Milliman Market Monitor - June 2023

Market Commentaries

Equities

● US equity markets finished the financial year on a strong note, with strong US economic data and a tech sector rally helping the S&P 500 to finish the month up 6.6%.

● European equities also made gains, up 4.3%. Japanese equities continue to outperform, with the Nikkei and TOPIX up 7.45% and 7.41%, respectively. A weak Yen has helped boost Japanese equities.

● Australian equities had a mixed month. The ASX 200 was well above its starting figure for the month before falling sharply on the 22nd, due to sharp declines in the tech and mining sectors. Overall, the ASX 200 returned 1.76%. By far, the worst sector was healthcare, down 6.6% while Tech and Materials were up 3.5% and 4.8% for the month, respectively.

Fixed Income

● Fixed income markets had a bumpy month as investors reacted to comments from the US Fed Reserve Chair Jerome Powell, who indicated there would likely be two more rate rises in the US this year.

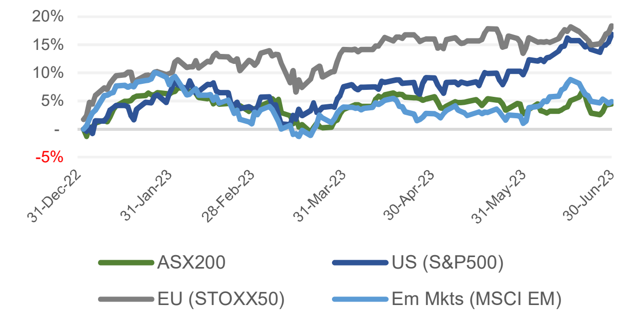
● The RBA raised rates again in their June meeting, this time by another 25bp to 4.1%. Overall, Australian Government Bonds and Global Bonds generated a return of -2.1% and -0.2% respectively, as measured by Bloomberg indices.

Currencies

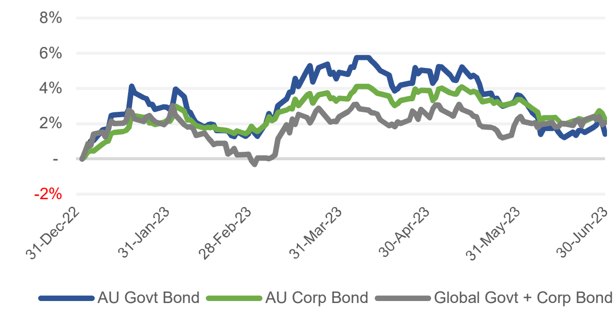
● The Aussie Dollar rallied against the US Dollar this month before falling back across the 2nd half of June. It ended the month at 66.63 US Cents, a 2.4% increase. The initial rally was driven by rates speculation in the US weakening the US Dollar before a shift in investor sentiment surrounding US rates led to the US Dollar recovering some ground.

● The AUD made slight gains against the other majors, such as the Euro, where it gained 0.4%, and the Yen, gaining 5.8%. The Yen has been significantly weakening against the other majors recently, due to a divergence between monetary policy in Japan versus other economies, such as the US or across Europe.

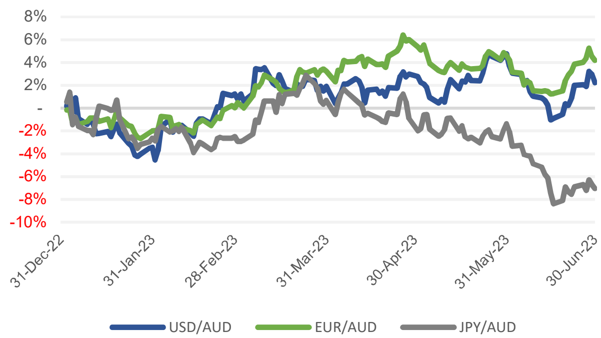
Equities: YTD Total Return[1] %



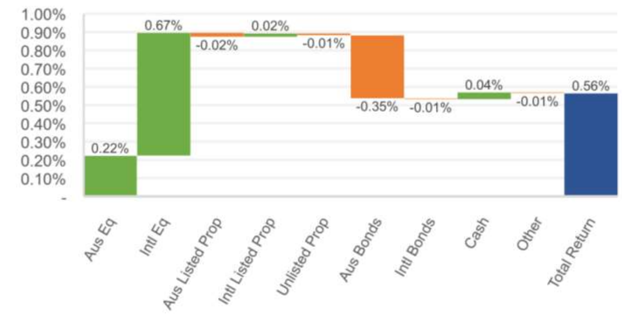
Fixed Income: YTD Return[2] %



Foreign Currencies: YTD Return %



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



Returns ending 30 June 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	1.8%	6.6%	4.3%	3.8%	-2.1%	-1.1%	-0.2%	-2.4%	-0.4%	-5.8%
3 Month	1.0%	8.7%	3.7%	0.9%	-3.3%	-1.1%	-0.3%	0.3%	0.9%	-7.7%
1 Year	14.8%	19.6%	30.6%	1.8%	0.9%	3.3%	-1.2%	3.6%	7.8%	-2.6%
CYTD	4.5%	16.9%	18.4%	4.9%	1.4%	2.3%	2.1%	2.2%	4.2%	-7.1%

