

Testing Resilience

Michael W Arone, CFA

Chief Investment Strategist

Matthew J Bartolini, CFA, CAIA

Head of SPDR Americas Research

Contributor

Anqi Dong, CFA, CAIA

Senior Research Strategist

Will 2024 Repeat, Rhyme, or Rattle Investors?

Enthusiasm is common. Endurance is rare.

—Angela Duckworth

Investors fell victim to the behavioral bias of extrapolation in 2023. After a historically poor 2022, they anticipated an equally bad, and possibly worse, new year. With expectations at rock bottom, most economists forecast a recession. Instead, years of easy monetary policy and tremendous fiscal spending supported the economy and led to an unexpected stock market rally, one that investors believe will continue in 2024. But is their optimism misplaced?

2023: A Magnificent Year

Notwithstanding a still difficult environment for bonds, stocks and diversified investment portfolios performed solidly in 2023. The S&P 500 Index has soared by more than 19% and the 60/40 portfolio has returned a commendable 11%.¹

Plenty of bad news could have derailed both the economy and markets. The Federal Reserve (Fed) and other central banks continued to raise rates throughout the first seven months of 2023. Several US bank failures were the collateral damage from more restrictive monetary policy. Dysfunction in Washington, combined with the US' deteriorating fiscal health, routinely stoked investors' fears. US companies suffered through an earnings recession — three consecutive quarters of negative year-over-year earnings growth. And, despite considerable progress made on lowering inflation, it still remains too high.

Bigger picture, China's disappointing emergence from COVID-19 restrictions led to a weaker than expected European economy. In the battle for world supremacy, elevated tensions between the US and China persist. There's still no resolution in the Russia-Ukraine war. And the Israel-Hamas war risks entangling additional countries into a wider Middle East conflict.

Yet, years of seemingly endless easy monetary policy and massive fiscal spending, especially in response to the pandemic, combined with historically low investor expectations to start the year, created the perfect environment for a resilient economy and an unexpected rally. Rather than contracting as most economists anticipated, the US economy expanded in every quarter of 2023, culminating in a robust annual increase of 4.9% in third quarter GDP.² Bolstered by the strongest labor market in more than 50 years, the consumer continued to be the engine of exceptional US economic growth.

The Economy's Resilience Should Be No Surprise

More than a decade of ultra-low interest rates enabled consumers and businesses to lock in cheap financing costs on growing debt obligations. Now, after 11 Fed rate hikes, they are able to earn a competitive return of 5% or more from money market investments. This differential between low financing costs on debt and practically risk-free income from money market investments has allowed the economy to weather the impacts from higher interest rates better than the Fed or anyone else thought possible.

Further aiding the economy's resilience, consumers and businesses lined their pockets with extraordinary government stimulus funds, incentives and tax breaks enacted to combat the negative effects of the pandemic. Beginning with the CARES Act in March 2020 and ending with the Inflation Reduction Act in August 2022, the US government signed into law more than \$6 trillion in fiscal stimulus legislation that's been positively flowing through the US economy.

To investors' relief, inflation cooled considerably as benefits from fiscal spending faded, monetary policy tightened, and global supply chains were restored. Softening economic data and shrinking inflation have convinced market participants that the Fed's tightening cycle is over and that a soft landing is probable. In fact, the Fed has raised rates just once since June 2023 and stood pat in three out of the last four FOMC meetings.

According to FactSet, the earnings recession ended in the third quarter. Year-over-year earnings for S&P 500 companies are on pace to grow by 4.3%, marking the first quarter of earnings growth since the third quarter of 2022.³ And S&P 500 companies continue to be highly profitable. After bottoming early in 2023, net profit margins expanded to 12.1% year-over-year in the third quarter — above the previous quarter, one year ago, and the five-year average.⁴

But will lofty investor expectations for future earnings growth, cooling inflation, and an end to the Fed's tightening cycle be enough to sustain the rally?

Soft Landing or Hard Lesson?

As investors begin 2024, healthy skepticism has transformed into dangerous confidence. Market participants are certain that the rare soft landing is in reach. Convinced that inflation will continue to move toward the average 2% target, investors believe the Fed's tightening campaign has ended — without a recession or a capital markets catastrophe.

Investors are confident that their willingness to pay a higher price for future earnings in 2023 will be rewarded in 2024 when S&P 500 companies are forecast to grow their earnings by 11%.⁵ But they are underestimating the risks to the economy as it transitions from monetary and fiscal policy aided resilience to durable organic expansion. Not to mention the potential for increased market volatility in a contentious US presidential election year.

Regrettably, 2023's caution has turned into 2024's courage. The economy and market were able to beat incredibly low expectations in 2023, but they were supported by the long and variable impacts from years of easy monetary policy and massive fiscal stimulus. In 2024, investor expectations are much higher. And the monetary and fiscal policy crutches have been removed from an economy that may not be able to stand on its own two feet.

With the range of possible market outcomes wider than normal, risks are firmly skewed to the downside. As a result, investors should consider these three strategies when constructing investment portfolios for 2024:

- 1 Target Growth with Quality US Equities
- 2 Emphasize Stable Income
- 3 Seek New Opportunities Supported by Macro Momentum

Theme 1: Target Growth with Quality US Equities

Global equities climbed a wall of worry in 2023. The US regional bank crisis, elevated inflation, recessionary fears, earnings slowdowns, steady tightening by global central banks, and a war in the Middle East. US equity gains — driven by a handful of large-cap technology leaders and a better-than-feared earnings downturn — have dominated thanks to the resilient US consumer and growing AI-related demand.

Heading into 2024, we expect US equities to continue to outpace broad developed ex-US and emerging markets given their higher growth prospects, stronger earnings and economic resiliency, and greater exposure to near-term beneficiaries of fast development in AI.

But because US economic growth is expected to slow, the margin expansion assumption embedded in the current consensus 2024 estimates will be challenged by higher financing costs, above-average inflation, and a weaker demand outlook. Therefore, 11% forecasted 2024 earnings growth in the US is not a given, and revision risks skew to the downside.

As higher rates take a larger bite out of economic growth and equity volatility increases, targeting growth with quality in equity portfolios may help to deliver potential upside coupled with stability.

Investors should consider the following:

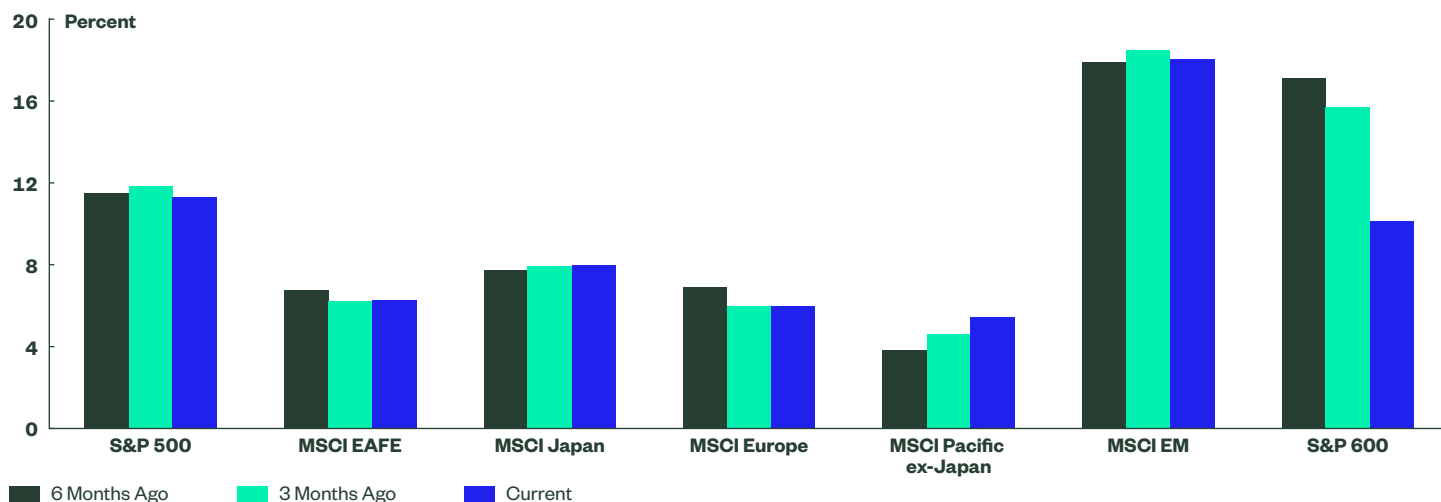
- **A core multi-factor US strategy** that blends Quality, Value, and Minimum Volatility to capture a quality-centric upside with a defensive bias.
- **The insurance industry's strong pricing power**, to target areas with reliable growth.
- **Tech leaders** across Information Technology, Communication Services, and Consumer Discretionary sectors to capture AI-related tailwinds.
- **Dividend growth strategies**, to lower volatility when pursuing upside.

Favor the US
Over Europe and
Emerging Markets

Overcoming recessionary fears in 2023, global equities, led by US large-cap growth names, registered double-digit gains, rewarding those who stay invested. But those gains were driven mainly by multiple expansion, as earnings growth was flat or negative across most regions. With global earnings expected to rebound in 2024 and the high interest rates keeping multiple expansions in check, earnings growth is likely to be the key driver of regional returns.

Among developed regions, the US is expected to lead annual earnings growth in 2024 (Figure 1). If this 11% growth rate is achieved and valuation multiples are little changed, investors may be looking at another year of gains. After all, the US has shown greater economic resilience so far amid the monetary tightening. Thanks to strong consumer spending supported by the resilient labor market and lingering effects from the CHIPS Act and Inflation Reduction Act, US 2023 GDP growth estimates have been upgraded throughout the year from 0.3% to 2.3%.⁶

Figure 1
**2024 EPS Growth
 Estimates by Region**



Source: FactSet, as of November 11, 2023. **Past performance is not reliable indicator of future performance.**

On the other hand, European economic momentum has weakened since Q1 2023. Eurozone Purchasing Manager Indices (PMIs) contracted for both the manufacturing and services sectors over the summer, as weak demand for their goods from China spilled over to services sectors.⁷ The EU Economic Sentiment Indicator has steadily declined to its lowest level since October 2022.⁸ European earnings sentiment has also been weaker than in the US lately, with sales and earnings beats surprising to the downside, while US companies continued exceeding expectations.

While 2024 emerging market (EM) earnings growth projections are higher than the US, those numbers are more vulnerable to downgrades during a global economic slowdown. EM earnings revisions have been negative throughout the year due to deteriorating earnings prospects in China and the spillover effects of a sluggish Chinese economy on other EM countries. Given ongoing challenges faced by the Chinese government to stimulate the economy and weaker demand from developed countries, EM's earnings growth projection of 18% looks too optimistic.

The impacts of high interest rates have also started to show on EM companies' balance sheets, with interest coverage ratio (EBIT/Interest Expense) declining to its lowest level since Q2 2021. Although their valuations relative to US equities are trading in the bottom decile of the past 15 years,⁹ considering the record wide gap between EM and US return on equity (ROE), their cheaper valuations are less attractive.

The Path to Gains in the US Won't Be a Straight Line

Below-average sales surprises and downbeat revenue guidance from companies in the Q3 earnings season underscored the soft demand outlook. Much weaker top-line growth relative to bottom-line growth in 2024 (5% versus 11% for S&P 500 companies) implies operating margins will expand to a record high of 17% in 2024.¹⁰

The last time we saw such strong margin expansion was in 2012, when economic growth rose from 1.6% in 2011 to 2.3% and the interest rate was close to zero. For 2024, US GDP growth is expected to decelerate to below trend of 1.0%, while interest rates likely will be above 4.0%. Therefore, margin expansion will be challenged, making 2024 consensus earnings-per-share (EPS) subject to further downgrades.

Higher rates also have started to bite into corporate profits and balance sheets. The excess corporate cash holdings that companies accumulated in 2020 and 2021 to finance operations, growth, and share buybacks in the current rate hike cycle are depleting.¹¹ As corporate debt refinancing starts rolling in at yields north of 6% or 9% (depending on credit quality), the effects of higher interest rates on companies' balance sheets will gain traction in the coming quarters.

