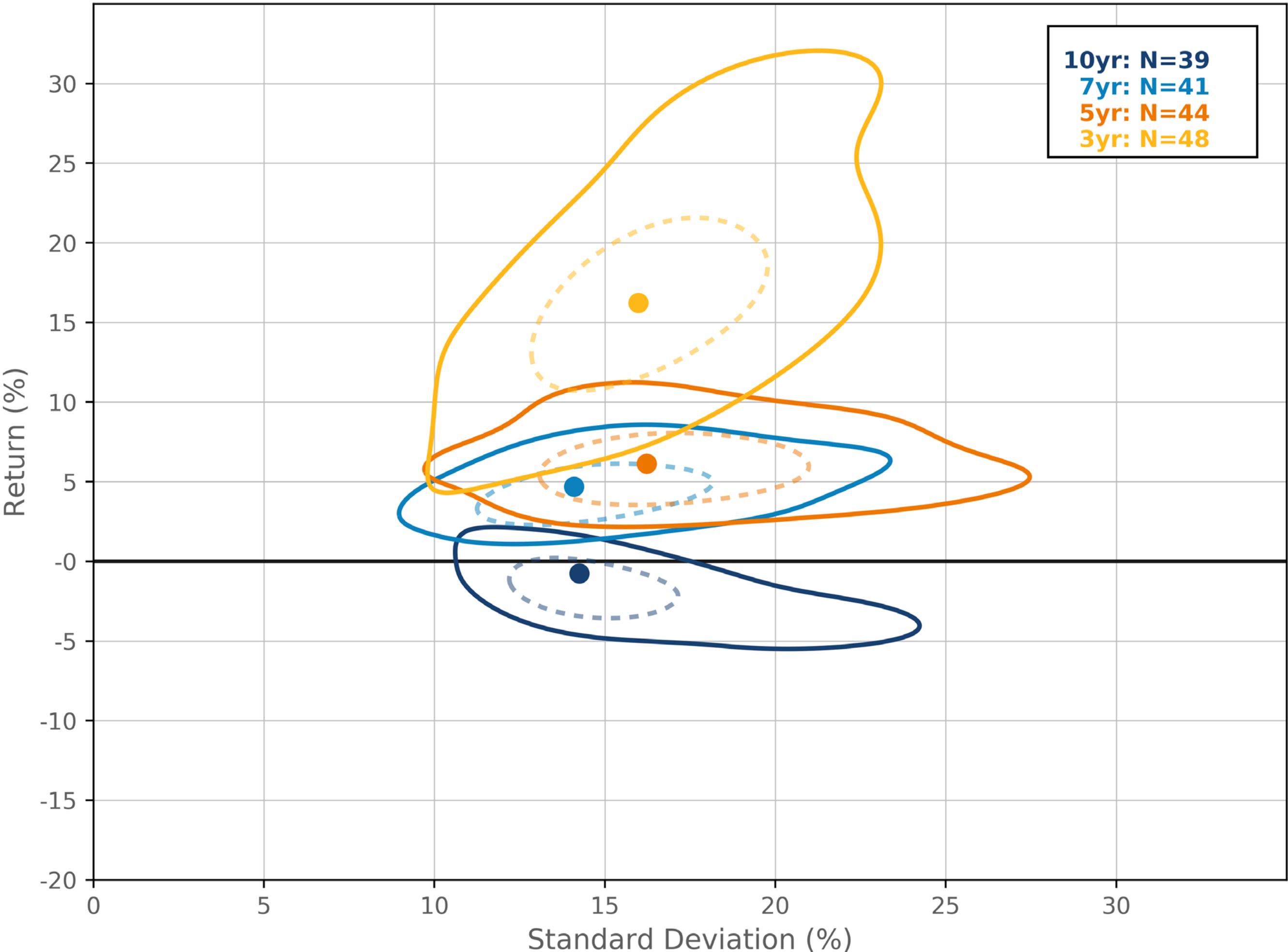
Source: Standard & Poor's, as of 11/30/23

