

CY22: The year in review

Equities & bonds sell off as central banks try to tame inflation

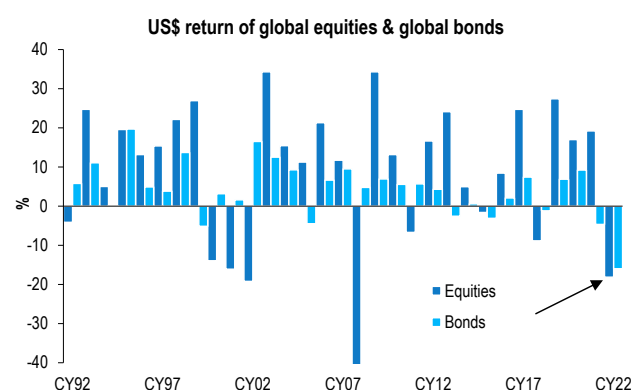
- CY22 was dominated by hawkish central banks attempting to tame inflation by sharply raising interest rates. The speed of rate hikes meant its effects are still flowing through transmission channels but the impact on financial markets was more instantaneous with both equities and bonds posting large losses.
- Equities, which posted new record highs in early January, declined dramatically in the first half of the year, led by high multiple growth stocks as higher rates compressed valuations and called into question the re-rating driven during the global pandemic period.
- Global equities posted a CY22 total return of -18.4% in US\$ and -12.5% in A\$ with many major indices such as the S&P500 entering 'bear market' territory after falling more than 20% from their peaks in early January. The tech led NASDAQ feared even worse, finishing the year down 32.5%.
- The ASX200 index posted a total return of -1.1% over CY22, receiving a boost from a relatively strong domestic economy, an overweight in outperforming resource stocks and an underweight in underperforming information technology stocks.
- Growth stocks underperformed across the globe as they were disproportionately impacted by a rising discount rate that saw valuations compress. The MSCI World Growth index underperformed the MSCI World Value index by a whopping 24% through the year. One of the few performing sectors was Energy, which rallied strongly off the war-induced oil price spike.
- Rising inflation and central bank hawkishness saw global bond yields jump to multi-year highs – nearly tripling from the lows seen in late 2021, resulting in the worst ever performance for bond indices and meaning there were few places for investors to hide in a balanced portfolio.
- Commodity prices rose 9% (in US\$) over CY22 although this was dominated by energy related commodities. Excluding energy, commodity prices rose a more modest 1.5% albeit with considerable intra-year volatility as early/mid year highs were unwound into a deteriorating industrial demand backdrop

- The rise in the U.S. Dollar was the big currency story of the year, driven by an aggressive US rate hike cycle. The Australian Dollar fell 6.2% against the U.S. Dollar over the year but at its worst point was down more than 1% versus the greenback.

An asset allocator's worst nightmare

CY22 witnessed the rare occurrence of both bonds and equities posting double-digit losses, resulting in the worst performance for balanced portfolios since CY08. Central banks hiked interest rates sharply in an effort to tame high inflation which drove a significant correction in all growth/liquidity driven assets including equities. Rate hikes in response to the highest inflation in decades, rather than from an 'overheating' economy, caused a reversal of the usual equities/bonds relationship (i.e., equity and bond prices being negatively correlated).

A bad year for both equities and bonds



Source: Factset, MWM Research, January 2023

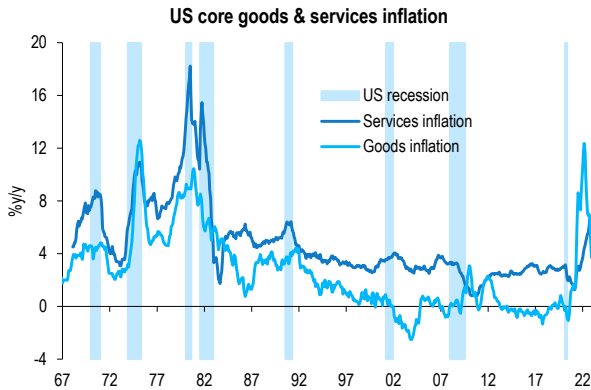
Economic backdrop

Central banks scramble to tame inflation...

The surge in inflation that began in CY21 proved to be higher and stickier than initially anticipated as the war in Ukraine and supply chain disruptions dragged on. This saw central banks caught flat footed, forcing them to raise rates earlier and more sharply than initially anticipated in an

attempt to bring inflation under control. While goods inflation peaked in 1H (as supply chains began to normalise) services inflation kept going up, sparking fears that bringing inflation down would require higher interest rates and a more severe economic slowdown.

