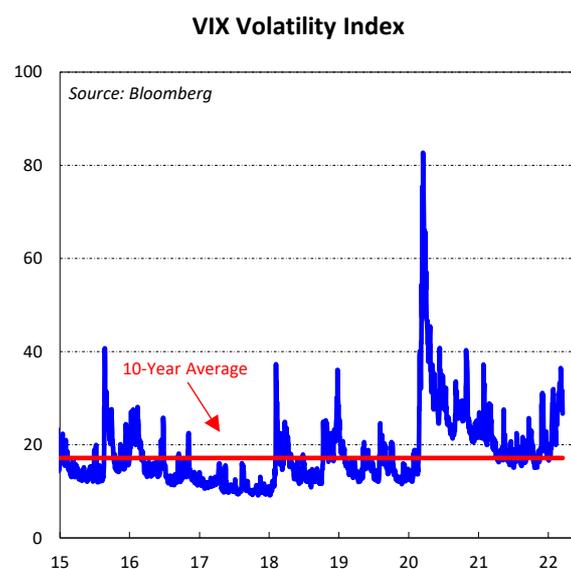
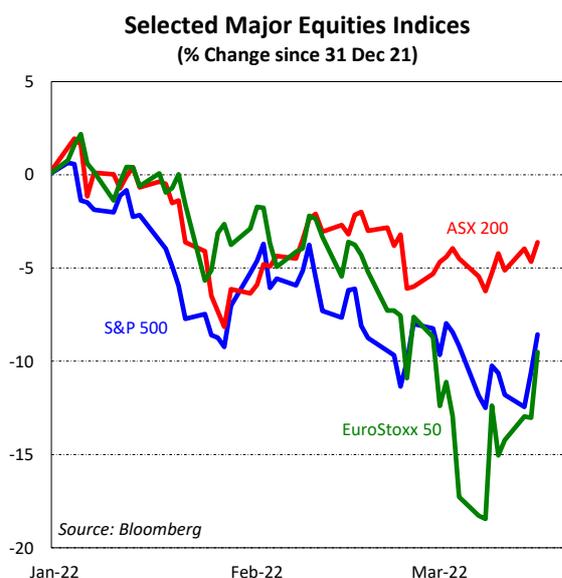


Wednesday, 16 March 2022

Equities, Geopolitics & Rate Hike Cycles

- The start of 2022 has been a tumultuous ride for equity markets, as investors have navigated an array of fresh and existing uncertainties.
- Volatility has been elevated over the start of 2022 and swings in the market have largely landed in the red. Conflict in Ukraine and concerns over inflation, and relatedly the prospect of sharp tightening in monetary policy, have overtaken COVID-19 as the key drivers of equity markets.
- History tells us geopolitical conflicts tend to have a short-lived impact on equity markets. Much depends on the scale, duration, and location of the conflict.
- It is too early to tell whether markets have bottomed out as a result of the Ukraine war, especially when considering the importance of Russia and Ukraine in global commodities trade. A prolonged or more severe conflict will likely dent global growth. And if other countries are dragged into the conflict, it could have more significant implications for share markets and beyond.
- At the same time, concerns have been raised about the implications of higher interest rates for equity markets. A number of central banks around the world have already kicked off their hiking cycle.
- Past interest rate tightening cycles provide little evidence of a clear relationship between the cash rate and equity market performance. Instead, it is likely that changes in the cash rate reflect the underlying conditions driving share market performance, rather than the two being directly linked.



The start of 2022 has been a tumultuous ride for equity markets. Investors have navigated an array of fresh and existing uncertainties, including the Omicron variant, inflation, the prospect of interest rate hikes and most recently, war in Ukraine.

As a result, volatility has been elevated over the start of 2022. This is perhaps best captured by the CBOE VIX volatility index, which has averaged a level of 26.1 over the year to date, compared to 19.7 over 2021. The VIX index represents the expected volatility over the coming 30 days for the S&P 500. However, the swings in the market over the start of the year have largely landed in the red; the S&P 500 index is 10.6% lower over the year to date and the Euro Stoxx 50 is down 13.0%. Domestically, we have experienced a more modest decline in valuations, the S&P/ASX 200 closed down 4.7% over the year on 15 March. The slide in market performance comes despite a generally strong reporting season over the start of the year, as many companies delivered earnings above market expectations.

Although uncertainty surrounding COVID-19 has dominated markets over the past two years, the conflict in Ukraine and concerns of rising interest rates, including tighter central bank policy, have overtaken as the key drivers of equity market sentiment.

