

Market Commentaries

Equities

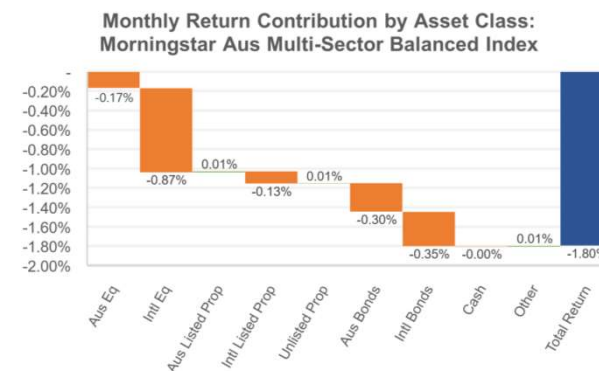
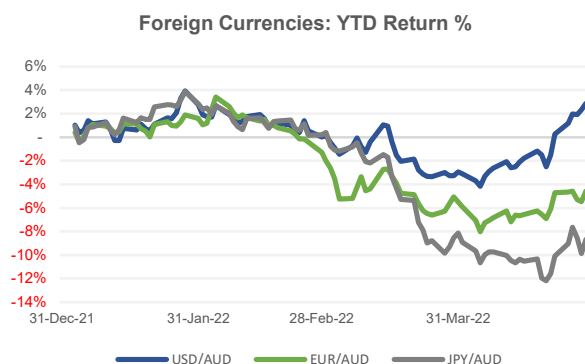
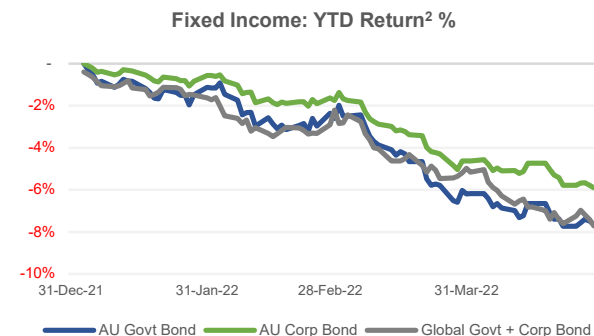
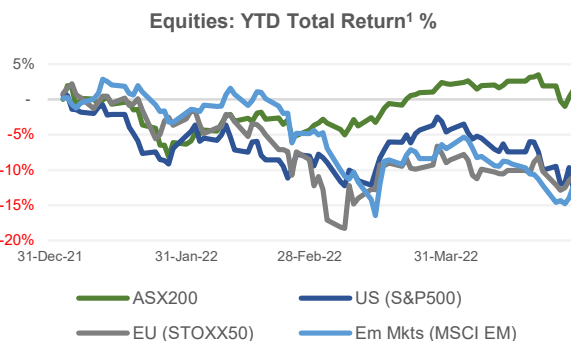
Markets around the world saw a poor month, largely thanks to the ongoing geopolitical tensions caused by the Russian-Ukraine war, as well as poor earnings reports from many large US companies. Both Netflix and Amazon have been citing issues such as higher running costs and household cost of living pressures, which in turn are causing consumers to wind back spending as record inflation continues to bite across many developed economies. Australian equities were relatively insulated from these wider falls, with the ASX200 closing -0.9% in April. Global developed market equities fell sharply with the MSCI World down -8.7%. However, the fall in the AUD helped to offset the sharp drop in international equities this month, with the MSCI World in AUD down -3.1%.

Fixed Income

There continued to be major movement in the Fixed Income markets this past month, as inflation rates grew higher and investors priced in further rate rises across many economies next month, including Australia. The Australian Government Bond² and the Global Bond² generated a negative return of -1.5% and -2.9% respectively.

Currencies

The US Dollar strengthened significantly against the Aussie this month as US Federal Reserve Chair Powell, signalled that rates were poised to rise higher and faster. Lockdowns in China have curbed demand for commodities and this in turn, has also contributed to the Aussie Dollar's slide. The AUD/USD rate closed at 70.61 US Cents, a loss of -2.9%.



	Returns ending 29 April 2022							USD/AUD	EUR/AUD	JPY/AUD
	ASX200	US (S&P500)	EU (STOXX)	EM Mkts (MSCI)	AU Govt Bond	AU Corp Bond	Global Bond			
1 Month	-0.9%	-8.7%	-2.1%	-5.6%	-1.5%	-1.3%	-2.9%	6.0%	1.0%	-0.6%
3 Month	8.2%	-8.2%	-8.3%	-10.5%	-6.6%	-5.4%	-6.2%	0.1%	-6.1%	-11.2%
1 Year	10.2%	0.2%	-2.4%	-18.3%	-7.7%	-6.6%	-7.0%	9.3%	-4.2%	-8.0%
CYTD	1.4%	-12.9%	-10.8%	-12.2%	-7.6%	-5.9%	-7.7%	2.9%	-4.6%	-8.7%

¹Equities returns captures both the capital gains as well as any cash distributions, such as company dividends.