That's one of the reasons why companies with strong cash flow and low debt burdens performed well in 2023. Firms in the top quintile of free-cash-flow-per-share had an average 9.2% return in 2023 compared to -9.0% loss for the bottom quintile. Similarly, top quintile firms based on net-debt-to-EBITDA produced an average return of 2.3% versus bottom quintile firms recording an -8.0% loss.¹²

Large caps are also better positioned than small caps for a slowing economy with high financing costs. Large caps' debt-weighted average maturity is ~12 years (ex-Financials) vs. small caps at ~7 years due to their greater exposure to floating rate debt.¹³ Additionally, small caps tend to be more economically sensitive with less pricing and wage negotiation power — and therefore may face more challenges in a softening economy and strong labor market.

Quality US Equities Deliver Growth

With a mix of macroeconomic and earnings fundamental tailwinds and headwinds, high quality companies with strong pricing power, stable earnings, and healthy balance sheets are more likely to withstand margin pressure and high financing costs in order to meet growth expectations.

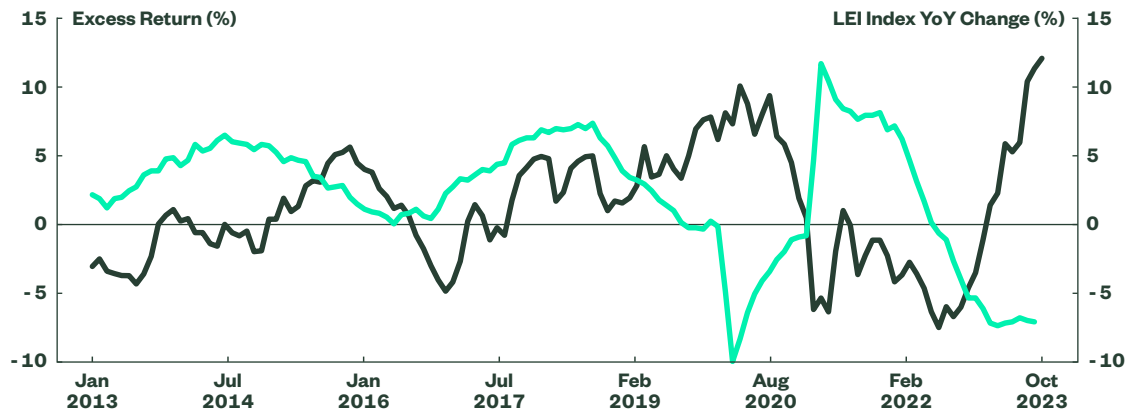
Indeed, US high quality companies are expected to grow their earnings by 15.9% and revenue by 7.3% in 2024, exceeding the broad market by 4.3% and 1.8%, respectively.¹⁴ Their operating margins are expected to continue expanding at a faster pace than the broad market. This is consistent with historical trends observed in 2019, when the US economy slowed from the previous year and the Fed held interest rates at the cycle's peak. During that period, quality companies outpaced the broad market in earnings growth and managed to expand their operating margins when the broad market experienced a margin decline.¹⁵

As a factor, Quality has historically outperformed the broader market in seven out of eight economic slowdowns, and by an average of 6.5% on a cumulative basis since 1988.¹⁶ Quality's track record of consistently outperforming the broad market in every recession since 1988 highlights its resiliency in challenging economic environments.

Quality struggled to outperform in 2022 (Figure 2) as markets re-priced its expensive valuations to their lowest level since 2018, amid the Fed's aggressive rate hikes. But with the Fed closer to its terminal rate, Quality's reasonable valuations and the regional bank crisis rekindled investors' interest in 2023.

Figure 2
**Quality Has
 Outperformed During
 Economic Slowdowns**

■ MSCI USA Quality Excess
 Return Over S&P 500
 (12-Month Annualized)
 ■ LEI Index YoY Change



Source: FactSet, as of November 11, 2023. **Past performance is not reliable indicator of future performance.** Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

After the recent run-up, high quality companies' valuations indeed have become more expensive compared to the beginning of 2023. However, their price-to-forward-earnings and price-to-cash-flow are still 16% and 31% below their historical peaks, respectively. Further, their profitability, as measured by ROE increased to near a record high of 39% in the second half of 2023.¹⁷ Given lower ROE (25%) and weakness in earnings trends in the broad market and peaking interest rates, Quality's current valuations are not too stretched.

Insurance Industry's Pricing Power Pays a Premium

Insurers have been raising premiums to catch up with increasing underwriting expenses, using strong pricing and underwriting actions to confront inflationary pressures and significant losses from natural catastrophes in the first half of 2023. P&C insurers' net written premium, a key indicator of earned premium for the following year, increased by 9% over the same period. And it's expected to increase by high single digits for the fourth straight year in 2024¹⁸ — well above the industry's 10-year average. Adverse auto claim trends are poised to improve, as used vehicle prices declined 7% below their level one year ago, and CPI inflation in maintenance and repair fell steadily to 9% in 2023.¹⁹

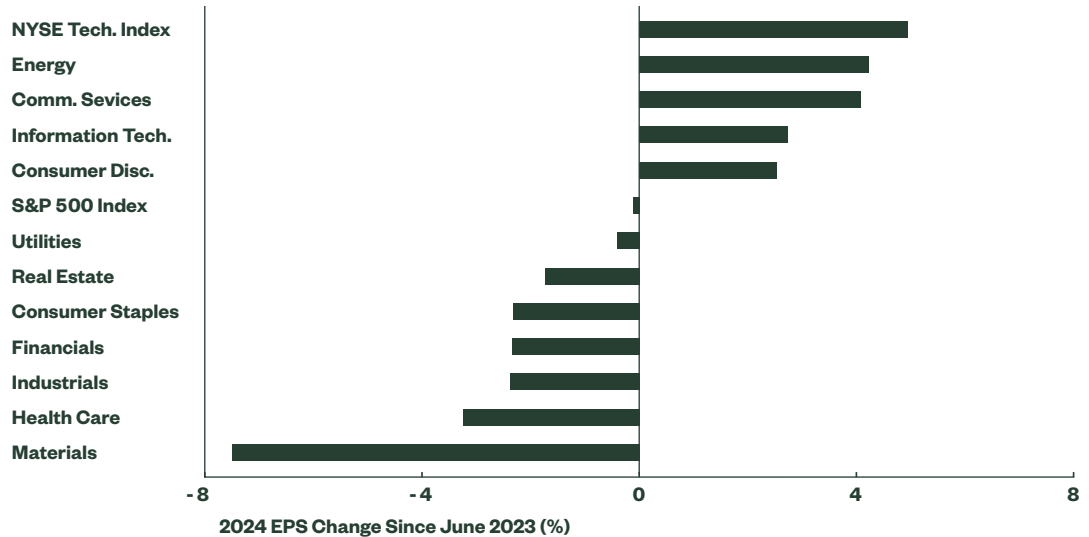
Meanwhile, the higher-for-longer interest rate environment supports insurers' investment income — the second-largest part of their revenues. Life insurance companies, in particular, will generate more income from the difference between investment income and the amount paid out on annuity guarantees and other liabilities.

With new higher premiums taking effect and improved investment returns driven by higher rates, the insurance industry's 2024 earnings estimates have been raised by 3.6% over the past six months, compared to a 0.7% decline for the broad market.²⁰ And the industry's EPS growth is projected to be above 20.0% again next year, outpacing the broad market for the second straight year.²¹

The insurance industry also has shown financial strength. Despite inflationary pressures and increased natural catastrophes in 2023, the industry maintained positive net income, boosting capital levels and keeping the net writings leverage at a healthy level. The industry's aggregated policyholders' surplus increased close to a record high of \$1.07 trillion last year, indicating sufficient financial protections for policyholders in the event of unexpected or catastrophic losses.²²

We have seen similar earnings resilience in the Communication Services, Information Technology and Consumer Discretionary sectors, which have led 2024 positive earnings revisions among the S&P 500 sectors, barring Energy, since June (Figure 3). Earnings sentiment among tech leaders across these sectors has been even stronger than individual sectors as the NYSE Technology Index — an index composed of 35 leading US-listed technology-related companies across the three sectors — has seen higher earnings upgrades for 2024.

Figure 3
**Earnings Sentiment
Among Tech Leaders
Has Been Strong**



Source: FactSet, as of November 9, 2023. Source: FactSet, as of November 9, 2023. **Past performance is not reliable indicator of future performance.**

In addition, AI-related tailwinds may continue to provide growth opportunities in 2024 and beyond for companies well positioned to take advantage of AI technologies. To capture these potential growth opportunities, investors need to take a broad view of the AI ecosystem and look beyond the traditionally defined Information Technology sector. For example, online retail platforms that have large amounts of customer data to train the large language models are in a strong position to leverage AI technologies to improve efficiency in marketing and sales and provide curated customer experiences.

The current AI technology cycle is driven by the world's largest technology leaders who invest heavily in building the foundational large language models and who have plenty of customer data to train the models. Early monetization of gains from AI technology could come more easily for them by offering differentiated high-value-add products to their customer bases, resulting in higher revenue per customer. AI enablers, such as advanced chip makers and cloud computing companies that provide the infrastructure needed to deploy AI at scale, are also able to monetize gains in the beginning stage of AI development.

The significant year-to-date gains in large-cap tech leaders has prompted some investors to question if AI hype has created a valuation bubble. But the NYSE Technology Index's earnings and sales price multiples are still well below their pandemic peaks and dot-com bubble levels, and they're trading around their five-year median thanks to the valuation pressure from higher rates.²³ In addition, these companies have lower financial leverage than the broad market and positive free cash flows, meaning their operations are less impacted by higher financing costs.

As rates peak and investors search for high quality growth companies in a slowing economy, large-cap tech-related leaders likely will continue to attract investors' interest.

Dividend Growers' Quality Traits Offset Volatility

Equity volatility trended lower in 2023, despite elevated rates' implied volatility and episodic volatility driven by the regional bank crisis, debt ceiling negotiation, and the Israel-Hamas war. Year to date, there were only 44 days when the VIX Index was above 20, compared to 236 days for 2022 and 93 days for 2021.²⁴ As monetary tightening enters its third year and the effects of pandemic-era fiscal and monetary stimulus diminish, equity implied volatility is likely to move higher.

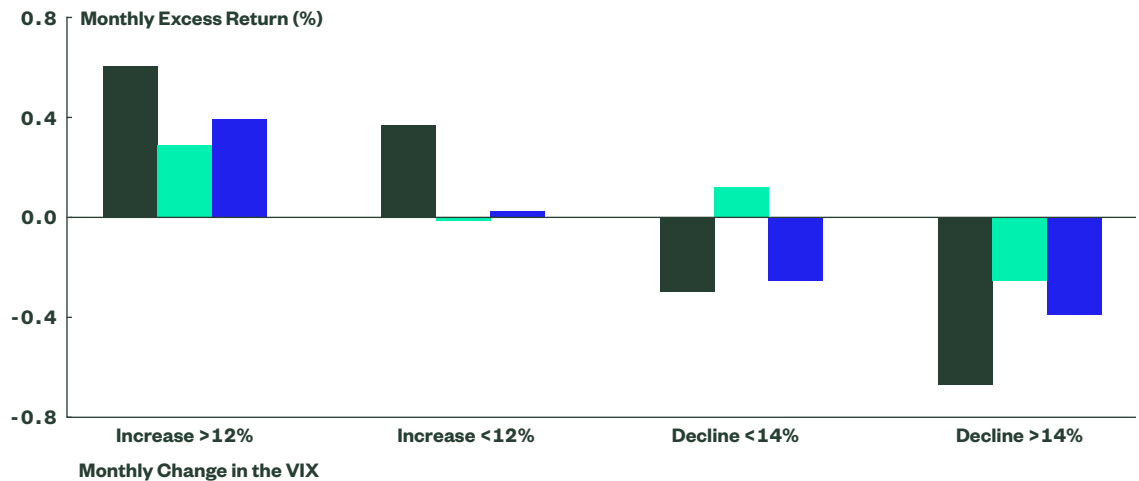
Dividend growers' quality traits may help lower the impact of volatility when pursuing upside in equities.

Companies that have historically increased their dividends for years have shown their ability to balance returning capital to shareholders and reinvesting capital for future earnings growth. Achieving this balance over a long period of time requires financial strength and disciplined capital management. That usually translates into high quality traits, such as lower financial leverage and more stable earnings than the broader market and higher-yielding companies.²⁵

Thanks to their track record of returning capital to shareholders and maintaining financial stability, on average, dividend growers have outperformed low dividend payers, high dividend payers, and the broad market when equity volatility jumped double digits for the month. Even when volatility increased to a lesser extent, dividend growers still outperformed low dividend payers by a large margin (Figure 4).

