Milliman Market Monitor - December 2023

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Market Commentaries

Equities

• As 2023 drew to a close, the stock market experienced a notable surge in December. This upswing was fueled by global markets responding positively to comments from the US Federal Reserve, which stated an end to rate hikes and hinted at potential rate cuts in the future. The S&P 500 reflected this optimism by posting a substantial gain of 4.5% for the month. In economic indicators, the November US CPI revealed a 3.1% increase YoY, slightly lower than October's 3.2%. Furthermore, core inflation maintained a 4% YoY increase, mirroring the figures observed in October.

• European equities were also stronger. The EuroStoxx 50 was up 3.2%. In the UK, the FTSE 100 up 3.8%.

• Japanese equities were largely flat for December, with the Nikkei down 0.1% and the Topix down 0.4%. Other Asian equities followed the global trend, with the MSCI Asia Ex-Japan Index up 3.4%.

• Aussie Equities outperformed this month versus the other major indices, with the ASX 200 up 7.3%. All sectors were stronger, with Real Estate stocks and Healthcare stocks among the best performers, up 11.3% and 9.1%, respectfully. Utility stocks were the worst performing this month, albeit still making a gain of 2.5% this month.

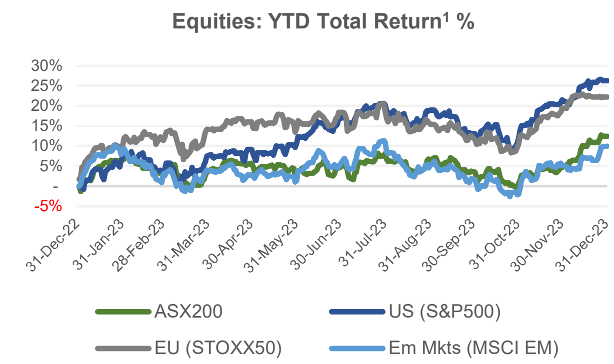
Fixed Income

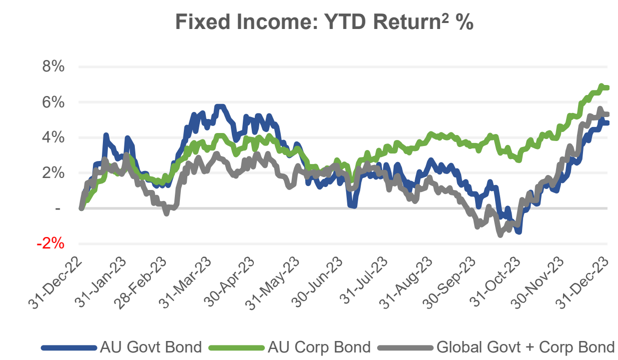
• Sovereign bond yields continued to fall this month as investors reacted to comments from the US Federal Reserve confirming that there would be no more hikes, but rather rate cuts. US 10-year Treasury yields fell a further 45 basis points this month, back below the 4% mark, settling around 3.9%.

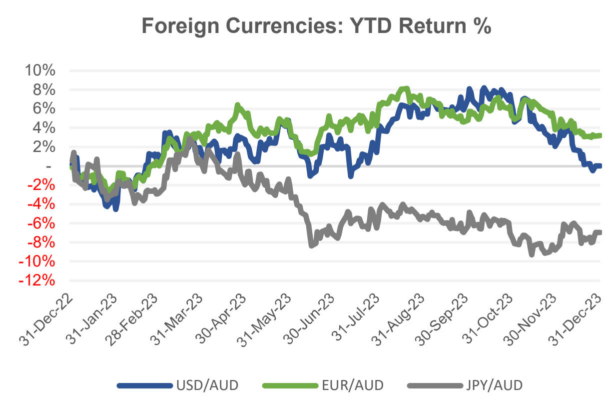
• The RBA held rates steady this month at 4.35%. In contrast to other central banks, the RBA remained concerned inflation could remain higher for an extended period of time. Overall, Australian Bonds returned 3.0%, and Global Bonds returned 3.0%, respectively, as measured by Bloomberg Aggregate indices.

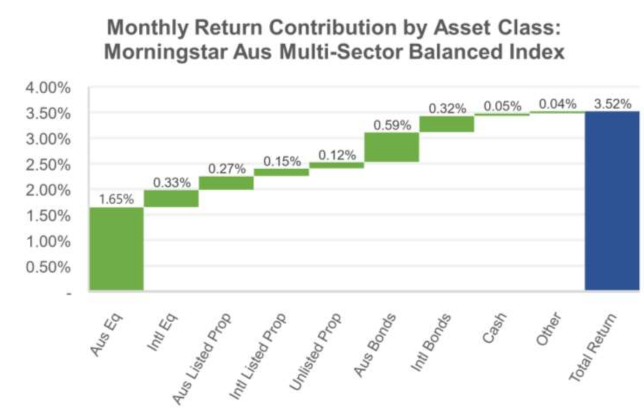
Currencies

• The Aussie dollar strengthened against the US Dollar, as US rates fell further this month. The AUD/USD rate gained 3.1%, closing at 68.12 US cents.









