House View 2022 Outlook

The intelligence that guides our investment decisions

AVIVA INVESTORS

House View

The Aviva Investors House View document is a comprehensive compilation of views and analysis from the major investment teams.

The document is produced quarterly by our investment professionals and is overseen by the Investment Strategy team. We hold a House View Forum biannually at which the main issues and arguments are introduced, discussed and debated. The process by which the House View is constructed is a collaborative one – everyone will be aware of the main themes and key aspects of the outlook. All team members have the right to challenge and are encouraged to do so. The aim is to ensure all contributors are fully aware of the thoughts of everyone else and that a broad consensus can be reached across the teams on the main aspects of the report.

The House View document serves two main purposes. First, its preparation provides a comprehensive and forward-looking framework for discussion among the investment teams. Secondly, it allows us to share our thinking and explain the reasons for our economic views and investment decisions to those whom they affect.

Not everyone will agree with all assumptions made and of the conclusions reached. No one can predict the future perfectly. But the contents of this report represent the best collective judgement of Aviva Investors on the current and future investment environment.

Executive Summary

Elevated inflation: persistent, not permanent

As 2021 draws to a close, expectations are for global growth to be around 6 per cent for the year. That is broadly in line with our above consensus expectations at the start of the year and is despite the headwind to growth from the emergence of the Delta variant of COVID-19 in the middle of the year. Amongst the major economies, the United States, United Kingdom and Canada all surprised us positively in 2021, while China, the Eurozone (primarily Germany) and Japan surprised on the downside. The upside surprises largely reflected an even more buoyant consumer recovery than we had anticipated, supported by strong household income. The downside surprises reflected a combination of factors relating to COVID-19 management and global supply-chain issues that emerged over the course of 2021. Looking ahead to 2022, we expect growth to moderate to around 4¼ per cent, broadly in line with consensus. Across all the major economies, we expect a slowing from the rapid pace of recovery in 2021, but a still above-trend pace of growth, reflecting the expected full reopening of the service sector, pent-up demand, strong household and corporate balance sheets and easy (albeit less so than in 2020/21) monetary and fiscal policy (Figure 1).

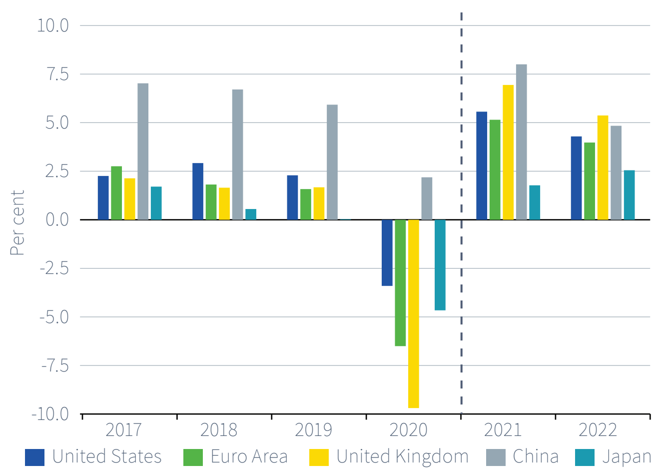
Growth expected to moderate, but remain well above trend in 2022

While much has been written about the build up of "excess" savings, particularly in those countries that provided extensive income support during periods of economic shutdown in 2020/21, and the capacity for that to sustain the recovery in household consumption, less has been written about the much larger increase in household net worth over the last two years. For example, in the United States, net worth is estimated to have risen by over 20 per cent since the end of 2019, rising around three times faster than the average increase over the past 20 years. That equates to around $25 trillion, an order of magnitude greater than the estimated $2.5 trillion in excess savings. Moreover, the Federal Reserve estimates that the percentage gains in net worth across income quintiles has been similar. Comparable gains in household net worth are likely to have been experienced in other major economies.

Significant gains in household net worth support consumption growth

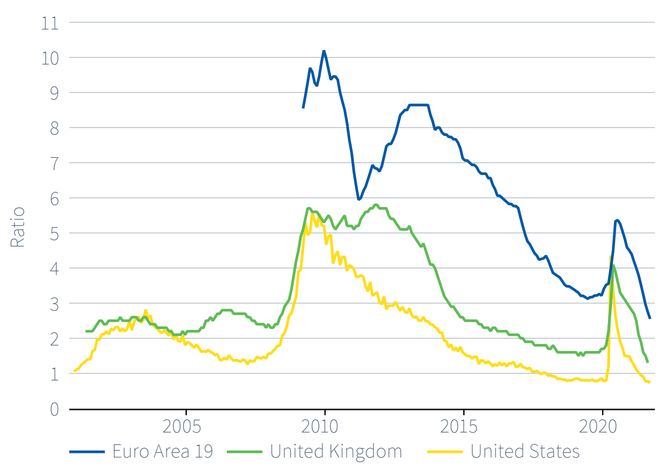
We expect the increase in net worth, alongside a strong rise in household income, to support consumption growth in 2022. Business capex is also expected to be solid in 2022, supported by strong profitability, excess demand across many sectors (especially manufacturing) and the need to increase capacity and inventories. While public sector deficits are set to decline materially in 2022 as various COVID-19 income support packages are removed, public sector investment should be supportive, as major infrastructure projects are undertaken to support the economic transition required by climate policy objectives.

Figure 1. **Major economy GDP growth projections**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 2. **Number of unemployed per job vacancy at record low**



Source: Aviva Investors, Macrobond as at 1 December 2021

Of course, risks remain to the outlook. In particular, the new Omicron variant of COVID-19 could present a challenge that may require (at least temporary) re-introduction of restrictions on economic activity. And it may not be the last variant that is a cause for concern, though we would expect Omicron or other variants to defer growth, rather than create a permanent loss, so long as income support measures were once again available. The risks around the growth outlook in China are also likely tilted to the downside, as the country continues to look to deleverage the property sector and pursue "common prosperity".

Public sector current spending set to decline, but investment to pick up

The speed limit to growth that appeared in 2021 due to supply constraints, in the manufacturing sector in particular, should ease in 2022. We expect increased capacity and reduced economic restrictions should allow for production to pick up, with some recent evidence indicating an easing in the shortage of semi-conductor chips and an improvement in international shipping capacity. However, the Omicron variant could have the potential to impact supply conditions should it require a forceful response. But even absent potential concerns around Omicron, we are focused on the already apparent tightness of labour markets around the world. While unemployment rates are still somewhat above their pre-COVID-19 level in the major economies, they are on a downward trajectory and other indicators, such as very elevated job vacancies, suggest that employers are finding it difficult to match potential employees to jobs (Figure 2). The tight labour market is also beginning to be reflected in rising wage growth, which in the United States is at a multi-decade high.

