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- The market delivered plenty of volatility to start off the year, with the failures of Silicon Valley Bank and Signature Bank stoking fears that the Federal Reserve had gone too far with its rate hikes. In March, markets whipsawed amid widespread anxiety of bank runs and credit collapses within the financial sector.
- However, coordinated actions by the Federal Reserve, the FDIC, and the U.S. treasury curbed broad panic from rippling through the market and reassured the public of the resiliency of the financial sector. Similarly in Europe, the folding of Credit Suisse was met with quick action from regulators, resulting in the bank's acquisition by UBS.
- As of June 2023, the Fed Fund's target rate stood above 5%, up from 0.875% just one year ago. As markets continued to speculate on The Fed's future policy decisions, equity markets were able to post strong returns in the first 6 months of the year. The S&P 500 notched out a 16.9% return year to date. Growth stocks outperformed their value counterparts by a considerable margin.
- The Information Technology, Communication, and Consumer Discretionary sectors returned 42.8%, 36.2% and 33% respectively through the end of June. This was in stark contrast to how these sectors performed in 2022, where they closed out a dismal year down -28.2%, -39.9%, and -37% respectively. The technology heavy NAQDAQ was up 38.8% by the June close.
- Leading laggards included Utilities, Energy, and Health Care. Despite further production cuts announced by OPEC in April and supply concerns due to the war in Eastern Europe, continued uncertainty of economic growth prospects around the globe have led the price of oil lower. The financial sector continued to struggle as investors weighed future policy decisions by the Fed and yield opportunities elsewhere in the market.
- The Bloomberg US Aggregate index was up 2.1% as of 6/30/2023. The bond market appears less upbeat about the economy's momentum. Short term yields have continued to move up, further inverting the yield curve. This reflects a market sentiment that higher rates and tighter lending conditions will impact future economic growth. Many investors use inverted yield curves as a bellwether that a recession is on the horizon. An inverted yield curve has been in place for five of past six recessions.

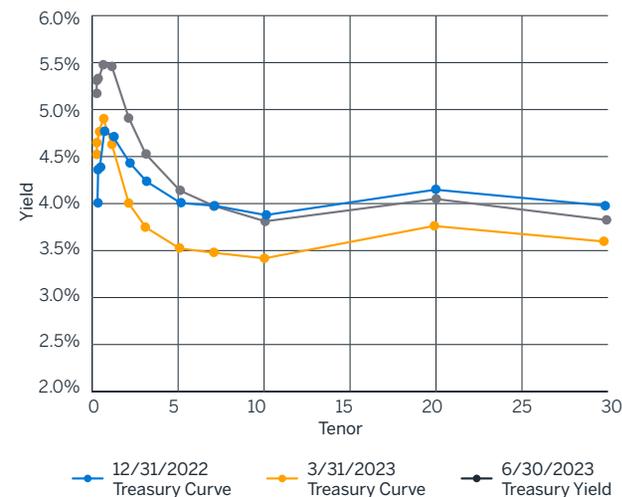
Equity Markets: 2023 YTD Total Return



S&P 500 SECTORS

Gainers		Laggards	
Information Technology	42.77%	Utilities	-5.69%
Communication	36.24%	Energy	-5.55%
Consumer Discretionary	32.97%	Health Care	-1.48%
Industrials	10.19%	Financials	-0.53%
Materials	7.74%		
Real Estate	3.72%		
Consumer Staples	1.28%		

Treasury Yield Curves YTD 2023



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Milliman Financial Risk Management

CREATING TRANSFORMATIONAL IMPROVEMENT IN THE RETIREMENT SAVINGS INDUSTRY

STRATEGY PERFORMANCE

Managed Risk Investments

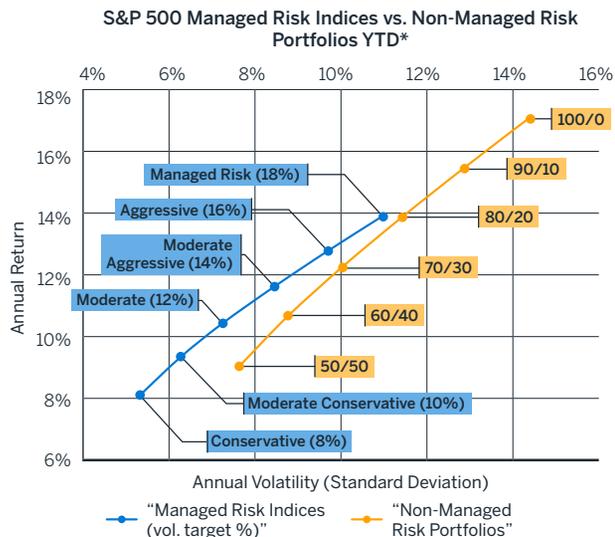
- The Managed Risk Indices continued to add allocations to equity in the first half of the year.
- The S&P 500 Managed Risk Index increased from 57% at the start of the year to 100% at the end of June.
- While managed risk indices lagged their corresponding non-managed blends of the S&P 500 and Bloomberg U.S. Aggregate Bond Indices, they also produced lower volatility within the portfolios.
- On a risk-adjusted basis, the return of the S&P 500 Managed Risk Index outperformed that of the S&P 500.