COMMODITIES



Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg Commodity Index

Commodities

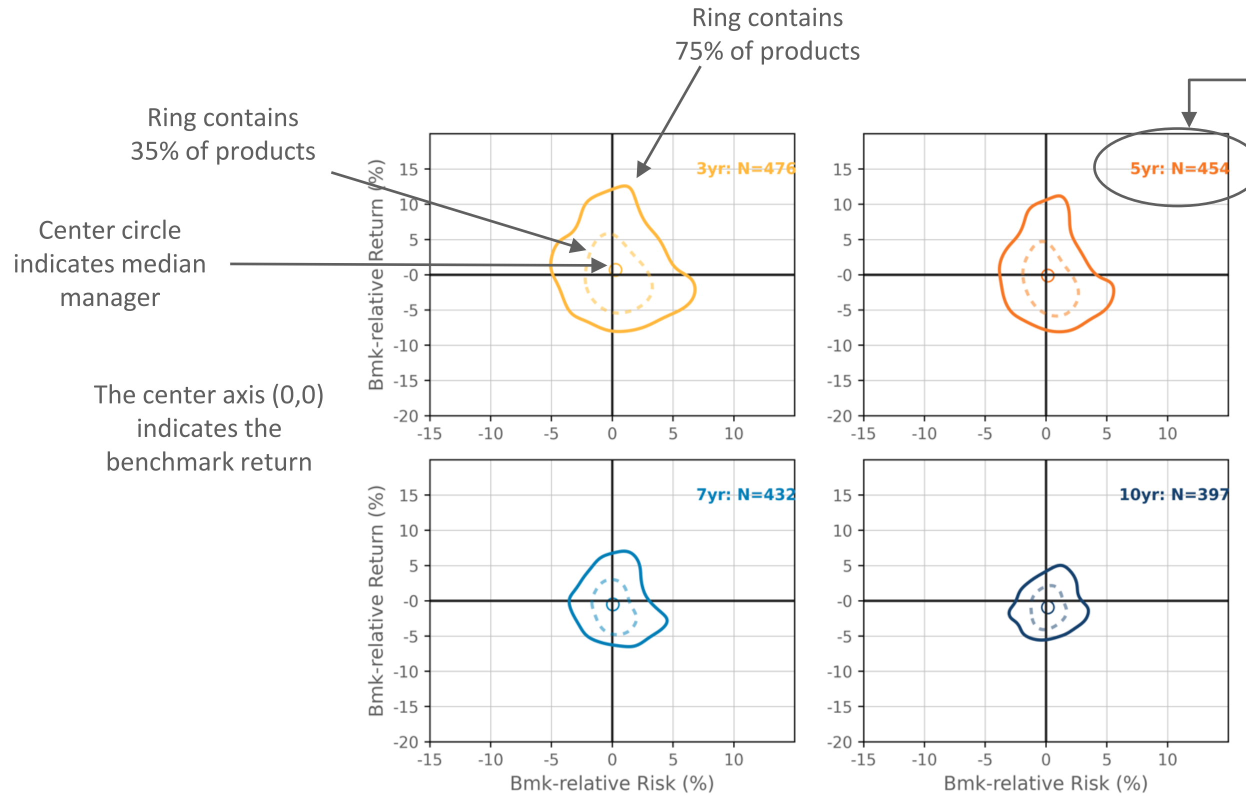


Source: eVestment, as of 9/30/23. Universe returns have been adjusted for fees and survivorship bias. Benchmark displayed is the Bloomberg Commodity Index

Appendix

Supplementary Universe Charts

How to read a risk/return universe chart

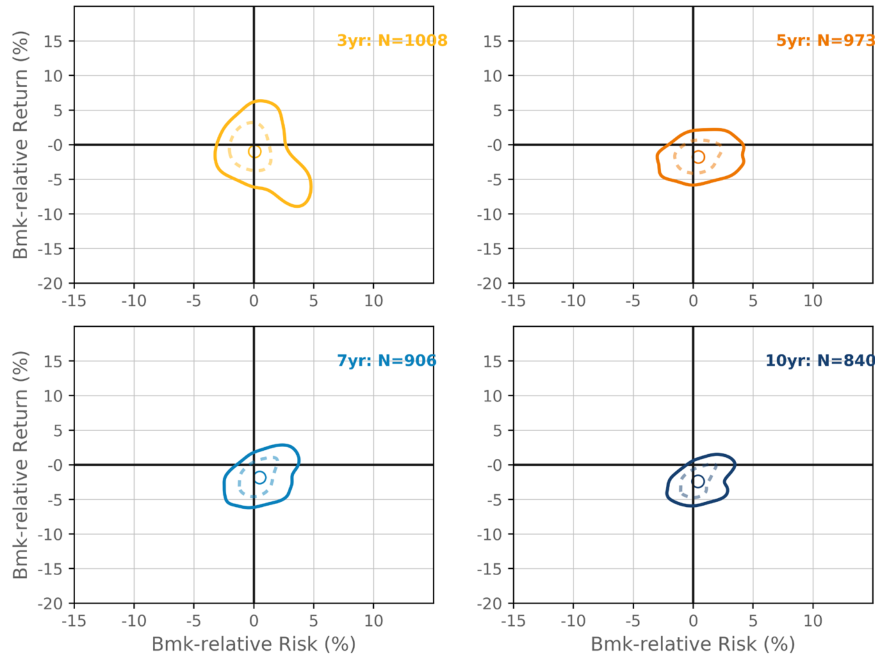


The number of products included in the analysis provides insight into the robustness of the analysis.

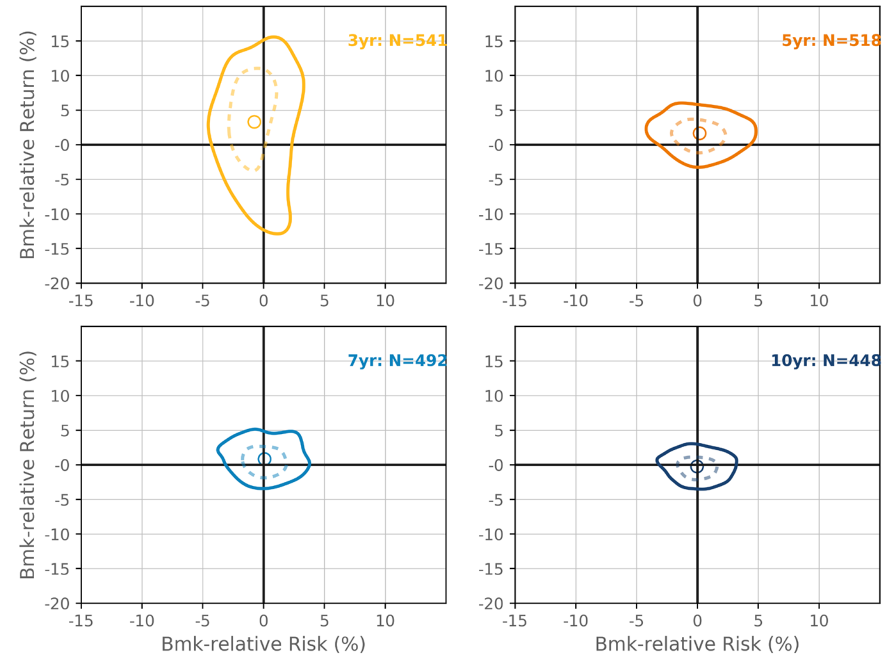
The changing shape within the charts is impacted by the market environment and the time period examined

