Milliman Market Monitor - March 2023

Market Commentaries

Equities

● Equity market volatility picked up sharply in early March when Silicon Valley Bank(SVB), Signature Bank (SB) and Silvergate Bank struggled with liquidity issues due to their excessive exposures to cryptocurrency and technology venture capitalists. These banks also suffered losses from their bond holdings as interest rates rose on the back of central bank tightening. US Treasury and FDIC decided to provide a guarantee on deposits beyond the insured limit of $250,000 per account owner in SVB and SB as well as provide short-term funding aimed at containing the bank run. A raft of good data releases however bolstered bets that the US Federal Reserve would pause its rate hike cycle. The S&P 500 returned 3.7%.

● Additionally, there were financial stability concerns in Europe when the largest shareholder of Credit Suisse Bank, Saudi National Bank refused to inject more capital. Credit Suisse had performed poorly over recent years due to bad loans and internal risk management weakness. To avoid a bank failure and volatility spillover, the Swiss National Bank provided emergency liquidity to Credit Suisse; which was later acquired by its rival UBS.

● Australian equities were mostly flat this month, the ASX 200 returned -0.2%. At a sector level, Materials stocks outperformed, gaining 4.1% while Financials underperformed, losing 5.1%.

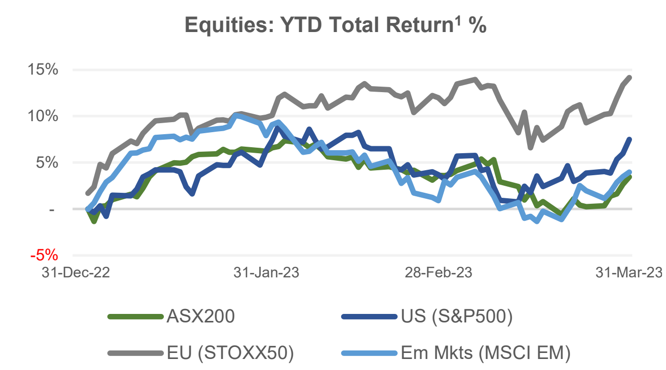
Fixed Income

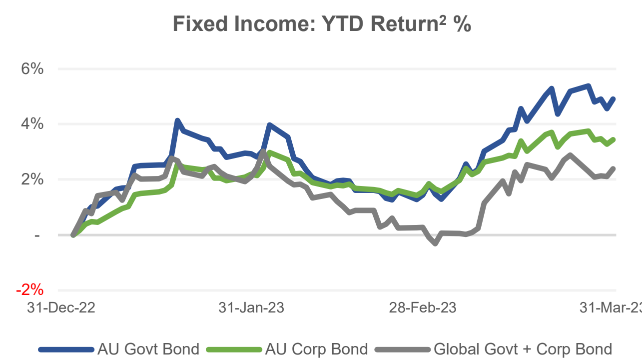
● Fixed income markets rallied this month as investors priced in an increased probability the US Fed would pause its rate rising cycle. Local markets also rallied as investors expect the RBA to also pause its rate hike cycle.

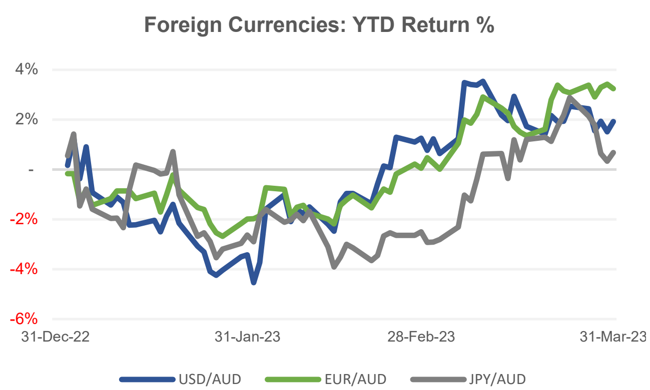
● Inflation in Australia slowed to 6.8% YoY in February (down from 7.4% YoY in January) and this added further fuel to the idea the RBA would slow or pause its pace of rate hikes. The fall in interest rate expectations led to the Australian Government Bonds and Global Bonds generating a return of 3.4% and 2.1% respectively, as measured by Bloomberg indices.