This begs the questions, why are these factors effecting equity market performance and should we expect stock markets to grind lower as these factors evolve?

Geopolitical Events

The war in Ukraine is a humanitarian disaster of immense scale, however, the conflict also has considerable implications for financial markets. As we have observed, equity prices across the globe have fallen sharply since Russia invaded and have moved around violently since that time, alongside changes in market sentiment.

One of the direct transmission channels driving market sentiment has been a surge in commodities prices resulting from the conflict. Russia is the world's third largest producer of crude oil and petroleum products and the largest producer of natural gas. While together, Russia and Ukraine account for a large share of global production of wheat, base metals, and precious metals.

Concerns around ongoing supply of commodities produced by Russia and Ukraine have driven a surge in commodities prices – both for commodities in which Russia and Ukraine account for a large share of production and commodities, such as coal, which act as substitutes for the impacted resources. Higher commodity prices are a headwind for growth, pressuring corporate margins and consumer purchasing power, as well as dampening confidence and therefore have negative implications for market sentiment.

However, history tells us that the impact of geopolitical conflict on equity returns is generally short lived and that stock markets tend to rebound quickly. Although, much depends on the scale, duration, and location of the conflict.

This is apparent examining eight major geopolitical events which have occurred since 1939. On average, each event has wiped 16.4% off the US S&P 500 share market. Importantly, it has taken an average of 120 calendar days for the index to unwind these losses. This is shortened to 48 days when removing prolonged conflicts during World War II. Encouragingly, in the aftermath of major geopolitical events the S&P 500 has jumped an average of 9.4% in the 30-days following the market trough.

Geopolitical Event	Date	One-Day Return (%)	Total Drawdown %	Days to Trough*	Days to Recover*	% Return 30-days Post Trough	% Return 10-days pre-event
Nazi Invasion of Czechoslovakia	15 Mar 1939	-2.8	-19.7	28	154	8.3	0.9
Nazi Invasion of France	10 May 1940	-3.0	-38.4	719	400	9.5	0.0
Attack on Pearl Harbour	7 Dec 1941	-3.8	-19.8	143	165	9.5	0.5
North Korea Invasion of South Korea	25 Jun 1950	-5.4	-12.9	23	60	10.0	0.8
Cuban Missile Crisis	16 Oct 1962	-0.3	-6.3	8	10	13.7	0.4
The Tet Offensive	31 Jan 1968	-0.7	-5.6	35	30	7.0	-2.5
Iraq Invasion of Kuwait	2 Aug 1990	-1.1	-16.9	71	119	6.2	-1.7
September 11 Terror Attacks	11 Sep 2001	-4.9	-11.6	11	21	11.1	-3.6
Average		-2.7	-16.4	130	120	9.4	-0.6
Average excl. WWII		-2.5	-10.6	30	48	9.6	-1.3

*Calendar Days

While observing history is a useful exercise, it is also important to acknowledge that, of course, these events do not occur in a vacuum. The macroeconomic backdrop, and monetary and fiscal policy are also important drivers of equity markets. In addition, equity markets have undergone major changes over the period examined, including the rise of algorithmic trading, changing composition and broadening derivatives markets.

It is too early to tell whether markets have bottomed out as a result of the Ukraine war, and much will depend on the duration and scale of the conflict. This is especially true when considering the importance of Russia and Ukraine in global commodities trade. A prolonged or more severe conflict would likely keep commodities prices higher for longer via more significant disruptions to supply, denting global growth. Indeed, the risks around stagflation have grown since the invasion of Ukraine began. Further, if Russia were to escalate the conflict beyond Ukraine, there could be much broader implications for share markets and beyond.

So far, the Australian share market’s reaction to the conflict has broadly mirrored that of the US. However, The S&P/ASX 200 index has outperformed a number of major share market indices. This partly reflects compositional factors – the resources sector accounts for a sizeable share of the index and has been boosted by the jump in commodity prices. Australia is also relatively more sheltered against the impacts of the war due to its geographical location and limited direct trading ties with Russia and Ukraine, which collectively account for less than 1% of our exports.

