Milliman Market Monitor - January 2023

Market Commentaries

Equities

● Global stocks have kicked off 2023 with strong growth, buoyed by optimistic outlooks on the US economy and China's reopening. Although US inflation shows signs of slowing, some developed European markets, such as France and Italy, are still grappling with persistent inflation due to the energy impact of the Russian-Ukraine conflict. The S&P 500 gained +6.3%, while the MSCI world index gained +3.5% for the month.

Australian equities also rallied this month, despite continued inflationary pressures. The ASX 200 gaining +6.2% this month.

Fixed Income

● Fixed income markets also saw a recovery this month, as slowing inflation in developed markets such as the US and Germany led investors to believe that central banks may slow the pace of interest rate increases.

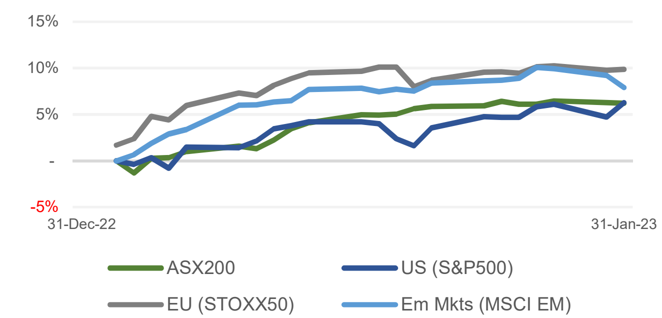
The Australian Government Bond and the Global Bond generated a return of +2.9% and +2.1%, respectively.

Currencies

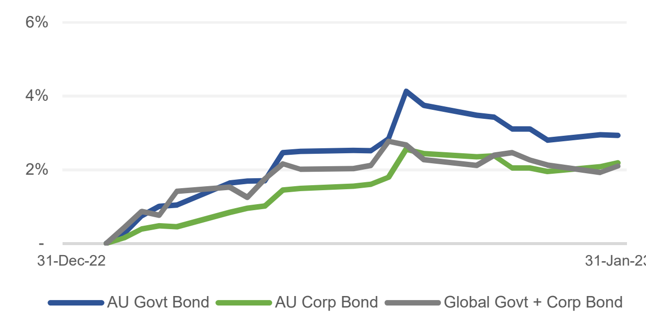
● The Aussie Dollar strengthened against the other major currencies this month off the back of stronger metals prices (both industrial and precious) and positive sentiment from China's re-opening. In addition, the US Dollar weakened as investors dialled back rate hike expectations.

The Aussie Dollar closed at 70.55 US Cents, which was a 3.4% gain.

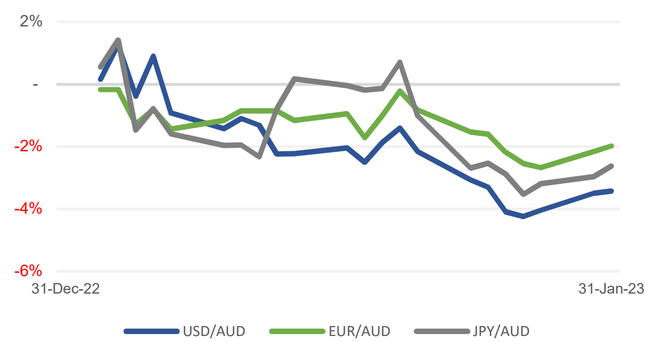
Equities: YTD Total Return[1] %



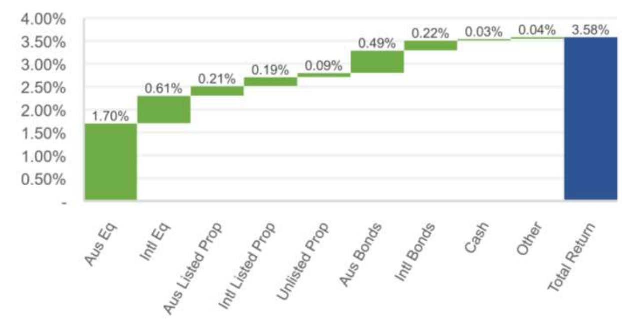
Fixed Income: YTD Return[2] %



Foreign Currencies: YTD Return %



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



Returns ending 31 January 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	6.2%	6.3%	9.9%	7.9%	2.9%	2.2%	2.1%	-3.4%	-2.0%	-2.6%
3 Month	9.6%	5.8%	15.4%	22.2%	2.1%	2.9%	3.2%	-9.3%	-0.3%	3.7%
1 Year	12.2%	-8.2%	2.3%	-12.1%	-6.8%	-4.2%	-8.9%	0.2%	-3.2%	-11.3%
CYTD	6.2%	6.3%	9.9%	7.9%	2.9%	2.2%	2.1%	-3.4%	-2.0%	-2.6%

[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 decreased for the ASX, S&P500 and Stoxx 50, while remaining below the 25th percentile over the past 1 year. The implied likelihood of the S&P 500 falling more than 10% and 5% in February is 4% and 14% respectively.