U.S. equity

U.S. LARGE CAP



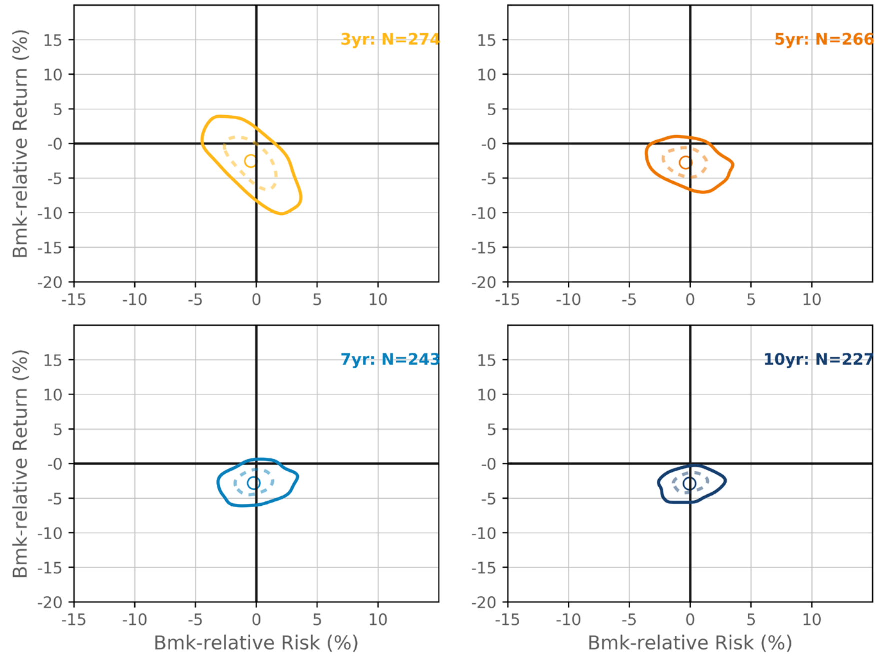
U.S. SMALL CAP



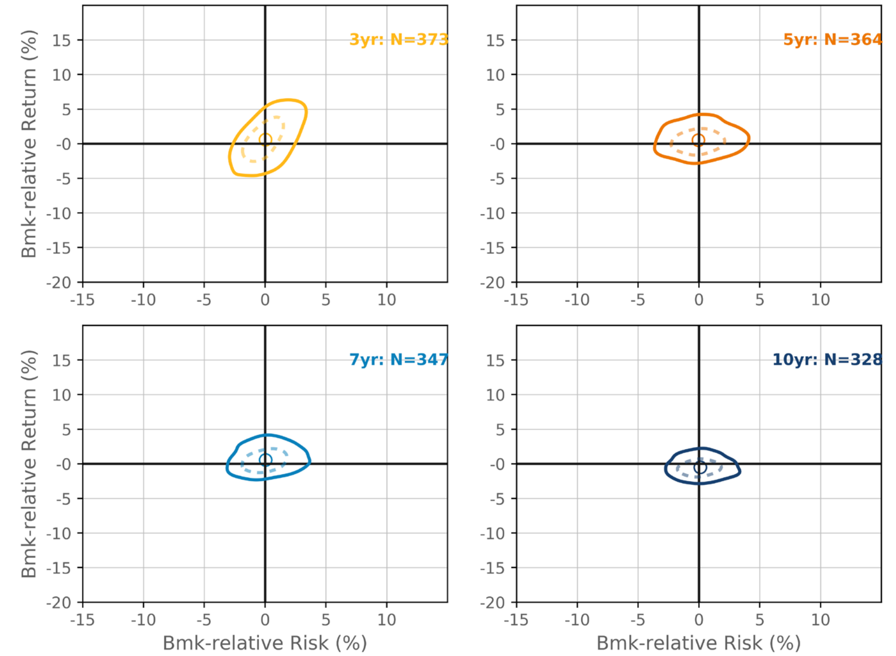
Source: eVestment, Verus, as of 9/30/23, center circle indicates median manager

