SIGNIA INVEST

SIGNIA INVEST INSIGHTS

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Considering the case for a goldilocks moment

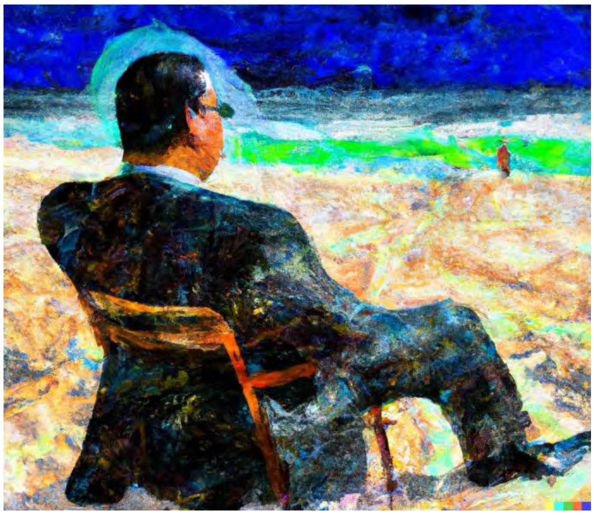
"The growth of the Internet will slow drastically, as the flaw in 'Metcalfe's law' becomes apparent: most people have nothing to say to each other! By 2005, it will become clear that the Internet's impact on the economy has been no greater than the fax machine's."
Paul Krugman, 1998

SUMMARY

- The worst year for a typical balanced investor on record ends on a low note in terms of sentiment.
- Current one-way consensus points us to another, contrarian outcome: A goldilocks moment in 2023.
- Inflation is bound to fall drastically this year, reducing pressure on markets and the economy.
- Valuations have largely adjusted to a new normal whilst economies are still robust, putting a floor under markets for now.
- Although the earnings outlook is fraught with risks, equities and bonds tend to do well in a disinflationary environment.

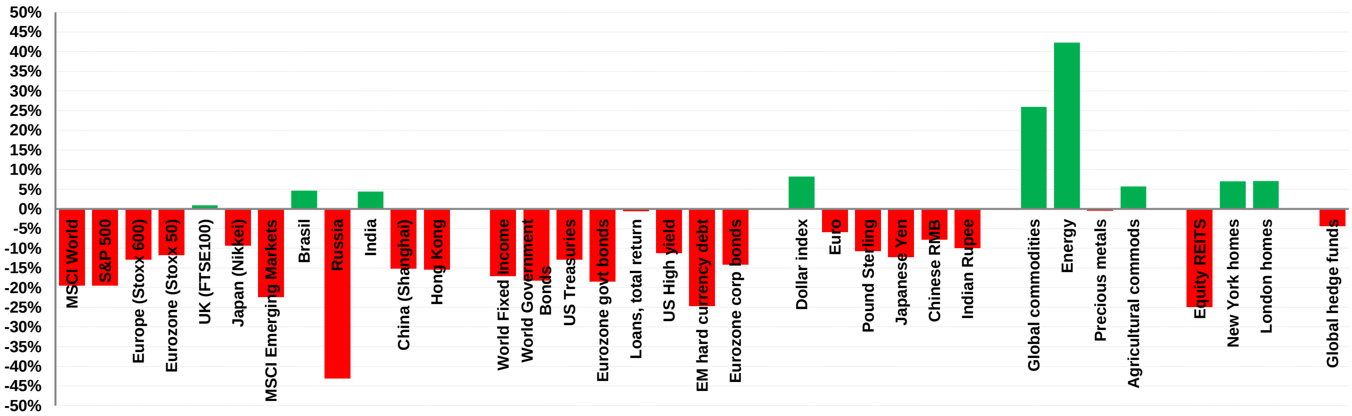
Happy New Year!

2022 was one of the more eventful years in markets and one where tremendous opportunities for active investors began to resurface again. It demonstrated that valuations do matter and an abundance of liquidity does not in itself make a strong investment case.
We feel vindicated in that imbalances in markets we are usually concerned about normalised quickly. A reasonable cost of capital has been re-established as an adequate risk-free rate is available again to investors from which to evaluate all other investment opportunities. Despite all the negativity around us about the immediate outlook for economies and markets, I consider this to be great news for fundamental investors and look forward to an exciting 2023.



DALL-E: "The CIO sitting on the beach thinking about the opportunities in the stock market expressionist style"

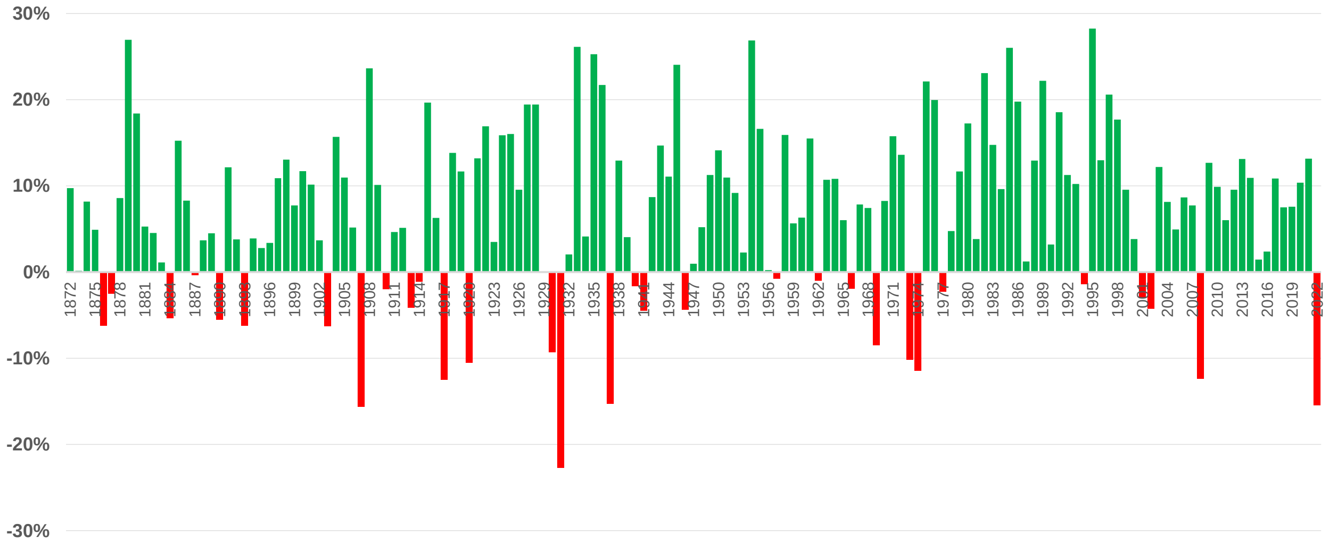
Exhibit 1: Performance of different asset classes in 2022



Source: Bloomberg Finance L.P., Arbion Ltd.

Last year, financial markets delivered the worst returns in decades for a typical balanced investor. The average total return from US equity and government bond markets was -15%, the worst since 1931, recorded in the middle of the Great Depression.

Exhibit 2: Average performance of US equities and government bonds since 1872



Sources: Jordà-Schularick-Taylor Macrohistory Database, Arbion Ltd.

There were not many places to hide. Interestingly, UK equities were amongst the few markets globally finishing in positive territory at +0.9% for the large cap FTSE100 index. Energy stocks rallied almost 50% last year and are primarily responsible for the positive index outcome. In contrast, the main index's smaller sibling, the more representative FTSE250, was down nearly 20% over the same timeframe. Whilst performance across developed markets was relatively uniform, dispersion within emerging markets was large. Whilst India and Brazil posted a >4% positive performance in 2022, Hong Kong was down 15% and South Korea lost 25%.

As discussed throughout last year, the real culprit for poor performance in 2022 was fixed income, where losses were on par with equities, something not seen in a long while – and thus not providing any diversification benefit during a risk-off period in equities. US government bonds incurred the worst performance on record, i.e. at least since 1872! The FTSE WorldBig global bond index lost more than 17% last year and emerging market hard-currency indices shed nearly 25%. No meaningful area within fixed income made money in 2022.

This is largely the result of a normalisation of monetary conditions, moving away from an over-indulgence on extremely low and even negative interest rates for many years following the great financial crisis. As these effects are now about to be washed out, one can reasonably expect some smoother waters going forward.

2022 was another year of dollar strength, which is not surprising considering the hawkish rate policies of the Fed. The dollar index gained 8.2% as EUR, GBP and JPY lost 5.8%, 10.7% and 12.2%, respectively. Only certain emerging market currencies outperformed the dollar; especially the Brazilian real and the Mexican peso.

Rising energy prices stoked inflation during 2022 and this asset class was indeed the only area that performed well. Global commodities rose by 26%, following a 40% performance in the year prior. The cyclical nature of this market and current trends would indicate to us that positive performance will be a lot harder to achieve across commodities in 2023.

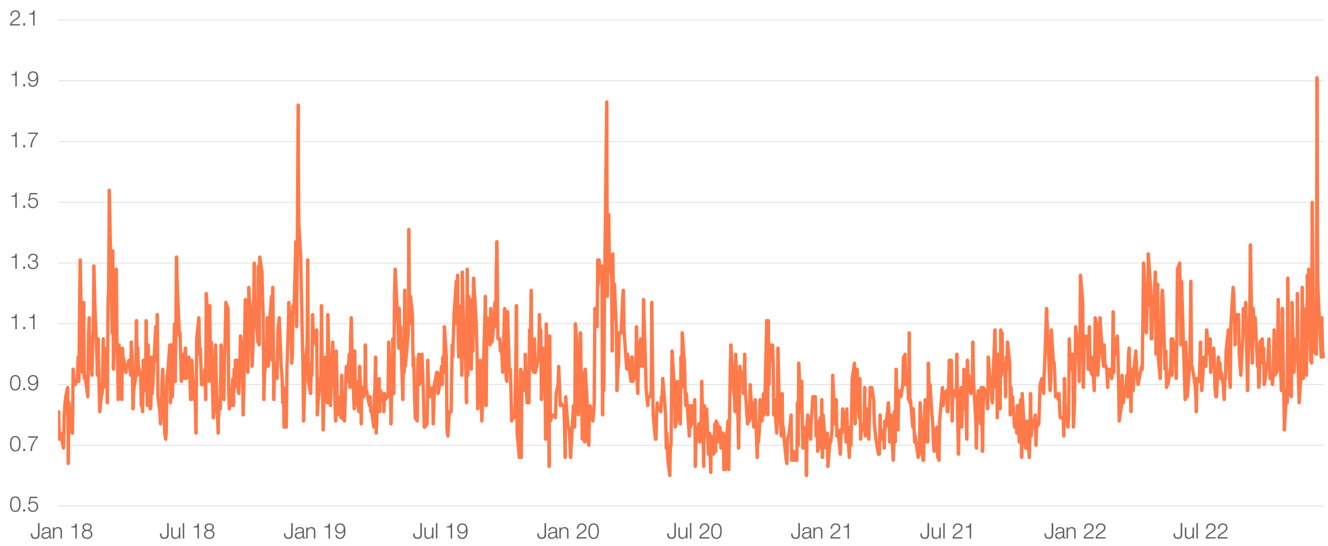
No doubt, 2022 was a challenging year on many fronts. As a result, going into 2023, sentiment amongst investors, consumers and corporate managers is poor. There are a variety of concerns making the bigger picture more difficult to decipher. Unlike previous shocks such as the 2008 financial crisis or the 2001 dotcom bubble and subsequent 9/11 events, this time around we have to deal with more layers of complexity and have to consider several more lagged effects that make a comprehensive analysis of the current situation and forecasts of potential medium-term outcomes all the more challenging.

In a nutshell, what we are currently experiencing are the effects of a combination of previous demand and supply shocks due to the global pandemic, exacerbated by monetary and fiscal stimuli provided to alleviate some of the negative effects of these shocks (collapse in demand) but creating some other negative side effects in turn (delayed demand response and inflation) in addition to central banks trying to address one of the negative side effects (inflation) whilst trying to make sure it does not cause damage to another important variable (employment). All these various parameters impact an economy in different ways, have different response functions and create second-round effects.

As always, it is impossible to know what the future holds but, in our business, it pays to use different scenarios and be very open-minded to all potential outcomes. This includes considering the positive and negative extremes but also the many shades of grey in between. Of course, this approach does not lend itself to spectacular proclamations about a certain dramatic outcome but it has been a helpful tool to navigate choppy waters in the past. Primarily it helps us avoid getting sucked into a prevailing consensus thought bubble.

What strikes me today is the broad negativity over the global economy and the outlook for financial markets. It is not the deep negative sentiment one would typically find in the midst of a market correction but a subtler and more all-encompassing version of a gloomy outlook that ignores every positive signal around it. In that, it eerily reminds me of the post GFC years, considered the most hated bull market ever. The recent record spike in put options traded compared to call options highlights the desire of investors to hedge, in other words an underlying bearish disposition.

Exhibit 3: US put/call ratio at the CBOE (Chicago Board Options Exchange)

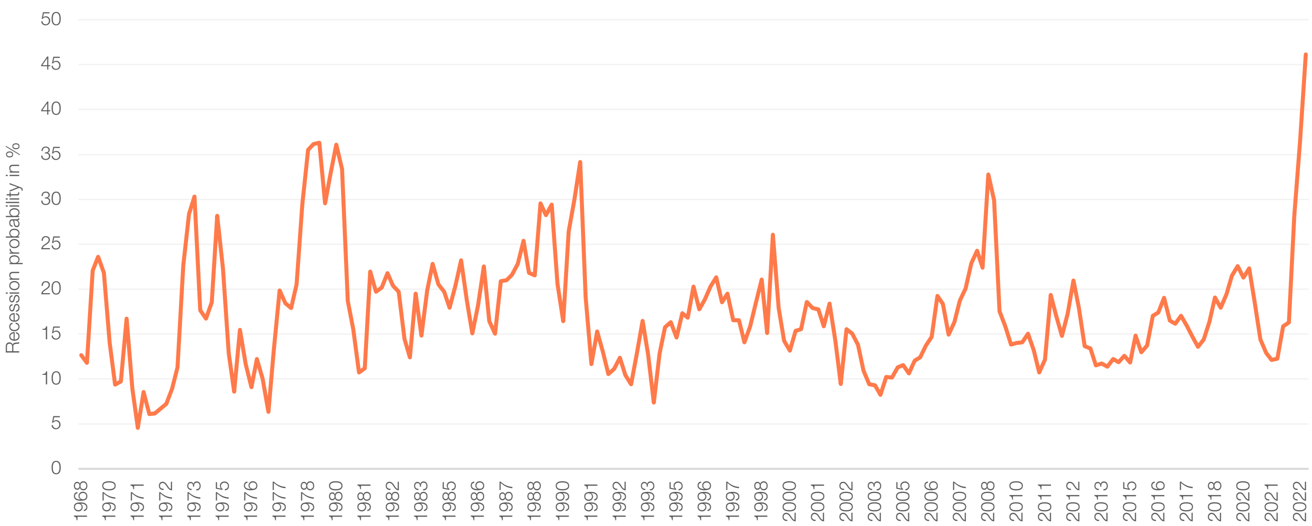


Sources: Bloomberg Finance L.P., Arbion Ltd.

Glancing over market outlooks and reading other financial commentary one cannot help but wonder whether the near-universal assumption of a recession hitting the world in the second half of this year is just another result of comfortable group think.