Goods inflation subsided but services inflation accelerating

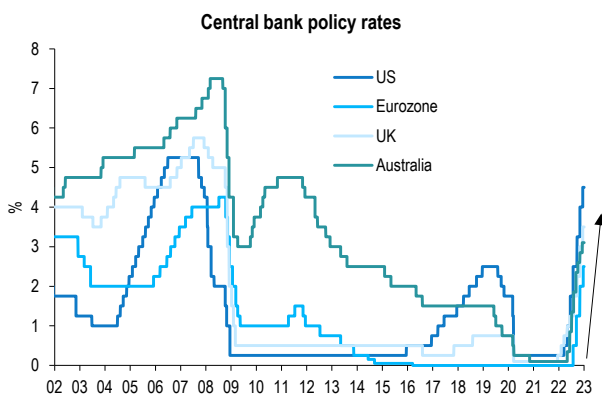


Source: Macquarie Macro Strategy, Bloomberg, January 2023

...with the sharpest rate hike cycle ever...

The biggest spike in inflation in decades prompted central banks to embark on the sharpest ever rate hike cycle. In March the U.S. Federal Reserve lifted rates for the first time since 2015 and by the end of the year had raised rates a cumulative 425 basis points. The Reserve Bank of Australia followed suit in May with its first rate hike since 2010 and by the end of the year had raised rates a cumulative 300 basis points – after previously suggesting rates would not rise for a number of years.

Policy rates rose dramatically around the world



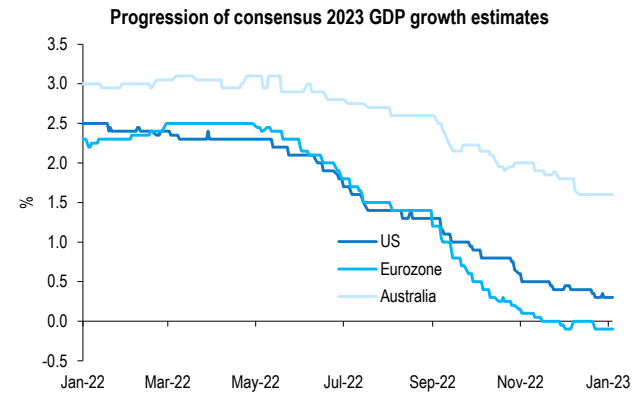
Source: Factset, MWM Research, January 2023

...slowing the economy...

Sharply rising interest rates, as well as the impact of stubbornly high inflation, finally began to slow demand across the global economy. In the US, consumer confidence plunged as high inflation eroded real incomes. A further hit to the global economy came from the Russian

invasion of Ukraine in February, which sparked another sharp rise in energy-related commodity prices and consumer energy bills. By year-end most major economies' manufacturing indicators were signalling contraction.

Economic growth expectations fell precipitously



Source: Factset, MWM Research, January 2023

...to the brink of recession

Markets became increasingly concerned that central banks would raise rates so sharply to fight inflation that the economy would fall into recession – albeit a 'soft' rather than 'hard' landing scenario. Underscoring this was repeated statements by US Federal Reserve Chair Jay Powell that the Fed would do whatever it takes to tame inflation. The bond market appeared to be increasingly pricing in this risk, with the U.S. yield curve inverting (an event that has historically preceded recessions) in April.

China's economy takes a hit from COVID

The Chinese economy was weighed down by the impact of stringent lockdowns stemming from the government's 'zero COVID' policy, which resulted in shutdowns of major manufacturing centres. This resulted in a major property downturn and a liquidity crisis for property developers. However, in November shortly after the 20th Party Congress, China's policymakers made long-awaited policy pivots in both zero-COVID and property, announcing "20 measures" to relax COVID controls and "16 measures" to support the property sector.

Australian economy relatively strong...

Australia's economy grew strongly during the year, outpacing most global peers, aided in part by strong exports and a much more delayed start to the rate hike cycle given the central bank's view that Australia's inflation outlook would be different to other developed economies. The labour market continued to tighten with the unemployment rate reaching a 48-year low of 3.4%.

...but cracks appear...

However, as was the case overseas, inflation rose sharply, hitting 7% per annum as at Q3 - its highest rate since 1990. Cracks also began to appear in the previously red-hot housing market as rising mortgage rates, worsening affordability and deteriorating consumer sentiment took a toll. According to CoreLogic, the national Home Value Index fell 5.3% over CY22, having peaked in May and fallen 8.2% since then. It was the biggest calendar year fall in Australian house prices since 2008.