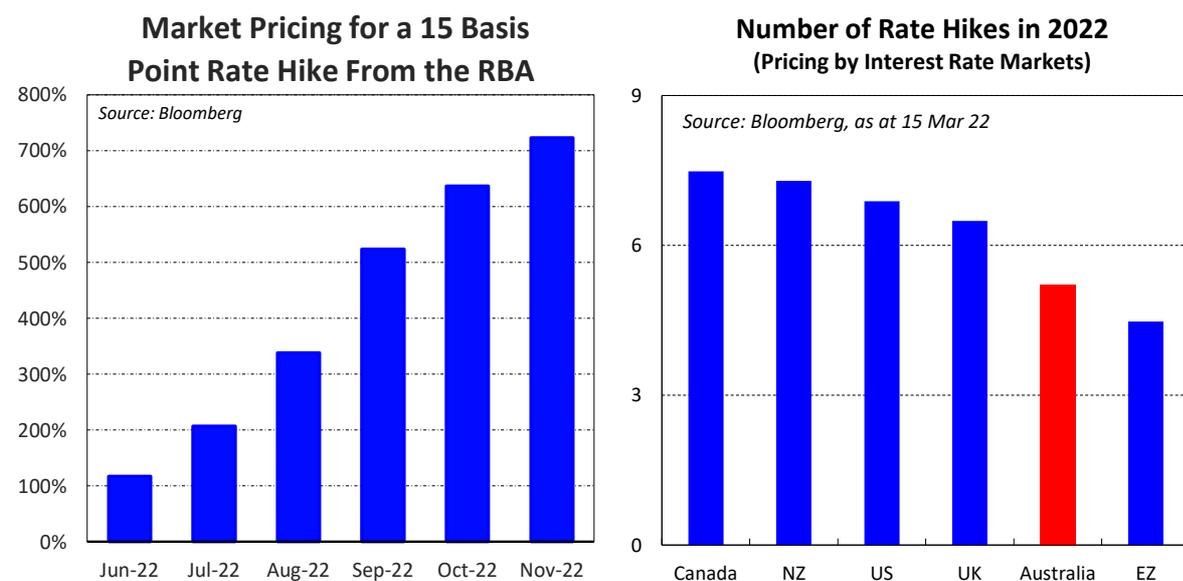
Rising Inflation and Interest Rate Expectations

While the longer-term implications of the Ukraine war on stock market valuations is uncertain, the reality of rising interest rates is sure to continue to drive market sentiment over 2022, even after the effects of the war have abated.

Inflation picked up markedly across the global economy over 2021 and into 2022. Supply-chain disruptions were prevalent, and remain so, as rebounding demand intersected with constrained supply. Labour markets also tightened considerably, and wage pressures are building to varying degrees across the globe.

The conflict in Ukraine has added another layer of uncertainty, driving higher inflation through surging commodities prices and further supply difficulties, while constraining global growth at a time when central banks are under pressure to rein in inflation.

As a result, expectations of the likely timing and path of global interest rate rises have been brought forward, and Australia is no exception.



Although Australia has experienced relatively weaker inflation compared to its counterparts in the US, UK, NZ and Canada, the Reserve Bank (RBA) Governor recently conceded that it is plausible for the cash rate to

increase in 2022. This is a far cry from only four months earlier, when the Governor reiterated that their central case scenario was that interest rates wouldn't increase until 2024. However, the Australian economy has performed much better than the RBA expected over the pandemic. Inflation has now entered the top half of the RBA's target band for the first time in more than seven years and is expected to remain at or above that level over 2022 and beyond.

Markets have persistently challenged the RBA's guidance on rate hikes – anticipating an earlier move – over concerns inflation would run hotter than the central bank expected. Rate hike expectations have been pared back slightly following the conflict in Ukraine, however, markets are still pricing an aggressive interest rate profile from the RBA. Indeed, markets are fully pricing five rate hikes from the RBA this year, which would take the cash rate to 1.25% by the end of 2022.

Equity market performance has suffered, partly due to expectations of a faster tightening of monetary policy. Indeed, in January, the S&P/ASX 200 index shed 6.4% largely driven by concerns of interest rate hikes in the US. This is the largest monthly fall in the ASX 200 index since March 2020, following the outbreak of COVID-19.

The question which remains is why are growing inflation expectations paring equity valuations? And can we expect a prolonged period of equity market underperformance, as we approach an interest rate tightening cycle for the first time in more than a decade?

The Theory

The value of a company, and therefore its shares, reflects the sum of its future cash flows, discounted to today by a discount rate. That discount rate is a combination of the risk-free interest rate, plus a risk premium.

Therefore, when thinking about how interest rates impact the value of a company, it can be possible to draw a conclusion that increases in interest rates would place downward pressure on equity valuations. This would happen through a higher discount rate.