Defined Outcome

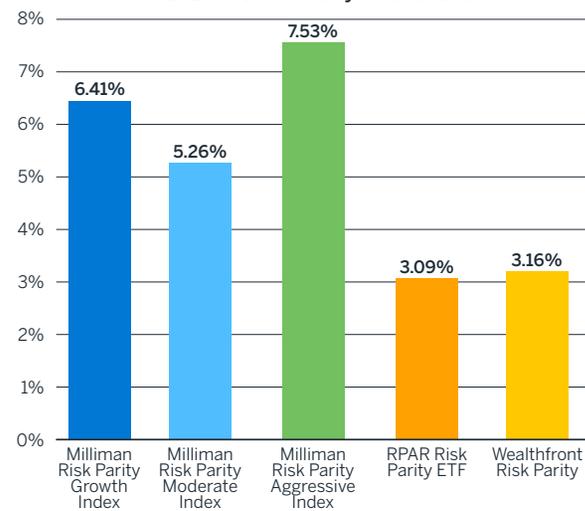
- In the defined outcome space, the January CBOE S&P 500 15% Buffer protect index was able to capture 69% of the S&P 500 returns to date.
- The risk-adjusted return of the Buffered index outperformed that of the S&P 500.

Risk Parity

- Risk Parity strategies moved out of cash and reallocated into global equities, bonds, and gold.
- The Milliman risk parity strategies outperformed popular market competitors such as the RPAR ETF and Wealthfront Risk Parity fund.



2023 YTD Risk Parity Total Returns



Total Returns as of June 30, 2023							
	S&P 500	70/30 Stock/ Bond Blend*	60/40 Stock/ Bond Blend*	S&P 500 Managed Risk Index (18% Vol. Target)	CBOE S&P 500 15% Buffer Protect Index - January Series	Milliman Risk Parity Growth Index	Milliman Risk Parity Moderate Index
YTD	16.9%	12.4%	10.9%	13.8%	11.7%	6.4%	5.3%
1 Year	19.6%	13.5%	11.4%	15.1%	17.7%	3.7%	3.6%
5 Year	12.3%	9.3%	8.2%	9.2%	6.7%	3.2%	2.6%
10 Year	12.8%	9.7%	8.6%	10.2%	6.0%	4.6%	3.4%
YTD Vol	14.4%	10.1%	8.9%	11.1%	7.6%	8.3%	6.8%
1YR Vol	19.4%	14.4%	12.8%	11.9%	11.0%	9.4%	7.6%
5YR Vol	21.8%	15.3%	13.2%	12.7%	11.5%	8.4%	6.7%
10YR Vol	17.7%	12.4%	10.6%	11.9%	9.0%	7.8%	5.9%
YTD Risk Adjusted	1.17	1.22	1.23	1.24	1.53	0.78	0.78
1YR Risk Adjusted	1.01	0.94	0.89	1.27	1.61	0.39	0.47
5YR Risk Adjusted	0.56	0.61	0.62	0.72	0.58	0.38	0.40
10YR Risk Adjusted	0.72	0.79	0.81	0.86	0.67	0.58	0.58
1YR Max Drawdown	-16.7%	-13.9%	-13.0%	-9.7%	-8.1%	-10.6%	-8.5%
5YR Max Drawdown	-33.8%	-24.7%	-21.5%	-18.3%	-20.0%	-21.5%	-18.0%
10YR Max Drawdown	-33.8%	-24.7%	-21.5%	-18.3%	-20.0%	-21.5%	-18.0%