Omicron may present a challenge to the near-term outlook

The combination of continued strong demand, tight labour markets and high consumer price pressures presents a challenging inflation outlook for 2022 (Figure 3). While the factors that have led to the sharp increase in inflation in 2021 are likely to abate in 2022 – notably the contribution from energy prices and consumer goods – these are likely to be met by rising underlying inflation pressures in the service sector. The first of those two effects is expected to dominate in 2022, with inflation likely to fall back from a peak in Q1, but the risk remains tilted for a less rapid decline. We, like many other forecasters, have significantly revised up both the peak in inflation and the time we expect it to take to ease back. But given the uncertainties around the inflation process, and the unique nature of the recovery and expansion, it is right to be humble about the ability to forecast the inflation outlook with any certainty.

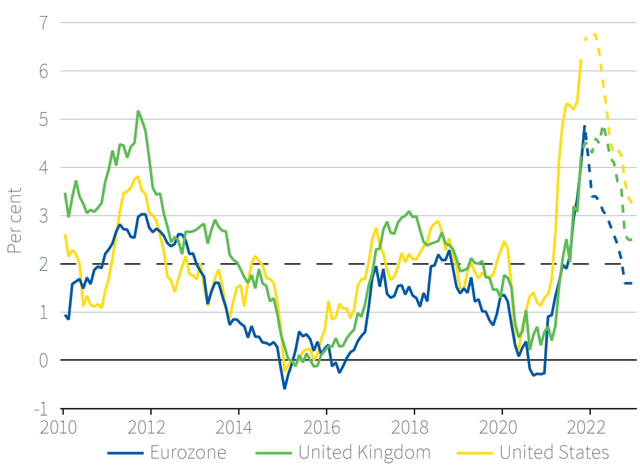
Supply-chain issues should ease through 2022, but tight labour markets more important

Looking beyond just the next 12 months, we think there are reasons to expect economic and financial market volatility to be higher over the coming years than it has in the past decade or more.

Elevated and uncertain inflation outlook

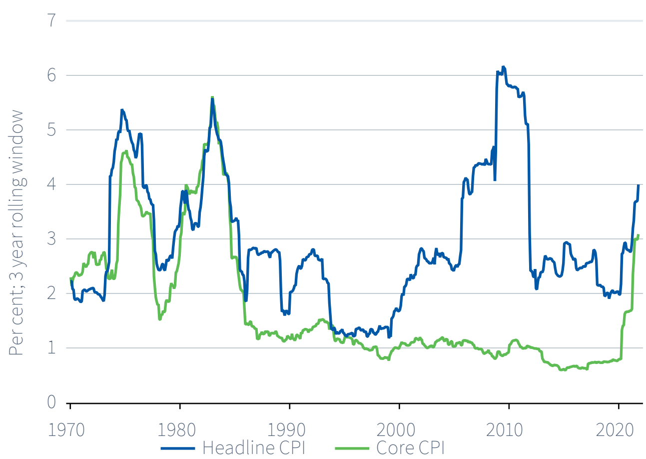
The economic shock that resulted from the COVID-19 pandemic was a seismic event. The forceful and coordinated fiscal and monetary policy response facilitated a rapid economic recovery. Indeed, the recovery has been so rapid that, as noted above, it created unexpected challenges to global supply-chains. The COVID-19 shock has also coincided with a major review of monetary policy frameworks by several central banks. The frameworks were adjusted to allow economies to run 'hotter' in the cyclical upswings, in order to deliver a

Figure 3. **CPI inflation projections: taking longer to return to target in 2022**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 4. **Realised US inflation volatility has risen sharply**



Source: Aviva Investors, Macrobond as at 1 December 2021

period of inflation above target when it has been preceded with a long period of below target inflation. It has also coincided with a more activist fiscal policy than we have seen for many decades.

While the impact of these changes on economic outcomes over the coming years is difficult to judge, it appears to present a mix of both economic opportunities and risks associated with COVID-19 itself, as well as a policy framework that is more willing to allow for greater variability in growth and inflation. Moreover, the economic transition needed to reduce dependence on fossil fuels adds to the potential economic uncertainty during that transition. These factors have arguably already combined to increase volatility in inflation (Figure 4). Looking ahead, these factors could lead to a more sustained increase in both expected and realised economic volatility and which could also increase volatility and risk premia across asset classes. That could be particularly challenging for highly valued assets that have relied on zero interest rates and low volatility to justify those valuations. On the other hand, it could benefit high-quality, lower-valued assets that produce reliable free cash flow.

Response to COVID-19 shock, alongside other factors may increase volatility for some time

Reflecting on the new monetary policy frameworks, we see the Federal Reserve as already having let the economy run hotter than they would have in past cycles. Therefore, once they do move into the phase of removing policy accommodation, it could well come more quickly than in the last cycle. Starting in mid-2022, we expect two to three rate increases by the end of next year, with another four to five in 2023. The Bank of England is expected to raise rates by a similar margin in 2022, although beginning that process sooner. Meanwhile, we now see the ECB as potentially looking for a first rate increase in over a decade in early 2023. The Bank of Japan is not expected to raise rates in the next two years.

We prefer to be overweight equities and underweight duration

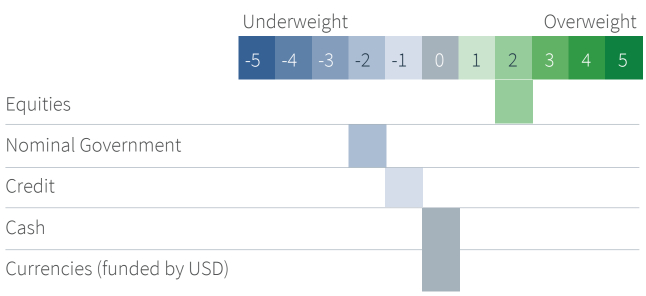
We retain a moderate overweight position to equities going into the new year (Figure 5). This is funded by an underweight position in credit. Equities typically fare better than credit during the middle stages of the business cycle, and whilst valuations are high for both asset classes, the prospect of rising rates volatility raises disproportionate downside risks to credit.

Inflation outlook has potential to bring earlier and faster rate hikes

In light of persistently high inflation and risks to the inflation outlook being tilted to the upside, we maintain a negative stance on government bonds. Rate hikes may not only occur earlier and faster than the market currently anticipates but we also view terminal rates as underpriced. Moreover, should the Omicron variant temporarily impact growth negatively, the consequence for inflation beyond the near-term has the potential to turbo-charge the rates sell-off later in the year.

