Milliman Market Monitor - November 2023

Milliman

Market Commentaries

Equities

● Global equities have bounced back this month following an easing in tensions in the Middle East and US inflation figures, suggesting US interest rates may have peaked. The S&P 500 rose 9.1% this month. In the October US headline CPI print, prices rose 3.2% YoY, down from 3.7% in September. Core inflation rose 4.0% YoY, the smallest level since Sep 2021.

● European equities were also stronger, with the EuroStoxx 50 up 8.0%. In the UK, the FTSE 100 rally was more muted, however, it was still up 1.8%. The November Eurozone CPI release showed prices fell by more than expected this month, at 2.4% YoY which brings it within striking distance of the ECB's inflation target.

● Japanese equities were also stronger, with the Nikkei up 8.6%. Other Asian equities followed the global trend, with the MSCI Asia Ex-Japan Index up 5.3%.

● Aussie Equities bounced back this month, with the ASX 200 rising 5.0%. Most sectors recorded gains, notably Healthcare and Real Estate, up 11.4% and 10.7%, respectively. Energy stocks were the poorest performers, down 7.2%.

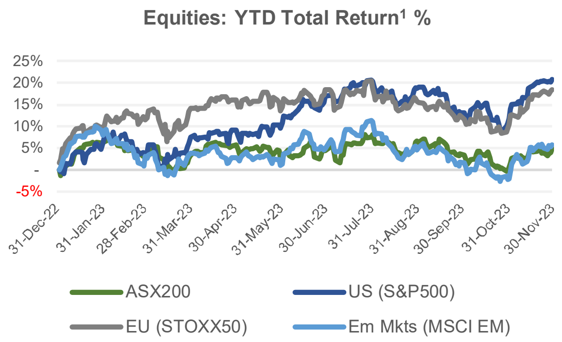
Fixed Income

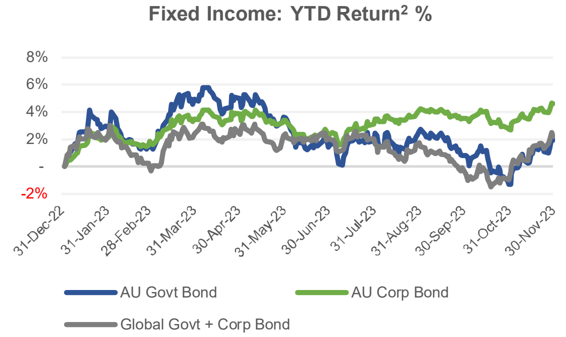
● After rising dramatically last month, sovereign bond yields fell sharply this month as investors reacted to the lower US inflation data, suggesting that the rates had peaked. US 10-year Treasury yields have fallen over 60 basis points, dropping from around 5% to below 4.3%.

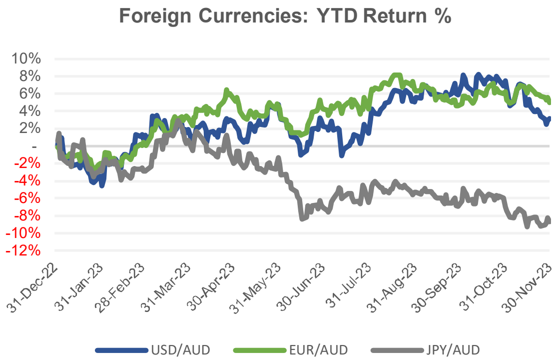
● In contrast, the RBA hiked interest rates again this month by 25 basis points to 4.35%. While many other central banks are either beginning to pause or cut rates. Overall, Australian Bonds returned 3.3%, and Global Bonds returned 3.2%, respectively, as measured by Bloomberg Aggregate indices.

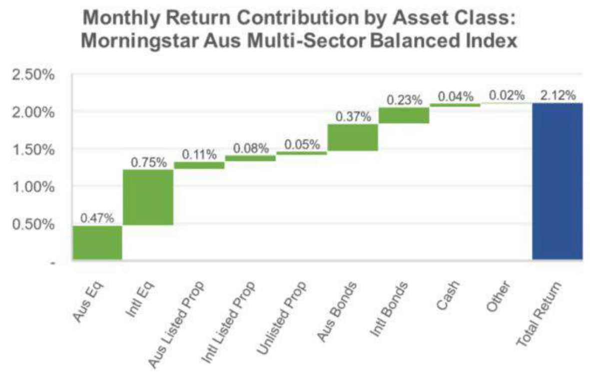
Currencies

● The Aussie dollar has regained ground against the US Dollar, as rates fell this month. The AUD/USD rate gained 4.1%, closing at 66.05 US cents.









