Milliman Market Monitor - July 2023

Market Commentaries

Equities

● S&P 500 was up 3.2% last month with major gains in the energy, banking, and resources sectors on the back of a strong rally in crude oil prices and precious metals.

● FTSE 100 and Euro Stoxx 50 also performed well with gains of 2.2% and 1.7%, respectively. Nikkei 225 took a breather, down -0.05% over July after rallying 14.4% in the past 3 months, with a weakened Yen boosting exports.

● ASX 200 was also a beneficiary of a rebound in energy and financials, and the only two sectors that lost ground over the month were health care and consumer staples. The 2Q inflation data released was lower-than-expected, and the upside surprise in June employment change had both boosted the domestic equity. Overall, the ASX 200 returned 2.9%.

Fixed Income

● Fixed income markets performed strongly in the first half of the month on the back of lower-than-expected US 2Q inflation. However, this rally was trimmed away by upbeat job numbers and a resilient Service PMI print (above 50), despite Manufacturing PMI being in contraction territory.

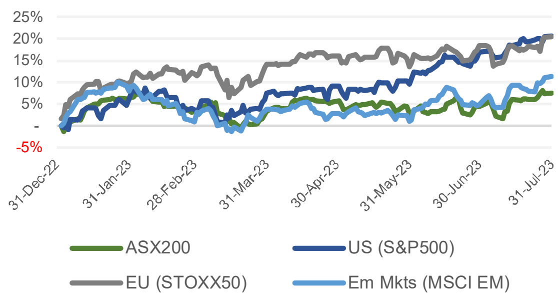
● The RBA kept its official rate at 4.1% in the July meeting while expecting one more hike before the end of this calendar year. Overall, Australian Bonds returned 0.5% and Global Bonds returned 0%, respectively, as measured by Bloomberg indices.

Currencies

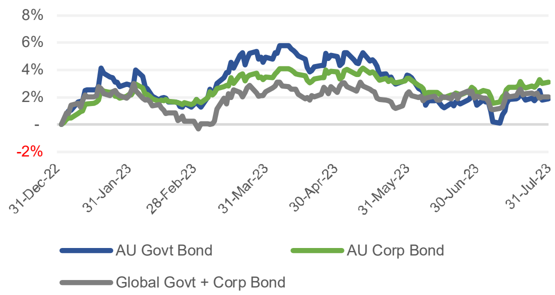
● The Aussie Dollar rallied against the US Dollar in the early part of July, rising up to 3.8% due to risk-on momentum and lower-than-expected US CPI data, before retreating in the bottom half of the month to finish the month at +0.8%.

● The Bank of Japan (BoJ) introduced some flexibility in its yield curve control around late July, leading to large exchange rate intraday swings. The US Dollar fell 4.34% against the Japanese Yen by the middle of the month before recovering 3.35% by the month-end.

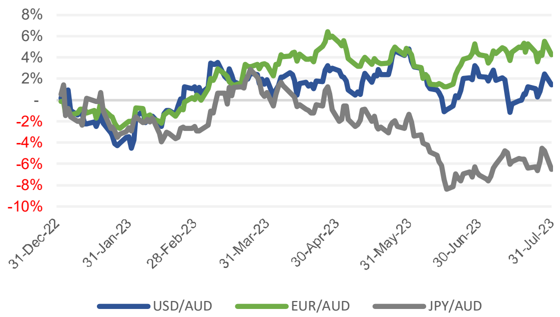
Equities: YTD Total Return[1] %



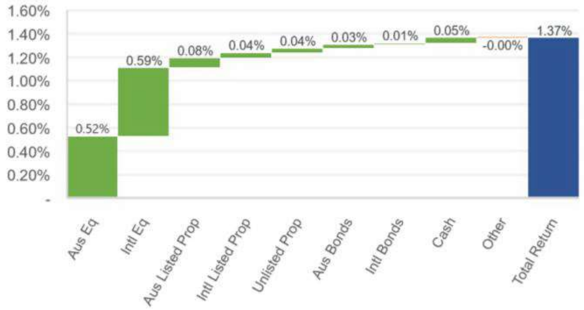
Fixed Income: YTD Return[2] %



Foreign Currencies: YTD Return %



Monthly Return Contribution by Asset Class: Morningstar Aus Multi-Sector Balanced Index



Returns ending 31 July 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	2.9%	3.2%	1.7%	6.2%	0.5%	0.8%	-0.0%	-0.8%	0.0%	0.6%
3 Month	2.0%	10.5%	3.8%	8.4%	-3.0%	-0.8%	-0.8%	-1.5%	-1.7%	-5.6%
1 Year	11.7%	13.0%	23.7%	8.3%	-2.1%	1.8%	-3.6%	4.0%	11.9%	-2.6%
CYTD	7.5%	20.6%	20.5%	11.4%	1.9%	3.1%	2.0%	1.4%	4.2%	-6.5%