● Continued evidences of peaking inflationary pressure and moderating growth in the US has brought optimism to the financial markets. Investors dialled back the extent to which the Fed will ultimately lift rates and coupled with the China recovery story, USD dollar weakened and commodities/equity assets outperformed strongly in January. Realised equity volatilties in general, have ended lower over the month, particularly for the S&P500 and the Stoxx 50.

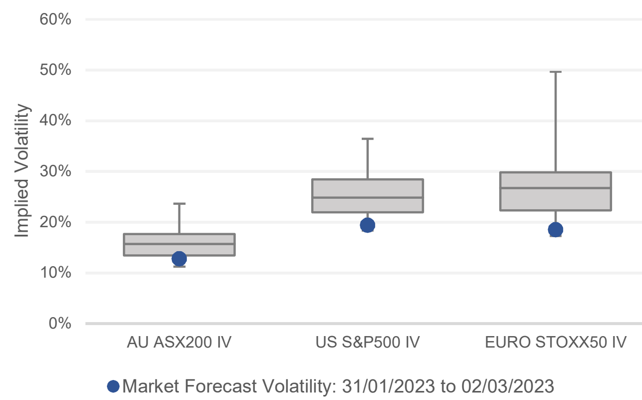
● Domestically, the RBA will meet on 7 Feb. They are expected to continue on with another 25bp hike to the cash rate. The NAB Business surveys (Jan 2023) are due on 14 Feb and the Labour Force data is due on 16 Feb. The Q4 2022 Wage Price report will be released on 22 Feb, after which the Retail Sales report for Jan will be released, on 28 Feb.

● Offshore in the US, the ISM Manufacturing PMI (Feb) are released on 2 Feb (f/c 48). The FOMC meeting will also be held on 2 Feb, where the Fed is widely expected to hike by another 25bps. The Non-Farm Payroll (Jan) is released on 4 Feb (f/c 190k). US CPI (Jan) is due on 15 Feb. US Retail Sales (Jan) and Industrial Production (Jan) are out on 16 Feb.

● In Europe, the Jan 2023 CPI is due on 1 Feb (f/c 0.1%, prior -0.4%). The ECB is expected to hike its refinancing rate by 50bp on 3 Feb. The Q4 GDP for Eurozone is due on 14 Feb and S&P PMI data (Feb) will be out on 21 Feb. In China, the Caixin PMIs are due between 1 and 3 Feb, and the CPI (Jan) data is due on 10 Feb.

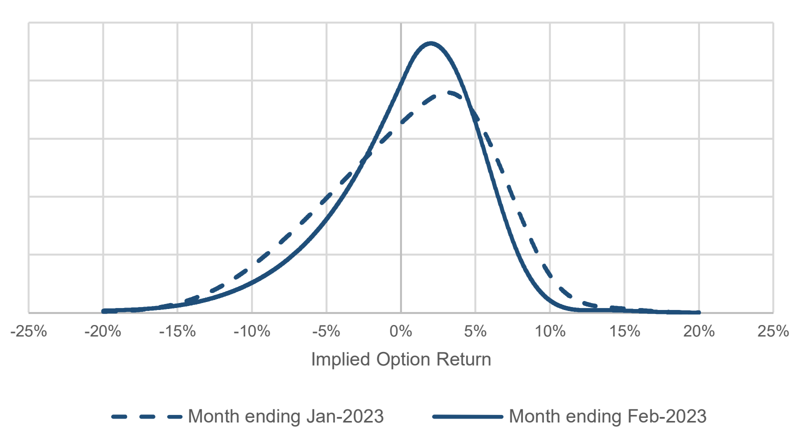
Realised 1 Month Equity Volatility (%)

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 Feb-2023	Month ending Jan-2023
Falling more than 10%	**~ 4%**	~ 5%
Falling more than 5%	**~ 14%**	~ 18%

[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

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Observations on Sustainable Withdrawal Rates