[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

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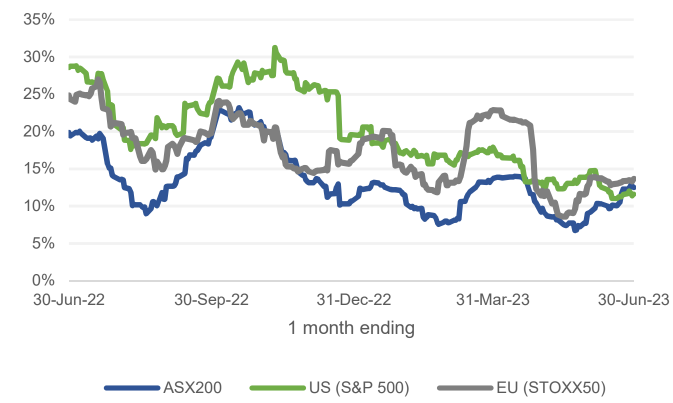
Upcoming Key Economic Events & Risk Commentaries

●Implied volatility (often viewed as the market's fear index) has decreased for the ASX, S&P500, and Stoxx 50, while remaining below the 25th percentile over the past year. The implied likelihood of the S&P 500 falling more than 10% and 5% in July has decreased from last month and is currently sitting at 1% and 6%, respectively.

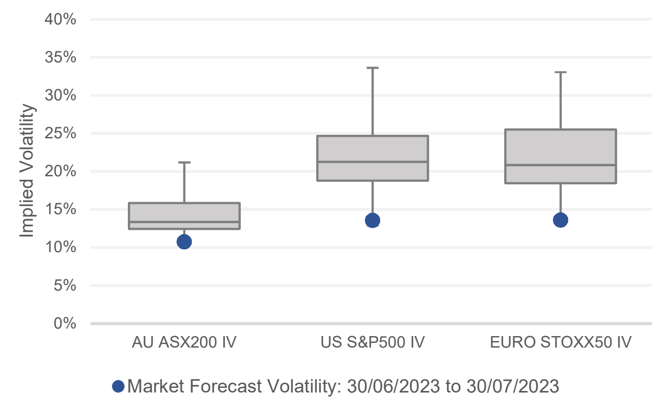
● Many investors were surprised by the unexpected rate hikes by BoC early this month, soon followed by the RBA 25bps raise. While the US Fed did not raise its official cash rate in June, the dot plot suggested another 50bps rate hike on the agenda this year. Before this month, the financial markets expected the moderating inflationary pressure in the US, Canada and Australia would allow the central banks to stop raising interest rates by this point. However, the monetary policymakers are, in fact, more hawkish and aim to see inflationary moderation not only in goods but also services. The central banks want to avoid sticky and high wage inflation which can contribute to higher prices and further rate hikes. However, this exercise can be tricky because the unemployment rates are near record low levels, and the time delay in the impact of further rate hikes exists. The chances of monetary policy mistakes can be substantial and could lead to urgent rate cuts when the central banks realise they have pushed the interest rate too high. If the central banks are making rate decisions on wage inflation and labour market conditions, it is difficult to tell where the peak rates might be at the moment.

● The implication of a policy mistake might be a deeper and sharper economic recession, which poses a downside risk to global equitiy markets, especially when most of the US equity gain this year has come from rate-sensitive tech sectors. The US Treasury yield curve is now more inverted, and the expectation of a weakening economy is further entrenched. There are already signs indicating rate hikes are beginning to constrain household spending and new housing approvals. So a material price correction in equity and housing could have negative wealth effects. It is important for the central banks to tighten wage inflation expectations, but how far is too far?

Realised 1 Month Equity Volatility (%)

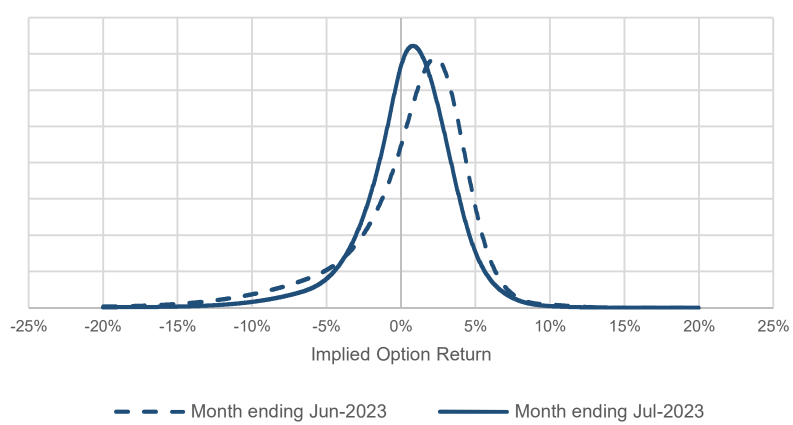


Implied Volatility[3,4] (IV)



