Milliman Market Monitor - April 2024

Market Commentaries

Equities

● April was a bad month for equities as US inflation data came in higher than expected, which fuelled fears that the US Fed and other central banks would not ease monetary policy as soon as originally hoped. The S&P 500 returned -4.1%.

● European equities followed the wider trend, with the EuroStoxx 50 returning -2.4%. UK equities bucked the trend, with the FTSE 100 gaining 2.4%.

● The Bank of Japan held its interest rate this month while losing its grip on curve control. Japanese equities lost ground despite further Yen weakness. The Nikkei 225 returned -4.9%. Chinese and Hong Kong stocks were much stronger this month, with the Hang Seng up 7.4%.

● Aussie Equities were also down, with the ASX 200 down -2.9%. Most sectors were down this month, with real estate the worst affected, however, a small gain in the materials sector helped soften the fall of the wider index.

Fixed Income

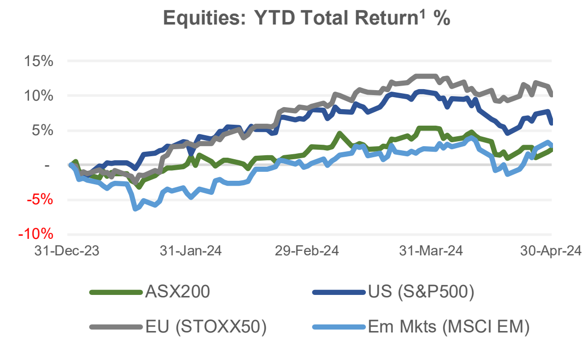
● Fixed Income markets also saw large shifts this month following sticky inflation data suggesting central banks would push any ease of monetary policy further out. US 10-year Treasury yields jumped 48bp to sit at 4.68%.

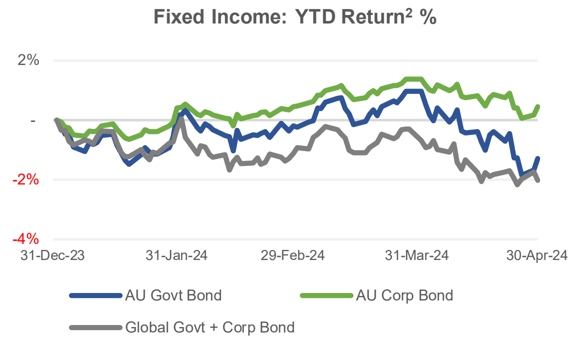
● Australian fixed income markets were also hit, as Aussie CPI data also came in above estimates, leading to the market shifting its forecasts for future RBA rate cuts further out. Overall, Australian Bonds returned -2.2%, and Global Bonds returned -1.7%, respectively, as measured by the Bloomberg Aggregate Indices.

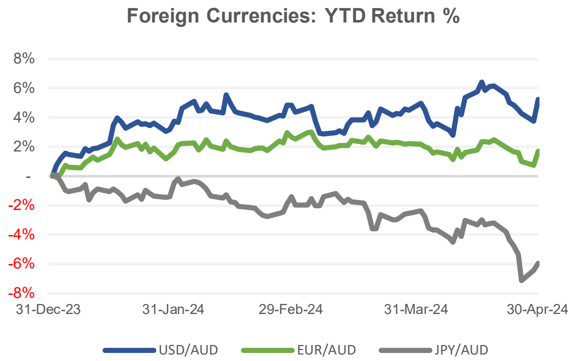
Currencies

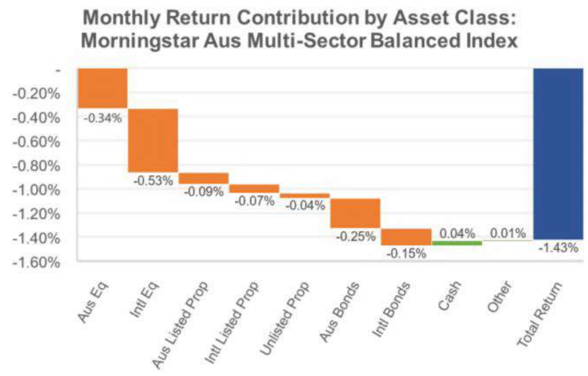
● The Aussie dollar weakened this month against the USD following the shifts in expected rate cuts in the US being pushed out. The AUD/USD rate fell -0.7%, closing at 64.73 US cents.

● The Yen continues to weaken against other major currencies. The AUD/JPY rate has gained another 3.5% to close at 102.145 Yen, approaching a 10-year high.