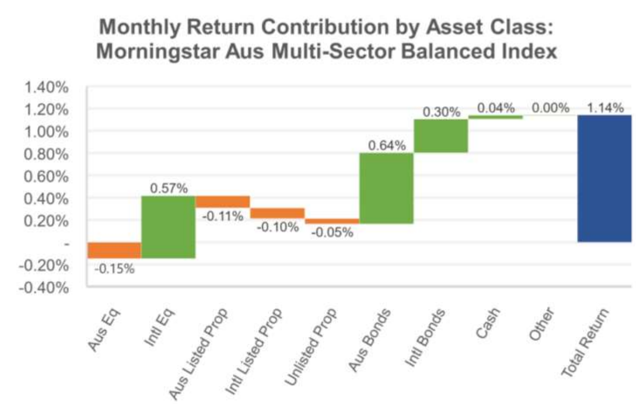
Currencies

● The Aussie Dollar weakened against the other major currencies, closing at 66.85 US cents, down 0.7%.









Returns ending 31 March 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	-0.2%	3.7%	2.0%	3.0%	3.4%	1.9%	2.1%	0.7%	3.2%	3.3%
3 Month	3.5%	7.5%	14.2%	4.0%	4.9%	3.4%	2.4%	1.9%	3.2%	0.7%
1 Year	0.1%	-7.7%	13.5%	-10.7%	0.2%	1.1%	-5.5%	11.9%	9.7%	2.6%
CYTD	3.5%	7.5%	14.2%	4.0%	4.9%	3.4%	2.4%	1.9%	3.2%	0.7%

[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 Aggregate Index, which measures global investment grade debt from 24 countries, both developed and emerging markets issuers.

Milliman Market Monitor - March 2023

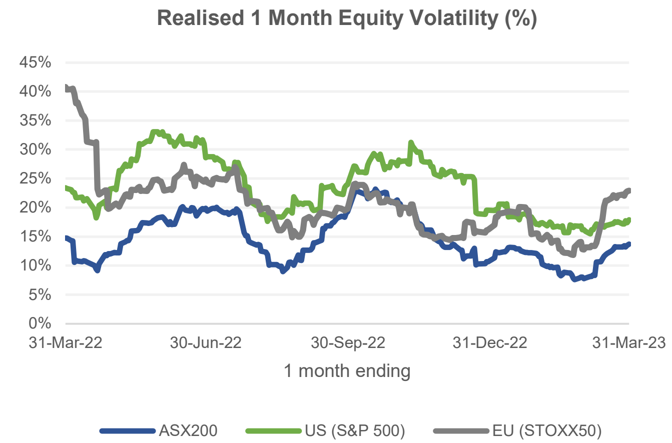
Upcoming Key Economic Events & Risk Commentaries

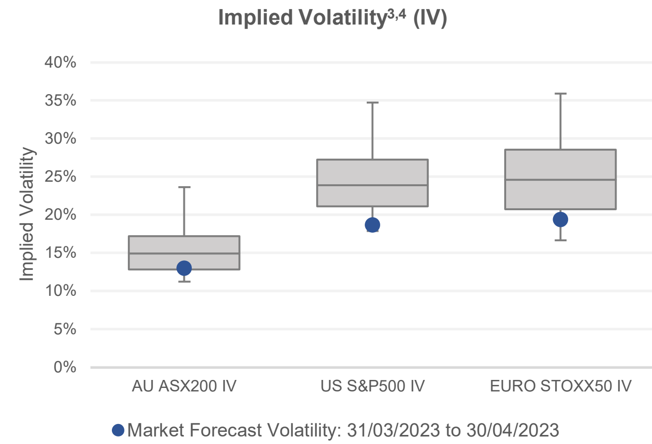
● Implied volatility (often viewed as the market's fear index) has decreased for the S&P 500 and Stoxx 50, for the ASX 200, it has marginally increased. The S&P500 and Stoxx 50 have remained below the 25th percentile over the past year, while ASX remained below the 30th percentile over the past year. The implied likelihood of the S&P 500 falling more than 10% and 5% in March has decreased slightly from last month and is currently sitting at 4% and 12%, respectively.