Of the eight recessions some of us have experienced over the past 54 years, not a single one was forecasted collectively by economists one year in advance. In this light, the results of the Philly Fed survey of professional forecasters are all the more striking in their confidence. The key result of the latest survey is that the probability of a recession in a year is the highest since 1968, which is a neat statistical confirmation for what I usually call the most anticipated recession ever. Needless to say, this does not increase the odds of such an event happening and rather enforces my somewhat contrarian disposition at this stage.

Exhibit 4: Probability of a recession (quarter-over-quarter chain-weighted real GDP growth of less than zero) in four quarters' time according to the Survey of Professional Forecasters by the Federal Reserve Bank Philadelphia



Sources: Federal Reserve Bank Philadelphia

This is not to say that many data points wouldn't indicate the high likelihood of such an outcome, but it is also fair to assume that this is to some extent, priced in already. I am also very mindful that the particular complexity of the current situation has triggered many surprising outcomes over the last two years that almost no one foresaw.

The difficulty lies not only in predicting an event (which is an impossible and moot undertaking) but also forecasting the market's reaction to that event. Who would have deducted from the invasion of Ukraine and subsequent sanctions that the Russian ruble would strengthen or that oil prices would decline year-on-year?

Hence, it is worthwhile thinking about what consensus might be missing and what could therefore have a higher than random chance of happening.

Probably one of the more unexpected outcomes would involve the assumption of a near-goldilocks environment for investors. This would typically include:

1) **declining inflation**,
2) **robust economic growth**
3) **easing financial conditions**,
4) **low unemployment** and
5) capital market **valuations that appear attractive**.

Interestingly, despite the near-term challenges, one can potentially make a case that over the course of this year, many of the mentioned parameters could neatly fall into place and create such a goldilocks moment. I say 'moment' as at this stage, it might just be that – a passing stage on the way to a somewhat different outcome.

Starting with inflation, a topic that still sits prominently in everyone's mind. However, inflation angst is currently more based on sentiment than hard data. It is true, we encounter some eyewatering price rises on a daily basis, from grocery shopping to the latest utility bills. This fuels fear and impacts sentiment but ignores what is happening in spot markets where many prices have been correcting dramatically and are largely back to pre-invasion levels.

Exhibit 5: Prices of key commodities from their 2022 peak and year-on-year

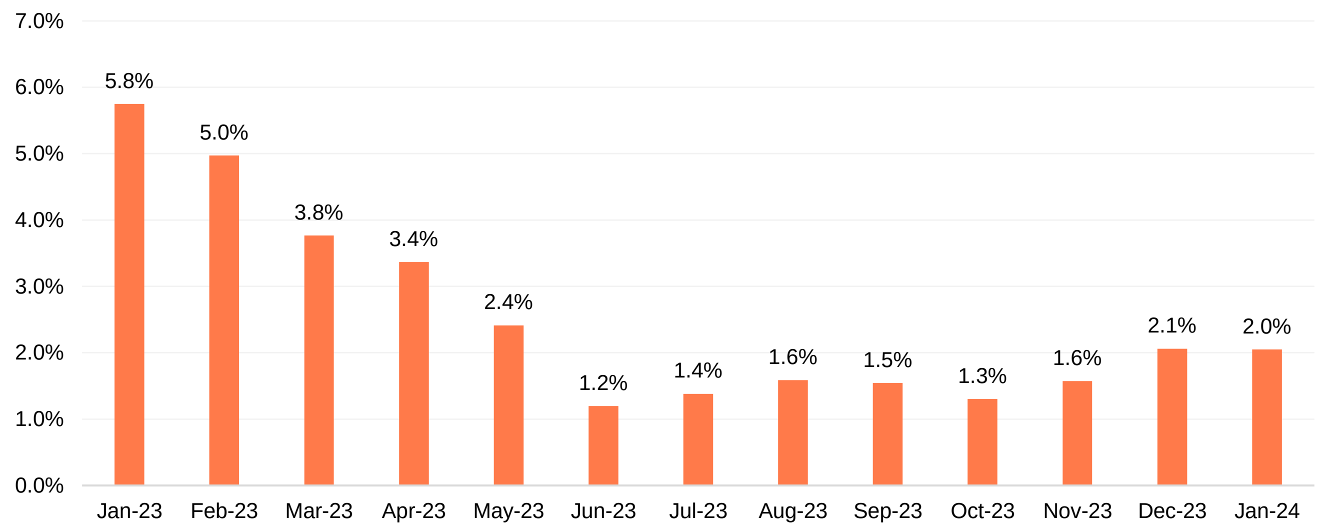
Commodity	From 2022 peak	Year-on-year (9th Jan 2023)
Dutch one-month forward gas price	-74%	-17%
Crude oil	-39%	-4%
Copper	-19%	-9%
Wheat	-48%	-3%
Day-ahead electricity Germany	-81%	-52%

Sources: Bloomberg Finance L.P., Arbion Ltd.

However, even stripping out the more volatile elements (food and energy) could leave core inflation measures elevated for some time and there is a risk that stickier components such as shelter remain supported by continued robust wage inflation. Overall, many of the more dramatic effects of last year are unlikely to recur. 2022 was dominated by inflationary spikes induced by exploding energy prices which prompted an aggressive central bank response.

The expected disinflationary base effect will increase over the next few months as we start comparing current spot prices with the extreme levels of late spring of last year, immediately after the Russian invasion of Ukraine. Rightly or wrongly, the market-implied expectation for CPI inflation in 2023 is closer to 2%, down from 6% only six months ago. Arithmetically, unless we experience some sudden price shocks along the way, this would lead to reported CPI inflation declining quickly to just over 1% in June from current levels of over 7%.

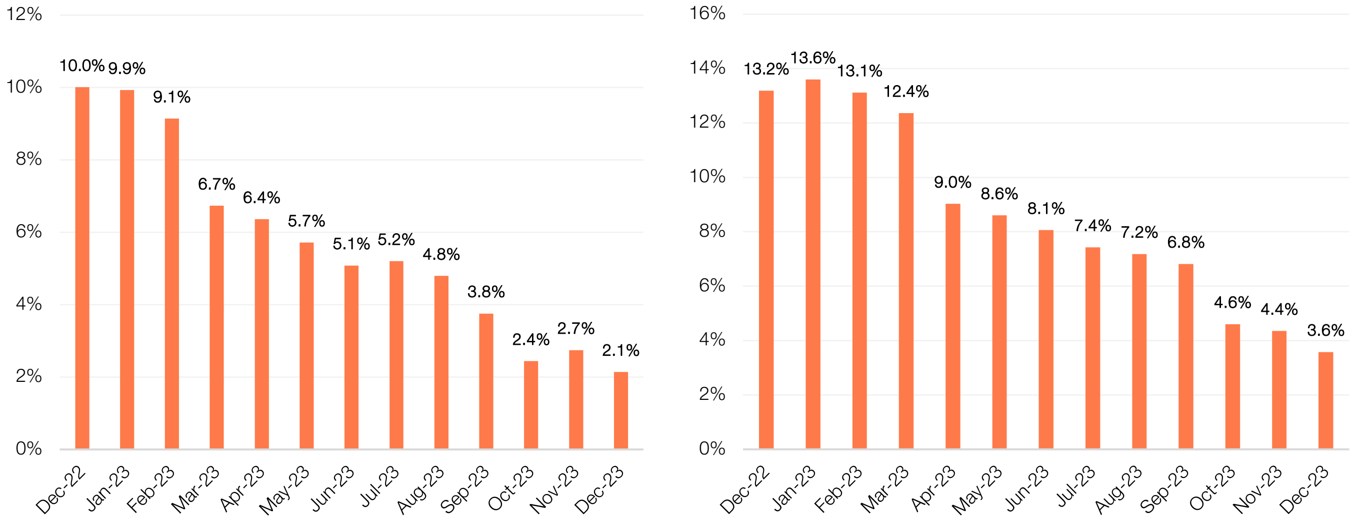
Exhibit 6: Flight path for inflation in the US (monthly market-implied y-o-y US CPI change)



Sources: Bloomberg Finance L.P., Arbion Ltd.

Similar to the US, consumer price inflation in the eurozone and the UK are also expected to decline rapidly over the next few months. The expected fall is the sharpest in Europe where high energy-induced base effects are forecasted to bring inflation down to nearly 2% from over 10% at present.

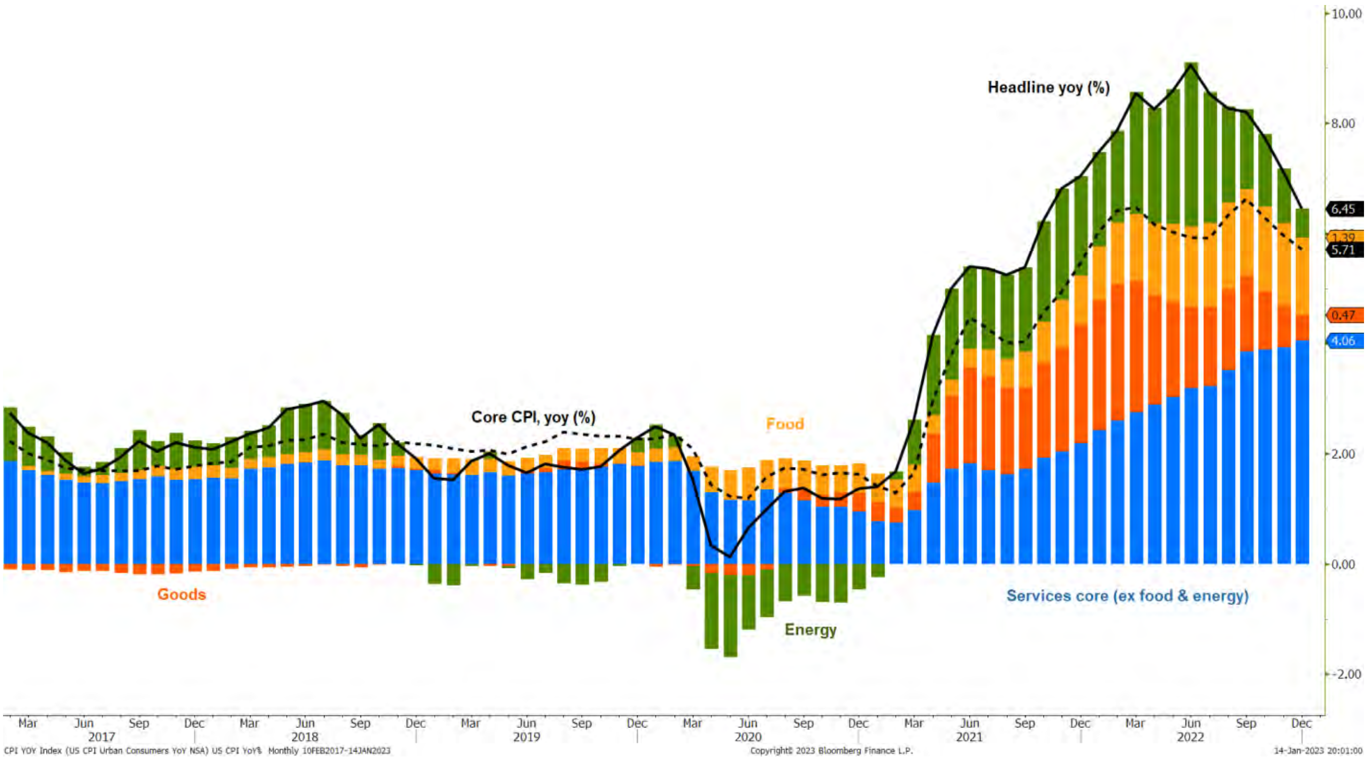
Exhibit 7: Path for inflation in the eurozone (HICP, lhs) and the UK (UK RPI, rhs), monthly market-implied y-o-y



Sources: Bloomberg Finance L.P., Arbion Ltd.

December inflation figures for the US have just confirmed this broader disinflationary trend. Headline CPI came in at 6.5%, down 0.1% compared to November. Core inflation climbed 0.3% month-on-month however is slowing down. The majority of index components are slowing compared to their six-month average, leaving only core services as a source of sticky inflation. Core goods prices are in deflationary mode as second hand car prices, for instance, deducted 0.12% from core CPI.

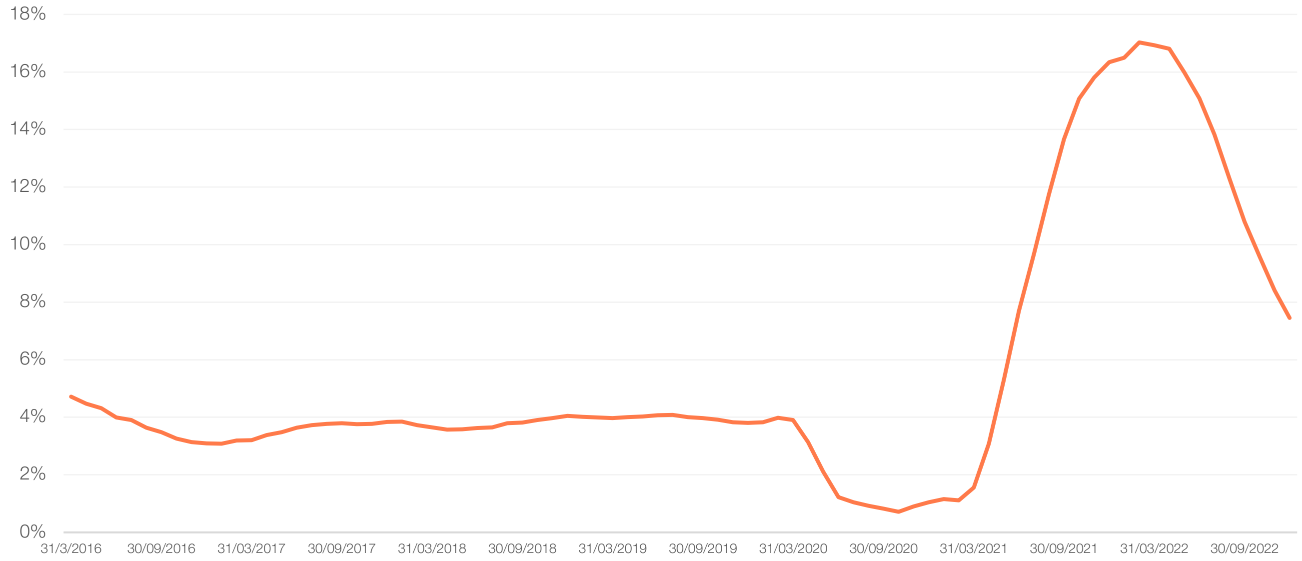
Exhibit 8: US CPI components, monthly year-on-year since 2017



Sources: Bloomberg Finance L.P.

On the stickier end of inflation, services contributed 0.4% to core CPI of which the largest contributor is shelter at 80%. Shelter inflation is a slow-moving component but there is evidence that rent inflation is coming under pressure which should also help put a lid on service inflation as a whole over the medium term.

