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## 2024 YTD MARKET COMMENTARY – DECEMBER 2024

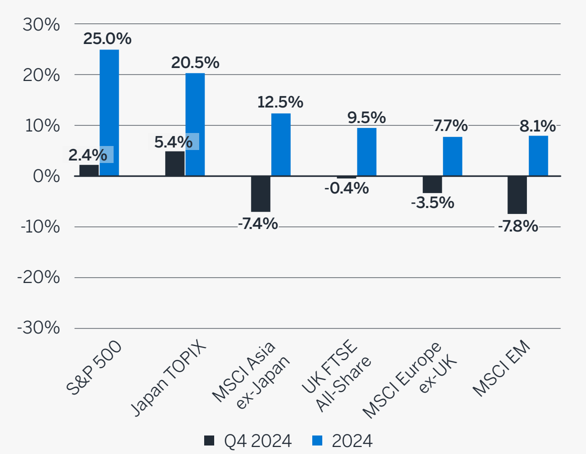
### 2024 MARKET RECAP

- In 2024, U.S. economic performance remained resilient despite concerns that a slowing economic environment might drag the country into a recession. Through September, the U.S. economy produced an average GDP growth of around 2.6% quarter-over-quarter in 2024, and the Federal Reserve Bank of Atlanta's latest estimate for the fourth quarter remains closely aligned at 2.7%.
  - The S&P 500 led international equity markets in 2024, ending the year with nearly a 25% gain. 10 of the 11 industry sectors closed the year out in positive territory, with materials only marginally down amid worries about economic slowdowns abroad.
  - The telecommunication and technology sectors outperformed the broader index by 15.2% and 11.6%, respectively as A.I. and chip companies continued to push higher.
  - Although the healthcare sector ended the year with positive returns, it underperformed the broader market by over 22%. Key factors contributing to this underperformance included government reimbursement rates for Medicare and Medicaid services that fell short of expectations under the current administration, disappointing insurers and investors. Additionally, the prospect of changes to subsidies for health insurance exchanges and vaccine programs following the 2024 presidential election added to the sector's challenges.
  - While a select number of mega-cap stocks continued to dominate the return space in 2024, small cap and value stocks also got a lift following the presidential election and the promise of deregulation.
  - In 2024, Japanese equities achieved returns of 20.5%, driven by optimism over the end of deflation amid support of a weak yen.
  - In Asia, China is still dealing with declining property prices and weak consumer confidence amid trade war threats. However, hopes for significant economic stimulus persist entering 2025. Despite a turbulent fourth quarter, the MSCI Asia ex-Japan ended the year up 12.5%.

| Sector | 2024 Return | 2024 Return vs. 52-Week High | 2024 Return vs. 52-Week Low | 2024 Excess Return vs. S&P 500 |
|---|---|---|---|---|
| S&P 500 | 25.0% | -3.3% | 27.2% | 0.0% |
| Telecomm | 40.2% | -4.7% | 42.3% | 15.2% |
| Technology | 36.6% | -3.6% | 42.6% | 11.6% |
| Financial | 30.6% | -5.4% | 31.9% | 5.5% |
| Consumer Desc | 30.1% | -6.6% | 35.2% | 5.1% |
| Utilities | 23.4% | -8.0% | 30.4% | -1.6% |
| Industrial | 17.5% | -7.9% | 21.4% | -7.6% |
| Consumer Stap | 14.9% | -5.0% | 15.3% | -10.1% |
| Energy | 5.7% | -11.3% | 10.9% | -19.3% |
| Real Estate | 5.2% | -9.1% | 17.1% | -19.8% |
| Health Care | 2.6% | -11.8% | 2.6% | -22.4% |
| Materials | 0.0% | -13.8% | 5.6% | -25.1% |

| 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| U.S. Growth **33.5%** | U.S. Growth **32.0%** | U.S. Value **-5.2%** | U.S. Growth **30.0%** | U.S. Growth **35.9%** |
| U.S. Small Cap **20.0%** | U.S. Large Cap **28.7%** | U.S. Large Cap **-18.1%** | U.S. Large Cap **26.3%** | U.S. Large Cap **25.0%** |
| U.S. Large Cap **18.4%** | U.S. Value **24.9%** | U.S. Small Cap **-20.4%** | U.S. Value **22.2%** | U.S. Value **12.3%** |
| U.S. Value **1.4%** | U.S. Small Cap **14.8%** | U.S. Growth **-29.4%** | U.S. Small Cap **16.9%** | U.S. Small Cap **11.5%** |

