

SENIOR SOLUTIONS UPDATE

FROM: PATRICE HORNER, CFP, MBA
SUBJECT: INVESTMENT COMMENTARY
DATE: NOVEMBER 15, 2023



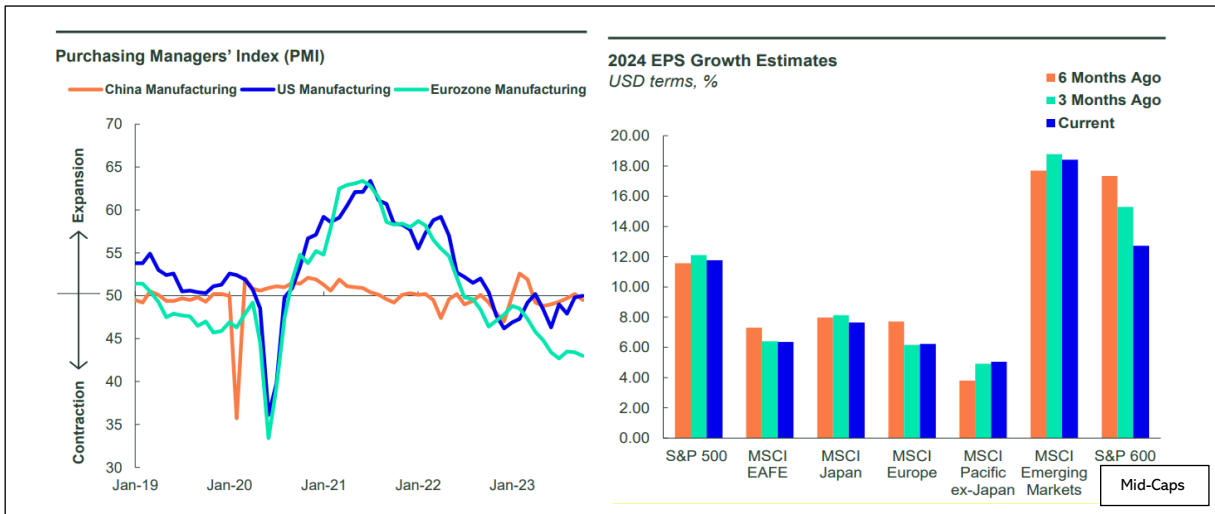
Economic Overview

The horrendous attack by Hamas on October 7th on Israel has increased global risk.

With the human tragedies unfolding in Gaza and rising tensions in the Middle East along with continuing aggressions in the Ukraine, geopolitical rivalry is affecting global commerce. Risk factors are geopolitical tensions, inflation, or unexpected economic downturns. The effects of weak productivity, labour shortages and tighter financial conditions are expected to intensify next year. Bearish sentiment has been rising for the last three months as investors de-risk their portfolios notes SSGA.

Industries that attract the greatest amount of state subsidies such as semiconductors, green technology, cybersecurity and defense have improved business prospects. Another US government shutdown with the high debt load and high social payments prompted BMI-Fitch to place the US on a negative status for its AAA credit standard. However, the third year of a president's term has historically performed better as the government readies for reelection and is focused on policies to support the economy.

Morningstar analysts expect US GDP growth to slow in 2024, owing to delayed affects of the monetary tightening in 2022-23, along with the depletion of household excess savings. The alleviation of supply constraints along with cooling demand is pushing inflation down. Inflation is moving toward the Fed's 2% target in 2024. The Fed may begin cutting rates late next year, which can prompt a GDP growth rebound in 2025 and following years.

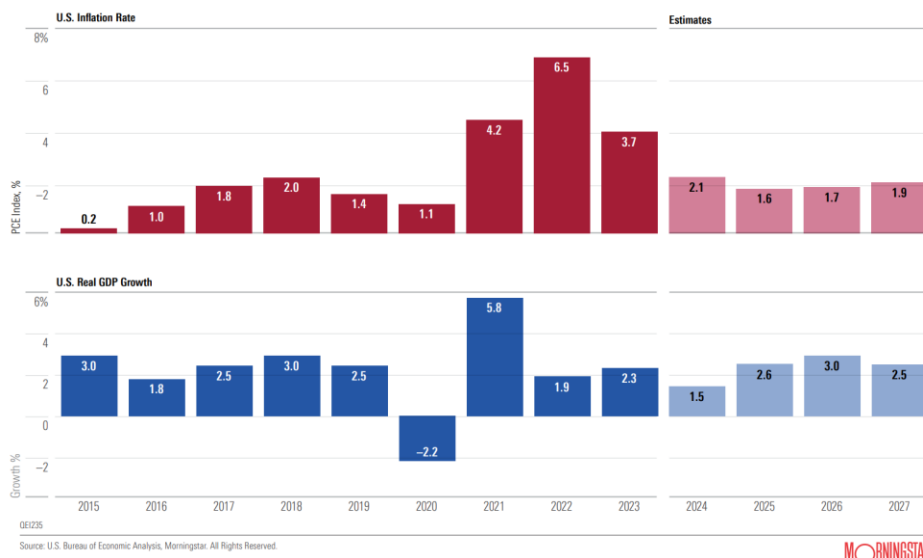


The IMF expects global real GDP growth to move to 3.5% in 2023 from 3% in 2022, and to an average 3.1% per year from 2024 to 2028. This is weaker than the 3.7% average over 2010-19. It is driven by the tightened monetary policy to combat inflation remaining in emerging economies. China's rapid growth is diminishing have an impact on commodity-exporting emerging economies.

While the US manufacturing PMI reached its six-month high at the neutral level, Europe continue to lag. China’s manufacturing PMI may slip into contraction as demand dropped. The Eurozone is facing a slow 2H23 while Germany is already in a recession with plunging negative growth over the last four quarters.

Labour shortages around the world continue due to both an ageing population and the shift to flexible working. This shortage is lowering productivity and curtailing the world’s long-term economic growth. China’s shrinking population makes it even worse. An increase in automation could become a more important priority, according to Pictet Asset Management.

There has been dramatic reduction in US inflation over the past year despite accelerating GDP growth. Improvements of the supply chain has created some disinflation, but less than historical examples. This process is expected to continue, leading to a soft landing. An overheating scenario is the biggest risk. However, any growth acceleration will mediate with the effects of continuing rate hikes.



Central banks in major economies are winding down hikes in interest rates. The effects of monetary tightening will roll out in 2024 as central banks may begin to cut rates in late 2024, if inflation falls. This is indicated by the recent runup in long-term bond yields. Forecasts for federal-funds rate maybe below market expectations, for a nearly 200 basis point gap by the end of 2025. Interest rates may decelerate faster than market expectations and settle near pre-pandemic levels, but a spike in oil prices and a strong economy leads to lack of clarity around the Federal Reserve's future decisions.

Despite anticipation of an era of ongoing higher rates, market forces continue to push rates down. Budget deficits have increased and productivity growth remains relatively weak. Aging populations should continue to create an excess of savings over investment. The current 22-year high in rates could still increase before retreating, due to policymakers’ actions. The gap between the 4.54% Earnings Yield on stocks versus the 5.46% yield on 3-month T-bills is at the widest level since 2001, favoring Bonds with historically lower risk.

Market Overview

Financial markets sit in a unique position as we enter the fourth quarter of 2023, US Global.