Exhibit 9: Zillow US observed rent index US, change year-over-year, since 2016

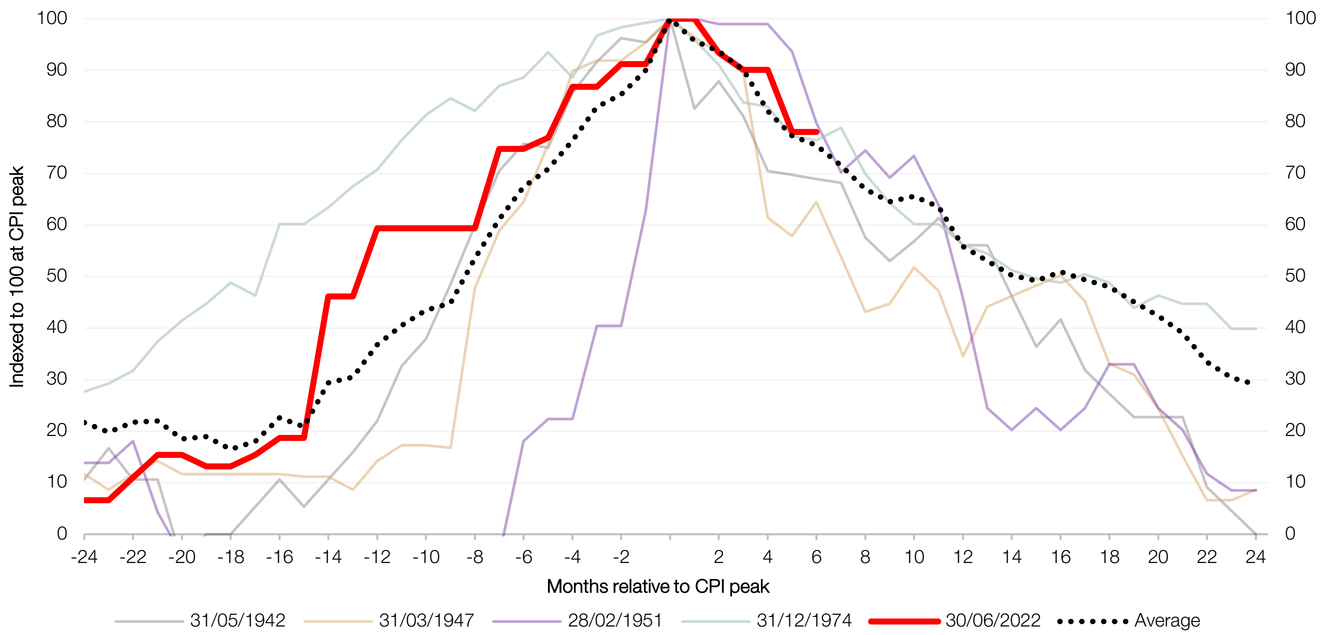


Sources: Zillow

From a headline perspective, the downside trajectory and disinflationary momentum is positive for risk assets but also good news for governments and central banks that would be under less pressure to deal with the cost-of-living crisis.

From an empirical perspective, history is on our side. Over the last major inflationary cycles since 1940, CPI inflation followed a relatively symmetrical pattern: a steep increase followed by an equally rapid decline. The whole process typically lasted around four years from start to finish and involved CPI falling by around 80% from its peak value within two years of peaking. Assuming that the June 2022 CPI print was the top of US CPI, the current cycle appears to be following the average pattern rather accurately.

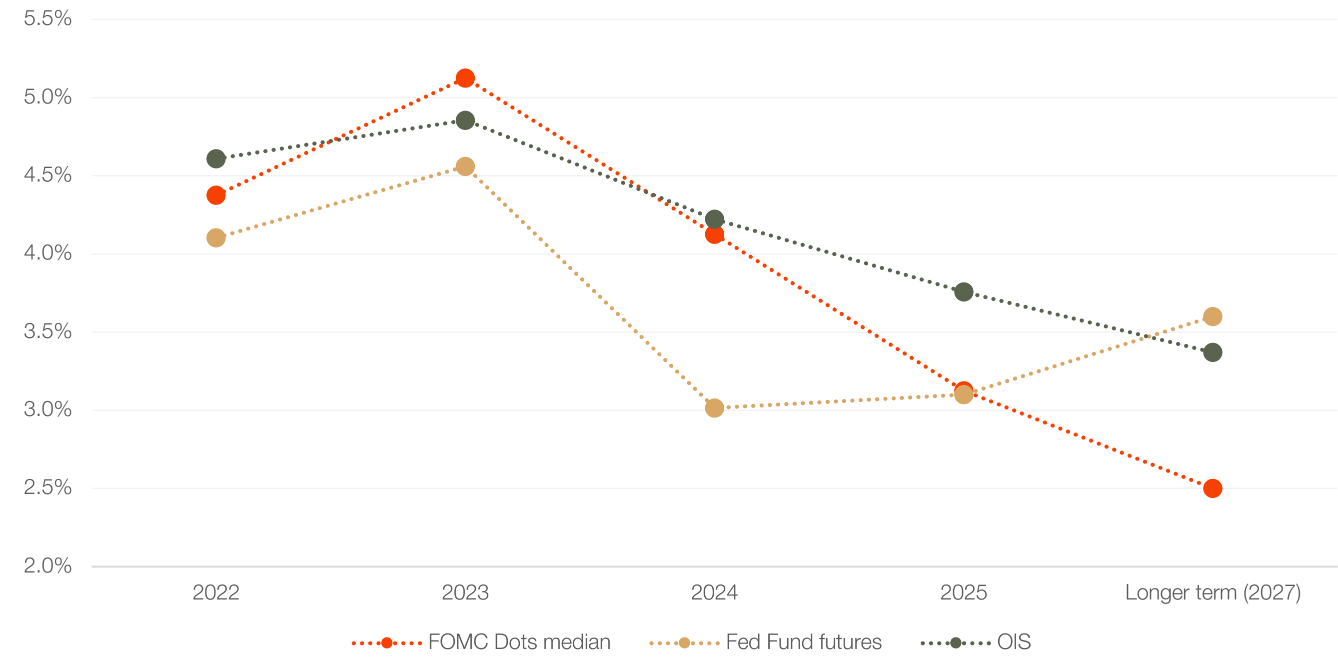
Exhibit 10: US consumer price inflation 24 months before and after peaking out for the cycle over the past five major inflation cycles since 1940 (in percent from peak inflation)



Sources: Bloomberg Finance L.P., Arbion Ltd.

How would this compare with current monetary policy? At this point, most central banks approach forward guidance and public communication from a hawkish angle. Projecting an image of tight monetary policy is as important as raising rates itself. From an investor point of view, the correct response to that would be to 'watch what they do, not what they say'. Provided that key measures of core inflation will begin to follow the trajectory of headline inflation, this would imply that the Fed and others could be in a position to stop hiking rates before the summer. In the US, this could be the case around a Fed Fund rate of 5% (0.5% higher from current 4.5%), ~4% in terms of the UK base rate and ~3% for the eurozone. To be clear: this does not necessarily mean that rates will be cut (the common view of what the 'Fed pivot' entails) - more likely is an extended period of elevated rates.

Exhibit 11: Fed dot plot projections, USD OIS swap rates and Fed Fund futures implied values for US policy rates

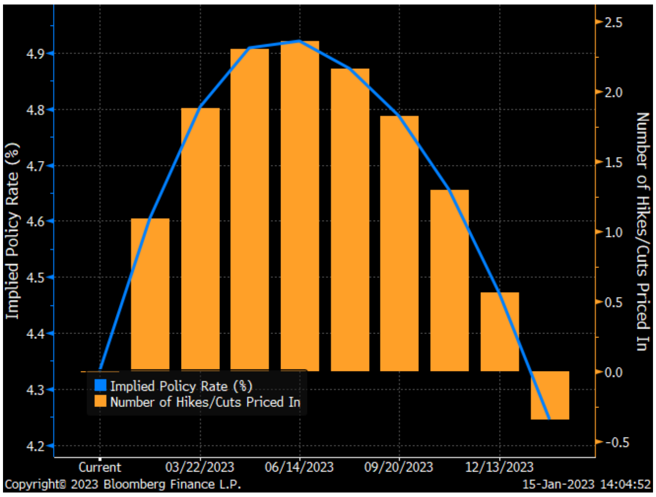


Sources: Bloomberg Finance L.P., Arbion Ltd.

Financial markets are currently anticipating that interest rates will be cut soon after the last rate hike is implemented. Even the Fed's dot plots - projections for the Federal funds rate by the Fed's voting members - imply a strong reversal of currently tight monetary policies.

The recent more positive inflation numbers have now led the market to assume that the Fed might only increase rates by 0.25% in their February meeting and approximately one more hike before the terminal rate is reached.

Exhibit 12: Market-implied assumptions for Fed rate hikes throughout 2023

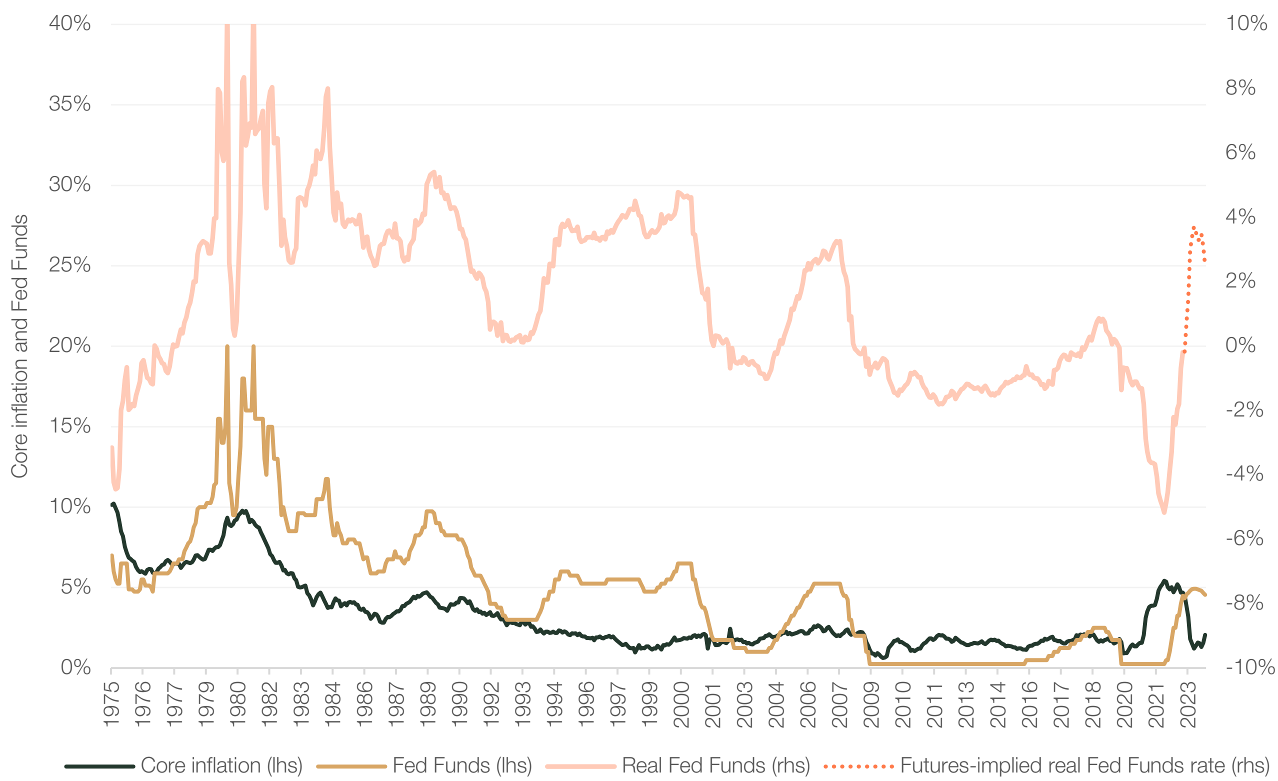


Sources: Bloomberg Finance L.P.

This extreme pivot is the one point I have some difficulties agreeing with. Despite the disinflationary base effects impacting CPI levels this year, there is an undeniable risk that inflation will stabilise at levels higher than those experienced before the pandemic. Assuming that we settle around 2.5% to 3% CPI in the US for the longer term and assuming further that a more normal relationship between inflation and base rates will be re-established (i.e. policy rates being ~1% above inflation); this would imply that Fed Funds could drop back to around 3.5% to 4% over the longer term, still a meaningful decline but less than currently anticipated. I also believe that the willingness of central banks to implement very dovish policies is now rather limited after the backlash that was caused by the cost-of-living crisis.

The chart below plots US core PCE inflation versus Fed Funds and real Fed Fund rates. Should inflation and US central bank rates follow the currently anticipated path of declines over the next quarters, real rates could soon reach and even exceed their 1% average level observed since 1975. This means, we have relatively swiftly returned to a normal relationship between rates and inflation as observed pre the 2008 financial crisis.

Exhibit 13: Core inflation, Fed Funds and real Fed Fund rates since 1975



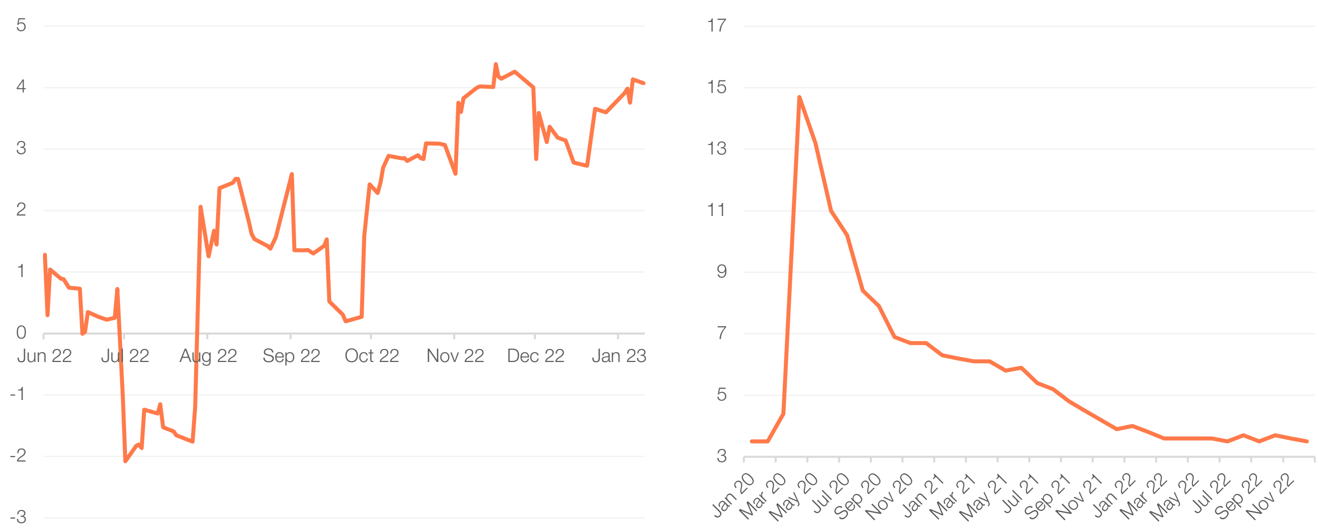
Sources: Bloomberg Finance L.P., Arbion Ltd.

When we just look at the period from 1975 to 2007, excluding the measures implemented in 2008 and beyond, we find that real Fed Fund rates measured as the prevailing policy rates less core inflation have been positive 84% of the time, averaging 2.6%. The post GFC era materially dampened these figures but I think we are returning to a more traditional relationship going forward that can provide savers and investors a positive real risk-free return. The market forecasts real rates to reach the level observed during the peak of the 2004-2006 tightening cycle.

