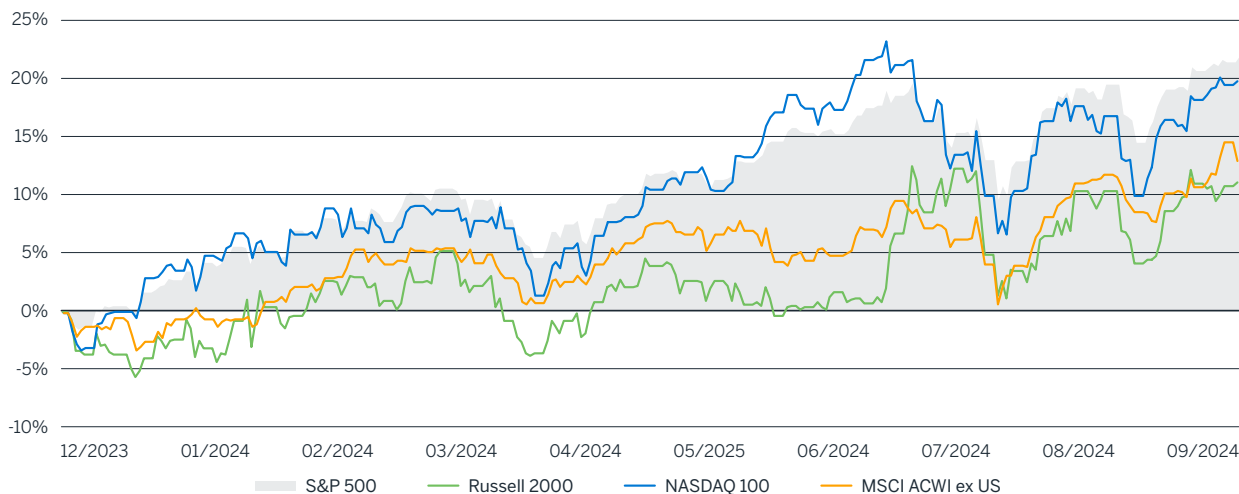


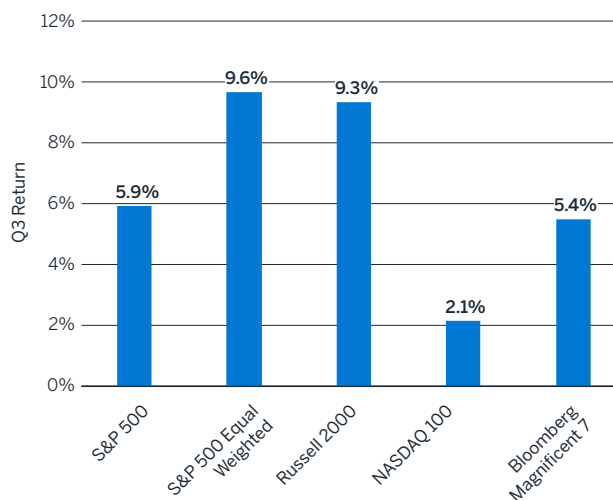
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- Economic data released in August indicates that the U.S. economy is probably not in a recession or nearing one. Real GDP saw an upward revision, growing by 3% year-over-year in the second quarter of 2024, fueled by higher consumer spending and increased business investments.
- At its September meeting, the Federal Reserve announced its first rate cut in over 4 years. The 50bps cut came amid slowing job gains and a move up in the unemployment rate, which at 4.1% still hovers around historical lows. The Committee expressed confidence that inflation is moving sustainably toward its 2% target and the risks to achieving its employment and inflation goals are roughly in balance.
- Renewed confidence in the “soft landing” scenario impacted bond markets, as investor flows left the safety of treasuries and moved into risk assets. Following the 50bps rate cut, the entire curve shifted down. The curve remains inverted but has continued to flatten as inflation expectations and growth projections remain cautiously optimistic. 2-Year yields saw the largest change, dropping 1.1%. 10-year yields dropped ~ 0.62%
- The U.S. stock market continued its climb to new all-time highs as economic indicators suggest that a “soft landing” scenario, characterized by slowing but positive GDP growth, is playing out. More stocks are participating in the S&P 500’s march to record highs, alleviating concerns about a rally that has been concentrated in a handful of giant technology names for much of 2024. The index is up 22% in 2024 after rising 5.9% in the third quarter.
- More than 60% of the S&P 500’s constituents outperformed the index this quarter, compared to around 25% in the first half of the year. The equal weighted version of the index gained over 9%, outperforming the market cap weighted index.
- Small caps, which remained mostly flat through the second quarter, started the second half of 2024 strong amid economic optimism and anticipation of a rate cut, rising over 9% by the close of September.
- The Nasdaq lagged other market indices during the quarter, up a modest 2% in the third quarter amid valuation concerns and a rotation to value and small cap stocks. The index remains up 20% in 2024.