Figure 4
Dividend Growers Outperformed Amid Increased Volatility

- Dividend Growers vs. Low Dividend Payers
- Dividend Growers vs. High Dividend Payers
- Dividend Growers vs. Broad Market



Source: FactSet, Kenneth French Data Library, for the period from November 30, 2005 to September 30, 2023. Dividend growers are represented by the S&P High Yield Dividend Aristocrat Index. Low and high dividend stocks are represented by the bottom and top quintile groups based on dividend yield. The broad market is represented by the S&P Composite 1500 Index. **Past performance is not a reliable indicator of future performance.** Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income as applicable.

Implementation Ideas

With higher rates taking a larger bite of economic growth, target quality growth with:

A Multi-factor US Strategy that Blends Quality, Value, and Minimum Volatility	QUS SPDR MSCI USA StrategicFactors SM ETF
The Insurance Industry's Pricing Power	KIE SPDR S&P Insurance ETF
Tech Companies' AI Leadership	XNTK SPDR NYSE Technology ETF
Dividend Growers' Resilience	SPDG SPDR Portfolio S&P Sector Neutral Dividend ETF SDY SPDR S&P [®] Dividend ETF

Theme 2: Emphasize Stable Income

Balancing income and stability is the key to unlocking bond opportunities in 2024. After the rate moves in 2023, core bond yields are now more in line with their duration — the first time they've been this balanced since 2009. But this more balanced opportunity comes at a time when both realized and implied volatility levels are abnormally high, a risk regime that is likely to endure.

Over the next eight months, the Fed will try to pull off a delicate passing of the baton in its policy relay race — transitioning from hiking to holding to cutting rates, without causing harm to the markets or the economy.

Amid high rates, increased volatility, mixed fundamentals, and evolving fiscal and monetary policy, bond investors should consider:

- **Active core bond strategies**, to pursue more yield with less volatility than indexed core bonds while navigating an evolving risk regime.
- **Select short-duration bond exposures**, where elevated yields offer income alongside the potential to minimize total risks — including reinvestment risk.
- **Balanced high-quality intermediate investment-grade bonds**, to take on more fairly compensated credit and rate risks, given their yield, duration, and spread profiles.
- **Active high-income strategies**, where allocating selectively across multiple credit sectors may help to diversify income and below investment-grade risks.

Historic Bond Losses and New Risks

The new balance for core bonds follows a painful record run of bond losses. The Bloomberg US Aggregate Bond Index (Agg) is down 15% over the past three years and roughly flat in 2023.²⁶

Shorter term bonds have fared better, up 2% in 2023 with far fewer drawdowns over the past three years (max drawdown of -7% versus -17%).²⁷ And they continue to screen as attractive. Given their low duration and the shape of the yield curve, they historically have had higher yields and more stability, as a result of lower total volatility, compared to core markets.

But short-term bonds have their own risks. Reinvestment risk, based on the selected tenor, may come more into focus if the Fed cuts rates — something that could reduce both the potential income and total return currently quoted by a segment's yield to worst.

Credit offers strong income, but with uneven fundamentals. Rising default rates and tight credit spreads present challenges to total returns from potentially weaker price returns. Being selective among higher quality stacks of bonds may help to balance stability while seeking to earn the carry from the credit sector's high coupons.

After Core Pain, Bonds Due for Gains

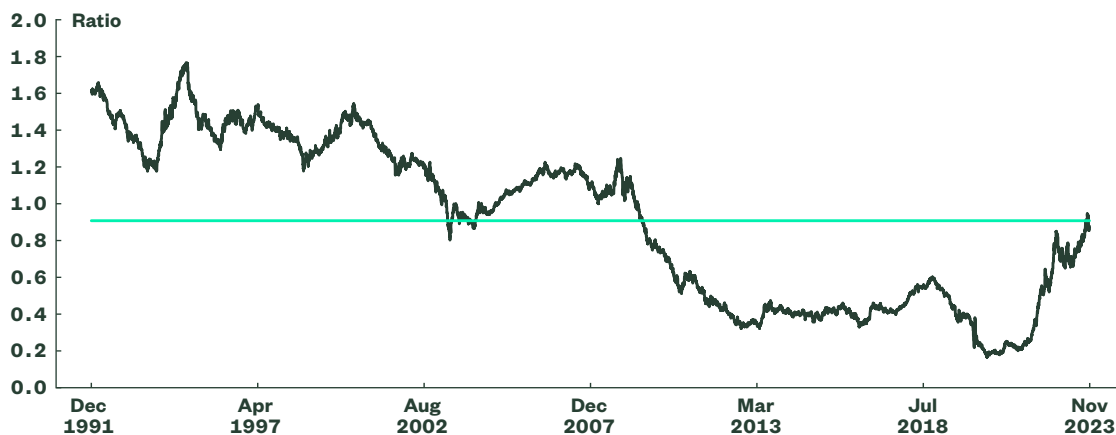
Over the past three years, core bonds have detracted from the standard 60/40 portfolio, given their significant negative returns since 2021. At the same, their diversification properties were also reduced, with the correlation of stocks and bonds increasing and turning positive as higher rates hurt both asset classes.²⁸ Add in the weakest relative return trends in over 45 years — with US 1-3 month T-bills outperforming the Agg for a record 32 consecutive rolling 12-month periods²⁹ — and it's no wonder the rationale for including bonds in portfolios has been challenged.

But core bonds' yield-per-unit-of-duration has moved from 0.65 at the start of the year to 0.90 — a level not seen since 2009 (Figure 5). And, for the first time since 2009, the Agg's subsequent one-year total return could still be positive with even another 100 basis point (bps) rise in rates. This calculation is based only on duration effects, while holding other factors equal, using the commonly accepted formula $(-Rate\ Change * Duration) + Yield + Rate\ Change$.

Figure 5

Core Bonds Are More Fairly Balanced After 15 Years of Imbalance

■ Yield-per-Unit-of-Duration
■ Median



Source: Bloomberg Finance L.P. as of November 14, 2023. **Past performance is not a reliable indicator of future performance.** The Bloomberg US Aggregate Bond Index is used to represent core bonds.

More balanced breakeven ratios brightening bonds' outlook is one reason bond allocations have increased heading into 2024. A recent Bank of America survey found that investors have turned the most bullish on bonds since the Global Financial Crisis — dumping cash in favor of holding the biggest overweight positions in bonds since 2009.³⁰ ETF fund flows confirm the relative interest in bonds; bond ETFs have taken in 43% of all ETF flows, despite making up just a 20% of total ETF assets.³¹

But, credit risks challenge the notion of bonds being balanced to all risks. Also, higher yields coincide with higher levels of rate volatility. Realized volatility on the Agg is in the historical 96th percentile over the past 30 years.³² Meanwhile, implied rate volatility is in the 88th percentile over the same period.³³

With volatility elevated, the ratio of yield-per-unit-of-volatility is not as balanced as the yield-per-unit-of-duration. Right now, the yield-per-unit-of-volatility is 34% below its long-term average (0.74 versus 1.13), as opposed to the yield-per-unit-of-duration trading right at its average.³⁴

Still, the duration math suggests bonds are back — for income generation and total return, at least for the longer-term investor who can withstand some day-over-day volatility. And if the Fed does cut rates, there could be some duration-induced price appreciation for the first time in three years, ending a painful draught for bond investors.

Monetary Policy Shift and Reinvestment Risk

Consensus is for 50 bps of rate cuts by the July 2024 Fed meeting.³⁵ But the March meeting likely will have the greatest impact on rate movements because the Fed will begin to foreshadow its shift in policy, consistent with how Chair Powell used forward guidance to prep the market for higher-for-longer rates during the Jackson Hole Symposium.³⁶ March will also be exactly two years from when the Fed started hiking rates, consistent with research on the lag effects of rates.³⁷

With Fed policy anticipated to moderate, forward looking estimates from consensus forecasts expect the curve to ever so slightly slope upward by Q3 2024.³⁸ US 2-year forecasts are for 3.88% and US 10-year forecasts are for 3.90%, with steepening expected to continue toward the end of the year.

With lower rates, reinvestment risk becomes a risk factor — even more so if the Fed cuts rates as aggressively on the way down as it hiked on the way up. Given how sensitive ultra-short-term rates are to Fed policy rates, this could significantly impact investors who have flocked to cash-like, money-market mutual funds over the past year.

Roughly \$1 trillion of assets have been deposited into those funds since the start of 2023, ballooning assets to over \$5.7 trillion — a high water mark that coincides with significant inflows into ultra-short duration government bond ETFs.³⁹ The roughly 5% yield those investors are earning today is likely to decline.

For investors staring down reinvestment risk, this just means that the once-considered-stable income of near zero duration government funds is likely to be a little more unstable in 2024. Adopting more of a total return mindset and moving further up the curve, even within short-duration tenors, may be a better option for investors.

Counter Rate Volatility with a Mix of High Quality and High Income Bonds

With bonds back in favor, but still subject to elevated rate volatility, a diverse mix of high quality and high income bonds can help investors stabilize their fixed income portfolios and limit volatility on the hunt for income and total returns.

With that in mind, consider the following:

Active Core Strategies

Go active in the core for income, total return, and volatility management. Today's uncertain monetary policy path and mixed fundamentals call for active fixed income ETFs to help insulate your core bond portfolio from elevated volatility, while also pursuing income opportunities.

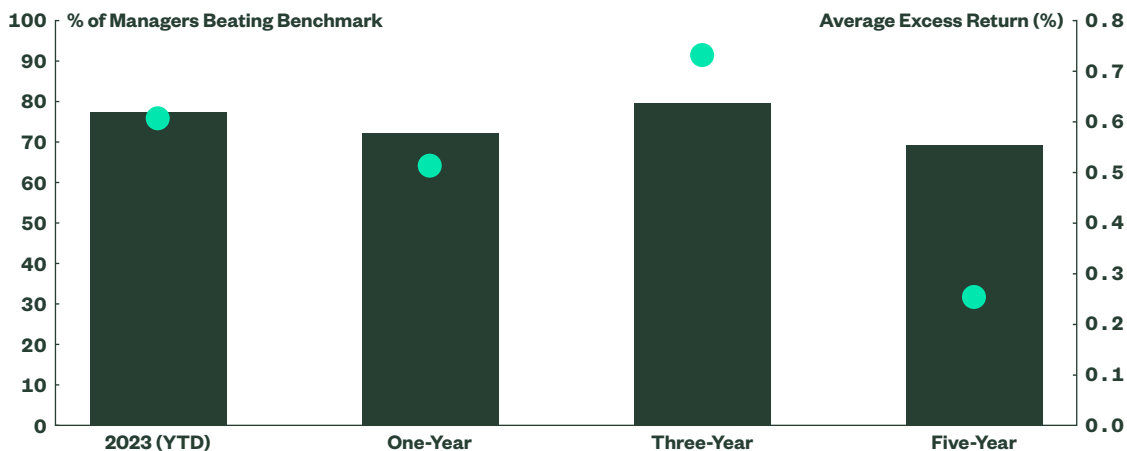
By combining traditional and non-traditional fixed income asset classes to maximize total return over a full market cycle, active sector allocation and security selection can help investors take advantage of income and total return opportunities, while also seeking to mitigate the credit and rate risks facing core markets.

Active managers' ability to expand their opportunity set to include non-Agg sectors, or re-allocate capital along the yield and credit curve differently than how it is within the Agg, can be valuable heading into 2024.

For example, if an active manager held all of the same sectors of the Agg in 2023, but had one year less of duration, the manager would have outperformed the benchmark just from duration management.⁴⁰ The same would be true if the duration matched the Agg but the manager held allocations to EM debt, high yield, or intermediate Treasury inflation-protected securities (TIPS) — three sectors with stronger returns than the Agg.⁴¹ In 2023, this ability to re-allocate capital has led to nearly 70% of intermediate core-plus managers beating their benchmark.⁴² Historically, the majority of active managers in this category have provided meaningful alpha (Figure 6).

Figure 6
Active Core Managers Have a Strong Track Record of Delivering Alpha

■ % of Intermediate Core-Plus Managers Beating Benchmark
● Average Excess Return



Source: Morningstar as of October 31, 2023. **Past performance is not a reliable indicator of future performance.**

Managers with a historical track record of generating above-benchmark yields with less volatility are well-suited for the core. And 2024 is likely to be a year where bonds, although they've never been more balanced in terms of duration risks, are still out of balance versus total portfolio risks.