Moving on to the real economy: as inflation issues are beginning to moderate and pressure on real income growth for consumers is receding, helped by continued wage growth, strains on the economy are rather muted at the moment. Whilst certain industries are under pressure, others are doing well, supported by relatively healthy consumer balance sheets.

Taking into account real-time economic data, the GDPNow tracker is currently forecasting a robust 4% growth for US GDP in the fourth quarter 2022, the highest level since the summer. Similarly, unemployment in the US has reached the lowest point for this cycle.

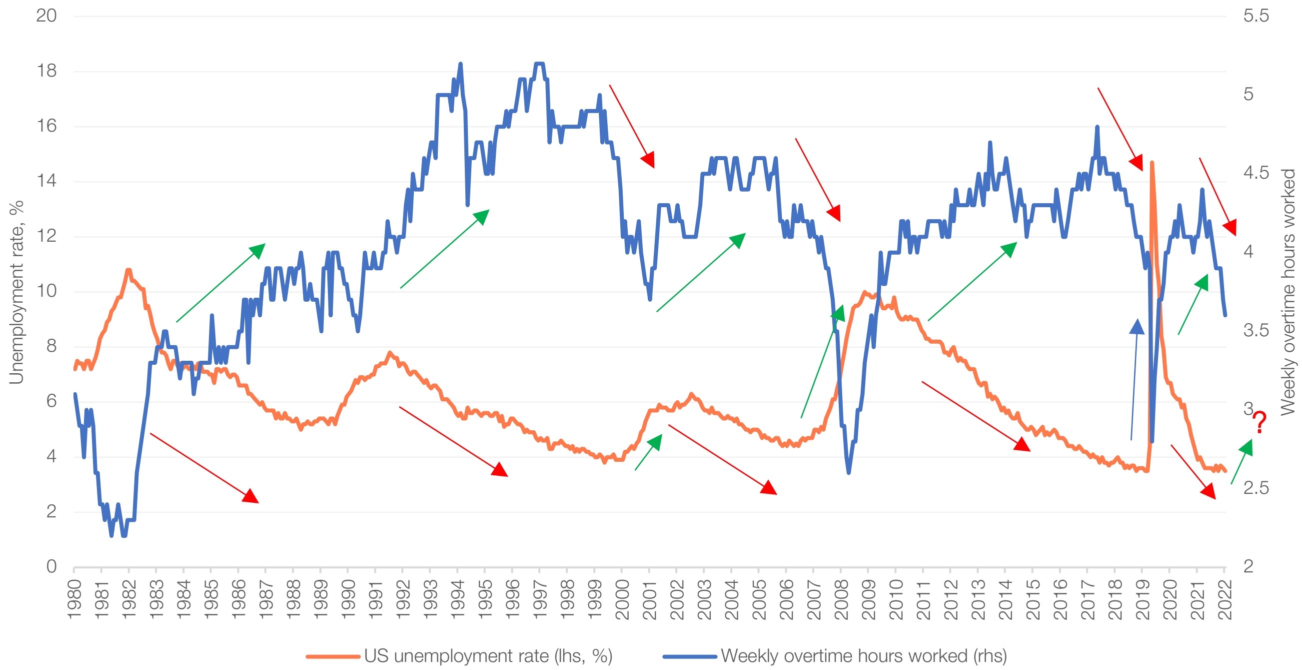
Exhibit 14: Atlanta Fed GDPNow forecast for Q4 US GDP (lhs, in %) and US unemployment rate since January 2020 (rhs, in %)



Sources: Bloomberg Finance L.P., Arbion Ltd.

Despite robust headline figures, there are areas of concern. As it pertains to the jobs market, the number of weekly overtime hours per employee in the US is falling. This tends to be a good indicator of incoming weakness for payrolls and hourly wages.

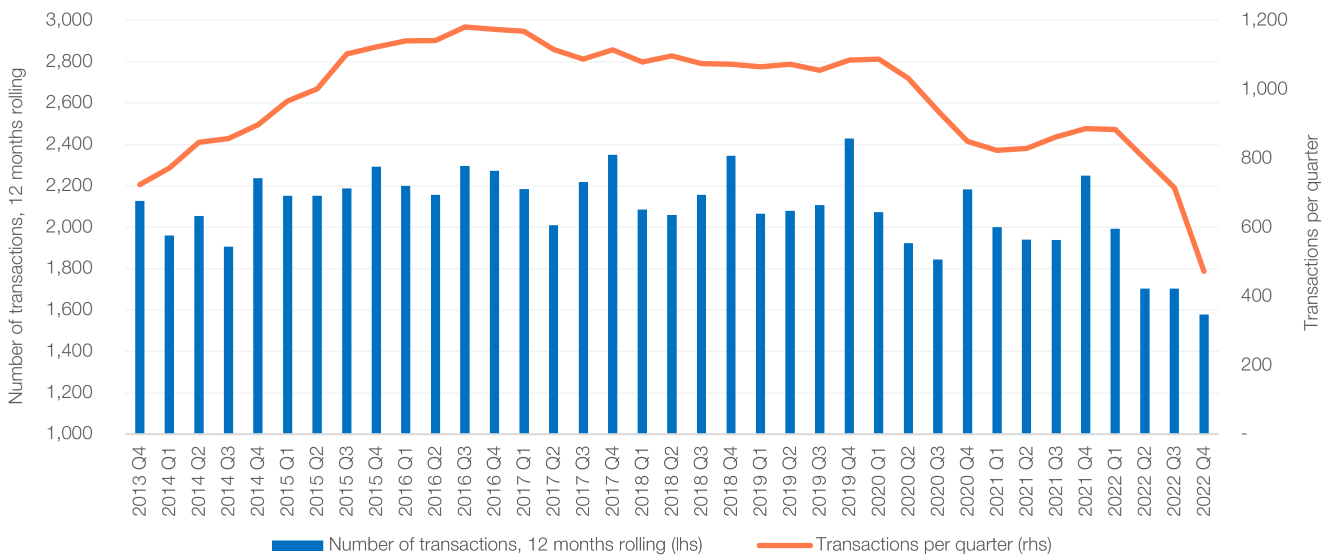
Exhibit 15: Weekly overtime hours worked per employee and US unemployment rate since January 1980



Sources: Bloomberg Finance L.P., Arbion Ltd.

There is a close correlation between rising overtime hours and a decline in unemployment and vice versa, especially for significant changes in the former. This relationship would point to weakness in payrolls over the course of this year, which should also support a moderation of wage growth pressures and, as a result, help contain inflation.

Exhibit 16: Quarterly real estate transaction volumes for Germany



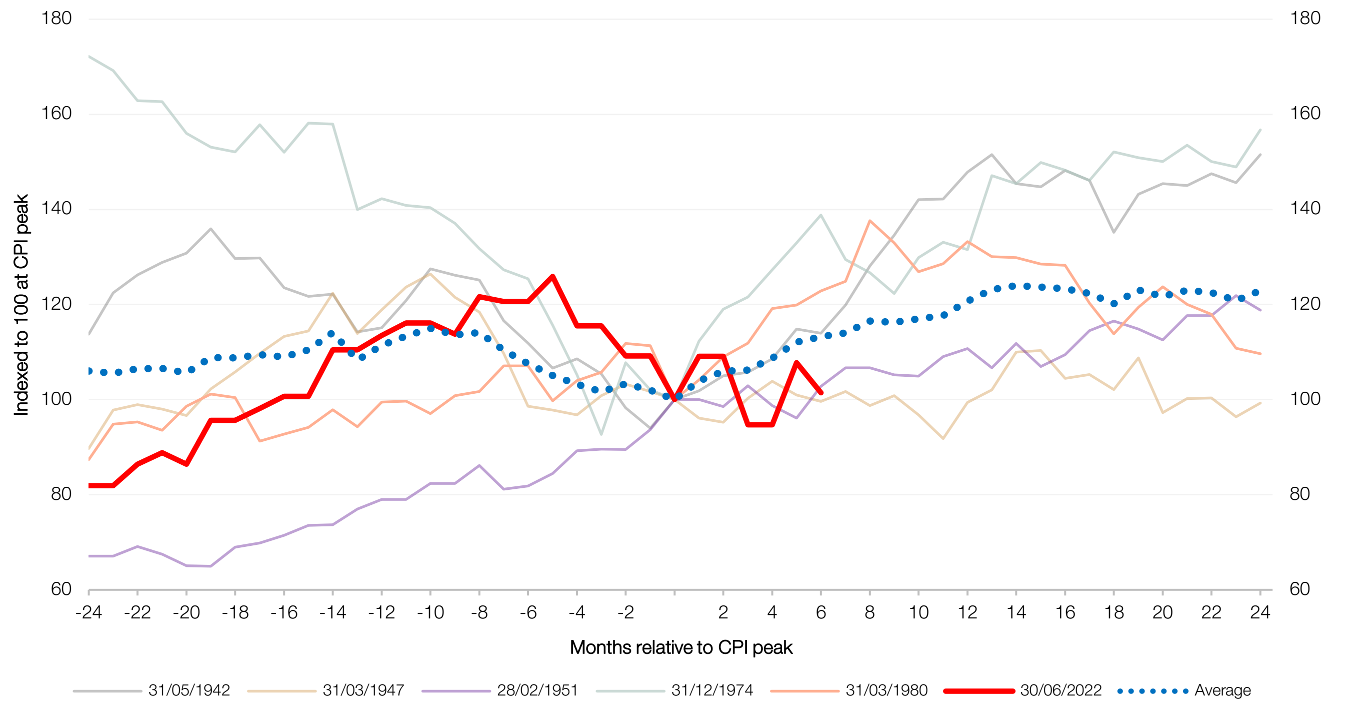
Sources: Savills

One of the worst affected segments in the economy from rising interest rates is real estate. Increasing risk-free rates are putting cap rates under upside pressure and whilst most property markets still appear to be resilient from a price perspective, transaction volumes as well as construction activity have been severely affected across developed markets. Germany, for instance, experienced a substantial boom particularly in residential investment between 2019 and the summer of last year that has now come to a near standstill with the lowest transaction volumes reported in over ten years. Unsurprisingly, construction order volumes are in freefall and cancellations reached record high levels.

These developments were also reflected in recent reports from US and UK homebuilders (KB Home, Persimmon) that warned of cancellation rates as high as 70%. However, what is telling in the spirit of this Viewpoint is that share prices of said companies reacted relatively positively to these announcements – a sign that investors were already prepared for the worst.

What are the implications for equity markets and how have they historically responded to such external shocks? Looking at significant past inflationary outbursts one finds that stocks trade progressively weaker the faster inflation rises as the central bank response also intensifies along the way.

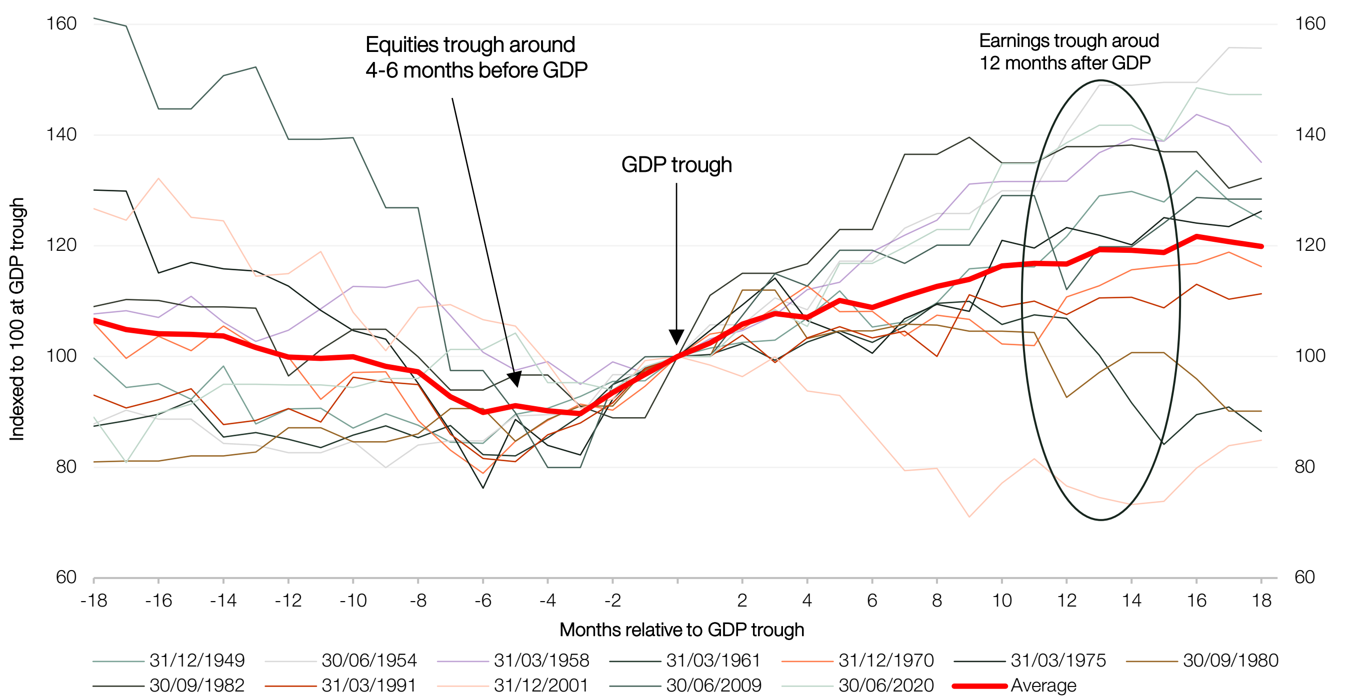
Exhibit 17: S&P500 performance 24 months before and after inflation peaks over the last five inflation cycles since 1940



Sources: Bloomberg Finance L.P., Arbion Ltd.

However, once it becomes clear that inflation has peaked, equities start performing almost immediately (dotted blue line above) and continue to do so under less volatility than during the two-year period going into the CPI peak. What is also noteworthy is the lack of any major drawdown for equities once the inflation peak has passed. This is of course due to easing financial conditions but the upward tilt for equities is still remarkable with an average performance of over 20% over the two year period post peak and effectively no negative performance over the past five cycles.