Market backdrop

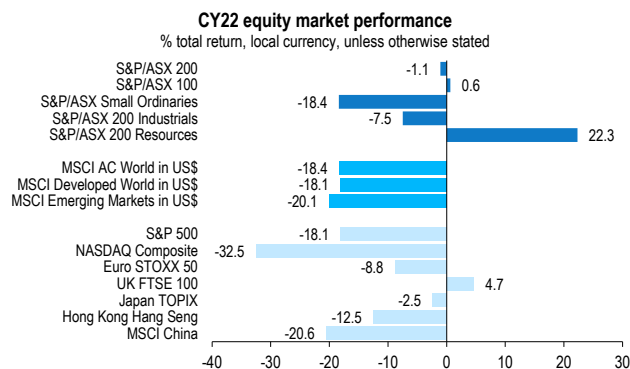
A bad 1H & choppy 2H for global equities

Global equities sold off sharply in the first half of the year, having posted new record highs in early January, posting their worst first half performance since 1970. However, equities managed to eke out a small positive gain in the second half of the year, albeit with great volatility. The S&P500 index at one point was down 25% from its high of early January to its low point in October, putting it firmly in 'bear market' territory.

Most equity markets post negative returns...

Over CY22, global equities posted a total return of -18.4% in US\$ (-12.5% in A\$). Most major markets posted double-digit losses with the UK FTSE 100 (due to its exposure to oil stocks) and Japan TOPIX (due to a falling Yen boosting exporters) notable exceptions. Chinese equities underperformed as its economy was weighed down by COVID lockdowns, with the MSCI China Index down 41% by late October before rallying 35% in November and December on relaxation of lockdowns.

Most equity markets down for the year



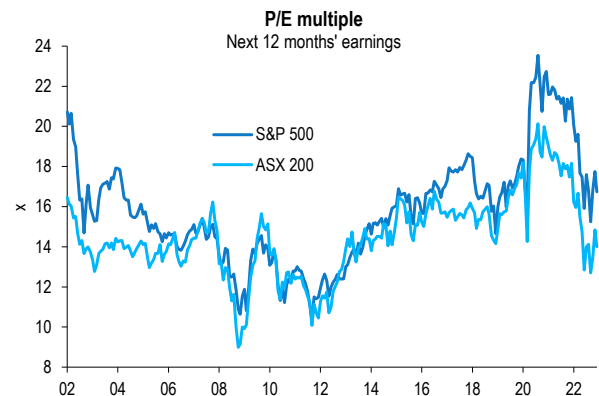
Source: Factset, MWM Research, January 2023

...as valuations come under pressure from rising rates

The overwhelming driver of equity market weakness was falling valuations, which were in turn weighed down by rising bond yields. The S&P500 and ASX200 indices both

saw their forward P/E multiples fall 22% over CY22 (the S&P500 to 17x and the ASX200 to 14x) while forward earnings rose over the same period (+3% for the S&P500 and +20% for the ASX200). Domestically, corporate earnings held up well as the economy remained resilient to initial rate hikes and elevated consumer savings kept consumer demand high.

Big valuation de-rating for equities in CY22

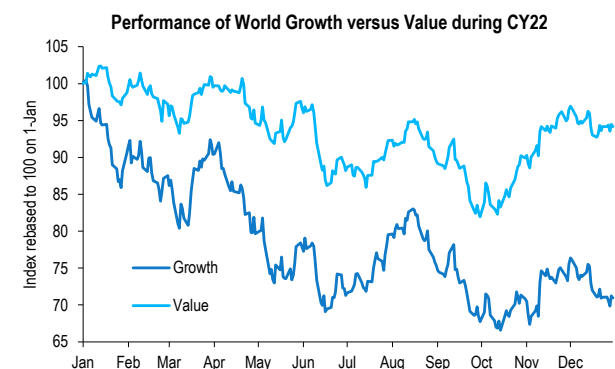


Source: Factset, MWM Research, January 2023

Growth stocks a big victim of rising rates

Growth stocks trading on relatively high valuations were the main victims of rising interest rates as their expected cash flows extend further into the future, making them more vulnerable to increases in the discount rate used to calculate their present value. Global growth stocks underperformed global value stocks by 24% with Australian growth stocks underperforming Australian value stocks by 21%.