● Domestically, the RBA held its latest policy meeting on 4th Apr and kept the cash rate at 3.6% after 10 consecutive rate hikes. As per Philip Lowe's speech following the decision, the decision to take a pause on rate rises has been partly attributed to the RBA's intention to evaluate the consequences of the recent rate hikes. Further, the large number of mortgages shifting from low fixed rates to higher variable rates was another factor in the decision. The monthly CPI for February showed that inflation continues to moderate from its peak and housing price is still falling. However, the green shoot rally in energy costs and industry wage pressure were also cited as potential drivers that could make inflation harder to tame. Key data releases this month include March job numbers coming out on 13th Apr and NAB Business Confidence for March is due on 20th Apr.

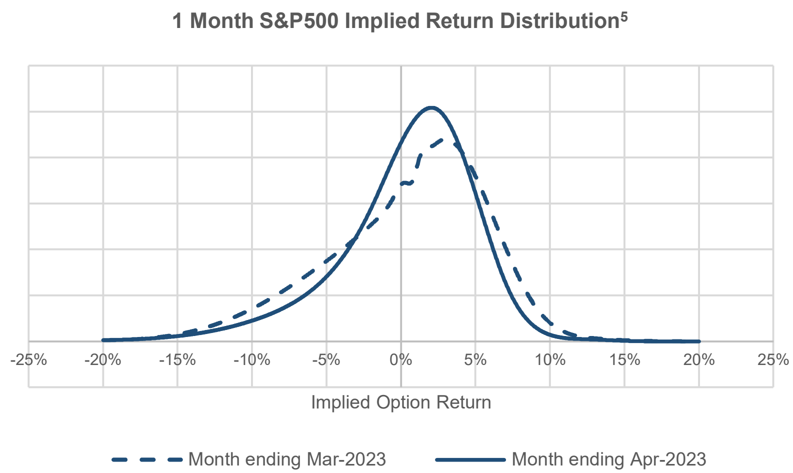
● Offshore in the US, March consumer confidence came in above expectation while the initial and continuing job claims indicated the trend is weakening from a very tight labor market. ISM Manufacturing was 46.3 (vs. 47.5), the lowest since mid-2020. US Retail Sales for March is due on 14th Apr and US PMI is due to be released on 21st Apr.

● In Europe, BoE raised the key rate to 4.25% and UK Manufacturing PMI (Mar) came in at 47.9. UK Mar CPI data is due on 19 Apr and Retails Sales on 21 Apr. EU Consumer Confidence (Mar) was -19.2 (f/c -18.2) and EU Composite PMI came in at 54.1 (f/c 52). Eurozone CPI is due on 19 Apr.





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 Apr-2023	Month ending Mar-2023
Falling more than 10%	**~ 4%**	~ 5%
Falling more than 5%	**~ 12%**	~ 17%

[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.

Milliman Market Monitor - March 2023

Milliman

Observations on Sustainable Withdrawal Rates

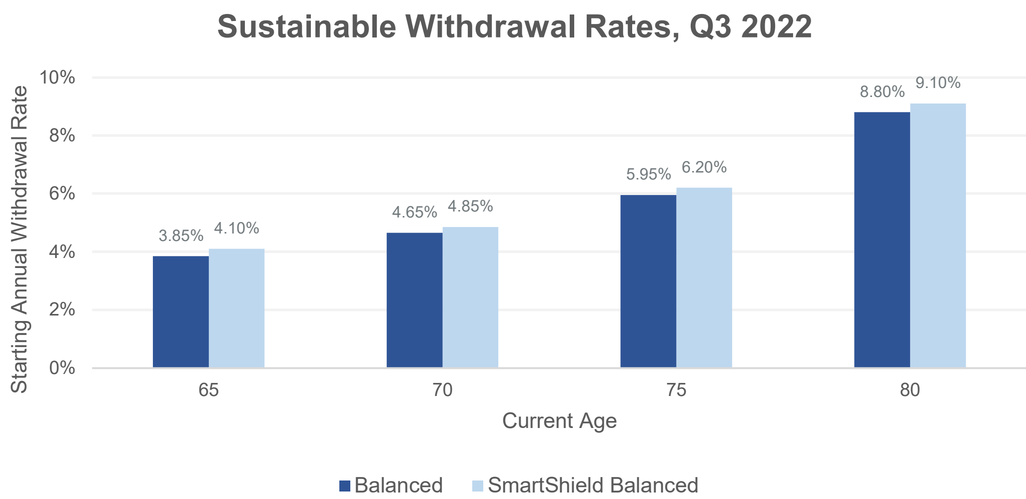
We observe that sustainable withdrawal rates at the end of Q4 2022, are lower compared to Q3 2022.