Exhibit 18: S&P500 performance 18 months before and after the trough in GDP across all recessions since 1948



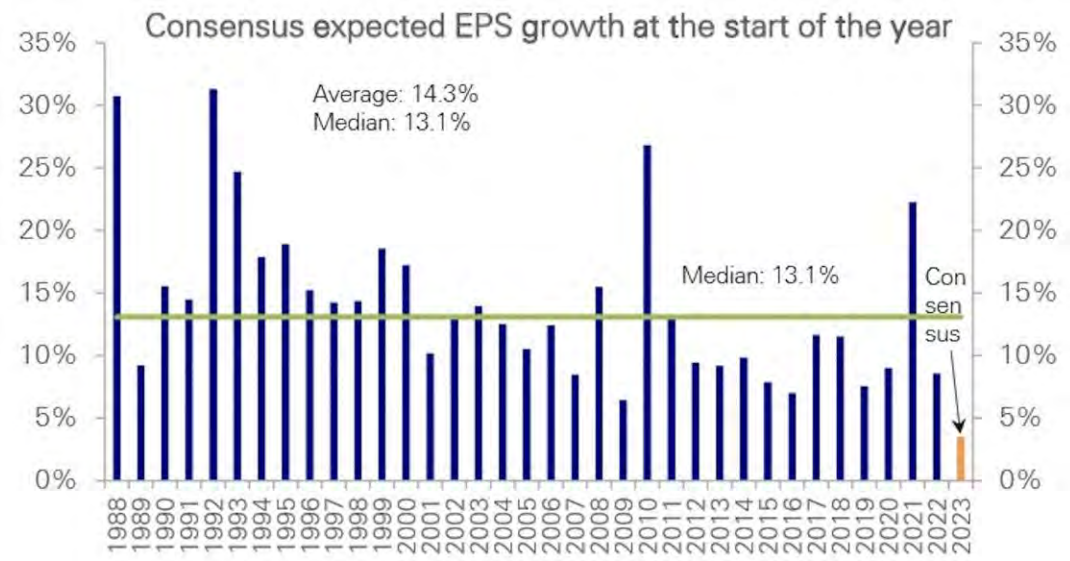
Sources: Bloomberg Finance L.P., Arbion Ltd.

Extending this view to GDP growth and, therefore, looking at recessionary environments rather than only inflationary ones, also offers some interesting insights.

Since 1948, equity markets in the US bottomed around four to six months before the economy bottomed. Earnings however only bottomed around one year after the GDP troughed out. This is what makes equity investing around recessionary periods challenging as investors lose the guiding hand of earnings to inform their view on valuations. As a result, valuation measures during recessions look expensive as they are based off depressed earnings whilst stock prices are trying to look through this volatility and reflect assumed normalised profits.

Therefore, it is no wonder that, considering the messy backdrop we are dealing with today, the earnings outlook remains more uncertain than usual. This is reflected in the lowest forward earnings growth expectation in decades at just under 4%.

Exhibit 19: This year's forecast of under 4% earnings growth is the lowest on record at the beginning of a year

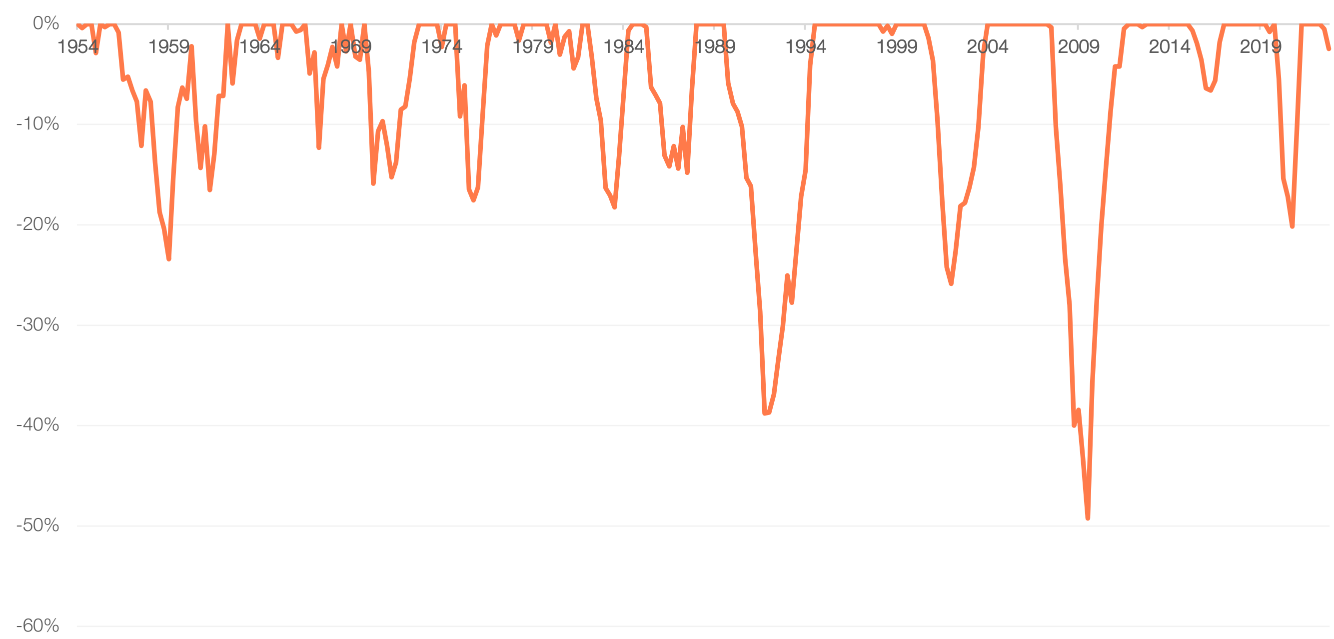


Sources: Deutsche Bank

Investors are generally well advised not to pay too much attention to such forecasts as they tend to be overoptimistic and typically experience substantial downward revisions as we progress through almost any given year.

Therefore, some headwind for equities is likely to be coming from earnings over the medium term as economies go through the current adjustment process towards a post-pandemic and post-QE regime. Earnings growth has been slowing down over the last few quarters and is likely to be negative for the first half of this year but still expected to be positive for 2023 as a whole (+3.9% year-on-year).

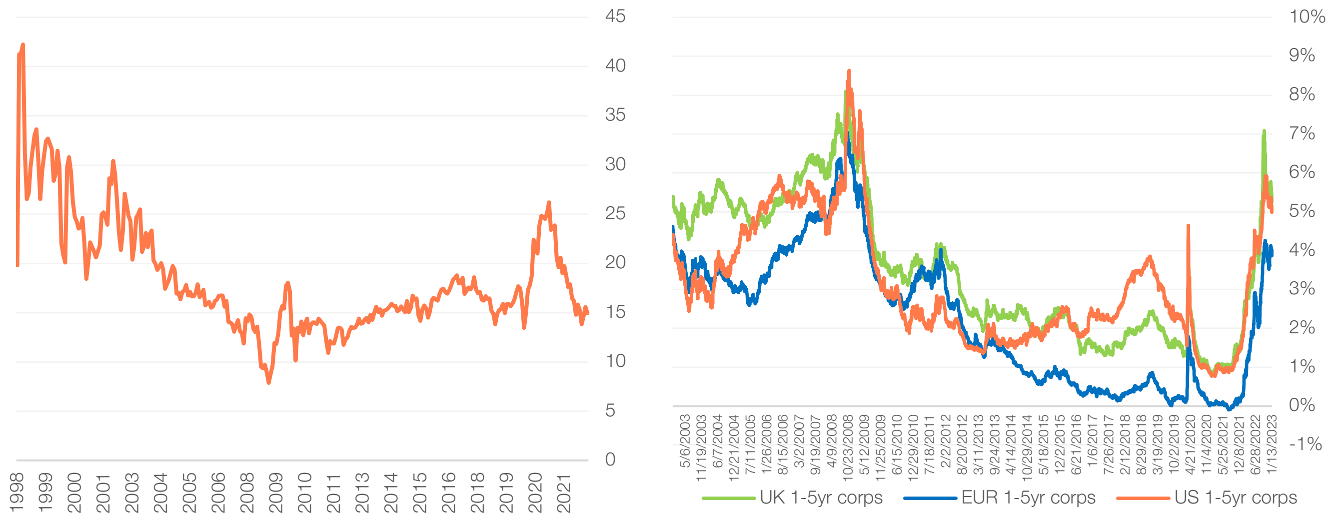
Exhibit 20: S&P500 earnings drawdown perspective: Trailing four-quarter earnings per share distance to high watermark



Sources: Bloomberg Finance L.P., Arbion Ltd.

The earnings outlook remains more uncertain than usual at this point, and keeping with the notion of a return to more normal economic and earnings cycles, one should assume that earnings volatility overall could increase somewhat going forward. This would potentially entail earnings declines on a more frequent basis but rather limited in terms of magnitude.

Exhibit 21: MSCI All World index trailing price/earnings ratio since 1998 (lhs) and 1-5 year corporate bond yields for the US, UK and the eurozone since 2003 (rhs)

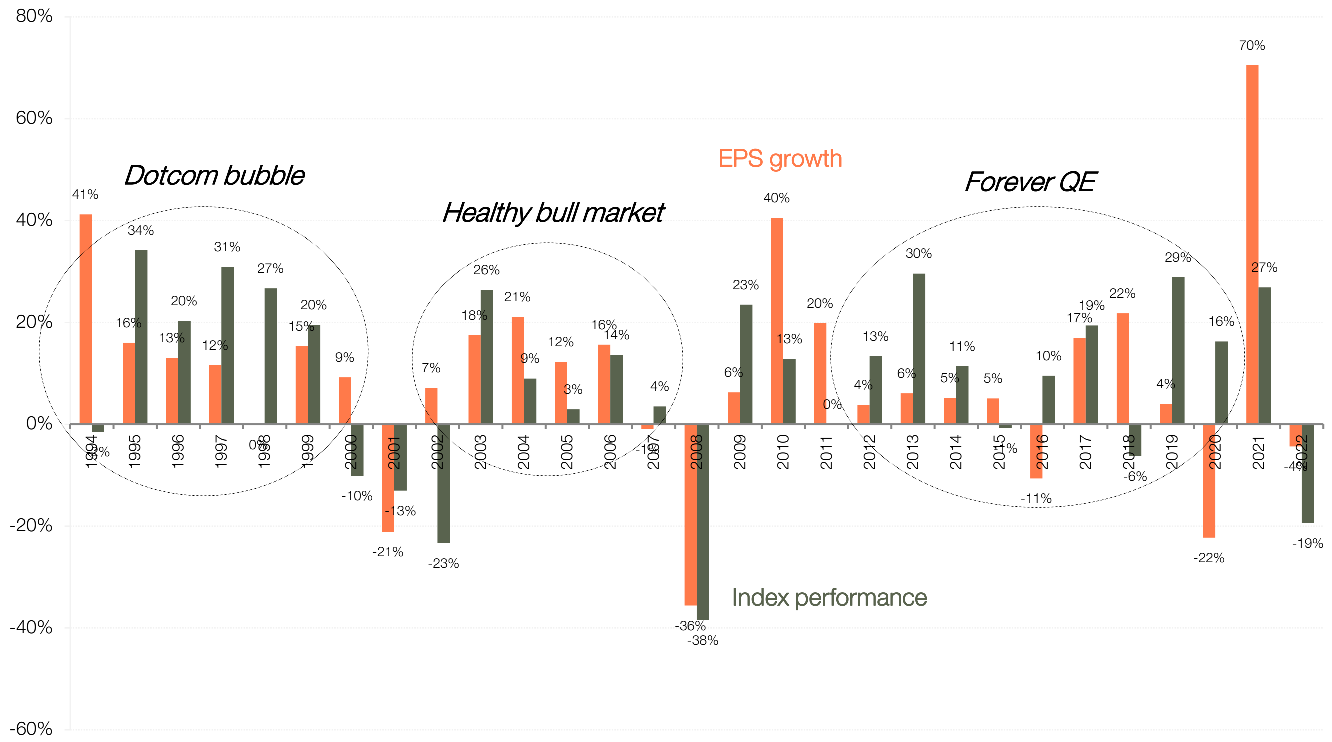


Sources: Bloomberg Finance L.P., Arbion Ltd.

Valuations across asset classes have come down substantially as a result of last year's market woes. World equity markets have returned to their long-term averages near 15x trailing earnings and bond markets are now, for the first time in well over a decade, offering attractive yields even for short-term paper. This in itself is a major achievement and great news for investors.

When I look back over the last decades in equity markets, we have traded through several distinctly different environments over time. The dotcom bull market of the 1990s was driven by multiple expansion and less focused on earnings growth whilst the subsequent bull that started in 2002 was a lot more balanced and nuanced. The financial crisis and later the pandemic uprooted the investment world through financial oppression, negative-rate policies and quantitative easing. It appears that this period is now also firmly behind us and we can return to a somewhat more normal environment.

Exhibit 22: Annual index performance, earnings growth and market cycles for the S&P500 since 1994



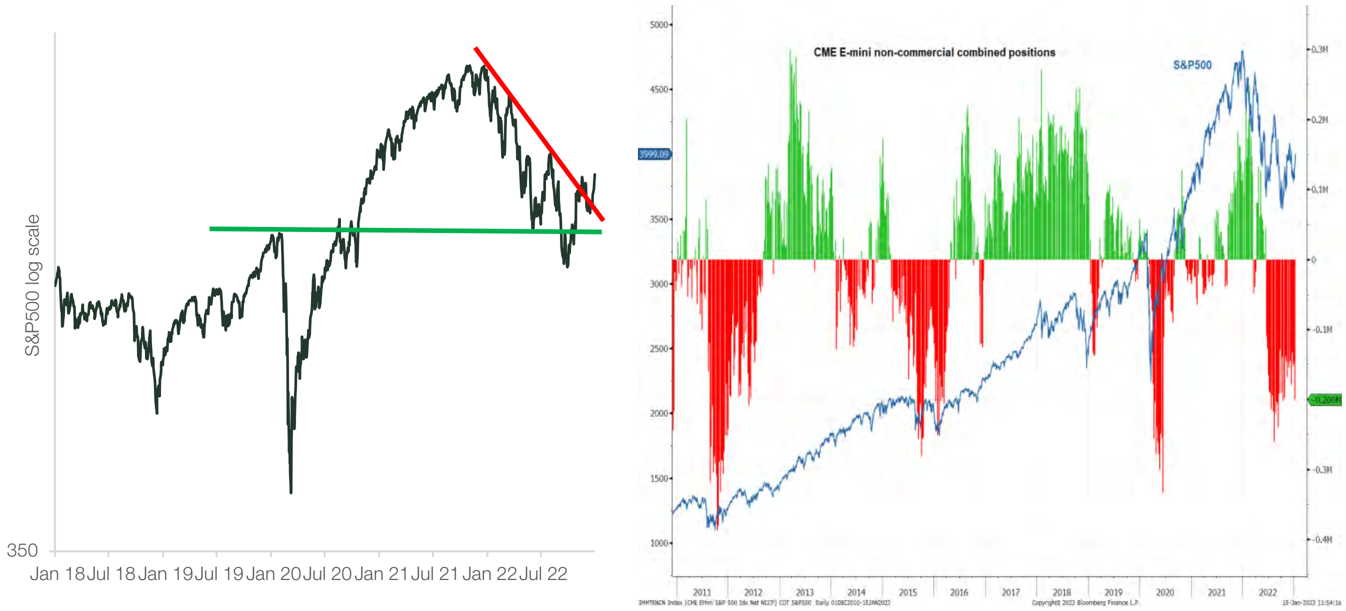
Sources: Bloomberg Finance L.P., S&P Dow Jones Indices, Arbion Ltd.

Overall, and in keeping with the spirit of Sir John Templeton (*"In all my 60 years in the stock market, I never found anyone whose opinion of what the stock market would do next week or next month was worth heeding"*), whilst I would not promote the case for a swift return to all-time highs or an uninterrupted continuation of the recent recovery, a broad sideways consolidation in equities this year would in itself be a positive outcome and opens up the potential for attractive positive returns from undervalued sectors within the equity space.

Whilst analogies never fully repeat, it is useful recalling the experience of the 1990s, especially the second half where policy rates were broadly stable with some minor adjustments up and down whilst inflation remained comfortably around 2% below that level. Economic and employment growth during that period was also robust and equity markets performed extraordinarily well as a result.