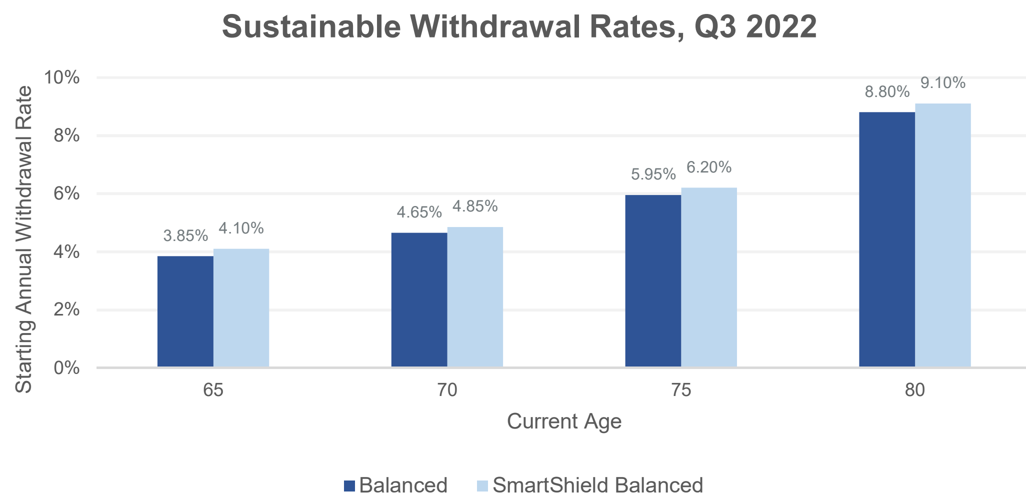
We observe that sustainable withdrawal rates at the end of Q4 2022, are lower compared to Q3 2022.

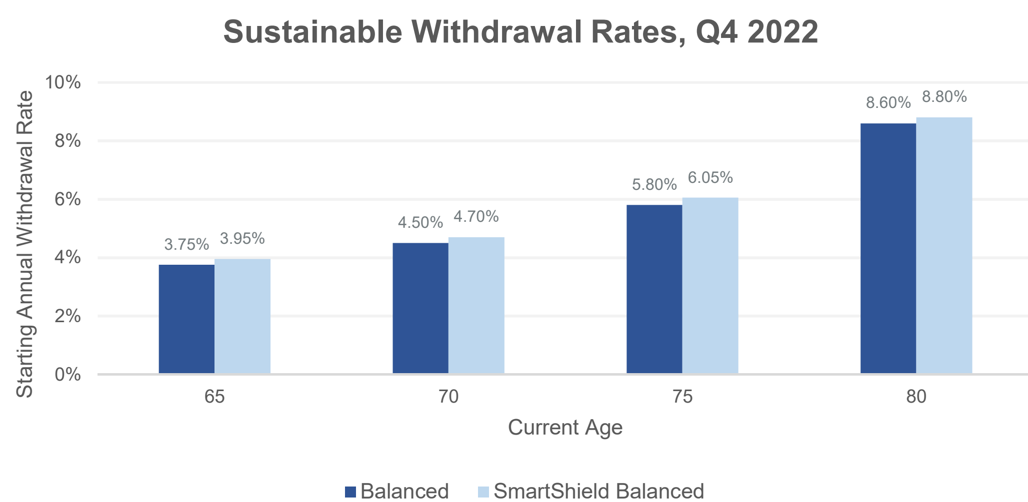
This was mainly driven by the increase in starting inflation levels.

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 market rebounded in January, the equity hedge level within SmartShield Portfolios has reduced from approximately 40% at the beginning of the month, to 21% by the end of the month.





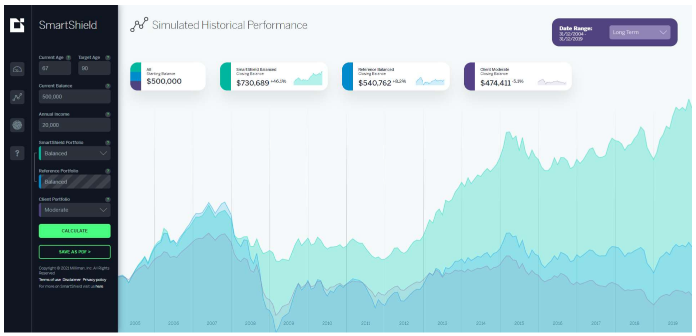
Sustainable Withdrawal Rate is defined as the maximum amount that can be withdrawn from a portfolio each year with a 90% certainty that this rate can be sustainably withdrawn (adjusted for inflation) until the target age of 90. An additional constraint introduced is for the potential shortfall to be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

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

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