**World Stock Market Returns**

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*The results shown are historical, for informational purposes only, not reflective of any investment, and do not guarantee future results. Any reference to a market index is included for illustrative purposes only, as it is not possible to directly invest in an index. Indices are unmanaged, hypothetical vehicles that serve as market indicators and do not account for the deduction of management fees or transaction costs generally associated with investable products, which otherwise have the effect of reducing the results of an actual investment portfolio.*

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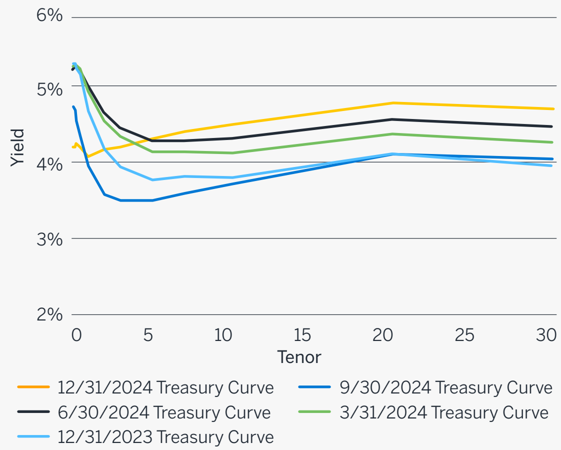
- European markets struggled to match the momentum of their American counterparts due to high energy costs, regulatory challenges, and weak export demand. Political and economic headwinds along with limited exposure to A.I. companies further dampened returns, resulting in the MSCI Europe ex-UK posting a 7.7% return for the year.
- UK equities slightly outperformed other European markets, ending 2024 with a 9.5% gain. The Bank of England faces challenges in 2025, as employment seems to have peaked, and prices are starting to rise again.

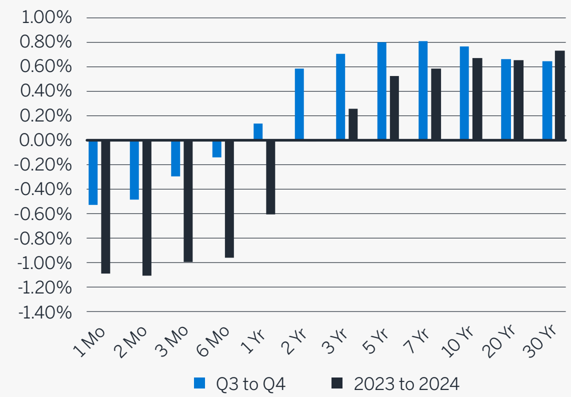
- The Federal Reserve commenced its first rate cut in over 4 years at its September meeting, slashing its target rate by 50bps followed by two 25bp cuts in November and December as the committee expressed confidence that inflation was moving sustainable toward its 2% target. During the year, the yield normalized.
  - While the September rate cut led to a sizable downward shift in the entire yield curve, long term rates have continued to climb since.
    - 10-year and 30-year yields are nearly 80bps and 66bps higher respectively since the end of September.
  - One explanation for higher yields at these tenors could be that investors are now expecting a stronger economy going forward.
  - However, there could be a few other signals that investors should pay attention to.
    - Following the presidential election and the prospect of trade wars and worker shortages (if broad deportations materialize), there could be growing concerns of higher price inflation in the long term.
    - Demand for U.S. debt could be sagging amid ballooning deficits run by the U.S. government. Investors may see more risk long term, and thus are demanding a higher yield.
  - High Yield bonds were the top performing sector in 2024 with high yields and tightening spreads boosting returns over 8%.