Returns ending 31 December 2023

	ASX200	US (S&P500)	EU (STOXX)	EM Mkts (MSCI)	AU Govt Bond	AU Corp Bond	Global Bond	USD/AUD	EUR/AUD	JPY/AUD
1 Month	7.3%	4.5%	3.2%	3.9%	2.9%	2.1%	3.0%	-3.0%	-1.7%	1.9%
3 Month	8.4%	11.7%	8.5%	7.9%	4.0%	3.2%	5.4%	-5.5%	-1.4%	-0.0%
1 Year	12.4%	26.3%	22.2%	9.8%	4.8%	6.8%	5.3%	0.0%	3.1%	-7.0%
CYTD	12.4%	26.3%	22.2%	9.8%	4.8%	6.8%	5.3%	0.0%	3.1%	-7.0%

[1] Equities returns captures both the capital gains as well as any cash distributions, such as company dividends.

[2] AU Govt Bond uses the Bloomberg AusBond Govt 0+ Yr Index, which measures the return of Australian Treasury and Semi-government bonds maturing in 0+ years. AU Corp Bond uses the Bloomberg AusBond Credit 0+ Yr Index, which measures the return of Australian corporate/credit securities maturing in 0+ years. Global Govt + Corp Bond uses the Bloomberg Barclays Global Aggregate Index, which measures global investment grade debt from 24 countries, both developed and emerging markets issuers.

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Upcoming Key Economic Events & Risk Commentaries

● Implied volatility, often viewed as the market's fear index, has remained flat for S&P 500 and Stoxx 50, and increased for ASX200. The ASX200, S&P500 and Stoxx 50 remain below the 25th percentile over the past year. The implied likelihood of the S&P 500 falling more than 10% and 5% in October has remained consistent compared to last month, currently sitting at 1% and 5%, respectively.

● The FOMC held rates at 5.5% again as widely anticipated, but the market mover was the change in the Dot plot which suggested (a) the end of tightening cycle and (b) 75 bps cut in 2024. This reflected the further evidence of slowing inflation in the US over the past month and the Fed's preferred annualised CPI measure showed 2.6% in December, moving steadily towards the target of 2%.

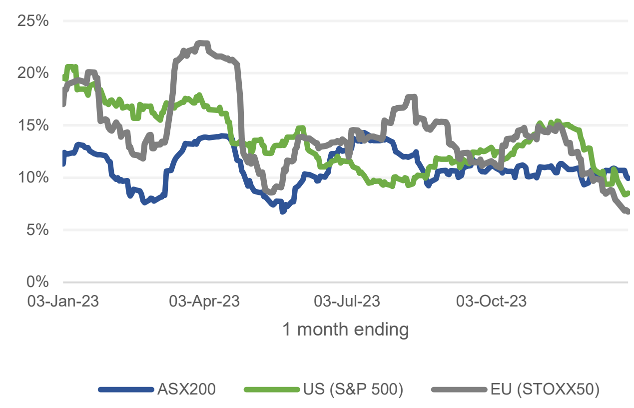
● Global equity markets were boosted by the Fed's confirmation on the end of the monetary tightening cycle. All developed equity markets were materially higher than where they were in November while Japanese equities being the only exception. The end-of-year Santa Claus rally also provided further positive momentum.

● One short term risk is the possibility of financial markets pricing too many and/or too soon rate cuts in 2024. The current interest rate futures are indicating almost six rate cuts in 2024 compared to only 3 shown in the Dot plot. The equity markets with recent large gains might be at risk of retracement should any new economic data suggests a stronger economy than expected.

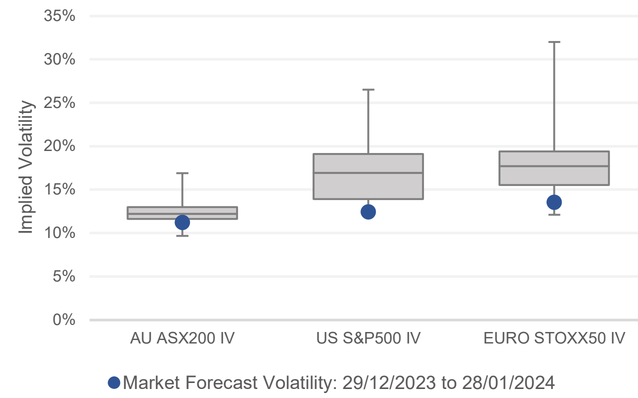
● There are also between five and six rate cuts priced in ECB and BoE official cash rates in 2024 while the BoE is warning Britain's tight labour market is feeding inflation and that interest rates will have to remain higher for longer.