Third quarter 3Q23 earnings per share (EPS) growth of 4.1% is expected to be reported across eight of 11 sectors, of which 81% of companies are beating earnings estimates. There have been more upside than downside revisions to full-year 2023 earnings for Large and Small cap companies. This reporting season is confirming resilience and growth at mega cap Tech/Digital firms.

The S&P 500 companies (less the top five) comprise 63% of the index. Some 72% beat EPS estimates while 25% missed and the rest in-line. The aggregate surprise is 7.1%. This is much stronger upside than the 3.3% historic average. The 1H23 mega-cap growth stocks rally has stalled as from impacts of an uptick in inflation, suggesting further rate hikes.

Bond investors gained in yield but lost in price during 3Q23. Income payments increased but were insufficient to offset the 3.2% price decline across US Investment-Grade bonds (IG). High-yield bonds were flat on 3Q23, so able to preserve the 6% gain year-to-date (YTD). The Treasury curve steepened in 3Q23 as long rates moved higher, while short rates remained anchored. This is unusual. Historically, as the Fed moves closer to the end of a rate-hiking cycle, both short and long rates move down, with short rates falling faster (a bull steepening). However, continued inflation volatility, a resilient domestic economy, and pressure from increased Treasury debt issuance challenged market assumptions. US Bonds have recovered from lows but prices remain low in the higher rate environment.

Commodities stormed back in the third quarter as oil rebounded but did not offset a 9.4% drop from October 2022 to June 2023. Gold was one of the bright spots in 3Q23. There were investment losses across most major asset classes. The Bloomberg Commodity Index was up nearly 5%, driven by rising oil prices following production cuts by OPEC+ producers.



Despite strong Q3 economic growth, small caps led the decline in risk assets

Source: Bloomberg Finance, L.P., as of October 31, 2023. **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. All the index performance results referred to are provided exclusively for comparison purposes only. It should not be assumed that they represent the performance of any particular investment. Performance returns for periods of less than one year are not annualized. Agg Bonds = Bloomberg US Agg Total Return Index | Broad Commodities = Bloomberg Commodity Total Return Index | Developed ex-US = MSCI EAFE Total Return Index | Dollar = DXY Dollar Index | EM Debt = Bloomberg EM Hard Currency Total Return Index | Emerging Markets = MSCI Emerging Markets Index | Gold = LBMA Gold Price Index | IG Corp = Bloomberg US Corporate Total Return Index | MBS = Bloomberg US MBS Index Total Return Index | Senior Loan = Morningstar LSTA US Leveraged Loan Total Return Index | US High Yield = Bloomberg US Corporate High Yield Total Return Index | US Large Cap = S&P 500 Total Return Index | US Small Cap = Russell 2000 Total Return Index | US Treasuries = Bloomberg US Treasury Total Return Index.

Equity Markets

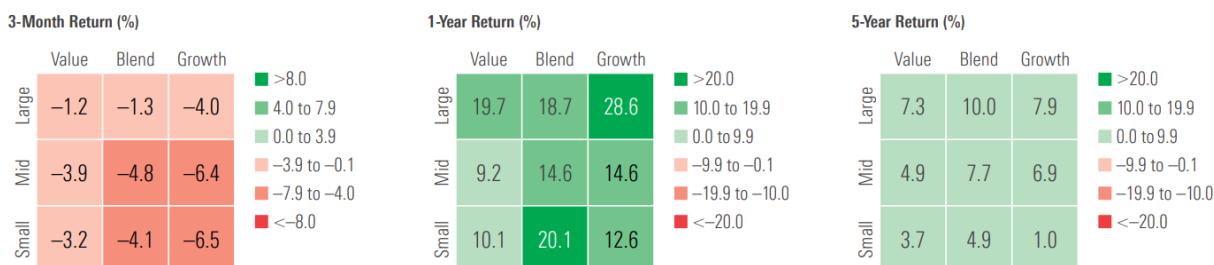
Developed-Markets Stocks Remain on Top

Developed-markets stocks remain 12-month winners, even with the 3Q23 losses, as Equities rebounded from October 2022 lows. Emerging-Markets Equities have rallied, though Chinese stock market weakness dragged on the index. In the past 30 years the S&P 500 fell by 0.7% in the month of September. This September it was worse, down by 4.9% as reported DWS. From its intraday high of over 4,600 at the end of July, it lost over 10% by October 26 and was still trading below the 4,200 mark at the end of the month.

The S&P 500 Index was only 1.2% below its July 2021 peak before the 6.4% loss in August and September. The reduced optimism and the contraction of the P/E multiples was a set-back in 3Q23. The S&P Index is now 7.6% off all-time highs, with the downdraft starting in January 2022. Even following the 3.3% decline in 3Q23, the S&P 500 closed September up more than 13% YTD. The YTD returns were largely the result of rise in the P/E ratios that may decline which will put downward press on stock prices.

Much of the US gain YTD through 3Q23 was from a handful of companies. Ten (10) stocks drove 82% of the return. Of the Morningstar US Market Index's overall 12.8% return YTD through September, 10.5% was sourced from the 10. A portfolio with only these 10 stocks would have returned 55% through 3Q23. Whereas a portfolio consisting of the market outside the top 10 contributors would have returned just 1.4%.

Any upside capture came from a mix of Factors like Quality and Value. The performance of Growth versus Value tends to cyclical. Growth had a 10-plus year leadership over Value, in the era of ultralow rates after the global financial crisis. Comparing the one-year rolling return suggests a rotation to Value might be underway.



QM05

Source: Morningstar Direct. U.S. Aggregate—Bloomberg U.S. Aggregate Bond Total Return, U.S. Corporates—Bloomberg U.S. Corporate 5-10 Year Total Return, High Yield—Bank of America Merrill Lynch U.S. High Yield Master II Total Return, Municipals—Bloomberg Municipal Total Return, Fixed-Income Emerging Markets—J.P. Morgan EMBI Global Diversified Total Return, Gold—London Fix Gold PM Price Return. Data as of Sept. 30, 2023. ©2023 Morningstar. All Rights Reserved.

The Quality Factor was the sole outperformer in the US the last 12 months due to its large exposure to outperforming Tech stocks. Quality then lost steam after its 2Q23 rally. Quality and Momentum Factors are the most expensive, while Value and Yield remain cheaper on a forward P/E basis. Overall, the P/Es for most Factors are near the 10-year averages. Value benefited overwhelmingly from its overweight in Energy and Financial stocks. Energy was among the few industries to post gains globally in 3Q23 as a result of soaring oil prices. There was a broad selloff in 3Q23 in Growth-tilted groups such as Industrials, Technology, and Discretionary. Size was the laggard, missing the gains in large Health Care and Discretionary companies.

Despite high valuations of a handful for the market's largest stocks, except for the Energy Sector, more than 75% of stocks in each Sectors sold at a discount. In Healthcare, the median stock was trading at a discount of 30.8% below its fair value, yet large-cap companies like Eli Lilly pulled the average to only an 8.6% discount. By the end of 3Q23, their shares bounced back and were trading at a 50% premium to perceived fair value.