U.S. equity

U.S. LARGE CAP GROWTH



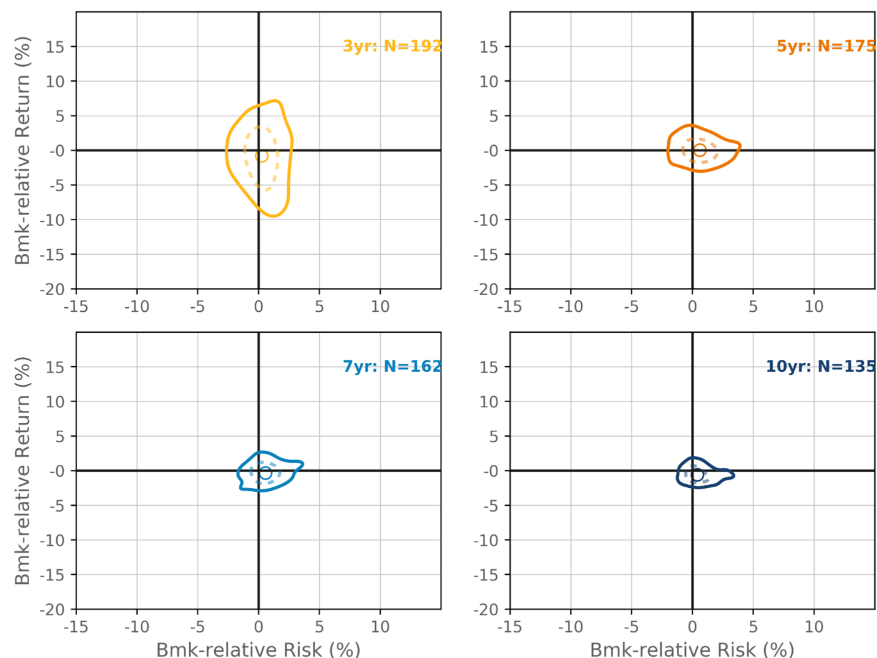
U.S. LARGE CAP VALUE



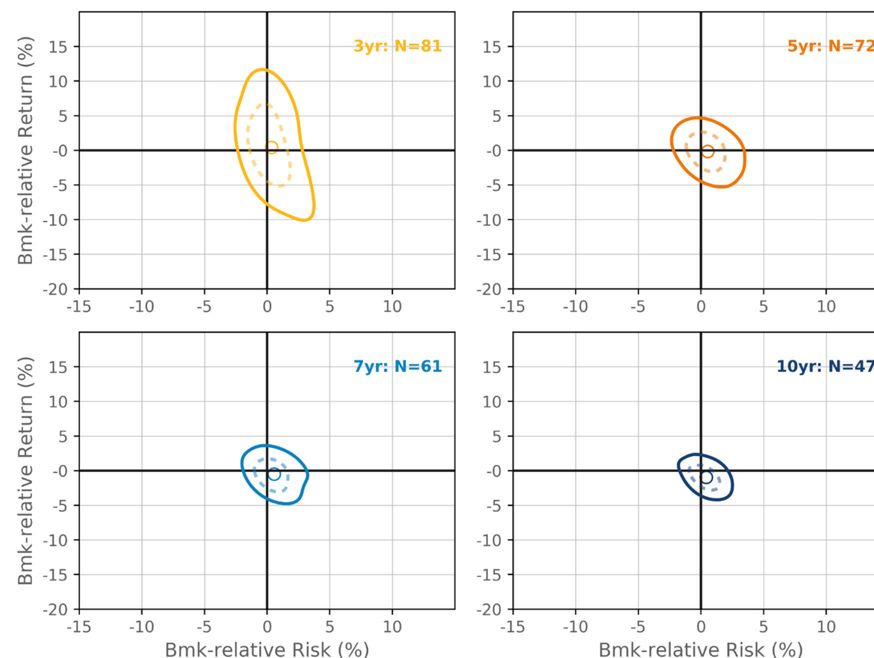
Source: eVestment, Verus, as of 9/30/23, center circle indicates median manager