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

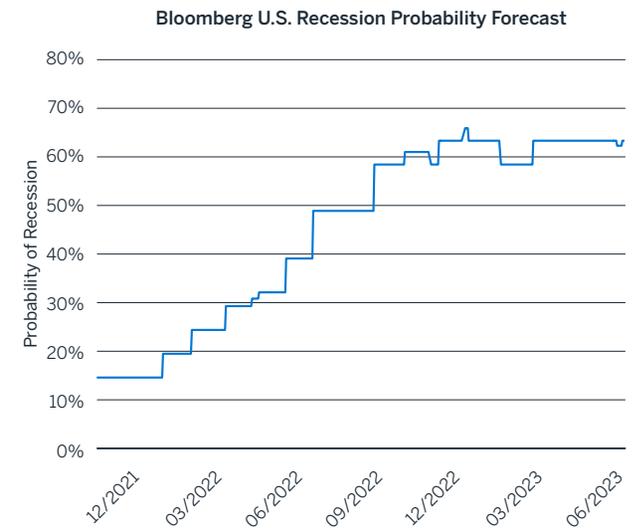
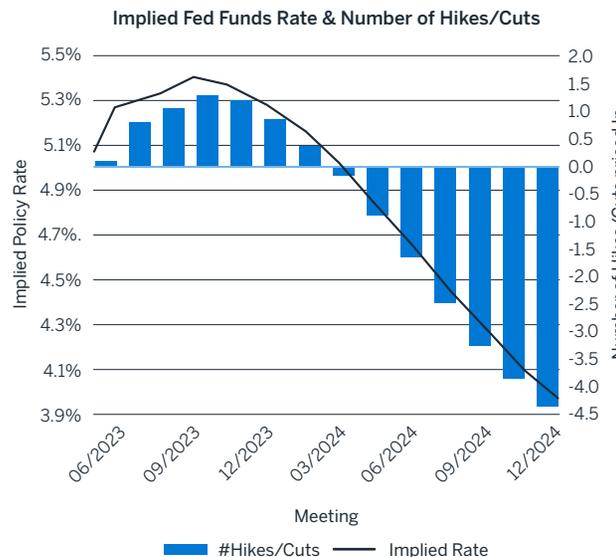
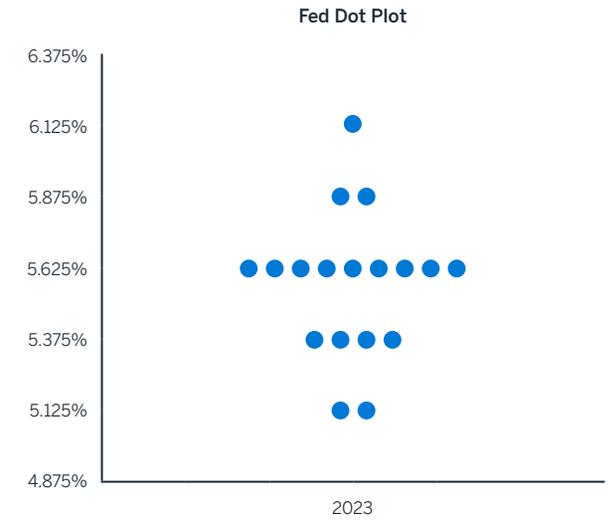
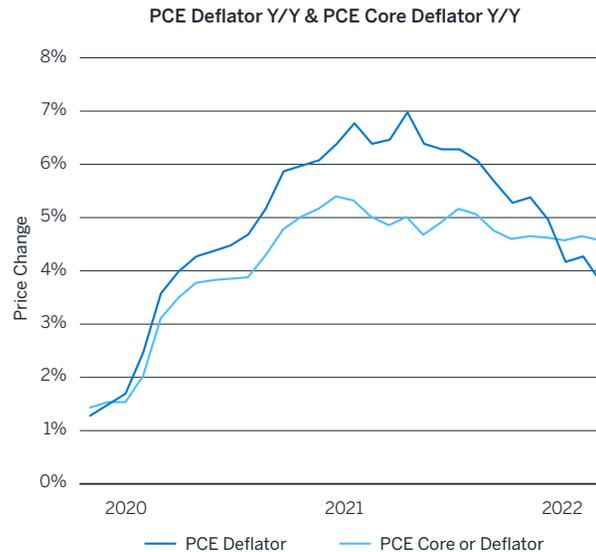
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OUTLOOK

The Fed and Inflation

- There has been a lot of good news for markets in the first half of 2023. With the U.S. banking and debt ceiling crisis in the rear-view mirror, financial conditions are starting to loosen, as evidenced by the strong rally of stocks. The labor market in the U.S. has remained resilient with unemployment remains near decade lows
- The Fed's favored inflation gauge, the PCE deflator, which tracks the overall price for goods and services purchased by consumers, slowed to 3.8% in May, suggesting that consumer spending is starting to stagnate, and the economy's main engine may be starting to lose steam. Core PCE, which excludes food and energy prices, also softened to 4.6% in May.
- Even with softening of Y/Y inflation, Fed Chair Jerome Powell noted to the House Financial Services Committee that getting inflation back down to 2% "has a long way to go" as inflation pressures continue to run high.
- Given that the Fed doesn't see core PCE inflation converging to their 2% target by even 2025, it is likely to take rates even higher than what markets are currently pricing in, especially if labor markets continue to be as robust as they are now.
 - As of June, interest rate traders are pricing in some 30bps of cumulative rate hikes for the remainder of the year. This falls short of the consensus illustrated by the Fed dot plot published at the June meeting.
- Other economic indicators suggest that an economic contraction could be on the horizon. According to the Bloomberg U.S. Recession Probability Forecast, surveyed banks estimate that there is a 65% chance of the U.S. slipping into a recession within the next 12 months as of June 2023. Perhaps more notably, this was also the same reading at the end of 2022, which was a dismal year for both stocks and bonds alike.



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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 Oil:** S&P GSCI Crude Oil Total Return CME Index. The index is weighted based on world production and it uses spot prices to calculate price. **S&P US REIT:** defines and measures the investable universe of publicly traded real estate investment trusts domiciled in the United States. **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. **S&P Global 1200:** global equity index, captures approximately 70% of the world's market capitalization. It is a composite of seven headline regional indices: S&P 500®, S&P Europe 350®, S&P TOPIX 150, S&P/TSX 60, S&P/ASX All Australian 50, S&P Asia 50, and S&P Latin America 40. **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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