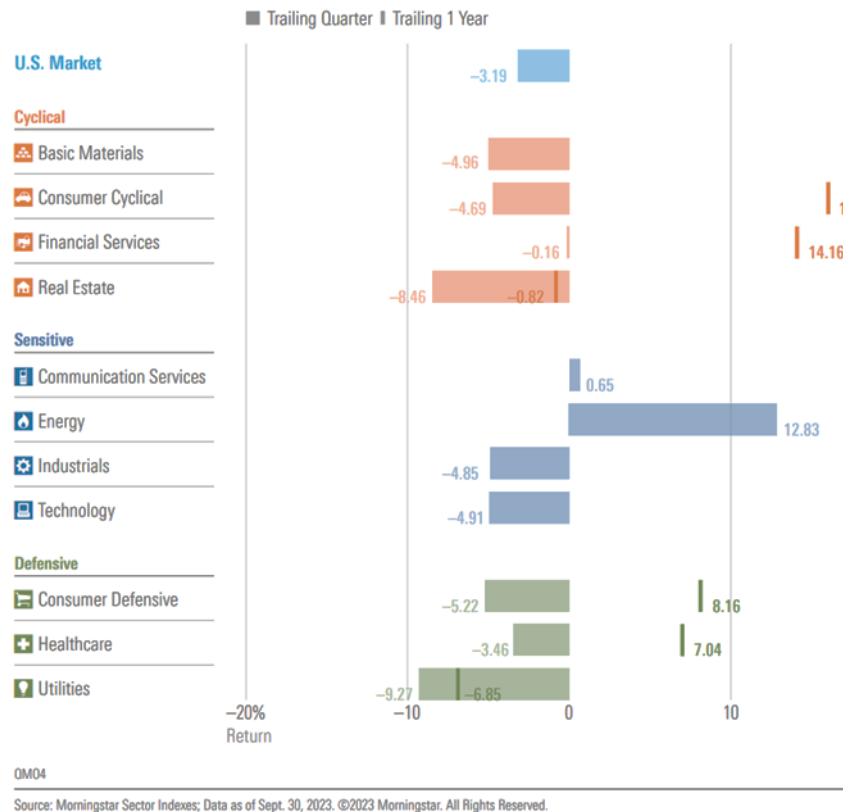
The Financial Times Stock Exchange (FTSE) Russell 2000 Small-Cap stock index declined 7% in September, a decline of 27% points from its all-time high in 2021. It outpaced the S&P 500's reversal. The declines underscore how the Federal Reserve's monetary tightening is weighing heavily on Small-Cap stocks.

US Equity Sector Performance

Changing interest-rate expectations in 3Q23 cut into optimism for Growth Sectors such as Technology and Healthcare. Rising yields provided income opportunities that hurt dividend driven sectors, such as Utilities. YTD Energy stocks rose 12.83% from rising oil prices while Communication Services held flat at 0.6% YTD.

In 3Q23, the *Energy Sector* gained 4.50% which led the S&P. While five out of eleven Sectors posted negative returns in 3Q23. Defensive Sectors such as Utilities, Real Estate, and Consumer Staples defensive Sectors led the decline. Top Tech stocks continued to outperform, noted State Street Global Advisors (SSGA), after leading through the year. Nvidia is known for Graphical Processing Units for gaming. Its AI-related chip vaulted Nvidia into the spotlight of speculators and serious investors. It supported the Tech Sector overall. The following are a quarter and 12 month returns by Sector.

The *Equity Defensive Sectors* such as XLP Consumer Staples retreated in the September as the rising yields on US Treasuries made the sector less attractive as compared to government-issued Bonds and Money-Market. Investors fled the low-volatility and dividend-paying shares in favor of higher yields and less risk in the US Treasuries.



The unusual move for stocks in the Defensive Sectors could be coming to an end with evidence of breaking the previous downtrends, according to Jonathan Krinsky, managing director and chief market technician at BTIG. The S&P 500 Consumer Staples and Utilities Sectors were the only ones up 0.3% and 0.5%, respectively as of Weds Oct 25th. And have a one month return of 2.52% through Nov 17th.

Consumer Discretionary has been more volatile, with a stronger down turn but snapping back higher. Tesla's stock is a component of the Consumer Discretionary Sector and spiked up 92.7% YTD through Thursday, while the Consumer Discretionary Select Sector SPDR ETF (XLY) unexpectedly rallied 29.7% while the S&P 500 advanced 17.1%. Lower inflation will allow people to spend more on discretionary items, according to Morningstar, as consumers will have more spending power if price increases slow.

Bain & Company, a consulting group in the Luxury Sector, said that the sector is experiencing normalization with growth slowing to 4-5% next year, below its long-term average. A majority of the luxury companies released strong financial results this week. Williams Sonoma, a home furnishing company, was the best performing S&P Global Luxury stock, gaining 20.6% in the past five days. Sales at Lululemon rose 11% in 2Q23 prompting the company to lift its full-year outlook. Brunello Cuccinelli reported a rise in net profit in the 1H23 and sees full year revenue growth at the upper end of its range.

Burberry shares plummeted to their lowest point in over a year, losing more than 20% of its value in 2023. Bloomberg reported that prices for used Rolex and Patek Philippe watches fell to a fresh two-year low on the secondary market last month, as demand continues to decline amidst rising supply. US consumers of premium spirits have been trimming consumption after demand soared during the pandemic, reports US Global. Luxury companies are adopting blockchain technology to track the authenticity and origin of high-end products. OTB Group, a member of the Aura Blockchain Consortium, runs blockchain technology specifically for luxury brands. The consortium was founded in 2021 by LVMH, Prada Group, and Richemont.

The long-term performance of *US banks was not strong as compared* to overall Large-Cap equities. The industry's exposure to Commercial Real Estate (CRE) and adverse auto claim trends raised investors' concerns about the industry's profitability. This hit valuations. SSGA thinks concerns about the Bank and Insurance industries' CRE exposure are overdone. The office sector is most vulnerable. Yet, it accounts for just 1.95% of invested assets. Declining Auto claim costs, given disinflationary trends in used cars, could improve Insurance profitability. Next year's Insurance earnings estimates were upgraded by 4.8% compared to little changes elsewhere.

US Bank performance should continue to be challenged in 2H23, with slow growth amid elevated funding and credit costs, particularly for small and mid-sized institutions. Fitch Ratings expects the challenging operating environment for US banks to persist into 2024. All US banks will need to take defensive measures to conserve capital and have provisions for higher expected losses. In the US, loans to commercial and industrial (C&I) businesses are barely growing, slowing from an annual rate of 15% last year.

The *US has a shortage of housing* with the inventory of new and existing homes for sale at an all-time low. The shortage is partly due to hangover effects from the housing crash according to Infrastructure Capital Management. While high mortgage rates hurt affordability, there are trends that continue to support demand for new construction, such as increase in household formation, strong labor markets, and limited existing housing supply. The supply deficit increased from 2.5 million in 2018 to 3.8 million units in 2020. Existing homeowners are disincentivized to sell and give up their low mortgage rates. That constrains existing home inventory that drives demand for the new home construction market.

The 30-year US mortgage rates have exceeded the 8% mark for the first time since 2000 reports DWS. Building permits and early readings of new residential sales for August pointed to better-than normal seasonality. Valuations are at the lowest level since 2009 affected by higher mortgage rates. Ironically SSGA reported, Homebuilders stocks outperformed the S&P 500 index by 104% to 22% in the 12-month period following the last rate hikes.

There is also a *shortage of new autos for sale* because of the auto chip production disruption. These shortages are supporting the Consumer Cyclical discretionary Housing and Auto Sectors, reports Infrastructure Capital. The US Infrastructure Bill is driving construction and investment to prevent layoffs.