● ASX 200 gained a stellar 7.3% over December on the back of anticipated lower rates and strong demand for iron ore and coal as China is now making more EVs than the rest of the world combined. It is worth mentioning last month's job gain was almost six times than expected while the unemployment rate is still under 4% which could support wage inflation.

Realised 1 Month Equity Volatility (%)

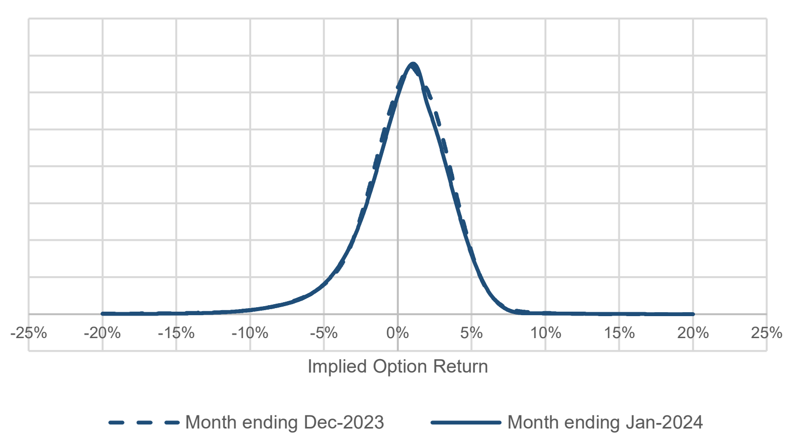


Implied Volatility[3,4] (IV)



The chart above shows the current market implied volatility for the next month, and compares it against the range of implied volatilities for the past 1 year.

1 Month S&P500 Implied Return Distribution[5]



Implied likelihood[5] of S&P 500:	#N/A Requesting Data...	#N/A Requesting Data...
Falling more than 10%	**~ 1%**	~ 1%
Falling more than 5%	**~ 5%**	~ 5%

[3]**Implied Volatility (VIX) r**epresents the expected volatility of the index over the next 30 days (starting from the effective date of this report), as derived from the market prices of index options traded on the exchange.

[4]**Box & Whisker Plot** is designed to give readers a quick sense of the range of implied volatility for the past year. The end of the whiskers indicate the maximum and minimum implied volatility for the past year. The box represents the interquartile range (from first to third quartile implied volatility values), and the middle line indicates the median implied volatility value for the past year.

[5]**Implied Return Distribution / Implied Likelihood r**epresents the forecasted return (and its likelihood) of the index over the next 30 days (starting from the effective date of this report), as implied from the market prices of index options traded on the exchange.

Observations on Sustainable Withdrawal Rates

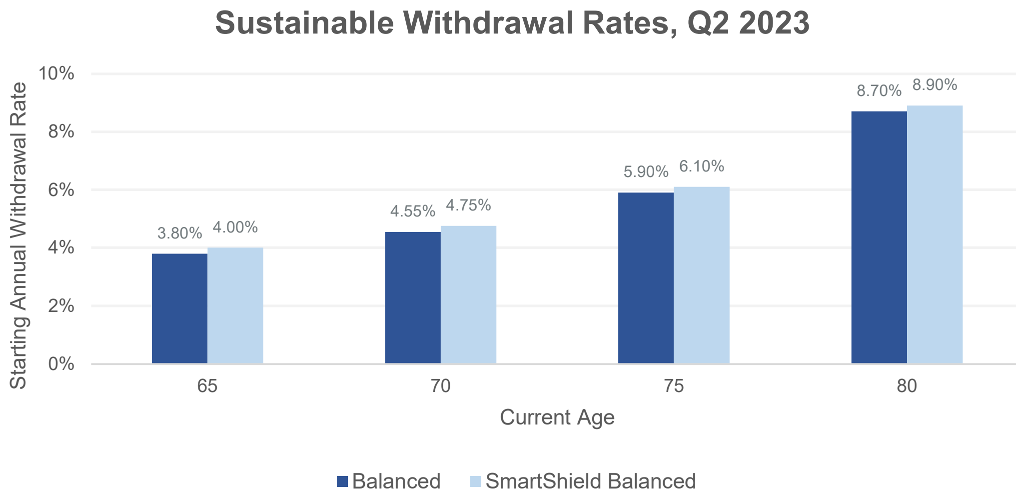
We observe that sustainable withdrawal rates at the end of Q3 2023, are higher compared to Q2 2023.