Indeed, some hold the view that equity valuations and interest rates have an inverse relationship, and therefore, equities are expected to perform poorly in a rising interest rate environment.

However, this simple idea doesn't necessarily reflect reality.

The problem is that it does not account for changes in the size and timing of future cash flows, or changes in the risk premium. These factors are also sensitive to the underlying economic conditions driving changes in the cash rate, among many other variables.

In reality, equity valuations are considerably more complex. For example, the underlying economic conditions which may induce a rise in interest rates, including low unemployment, strong demand, and inflation, are also likely to change a company's earnings profile and therefore, its valuation. This example is not unique and there is a myriad of other factors which blur the relationship between interest rates and equity valuations. And as you would expect, these factors vary across companies and industries, and as such are difficult to quantify.

Therefore, higher interest rates alone do not necessarily mean lower equity returns.

In Practice

Australia has experienced four rate hike cycles over the past 30 years and over each cycle the performance of equity markets has been mixed. This is complicated by the fact that markets usually anticipate and price in, with varying success, rate hikes before they take place.

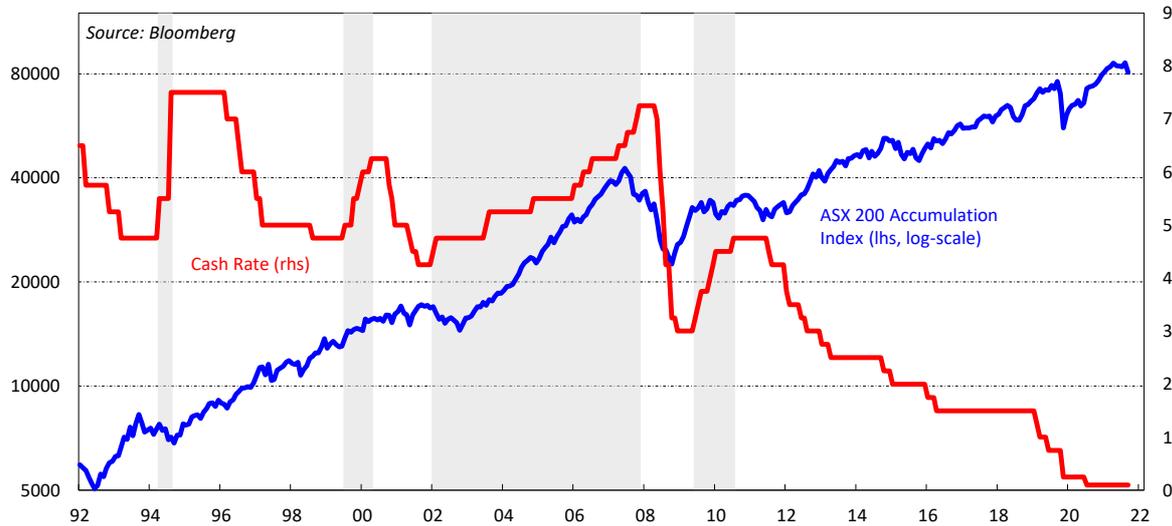
However, the ASX 200 has only declined over one of these four rate hike cycles. This was between August and December 1994, where the cash rate increased 200 basis points to 7.50%. Over that time the ASX 200 Accumulation Index (which includes returns from both dividends and capital gains/losses) declined 7.0%.

A summary of the ASX 200 share market performance over previous rate hike cycles is summarised below:

Cycle Start	Cycle End	Cash Rate Range	Cash Rate Change	# of Hikes	ASX 200 Index (%)	ASX 200 Accumulation Index (%)
17 Aug 1994	14 Dec 1994	5.50% - 7.50%	2.00	2	-9.6	-7.0
02 Nov 1999	01 Aug 2000	5.00% - 6.25%	1.25	5	14.2	16.3
07 May 2002	04 Mar 2008	4.50% - 7.25%	2.75	12	61.8	106.1
06 Oct 2009	02 Nov 2010	3.25% - 4.75%	1.50	7	2.4	4.8

From looking at these returns alone, there doesn't appear to be a clearly discernible relationship between equity performance and rate hike cycles.

Australian Share Market and Policy Cycles



These trends add weight to the idea that equity market performance is driven by actual and expected underlying economic conditions. Indeed, it is likely that changes in the cash rate reflect the same underlying economic conditions driving share market performance, rather than the two being directly linked.

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