[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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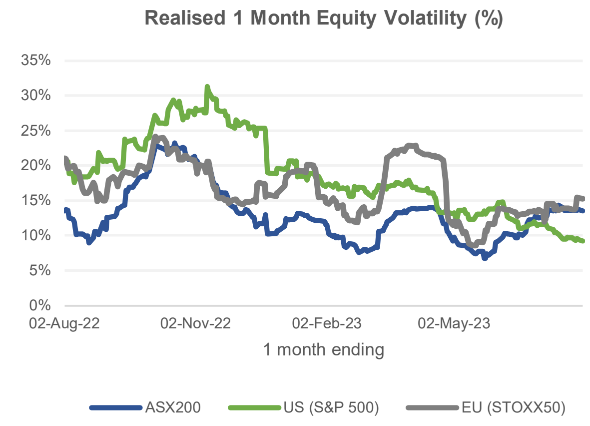
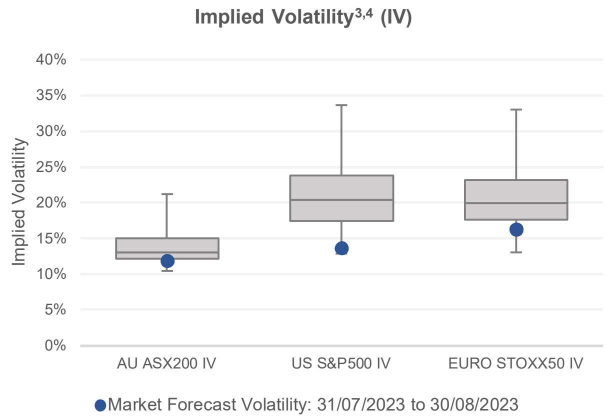
Upcoming Key Economic Events & Risk Commentaries

● Implied volatility, often viewed as the market's fear index, has decreased for the ASX200. The S&P 500 and Stoxx 50 have increased but remain below the 30th percentile over the past year. The implied likelihood of the S&P 500 falling more than 10% and 5% in August has remained the same as last month, currently sitting at 1% and 6%, respectively.

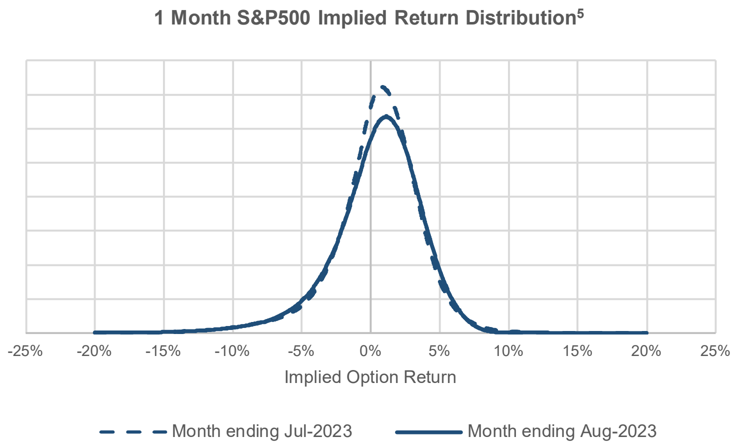
● The US Fed increased its official cash rate from 5.25% to 5.50% at the July FOMC meeting, as expected. The June headline CPI MoM was 0.2%, which is the smallest rise since 2021. The market is now divided on whether further rate hikes are required and is anticipating rate cuts from 2024. The 2Q GDP released this month was much stronger than expected at 2.4% versus 1.8%, suggesting that the economy is slowing at a lower pace than most had anticipated. The US labor market is still tight, with an unemployment rate at 3.6%, and the monthly job claims in the previous months were upbeat. These data in combination have pushed risky asset valuations higher, with the possibility of a resilient economy and strong employment levels despite the recent rate hikes. The Fear Index, VIX, closed at 13.63 last time, and the cost of market protection is at the cheapest level since the COVID pandemic in 2020. The S&P500 has gained almost 20% this calendar year, and empirical data suggests that late August and September are when equity markets tend to underperform. A profit-taking sell-off is possible

● Similarly in Australia, the RBA is also targeting wage inflation, despite the headline inflation having moderated for a few months. The domestic official cash rate was put on hold in July, and Lowe suggested that there are still further impacts of recent rate hikes to work their way into the domestic economy, citing the fall in the unemployment rate to 3.5% released in July and the increasing number of mortgages switching from fixed to variable rates.





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.