Select Short-duration Bonds

Portions of the short end of the curve can offer elevated yields alongside the potential for more stable total returns than bonds further out on the curve.

The problem is reinvestment risk looms on the horizon. Particularly for all those assets invested in money market-like instruments. In 2024, to strike a balance among the objectives of income, stability, and reinvestment risk mitigation, investors should consider moving further out on the short end of the curve.

Focusing on short duration, not short maturity, is critical. And using duration as the screen allows for more securitized segments to be included in a portfolio that may have a long maturity — like mortgages — but far less duration given the structure of the securitization.

Even just naively capping an Agg-based portfolio by maturity, and not by a duration of less than three years, leads to the removal of mortgages — a historically defensive sector with current attractive yields relative to Treasuries (5.5% versus 4.7%).⁴³

Again, to construct a potentially high income, stable return profile, it's a good time to consider active strategies that have the ability to blend different short-duration sectors. In 2023, this enabled 79% of active short-term bond managers to beat their benchmark.⁴⁴

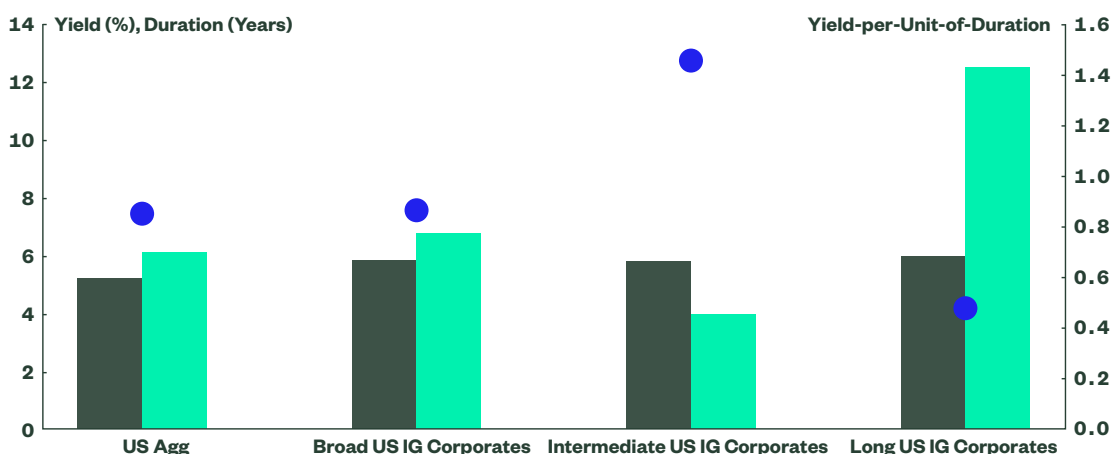
High-quality Intermediate Investment-grade Bonds

With broader core markets balanced versus rate risks, taking on some duration is not a bad idea. But it's important to ensure that the duration risk assumed is being fairly compensated. Consider tactically overweighting intermediate investment-grade corporate bonds with a maturity less than 10 years for these three reasons:

- 1 Unlike high yield credit spreads, which are well below their historical averages (-22%),⁴⁵ intermediate investment-grade corporate bonds are trading closer to their long-term average (-8%),⁴⁶ so valuations are not as stretched.
- 2 Owning bonds with maturities between 1 and 10 years, leading to a weighted duration of 4 years,⁴⁷ allows investors to trim duration risk (and volatility) relative to the Agg, while also limiting reinvestment risk.
- 3 Sitting in the short-plus belly portion of the curve allows a 1- to 10-year maturity exposure to strike a balance between yield, duration, and potential volatility from rate movements relative to other broader bond sectors (Figure 7).

Figure 7
Intermediate Investment-Grade Corporate Bonds Can Strike a Strong Balance Between Yield and Duration

■ Yield to Worst
■ Duration
● Yield-per-Unit-of-Duration



Source: Bloomberg Finance L.P. as of November 14, 2023. US Agg = Bloomberg US Aggregate Bond Index, Broad US IG Corporates = Bloomberg US Corporate Bond Index, Intermediate US IG Corporates = Bloomberg US Intermediate Corporate Bond Index, Long US IG Corporates = Bloomberg US Long Corporate Bond Index. **Past performance is not a reliable indicator of future performance.**

By having some duration, if rates were to fall, the duration-induced price appreciation can add to the total return potential of an asset yielding over 5.75%. At the same time, given the yield/duration profile in Figure 7, if rates rise, a stable cushion can help offset duration-induced price declines.

Active High Income Strategies

All the negatives for below investment-grade bonds at the start of 2023 — tight spreads, more downgrades than upgrades, potential for rising defaults, and recessionary forecasts — remain as we turn to 2024.

The only difference is that high yield bonds, senior loans, and collateralized loan obligations (CLOs) produced some of the strongest returns out of any fixed income assets in 2023. Those three segments were up 7.8%, 9.6%, and 7.9%, respectively, while core Agg bond returns were flat.⁴⁸ And those returns came with far less volatility than the Agg for both loans and CLOs.⁴⁹

But fundamental risks are real. Defaults are forecast to rise to 3.5%, up from 3.0%.⁵⁰ Meanwhile, downgrades are still outpacing upgrades — a trend that has now occurred for six straight quarters.⁵¹ Yet, the last two quarters have seen a moderation in pace. Nonetheless, the backdrop for credit is not incredibly attractive as spreads for high yield bonds are 22.0% below their average.⁵²

But the carry, or coupon, from these high income sectors is too attractive to ignore. In fact, it was one of the major factors driving stronger total returns than the Agg in 2023, accounting for more than 70% of the total return of each of the three sectors mentioned above.⁵³ Even with rates falling to close out 2023, high yield and CLOs offer yields over 7%, with loans over 10%.⁵⁴ If markets stay resilient in 2024, the carry could counterbalance any credit risks like it did in 2023.

As a result, actively allocating across credit sectors like high yield, senior loans, and CLOs, as well as throughout the credit rating spectrum, can diversify income streams to help manage the risks in below investment-grade markets.

Implementation Ideas

To seek a balance between income and stability investment objectives in 2024, consider:

Active Core Strategies	TOTL SPDR® DoubleLine® Total Return Tactical ETF
Select Short-Duration Exposures	STOT SPDR® DoubleLine® Short Duration Total Return Tactical ETF ULST SPDR® SSGA Ultra Short Term Bond ETF
Balanced Intermediate High Quality Corporate Bonds	SPIB SPDR® Portfolio Intermediate Term Corporate Bond ETF
Active High Income Strategies	HYBL SPDR® Blackstone High Income ETF

Theme 3: Seek New Opportunities Supported by Macro Momentum

Volatility is back. The CBOE VIX Index (VIX) recently traded in the 20s after spending 80% of 2023 below its historical average of 19.⁵⁵ Between high rates, above-average inflation, and increasing geopolitical stress, investors are likely to see episodic volatility throughout 2024. But while it can sow uncertainty and cause upheaval, macro volatility also creates opportunities.

For example, despite rate volatility and above-average inflation in 2023, strong labor and wage foundations that underpin consumer strength kept unemployment low while fueling consumption. In fact, the consumer was the main driver of growth, expanding by 4% and driving 82% of the 4.9% headline real GDP figure in Q3.⁵⁶ And inflation-adjusted final sales to private domestic purchasers, a key gauge of underlying demand, rose 6.1% on the quarter.⁵⁷

With forward-looking GDP estimates positive⁵⁸ and the probability of recession moving lower,⁵⁹ industries connected to the consumer engine could remain a source of macro-driven momentum in 2024.

Macro trends could even turn into tailwinds, creating momentum in the following markets:

- **Housing and home retail**, driven by a resilient consumer that may benefit if the Fed cuts rates and mortgage rates fall.
- **Defense industry**, likely fueled by strong bi-partisan support in Washington, DC.
- **Real assets**, where natural resource markets have reacted differently to geopolitical stress.
- **Gold**, which has historically outperformed in volatile markets and has potential upside from a stretched US dollar and persistent inflation.⁶⁰

What supports macro-led volatility turning into macro-led opportunity in 2024?

Consumer Strength:
A Sturdy Foundation
for Homebuilders

Nowhere has the consumer been more resilient than in the Homebuilders industry — home construction, home retail, and home furnishings. Even as elevated mortgage rates and tight supply curtailed existing home sales, and expected sales and prospective buyer traffic expectations dropped to their lowest level in a year,⁶¹ new home sales have risen.⁶² And the National Association of Home Builders' (NAHB) sentiment reading indicates greater demand for new construction,⁶³ supported by builders offering financing incentives to reduce the pain of high rates.⁶⁴

A 3.4-month inventory to end 2023 favors sellers and builders who will continue to benefit from higher prices. The tight housing market also has resulted in an increase in home improvement projects. The remodeling market condition indicator is 23% above its 15-year average, benefiting housing retail.⁶⁵

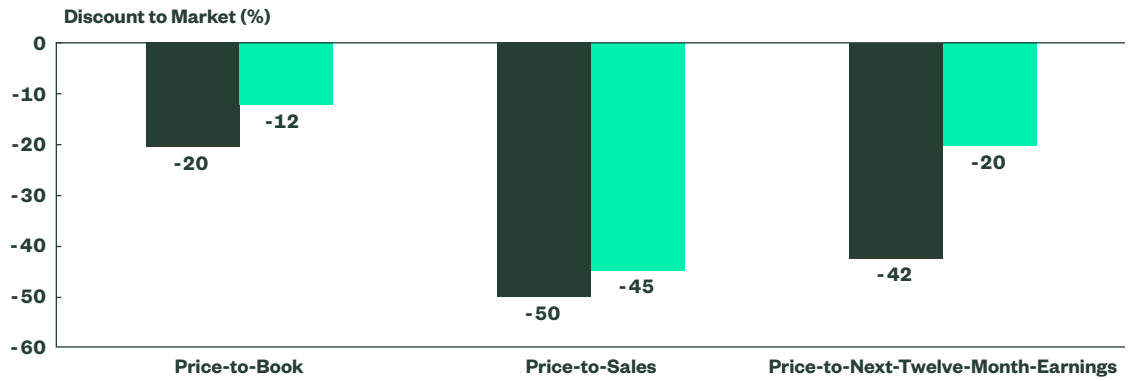
Between increased new home sales and above-average remodeling plans, it's no surprise that Homebuilders stocks gained 30% in 2023,⁶⁶ 12 percentage points better than the market⁶⁷ — talk about flying in the face of the “high rates hurt housing” mantra.

More than 83% of firms, including the big box firms, surprised to the upside for Q3 2023 earnings season — outpacing expectations by 8.4%.⁶⁸ Both figures are better than the market (81%, 7.5%, respectively).⁶⁹ And while the broader market has had its 2024 earnings forecast lowered over the past few months (-0.6%), Homebuilders has witnessed a near 4% increase.⁷⁰

Importantly, the recent price and fundamental momentum hasn't extended valuations. Across price-to-next-twelve-month-earnings (P/E), price-to-sales (P/S), and price-to-book (P/B), Homebuilders is trading at a larger-than-normal discount to the S&P 500® Index today than over the past ten years (Figure 8).⁷¹

Figure 8
Homebuilders Now Trades at a Wider Discount than Usual

■ Current Discount to Market
 ■ 10-Year Median



Source: Bloomberg Finance L.P. as of November 13, 2023, based on the S&P Homebuilders Select Industry Index and the S&P 500 Index. **Past performance is not a reliable indicator of future performance.**

Looking ahead, Fed rate cuts in 2024 could help ease the housing affordability burden by lowering mortgage costs. But given the tight supply, it's unlikely we'll see a buyers' market overnight. In fact, the National Association of Realtors expects home prices to rise by 2.6% in 2024.⁷²

Alongside resilient earnings trends and constructive valuations, this may lead to a continued optimistic outlook for this consumer-oriented industry.