Emerging markets are expected to underperform developed markets in FX and in Equities. Headwinds for the EM complex include, but are not limited to, our expectation of slowing global economic growth momentum, monetary policy normalization and relatedly a risk of higher real rates, as well as a host of idiosyncratic risks ranging from politics to regulation, for which current valuations offer little room for error.

Figure 5. **Asset allocation summary**



Source: Aviva Investors, Macrobond as at 1 December 2021

Key investment themes and risks

Investment themes

1 Above-trend growth
2 High inflation
3 End of emergency policy settings
4 Climate change policies
5 Living with COVID-19
6 New China
7 Supply-side challenges

Above-trend growth

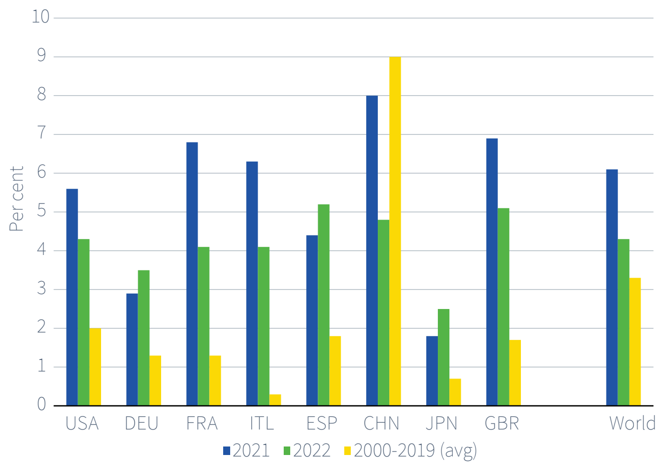
After the wild gyrations in growth of the last two years, the next year or so should see a return towards a more "normal" and more stable pace of expansion around the world. The exact pattern will continue to be influenced by the transmission patterns of the virus (and by any policy or behavioural reactions to those), but it is very likely to be at an above-trend pace in most places between now and the end of 2022. That is largely a reflection of post-COVID-19 catch-up as countries re-open more fully and/or adapt to the "new normal". Once that process is almost complete, economic growth should revert to the rates that were considered to be the norm before the pandemic. For most developed economies that will be somewhere between 1% and 2%. For China it will be closer to 5% and for the world as a whole perhaps 3.3% or so. Nevertheless, the way that GDP is measured means that both 2021 and 2022 will see annual growth rates well above those rates for most nations (Figure 6).

2021 and 2022 will see very strong GDP increases across the world

Moreover, the fact that GDP growth is slowing should not by itself be a major concern, given where we have been. After the initial rapid catch-up, it was inevitable, a reflection of the ongoing transition back towards a resumption of normal activity. It would be wrong to interpret such trends as a conventional cyclical slowdown which might have to be met with looser policy settings. Instead, they should be seen as structural adjustments to a unique set of circumstances which will, we hope, never be repeated. Equally, any conclusions reached that are modelled on what happens during "normal" growth slowdowns should be treated with great caution. There are few if any lessons that can be drawn from historical experience because there has been nothing remotely comparable to COVID-19-in the modern age. Instead, the emphasis should be on ongoing robust growth rather than any incremental deceleration. The key comparison is that most countries will have returned to pre-COVID-19 levels of activity by early 2022 (many already have) and a number look as if they will approach (or even exceed) their pre-COVID-19 trend by the end of next year (Figure 7). That is an outcome which looked highly improbable as recently as a year ago.

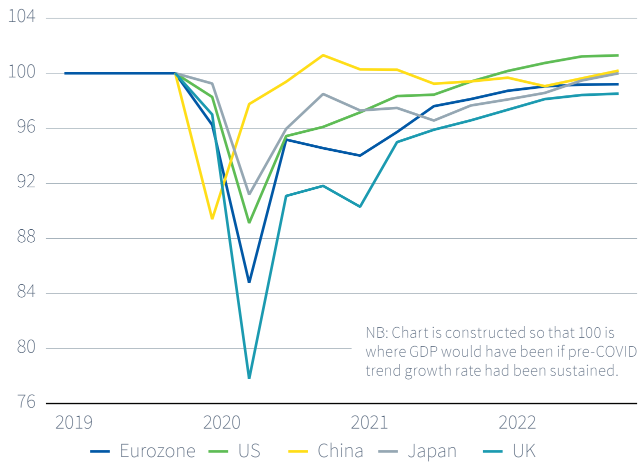
Despite virus setbacks, the economic recovery has been better and more complete than expected

Figure 6. **Annual growth estimates**
2021 and 2022 will see strong increases compared with history



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 7. **GDP relative to pre-COVID-19 trend**
Economic recoveries have been better than hoped



Source: Aviva Investors, Macrobond as at 1 December 2021

High inflation

The main surprise of 2021 has been much higher inflation

Perhaps the chair of the Federal Reserve in the US, Jerome Powell, is right and we should stop using the term “transitory” to describe the current wave of higher inflation. Every bout of inflation passes, so they are all temporary in that sense. More importantly, although it has been less than a year that high inflation has been with us and we continue to believe that it will fall back in 2022, the transitory/permanent distinction is less helpful and relevant now. Inflation has been high enough, for long enough, to matter in terms of influencing sentiment, behaviours and expectations. At the simplest level, changes in prices are driven by imbalances between supply and demand. During the pandemic spare capacity (excess supply) opened up, although not as much as in normal recessions because there was a big shock to supply as well as demand. Price pressures initially fell as a result, but when demand recovered sharply, output gaps closed quickly (Figure 8).

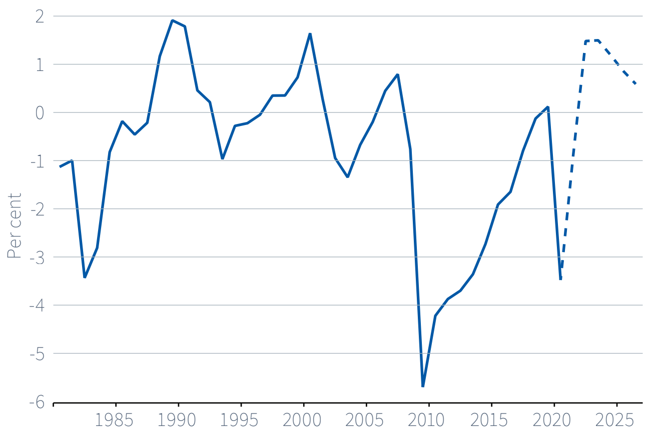
Demand and supply do still matter

Although output gaps can only be estimated, the stylised facts do help explain recent inflation trends – both the sudden return of inflation as well as its subdued nature in the decade that followed the Global Financial Crisis. It is entirely possible that demand growth now moderates after the initial rapid jumps, while supply constraints after the COVID-19 shock ease in 2022, leading to a waning of underlying inflation pressures. Nevertheless, while some of the factors which drove inflation rates to multi-decade highs (Figure 9) are likely to prove transitory, it still looks likely that a broadening of inflation pressures from conditions of modest excess aggregate demand will in coming years be sufficient to sustain underlying inflation rates above the average levels which have prevailed for much of the last two decades.