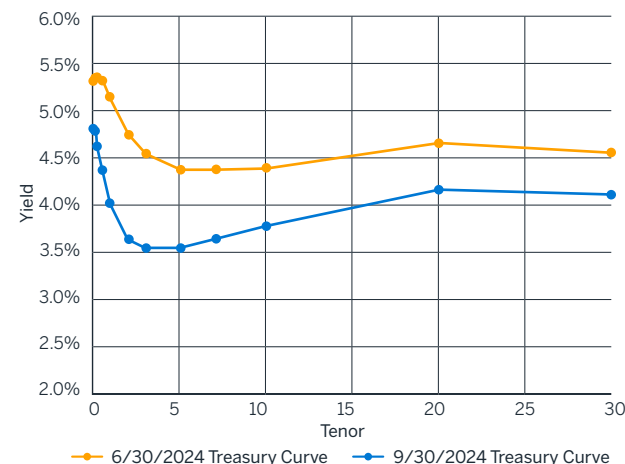
Equity Market Total Returns - YTD



Cumulative Returns - 3Q 2024



Treasury Yield Curves



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# Milliman Financial Risk Management

CREATING TRANSFORMATIONAL IMPROVEMENT IN THE RETIREMENT SAVINGS INDUSTRY

## STRATEGY PERFORMANCE

- The Bloomberg Magnificent 7 Index, which tracks the performance of 7 stocks that have accounted for a vast majority of the market gains in 2024, rose 5.4% in the third quarter.
- TSLA (32.2%), META (13.6%), AAPL (10.8%), NVDA (-1.7%), MSFT (-3.6%), AMZN (-3.6%), GOOGL (-8.8%)
- The equal weighted index remains up 44% year-to-date.