Returns ending 30 April 2024

	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%	-4.1%	-2.4%	0.4%	-2.2%	-0.9%	-1.7%	0.7%	-0.5%	-3.5%
3 Month	1.0%	4.3%	6.9%	7.8%	-1.5%	0.0%	-1.7%	1.5%	0.0%	-5.5%
1 Year	9.1%	22.7%	15.9%	9.9%	-1.5%	3.3%	0.4%	2.2%	-1.1%	-11.7%
CYTD	2.2%	6.0%	10.1%	2.8%	-1.3%	0.4%	-2.0%	5.2%	1.7%	-6.0%

[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

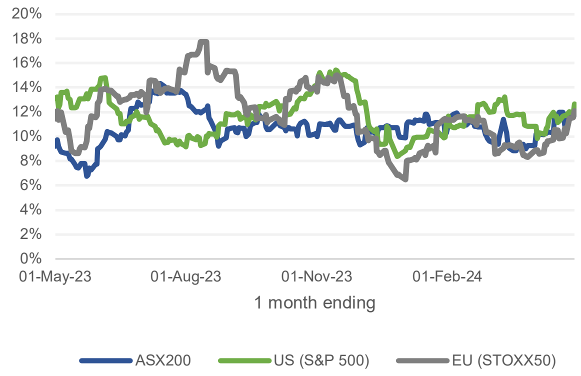
● Implied volatility, often viewed as the market's fear index, has increased significantly for ASX200, S&P 500 and Stoxx 50, while remains below the 75th percentile over the past year. The implied likelihood of the S&P 500 falling more than 10% and 5% in May has increased from last month, currently sitting at 2% and 9%, respectively.

● The global bond yields surged during April as the anticipated three Fed rate cuts for this calendar at the beginning of the month were reduced to just one. The 2-year and 10-year US Treasury yields climbed a whopping 47bps and 49bps respectively. The Fed members have been eagerly awaiting to see more evidence of slowing inflation, but the recent economic data seem to indicate the opposite. The ISM manufacturing index rebounded back into expansionary territory in early April followed by a stronger-than-expected NFP for March (303k vs 214k) and the unemployment rate fell to 3.8%.

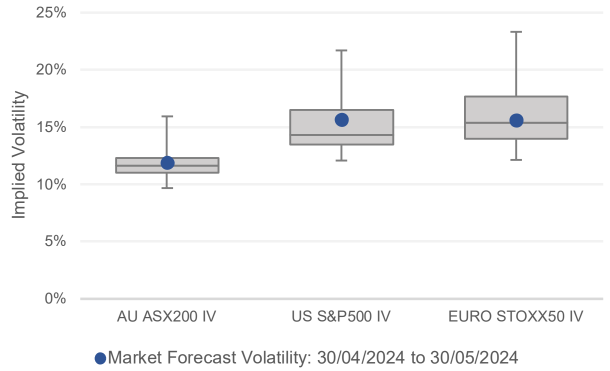
● The March quarter US core CPI came in above market expectations, hinting that the progress in battling inflation has stalled. Both retail sales and durable goods orders were above consensus while March quarter Employment Cost Index reached a 12-month high. The strong economic activity, strong consumption, strong employment, and persistent inflation, in combination, have led the Fed members to talk down the possibility of rate cuts, while traders pared back their expectations for rate cuts even further.

● The temporary escalation in the Middle East triggered a volatility spillover, pushing global yields and equities sharply lower, but the effect was short-lived as Israel and Iran were called to restrain themselves and traders refocusing on fundamentals. However, the fear index, VIX reached its six-month high during the month and closed the month almost three points higher relative to last month. Over the same period, Gold spot price climbed almost 5 %. The reduced Fed rate cuts expectation has led overall global equities lower this month, and the geographical conflict reminded investors of the potential market fragility.

Realised 1 Month Equity Volatility (%)

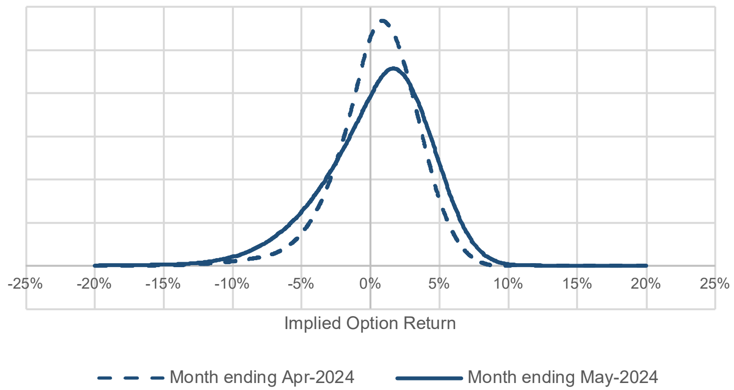


Implied Volatility[3,4] (IV)



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 May-2024	Month ending Apr-2024
Falling more than 10%	**~ 2%**	~ 1%
Falling more than 5%	**~ 9%**	~ 5%

[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.