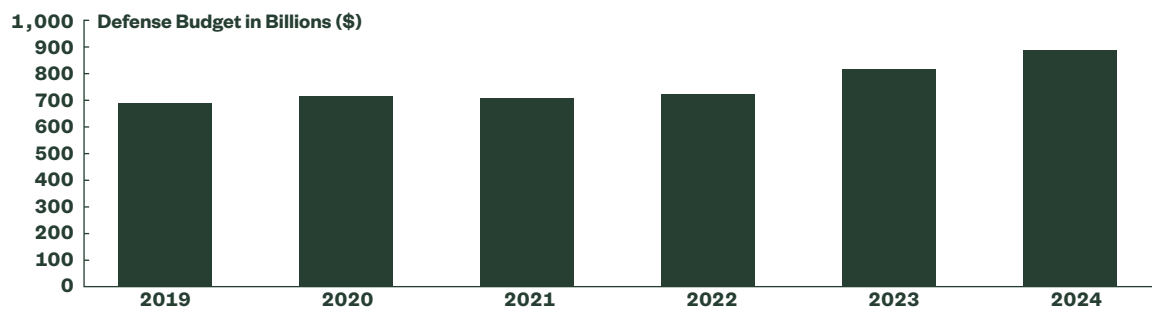
Bipartisan Support for Defense Defies US Political Trend

Headlines in a divided Washington focus on contentious budget debates and theatrics on the campaign trail. Meanwhile, defense spending has quietly garnered bipartisan support. The Biden administration proposed a \$106 billion supplemental-aid request to support Ukraine, Israel, and other critical national security priorities. Such a request could drive an incremental 7–8% increase to the 2024 Pentagon budget.⁷³

At the same time, Republican Senate Leader Mitch McConnell, along with other defense hawks, urged the Senate to support more aid as part of broad national security package.⁷⁴ Proposals by the GOP-led House of Representatives carved out measures for aid to both Israel and Ukraine, while cutting other discretionary spending measures.⁷⁵ And on the campaign trail, GOP candidates are touting their support for Ukraine and Israel along with being tough on China and US border enforcement.⁷⁶

The defense budget has expanded from \$687 billion in 2019 to \$817 billion in 2023 as violence around the world increased. The Biden administration suggested a 2024 budget of \$886 billion under the National Defense Authorization Act (Figure 9).⁷⁷

Figure 9
Defense Spending Has Risen Significantly



Source: Office of the Under Secretary of Defense (Comptroller) comptroller.defense.gov. National Defense Authorization Act for Fiscal Year 2024. National Defense Authorization Act for Fiscal Year 2023. National Defense Authorization Act for Fiscal Year 2022. **Past performance is not a reliable indicator of future performance.**

Add in the emerging threat of artificial intelligence (AI) on top of increased cyber warfare, and defense spending will extend from traditional expenditures to advanced technologies. In addition to President Biden's executive order on "Safe, Secure, and Trustworthy Artificial Intelligence,"⁷⁸ there have been hearings on Capitol Hill on the growing influence of AI and bipartisan bills proposed to regulate the industry.⁷⁹

With more spending on defense, contractors in the space are likely to witness upticks in bottom-line and top-line growth. Aerospace & defense firms have had their 12-month earnings forecast revised upwards by 3% since the start of Q3 earnings season, right as those firms registered 57% EPS growth while 75% firms beat estimates — outpacing forecasts by 6.6%.⁸⁰

More importantly, and reflecting the strong demand, their sales growth was 10%, with 85% of firms either beating or matching estimates.⁸¹ This growth profile coincides with valuations that remain attractive. Aerospace & defense firms trade at a 1% discount to the market based on P/B versus a historical 8% premium, and they trade at a 25% discount based on P/S versus a historical 23% discount to the market.⁸²

Looking ahead, with continued demand for services from their largest customer, alongside constructive fundamentals, the outlook for the defense industry is supported by both strong macro and fundamental trends.

Commodity Volatility Creates Dispersion and Opportunity in Real Assets

Increased geopolitical risks have turned commodity prices volatile. After falling through the first nine months of the year, implied oil volatility spiked 30% following the attack by Hamas on Israel.⁸³ Realized 30-day volatility on the broader commodity markets recently doubled from its nadir in September.⁸⁴

Volatility has also resulted in widening dispersion, as commodity markets reacted differently. One-month dispersion across the major commodity markets rose to the 50th percentile and has been volatile itself — ranging from the first percentile all the way to the 70th percentile in the past three months.⁸⁵

This return dispersion can create tactical opportunities.

In the US, global growth plays a role because it anchors demand for commodities and other inflation-related real assets like real estate. And growth is under slight pressure. Global real GDP is forecast to be 2.6% in 2024 and 3.0% in 2025, below the 3.3% pre-pandemic five-year average.⁸⁶ The fact that those figures are still positive, indicating no recession over the next two years, should reassure broad-based demand concerns.

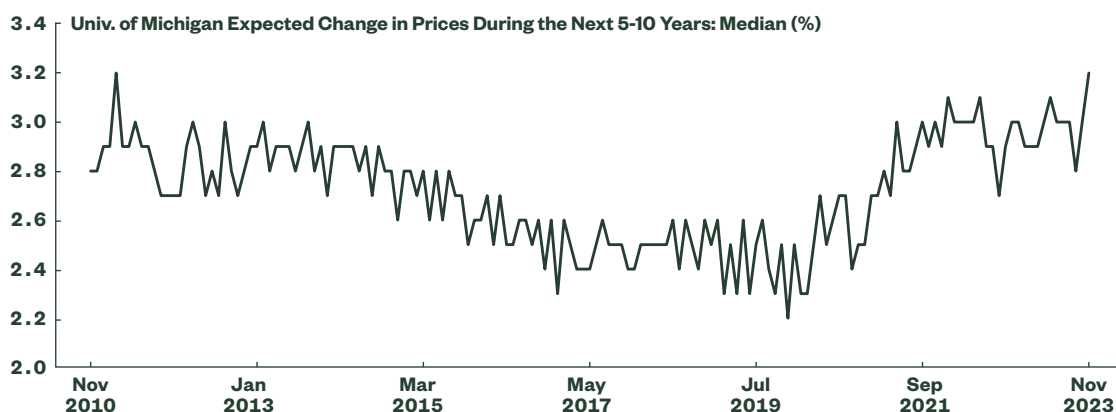
In fact, Morgan Stanley's outlook for aluminum and copper is positive, given stronger-than-expected demand in China, driven by property completions and "green" applications.⁸⁷ They also expect bulk commodity prices to stay resilient, with increasingly unlikely steel production cuts in China set to keep demand for iron ore and metallurgical coal strong.⁸⁸

Barclays views US oil demand for 2024 to be higher than it was for 2023, as the economy remains resilient and growth positive.⁸⁹ This is all set against weaker supply. Planned OPEC+ output cuts,⁹⁰ alongside a tepid outlook for US inventories, indicate a tighter market that should support oil's prospects. Lower inventories are likely to boost oil prices, with the US Department of Energy Information Administration estimating the spot price of Brent crude around \$94.91 a barrel in 2024, up from a previous forecast of \$88.22.⁹¹

Inflation — expected to linger around 3% in 2024 with upside risks from commodity prices⁹² — also supports the case for real assets. While cooling, inflation will still be somewhat sticky over the next year and is not expected register pre-pandemic levels for some time.

Sticky inflation is corroborated by the recent University of Michigan US Consumer Confidence Report revealing that consumers' long-term inflation expectations increased to the highest rate since 2011 (Figure 10).⁹³ The rationale for higher prices over the years ahead: increasing gas prices.

Figure 10
**Higher Inflation
 Expectations Support
 the Case for Real Assets**



Source: Bloomberg Finance L.P. as of November 12, 2023. **Past performance is not a reliable indicator of future performance.**

There are also strategic reasons to add to real assets. Namely, most portfolios are likely overweight equities and nominal assets like bonds that can be challenged on a real return basis, given the current growth and inflation backdrop.

Overlaying a less correlated tactical real asset natural resource sector rotation strategy may offer potential diversification as investors position for a macro environment where commodity prices may have a volatile, but potentially upward bias if aggregate demand continues to improve.

As Volatility Builds,
 Think Gold

With higher-for-longer rates raising funding concerns for firms and leading to weaker guidance, violence in the Middle East disrupting commodity markets, and political posturing around record deficits, no wonder cross-asset volatility has risen.⁹⁴

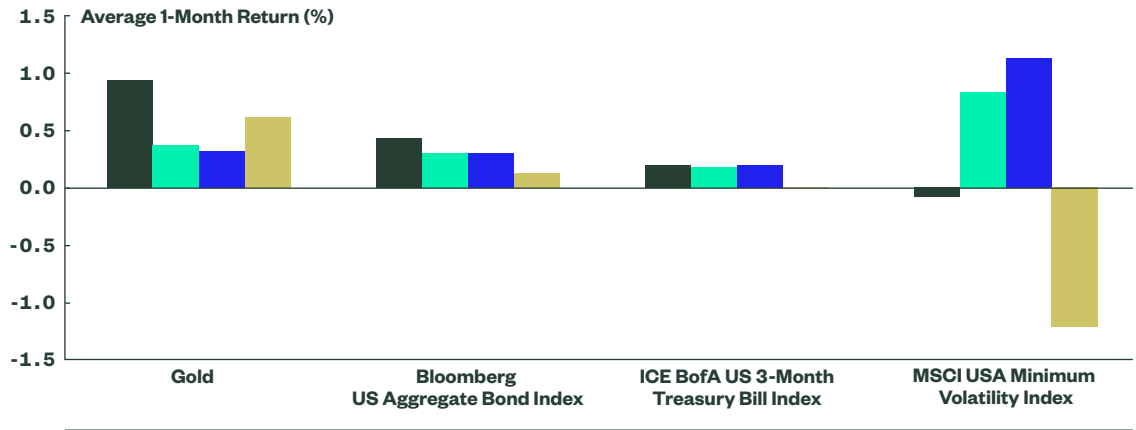
Rates implied volatility (IV), a main driver of cross-asset volatility, now sits above that of S&P 500 Index IV by almost four percentage points.⁹⁵ On average, rates volatility is usually below equity volatility by 3%. And volatile volatility (vol-of-vol) has spiked by 50% from summer lows.⁹⁶

Historically, on average, in high volatility periods when the VIX Index rises, gold prices have outperformed other traditional risk mitigators like bonds, Treasury bills, and defensive equities. And gold has the largest spread of returns between high and low terciles (Figure 11).⁹⁷

Figure 11

Gold Has Shined During Periods of High Volatility

- High Tercile of Volatility
- Middle Tercile of Volatility
- Low Tercile of Volatility
- High Minus Low Spread



Source: Bloomberg Finance L.P. as of November 12, 2023. **Past performance is not a reliable indicator of future performance.**

Gold is not only for risk mitigation. There could be additional tailwinds to the spot price of gold from a macro perspective. The dollar, given the restrictive policy from the Fed, remains toward the higher end of its historical value, trading well above its historical real effective rate and just 4% away from its all-time high.⁹⁸ If the Fed does decide to cut rates, that could lead to relative depreciation versus other currencies and some mean reversion. Gold has had a -45% correlation to the dollar over the past 20 years.⁹⁹

Meanwhile, if inflation remains stubborn, that could embolden the Fed to keep rates higher for longer than expected. In that case, gold’s store of value properties maybe be supported by strong global demand led by central banks.

That’s something strategic investors realized in 2022 when CPI hit multi-year highs and gold was up 44 bps on the back of the highest level of central bank demand for gold on record, while stocks and bonds were both negative.¹⁰⁰

Either increasing a strategic allocation to gold, or introducing an initial portfolio position now, could potentially benefit investors amid rising geopolitical risks, a mean-reverting weaker dollar, and stubborn inflation.