International equity

INTERNATIONAL DEVELOPED



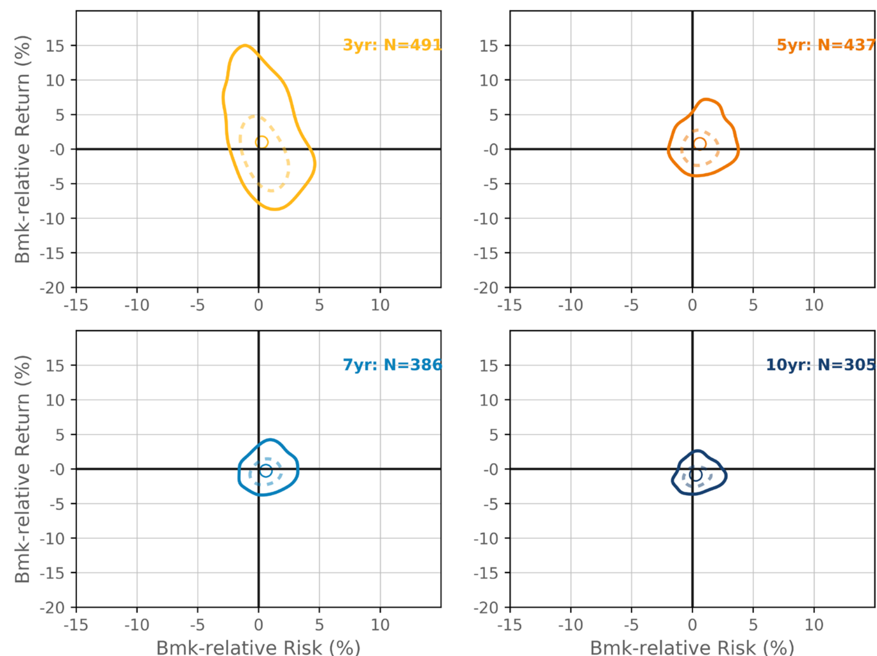
INTERNATIONAL DEVELOPED SMALL



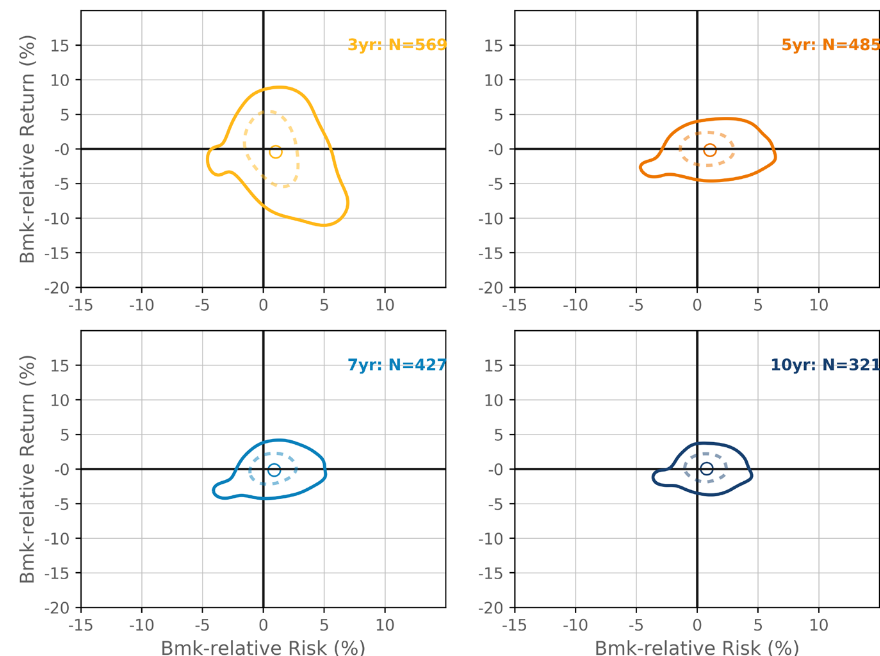
Source: eVestment, Verus, as of 9/30/23, center circle indicates median manager

Emerging market & global equity

EMERGING MARKETS



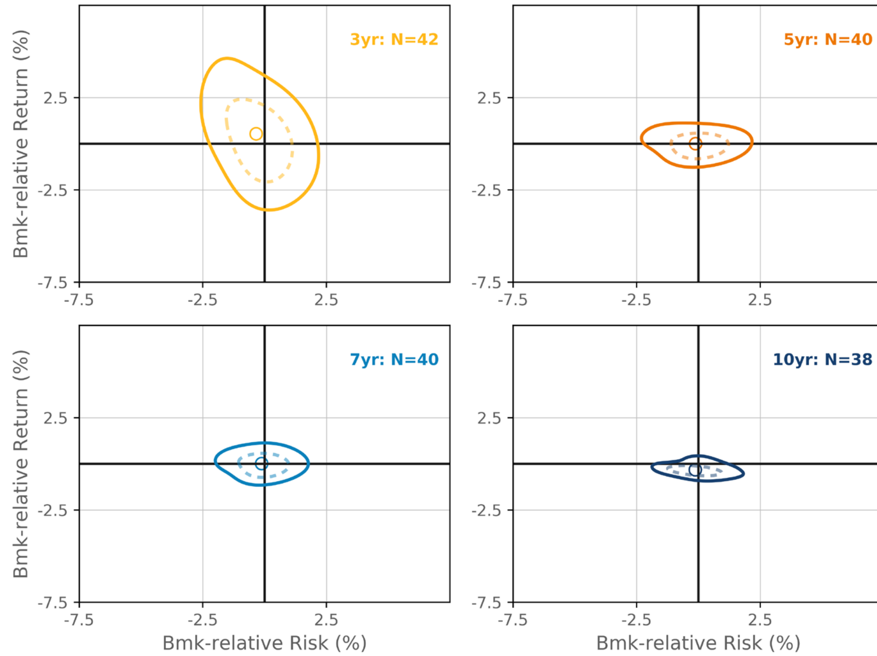
GLOBAL



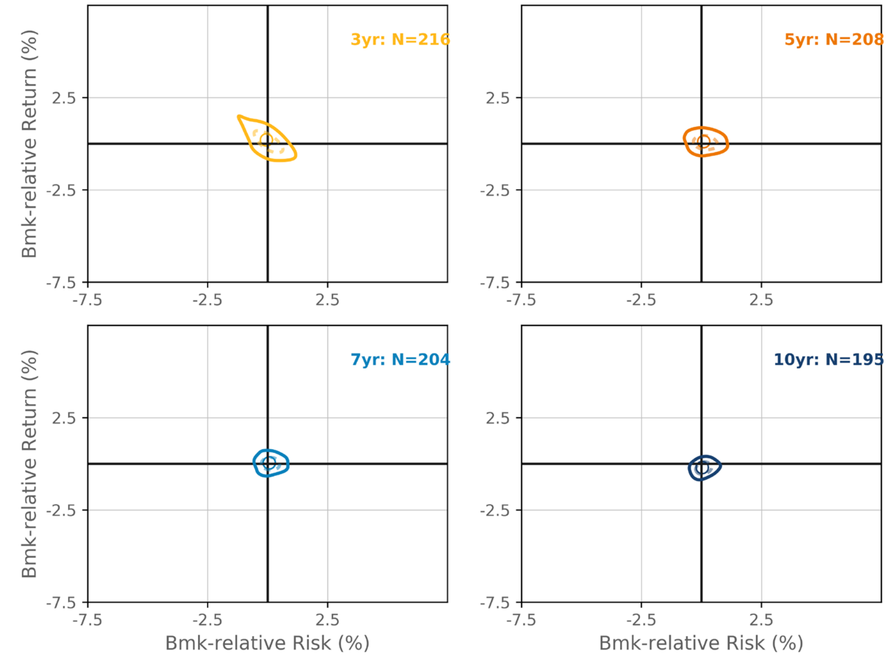
Source: eVestment, Verus, as of 9/30/23, center circle indicates median manager