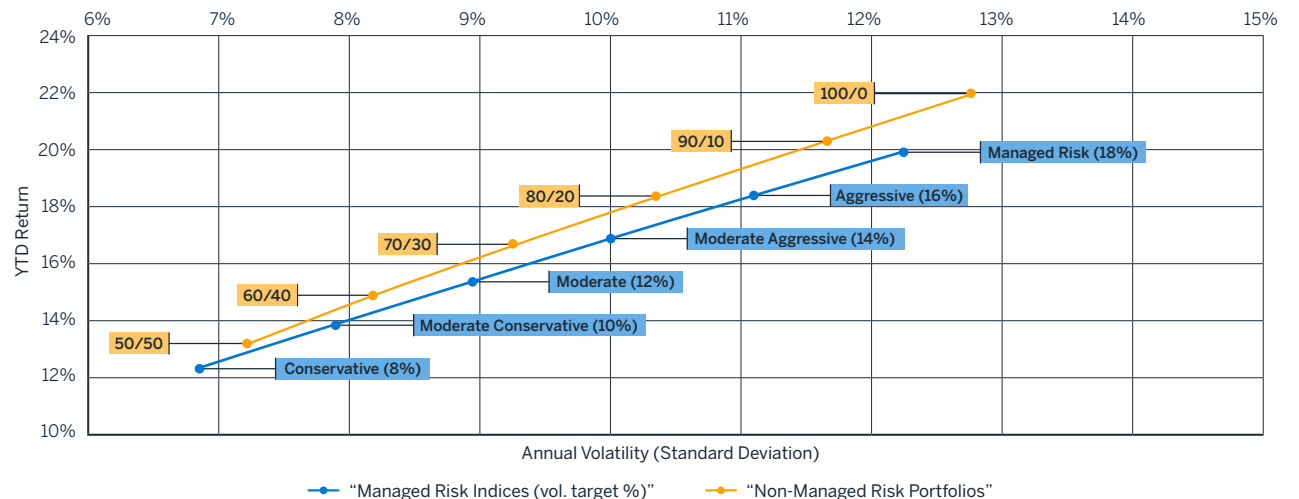
## Managed Risk Investments

- Markets experienced a sharp, but short-lived spike in volatility. At the end of July, The Bank of Japan unexpectedly raised 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.
- Year-to-date, managed risk strategies have been able to significantly 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 September CBOE S&P 500 15% Buffer protect index has able to capture over 50% of the S&P 500 rally this year.
  - The strategy's buffer of 15.78% has come into play.
  - The risk-adjusted return of the Buffered index has historically been in line with that of the S&P 500.

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



YTD Total Returns as of September 30, 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 - September Series
YTD	22.1%	16.7%	14.9%	13.9%	11.3%
1 Year	36.1%	28.4%	25.9%	23.5%	19.7%
5 Year	16.0%	11.6%	10.1%	8.2%	10.0%
10 Year	13.4%	10.2%	9.1%	7.4%	7.7%
YTD Vol	12.7%	9.2%	8.2%	7.9%	5.1%
1YR Vol	12.6%	9.4%	8.5%	8.0%	5.7%
5YR Vol	21.3%	15.1%	13.1%	8.0%	11.4%
10YR Vol	17.9%	12.6%	10.8%	7.5%	10.1%
YTD Risk Adjusted	1.74	1.80	1.81	1.77	2.23
1YR Risk Adjusted	2.87	3.03	3.07	2.94	3.47
5YR Risk Adjusted	0.75	0.77	0.77	1.02	0.88
10YR Risk Adjusted	0.75	0.81	0.84	1.00	0.77
1YR Max Drawdown	-8.4%	-5.4%	-4.5%	-4.4%	-3.5%
5YR Max Drawdown	-33.8%	-24.7%	-21.5%	-16.0%	-18.5%
10YR Max Drawdown	-33.8%	-24.7%	-21.5%	-16.0%	-18.5%

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

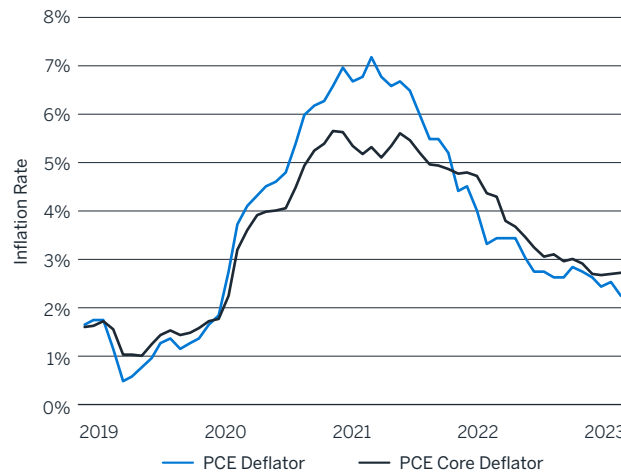
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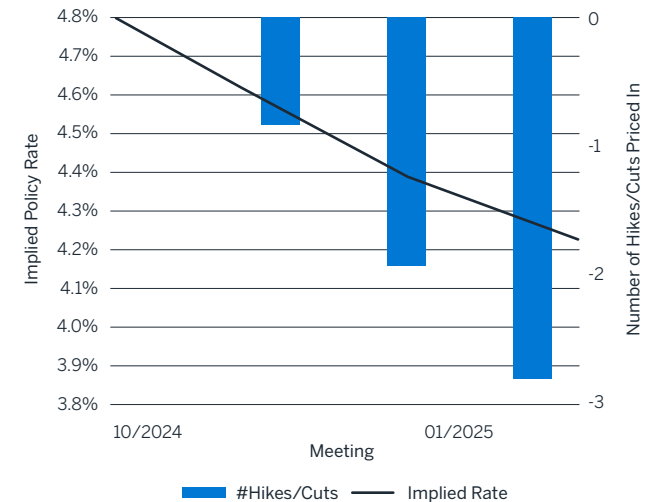
### OUTLOOK