Inflation spike comes after many years of excessively low inflation in many places

For much of that period, the major developed market central banks (Japan and Europe in particular) have struggled to achieve their inflation targets, chronically missing them to the downside. In some extreme cases, deflation became a more meaningful threat although, outside of Japan, this has been largely avoided. This contrasts sharply with the experiences of the inflationary 1970s and 1980s and led to a general acceptance that runaway inflation had largely been beaten or at least controlled by successful monetary policy. Sceptics have suggested that it may yet prove spectacularly ironic timing that the low inflation backdrop resulted in several central banks – led by the Fed in the US – to recently adopt a more relaxed approach to inflation-targeting, approving new regimes that effectively encourage higher inflation. We believe that inflation will remain high compared with the average since 2000, but that it is not out of control and that central banks can contain it satisfactorily. But the confluence of factors affecting inflation currently clearly point to upside risks.

Figure 8. **G7 countries output gap, IMF estimates**
Negative gap closed quickly as demand recovered and supply was constrained



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 9. **G7 annual CPI inflation**
Inflation has spiked higher over the last year

Source: Aviva Investors, Macrobond as at 1 December 2021

End of emergency policy settings

The special circumstances surrounding COVID-19 have complicated monetary policy decision-making considerably. In normal times, the combination of above-trend growth and above-target inflation would surely have led to at least some policy tightening, especially since current settings were effectively in maximum stimulus mode. But as in the aftermath of the GFC a decade or more ago, a cautious approach to the withdrawal of support has been warranted. There are still legitimate concerns about the path of the virus from here and there will doubtless be further bumps along the way. Recent history has amply demonstrated that both fiscal and monetary policy levers can be pulled quickly and effectively. It is now appropriate to consider more explicitly the timing, extent and configuration of the end of emergency policy settings, and it is this debate that has been taking place in financial markets whenever extraneous influences such as the virus do not dominate the mood and the headlines.

The end of emergency policy settings is now appropriate most places

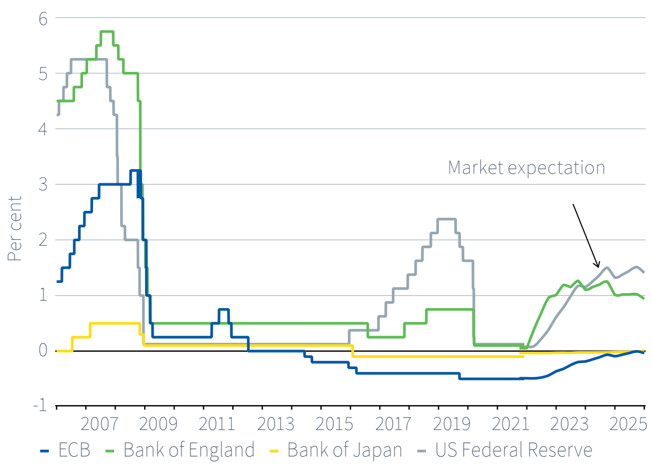
The first steps have already been taken. A number of emerging market central banks have already raised policy rates, and the first developed market peers have now followed. Moreover, all of the major players have signalled either a reduction in or a planned end to unconventional policy initiatives, as a precursor to eventual rate hikes. And markets have listened: current expectations are for a very modest and measured pace of policy interest rate hikes over the next few years (Figure 10). Nothing is certain, especially with understandable worries about the possible adverse ramifications of the Omicron variant. Against the backdrop of high inflation, central banks may be uncomfortable about keeping policy "loose". But if they foresee downside risks to growth, they can easily amend their tightening timetable or, in extremis, put them on hold. They have had plenty of practice over the last 12 years. The ECB in particular will be nervous: they will be very keen to improve on their misguided attempts to raise rates in the past – the last two occasions are now generally accepted to be significant policy mistakes. The fact that even they are now going to some lengths to prepare markets and economies for tighter policy is one of the clearest indications that we are – finally – entering a hiking environment.

Financial markets expect a modest and limited pace of monetary tightening

Fiscal policy settings around the world will also be guided by the path of the virus and the related pace and shape of economic recovery. Fiscal policy did much of the "heavy lifting" during the pandemic and it is not out of the question that it could be called on again if there are renewed lockdowns or severe restrictions on activity in some areas. But absent that, budget deficits are already shrinking automatically as emergency assistance programmes are withdrawn. Our base case is that this will continue in coming years, but there will be no return to the "austerity" which followed the GFC (Figure 11).

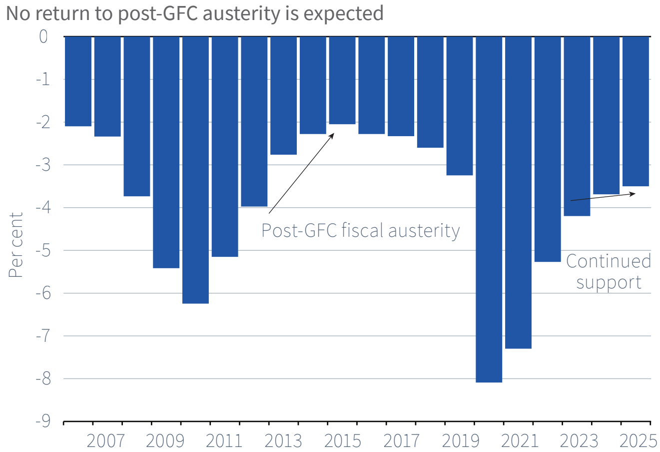
No return to post-GFC "austerity" is expected

Figure 10. **Policy interest rate expectations**
Slow and limited pace of hiking expected by financial markets



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 11. **Cyclically adjusted budget deficit as per cent of GDP (advanced economies)**
No return to post-GFC austerity is expected



Source: Aviva Investors, Macrobond as at 1 December 2021

Climate change policies

Even the optimists believe that, after COP26 in Glasgow, there is precious little chance of achieving the long-stated goal of limiting global warming to just 1.5°C. At COP21, in Paris, all participating countries had signed up to this goal, agreed to contribute towards initiatives to get there and settled on periodically assessing ambitions and developments through five-year national climate plans. Progress since Paris has been lacklustre at best. COP26 did see updated and new pledges from countries around the world to increase efforts to tackle climate change alongside some additional goals. But the overriding impression is that nowhere near enough is being done, even if all of the actions revealed in Glasgow were implemented. Essentially, to stand any chance of meeting the Paris goals, the issue will require "constant effort and unrelenting pressure on all governments, especially the major emitters", according to the EU climate chief Frans Timmermans.