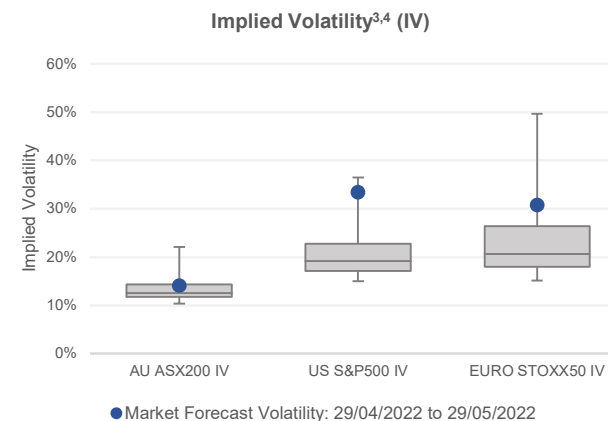
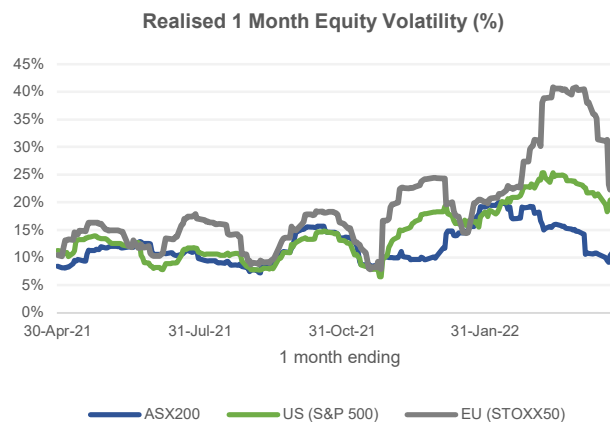
²AU Govt Bond uses the Bloomberg AusBond Govt 0+ Yr Index, which measures the return of Australian Treasury and Semi-government bonds maturing in 0+ years. AU Corp Bond uses the Bloomberg AusBond Credit 0+ Yr Index, which measures the return of Australian corporate/credit securities maturing in 0+ years. 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.

Upcoming Key Economic Events & Risk Commentaries

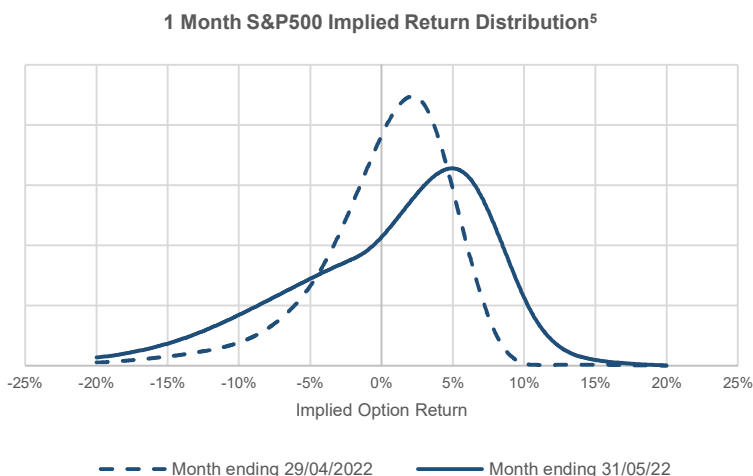
- Significantly faster rate hike expectations and worries on the potential weaker demand coming from China have caused the implied volatilities on equities, FX and rates to rise. The implied likelihood of the S&P 500 falling more than 10% and 5% in May is 11% and 23% respectively (estimated from option pricing). This represents a material increase in risk.

- Domestically, we have the monthly RBA meeting on 1 May. After the use of more hawkish language in their last meeting, and stronger-than-expected Q1 CPI, economist consensus is to look for a 15bps hike at the May meeting taking cash rate back to 25bps. We will also see the Statement of Monetary Policy on 6 May, where the RBA will provide their latest forecasts on GDP growth, CPI and unemployment. Furthermore, we will then see a Wage Price Index for Q1 2022 on 18 May; a number that will be closely watched by the RBA, for signs of wage growth and the Federal election result on 21 May.

- Offshore in the US, most economists expect the Federal Reserve to hike the Fed Fund rate by 50bp in the upcoming FOMC meeting on 5 May. Non-Farm Payroll data for April will be released on 6 May (f/c 390k, prior 431k). The US GDP and core PCE for Q1, are due on 26 May. In Europe, we will see the manufacturing and service PMI for May on 24 May, and we will see the May CPI on 31 May. In China, PPI and CPI data for April are due on 11 May, while retail sales and industrial production are released on 16 May.