From a technical perspective, global equity markets look substantially more constructive today than only a few months ago. This is largely due to the near 19% bounce in the MSCI World index from its October lows which has propelled most large equity markets out of their prevailing downtrends. Some markets, such as the FTSE100 in the UK or the German DAX index are, due to their index composition, trading very near all-time highs.

Exhibit 23: S&P500 market technicals (lhs) and commitment of traders statistics (non commercials, rhs)



Sources: Bloomberg Finance L.P., Arbion Ltd.

Investor sentiment is currently neutral to slightly bearish, largely because of the all-dominating debate around the possibility of an incoming recession and hard-landing, prevailing high inflation, and concerns about further rate hikes. This negative sentiment can be seen in the net short positioning of retail traders in futures contracts on the S&P500 index which is comparable to the initial period after the pandemic crash in early 2020 or during the European crisis in 2012 and the 2015 market turbulences. From a contrarian standpoint, when markets rise on the back of subdued sentiment and limited participation, it typically bodes well for future returns or, at the minimum, it de-risks some of the downside potential as a sufficient amount of bearishness is already baked in.

Are we now on the cusp of another goldilocks period? Hard to say, but this would clearly be the most non-consensual outcome of all possibilities put forward today by the vast majority of market strategists and commentators.

How would such a scenario on the macro level connect with past experience from the micro side of things? It appears that many investors today struggle to comprehend the effects of a reflationary environment on corporate earnings and equate a stricter monetary regime with an imminent recession and an earnings collapse. Whilst it is possible and indeed likely that earnings might slow down or even experience a drawdown, the empirical evidence from the 1970s and 1980s suggests that such earnings declines are relatively limited in magnitude and brief in terms of duration. Last year's equity market correction was exclusively driven by multiple contraction as a result of higher interest rates while earnings growth was still positive. A mild earnings contraction in 2023 should therefore have only a limited impact on markets, especially if the outlook for 2024 is potentially more constructive. Should rates indeed decline somewhat as suggested by fixed income markets, this could reverse some of the multiple contraction experienced last year – a point I see rarely discussed by the equity bears.

We are currently navigating through a regime shift - leaving the post-GFC environment and entering a new investment era. As always, we won't know what will characterise this new cycle until we have experienced some of its initial vibes. If I had to make a bet of what some of its key ingredients would be, I believe it would feature some of the following:

Top 10 potential features of the post QE era:

1) Zero interest rate policies are unlikely to return anytime soon. Negative-yielding debt disappears.
2) Policy rates stay above inflation, re-establishing a positive real rates regime.
3) Mega-cap IT stocks will underperform broad market indices.
4) Value continues to outperform growth in the medium term.
5) As a result, rest of World stock markets will narrow their wide performance gap to US stocks somewhat.
6) Sectors that have underperformed the most over the last 5+ years will catch up, global banks are a strong candidate.
7) Asset-heavy as opposed to asset-light companies could outperform for some time.
8) Emerging market assets could outperform in 2023 after a dismal 2021 and 2022.
9) The Bank of Japan is likely to abandon yield curve control.
10) After the implosion of crypto, money will flow again into gold assets.

Whatever the eventual outcome might be, our view will be primarily informed by what markets and price action are telling us. Investors can draw valuable insights from sectors and market segments that display relative strength versus others as these typically translate into medium-term trends and also signal changes in longer-term trends.

Looking at the year ahead and where asset classes are trading in early January, this is what markets are currently pricing in:

1) Equities have adjusted to the higher rate environment, as can be seen in the multiple compression that has taken place last year. They have <u>not fully priced</u> the risk of a serious earnings decline (which is also not yet reflected in forecasts). If and when this becomes a more tangible issue, one of two things can happen: a) multiples increase as earnings fall and prices fluctuate within a range, effectively seeing through the cyclical earnings dip or b) stock prices decline, assuming a longer-lasting earnings growth issue. I would note that a reflationary environment is generally supportive for earnings as revenues are nominal.
2) Bond markets are priced for an <u>almost immediate recession</u> exhibiting a strongly inverted yield curve. However, credit spreads appear to be sympathetic to the view from equity markets, i.e. not assuming any immediate carnage in the real economy that would translate into quickly deteriorating balance sheet quality and subsequent defaults. Low spreads leave little margin for error on this outlook.
3) Commodities and inflation expectations are pricing a complete reversal of the inflationary spike experienced last year. This is also feeding back into bond and equity markets.

It is evident that some of these perspectives taken together are not consistent even if not mutually exclusive. They appear to represent outcomes from the more extreme ends of the spectrum of probabilities whereas I believe we may settle somewhere in between, characterised by:

1) A moderate recovery in inflation at the end of the year and going into 2024, staying elevated but not dangerously high for an extended period of time thereafter which would…
2) …lead to central banks lowering rates in due course (but not this year) and keep them above inflation, similar to the 1990s…
3) …which would entail a re-steepening of yield curves, pricing out a deep recession but also a total collapse in inflation…
4) …leading to a more constructive earnings scenario for equities with only a moderate decline this year and a recovery in due course, resulting in a broad trading range for markets with substantial sector rotation and meaningful dispersion in regional equity market performance.

As a result, from a risk/reward perspective, short to medium-duration credit still scores favourably despite spreads being relatively low. Furthermore, should concerns about a deep economic and earnings recession subside somewhat in the short term, we would not be surprised if stock markets would continue to recover, considering how poor sentiment and positioning are at the moment. As markets are likely to be stuck in a relatively broad trading range, some tactical manoeuvring will be critical over the next 12 to 18 months to take advantage of some of the more apparent mispricings that are evident today.

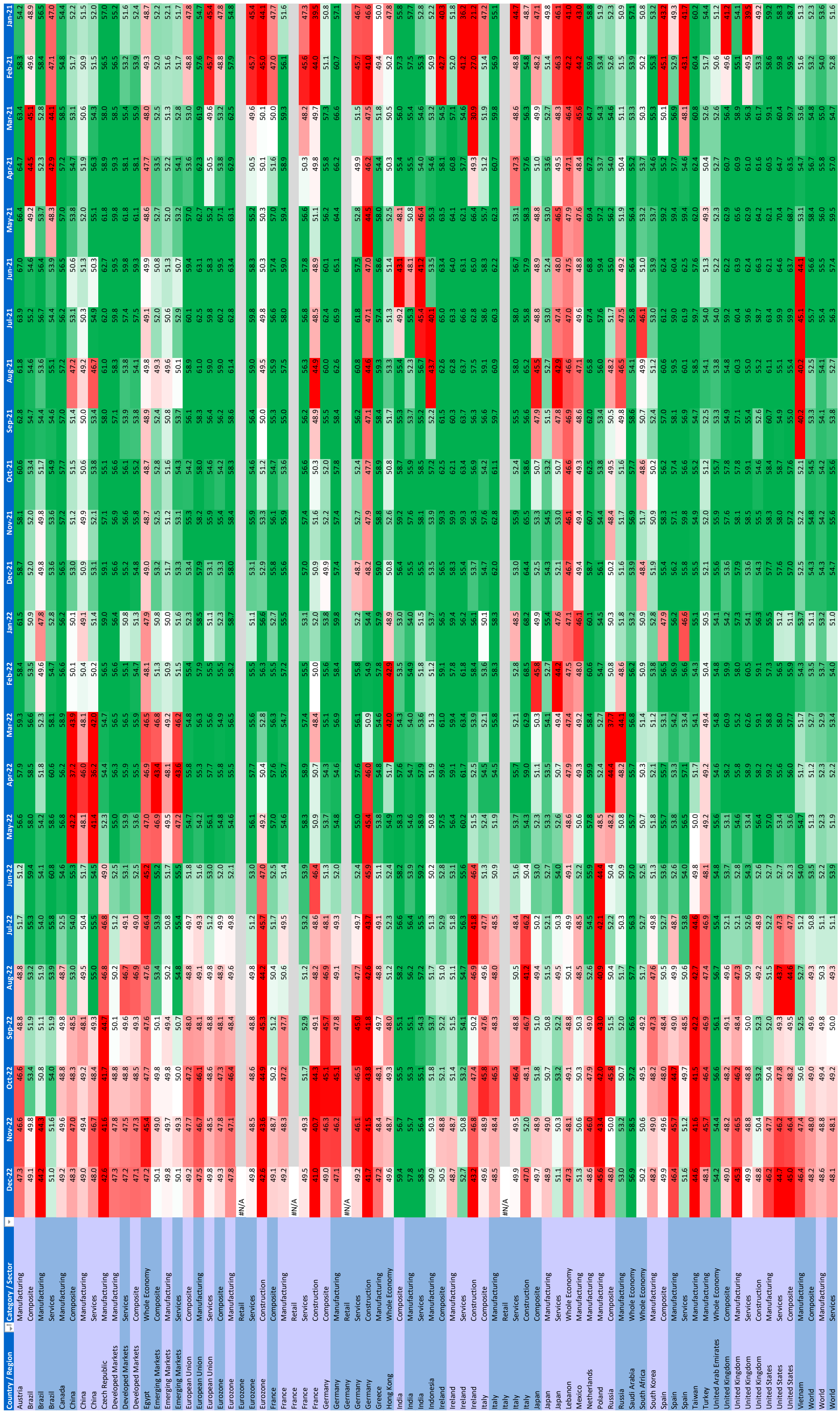
Risk management is as important as ever but I believe the outlook for 2023 is not as poor as it appeared to be only a few months ago after a year as dismal as 2022. Historically, what typically follows such a period of upheaval is a stretch of relative calm and rather unspectacular moves.

GLOBAL ECONOMIC MONITOR

	Jul	Aug	Sep	Oct	Nov	Dec		Trend
Citi Economic Surprise US	-61.8	-27.6	17.9	8.1	8.9	-2.7		
Citi Economic Surprise G10	-40.0	-11.2	9.8	11.2	17.5	20.2		
Citi Economic Surprise Europe	-63.9	-25.4	0.2	18.2	32.5	67.9		
Citi Economic Surprise EM	27.3	8.8	-4.4	7.2	-3.1	-20.6		
Citi Economic Surprise UK	0.8	21.1	36.6	14.4	77.6	39.7		
ISM manufacturing	52.8	52.8	50.9	50.2	49.0	48.4		
ISM new orders	53.95	56.55	53.85	52.85	51.6	45.2		
Global manufacturing PMI	50.8	49.3	49.6	49.0	48.0	48.2		
China manufacturing PMI	49.0	49.4	50.1	49.2	48.0	47.0		
Japan manufacturing PMI	52.1	51.5	50.8	50.7	49.0	48.9		
US durable goods orders	-0.1	0.2	0.2	0.7	-2.1			
US initial jobless claims	248	228	219	218	226	204		
US Industrial production	0.5	-0.1	0.4	-0.1	-0.2			
Euro Industrial production	-2.0	1.6	0.8	-2.0				
Japan Industrial production	0.8	3.4	-1.7	-3.2	-0.1			
US retail sales	-0.4	0.7	-0.2	1.3	-0.6			
Euro retail sales	-0.2	0.0	0.8	-1.5	0.8			
Japan retail sales	2.4	4.1	4.8	4.4	2.6			
China retail sales	2.7	5.4	2.5	-0.5	-5.9			
US consumer confidence	95.3	103.6	107.8	102.2	101.4	108.3		
Euro consumer confidence	-27.0	-24.9	-28.7	-27.5	-23.9	-22.2		
ifo German business expectations	80.3	80.5	75.2	75.9	80.2	83.2		
China export trade	18.2	7.5	5.7	-0.2	-8.9			
South Korea export trade	8.6	6.5	2.3	-5.8	-14.0	-9.5		
German export trade	14.2	20.1	20.2	15.8	13.3			
China monthly money supply	12.0	12.2	12.1	11.8	12.4			
US personal income	0.4	0.4	0.4	0.7	0.4			

Sources: Bloomberg Finance L.P., Arbion Ltd.

THE GLOBAL PMI HEATMAP



The table shows monthly PMI statistics across countries and different sectors per country for the past two years.

The latest data are next to the country/sector name at the bottom of the page.

Broad global slowdown

Sources: Bloomberg Finance L.P., Arbion Ltd.

THE WORLD IN NUMBERS

US												
Date	PMI	CPI (%)	Disc rate %	Ind Prodyoy%	Exports ($M)	Imports ($M)	Trade bal ($M)	M2 ($bn)	M2 mom%	Unempl %	Date	GDP yoy%
30/06/2022	56	9.1	1.75	3.75	184,387	288,559	-104,172	21,607		3.6	31/12/2021	5.7
31/07/2022	52.1	8.50	2.50	3.58	177,380	273,596	-96,216	21,636	0.1%	3.5	31/03/2022	3.7
31/08/2022	52.2	8.3	2.50	3.55	183,772	286,134	-102,362	21,632	0.0%	3.7	30/06/2022	1.8
30/09/2022	45.7	8.2	3.25	4.97	177,272	278,237	-100,965	21,503	-0.6%	3.5	30/09/2022	1.9
31/10/2022	45.2	7.7	3.25	3.34	182,488	285,399	-102,911	21,415	-0.4%	3.7		
30/11/2022	37.2	7.1	4.00	2.51	172,203	258,816	-86,613	21,352	-0.3%	3.6		
31/12/2022	44.9		4.50							3.5		

CHINA												
Date	PMI	CPI (%)	Disc rate %	Ind Prodyoy%	Exports ($bn)	Imports ($bn)	Trade bal ($bn)	M2 (RMBbn)	M2 mom%		Date	GDP yoy%
30/06/2022	50.2	2.5	1.50	3.9	328.294	231.187	97.1	258,145			31/12/2021	4
31/07/2022	49	2.7	1.50	3.8	332.442	230.584	101.9	257,808	-0.1%		31/03/2022	4.8
31/08/2022	49.4	2.5	1.50	4.2	315.057	234.984	80.1	259,507	0.7%		30/06/2022	0.4
30/09/2022	50.1	2.8	1.50	6.3	321.934	237.8	84.1	262,660	1.2%		30/09/2022	3.9
31/10/2022	49.2	2.1	1.50	5.0	298.493	213.228	85.3	261,291	-0.5%			
30/11/2022	48	1.6	1.50	2.20	295.501	226.253	69.2	264,701	1.3%			
31/12/2022	47.0		1.50									

GERMANY												
Date	PMI	CPI (%)	Disc rate %	Ind Prodyoy%	Exports (€bn)	Imports (€bn)	Trade bal (€bn)	M2 EZ (€bn)	M2 EZ mom%	Unempl %	Date	GDP yoy%
30/06/2022	52	7.6	0.00	-0.1	133.3	127.4	5.9	15,111,473		5.3	31/12/2021	1.8
31/07/2022	49.3	7.5	0.50	-0.8	131.2	128	3.2	15,245,006	0.9%	5.4	31/03/2022	3.6
31/08/2022	49.1	7.9	0.50	1.6	135.3	134.4	0.9	15,318,049	0.5%	5.5	30/06/2022	1.6
30/09/2022	47.8	10	1.25	3.1	134.4	131.8	2.6	15,420,452	0.7%	5.5	30/09/2022	1.3
31/10/2022	45.1	10.4	2.00	-0.2	135.5	128.6	6.9	15,336,068	-0.5%	5.5		
30/11/2022	46.2	10	2.00	-0.4	135.1	124.4	10.7	15,337,963	0.0%	5.5		
31/12/2022	47.1	8.6	2.50							5.5		