Returns ending 30 November 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	5.0%	9.1%	8.0%	8.0%	3.3%	1.8%	3.2%	-4.1%	-1.2%	-1.8%
3 Month	-1.8%	1.7%	2.2%	1.1%	-0.7%	0.5%	0.5%	-1.8%	-1.4%	-3.6%
1 Year	1.5%	13.8%	13.4%	4.2%	-0.5%	4.0%	0.9%	2.8%	7.5%	-4.3%
CYTD	4.8%	20.8%	18.4%	5.7%	1.9%	4.6%	2.2%	3.1%	4.9%	-8.7%

[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

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Upcoming Key Economic Events & Risk Commentaries

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

● The FOMC held the rate at 5.5%, but US Treasury yields fell aggressively. This was attributed to (a) building evidence of a labour market slowdown, (b) softer-than-expected manufacturing indicators, (c) a reduction in US Treasury bond issuance due to a pick-up in tax revenue, and (d) CPI for the last month coming in below expectations.

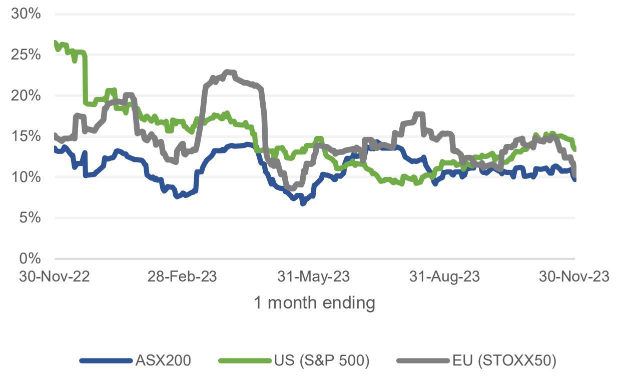
● There have been large swings in the global interest rates over the past three months, mostly driven by the US Treasury yields. The UST 10-year climbed 82 bps over September to October followed by a fall of 74 bps during this month. The global equities also recouped some of the losses during the yield rally but some markets are still trading lower than three months ago.

● The FOMC members are now divided on whether a rate hike in December or January next year is needed, even as the unemployment rate remains at historically low levels and service inflation only begins to show signs of slowing. Powell suggested that the bar has become higher for further rate hikes.

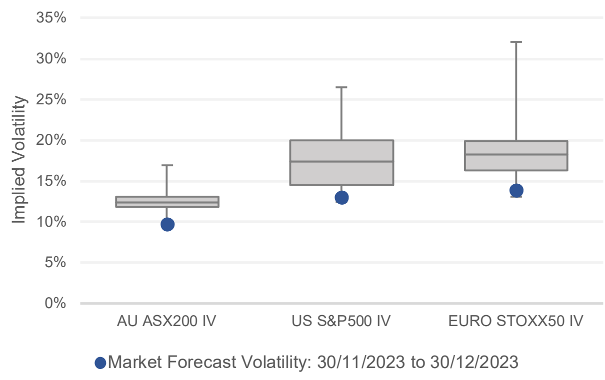
● The ECB remains concerned about downside risks to the near-term growth outlook and noting that progress on disinflation had been somewhat faster than expected, but that the incoming wage information remained strong. The BoE warned it may have to raise interest rates again due to food and energy costs remaining an upside risk to the inflation outlook. The BoE reiterated that it is too soon to be thinking about rate cuts, warning that services inflation remains 'much too high', and that wage growth is still 'elevated'.

● AUS employment growth (Oct) surprised to the upside, lifting by 55.0k (vs 25k) Similarly, seasonally adjusted hours worked rose by 0.5% in October. The RBA raised its cash rate by 25 bps this month, while AUS CPI over last month came in below market consensus, due to the federal rent assistance.

Realised 1 Month Equity Volatility (%)

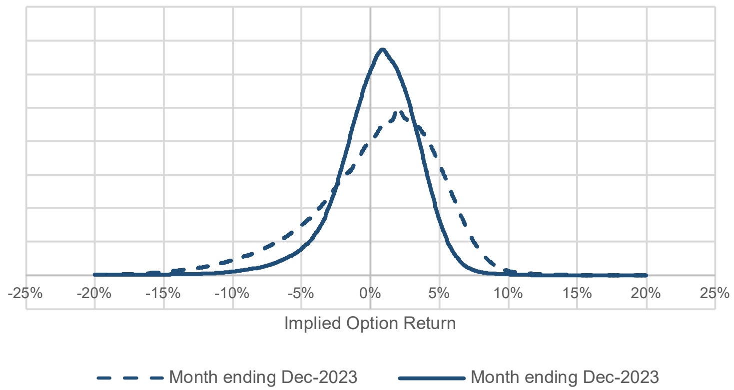


Implied Volatility[3,4] (IV)