Progress since Paris has been lacklustre at best

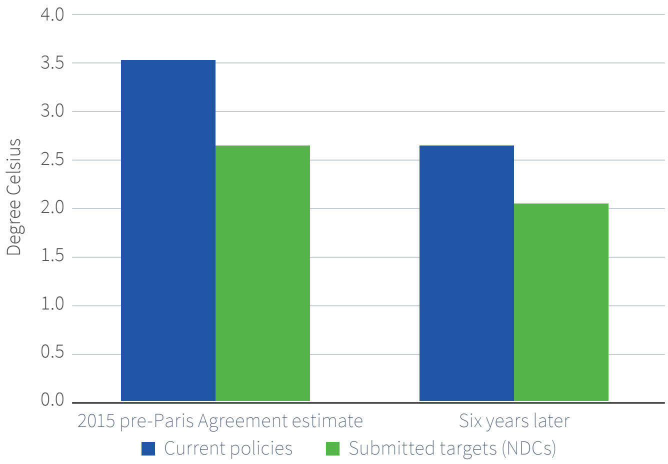
All analyses of the global climate pledges made at COP26 show a credibility gap between stated climate goals and the actions planned in order to achieve them. In all scenarios apart from the most optimistic, the world is on course to overshoot the Paris climate goals on a massive scale. Essentially, the actions planned to achieve the Paris goals are simply insufficient and targets need to be reset. Climate Action Tracker (CAT) warns that if all official 2030 targets are implemented, global warming would still reach 2.4°C. Getting below 2.0°C would in addition require full achievement of net zero emissions pledges. And on current settings, as presented at Glasgow, the world will still be emitting about twice as much as today in 2030. That credibility gap has been reduced since Paris, but it is still significant (Figure 12).

There is a big credibility gap between goals and actions

Modelling shows 2030 pledges could shave 0.1°C off central warming projections, reaching 2.3°C. Add the long-term promises and we could even reach 1.8°C. But there are crucial gaps. The first is the obvious gap between all the projections and 1.5°C. That is particularly acute at the 2030 point, where emissions need to be roughly half their 2010 levels to give us a fighting chance. Annual emissions are currently above 2010 levels. The latest national climate plans and COP pledges close that 2030 emissions gap, but only incrementally The second gap relates to delivery. The vague, post-2030 accelerations to net zero are, in most cases, simply aspirations. The 1.8°C should therefore be taken with a mountain of salt. But momentum from COP26 can help close both gaps. Another round of climate plans in 2022, the roll-out of targeted financing partnerships and renewed US-China collaboration all offer hope. And public interest and scrutiny has never been greater. Scepticism is understandable given the poor historic record. But if the mood and momentum do result in major changes to climate change policies, then the economic consequences would be vast. The rapid rise in the carbon price (Figure 13) in 2021 is indicative of the way the global mood is shifting.

Further momentum needs to build if meaningful change is to emerge

Figure 12. **Progress since Paris**
The gap has closed a little



Source: Climate Action Tracker

Figure 13. **European carbon futures price**
Carbon price has quadrupled in 2021

Source: Aviva Investors, Macrobond as at 1 December 2021

Living with COVID-19

The recent emergence of the Omicron variant of COVID-19 has highlighted the difficulties in predicting the likely path of the virus(Figure 14 & Figure 15). It has also brought home the reality that we will be living with this virus, in all likelihood, for years to come. Although it remains reasonable to expect a transition from pandemic to endemic in coming months or years, the latest developments have demonstrated that while the virus is still here, it will evolve and mutate (that is what viruses do), obliging the medical profession to make constant efforts in order to keep one step ahead. There is still great uncertainty about Omicron, only part of which will be resolved before the end of the year. It is not yet clear whether it is more transmissible or capable of causing more serious illness among either the vaccinated or unvaccinated. The two key variables are transmissibility and whether it is more likely to evade the immune protection provided by vaccines or prior infection.

From pandemic to endemic - we hope

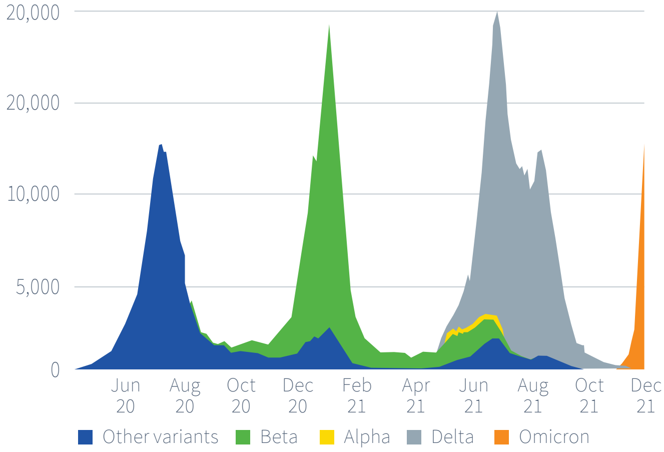
There have been some encouraging early signs that Omicron is not more dangerous and that existing vaccines do provide protection. It is also a reminder that COVID-19 is not a fixed target – it is an evolving one. And countries would be wise to accept that living with the virus will inevitably mean adapting to swiftly changing circumstances at times. Governments will have to be nimble in imposing any new guidelines or restrictions if they are deemed necessary, and businesses and households will have to be compliant in respecting any such measures if more damaging infection trends are to be avoided. The best case is that Omicron is milder than previous variants and therefore vaccine protection from severe disease is high. Booster doses would then provide protection above that seen thus far in the pandemic. If this is right, then whilst the pace of infections would still need to be monitored, governments and central banks can look forward to a post-pandemic world with greater confidence and can set policy accordingly. But if new vaccines are needed, they are unlikely to be ready until next spring, so it would be more sensible to provide ongoing support. In the worst case, where some lockdown restrictions are needed again (even if more local and specific), then economies would probably require a renewal of limited income support measures.