UK												
Date	PMI	CPI (%)	Disc rate %	Ind Prodyoy%	Exports,GBPM	Imports,GBPM	Trade bal (GBPM)	M2 (GBPM)	M2 mom%	Unempl %	Date	GDP yoy%
30/06/2022	52.8	9.4	1.25	-1.8	62,692	72,038	-9,346	2,252,629		3.8	31/12/2021	8.9
31/07/2022	52.1	10.1	1.25	-2.7	67,410	72,243	-4,833	2,249,497	-0.1%	3.6	31/03/2022	10.7
31/08/2022	47.3	9.9	1.75	-4.3	70,471	75,147	-4,676	2,249,662	0.0%	3.5	30/06/2022	4.0
30/09/2022	48.4	10.1	2.25	-3.1	69,188	72,323	-3,135	2,279,499	1.3%	3.6	30/09/2022	1.9
31/10/2022	46.2	11.1	2.25	-2.4	69,060	70,845	-1,785	2,274,910		3.7		
30/11/2022	46.5	10.7	3.00					2,278,104				
31/12/2022	45.3		3.50									

JAPAN												
Date		CPI (%)	Disc rate %	Ind Prodyoy%	Exports,JPYbn	Imports,JPYbn	Trade bal (JPYbn)	M2 (JPY TRN)	M2 mom%	Unempl %	Date	GDP yoy%
30/06/2022		2.4		-2.8	8,615	10,019	-1,404	1,208		2.6	31/12/2021	0.8
31/07/2022		2.6		-2.0	8,755	10,200	-1,445	1,209	0.1%	2.6	31/03/2022	0.4
31/08/2022		3.0		5.8	8,060	10,885	-2,825	1,209	0.0%	2.5	30/06/2022	1.6
30/09/2022		3.0		9.6	8,820	10,920	-2,100	1,208	-0.1%	2.6	30/09/2022	1.5
31/10/2022		3.7		3.0	9,002	11,177	-2,175	1,206	-0.1%	2.6		
30/11/2022		3.8		-1.3	8,837	10,866	-2,029	1,213	0.5%	2.5		

INDIA												
Date		CPI (%)	Disc rate %	Ind Prodyoy%	Exports ($M)	Imports ($M)	Trade bal ($M)	M3 (INR 10M)	M2 mom%		Date	GDP yoy%
30/06/2022		7.0	4.90	12.6	40,134	66,312	-26,178	20,662,321			31/12/2021	4.71
29/07/2022		6.7	4.90	2.2	36,274	66,273	-29,999	21,032,376	1.8%		31/03/2022	3.89
31/08/2022		7.0	5.40	-0.7	33,923	61,901	-27,978	21,051,592	0.1%		30/06/2022	12.75
30/09/2022		7.4	5.90	3.5	35,445	61,158	-25,713	21,072,894	0.1%		30/09/2022	5.61
31/10/2022		6.8	5.90	-4	29,782	56,693	-26,912	21,301,561	1.1%			
30/11/2022		5.9	5.90		31,992	55,885	-23,893	21,397,426	0.5%			
30/12/2022			6.25					21,482,883				

Source: Bloomberg Finance L.P., Arbion Ltd.

PERFORMANCE OF DIFFERENT ASSET CLASSES

EQUITIES	Currency		DECEMBER	2022	2021	2020	2019	2018	2017	2016
MSCI World	**USD**	**2,602.7**	**-4.3%**	**-19.5%**	**20.1%**	**14.1%**	**25.2%**	**-10.4%**	**20.1%**	**5.3%**
MSCI World (EUR hedged)	**EUR**	**186.0**	**-5.3%**	**-19.2%**	**21.5%**	**10.1%**	**22.2%**	**-11.1%**	**14.6%**	**5.6%**
MSCI World (GBP hedged)	**GBP**	**993.0**	**-5.2%**	**-18.5%**	**22.2%**	**9.9%**	**23.0%**	**-9.3%**	**15.5%**	**6.0%**
MSCI World (USD hedged)	**USD**	**730.2**	**-5.1%**	**-16.7%**	**22.7%**	**12.4%**	**25.9%**	**-7.4%**	**16.9%**	**7.2%**
MSCI World local	Local	726.9	-4.9%	-17.5%	19.1%	12.3%	23.7%	-9.5%	17.5%	6.8%
US (S&P500)	**USD**	**3,839.5**	**-5.9%**	**-19.4%**	**26.9%**	**16.3%**	**28.9%**	**-6.2%**	**19.4%**	**9.5%**
Europe (Stoxx 600)	**EUR**	**424.9**	**-3.4%**	**-12.9%**	**22.2%**	**-4.0%**	**23.2%**	**-13.2%**	**7.7%**	**-1.2%**
Eurozone (Euro Stoxx 50)	**EUR**	**3,793.6**	**-4.3%**	**-11.7%**	**21.0%**	**-5.1%**	**24.8%**	**-14.3%**	**6.5%**	**0.7%**
Germany (DAX30)	EUR	13,923.6	-3.3%	-12.3%	15.8%	3.5%	25.5%	-18.3%	12.5%	6.9%
UK (FTSE 100)	GBP	7,451.7	-1.6%	0.9%	14.3%	-14.3%	12.1%	-12.5%	7.6%	14.4%
France (CAC40)	EUR	6,473.8	-3.9%	-9.5%	28.9%	-7.1%	26.4%	-11.0%	9.3%	4.9%
Greece (ASE)	EUR	929.8	1.9%	4.1%	10.4%	-11.7%	49.5%	-23.6%	24.7%	1.9%
Spain (IBEX)	EUR	8,229.1	-1.6%	-5.6%	7.9%	-15.5%	11.8%	-15.0%	7.4%	-2.0%
Italy (MIB)	EUR	23,707.0	-3.7%	-13.3%	23.0%	-5.4%	28.3%	-16.1%	13.6%	-10.2%
Japan (Nikkei 225)	**JPY**	**26,094.5**	**-6.7%**	**-9.4%**	**4.9%**	**16.0%**	**18.2%**	**-12.1%**	**19.1%**	**0.4%**
MSCI Emerging Markets	**USD**	**956.4**	**-1.6%**	**-22.4%**	**-4.6%**	**15.8%**	**15.4%**	**-16.6%**	**34.3%**	**8.6%**
MSCI Emerging Markets local	**Local**	**57,479.3**	**-2.2%**	**-17.9%**	**-2.3%**	**16.6%**	**15.1%**	**-12.2%**	**27.8%**	**7.1%**
MSCI Asia ex Japan	USD	619.2	-0.4%	-21.5%	-6.4%	22.5%	15.4%	-16.4%	38.7%	2.9%
MSCI Eastern Europe	USD	31.5	5.2%	-82.9%	12.9%	-15.6%	26.9%	-8.1%	12.9%	33.0%
MSCI Latin America	USD	2,128.3	-4.7%	-0.1%	-13.1%	-16.0%	13.7%	-9.3%	20.8%	27.9%
Russia (MICEX)	RUB	2,154.1	-0.9%	-43.1%	15.1%	8.0%	28.6%	12.3%	-5.5%	26.8%
India (Sensex)	INR	60,840.7	-3.6%	4.4%	22.0%	15.8%	14.4%	5.9%	27.9%	1.9%
Brasil (Bovespa)	BRL	109,734.6	-2.4%	4.7%	-11.9%	2.9%	31.6%	15.0%	26.9%	38.9%
Hong Kong (Hang Seng)	**HKD**	**19,781.4**	**6.4%**	**-15.5%**	**-14.1%**	**-3.4%**	**9.1%**	**-13.6%**	**36.0%**	**0.4%**
China (Shanghai Comp)	CNY	3,089.3	-2.0%	-15.1%	4.8%	13.9%	22.3%	-24.6%	6.6%	-12.3%
South Korea (Kospi)	KRW	2,236.4	-9.6%	-24.9%	3.6%	30.8%	7.7%	-17.3%	21.8%	3.3%
Israel (TA 25)	ILS	1,796.9	-2.8%	-9.2%	32.0%	-10.9%	15.0%	-3.0%	2.7%	-3.8%
South Africa (Top 40)	ZAR	66,955.5	-2.3%	-0.1%	23.3%	7.0%	8.8%	-11.1%	19.7%	-4.1%
FIXED INCOME			DECEMBER	2022	2021	2020	2019	2018	2017	2016
FTSE WorldBig	**USD**	**202.2**	**-0.1%**	**-17.1%**	**-5.4%**	**9.5%**	**6.9%**	**-1.3%**	**7.4%**	**1.9%**
FTSE WorldBig local	**Local**	**214.5**	**-1.6%**	**-13.9%**	**-2.1%**	**5.7%**	**7.1%**	**0.5%**	**2.1%**	**3.3%**
FTSE WorldBig (EUR hedged)	**EUR**	**200.5**	**-1.7%**	**-15.1%**	**-2.6%**	**4.9%**	**5.3%**	**-1.1%**	**1.0%**	**2.4%**
FTSE WorldBig (GBP hedged)	**GBP**	**260.2**	**-1.6%**	**-14.1%**	**-1.9%**	**5.6%**	**6.7%**	**0.0%**	**1.9%**	**3.6%**
FTSE WorldBig (USD hedged)	**USD**	**242.6**	**-1.5%**	**-13.1%**	**-1.8%**	**6.2%**	**8.4%**	**1.7%**	**2.9%**	**3.9%**
World government bonds (FTSE)	**USD**	**835.3**	**-0.2%**	**-18.3%**	**-7.0%**	**10.1%**	**5.9%**	**-0.8%**	**7.5%**	**1.6%**
US Treasuries, total return	USD	222.8	-0.7%	-12.9%	-2.5%	8.3%	6.9%	0.8%	2.5%	1.1%
US 10-year yield	**USD**	**3.87%**	**0.27**	**2.36**	**0.60**	**-1.00**	**-0.77**	**0.28**	**-0.04**	**0.17**
US 10-year bond	USD	112.3	-0.8%	-13.9%	-5.5%	7.5%	5.3%	-1.6%	-0.2%	-1.3%
US 5y/5y forward inflation expectation	USD	2.20%	-0.03	-0.07	0.30	0.13	-0.00	-0.15	-0.05	0.24
Eurozone government debt	EUR	207.5	-4.6%	-18.4%	-3.4%	5.0%	6.7%	1.0%	0.1%	3.3%
Eurozone corporate bonds	EUR	207.3	-1.8%	-14.2%	-1.1%	2.7%	6.3%	-1.3%	2.4%	4.7%
EU high yield (BofAML)	USD	307.0	-0.7%	-11.5%	3.3%	2.8%	11.3%	-3.6%	6.7%	9.1%
Germany 10-year yield	**EUR**	**2.57%**	**0.64**	**2.75**	**0.39**	**-0.38**	**-0.43**	**-0.19**	**0.22**	**-0.42**
Germany 10-year bond	EUR	132.9	-5.6%	-22.4%	-3.5%	4.2%	4.2%	1.2%	-1.5%	3.9%
UK 10-year yield	GBP	3.67%	0.51	2.70	0.77	-0.63	-0.46	0.09	-0.05	-0.72
Japan 10-year yield	JPY	0.42%	0.17	0.35	0.05	0.03	-0.01	-0.05	0.00	-0.22
China 10-year yield	CNY	2.84%	-0.08	0.06	-0.37	0.00	-0.17	-0.59	0.84	0.20
India 10-year yield	INR	7.33%	0.05	0.87	0.59	-0.69	-0.81	0.04	0.81	-1.25
Russia 10-year yield	RUB	#VALUE!	#VALUE!	#VALUE!	2.28	-0.27	-2.24	1.09	-0.86	-1.10
Loans, total return (S&P LSTA)	**USD**	**3,295.6**	**0.4%**	**-0.6%**	**5.2%**	**3.1%**	**8.6%**	**0.4%**	**4.1%**	**10.2%**
US High yield (BofAML)	**USD**	**1,401.7**	**-0.8%**	**-11.2%**	**5.4%**	**6.2%**	**14.4%**	**-2.3%**	**7.5%**	**17.5%**
US investment grade (BofAML)	USD	2,988.0	-0.2%	-15.4%	-1.0%	9.8%	14.2%	-2.2%	6.5%	6.0%
US mortgages (BofAML)	USD	2,020.4	-0.6%	-11.9%	-1.2%	4.1%	6.5%	1.0%	2.4%	1.7%
US municipals (BofAML)	USD	589.3	-0.1%	-9.0%	1.8%	5.3%	7.7%	1.0%	5.4%	0.4%
EM hard-currency debt (JPM EMBI+)	**USD**	**686.3**	**-0.0%**	**-24.7%**	**-4.5%**	**7.1%**	**12.6%**	**-5.3%**	**8.3%**	**9.6%**
EM external government debt (BofAML)	USD	1,046.5	0.7%	-18.8%	-2.2%	6.9%	12.7%	-4.5%	11.5%	7.6%
EM investment grade (BofAML)	USD	371.3	1.1%	-14.6%	-0.7%	6.5%	11.6%	-1.4%	7.3%	5.5%
Emerging market spreads	USD	305.5	-46.72	-6.09	46.19	32.37	-73.10	100.50	-81.21	-218.44
US Investment-grade spreads	USD	158.7	-4.44	46.81	16.87	-2.30	-49.72	55.55	-32.15	-44.55
US high-yield spreads	USD	480.3	6.54	142.63	-42.10	-13.45	-127.81	145.89	-54.61	-289.20
FOREIGN EXCHANGE			DECEMBER	2022	2021	2020	2019	2018	2017	2016
Dollar index		**103.5**	**-2.3%**	**8.2%**	**6.4%**	**-6.7%**	**0.2%**	**4.4%**	**-9.9%**	**3.6%**
Euro		**1.1**	**2.9%**	**-5.8%**	**-6.9%**	**8.9%**	**-2.2%**	**-4.5%**	**14.1%**	**-3.2%**
Pound Sterling		1.2	0.2%	-10.7%	-1.0%	3.1%	3.9%	-5.6%	9.5%	-16.3%
Swiss Franc		0.9	2.3%	-1.3%	-3.0%	9.4%	1.4%	-0.7%	4.5%	-1.6%
Japanese Yen		**131.1**	**5.3%**	**-12.2%**	**-10.2%**	**5.1%**	**0.9%**	**2.8%**	**3.8%**	**2.8%**
Renminbi		6.9	2.8%	-7.8%	2.7%	6.7%	-1.2%	-5.3%	6.7%	-6.6%
Won		1,265.5	4.6%	-5.7%	-8.4%	6.1%	-3.6%	-4.2%	13.2%	-2.6%
Brasilian Real		5.3	-1.8%	5.4%	-6.8%	-22.6%	-3.4%	-14.7%	-1.8%	21.7%
Indian Rupee		82.7	-1.6%	-9.9%	-2.0%	-2.5%	-2.3%	-8.4%	6.3%	-2.6%
USD real effective exchange rate (JPM)		**125.3**	**-2.0%**	**6.6%**	**6.4%**	**-2.6%**	**-1.1%**	**4.2%**	**-6.3%**	**4.2%**
EUR real effective exchange rate (JPM)		**94.5**	**1.9%**	**2.5%**	**-3.9%**	**5.3%**	**-3.1%**	**0.1%**	**5.4%**	**-1.2%**
JPY real effective exchange rate (JPM)		**61.0**	**4.1%**	**-8.6%**	**-11.4%**	**-0.5%**	**-0.7%**	**5.3%**	**-3.1%**	**3.6%**
COMMODITIES			DECEMBER	2022	2021	2020	2019	2018	2017	2016
Global commodities, total return (S&P GSCI)	**USD**	**3,495.8**	**-1.4%**	**26.0%**	**40.4%**	**-23.7%**	**17.6%**	**-13.8%**	**5.8%**	**11.4%**
Agriculture, spot return	USD	470.5	1.3%	5.7%	21.1%	21.8%	6.3%	0.6%	-3.0%	2.6%
Energy, total return	USD	610.8	-3.4%	42.3%	60.7%	-46.3%	29.7%	-17.1%	6.4%	18.1%
Crude oil	USD	424.0	-0.2%	27.6%	62.2%	-60.3%	34.1%	-20.5%	4.1%	8.0%
Industrial metals, total return	USD	1,675.6	0.8%	-7.6%	29.6%	14.8%	2.6%	-18.0%	29.1%	17.6%
Copper	USD	5,351.2	1.9%	-11.2%	26.0%	25.3%	4.7%	-16.8%	29.4%	17.3%
Livestock, total return	USD	1,590.9	2.3%	4.8%	7.9%	-22.1%	-5.6%	-1.5%	8.4%	-7.3%
Precious metals	USD	2,077.7	4.8%	-0.4%	-5.1%	23.0%	17.6%	-3.6%	12.0%	8.4%
Gold, total return	USD	916.7	4.1%	-0.7%	-4.3%	20.9%	18.0%	-2.8%	12.8%	7.7%
REAL ESTATE			DECEMBER	2022	2021	2020	2019	2018	2017	2016
All Equity REITS total returns (FTSE NAREIT)	**USD**	**21,483.8**	**-5.0%**	**-24.9%**	**41.3%**	**-5.1%**	**28.7%**	**-4.0%**	**8.7%**	**8.6%**
FTSE EPRA NAREIT developed markets, total return	USD	5,159.9	-2.6%	-24.4%	27.2%	-8.2%	23.1%	-4.7%	11.4%	5.0%
FTSE EPRA NAREIT emerging markets	USD	1,614.4	-4.1%	-10.8%	-11.4%	-27.2%	24.3%	-11.0%	28.8%	0.2%
New York home prices	USD	272.2	0.0%	7.0%	12.1%	8.0%	0.8%	3.5%	5.7%	2.8%
Greater London house price (£)	GBP	682,422.0	0.0%	7.1%	2.6%	3.5%	-0.5%	-1.1%	-1.7%	1.4%
Moscow prop prices (US$/sqm)	USD	3,895.0	-6.4%	16.9%	19.3%	-1.0%	8.8%	-8.3%	4.8%	3.6%
HEDGE FUNDS			DECEMBER	2022	2021	2020	2019	2018	2017	2016
Global hedge funds	**USD**	**1,367.8**	**-0.1%**	**-4.4%**	**3.7%**	**6.8%**	**8.6%**	**-6.7%**	**6.0%**	**2.5%**
Equity hedge funds	USD	1,447.2	-0.1%	-3.2%	12.1%	4.6%	10.7%	-9.4%	10.0%	0.1%
Event-driven hedge funds	USD	1,641.5	-0.2%	-7.3%	0.5%	8.9%	10.0%	-11.7%	6.5%	11.1%
CTA funds	USD	1,266.9	0.0%	3.7%	-0.8%	4.3%	4.8%	-3.2%	2.5%	-2.9%
Credit hedge funds	USD	2,116.9	-0.0%	-11.6%	1.4%	11.3%	6.2%	-2.5%	3.9%	5.0%
Activist hedge funds	USD	3,693.2	0.0%	-0.2%	19.8%	18.1%	15.5%	-7.4%	6.1%	9.1%