Implementation Ideas

To turn macro-led volatility into a macro-led opportunity, consider:

Homebuilders	XHB SPDR® S&P Homebuilders ETF
Defense Industries	XAR SPDR® S&P Aerospace & Defense ETF
	FITE SPDR® S&P Kensho Future Security ETF
Real Assets	RLY SPDR® SSGA Multi-Asset Real Return ETF
Gold	GLD ® SPDR® Gold Shares
	GLDM ® SPDR® Gold MiniShares® Trust

Endnotes

- 1 FactSet as of November 17, 2023.
- 2 U.S. Bureau of Economic Analysis, October 26, 2023.
- 3 Earnings Insight and FactSet as of November 17, 2023.
- 4 Earnings Insight and FactSet as of November 17, 2023.
- 5 FactSet as of November 17, 2023.
- 6 Bloomberg Finance L.P. as of November 10, 2023.
- 7 S&P Global as of October 31, 2023.
- 8 European Commission, October 31, 2023.
- 9 FactSet as of October 31, 2023. EM equities are represented by the MSCI Emerging Market Index. Based on next-twelve-month P/E relative to the S&P 500 Index.
- 10 FactSet as of October 31, 2023.
- 11 Federal Reserve Bank of Boston, October 12, 2023.
- 12 Bloomberg Finance L.P. as of October 31, 2023, based on a screen of Russell 1000 firms based on free-cash-flow per share and net-debt-to-EBITDA.
- 13 JP Morgan, "US Equity Strategy: The Cost of Even Higher for Longer and Tightening Liquidity," October 30, 2023.
- 14 FactSet as of November 10, 2023.
- 15 FactSet, as of March 31, 2020. EPS growth for MSCI USA Quality Index was 3.3%, compared to 0.5% for the S&P 500. MSCI USA Quality EBIT margin expanded by 1.6%, compared to -0.6% decline for the S&P 500.
- 16 FactSet and State Street Global Advisors as of October 31, 2023. For the period between June 1988 and October 2023.
- 17 FactSet as of October 31, 2023.
- 18 CFRA, Property & Casualty Insurance Industry Survey, July 2023.
- 19 US Bureau of Labor Statistics, October 31, 2023.
- 20 FactSet, as of November 14, 2023.
- 21 FactSet, as of November 14, 2023.
- 22 NAIC, US Property & Casualty and Title Insurance Industries, 2023 First Half Results.
- 23 FactSet, as of October 31, 2023.
- 24 FactSet, as of November 13, 2023.
- 25 FactSet as of October 31, 2023. Based on weighted average long-term debt to capital and average earnings growth variability of constituents of the S&P High Yield Dividend Aristocrats Index, compared to the S&P Composite 1500 Index.
- 26 Bloomberg Finance L.P. as of November 14, 2023.
- 27 Bloomberg Finance L.P. as of November 14, 2023, based on the Bloomberg US Aggregate 1-5 Year Index.
- 28 Since the start of 2022, the rolling 180-day correlation between the S&P 500 Index and the Bloomberg US Aggregate Bond Index has been positive, contrary to the historical negative correlation per Bloomberg Finance L.P. as of November 14, 2023.
- 29 Bloomberg Finance L.P. as of November 14, 2023, based on the return of the Bloomberg 1-3 Month US T-Bill Index and the Bloomberg US Aggregate Bond Index.
- 30 BofA ML Fund Manager Survey, November 14, 2023.
- 31 Bloomberg Finance L.P. as of November 14, 2023.
- 32 Bloomberg Finance L.P. as of November 14, 2023.
- 33 Bloomberg Finance L.P. as of November 14, 2023, based on the ICE BofA MOVE Index.
- 34 Bloomberg Finance L.P. as of November 14, 2023, based on data from 1992 to 2023.
- 35 "US Oct. CPI Unchanged, Below Estimate," Bloomberg, November 14, 2023.
- 36 "Markets Brace for Swings After High Rates Mantra of Jackson Hole," Bloomberg, August 27, 2023.
- 37 Atlanta Fed President Raphael Bostic's Nov 15, 2022 article, "On Long and Variable Lags in Monetary Policy,"
- 38 Bloomberg Finance L.P. as of November 14, 2023.
- 39 Bloomberg Finance L.P. as of November 14, 2023.
- 40 Bloomberg Finance L.P. as of November 14, 2023, based on duration effects.
- 41 Bloomberg Finance L.P. as of November 14, 2023, based on the return of the Bloomberg Emerging Markets Hard Currency Aggregate Index, the Bloomberg US High Yield Corporate Bond Index, and the Bloomberg US Govt Inflation-Linked 1-10 Years Index.
- 42 Morningstar as of October 31, 2023.
- 43 Bloomberg Finance L.P. as of November 14, 2023, based on the Bloomberg US MBS Index and Bloomberg US Treasury Index.
- 44 Morningstar as of October 31, 2023.
- 45 Bloomberg Finance L.P. as of November 2023, based on the Bloomberg US High Yield Corporate Bond Index option-adjusted-spread from 1993-2023.
- 46 Bloomberg Finance L.P. as of November 14, 2023, based on the Bloomberg US Intermediate Corporate Bond Index option-adjusted-spread from 1988-2023.
- 47 Bloomberg Finance L.P. as of November 14, 2023, based on the Bloomberg US Intermediate Corporate Bond Index.
- 48 Based on the JP Morgan CLOIE Index, the Bloomberg US High Yield Corporate Bond Index, and Markit/iBoxx USD Liquid Leveraged Loan Index as of November 14, 2023 per JP Morgan and Bloomberg Finance L.P.
- 49 Based on the JP Morgan CLOIE Index, the Bloomberg US High Yield Corporate Bond Index, and Markit/iBoxx USD Liquid Leveraged Loan Index as of November 14, 2023 per JP Morgan and Bloomberg Finance L.P.
- 50 "BofA ML Collateral Thinking," November 10, 2023.
- 51 Bloomberg Finance L.P. as of November 14, 2023, based on S&P ratings for US high yield issuers.
- 52 Bloomberg Finance L.P. as of November 2023, based on the Bloomberg US High Yield Corporate Bond Index option-adjusted-spread from 1993-2023.
- 53 Based on the JP Morgan CLOIE Index, the Bloomberg US High Yield Corporate Bond Index, and Markit/iBoxx USD Liquid Leveraged Loan Index as of November 14, 2023 per JP Morgan and Bloomberg Finance L.P.
- 54 Based on the JP Morgan CLOIE Index, the Bloomberg US High Yield Corporate Bond Index, and Markit/iBoxx USD Liquid Leveraged Loan Index as of November 14, 2023 per JP Morgan and Bloomberg Finance L.P.
- 55 Bloomberg Finance L.P. as of November 13, 2023.
- 56 Bureau of Economic Analysis data as of November 13, 2023.
- 57 Bureau of Economic Analysis data as of November 13, 2023.
- 58 Federal Reserve Bank of Atlanta, Atlanta Fed GDPNow GDP Forecast is 2% for Q4 2023.
- 59 Based on the United States Recession Probability Forecast per Bloomberg Finance L.P. as of November 13, 2023 which has declined since the summer as has the NY Fed Probability of Recession in US Twelve Months based on Treasury Spread from the Federal Reserve Bank of New York.
- 60 Bloomberg Finance L.P. as of November 13, 2023, based on historical one-month average of VIX Index percentile and the corresponding trailing average one-month return of the various asset classes like stocks and bonds.
- 61 "US Homebuilder Sentiment Declines to Lowest Levels in Nine Months," Bloomberg, October 17, 2023.
- 62 "US New-Home Sales Surge to Fastest Clip Since February 2022," Bloomberg, October 25, 2023.
- 63 "US Homebuilder Sentiment Declines to Lowest Levels in Nine Months," Bloomberg, October 17, 2023.
- 64 "US New-Home Sales Surge to Fastest Clip Since February 2022," Bloomberg, October 25, 2023.

-
- 65 "US Homebuilder Sentiment Declines to Lowest Levels in Nine Months," Bloomberg, October 17, 2023.
- 66 Bloomberg Finance L.P. as of November 13, 2023, based on the S&P Homebuilders Select Industry Index.
- 67 Bloomberg Finance L.P. as of November 13, 2023, based on the S&P Homebuilders Select Industry Index and the S&P 500 Index.
- 68 FactSet as of November 13, 2023, based on the S&P Homebuilders Select Industry Index.
- 69 FactSet as of November 13, 2023, based on the S&P 500 Index.
- 70 FactSet as of November 13, 2023, based on the S&P Homebuilders Select Industry Index and S&P 500 Index.
- 71 Bloomberg Finance L.P. as of November 13, 2023, based on the S&P Homebuilders Select Industry Index and the S&P 500 Index.
- 72 "Housing Market Predictions for 2024", Bankrate.
- 73 "Rising Global Uncertainty Spurs \$106 Billion Aid Request," Bloomberg, October 24, 2023.
- 74 "Republican Defense Hawks Have Had It With Party Populists," Bloomberg, November 4, 2023.
- 75 "House Republicans aim to pay for Israel aid with cuts to IRS funds," NPR as of October 31, 2023.
- 76 "GOP Field Spars Over Foreign Policy, Blames Trump for Losses," Bloomberg, November 8, 2023.
- 77 Office of the Under Secretary of Defense (Comptroller) at comptroller.defense.gov. National Defense Authorization Act for Fiscal Year 2024, National Defense Authorization Act for Fiscal Year 2023, and National Defense Authorization Act for Fiscal Year 2022.
- 78 "FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence," the White House Briefing Room.
- 79 "U.S. Congress to consider two new bills on artificial intelligence," Reuters, June 9, 2023.
- 80 FactSet as of November 13, 2023, based on the S&P Aerospace & Defense Select Industry Index.
- 81 FactSet as of November 13, 2023, based on the S&P Aerospace & Defense Select Industry Index.
- 82 Bloomberg Finance L.P. as of November 13, 2023, based on the S&P Aerospace & Defense Select Industry Index and the S&P 500 Index over the past 10 years.
- 83 Bloomberg Finance L.P. as of November 13, 2023, based on Oil Implied 3-Month Volatility
- 84 Bloomberg Finance L.P. as of November 13, 2023, based on the one-month return dispersion across the eight sub-industries within the Bloomberg Commodity Index.
- 85 Bloomberg Finance L.P. as of November 13, 2023, based on the one-month return dispersion across the eight sub-industries within the Bloomberg Commodity Index.
- 86 Bloomberg Finance L.P. as of November 13, 2023, based on consensus economic forecasts.
- 87 "Morgan Stanley Global Strategy Outlook," November 12, 2023.
- 88 "Morgan Stanley Global Strategy Outlook," November 12, 2023.
- 89 "The Blue Drum: Back to square one", Barclays, November 8, 2023
- 90 "Saudi Arabia, Russia to continue additional voluntary oil cuts," Reuters, November 5, 2023.
- 91 "Global oil stockpiles due to fall in second half 2023, EIA says," Reuters, October 11, 2023.
- 92 Bloomberg Finance L.P. as of November 14, 2023.
- 93 Bloomberg Finance L.P. as of November 12, 2023.
- 94 A blended measure of implied high yield, investment-grade credit, oil, developed equity, EM equity, rates, and currency volatilities saw sharp spikes in October 2023, with the blended measure soaring above the 60th percentile from the 24th during the summer before settling into the 53rd percentile as the markets rallied in November 2023.
- 95 Bloomberg Finance L.P. as of November 13, 2023.
- 96 Bloomberg Finance L.P. based on the CBOE VVIX Index, 2023 readings rose 79 to 116 from the middle of August to the end of October before edging lower in November as markets rallied.
- 97 Bloomberg Finance L.P. as of November 13, 2023,
- 98 Bloomberg Finance L.P. as of November 13, 2023, based on the Citi US Real Effective Rate.
- 99 Bloomberg Finance L.P. as of November 13, 2023, based on the US spot rate and the gold spot price from 2003–2023.
- 100 Bloomberg Finance L.P. as of November 13, 2023, based on the LBMA US Gold Spot Price and the S&P 500 Index as well as the Bloomberg US Aggregate Bond Index returns from December 30, 2021 to December 29, 2022.

Glossary

Alpha A gauge of risk-adjusted outperformance that is measured relative to a benchmark because benchmarks are often considered to represent the market's movement as a whole. The excess returns of a fund relative to the return of a benchmark index is the fund's alpha.

Basis Point (bps) A unit of measure for interest rates, investment performance, pricing of investment services and other percentages in finance. One basis point is equal to one-hundredth of 1 percent, or 0.01%.

Big Box Firms Refers to companies in the home goods retail space that offer physically large retail stores (hyperstores, supercenters, superstores, or megastores), usually part of a chain of stores. The term "big-box" references the typical appearance of buildings occupied by such stores.

Bloomberg 1-3 Month US T-Bill Index A fixed-income benchmark including publicly issued dollar-denominated zero-coupon US Treasury Bills that have a remaining maturity of less than three months and more than one month. They must be rated investment grade, have \$250 million or more of outstanding face value and be fixed-rate and non-convertible.

Bloomberg 1-5 Year Index A benchmark designed to measure the performance of US bonds that have a maturity of between 1 and 5 years.

Bloomberg US Aggregate Bond Index (Agg) A benchmark that provides a measure of the performance of the US dollar denominated investment grade bond market. The "Agg" includes investment-grade government bonds, investment-grade corporate bonds, mortgage pass through securities, commercial mortgage-backed securities and asset backed securities that are publicly for sale in the US.

Bloomberg US Corporate Bond Index A fixed-income benchmark that measures the investment-grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers.

Bloomberg US Intermediate Corporate Bond Index A benchmark designed to measure the performance of US corporate bonds that have a maturity of greater than or equal to one year and less than 10 years.