Over the past year, the Infrastructure Sector outperformed Real Estate. Infrastructure has earnings yields similar to those of Fixed Income. Infrastructure investments such as regulated Utilities can pass on the higher costs. Infrastructure is a Sector that can be resilient in a slowing economic environment. Health Care, Software, and Insurance brokers that are also well positioned to withstand economic downturns.

Panama-based Copa Holdings earned \$4.39 per share, ahead of the \$3.32 consensus due to better revenue, lower non-fuel unit cost, and lower non-operating expense with the settlement of the company's convertible notes. Container import volumes at US ports accelerated into the fall this year defying most expectations and historical peak season declines despite many reports of weak volumes and falling rates, reports US Global. Cargo volume is not weak. However, global economic recovery is required to fill the large supply of newly built vessels. Budgets are now constructed on the assumption that the outlook for fiscal year 2024 is not very encouraging. With 41% lower rainfall than usual, tanker and bulker fluidity is expected to worsen. The Panama Canal now has a queue of 120 ships. Downside risk is falling however, owing to measures such as slower steaming speeds. Airfreight rates reached a peak in April last year when ocean reliability was at its lowest. Goldman Sachs reports the Boeing new aircraft supply is well below demand, but that deliveries will ramp up substantially through end of 2023, into 2024.

Tesla is producing a few Cybertrucks a day at its Austin plant. The company is planning to start delivery of its long-awaited Cybertruck around the end of the 3Q23, adds US Global. The National Highway Safety Administration could be ending its two-year investigation into Tesla's drive-assistant systems Autopilots and Full Self-Driving. Tesla released an updated higher priced Model 3 in China with a slimmer look and a longer per-charge range.

US Global notes that Tesla faces growing threats from domestic rivals like Li Auto, BYD, and XPeng, all of which continue to gain momentum and expand their market presence. In October, Li Auto surpassed Tesla in sales, delivering a record 40,422 electric vehicles compared to Tesla's 28,626 units. Li Auto is focusing solely on SUVs with a unique fuel tank charging system.

Trailing 12-Month Performance of Major Asset Classes



Source: U.S. stocks—Morningstar U.S. Market Index. Developed-markets stocks ex-U.S.—Morningstar Developed Markets ex-U.S. Index. Emerging-markets stocks—Morningstar Emerging Markets Index. U.S. bonds—Morningstar Core Bond Index. Commodities—Bloomberg Commodity Index. Data as of September 30, 2023.

International x-US Equities

Most major international markets fell in the 3Q23 despite posting strong returns at the beginning of the year

Global ex-US posted a loss of 3.29% versus a loss of 3.19% for the US market. Global equities (MSCI AC World) fell for the third month in a row in October. Foreign investors mulled the possibility of higher rates for longer to combat stubbornly high inflation. Most major international markets fell in the 3Q23 despite posting strong returns at the beginning of the year. Bank lending in Spain and Italy is contracting in annual terms, while in France and Germany it is decelerating rapidly.

The MSCI All Country World Index (MSCI ACWI) fell by 3.30% (in USD terms) in 3Q23. The MSCI Europe Index fell by 4.91% and the MSCI EAFE Index fell more than 4%. Latin America and Switzerland were laggards losing around 5%. China’s one-year return was positive, but investor confidence was subdued due to the low rebound and the problems in the property market. Egypt’s 127.5% return can be attributed to extreme currency depreciation.

UK households accumulated about GBP280 billion of “excess” savings since the start of 2020 and have not drawn on them down to fund spending, unlike their US counterparts, according to BMI Fitch Ratings. Analysis of the expenditure components showed a 0.5% contraction in household spending in 2Q23. The UK September GDP showed an expansion of 0.2% from August in real terms. But this was insufficient to prevent the economy from stagnating in Q323, in part as investments declined by 2.0%.

Eastern Europe had a 40% return in the quarter with Turkiye continuing to drive performance. Developed markets in Europe, including the UK, posted losses in 3Q23 but with higher returns than Asia over the past year. In Japan, the real economy is holding up but the yen fell 1.5% against the dollar in October. That resulted in negative 15% YTD return. The Japanese 10-year government bond yield might reach 1% for the first time in years.

The 2023 growth forecast for Emerging Europe moved up (0.9% to 1.9%). BMI made several small upward revisions for Türkiye (2.6% to 3.0%) and Romania (2.2% to 2.7%) with Poland downward (1.5% to 0.9%). The key driver of the changed regional number was a more optimistic forecast for Russia. For 2024, the growth forecast for Türkiye is expected to fall by 0.8% due to abrupt financial tightening.

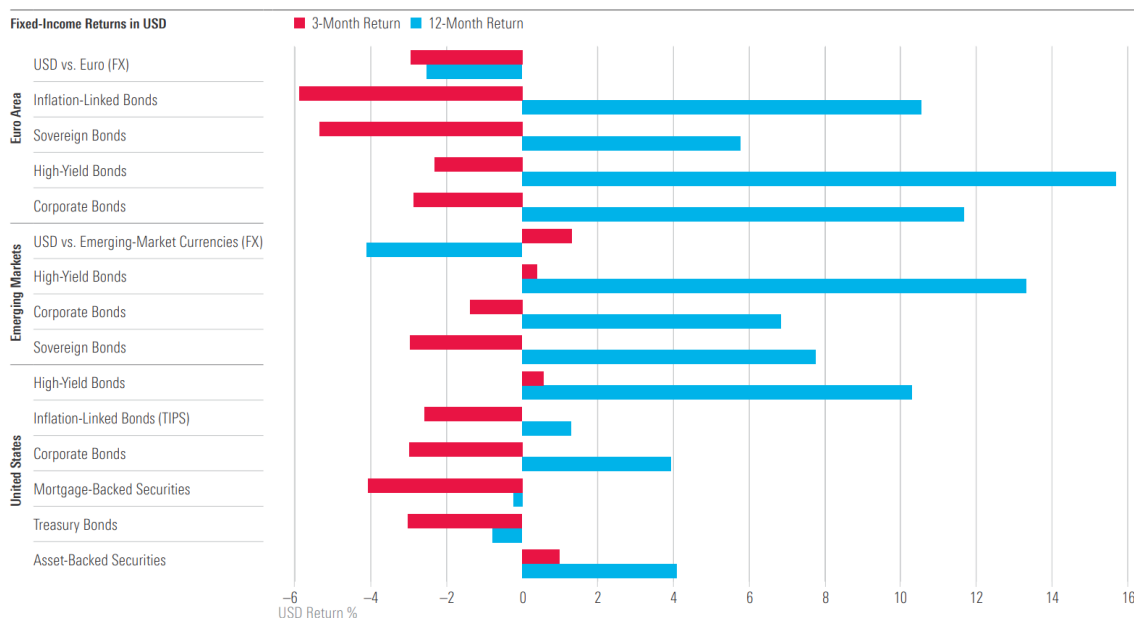
Strong Brazilian growth in Q2 2023 led BMI-Fitch revised up the 2023 forecast from 2.3% to 3.0%. Brazil remains a macroeconomic sweet spot, according to Nuveen, with better-than-anticipated GDP growth, moderating inflation, and easing monetary policy. The strong Mexican domestic demand figures in 2023 increased (3.0% to 3.2%), with the 2024 forecast down (1.6% to 1.4%). Nuveen believes favorable economic prospects warrant overweight allocations to Mexican equities. While the BMI headline MENA growth forecast for 2023 was revised down slightly (2.3% to 2.1%). Emerging-markets Equities could be back.