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:	Month ending Dec-2023	Month ending Nov-2023
Falling more than 10%	**~ 1%**	~ 3%
Falling more than 5%	**~ 5%**	~ 13%

[3]**Implied Volatility (VIX)** represents 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** represents the forecasted return (and its likelihood) of the index over the next 30 days (starting from

Observations on Sustainable Withdrawal Rates

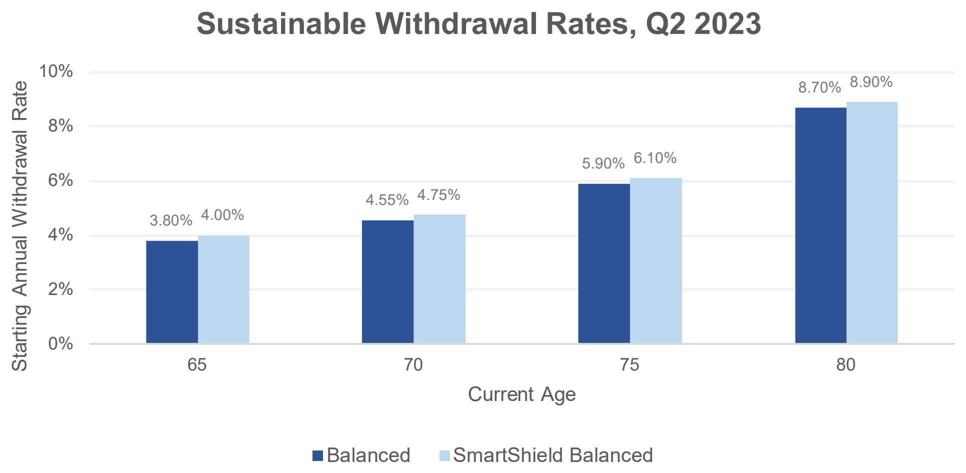
We observe that sustainable withdrawal rates at the end of Q3 2023, are higher compared to Q2 2023.

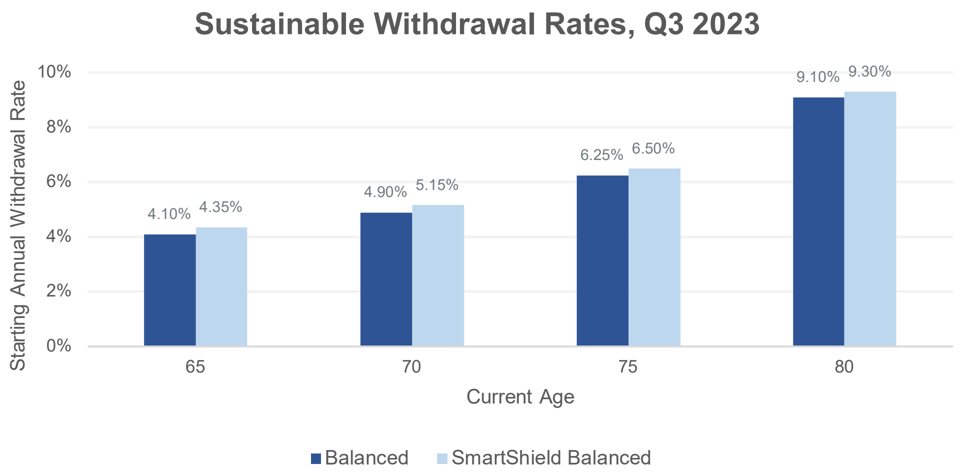
This was mainly driven by the change in interest rate levels over the period with 10-year government bond yields increasing by approximately 45bps, leading to higher simulated returns from all asset classes.

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 November, Milliman's SmartShield portfolios maintained an average hedge level of approximately 28% for Australian equities and 36% for global equities.





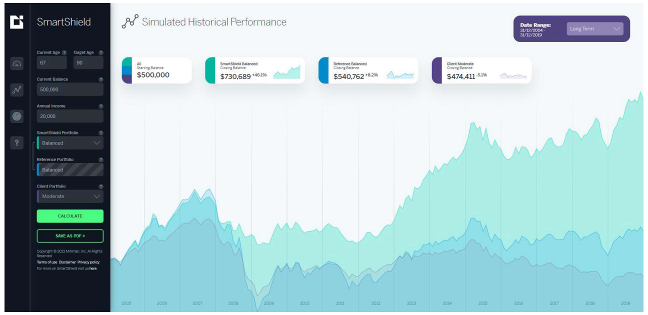
Sustainable Withdrawal Rate is defined as the maximum amount that can be withdrawn from a portfolio each year with a 90% certainty that this rate can be sustainably withdrawn (adjusted for inflation) until the target age of 90. An additional constraint introduced is for the potential shortfall to be 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**

Favourable SQM Research

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