Omicron is a reminder that this virus will be with us for some time

While most of the world continues to adapt to living with COVID-19, China has chosen a different route. Beijing has adopted a tougher zero-COVID-19 approach which has left it isolated from the rest of the world and which is coming at some economic cost. Other countries in the region which had also previously followed elimination strategies have changed and moved towards acceptance of the disease as endemic, allowing them to reopen more fully and recover economically. In typical fashion, Chinese authorities have so far remained resolute in their insistence that their way is best. While such policies are retained, the risk of economic pain is far greater, while the continued existence of the virus globally will be a much greater threat to China: there are huge question marks over the efficacy of their own vaccines, while the national policy means a very low level of infection-induced protection.

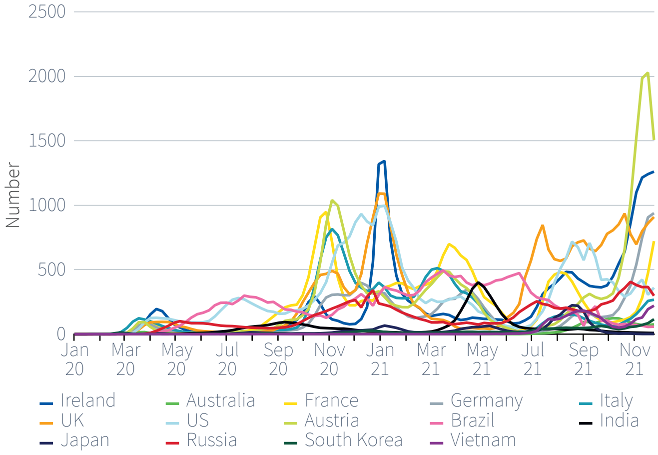
China has chosen a different and far more problematic route

Figure 14. **The Omicron variant is driving a new wave of cases in South Africa**



Source: FT analysis of data from Gisaid and the South African National Health Laboratory Service, John Burn-Murdoch, FT

Figure 15. **Global COVID-19 case numbers**
Cumulative 14-day total per 100K population



Source: Aviva Investors, Macrobond as at 1 December 2021

New China

China is doing things differently

China is in the midst of a major shift in its economic and social priorities as it heads towards the 20th Party Congress (Autumn 2022), in which President Xi Jinping will break with recent tradition and elevate himself to leader-for-life. How the state-dominated economy implements its key goals will be critical. For the next year, stability and ensuring the 'transition' proceeds smoothly is a key priority, with a desire to avoid embarrassment around the Winter Olympics, the exit from the Zero-COVID-19 policy, and overdoing the pressure on real estate. A slower-growth China is expected (Figure 16) which will have spillovers to other countries, while China's internal model will impact markets as it continues to try to open up, attract foreign capital, and integrate into global markets.

Based on the outcome of the Five Year Plan and 6th Plenum in 2021, China will aim for:

Greater self-reliance

– Greater self-reliance, with the internal part of the so-called dual circulation economy promoting consumption and local production. China is more paranoid than ever about external threats but realises that it needs to integrate and participate more fully in the global economy, partly in order to have a say in global rule and standard-setting. Sectors that are seen as antithetical to these goals – ones that open it up to foreign influence or supervision – may face regulatory hurdles and political opposition.

Quality not quantity

– High-quality development rather than merely high growth, led by investments that raise living standards and expand clean energy generation. Infrastructure and capital-intensive manufacturing will not be stopped, but SOEs will upgrade to become more efficient and less polluting. On the flip side, there will be taxes and transfers that are painful for those sectors that have grown dominant, limits on "negative" activities (gaming, online tutors, celebrity influencers) and property taxes once that sector is more stable.

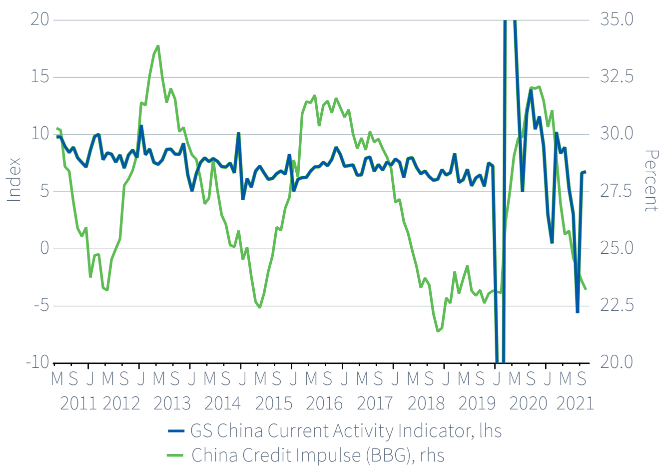
Risk reduction

– Risk-reduction: Ensuring stability is a priority not only because President Xi needs to ensure a smooth transition in the short term, but also because long-term growth is now weaker, and setbacks can damage strategic priorities. The main concerns are financial risks: the large and growing leverage in corporates and households, sprawling conglomerates attempting to straddle or arbitrage regulatory limits, and the property sector overall (Figure 17). A key term is "disorderly expansion of capital", an umbrella term that encompasses not just debt ratios or dependence on foreign capital, but market dominance that runs counter to shared affluence. These efforts may precipitate a hard landing, one of the risks to our 2022 House View.

Geopolitical tensions are not going to disappear any time soon

China and the US will seek to de-escalate the trade war and reduce risks of decoupling, but overall relations and geopolitical tensions between China and its neighbours are at multi-year lows; the pithy label of a Cold Peace from Eurasia Group is the correct characterization. Strains will continue but are increasingly shifting to technology, ideology, and global rule-setting, including 'unfair' competition via SOEs and official/state bank support. In contrast to the

Figure 16. **Low credit growth and lockdowns hamper growth**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 17. **China's real estate crackdown is taking a toll**

Source: China NBS: Aviva Investors, Macrobond as at 1 December 2021

Trump tariffs, a multilateral approach is being taken under Biden, together with the EU, the UK, and allies in Asia like Australia and Japan. They will look to compete with China, cooperate where possible (e.g. on climate) and punish when necessary (human rights, interference in politics).