- Investors will likely need to see further proof of economic strength to be convinced that market trends will continue, and that the U.S. economy is indeed heading toward a soft landing amid retreating inflation.
- Inflation will continue to be a key metric to monitor going forward as the Federal Reserve pivots its monetary policy stance.
  - After its rate cut in September, preliminary unemployment numbers released in early October indicated that the unemployment rate had dropped in September to 4.1%, after two prior employment reports were weaker than expected. While this may be evidence of a growing economy, these strong jobs readings may also dampen expectations of future rate cuts. More importantly, they may also introduce further inflationary pressures as the Fed continues to zero in on its 2% target.
  - Following the release of the latest unemployment data, fed funds futures traders have reduced the number of Fed rate cuts they are pricing in before year from 2 moderate rate cuts (~50bps each) to 1 (~50bps).
- Heading into the fourth quarter, investors will also be closely monitoring the performance of non-tech firms, as robust earnings reports will be crucial not only for validating recent market gains but also for restoring confidence in a diversified economic recovery that extends beyond the tech sector.
  - This focus will ultimately determine whether the gains seen in recent months can be sustained or if a more cautious approach is warranted going forward.

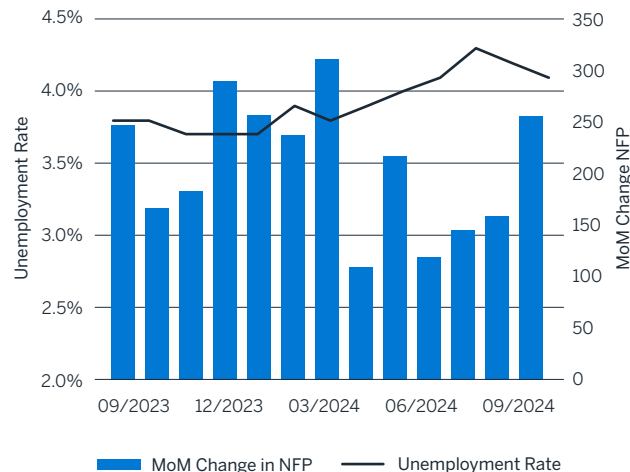
PCE Deflator Y/Y & PCE Core Deflator Y/Y



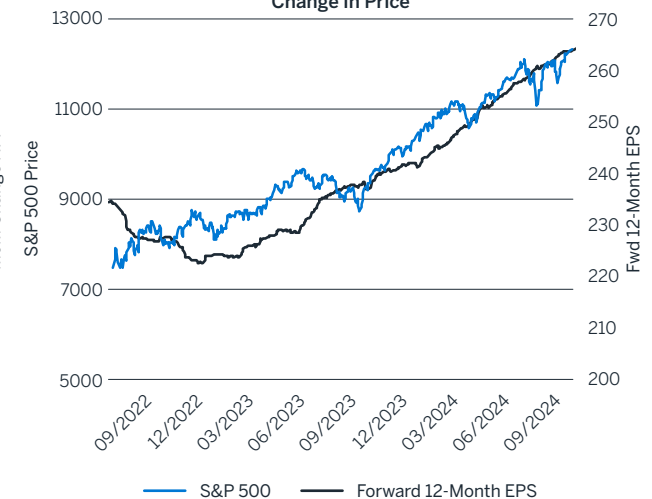
Implied Fed Funds Rate & Number of Hikes/Cuts



Unemployment Rate and MoM Change in NFP



S&P 500 Change in Forward 12-Month EPS vs Change in Price



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# Milliman Financial Risk Management

CREATING TRANSFORMATIONAL IMPROVEMENT IN THE RETIREMENT SAVINGS INDUSTRY

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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 \$182.5 billion in global assets (as of September 30, 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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## Definitions:

**Standard Deviation:** measures volatility in the market or the average amount by which individual data points differ from the mean. **Bloomberg US Aggregate Index:** a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. **NASDAQ 100 Index:** a modified capitalization-weighted index of the 100 largest and most active non-financial domestic and international issues listed on the NASDAQ. **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. **CPI:** a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. **Correlation:** describes the relationship that exists between two indices or securities and their respective price movements. **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.

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