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 Jul-2023	Month ending Jun-2023
Falling more than 10%	**~ 1%**	~ 3%
Falling more than 5%	**~ 6%**	~ 10%

[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

Observations on Sustainable Withdrawal Rates

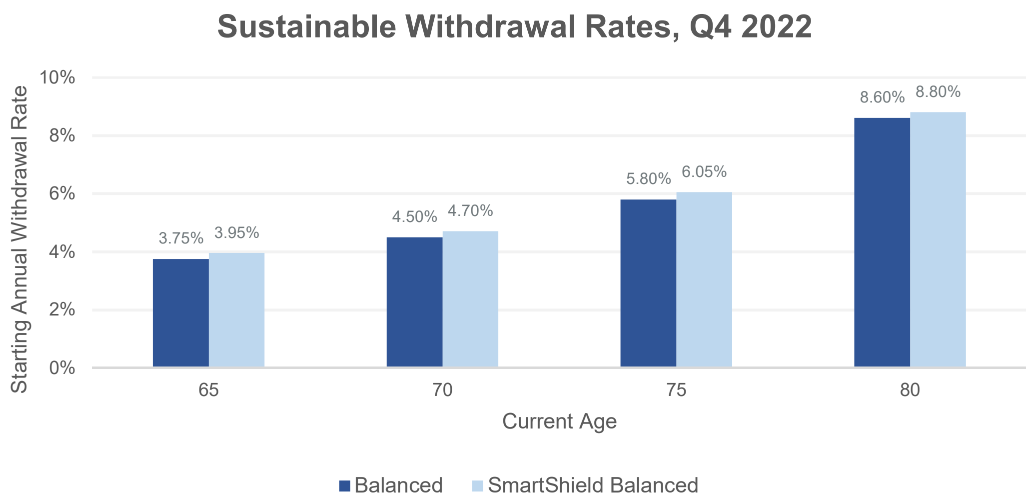
We observe that sustainable withdrawal rates at the end of Q1 2023, are lower compared to Q4 2022.

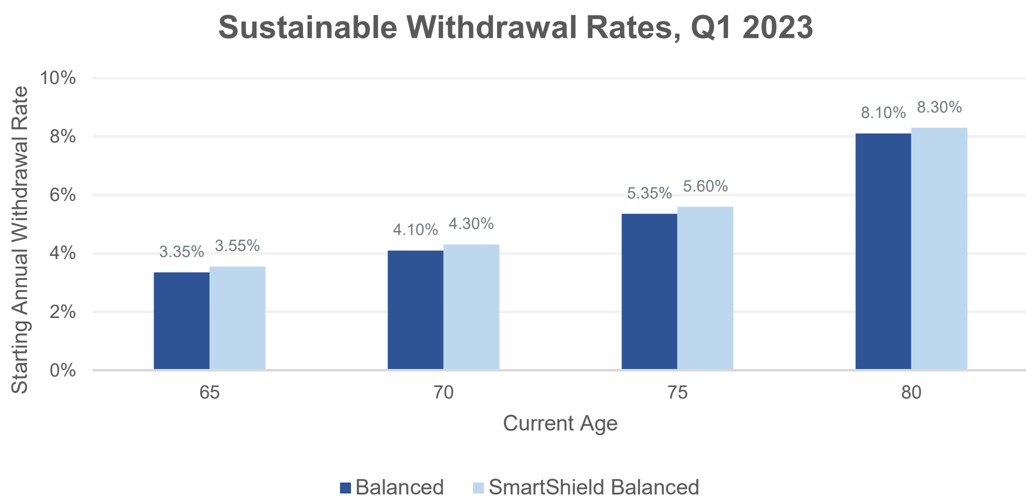
This was mainly driven by the change in interest rate levels over the period with 10-year government bond yields decreasing by approximately 75bps, leading to lower simulated returns from all asset classes.

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 June, Milliman's SmartShield portfolios maintained an average hedge level of approximately 24% for Australian equities and 22% for 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.





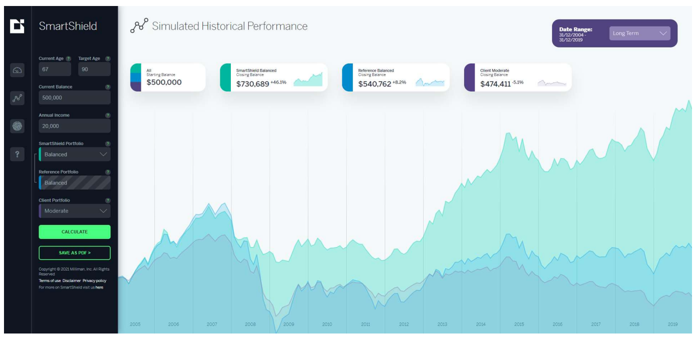
Sustainable Withdrawal Rate is defined as the maximum amount that can be withdrawn from a portfolio each year with a 90% certainty that this rate can be sustainably withdrawn (adjusted for inflation) until the target age of 90. An additional constraint introduced is for the potential shortfall to be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



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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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