Supply-side challenges

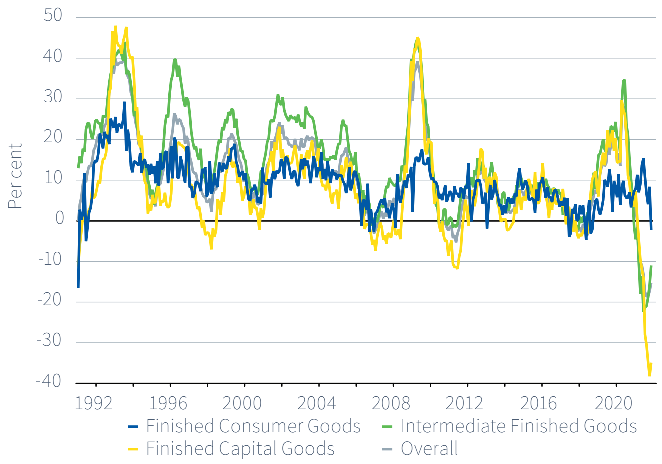
It turns out that restarting economies after large parts have effectively been put into an induced coma is not that easy. Perhaps it should not have been a surprise – there is no comparable playbook to follow in today's singular circumstances. In "normal" upswings, there have often been periods after demand recovers when supply has struggled to keep up, at least initially. Given the unprecedented extent of recent falls and subsequent rebounds in activity levels, it is quite possible that we are simply experiencing extreme examples of this pattern and that imbalances will fade away once economies reopen more and supply can respond more fully. But even if true, this does not make the present experience any less uncomfortable. Moreover, mismatches have been compounded by exceptionally low inventory levels which have resulted from the inexorable drive towards just-in-time stock management methods, as well as restarting frictions in key parts of the global transportation system. Although stock levels are still low (Figure 18) and delivery times lengthy in many goods sectors, a number of these difficulties had appeared to be starting to ease recently. Any renewed frictions as a result of Omicron and any subsequent containment measures would re-aggravate supply-side challenges and add to, or at the very least, sustain cost-inflationary pressures.

Restarting mothballed economies has not always been easy

Supply-side shocks are not uncommon, part of the normal cyclical process of disturbance and revival. But what has been unique about the recent experience has been the number of sectors across the world simultaneously facing a "once-in-a-century" shock to supply. One of the reasons that initial estimates of the extent and scale of disruptions proved too optimistic was that they were largely based on supply-chain guidance from firms via business surveys that in turn reflected their own historical experience. But companies have only limited visibility over the entire – and very interconnected – commercial network which their small chain makes up only a small part. The coordinated and massive aggregate supply shock meant that taking the average guidance from firms was misleading. It also complicates any assessment of the resolution of supply-side issues: it may not be until nearly all aspects correct that a durable improvement will be seen. There are some encouraging signs. Most industries are operating again which will allow orders to be met and inventory levels to be rebuilt. Microchip manufacture levels, for example, are returning to normal. Transport bottlenecks are easing, and goods trade has recovered well. Shortages of key commodities – including energy – should diminish next year, especially if new supply can come on stream. It now seems plausible that supply-side problems will last well into 2022, even if they do moderate a little. A final worry is that any transition of spending back to services (Figure 19) may ease pressure on goods but could intensify those on services (mainly labour).

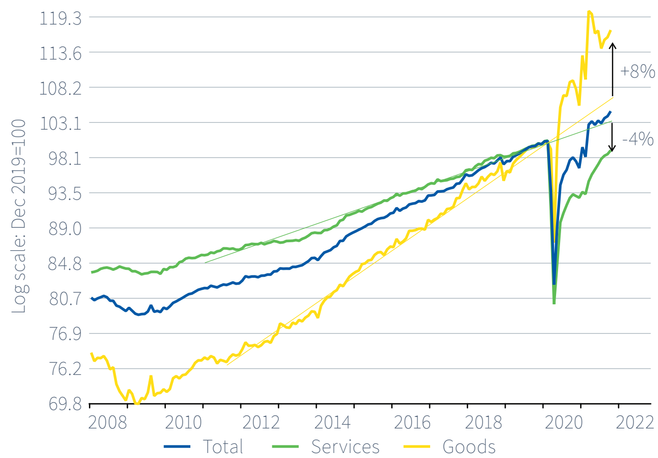
There has been no precedent for the COVID supply (or demand) shock, so no playbook to follow

Figure 18. **German inventory levels, IFO survey**
Many inventories are at all-time lows



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 19. **Consumer spending trends in the US – goods and services**
Spending on goods has soared in the pandemic



Source: Aviva Investors, Macrobond as at 1 December 2021

Risks

Inflation outbreak

Inflation rates of 4% to 6% in the major developed economies that have been recorded recently might already be described as an outbreak of dangerously high inflation (Figure 20). And in strict numerical terms that is a fair depiction, especially in the context of the history of the last 20 years or so. But if inflation rates do fall significantly next year, as we expect, then the present apprehension about excessive inflation will ease quickly. There is a unique confluence of factors pushing inflation higher at present, including the energy price spike and the unprecedented effects of reopening mothballed economies. There are some limited parallels with the aftermath of the GFC: G7 CPI inflation spiked to 4.6% in July 2008, but fell back swiftly, averaging just 1.3% over the following three years. But inflation might be more stubborn this time around – the spike is bigger, policy is looser, supply strains may continue, and central banks have become explicitly more tolerant of higher inflation.

Highest inflation rates for 20 years...

History has demonstrated that if inflation is allowed to become established, it can become more difficult to shift. One of the greatest concerns is that if higher inflation becomes more entrenched in expectations, then it will feature more prominently in wage- and price-setting behaviours, thereby ensuring that the inflationary impulse continues or accelerates. This is the sort of inflation outbreak that central banks really fret about and recent events have conspired to produce a set of circumstances which have intensified that risk. Policymakers are on high alert for clearer evidence of "old school" overheating and damaging second round effects. There have been some signs of higher wage inflation, but so far they have been reasonably contained. If these became more worrying, central banks may feel that they have no choice but to tighten policy significantly to slow demand. This would represent a major shock to financial markets and in the worst-case scenario could threaten the hard-won credibility of inflation-targeting central banks.

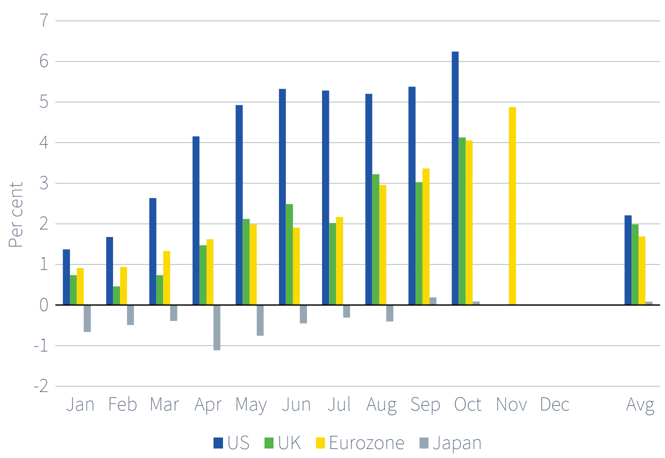
...but it is not, in our view, out of control

Fiscal sustainability

At the start of the COVID-19 pandemic, conventional wisdom was that many countries were already running up against the limits of fiscal sustainability. For example, the January 2020 Debt Sustainability Monitor published by the European Commission identified medium-term risks in several large European economies including Belgium, France, Italy, Spain and the UK, as well as lower grade risks almost everywhere else. Since then, COVID-19-related fiscal programmes have boosted public debt ratios by 15% to 20% of GDP on average (Figure 21) and budget deficits are still significant everywhere. But attitudes have evolved: there has been greater tolerance of higher borrowing in current circumstances and a recognition that perhaps debt and deficit ratios should be seen in a context other than simplistic comparisons to annual GDP.