U.S. fixed income

U.S. TIPS



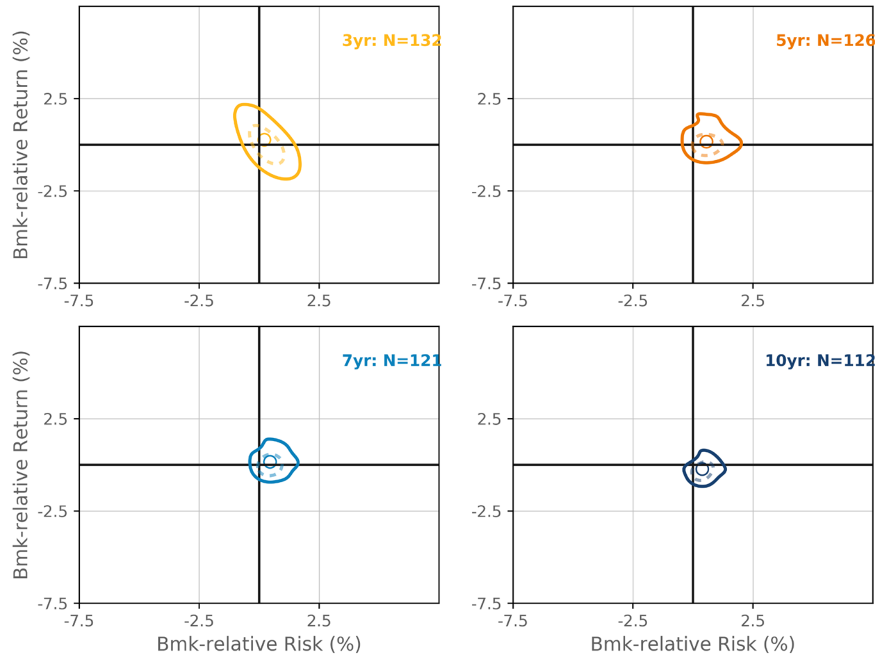
U.S. CORE



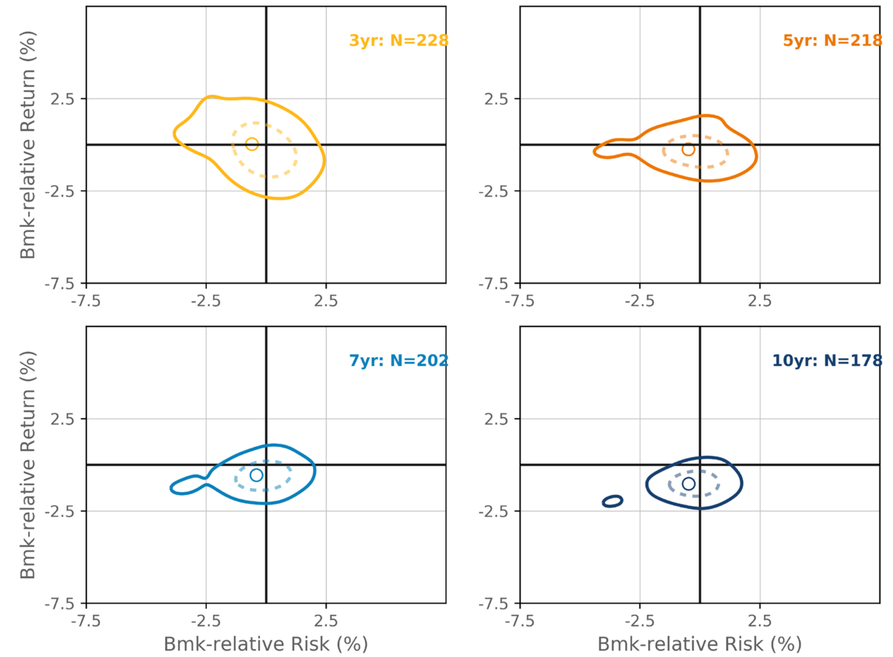
Source: eVestment, Verus, as of 9/30/23, center circle indicates median manager