**Treasury Yield Curves**



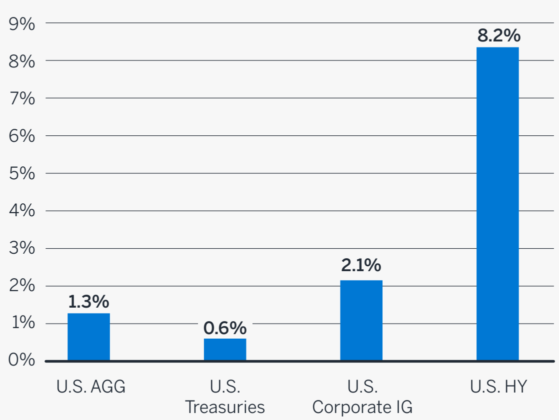

**Change in Treasury Yield**

*September 2024 to December 2024*
*December 2023 to December 2024*



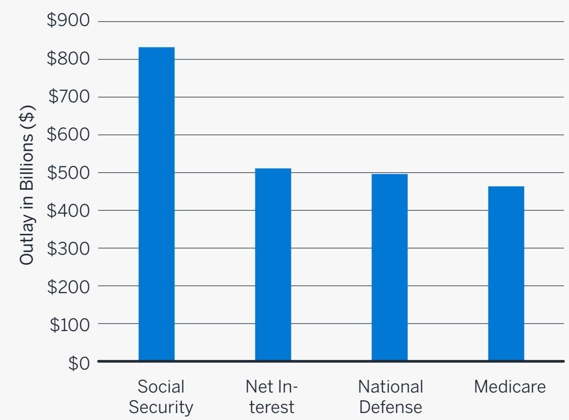

**Fixed Income Sector Returns**

*2024*




**Treasury Outlays Through Fiscal Year 2024**

*April 2024*



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## STRATEGY PERFORMANCE

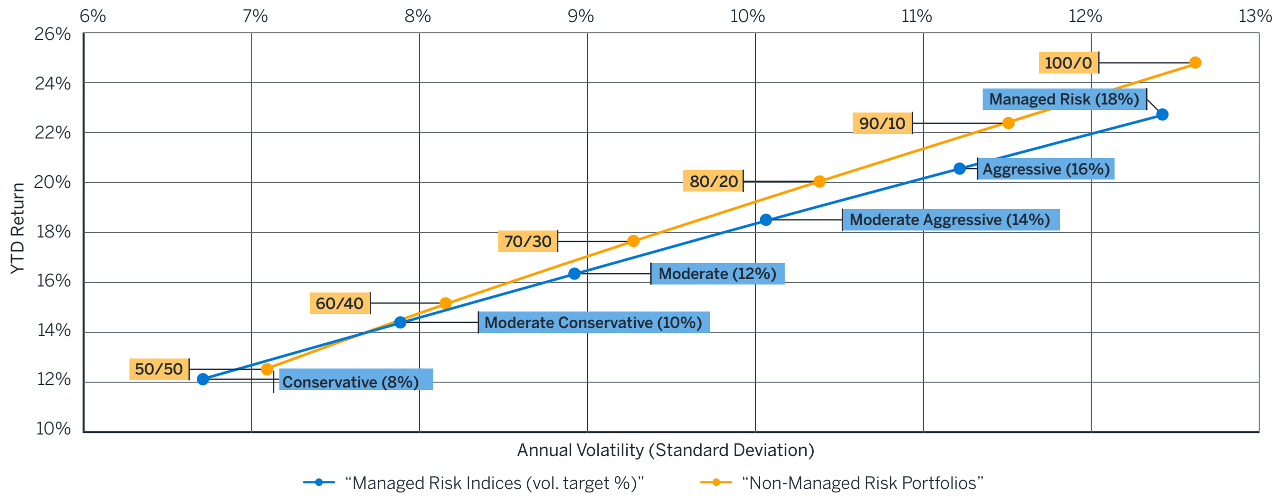
### Managed Risk Investments

- In 2024, volatility, as measured by the VIX Index, remained mostly muted through the year.
- Markets experienced a sharp, but short-lived spike in volatility at the end of July with the Bank of Japan unexpectedly raising interest rates, causing a repricing of Japanese bond yields and an unwinding of the popular Yen carry trade, which impacted U.S. markets. Additionally, the soft U.S. July jobs report contributed to this volatility by prompting a downward repricing of U.S. bond yields in anticipation of a Fed rate cut.
- Volatility also showed a few spikes as election day approached in November, as markets digested political rhetoric from both candidates. Following election day, volatility subsided back to it muted trend.
- Year-to-date, managed risk strategies have been able to reduce volatility while capturing the majority of the returns compared to corresponding non-managed blends of the S&P 500 and Bloomberg U.S. Aggregate.

### Defined Outcome

- In the defined outcome space, the January CBOE S&P 500 15% Buffer Protect Index was able to capture over 56% of the S&P 500 rally this year.
  - The strategy's cap of 14% has come into play.
  - The risk-adjusted return of the Buffered index has historically outperformed that of the S&P 500.