Growth stocks a victim of rising rates



Source: Factset, MWM Research, January 2023

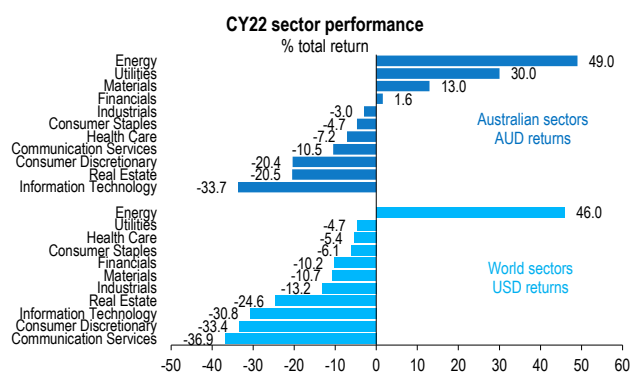
Energy sector the standout

Thematically, defensive sectors generally outperformed cyclical sectors and value stocks generally outperformed growth stocks – aided by cheaper valuations. Energy was the strongest performing sector, benefitting from a rising oil price as the war in Ukraine drove supply-side concerns

(mostly unwound by year-end). Utilities also benefitted to a lesser extent from this theme as clean energy demand pushed gas prices higher.

Information Technology suffered from the de-rating of growth stocks, as did global Communication Services (which contains many online retail growth stocks). Consumer Discretionary underperformed due to rising slowdown fears and the expectation that lockdown-driven demand would begin to normalise as services spending picked up. Real estate was also a major underperformer due to rising interest rates.

Energy the outstanding sector performer



Source: Factset, MWM Research, January 2023

Australian equities outperform

The ASX200 index posted a total return of -1.1%, strongly outperforming global equities’ -18.4% (US\$) return and -12.5% (AUD) return. Australian equities received a boost from resource (particularly energy) stocks (+22.3%) with the ASX200 excluding resources posting a return of -7.5%. Australian small caps (-18.4%) strongly underperformed large caps (+0.6%) as small industrials (-21.8%) underperformed heavily given the preponderance of technology/growth stocks in the index.

In other words, at a broad index level, the Australia market was a large outperformer but at a more micro level Australia also suffered from the same performance trends as global markets, with growth and small caps dramatically underperforming value and large caps.

As was the case overseas, Energy (+49.0%) was the strongest performing sector while Utilities (+30.0%) benefitted from substantial takeover activity among stocks in the sector. Among sub-sectors, insurance (+11.2%) and banks (+5.6%) benefitted from rising interest rates.

The Information Technology sector (-33.7%) was the worst performing sector with its high valuations falling victim to rising interest rates. Consumer Discretionary (-20.4%) suffered as an easing of lockdowns reversed the benefit some of these stocks gained from lockdowns and from a deteriorating backdrop for household consumption given high inflation and a slowing economy.

Best & worst ASX100 performers over CY22

Code	Company name	Sector	Total return
Best performing			
WHC	Whitehaven Coal	Energy	288.8%
WDS	Woodside Energy	Energy	78.6%
ORG	Origin Energy	Utilities	54.9%
WOR	Worley	Energy	46.5%
MIN	Mineral Resources	Materials	40.2%
BHP	BHP Group	Materials	38.0%
AGL	AGL Energy	Utilities	36.0%
CPU	Computershare	Information Technology	34.1%
AMP	AMP	Financials	30.2%
RIO	Rio Tinto	Materials	28.2%
Worst performing			
SGR	Star Entertainment	Consumer Discretionary	-51.9%
JHX	James Hardie Industries	Materials	-51.8%
RWC	Reliance Worldwide	Industrials	-51.1%
XRO	Xero	Information Technology	-50.3%
ARB	ARB Corporation	Consumer Discretionary	-50.1%
SQ2	Block	Information Technology	-47.9%
REH	Reece	Industrials	-46.9%
DMP	Domino's Pizza Enterprises	Consumer Discretionary	-42.6%
CHC	Charter Hall Group	Real Estate	-39.7%
SEK	Seek	Communication Services	-34.9%

Source: Factset, MWM Research, January 2023

Bond yields ratchet up...

Rising inflation and central bank hawkishness saw global bond yields jump to multi-year highs: The U.S. 10-year Treasury yield jumped 237 basis points over CY22 and at one point reached 4.23%, its highest level since 2008. The U.S. 2-year Treasury yield jumped 369 basis points, resulting in a significant flattening of the yield curve. The Australian 10-year government bond yield jumped 238 basis points over CY22 and at one point reached 4.20%, its highest level since 2014.