China’s economic growth has come with a corresponding increase in automobile ownership, construction projects, and energy consumption, particularly coal consumption, according to Krane Shares. Levels of air and water pollution in China are much higher than those recommended by the World Health Organization. The Ministry of Environmental Protection was formed in July 2008. China is addressing environmental concerns by moving away from manufacturing dependency. China has outpaced many regions in the expansion of electric power from renewables yet lag Americas and Europe on a per capita basis. Bloomberg reported China is considering providing at least CNY 1 trillion (\$137 billion) of low-cost financing to urban village renovation and affordable housing programs as it looks further to support the housing market.

Fixed Income Assets

Bond prices have been crushed since early 2022. Now the recent higher yields are attractive.

Convertible securities are Corporate Bonds with an embedded option that allows investors to convert bonds into the common stock of the issuing company. As a result, they combine the upside potential of equities with a coupon payment and bond-like floor to assist in mitigating downside risk. More than 50% of the convertibles market is allocated to the Consumer Discretionary, Communication Services, and Information Technology Sectors. They are the three Sectors driving returns this year. They are trading more like Bonds, to limit upside, but with less volatility than straight Equities. Combining Convertibles to an allocation with Preferred Securities (VRP), an hybrid investment, provides income and Sector diversification.



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Source: Morningstar Indexes. Data as of Sept. 30, 2023. ©2023 Morningstar. All Rights Reserved.

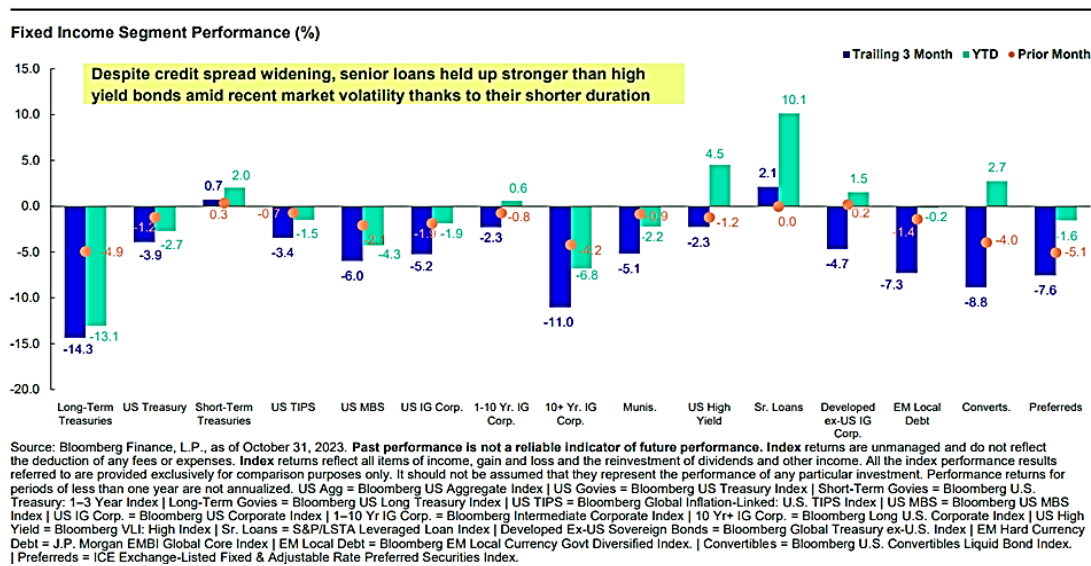
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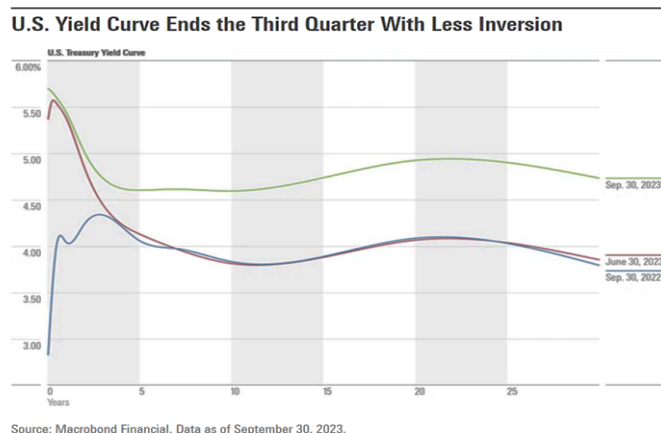
Yields continued to climb as the Federal Reserve reinforced the ‘higher for longer’ messaging to contain inflation. Bond prices have been crushed since early 2022. Now the recent higher yields are attractive, especially the less-risky, higher-quality bonds like Treasuries or agency Mortgage-Backed Securities (MBS). Investors can curb credit risk while improving income that has not available for a long time. A resilient economy provides an upside for Fixed Income, but weakening fundamentals question creditworthiness.

Investment Grade Bonds in the Bloomberg US Aggregate Corporate Bond Index (AGG) ended 3Q23 in negative territory, losing -3.23%, while US Treasuries lost -3.06% as the market prices declines. Yields rise as market prices fall. Yields ended 3Q23 higher at 4.85% versus 4.38% at the end of June. The US 10 yr Treasury Notes underperformed US TIPS by 46 bps. This is due to US inflation expectations ticking up slightly in 3Q23 by 6 bps to 2.25%.

Senior Bank Loans continue to be one of the best-performing asset classes in Fixed Income, as the Morningstar LSTA Leveraged Loan Index notched a 3.0% return in 3Q23. That said, defaults are beginning to pick up. Yields are attractive, but further defaults can persist if the economy begins to deteriorate as companies face higher interest costs. This threatens the potential for return from the riskier Senior Loans.



Uncertainty surrounding a potential recession, sticky inflation, and a weakened consumer will see continued volatility. The Yield Curve continues a ‘Bear Steepener’ points out SSGA, as long-term yields reached nearly 5% even amid increased geopolitical uncertainties, while short-term yields were little changed. If 10yr Yields exceeds 5%, SSGA thinks the risk of more than a ‘soft recession’ will climb. Yields are elevated as the term premium for longer term bonds finally turned positive, creating attractive opportunities in longer maturities.



Emerging Market Debt (EMD) yields of roughly 10% make EMD more appealing than other Bonds. For Sovereign issued Bonds, both Investment Grade and High Yield Bonds are positioned to do well into 2024. China is the world's second-largest economy and makes up about 30% of the EM equities market as measured by the MSCI Emerging Markets Index, and 21% of outstanding EMD corporates based on the JPMorgan Corporate Emerging Markets Bond Index (CEMBI), as well as 7% of Sovereign Debt in their local currency on the JPMorgan Emerging Markets Bond Index (EMBI). China's proportion of these benchmarks make it hard for investors to avoid the risks facing the country, notes Nuveen. China is expected to lag non-China EMs by approximately 5 percentage points. Nuveen EM strategist note that these factors contribute to substantial active underweights in Chinese Equities and their Fixed Income.