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 31/05/22	Month ending 29/04/22
Falling more than 10%	~ 11%	~ 5%
Falling more than 5%	~ 23%	~ 13%

³Implied 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.

⁴Box & 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.

⁵Implied Return Distribution / Implied Likelihood represents 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.

Observations on Sustainable Withdrawal Rates

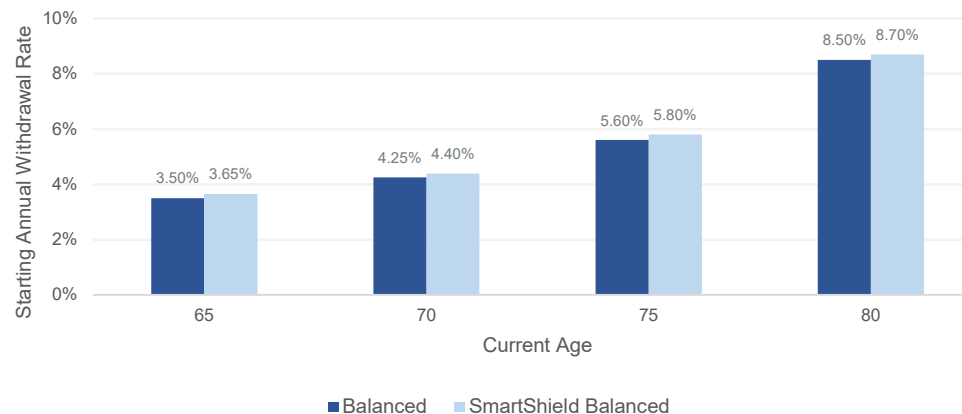
We observe that sustainable withdrawal rates at the end of Q1 2022 are higher compared to Q4 2021.

This was mainly driven by the change in interest rate levels over the period with 10 year government bond yields increasing by approximately 110bps, leading to higher simulated returns from all asset classes.

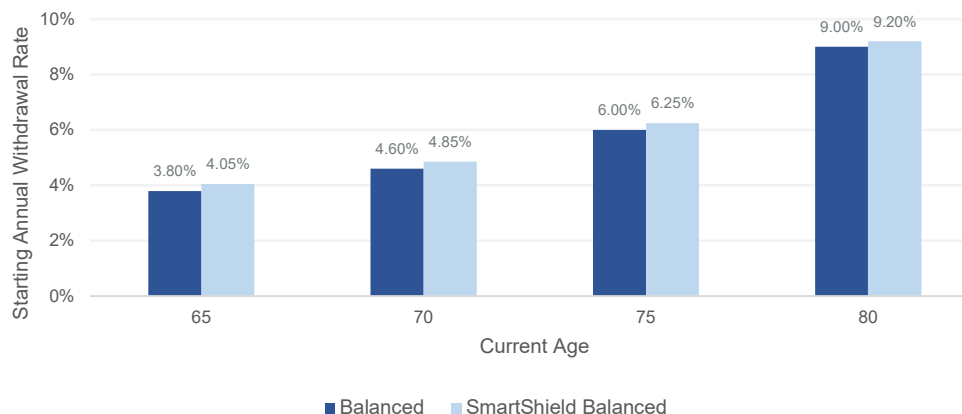
Using the SmartShield series of portfolios as an example, we have illustrated that additional sustainable withdrawal rates are achieved when we add a risk management strategy to the portfolios.

By controlling the level of volatility and reducing the impact of sustained market drawdowns, solutions such as the SmartShield portfolios that employ a risk management strategy, can reduce the exposure to sequencing risk, resulting in higher sustainable withdrawal rates for retirees.

Sustainable Withdrawal Rates, Q4 2021



Sustainable Withdrawal Rates, Q1 2022



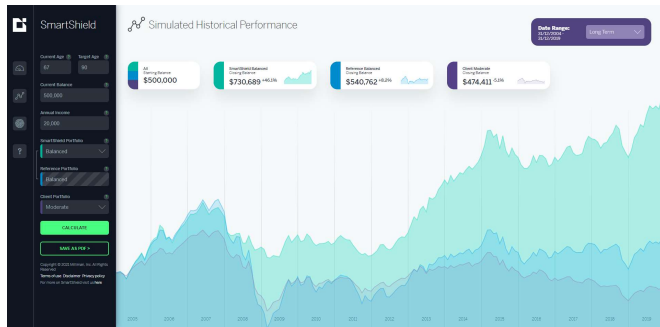
Sustainable Withdrawal Rate is defined as the maximum amount that can be withdrawn from a portfolio each year with a 90% certainty that this rate can be sustainably withdrawn (adjusted for inflation) until the target age of 90. An additional constraint introduced is for the potential shortfall to be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

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- Illustrating the impact of experiencing a market crash scenario e.g. Covid-19



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