Bond yields rose sharply in CY22



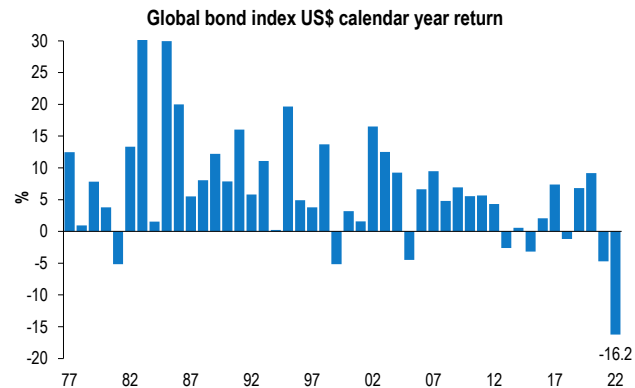
Source: Factset, MWM Research, January 2023

...resulting in a historic bond market rout

The rise in bond yields saw bond indices post their worst returns ever. The Bloomberg Barclays Global Aggregate bond index posted a US\$ total return of -16.2% (-12.3%

AUD hedged) while the Bloomberg AusBond Composite bond index posted a total return of -9.7%.

Bond indices posted historic losses



Source: Bloomberg/Barclays, Factset, MWM Research, January 2023

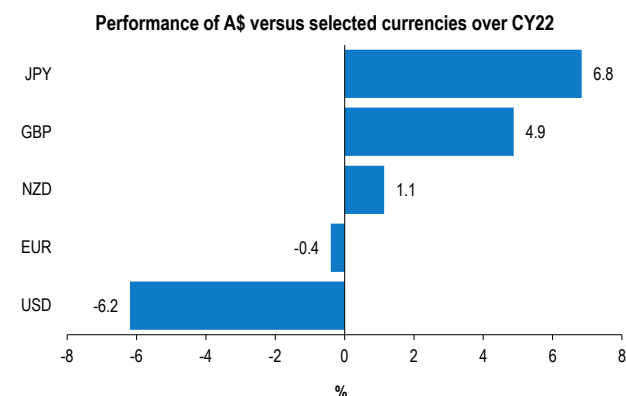
US\$ strength the big currency story

The U.S. Dollar strengthened against most major currencies, driven by expectations of a more aggressive U.S. rate hike cycle, which would make U.S. interest bearing assets relatively more attractive. The U.S. Dollar Index (DXY) in September hit its highest level since 2002.

Conversely the other big currency story was the weakness in the Japanese Yen, which in October hit its lowest level against the U.S. Dollar since 1990, driven by the Bank of Japan’s commitment to low interest rates given Japan’s relatively benign inflation backdrop. However, in December the Bank of Japan shocked markets by widening the band for long-term bond yields from 25 to 50 basis points, sparking speculation of an upcoming tightening of policy.

The Australian Dollar rallied against most major currencies, with the notable exception of the U.S. Dollar, driven by elevated commodity prices.

AUD weakened against the USD



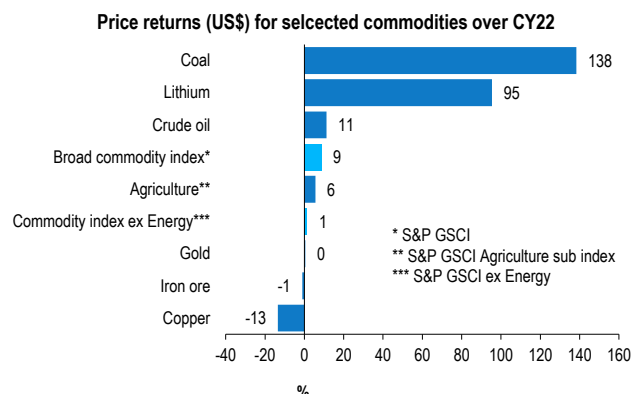
Source: Factset, MWM Research, January 2023

Commodity gains dominated by energy

The broad index of commodity prices rose 9% over CY22 although this was dominated by energy related commodities. Excluding energy, commodity prices rose a more modest 1.5% albeit with considerable intra-year volatility.