Other Assets

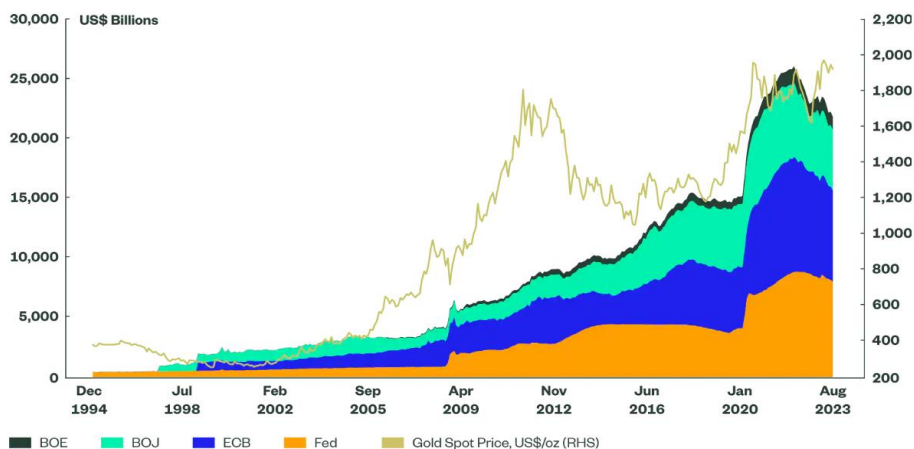
Bloomberg Commodity Index rose during the quarter, outperforming both equity and bond markets.

According to ExxonMobil's energy outlook, oil and gas are projected to still make up 54% of the world's energy supply by 2050 with the world failing to keep global temperature increases below 2 degrees. Oil use is expected to decline significantly in personal transportation but will remain essential for industrial processes. Natural Gas (LNG) use is projected to increase by more than 20% by 2050, given its utility as a reliable and lower-emissions source of fuel. Russia could shut off Russian gas to Europe by the end of 2024 according to the Ukraine Energy Minister making access to LNG critical.

The tighter oil markets improved the prospects for the oil and gas production industry in 2H23. Saudi Arabia and Russia are extending their combined 1.3 million barrels a day through 2023. This happens as oil demand is approaching record highs. Global inventories are still below their five-year average, leaving little buffer. The oil & gas exploration & production industry's 2023 and 2024 earnings estimates were upgraded in August, according to SSGA. Brighter oil explorers and producers' earnings prospects have not been fully priced into the current valuations.

The largest ever annual purchase of gold by global central banks was in 2022, an estimated 1,083 metric tons. The buying spree continued, with 387 metric tons of net gold purchased in the first half of 2023, reported SSGA. After the Global Financial Crisis (GFC) of 2008, central banks became net buyers. Gold's unique characteristics of liquidity, lack of default risk, homogeneity, and purpose as an alternate currency makes it a reserve asset and a good store of value. This week gold futures closed at \$1,983.20, up \$45.50 per ounce, or 2.35%. Gold equities are priced at \$1,800 per ounce. If the 2025 estimated average gold price forecast of \$2,200 is achieved, a 20% increase will be achieved.

Figure 2: Global Liquidity and Debt Levels Continue to Increase



Source: Bloomberg Finance L.P., State Street Global Advisors. Data from December 31, 1994 to August 31, 2023. Past performance is not an indicator of future performance.

As certain governments perceive that international sanctions against them are a monetary threat, switching from US dollar assets to gold becomes makes sense. The price of gold increased over 586% with the surge of global liquidity and debt. The gold price as compared to the inverse of 10-year US Treasuries Yields since 1980, indicates Gold is now roughly trading where it should be according to DWS

Gold has been volatile lately. It is beginning to move higher. Loser monetary policy is good news for real, non-interest-bearing assets like Commodities, Gold and other Minerals. Minerals and Metal are more valuable due to decarbonization and electrification efforts. These include copper, lithium, nickel, cobalt and silver. Most of these metals are not part of the broader commodity index but are in the Metals Indexes.

Stiefl Analysts, the financial services company, suggests that metals and minerals are gearing up to dominate the market for the next decade after 13 years of underperforming Stocks and Bonds. Goldman Sach Asset Management (GSAM) recommends going long Commodities in 2024, as the bank expects somewhat higher spot commodity prices, strong carry, and a hedge against geopolitical supply disruptions. GSAM forecasts a 21% increase in the Goldman Sachs Commodities Index (GSCI).

Nickel production increased by 20% last year, led by Indonesia, so the supply is stable. Zinc is the second worst performing metal on the LME this year despite exchange inventories being relatively low all year by historic standards. Bank of America's (BoA) car production forecasts indicate that US copper demand could expand by around 10%, two-thirds driven by renewables and one-third by the automobile industry. China's production of refined copper and its share of world output is heading for a record this year after a rise in construction of new smelters. Precious metals are being stolen from catalytic converters. The new and the old metals would later be blended under intense heat, then shipped to a refinery.

YTD Natural Gas and Hogs were the worst performing parts of the S&P Goldman Sachs Commodity Index (GSCI). Leaders in 1H23 were agriculturals cocoa, sugar, and cattle, due to limited supply due to weather shocks. After the spike in 2020, lumber prices are at their lowest level since June. The worst performing Commodity for the *week* was wheat, dropping 3.67%, as cheaper supplies from Russia and Ukraine squeeze domestic prices lower.

Each year, the world produces about 750 million tons of wheat and 1.1 billion tons of maize. Of this, 20% of the wheat (150 million tons) and 61% of the maize (671 million tons) is fed to animals, in addition to 77% of the world's soybean crop, reports Project Syndicate. One study carried out in the United States showed that grains and soy fed to beef cattle return less than 3% of the nutrients of what the crops contain. The conversion is higher around 10% for hogs, and 21% when fed to chickens. Is this in effect wasting the grains that could be consumed directly by people.

Real Estate Investment Trusts (REITs) continued to underperform the broader markets on a YTD basis as interest rates rose. All property sectors were negative in 3Q23, led by Self-storage and Residential REITs. Real Estate has suffered from higher rates, with longer term financing a significant part of the balance sheet. There have been high profile defaults in LA, San Fran, and NYC signaling the level of distress. The share of Office Buildings is 19% of the Real Estate sector, whereas Industrial is 32%, Residential 29%, and Retail only 10% according to DWS. The overall US property vacancy rate is reported at the lowest level since 1988, improving prospects for Net Operating Income. Institutional investors like insurance companies, private credit pools, and the likes of Fannie Mae and Freddie Mack as well and Commercial Mortgage Backed Securities (CMBS) are the source of half of the mortgage market. The lower prices and tighter credit standards are holding back new projects.

Cyber and Information Security is the top area of increased investment for 2023, more than data analytics, cloud platforms, and artificial intelligence. Spending on Information Security products and services is projected at a 11.3% growth, to be more than \$188 billion in 2023. President Biden's 2024 budget proposal allocates approximately \$26 billion to implement the new national cybersecurity strategy.

Bitcoin was in sight of \$38,000 this week, a level last seen in May 2022, amid an ongoing rally spurred by expectations of fresh demand for the token for ETFs, according to Bloomberg. Coinbase Global is one of the most important investors in the world of cryptocurrency. It's the all-time biggest backer of industry startups in terms of number of deals, according to PitchBook. In recent months, its investing activity has fallen off along with its market value, writes Bloomberg. Tether Holdings is taking steps to become one of the world's top Bitcoin miners as the \$87 billion stablecoin operator makes hefty investment in the highly competitive sector, at about half a billion dollars over the next six months, writes Bloomberg.