Observations on Sustainable Withdrawal Rates

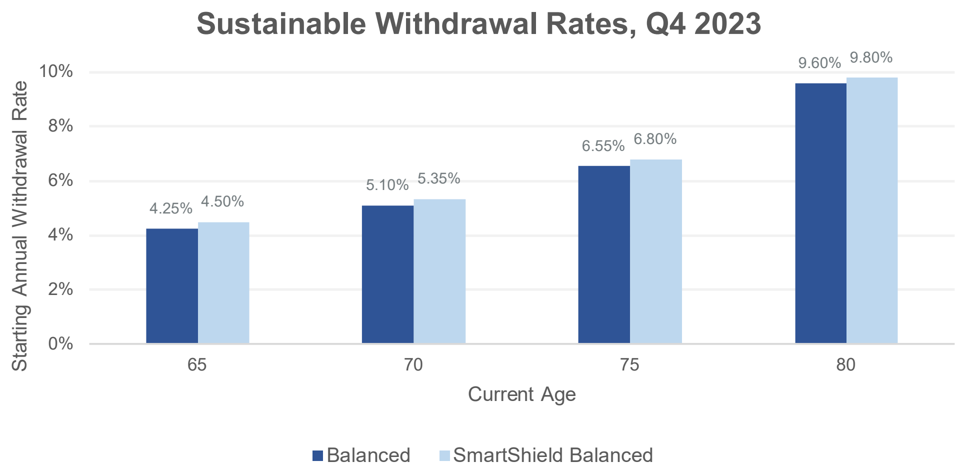
We observe that sustainable withdrawal rates at the end of Q1 2024, are unchanged compared to Q4 2023.

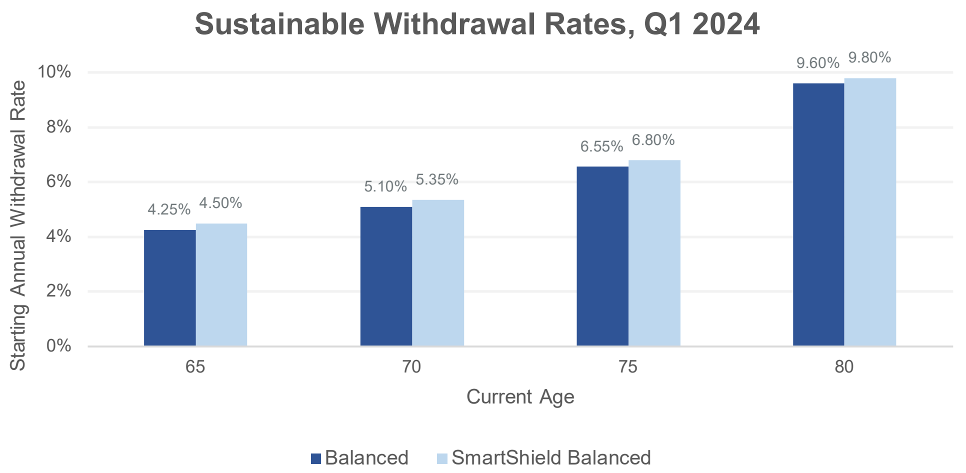
This is primarily driven by negligible change in interest rate levels over the period of 10 year government bond yields; decreasing by approximaterly 5bps, leading to insignificant simulated returns from all asset classes.

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 April, Milliman's SmartShield portfolios maintained an average hedge level of approximately 5% for Australian equities and 14% for global equities.





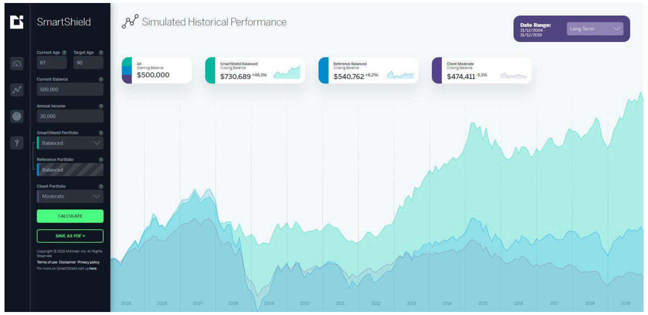
Sustainable Withdrawal Rate is defined as the maximum amount that can be withdrawn from a portfolio each year with a 90% certainty that this rate can be sustainably withdrawn (adjusted for inflation) until the target age of 90. An additional constraint introduced is for the potential shortfall to be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