**S&P 500 Managed Risk Indices vs. Non-Managed Risk Portfolios***




**YTD Total Returns as of December 31, 2024**

| | S&P 500 | 70/30 Stock/ Bond Blend* | 60/40 Stock/ Bond Blend* | S&P 500 Managed Risk - Moderate Conservative Index (10% Vol Target) | CBOE S&P 500 15% Buffer Protect Index - January Series | Milliman Risk Parity Growth Index | Milliman Risk Parity Moderate Index |
|---|---|---|---|---|---|---|---|
| 1 Year | 24.8% | 17.4% | 15.0% | 14.2% | 14.0% | 9.3% | 9.0% |
| 5 Year | 14.5% | 10.4% | 8.9% | 7.1% | 8.3% | 2.4% | 2.4% |
| 10 Year | 13.1% | 9.8% | 8.7% | 7.1% | 7.2% | 4.6% | 3.8% |
| 1YR Vol | 12.6% | 9.2% | 8.2% | 7.9% | 5.1% | 9.7% | 7.7% |
| 5YR Vol | 21.4% | 15.2% | 13.2% | 8.1% | 11.5% | 9.4% | 7.6% |
| 10YR Vol | 17.9% | 12.6% | 10.8% | 7.5% | 9.2% | 8.3% | 6.4% |
| 1YR Risk Adjusted | 1.96 | 1.89 | 1.84 | 1.81 | 2.72 | 0.96 | 1.16 |
| 5YR Risk Adjusted | 0.68 | 0.68 | 0.68 | 0.88 | 0.72 | 0.25 | 0.31 |
| 10YR Risk Adjusted | 0.73 | 0.78 | 0.80 | 0.95 | 0.78 | 0.56 | 0.60 |
| 1YR Max Drawdown | -8.4% | -5.4% | -4.5% | -4.4% | -3.3% | -5.6% | -4.2% |
| 5YR Max Drawdown | -33.8% | -24.7% | -21.5% | -16.0% | -20.0% | -21.5% | -18.0% |
| 10YR Max Drawdown | -33.8% | -24.7% | -21.5% | -16.0% | -20.0% | -21.5% | -18.0% |

**Portfolio represented by the S&P 500 Index and the Bloomberg US Agg Index*

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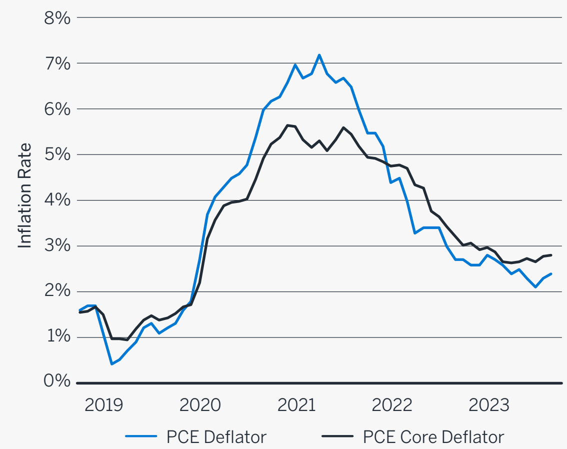
## OUTLOOK

- Following the 2024 election, Americans are keenly tuned in to the new administration's economic plans going forward and are weighing how it will affect growth.
- One key area many investors are paying attention to is the potential escalation of a trade war, not only with China, but also with neighboring countries like Mexico and Canada, who rank among the U.S.'s top trading partners.
- With respect to China, President Joe Biden originally campaigned against Trump's $300 billion tariffs on Chinese goods, promising to remove the tariffs if elected. However, Biden not only kept many of the Trump era tariffs in place, but he also expanded them, placing an additional $18 billion worth on Chinese imports.
- While much of the original promises could have been normal political banter during an election year, Biden's shift reflects a growing bipartisan recognition that China's trade practices are undercutting American workers. With the likelihood that Trump will make good on his promises to escalate trade wars, price pressures are likely to return for American consumers. This places the Federal Reserve in a difficult position, as it has cautiously begun its cutting cycles following raising rates at its fastest pace in history to combat skyrocketing inflation. The prospect of mass deportation could challenge these dynamics as unemployment remains near all-time lows.
- With consecutive back-to back blockbuster years for U.S. equities, some investors are wondering if we are in a bubble. Market sentiment remains positive heading into 2025, and investors continue to show risk appetites for a handful of A.I. stocks that have driven most of the broad market returns in 2023 and 2024.
  - While we cannot say for certain, however, an interesting observation is that only 28% and 29% of the stocks within the S&P 500 outperformed the index in 2023 and 2024. Similar numbers were observed leading up to the dot com bubble that burst in the late 1990s/early 2000s. Following the bubble pop, the S&P was down over 8% in 2000.