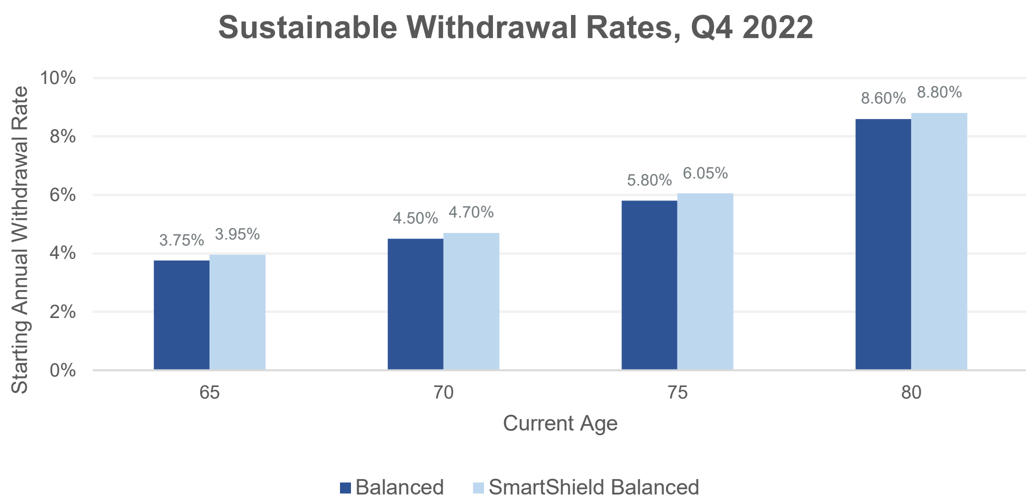
This was mainly driven by the increase in starting inflation levels.

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.

As the equities ended up relatively flat to slightly up towards the end of March, the equity hedge level within SmartShield portfolios remained steady at 29%, allowing for swift action in response to potential market fluctuations in either direction.





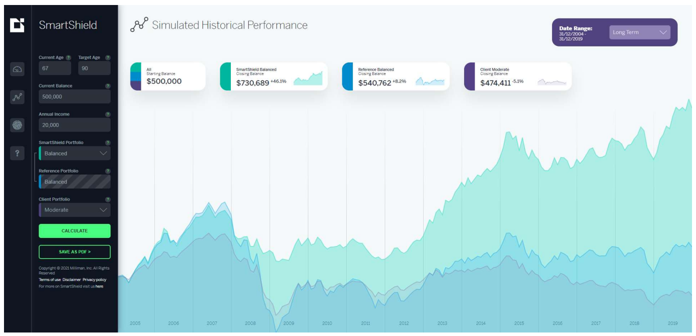
Sustainable Withdrawal Rate is defined as the maximum amount that can be withdrawn from a portfolio each year with a 90% certainty that this rate can be sustainably withdrawn (adjusted for inflation) until the target age of 90. An additional constraint introduced is for the potential shortfall to be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

LIMITATIONS & DISCLAIMERS

Milliman Pty Ltd ABN 51 093 828 418 AFSL 340679 (Milliman AU) for provision to Australian financial services (AFS) licensees and their representatives, [and for other persons who are wholesale clients under section 761G of the Corporations Act]. Not for public use or distribution.

Past performance is not indicative of future results. Recipients must make their own independent decisions regarding any strategies or securities or financial instruments mentioned herein.

Milliman Pty Ltd does not make any representations that products or services described or referenced herein are suitable or appropriate for the recipient. Many of the products and services described or referenced herein involve significant risks, and the recipient should not make any decision or enter into any transaction unless the recipient has fully understood all such risks and has independently determined that such decisions or transactions are appropriate for the recipient.

Any discussion of risks contained herein with respect to any product or service should not be considered to be a disclosure of all risks or a complete discussion of the risks involved.

The recipient should not construe any of the material contained herein as investment, hedging, trading, legal, regulatory, tax, accounting or other advice. The recipient should not act on any information in this document without consulting its investment, hedging, trading, legal, regulatory, tax, accounting and other advisors.

Milliman Pty Ltd does not ensure a profit or guarantee against loss.