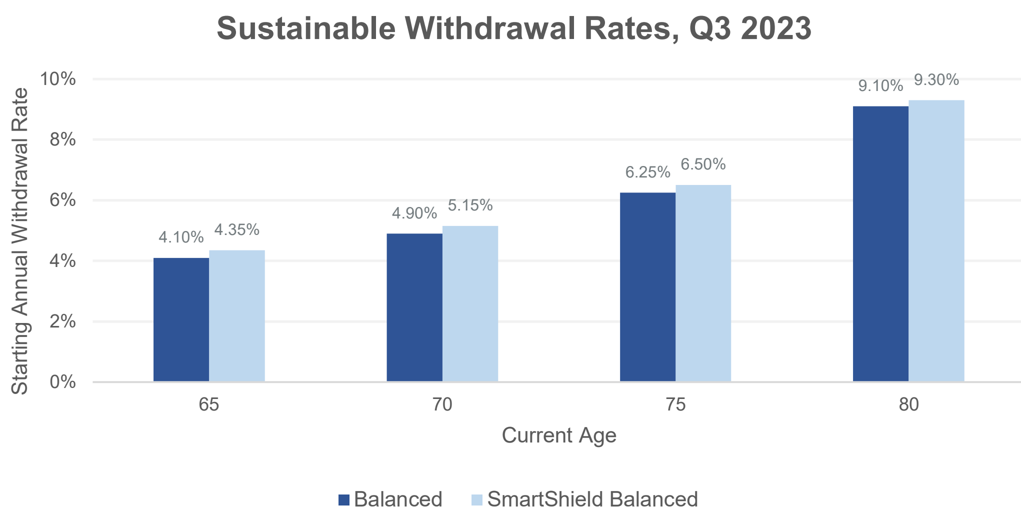
This was mainly driven by the change in interest rate levels over the period with 10-year government bond yields increasing by approximately 45bps, leading to higher simulated returns from all asset classes.

Using the SmartShield series of portfolios as an example, we have illustrated that additional sustainable withdrawal rates are achieved when we add a risk management strategy to the portfolios.

By controlling the level of volatility and reducing the impact of sustained market drawdowns, solutions such as the SmartShield portfolios which employ a risk management strategy, can reduce the exposure to sequencing risk and result in higher sustainable withdrawal rates for retirees.

In December, Milliman's SmartShield portfolios systematically reduced its hedge levels from 24% to 5% for Australian equities, and from 35% to 18% for global equities.





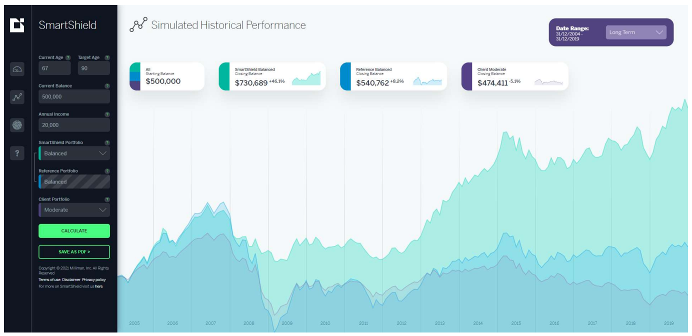
Sustainable Withdrawal Rate is defined as the maximum amount that can be withdrawn from a portfolio each year with a 90% certainty that this rate can be sustainably withdrawn (adjusted for inflation) until the target age of 90. An additional constraint introduced is for the potential shortfall to be less than 5 years. Note the withdrawal rate is calculated with regards to future projections of 5,000 stochastic scenarios. Further information on the assumptions used to generate these scenarios can be found via our portfolio simulator, which is free to access at https://smartshield.millimandigital.com/.

For example, a 4% sustainable withdrawal rate for a 70 year old retiree with $500k balance means the retiree can withdraw $20k in the first year. And for each subsequent years, the amount the retiree can withdraw is $20k plus any increase due to projected inflation (CPI).

SMARTSHIELD™ SIMULATOR – FREE ACCESS FOR FINANCIAL ADVISERS

Built for financial advisers and complementary to Milliman's SmartShield portfolios, the Simulator strengthens your client conversation by:

- Calculating the likelihood of meeting retirement goals
- Illustrating the impact of experiencing a market crash scenario e.g. the GFC or Covid-19



Simple to sign-up and FREE to access CLICK THIS LINK: https://smartshield.millimandigital.com/Identity/Account/Register

If you would like more information on the content in this report, or more information about our SmartShield Managed Account portfolios, please call us on +61 (0)2 8090 9100 | or visit **advice.milliman.com**

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