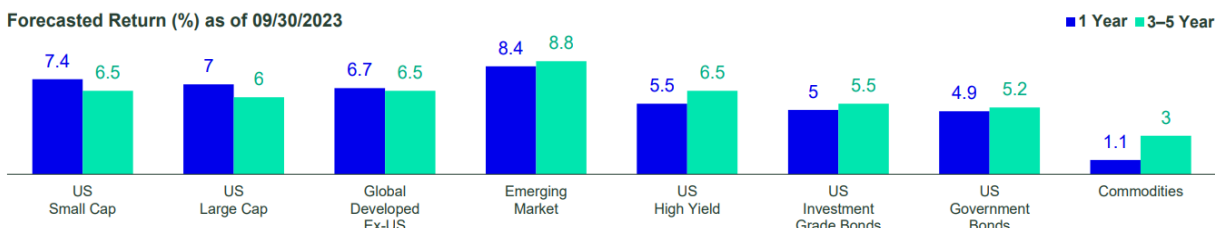
Asset Allocation

Institutional and retail investors have shown risk-off sentiment, SSGA

Institutional and retail investors have shown risk-off sentiment amid increasing Bond and Equity volatility. Institutional investors further increased cash allocation at the expense of Equities, while Fixed Income allocations remain near a 10 year low according to SSGA.

The current the combined value of US based companies as a percentage of the global markets went from 40% to 60+% over the last two decades and is at its highest level ever, despite the ascendancy of China. This indicates investors are betting on US prosperity. Forecasted returns over a five-year horizon favor the Emerging Markets, followed by Developed-X US markets, and US Small Cap and High Yield. There is associated higher volatility with these investments.

DWS sees Corporate Bonds (Credits) as an asset class more attractive than the S&P right now. To be competitive, it would take in excess of a 7% Earnings per Share (EPS) growth rate in 2024 & 2025 for the S&P 492 (500 less the Great Eight), Techs which is unlikely. If US slips into a small recession, EPS would likely be flat or down. The nearly 6% EPS yield of the S&P 492 is only 350bp above the 10yr Treasury.



Source: State Street Global Advisors Investment Solutions Group. The forecasted returns are based on SSGA's Investment Solutions Group's 09/30/2023. Forecasted returns and long-term standard deviations. The forecasted performance data is reported on a gross of fees basis. Additional fees, such as the advisory fee, would reduce the return. For example, if an annualized gross return of 10% was achieved over a 5-year period and a management fee of 1% per year was charged and deducted annually, then the resulting return would be reduced from 61% to 54%. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in the local (or regional) currency presented. It does not take into consideration currency effects. **The forecasted performance is not necessarily indicative of future performance, which could differ substantially.** Please reference Appendix B (continued) for the assumptions used by SSGA Investment Solutions Group to create asset class forecasts.

The SSL Model Portfolio for 4Q23 is building on the current theme of an emphasis on Quality Factors, so continue with the iShares QUAL US, the iShares International IQLT, and now the QEMM Emerging Market equity ETFs. There is 55% in the US, 18% in Foreign Stocks, including 5% in Emergin Markets.

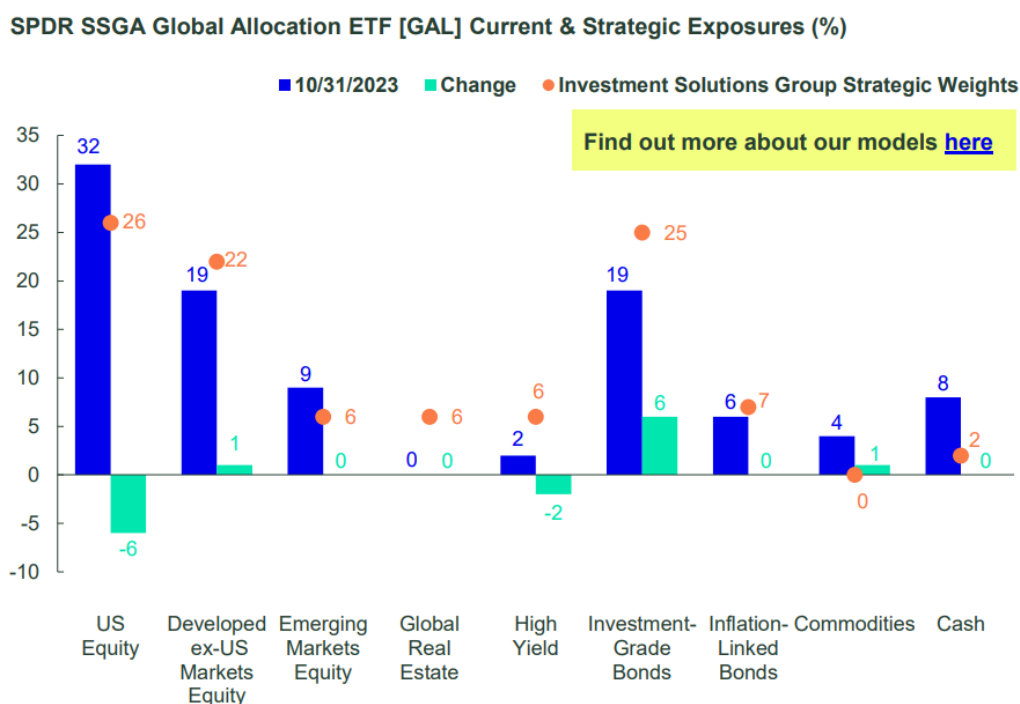
The portfolio is balanced between large companies and medium to smaller companies with the DEUS Xtracker US Multi-factor US ETF, the SMFL iShares US Small Cap Factor ETF, and the SCZ iShares Europe, Asia, and the Far East (EAFE) for smaller companies. With a slight tilt toward Larger Cap Growth stocks and Mid to Small Cap Value stocks.

There are a variety of special Sector ETFs, to fully diversify the portfolio in light of the current economic cycle. This includes the SPDR Aerospace XAR, as well as the Financial XLF, Health-Care XLV, Consumer Discretionary XLP, and Consumer Staples XLP. The iShare Infrastructure IFRA is included to capture the investments in building a better energy system. Financials were pared back along with Staples and Infrastructure to increase the allocation to Consumer Discretionary and to add to the iShares Global Energy IXC, as that Sector as under weight according to the Morningstar Portfolio xRay.

There is 16% of the portfolio is in Other Assets, including the Wisdom Tree Enhanced Commodity GCC ETF, the Invesco S&P Global Water ETN and the iPath Series B Carbon ETF, along with the Invesco Active US Real Estate PSR.

The 20% allocation into the Fixed Income ETFs includes the Janus-Henderson Short Duration VNLA, the investment grade iShares Core Total USD Bond IUSB, along with the Invesco Variable Rate Preferred VRP which has a good total return with its 6% dividend. As noted at the beginning of this section, Fixed Income is gaining leadership in the asset categories due to better yields after the prices retreated in 2022.

The following is recent guidance for the SSGA strategic asset allocation which SSL references in building the SSL model design structure.



SSL uses a ‘Smart Beta’ strategy with factor, sector and regional screens to pinpoint the attractive securities within an index or to make an investable index. Academic and practitioner research have shown that Smart Beta portfolios outperform the overall benchmarks in the long run. High Quality Factor has the superior risk-adjusted returns. The strategies are implemented in the following SSL 4Q2023 Model Portfolio and displayed in the attached portfolio xRay.