Source: Bloomberg Finance L.P., Arbion Ltd.

PERFORMANCE AND VALUATIONS OF INTERNATIONAL EQUITY MARKETS

Country		Year to date	Market Cap (USDbn)*	Rolling 1-yr change	Rolling 2-yr change	Rolling 3-yr change	PER 2022E	PER 2023E	EPS growth 2023E	Dividend yield 2022E	Dividend yield 2023E
WORLD											
All Country MSCI	MXWD Index	2.0%	74,879	-16.9%	-7.0%	8.2%	15.3	13.8	11.1%	2.5%	2.5%
Developed World	MXWO Index	1.8%	55,727	-16.6%	-3.8%	11.3%	16.1	14.3	12.5%	2.3%	2.4%
Emerging World	MXEF Index	3.4%	19,152	-19.4%	-27.0%	-12.5%	11.0	10.6	3.5%	4.1%	3.9%
AMERICAS											
US (S&P500)	SPX Index	1.4%	33,498	-16.7%	1.8%	18.9%	18.0	15.7	14.6%	1.7%	1.8%
US (Dow Jones Industrial)	INDU Index	1.5%	9,666	-7.2%	8.1%	16.1%	18.7	15.5	20.7%	2.0%	2.2%
US mid/small cap	RTY Index	1.8%	2,667	-17.8%	-14.3%	7.7%	35.5	16.8	111.7%	1.6%	#VALUE!
Canada	SPTSX Index	2.2%	2,317	-6.0%	9.8%	15.0%	12.6	11.9	5.7%	3.4%	3.5%
Mexico	MEXBOL Index	6.7%	313	-2.8%	10.7%	16.1%	13.4	10.8	24.3%	3.7%	3.8%
Argentina	MERVAL Index	5.8%	36	153.3%	313.7%	408.6%	16.6	2.5	553.3%		#VALUE!
Brazil	IBOV Index	-0.7%	625	6.1%	-12.9%	-6.0%	6.2	6.8	-7.5%	10.5%	6.9%
EUROPE											
Europe	SXXP Index	5.0%	12,610	-8.2%	8.5%	6.3%	12.8	11.7	8.7%	3.4%	3.6%
Germany	DAX Index	5.2%	1,589	-8.2%	4.3%	8.5%	11.9	10.6	12.8%	3.5%	3.4%
France	CAC Index	6.0%	2,256	-5.0%	20.2%	13.5%	11.3	11.0	2.1%	3.3%	3.5%
UK	UKX Index	3.2%	2,470	2.7%	11.9%	1.2%	9.9	10.0	-1.3%	3.8%	4.3%
Spain	IBEX Index	5.5%	575	-0.8%	3.3%	-9.4%	10.7	10.3	3.9%	4.5%	4.7%
Italy	FTSEMIB Index	6.8%	567	-8.4%	11.0%	5.4%	8.2	7.9	4.6%	4.7%	5.1%
Switzerland	SMI Index	4.1%	1,344	-12.7%	3.4%	4.9%	19.3	14.3	34.6%	3.0%	3.2%
Norway	OBX Index	1.2%	276	2.3%	23.9%	29.8%	8.1	9.3	-12.9%	6.1%	5.9%
Sweden	OMX Index	6.7%	710	-10.7%	15.2%	22.1%	16.8	14.1	19.1%	3.5%	3.6%
Austria	ATX Index	5.4%	96	-17.0%	12.0%	2.9%	6.0	7.5	-19.6%	5.2%	5.2%
Greece	ASE Index	2.6%	63	5.4%	17.3%	3.7%	5.2	17.0	-69.7%	3.6%	3.8%
EMERGING EUROPE											
Hungary	BUX Index	4.3%	20	-12.1%	2.9%	0.4%	4.7	5.1	-7.7%	5.0%	5.5%
Kazakhstan	KZKAK Index	0.6%	11	-8.3%	17.6%	38.4%					
Ukraine	PFTS Index	-1.0%	1	-1.7%	3.0%	0.6%					
Russia	RTSI$ Index	0.8%	434	-36.7%	-33.3%	-38.9%	1.9	3.4	-43.5%	24.6%	22.8%
Poland	WIG Index	5.6%	247	-14.2%	4.6%	3.6%	7.5	8.0	-6.7%	3.3%	4.0%
Czech Rep	PX Index	5.1%	45	-11.5%	17.4%	12.1%	7.8	8.0	-3.1%	8.4%	7.3%
Turkey	XU100 Index	-4.7%	239	158.1%	240.6%	344.7%	4.6	5.8	-20.9%	3.7%	3.6%
MIDDLE EAST & AFRICA											
South Africa	TOP40 Index	8.0%	1,012	7.6%	23.8%	42.1%	11.7	10.6	10.8%	4.0%	4.1%
Egypt	Hermes Index	10.9%		39.5%	57.7%	49.9%	7.0	6.1	14.7%	3.3%	3.8%
Namibia	FTN098 Index	5.2%	129	5.1%	27.1%	33.7%	9.8	9.3	5.5%	5.4%	5.4%
Nigeria	NGSEINDX Index	1.1%	61	18.1%	29.1%	76.2%					
Israel	TA-25 Index	1.1%		-8.7%	17.9%	8.2%	7.8	7.5	3.6%	2.3%	#VALUE!
Saudi Arabia	SASEIDX Index	1.1%		-8.3%	21.3%	27.0%	11.3	12.6	-9.7%	3.5%	4.0%
Qatar	DSM Index	7.4%		-4.5%	7.4%	9.8%	12.6	10.6	18.4%	4.3%	
Dubai	DFMGI Index	-0.5%		3.1%	26.5%	20.8%	9.1	8.8	2.7%	4.8%	5.0%
ASIA											
Asia	MXAPEXA Index	8.9%	3,869	-18.6%	-32.7%	-9.3%	14.1	11.9	18.0%	2.1%	2.2%
Japan	TPX Index	-0.8%	5,270	-6.0%	1.1%	8.5%	13.6	11.4	18.8%	2.7%	2.8%
Japan	NKY Index	-0.5%	3,552	-8.8%	-7.7%	9.4%	18.8	14.2	32.1%	2.3%	2.3%
Hong Kong	HSI Index	8.1%	2,831	-9.0%	-23.3%	-25.1%	11.9	9.4	27.3%	3.1%	3.5%
China domestic	shashr Index	2.8%	6,389	-11.3%	-11.0%	2.7%	11.9	9.1	30.8%	3.1%	3.3%
China offshore	HSCEI Index	8.7%	2,071	-11.5%	-33.5%	-35.4%	9.9	8.1	22.4%	3.4%	3.5%
South Korea	KOSPI Index	5.1%	1,360	-20.5%	-25.4%	7.5%				2.4%	2.6%
New Zealand	NZSE Index	1.4%	98	-13.4%	-18.6%	-6.0%	26.3	21.7	21.1%	3.1%	3.7%
Australia	AS30 Index	1.9%	1,739	-5.4%	4.7%	5.2%	13.8	13.6	1.5%	5.1%	4.7%
Pakistan	KSE100 Index	0.2%	23	-10.7%	-11.3%	-4.7%	3.7	3.1	20.3%	9.0%	#VALUE!
Thailand	SET50 Index	1.3%	357	3.2%	4.1%	-5.0%	17.2	15.7	9.5%	2.7%	2.7%
Indonesia	JCI Index	-2.4%	614	-0.2%	6.9%	6.6%	14.1	12.5	13.2%	4.6%	5.4%
India	NIFTY Index	0.0%	1,746	1.6%	26.2%	48.2%	22.2	18.1	22.7%	2.4%	1.5%
Singapore	FSSTI Index	1.7%	377	3.1%	10.4%	1.8%	12.6	10.4	20.8%	4.3%	4.8%
Malaysia	FBMKLCI Index	-0.1%	235	-3.2%	-8.6%	-6.4%	14.6	12.5	16.4%	4.3%	4.4%
Philippines	PCOMP Index	3.4%	165	-3.2%	-6.9%	-12.9%	15.2	12.2	24.8%	2.0%	2.1%
Vietnam	VNINDEX Index	4.7%	170	-31.0%	-9.7%	9.8%	11.1	8.8	25.5%	#VALUE!	

* Market cap for the main index

Data as of 30 December 2022

Source: Bloomberg Finance L.P., Arbion Ltd.

THREE-MONTH OUTLOOK

→	The coronavirus outbreak hit the world economy at a late stage in the cycle, causing a deep recession and leading to unprecedented stimulus. The current period of normalisation is characterised by elevated inflation and a hawkish central bank response but also a re-introduction of appropriate cost of capital and risk-free rates.		Weight
	Cash	Cash reserves are elevated after substantial de-risking across equity and fixed income.	↗
Equities	US	Rising yields, high inflation and slowing growth are putting pressure on markets. However, as inflationary forces recede, the outlook could improve over the course of the year.	→
	Europe	European markets are cheaper compared to the US and more tilted towards defensive industries. A cheap currency helps the economy, and the ECB is approaching interest rates cautiously.	→
	Japan	Inflation is beginning to pick up in the country with yield-curve control being relaxed. This provides support to the financial sector. The cheap yen is supportive for the country's export industries.	↗
	China	The sudden re-opening is likely to pose challenges and induce economic and market volatility. The equity market is trading on low valuations and depressed earnings.	→
	EM	Many emerging markets ex China are suffering from idiosyncratic issues and were hit hard by the global pandemic. Valuations are generally very low offering scope for upside.	→
	Central Banks	Central banks in most major economies are hawkish, trying to arrest high inflation levels. Bond markets are pricing a steep and swift initial rate hike path followed by rate cuts.	
Fixed Income	DM govt	Inflation volatility is high and central banks are determined to tackle the challenge. Some more rate tightening appears necessary before considering this asset class.	→
	EM govt	Emerging market central banks are dealing with a variety of different issues and inflation is not yet under control.	→
	DM credit	Spreads across investment-grade and high-yield fixed income are contained compared to history and the short to medium-duration IG space is now attractive again for investors.	↗
	EM credit	We avoid issuers with substantial hard-currency debt relative to the underlying revenue mix. Spreads for fundamentally strong issuers in hard currency are attractive.	→
	Alt FI	Alternative sources of carry are generally attractive; however, rising bond market yields are putting pressure on these areas as a genuine risk-free option is available again.	→
Currencies	USD	The dollar has enjoyed a strong recovery, fuelled by a more hawkish Federal Reserve that could see real interest rates rising in the future. Most of the strengthening is now behind us.	→
	EUR	The change in the monetary policy outlook for the eurozone is bullish for the common currency. Once dollar strength subsides, this would be positive for the common currency.	→
	JPY	The yen has been fundamentally undervalued and recent adjustments to the BoJ's monetary policy could lead to further upside for the currency.	↗
	EM	Emerging markets are suffering from receding global trade, devaluations as well as other idiosyncratic issues. Commodity currencies appear attractive.	→
	GBP	The stronger dollar puts pressure on GBP and the currency is currently trading within our fair-value range.	→
Commodities	Oil	Oil prices are expected to remain volatile, driven by geopolitical forces but also imbalanced global economies. The longer-term outlook is moderately bullish.	→
	Metals	Although industrial metal prices are benefiting from bottlenecks and supply issues, markets are beginning to price in the prospect of a global recession.	↘
	Gold	Gold is traditionally a good diversifier in multi-asset portfolios. Rising interest rates are posing a threat to near-term performance but Gold's relative strength is encouraging.	→

IMPORTANT INFORMATION

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