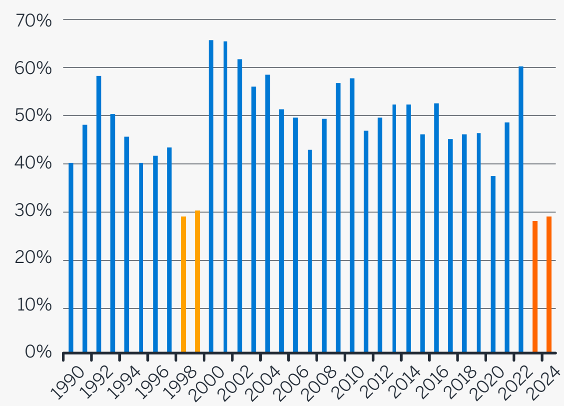
| Import Tariffs on China | Trump | Biden |
|---|---|---|
| Electric Vehicles | 25% | 100% |
| Semiconductors | 25% | 50% |
| Solar Cells | 25% | 50% |
| Syringes and Needles | 0% | 50% |
| Some Steel and Aluminium Products | 7.5% | 25% |
| Lithium-ion EV Batteries | 7.5% | 25% |
| Battery Parts | 7.5% | 25% |
| Some Personal Protective Equipment | 7.5% | 25% |
| Rubber Medical and Surgical Gloves | 7.5% | 25% |
| Natural Graphite and Permanent Magnets | 0% | 25% |
| Other Critical Minerals | 0% | 25% |
| Ship-to-Shore Cranes | 0% | 25% |

**PCE Deflator Y/Y & PCE Core Deflator Y/Y**

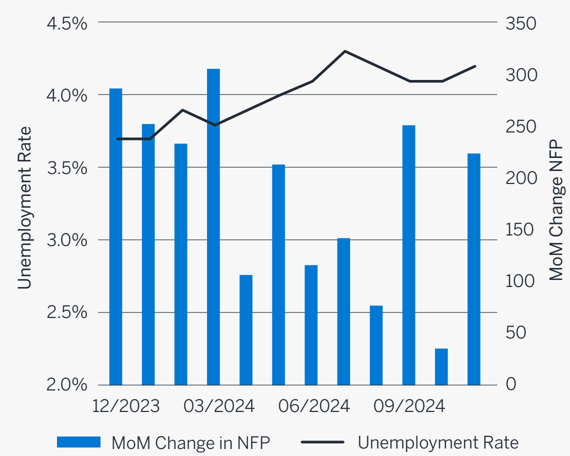



**Percentage of S&P 500 Stocks Outperforming the S&P 500**

*Calendar Years*




**Unemployment Rate and MoM Change in NFP**



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Milliman Financial Risk Management LLC is a global leader in financial risk management to the retirement savings industry. Milliman FRM provides investment advisory, hedging, and consulting services on approximately $181.3 billion in global assets (as of December 31, 2024). Established in 1998, the practice includes more than 200 professionals operating from four trading platforms around the world (Chicago, London and Sydney). Milliman FRM is a subsidiary of Milliman, Inc.

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**All Indices are total return in local currency except for MSCI Asia ex-Japan and MSCI Emerging Markets**

**S&P 500:** widely regarded as the best single gauge of large-cap U.S. equities and serves as the foundation for a wide range of investment products. The index includes 500 leading companies and captures approximately 80% coverage of available market capitalization. **S&P 500 Value:** measures the performance of the large-capitalization value segment in the U.S. equity market. The Index consists of those stocks in the S&P 500 Index exhibiting the strongest value characteristics based on: (i) book value to price ratio; (ii) earnings to price ratio; and (iii) sales to price ratio. **S&P 500 Growth:** measures the performance of the large-capitalization growth segment in the U.S. equity market. The Index consists of those stocks in the S&P 500 Index exhibiting the strongest growth characteristics based on: (i) momentum; (ii) earnings to price ratio; and (iii) sales to price ratio. **Bloomberg US Aggregate Index:** a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. **Bloomberg U.S. Treasury Index:** measures U.S. dollar-denominated, fixed-rate, nominal debt issued by the **U.S. Treasury. Bloomberg U.S. Corporate Investment Grade:** measures the investment grade, fixed rate, taxable corporate bond market. **Bloomberg US Corporate High Yield Bond Index:** measures the USD-denominated, high yield, fixed-rate corporate bond market. Tariff data is from the first administration for each president. Treasury Outlays are based on April report produced by U.S. Treasury (https://fiscaldata.treasury.gov/). **PCE deflator:** a measure of the average price increase for personal consumption in the United States. Core excludes the prices of food and energy. **Standard Deviation:** measures volatility in the market or the average amount by which individual data points differ from the mean. **Basis Points (bps):** Standard measure of percentages in finance. One basis point is one hundredth of one percent. **Drawdown:** How much the price of an index or security is down from the peak before it recovers back to the peak.