Implied likelihood[5] of S&P 500:	Month ending Aug-2023	Month ending Jul-2023
Falling more than 10%	**~ 1%**	~ 1%
Falling more than 5%	**~ 6%**	~ 6%

[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

Observations on Sustainable Withdrawal Rates

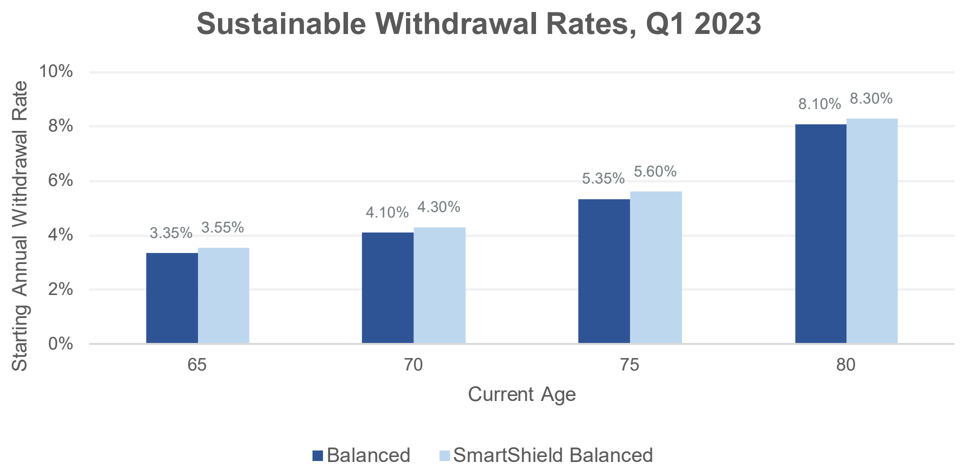
We observe that sustainable withdrawal rates at the end of Q2 2023, are higher compared to Q1 2023.

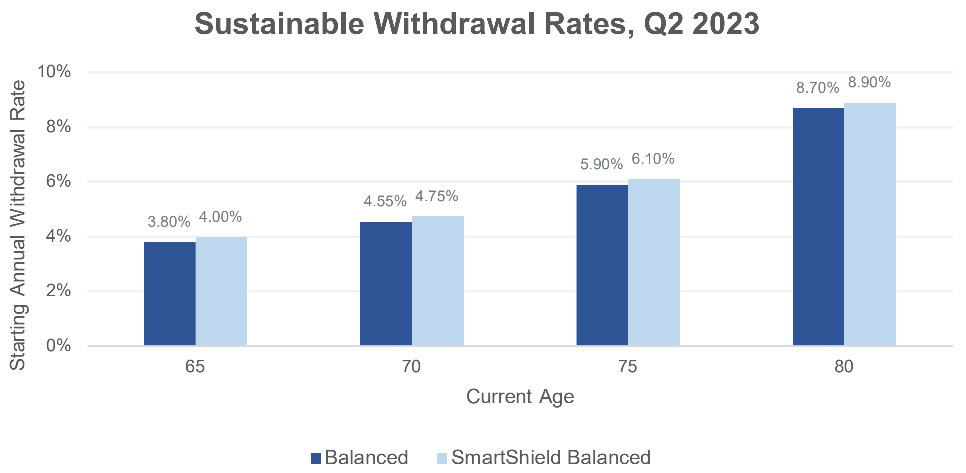
This was mainly driven by the change in interest rate levels over the period with 10-year government bond yields increasing by approximately 70bps, leading to higher simulated returns from all asset classes.

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 July, Milliman's SmartShield portfolios maintained an average hedge level of approximately 17% for Australian equities and global equities. This allowed the portfolios to participate on the market gains throughout the month, especially when combined with SmarShield portfolio's tilt towards growth assets, while still maintaining the flexibility to respond swiftly to potential market fluctuations.





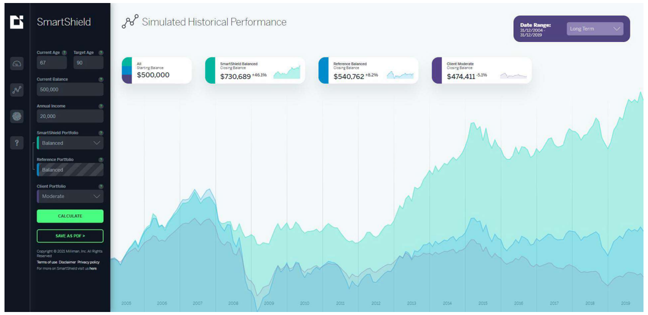
Sustainable Withdrawal Rate is defined as the maximum amount that can be withdrawn from a portfolio each year with a 90% certainty that this rate can be sustainably withdrawn (adjusted for inflation) until the target age of 90. An additional constraint introduced is for the potential shortfall to be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