U.S. credit

U.S. CORE PLUS



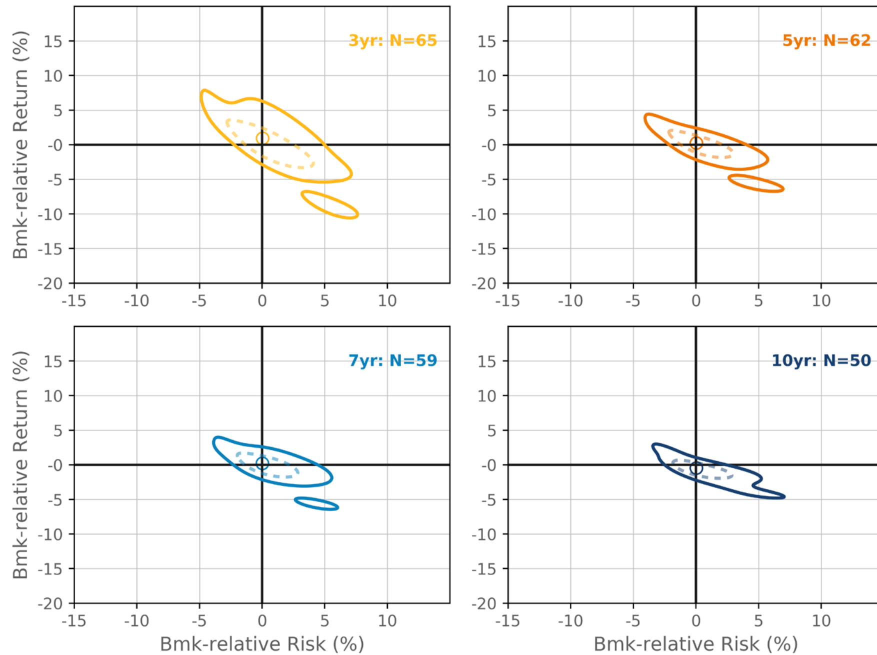
U.S. HIGH YIELD



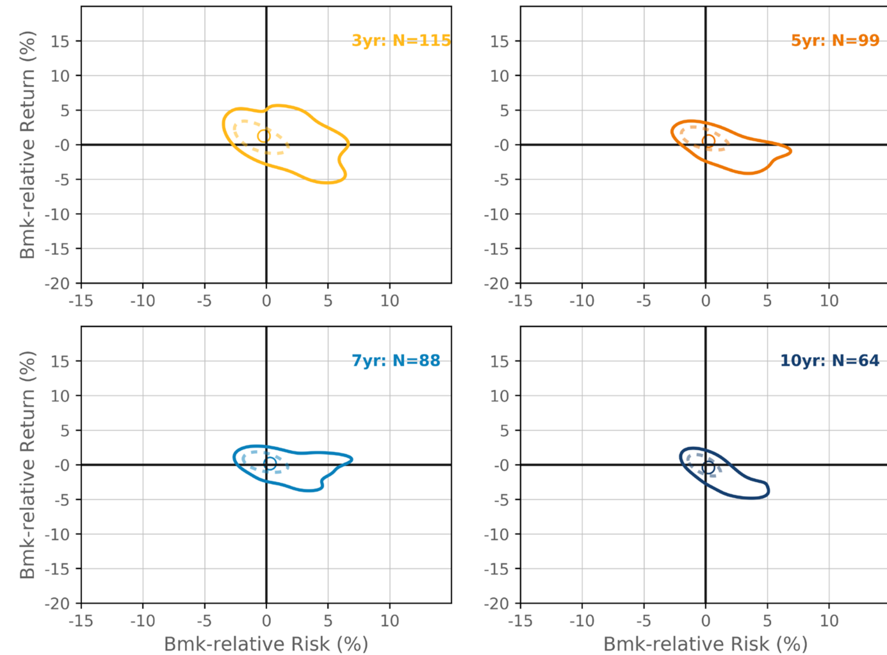
Source: eVestment, Verus, as of 9/30/23, center circle indicates median manager