Please contact us to analyze your portfolio holdings. SeniorSolutionsBDA@outlook.com

Conclusion - *The times they are a-changing – Bob Dylan*

A gentle transition to a mild recession maybe in the making. Growth is slowing, investing in quality companies and in investment grade bonds will mitigate downside risk. Bonds are better investments now. And Commodities will benefit from the emphasis on renewables and the support of infrastructure projects.

Previous performance is not a guarantee of future returns. All investments contain risk. Your particular portfolio should be designed to your level of risk and to target your financial goals. Review regularly. Senior Solutions Ltd (SSL) provides financial planning guidance for a fee. The client receives guidance to implement at their own discretion. SSL does not guarantee any returns from such guidance. SSL is not an investment manager, does not sell investment or insurance products, nor receives any commission or third-party compensation. SSL does not directly manage or custody assets on behalf of clients. SSL is a financial planning firm for select clients.

SSL Model Portfolio															
4Q23 Portfolio Design Structure															
as of 15-Nov-23															
Ttl Invest															
#####															
Green - Add Red - Remove ETFs															
20.00%	Symbol	FIXED INCOME	Crd	Hldg	Hldg	Hldg	Hldg	Reg	Reg	Cap	Dur	YtdRet	Yld	MS Star	
0.00%		Cash													
7.00%	VNLA	Janus Henderson Short Duration Inc	A-	55%Cr	20%D	16%Cas	4%Gov	39%BBB	26%A	MidLtd	0.86	4.81%	6.12%	3Neu	
0.00%	SPIP	SPDR® Portfolio (3-5yr) TIPS ETF	AAA	100%Gov				100%AA		HighMo	6.73	0.42%	3.55%	3Brz	
0.00%	SRLN	SPDR® Blackstone Senior Loan	B+	90%Crp	10%Cash			64%B	23%BB	LowLtd	0.25	6.51%	7.91%	3Neu	
7.00%	IUSB	iShares Core Total USD Bond	A+	40%Gov	31%Corp	23%Sec	63%AAA	3%A	15%BBB	MidMoc	5.85	1.37%	3.49%	3Gld	
2.00%	VGIT	Vanguard Intmdt-Term Treas	AAA	99%Gov	.33%Cash			100%AAA		HighMo	5.18	0.75%	2.22%	5Slv	
4.00%	VRP	Invesco Variable Rate Preferred	BBB-	98%Corp	1.74%Cash			71%BBB	21%BB	5%NR	MidLtd	1.92	6.15%	6.39%	5Brz
0.00%	CEMB	iShares JP Morgan EMB Corporate	BBB-	92%Corp	7%Gov	.5%Cash	34%BBB	22%A	20%B	MidMoc	4.92	3.33%	4.37%	4Slv	
0.00%	CWB	SPDR® Blmbg Convert Secs		98%Corp	0.4%Cash			80%NR	12%BBB	5%BB	NA	2.05	6.34%	2.38%	4Brz
20.00%		Subtotal													
80.00%		EQUITY	Crd	Hldg	Hldg	Hldg	Hldg	Reg	Reg	Cap	Dur	YtdRet	Yld	MS Star	
10.00%	QUAL	iShares MSCI USA Quality Factor	A	31%Tech	13%HC	12%FS	10%CC	99%USA			LrgGrw	23.00%	1.34%	4Slv	
0.00%	MTUM	iShares MSCI USA Momentum Factor	A-	29%Tech	18%HC	14%CC	12%Ind	99%USA			LrgGrw	4.12%	1.89%	3Brz	
5.00%	DEUS	Xtrackers Russell US Multifactor	B+	20%Ind	18%Tech	17%CC	11%HC	98%USA			MidBld	6.64%	1.84%	4Slv	
4.00%	SMLF	iShares U.S. Small-Cap Eq Fac	B-	18%Ind	16%Tech	16%FS	14%CC	96%USA			SmlBld	6.79%	1.74%	4Gld	
0.00%	XHB	SPDR® S&P Homebuilders ETF	B+	51%CC	49%Ind			100%USA		Mom	MidBld	37.65%	1.04%	4Slv	
5.00%	XAR	SPDR® S&P Aerospace & Defense ETF	B+	96%Ind	4%Tech			100%USA		Mom	MidBld	21.42%	0.47%	3Slv	
3.00%	XLF	Financial Select Sector SPDR®	B	98%Fin	2%Tech			97%USA	2%SWZ		LrgVal	3.80%	2.06%	4Brz	
6.00%	XLV	Health Care Select Sector SPDR®	A-	100%HC				100%USA			LrgBld	5.18%	1.58%	5Slv	
5.00%	XLY	Consumer Discret Sel Sect SPDR®	B+	99%CC	.6%Tech	.4%Ind		99%USA	.5%EU		LrgGrw	30.30%	0.94%	4Gld	
5.00%	XLP	Consumer Staples Select Sector SPDR®	A	99%CD	1%HC			99%USA	.35Cash		LrgBld	-5.04%	2.78%	3Brz	
3.00%	IXC	iShares Global Energy ETF IXC	B+	99%Eng	.1%Ind		Qual	59%US	12%UK	11%Cd	LrgVal	3.85%	4.59%	3Slv	
4.00%	SCZ	iShares MSCI EAFE Small-Cap	C+	23%Ind	14%CC	11%FS	10%Tech	33%Jap	14%UK	10%Aus	MidBld	4.43%	1.86%	3Brz	
7.00%	IQLT	iShares MSCI Intl Quality Factor	B+	19.5%FS	15%Ind	13%HC	12%CC	14%Swz	13%Jap	12%UK	LrgGrw	10.94%	2.40%	4Slv	
0.00%	EMGF	iShares Em Mkts Eq Factor	C+	23%Tech	22%FS	13%CC	7%Mat	27%Chn	17%Ind	16%Twn	LrgVBld	7.33%	4.12%	4Neu	
5.00%	QEMM	SPDR MSCI Emr Mrk StratFacts ETF	B-	24%Tech	20%FS	11%CD	10%CC	24%Chn	18%Ind	18%Twn	LrgVBld	6.10%	5.35%	4Gld	
3.00%	PSR	Invesco Active US Real Estate	B+	100%RE				99%USA			MidBld	-2.83%	3.41%	3Neu	
5.00%	IFRA	iShares US Infrastructure	B	43%Util	32%Ind	16%Mat	8%Enr	95%USA	5%Cda		MSBld	4.90%	2.25%	5Gld	
5.00%	GCC	WisdomTree Enhanced Cmnty ETF		35%Eng	.19%Imei	.16%Pme	.12%Agr				LrgVal	-2.46%	2.72%	1Brz	
0.00%	FLOWX	Fidelity Water Sustainability	B+	66%Ind	15%Util	11%Tech	6%HC	74%US	4.9%Cd	4.6%UK	MidGrw	9.00%		2Neu	
1.00%	CGW	Invesco S&P Global Water ETF	B+	51%Ind	39%Util	6%Mat	2%Tech	58%US	15%UK	9%Swz	MidGrw	6.99%	1.49%	4Brz	
4.00%	GRN	iPath® Series B Carbon ETN	na								LrgVal	-3.41%	0%	NR	
80.00%		Subtotal													
100.00%		Total													

Index: The ETF Trading Symbol is followed by the name, credit rating, sector data when applicable, YTD Returns, 12 month Yield, This is preceded by Market Cap and Style. The last column has Morningstar stars and level Neutral, Silver, Bronze or Gold.