- **Coal:** Coal, the top performing commodity of CY22, rallied sharply in the first six months of the year, spiking in late February after Russia invaded Ukraine and Western countries responded with various sanctions against Russian exports, and stayed elevated for the remainder of the year on supply shortages.
- **Lithium:** The lithium price rose 95% as it rode the electric vehicle (EV) ‘revolution’. Demand for electric vehicles, and by extension for lithium used in electric vehicle batteries, rose substantially and is forecast to continue rising given the global move towards ‘decarbonisation’.
- **Oil:** The oil price rose sharply in the first six months of the year, spiking in late February after Russia invaded Ukraine and Western countries responded with various sanctions against Russian exports. However, the oil price fell back over the last six months of the year as a weakening global economy reduced demand.
- **Agriculture:** The prices of key agricultural commodities (such as wheat) spiked sharply in February (but fell back over May to July) after Russia invaded Ukraine given the role of both Russia and Ukraine as major exporters.
- **Gold:** As a traditionally ‘safe-haven’ asset, gold spiked late February after the Russian invasion of Ukraine before steadily falling over most of the year. Despite high inflation, over CY22 gold rose only slightly, weighed down by rising interest rates.
- **Iron ore:** The iron ore price finished the year slightly lower although this masked a 50% peak to trough fall from April to November on weakening demand from China as it struggled with lockdowns and a property downturn.
- **Industrial metals:** Copper, long considered a bellwether for the economy, fell 13% over CY22, as the global economy slowed, and recession risks rose.

Coal & lithium dominated commodity performance

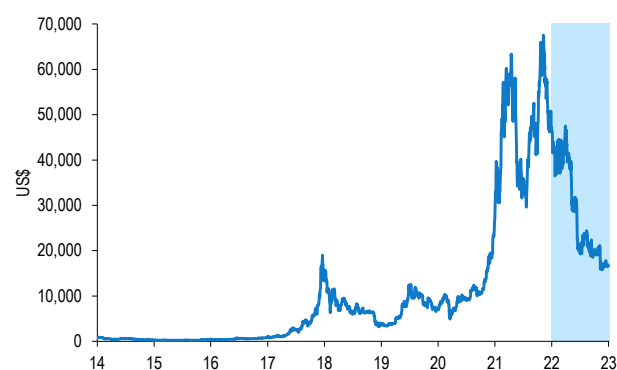


Source: Factset, MWM Research, January 2023

A severe 'crypto winter'

CY22 was a year most cryptocurrency investors would prefer to forget, as the sector fell victim to rising interest rates, rising risk aversion and a growing number of scandals. Cryptocurrency markets were rocked in May by the collapse of a major cryptocurrency – TerraUSD - a 'stablecoin' pegged to the U.S. Dollar but backed by financial algorithms rather than U.S. Dollar assets. Later in the year FTX, a cryptocurrency exchange, collapsed after it couldn't meet customer withdrawals with the founder/CEO being subsequently arrested. Total market capitalisation of all cryptocurrencies fell from US\$2.2 trillion on 1st January to US\$794 billion on 31st December. Bitcoin, the largest cryptocurrency by market capitalisation and best known, fell 64% (in US\$ terms) over CY22.

Bitcoin plunged 64% over CY22



Source: Factset, MWM Research, January 2023

Performance of major asset class indices

	Local currency % return	USD return % return	AUD return % return
Australian Equity Indices			
S&P/ASX 200	-1.1	-7.4	-1.1
International Equity Indices			
MSCI AC World	-16.0	-18.4	-12.5
MSCI Developed World	-16.0	-18.1	-12.2
MSCI Emerging Markets	-15.5	-20.1	-14.3
Country Equity Indices			
S&P 500	-18.1	-18.1	-12.2
NASDAQ Composite	-32.5	-32.5	-27.7
Euro STOXX 50	-8.8	-14.1	-8.2
FTSE 100	4.7	-6.5	-0.4
Japan TOPIX	-2.5	-14.4	-8.7
MSCI AC Asia ex Japan	-15.1	-19.4	-13.5
Hong Kong Hang Seng	-12.5	-12.6	-6.3
MSCI China	-20.6	-21.8	-16.2
Bond Indices			
Bloomberg Barclays Global Aggregate (hedged)	-16.2	-16.2	-12.3
Bloomberg AusBond Composite (0+Y)	-9.7	-15.8	-9.7
Commodities			
S&P GSCI	8.7	8.7	16.6

Source: Factset, MWM Research, January 2023

Macquarie WM Investment Strategy Team

CY22 The year in review was finalised on 9 January 2023.

Recommendation definitions (Macquarie Australia/New Zealand)

Outperform – return >3% in excess of benchmark return

Neutral – return within 3% of benchmark return

Underperform – return >3% below benchmark return

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