Bloomberg US Long Corporate Bond Index The index is designed to measure the performance of US corporate bonds that have a maturity of greater than or equal to 10 years. It depicts the performance of the long-dated, investment grade US corporate bond market.

Bloomberg US Mortgage Backed Securities Index A benchmark designed to measure the performance of the US agency mortgage pass-through segment of the US investment grade bond market. The term "US agency mortgage pass-through security" refers to a category of pass-through securities backed by pools of mortgages and issued by US government-sponsored agencies.

Bloomberg US Treasury Index The Bloomberg US Treasury Index measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury. Treasury bills are excluded by the maturity constraint, but are part of a separate Short Treasury Index.

CARES Act The Coronavirus Aid, Relief, and Economic Security (CARES) Act (2020), signed into law on March 27, 2020, was implemented to address issues related to the onset of the COVID-19 Pandemic. The purpose of the act was to provide direct economic assistance to workers, families, small businesses, and industries by providing \$2.2 trillion for economic stimulus. The spending primarily included \$300 billion in one-time cash payments, \$260 billion in increased unemployment benefits, the \$669 billion for providing forgivable loans to small businesses, \$500 billion in loans for corporations, and \$339.8 billion to state and local governments.

CBOE VIX Index (VIX) The VIX, often referred to as the equity market's "fear gauge," is a measure of market risk based on expectations of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options — both calls and puts. The VIX volatility measure is meant to be forward looking.

CHIPS Act A division of the CHIPS and Science Act of 2022, the CHIPS Act provides new funding to boost manufacturing of semiconductors in the US. The \$280 billion made available under the CHIPS and Science Act will be used towards subsidizing chip manufacturing on US soil, providing investment tax credits for the purchase of equipment and conducting research and workforce training.

Collateralized Loan Obligations Securities that are backed by a pool of debt, typically business loans, that are grouped by credit quality into tranches.

Consumer Price Index (CPI) A widely used measure of inflation at the consumer level that helps to evaluate changes in cost of living. The CPI is composed of a basket of consumer goods and services across the economy and is calculated by the US Department of Labor by assessing price changes in the basket of goods and services and averaging them. Core CPI is the same series, minus food and energy prices, which are considered to be volatile enough to distort the meaning and usefulness of so-called headline CPI. The absence of food and energy, means the core series reflects long-term inflation trends more accurately.

Correlation The historical tendency of two investments to move together. Investors often combine investments with low correlations to diversify portfolios.

Credit spreads The difference in yield between a US Treasury bond and a debt security with the same maturity but of lesser quality.

Dot-com Bubble The speculative stock-market run-up of the late 1990s that grew out of excitement about the potential of the Internet. While companies such as eBay and Amazon were born in this period, countless other start-ups with vague business plans and no profits were funded by investors dreaming of winning big. The fervor peaked on March 10, 2000, and a nearly three-year bear market followed.

Drawdowns A specific decline in the stock market during a specific time period that is measured in percentage terms as a peak-to-trough move.

Earnings Per Share (EPS) A profitability measure that is calculated by dividing a company's net income by the number of shares outstanding.

Earnings Recession It is a situation in which earnings have decline for at least two consecutive quarters. In the financial sector, during an earnings recession, companies' profits decline year-over-year for two or more quarters in a row.

Emerging Market Debt Securities Emerging markets (EM) debt refers to fixed income securities (bonds) issued by developing countries. In purchasing EM debt, investors essentially lend money to corporations or governments in developing regions in exchange for interest payments that are often notably higher than those offered in developed markets.

EU Economic Sentiment Indicator (ESI) A composite indicator produced by the Directorate General for Economic and Financial Affairs (DG ECFIN) of the European Commission. Its objective is to track GDP growth at Member states, EU and euro area levels. The ESI is a weighted average of the balances of replies to selected questions addressed to firms in five sectors covered by the EU Business and Consumer Surveys and to consumers.

Executive Order for Safe, Secure, and Trustworthy Artificial Intelligence Passed on October 30, 2023, the executive order aims to provide clear model building and testing standards, support the development of privacy-preserving technologies and research, prevent algorithmic discrimination in violation of civil rights, and work towards the responsible use of AI, encourage research in the field of AI in the US and in partnership with foreign stakeholders, and ensure responsible and effective use of AI by governmental agencies.

Federal Open Market Committee (FOMC) The FOMC is the branch of the Federal Reserve System that determines the direction of monetary policy in the United States by directing open market operations. The committee consists 12 members, including seven members of the Board of Governors, the president of the Federal Reserve Bank of New York, and four of the remaining 11 Reserve Bank presidents, who serve on a rotating basis.

Gross Domestic Product (GDP) The monetary value of all the finished goods and services produced within a country's borders in a specific time period.

Implied Volatility A way of estimating volatility of a security's price based on a number of predictive variables. Implied volatility rises when the market is falling when investors believe that the asset's price will decline over time, and it falls when the market is rising when investors believe that the security's price will rise over time. This is due to the common belief that bearish markets are riskier than bullish markets.

Investment Grade Bonds Bonds that have a relatively low risk of default. Bond-rating firms, such as Standard & Poor's, use different lettered descriptions to identify a bond's credit quality. In S&P's system, investment-grade credits include those with 'AAA' or 'AA' ratings (high credit quality), as well as 'A' and 'BBB' (medium credit quality). Anything below this 'BBB' rating is considered non-investment grade.

Inflation Reduction Act The Inflation Reduction Act, passed in 2022, aimed to curb inflation by possibly reducing the federal government budget deficit, lowering prescription drug prices, and investing in domestic energy production while promoting clean energy. It achieved these goals by investing in domestic energy production and manufacturing, and reduce carbon emissions by roughly 40 percent by 2030. The bill also allowed Medicare to negotiate for prescription drug prices and extend the expanded Affordable Care Act program for three years, through 2025.

Leading Economic Index (LEI) A composite of 10 economic components that are analyzed monthly to help foresee changes in the overall economy. The LEI components are: average weekly hours of manufacturing workers; average initial jobless claims; new manufacturer orders for goods and materials; speed of delivery of new goods to vendors; new orders of capital goods not related to defense; new residential building permits; changes to the S&P 500 Index; changes in inflation-adjusted money supply; the difference between long and short interest rates; and consumer sentiment. The data series is compiled by the Conference Board, a private, non-profit business research group.

NAHB (National Association of Home Builders) Founded in 1942 and headquartered in Washington, DC, NAHB is one of the largest trade associations in the United States, representing the interests of home builders, developers, contractors, and associated businesses. The NAHB Office of Economic and Housing Policy conducts independent research and produces a number of publications and indices, including the NAHB/Wells Fargo Housing Market Index (HMI), an economic indicator used by financial analysts, the Federal Reserve, policymakers, economic analysts, and the newsmedia.

National Association of Realtors Headquartered in Chicago, the National Association of Realtors (NAR) is an American trade association for those who work in the real estate industry. It is the largest trade association in the United States including NAR's institutes, societies, and councils, involved in all aspects of the residential and commercial real estate industries. The NAR also functions as a self-regulatory organization for real estate brokerage.

National Defense Authorization Act Refers to the recurring United States federal laws that specify the annual budget and expenditures of the US Department of Defense. The authorization bill determines the agencies responsible for defense, establishes recommended funding levels, and sets the policies under which money will be spent. The appropriations bill provides funds.

Net Debt-to-EBITDA The net debt-to-EBITDA ratio is a debt ratio that shows how many years it would take for a company to pay back its debt if net debt and EBITDA are held constant. The ratio tells you how well a company can cover its debts.

NYSE Technology Index An equal-dollar weighted index designed to objectively represent the technology sector by holding 35 of the leading US technology-related companies.

Pandemic-era Fiscal and Monetary

Stimulus Refers to the policies implemented by the government and the monetary stimulus measures used by the Federal Reserve during the COVID-19 pandemic to boost the economy and provide relief to those affected. These policies and measures included interest rate cuts, loans and asset purchases (done mostly through quantitative easing), and regulation changes. It also includes executive actions like the Lost Wages Assistance program, moratoriums on student loan payments and interest accruals, the American Rescue Plan, the CARES Act and multiple stimulus and relief packages.

Percentile Percentile ranking is a system of ranking scores that shows the percentage of results that are lower than the benchmark or fund in question for the most recent three-year period. Every year, each score is updated with the most recent year's percentiles.

Price-to-Book The price-to-book (P/B) ratio considers how a stock is priced relative to the book value of its assets

Price-to-Earnings The price-to-earnings (P/E) ratio relates a company's share price to its earnings per share.

Price-to-Sales The price-to-sales ratio (P/S) is calculated by taking a company's market capitalization (the number of outstanding shares multiplied by the share price) and divide it by the company's total sales or revenue over the past 12 months.

Purchasing Managers Index (PMI) An indicator of the economic health of the manufacturing sector. The PMI is based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment.

Quality Companies The term refers to companies with a consistent track record of strong earnings and stable balance sheets.

Recession A period of temporary economic decline during which trade and industrial activity are reduced.

Return on Equity (ROE) The amount of net income returned as a percentage of common shareholders' equity. ROE shows how well a company uses investment funds to generate earnings growth.

S&P 500 Index A popular benchmark for US large-cap equities that includes 500 companies from leading industries and captures approximately 80% coverage of available market capitalization.

S&P Aerospace & Defense Select Industry Index The S&P Aerospace & Defense Select Industry Index comprises stocks from the S&P Total Market Index that are classified in the GICS Aerospace & Defense sub-industry.

S&P Homebuilders Select Industry Index The S&P Homebuilders Select Industry Index comprises stocks from the S&P Total Market Index that are classified in the GICS Homebuilding sub-industry.

Senior Loans Floating-rate debt issued by corporations and backed by collateral such as real estate or other assets.

Shorter-Term Bonds Securities with maturities from one to three years. Such bonds have less interest-rate risk than both intermediate-term and long-term bonds.

Soft Landing A soft landing is a gradual slowdown in economic growth that avoids a recession. A soft landing is the goal of a central bank when it seeks to raise interest rates just enough to stop an economy from overheating and experiencing high inflation, without causing a severe downturn.

Treasury Inflation-Protected Securities (TIPS) Treasury securities that are indexed to inflation in order to protect investors from the negative effects of inflation. TIPS are backed by the US government and are thus considered an extremely low-risk investment. The par value of TIPS rises with inflation, as measured by the Consumer Price Index, while the interest rate remains fixed.

US Department of Energy Information

Administration The Energy Information Administration (EIA) is the statistical agency of the Department of Energy. It provides policy-independent data, forecasts, and analyses to promote sound policy making, efficient markets, and public understanding regarding energy, and its interaction with the economy and the environment.

Valuation The process of determining the current worth of an asset or a company.

VIX Index The VIX index is the a benchmark index that measures the market's expectation of future volatility. The VIX Index is based on options of the S&P 500® Index, considered the leading indicator of the broad US stock market.

Volatility The tendency of a market index or security to jump around in price. Volatility is typically expressed as the annualized standard deviation of returns. In modern portfolio theory, securities with higher volatility are generally seen as riskier due to higher potential losses.

Yield Curve A graph or line that plots the interest rates or yields of bonds with similar credit quality but different durations, typically from shortest to longest duration. When the yield curve is said to be “flat,” it means the difference in yields between bonds with shorter and longer durations is relatively narrow. When the yield curve is said to be “steep,” it means the difference in yields between bonds with shorter and longer durations is relatively wide.

Yield-per-Unit-of-Duration Yield-per-unit of duration is expressed by yield-to-worst being divided by effective duration where duration is a measure of the sensitivity of the price of a bond to a change in interest rates and yield to worst is a measure of the lowest possible yield that can be received on a bond with an early retirement provision.

Yield-per-Unit-of-Volatility Calculated by subtracting the risk-free rate of return from the expected return and dividing the result by the negative portfolio's standard deviation. The higher the ratio, the better the risk-adjusted yield may be.

Yield to Worst The lowest potential yield that investors can expect when investing in a callable bond without the issuer defaulting.

State Street Global Advisors

One Iron Street, Boston, MA 02210
T: +1 866 787 2257.

Important Risk information

The views expressed in this material are the views of Michael Arone, Matthew Bartolini, and Anqi Dong through the period ended November 20, 2023 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

All information is from SSGA unless otherwise noted and has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information, and it should not be relied on as such.

Past performance is not a reliable indicator of future performance.

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent.