Global fixed income

GLOBAL SOVEREIGN

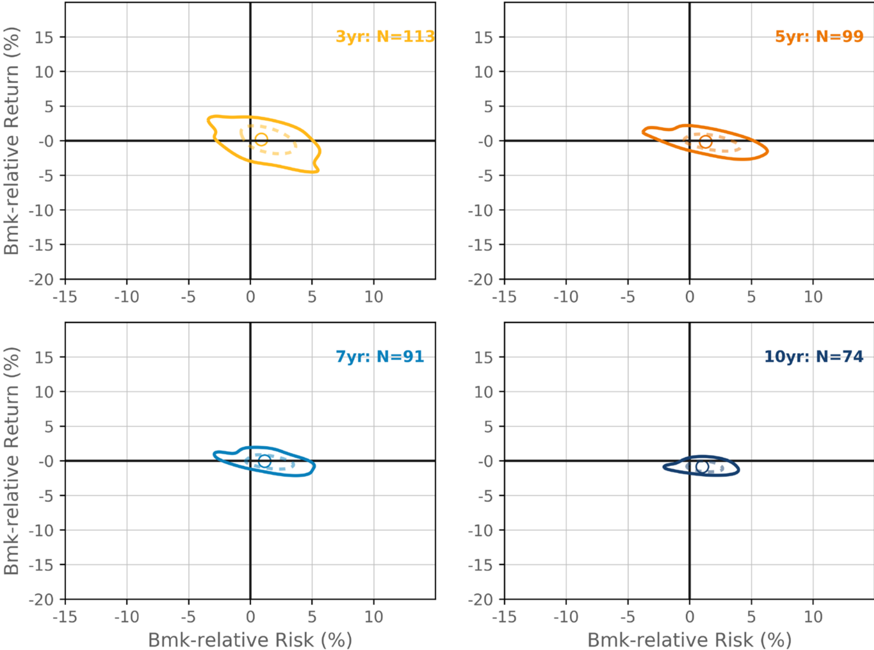


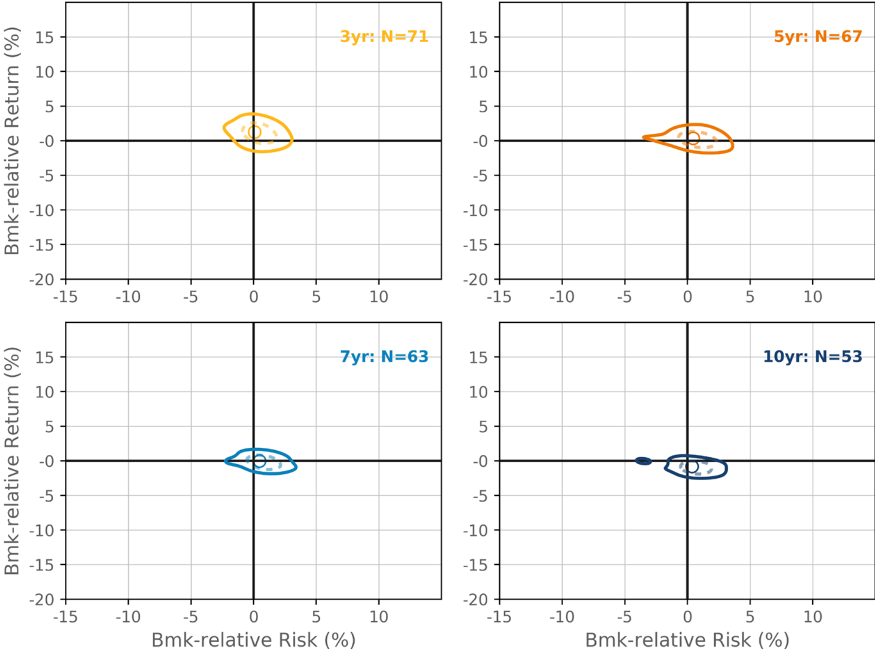
GLOBAL CREDIT



Source: eVestment, Verus, as of 9/30/23, center circle indicates median manager

Emerging market debt

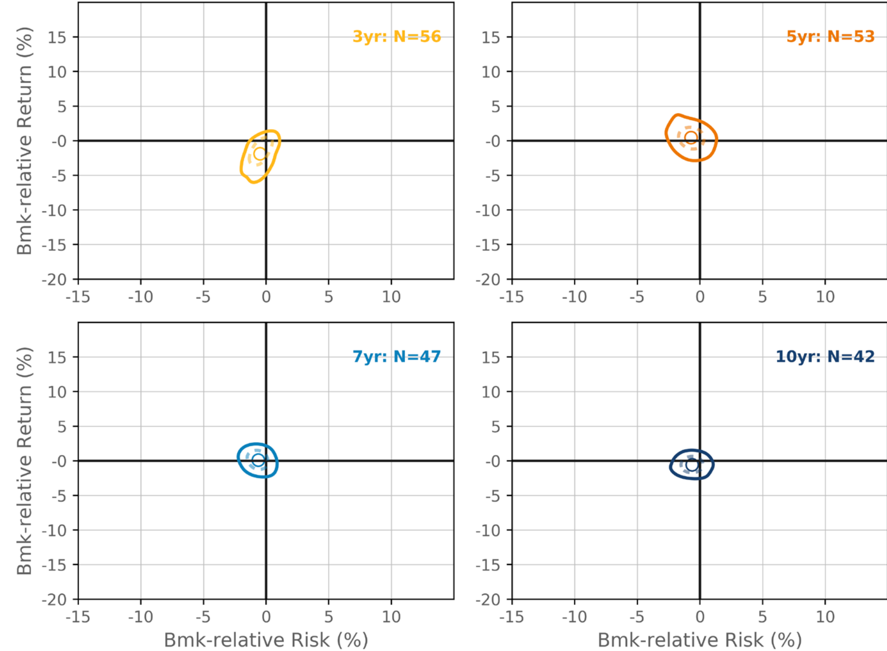




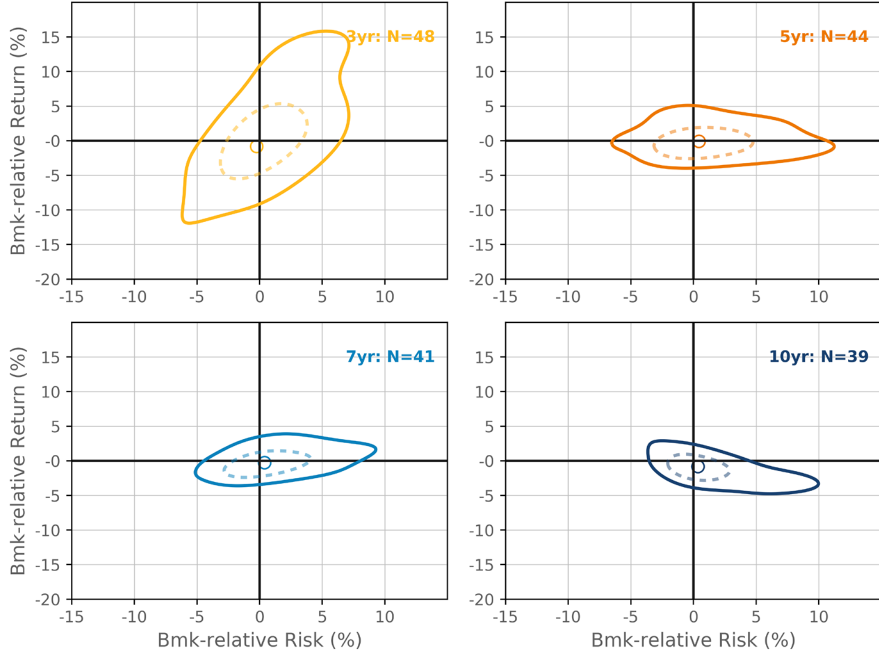
Source: eVestment, Verus, as of 9/30/23, center circle indicates median manager

Other

U.S. REITS



COMMODITIES



Source: eVestment, Verus, as of 9/30/23, center circle indicates median manager

Notices & disclosures

Past performance is no guarantee of future results. *This report or presentation is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and should not be relied upon by retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. The opinions and information expressed are current as of the date provided or cited only and are subject to change without notice. This information is obtained from sources deemed reliable, but there is no representation or warranty as to its accuracy, completeness or reliability. This report or presentation cannot be used by the recipient for advertising or sales promotion purposes.*

The material may include estimates, outlooks, projections and other "forward-looking statements." Such statements can be identified by the use of terminology such as "believes," "expects," "may," "will," "should," "anticipates," or the negative of any of the foregoing or comparable terminology, or by discussion of strategy, or assumptions such as economic conditions underlying other statements. No assurance can be given that future results described or implied by any forward looking information will be achieved. Actual events may differ significantly from those presented. Investing entails risks, including possible loss of principal. Risk controls and models do not promise any level of performance or guarantee against loss of principal.

"VERUS ADVISORY™ and any associated designs are the respective trademarks of Verus Advisory, Inc. Additional information is available upon request.