Investing involves risk including the risk of loss of principal.

Diversification does not ensure a profit or guarantee against loss.

ETFs trade like stocks, are subject to investment risk, fluctuate in market value and may trade at prices above or below the ETFs net asset value. Brokerage commissions and ETF expenses will reduce returns.

Frequent trading of ETFs could significantly increase commissions and other costs such that they may offset any savings from low fees or costs.

While the shares of ETFs are tradable on secondary markets, they may not readily trade in all market conditions and may trade at significant discounts in periods of market stress.

Passively managed funds invest by sampling the index, holding a range of securities that, in the aggregate, approximates the full Index in terms of key risk factors and other characteristics. This may cause the fund to

experience tracking errors relative to performance of the index.

Actively managed funds do not seek to replicate the performance of a specified index. An actively managed fund may underperform its benchmarks. An investment in the fund is not appropriate for all investors and is not intended to be a complete investment program. Investing in the fund involves risks, including the risk that investors may receive little or no return on the investment or that investors may lose part or even all of the investment.

A "value" style of investing emphasizes undervalued companies with characteristics for improved valuations, which may never improve and may actually have lower returns than other styles of investing or the overall stock market.

Low volatility funds can exhibit relative low volatility and excess returns compared to the Index over the long term; both portfolio investments and returns may differ from those of the Index. The fund may not experience lower volatility or provide returns in excess of the Index and may provide lower returns in periods of a rapidly rising market. Active stock selection may lead to added risk in exchange for the potential outperformance relative to the Index.

A "quality" style of investing emphasizes companies with high returns, stable earnings, and low financial leverage. This style of investing is subject to the risk that the past performance of these companies does not continue or that the returns on "quality" equity securities are less than returns on other styles of investing or the overall stock market.

Equity securities may fluctuate in value and can decline significantly in response to the activities of individual companies and general market and economic conditions.

XAR, FITE, KIE, XNTK, and QUS Funds are classified as diversified under the Investment Company Act of 1940, as amended (the "1940 Act"); however, the Fund may become "non-diversified," as defined under the 1940 Act, solely as a result of tracking the Index (e.g., changes in weightings of one or more component securities). When the Fund is non-diversified, it may invest a relatively high percentage of its assets in a limited number of issuers.

Because of their narrow focus, sector funds tend to be more volatile than funds that diversify across many sectors and companies.

Foreign (non-U.S.) Securities may be subject to greater political, economic, environmental, credit and information risks. Foreign securities may be subject to higher volatility than U.S. securities, due to varying degrees of regulation and limited liquidity. These risks are magnified in emerging markets.

Non-diversified funds that focus on a relatively small number of securities tend to be more volatile than diversified funds and the market as a whole.

Dividend paying securities can fall out of favor causing securities to underperform companies

that do not pay dividends. Changes in dividend policies of companies may adversely affect fund performance.

The trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.

There can be no assurance that a liquid market will be maintained for ETF shares.

The funds or securities referred to herein are not sponsored, endorsed, or promoted by MSCI, and MSCI bears no liability with respect to any such funds or securities or any index on which such funds or securities are based. The Prospectus contains a more detailed description of the limited relationship MSCI has with SSGA Funds Management, Inc and any related funds.

Concentrated investments in a particular sector or industry (technology sector and electronic media companies) tend to be more volatile than the overall market and increases risk that events negatively affecting such sectors or industries could reduce returns, potentially causing the value of the Fund's shares to decrease.

Technology companies, including cyber security companies, can be significantly affected by obsolescence of existing technology, limited product lines, competition for financial resources, qualified personnel, new market entrants or impairment of patent and intellectual property rights that can adversely affect profit margins.

Multi-cap investments include exposure to all market caps, including small and medium capitalization ("cap") stocks that generally have a higher risk of business failure, lesser liquidity and greater volatility in market price. As a consequence, small and medium cap stocks have a greater possibility of price decline or loss as compared to large cap stocks. This may cause the Fund not to meet its investment objective.

Actively managed ETFs do not seek to replicate the performance of a specified index. Because the SPDR SSGA Active Asset Allocation ETFs are actively managed, they are therefore subject to the risk that the investments selected by SSGA may cause the ETFs to underperform relative to their benchmarks or other funds with similar investment objectives.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates rise, bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Investments in asset backed and mortgage-backed securities are subject to prepayment risk which can limit the potential for gain during a declining interest rate environment and increases the potential for loss in a rising interest rate environment.

Government bonds and corporate bonds generally have more moderate short-term price fluctuations than stocks, but provide lower potential long-term returns.

Increase in real interest rates can cause the price of inflation-protected debt securities to decrease. Interest payments on inflation-protected debt securities can be unpredictable.

The values of debt securities may decrease as a result of many factors, including, by way of example, general market fluctuations; increases in interest rates; actual or perceived inability or unwillingness of issuers, guarantors or liquidity providers to make scheduled principal or interest payments; illiquidity in debt securities markets; and prepayments of principal, which often must be reinvested in obligations paying interest at lower rates.

Derivatives are based on one or more underlying securities, financial benchmarks, indices, or other obligations or measures of value; additional risks with derivatives trading (e.g., market, credit, counterparty and illiquidity) are possibly greater than the risks associated with investing directly in the underlying instruments. Derivatives can have a leveraging effect and increase fund volatility that can have a large impact on Fund performance.

Floating rate securities are often lower-quality debt securities and may involve greater risk of price changes and greater risk of default on interest and principal payments. The market for floating rate bank loans is largely unregulated and these assets usually do not trade on an organized exchange. As a result, floating rate bank loans can be relatively illiquid and hard to value.

Bank Loans are subject to credit, interest rate, income and prepayment risks. The fund may invest in secured and unsecured participations in bank loans. Participation loans are loans made by multiple lenders to a single borrower, e.g., several banks participate in one large loan with one of the banks taking the role of the lead bank. The lead bank recruits other banks to participate and share in the risks and profits. There is also the risk that the collateral may be difficult to liquidate or that a majority of the collateral may be illiquid. In participation the fund assumes the credit risk of the lender selling the participation in addition to the credit risk of the borrower.

Investments in senior loans are subject to credit risk and general investment risk. Credit risk refers to the possibility that the borrower of a senior loan will be unable and/or unwilling to make timely interest payments and/or repay the principal on its obligation. Default in the payment of interest or principal on a senior loan will result in a reduction in the value of the senior loan and consequently a reduction in the value of the Portfolio's investments and a

potential decrease in the net asset value ("NAV") of the Portfolio.

TOTL, STOT, ULST and HYBL are actively managed. The sub-adviser's judgments about the attractiveness, relative value, or potential appreciation of a particular sector, security, commodity or investment strategy may prove to be incorrect, and may cause the fund to incur losses. There can be no assurance that the sub-adviser's investment techniques and decisions will produce the desired results.

Investing involves risk, and you could lose money on an investment in each of SPDR® Gold Shares Trust ("GLD"® or "GLD") and SPDR® Gold MiniShares® Trust ("GLDM"® or "GLDM"), a series of the World Gold Trust (together, the "Funds").

Commodities and commodity-index linked securities may be affected by changes in overall market movements, changes in interest rates, and other factors such as weather, disease, embargoes, or political and regulatory developments, as well as trading activity of speculators and arbitrageurs in the underlying commodities.

Investing in commodities entails significant risk and is not appropriate for all investors. Investing in high yield fixed income securities, otherwise known as "junk bonds", is considered speculative and involves greater risk of loss of principal and interest than investing in investment grade fixed income securities. These Lower-quality debt securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer.

Important Information Relating to GLD® and GLDM®: GLD and the World Gold Trust have each filed a registration statement (including a prospectus) with the Securities and Exchange Commission ("SEC") for GLD and GLDM, respectively. Before you invest, you should read the prospectus in the registration statement and other documents each Fund has filed with the SEC for more complete information about each Fund and these offerings. Please see each Fund's prospectus for

a detailed discussion of the risks of investing in each Fund's shares. The GLD prospectus is available by [clicking here](#), and the GLDM prospectus is available by [clicking here](#). You may get these documents for free by visiting EDGAR on the SEC website at sec.gov or by visiting spdrgoldshares.com. Alternatively, the Funds or any authorized participant will arrange to send you the prospectus if you request it by calling 866.320.4053.

None of the Funds is an investment company registered under the Investment Company Act of 1940 (the "1940 Act"). As a result, shareholders of each Fund do not have the protections associated with ownership of shares in an investment company registered under the 1940 Act. GLD and GLDM are not subject to regulation under the Commodity Exchange Act of 1936 (the "CEA"). As a result, shareholders of each of GLD and GLDM do not have the protections afforded by the CEA.

Shares of each Fund trade like stocks, are subject to investment risk and will fluctuate in market value.

The values of GLD shares and GLDM shares relate directly to the value of the gold held by each Fund (less its expenses), respectively. Fluctuations in the price of gold could materially and adversely affect an investment in the shares. The price received upon the sale of the shares, which trade at market price, may be more or less than the value of the gold represented by them.

None of the Funds generate any income, and as each Fund regularly sells gold to pay for its ongoing expenses, the amount of gold represented by each Fund share will decline over time to that extent.

The World Gold Council name and logo are a registered trademark and used with the permission of the World Gold Council pursuant to a license agreement. The World Gold Council is not responsible for the content of, and is not liable for the use of or reliance on, this material. World Gold Council is an affiliate of the Sponsor of each of GLD and GLDM.

MiniShares® is a registered trademark of WGC USA Asset Management Company, LLC used with the permission of WGC USA Asset Management Company, LLC. GLD® and GLDM® are registered trademarks of World Gold Trust Services, LLC used with the permission of World Gold Trust Services, LLC.

For more information, please contact the Marketing Agent for GLD and GLDM: State Street Global Advisors Funds Distributors, LLC, One Iron Street, Boston, MA, 02210; T: +1 866 320 4053 spdrgoldshares.com.

KENSHO® is a registered service mark of Kensho Technologies Inc. ("Kensho"), and all Kensho financial indices in the Kensho New Economies® family and such indices' corresponding service marks have been licensed by the Licensee in connection with the SPDR Kensho Intelligent Structures ETF, SPDR Kensho Smart Mobility ETF and SPDR Kensho Future Security ETF (collectively, the "SPDR ETFs"). The SPDR ETFs are not marketed, sold, or sponsored by Kensho, Kensho's affiliates, or Kensho's third party licensors.

Kensho is not an investment adviser or broker-dealer and Kensho makes no representation regarding the advisability of investing in any investment fund, other investment vehicle, security or other financial product regardless of whether or not it is based on, derived from, or included as a constituent of any Kensho New Economies® family index. Kensho bears no responsibility or liability for any business decision, input, recommendation, or action taken based on Kensho indices or any products based on, derived from, or included as a constituent of any such index. All referenced names and trademarks are the property of their respective owners.

The S&P 500® Index is a product of S&P Dow Jones Indices LLC or its affiliates ("S&P DJI") and have been licensed for use by State Street Global Advisors. S&P®, SPDR®, S&P 500®, US 500 and the 500 are trademarks of Standard & Poor's Financial Services LLC ("S&P"); Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones") and has

been licensed for use by S&P Dow Jones Indices; and these trademarks have been licensed for use by S&P DJI and sublicensed for certain purposes by State Street Global Advisors. The fund is not sponsored, endorsed, sold or promoted by S&P DJI, Dow Jones, S&P, their respective affiliates, and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of these indices.

Distributor: State Street Global Advisors Funds Distributors, LLC, member FINRA, SIPC, an indirect wholly owned subsidiary of State Street Corporation. References to State Street may include State Street Corporation and its affiliates. Certain State Street affiliates provide services and receive fees from the SPDR ETFs. State Street Global Advisors Funds Distributors, LLC is the distributor for some registered products on behalf of the advisor. SSGA Funds Management has retained DoubleLine Capital LP and Blackstone Liquid Credit Strategies LLC as the sub advisors. State Street Global Advisors Funds Distributors, LLC is not affiliated with DoubleLine Capital LP or Blackstone Liquid Credit Strategies LLC.

Before investing, consider the funds' investment objectives, risks, charges and expenses. To obtain a prospectus or summary prospectus which contains this and other information, call 1-866-787-2257 or visit sga.com. Read it carefully.

© 2023 State Street Corporation.
All Rights Reserved.
ID1887853-3941223.9.1.AM.RTL 1123
Exp. Date: 06/30/2024

**Not FDIC Insured
No Bank Guarantee
May Lose Value**