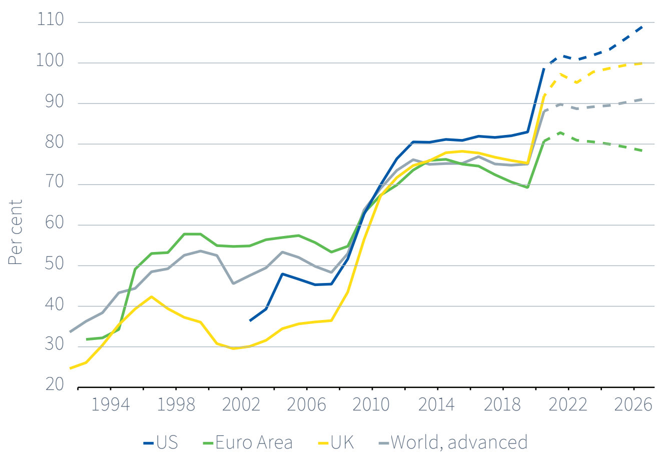
Fiscal risks may have risen, but previous metrics may no longer be the right ones

Figure 20. **CPI inflation in 2021 vs average since 2000**
Inflation has spiked higher almost everywhere



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 21. **Public sector net debt as % of GDP and IMF projections**
80% of GDP was once considered the upper limit for sustainability



Source: Aviva Investors, Macrobond as at 1 December 2021

Nevertheless, the algebra of fiscal sustainability still holds, and key relationships remain between variables including the rate of economic growth, pace of inflation, initial public debt ratio, primary budget balance and rate of interest. The more enlightened approach to acceptable fiscal metrics allowed policy to provide critical support during the pandemic, but there may still be limits and these will vary enormously across countries. Several emerging market economies do not have the luxury of being able to take on extra borrowing (Figure 22) and/or debt without potentially damaging consequences for their bond markets and/or currencies. Sharp movements in either can quickly push such countries onto untenable paths and severely curtail market access. The IMF has been notably more relaxed about the fiscal situation in all countries, but still recognises that a credible medium-term fiscal framework will be needed in many EMs and perhaps some DMs too.

EM public borrowing has been more restrained than most DMs

Productivity revival

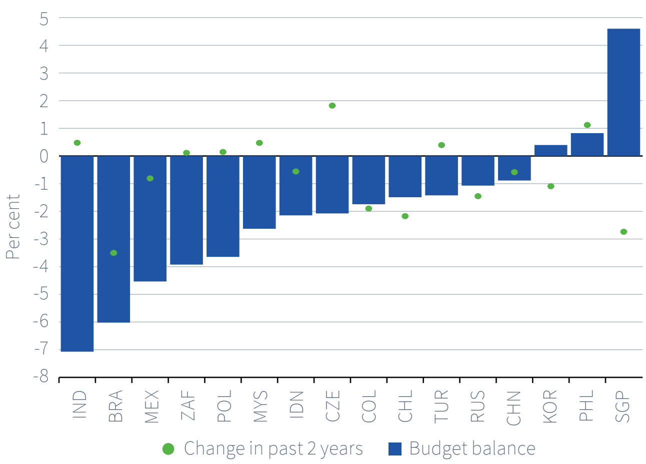
Nobel laureate economist Paul Krugman famously said that productivity isn't everything, but in the long run it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to increase output per hour worked. It is well known that trend productivity growth tends to slow as economies develop because they transition towards service sector activity where it is far more difficult to increase output per hour worked – more output usual requires more worker input. But the slowdown in the last 20 years has been far greater than expected (Figure 23). (Note that the leap at the end of the chart simply reflects the special circumstances of COVID-19: official hours worked fell far more than aggregate output.) There is some tentative initial evidence that the pandemic re-set is persuading businesses to re-examine their attitudes towards productivity-enhancing investments and to innovation in general.

Productivity growth has slowed significantly over the last 20 years

If the COVID-19 experience does act as a catalyst to the introduction of any such measures, then there is a reasonable chance that such change could boost underlying productivity growth, with wide-ranging positive consequences for potential economic growth. The vast majority of developed market economies are currently struggling with the slow-burn and ongoing hit to trend growth from the ageing populations which is severely reducing the population of working age (conventionally defined). Any offsetting boost from improvements in productivity growth would be a hugely valuable counterweight to this demographic inevitability. It is far too early to reach definitive conclusions, but productivity boosts could come from accelerated growth of ecommerce, increased adoption of automation and AI, more flexible working practices as well as from the more general acceptance of different attitudes towards change and innovation that have been ushered in by COVID-19. If productivity growth were to get a meaningful boost, the dynamics of growth would change significantly.

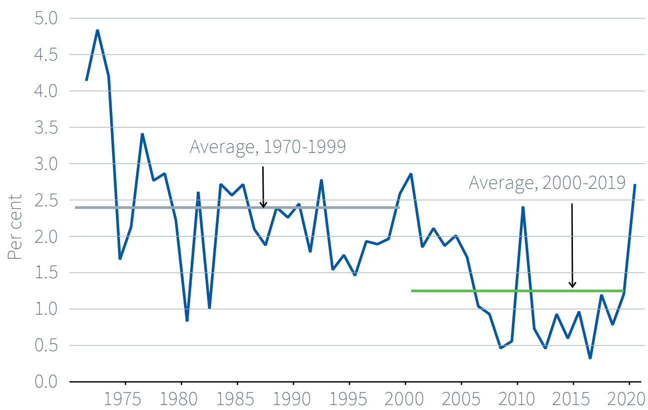
Will COVID-19 act as a catalyst for productivity-enhancing investment?

Figure 22. **Overall budget balance (% of GDP)**
EM public borrowing has been more restrained



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 23. **G7 productivity (GDP/hours worked) growth rate**
Productivity growth has slowed significantly since 2000



Source: Aviva Investors, Macrobond as at 1 December 2021

China policy mistake

China's importance in the global economy makes the impact of any slowdown there significant. China has had a series of policy-induced problems in the past, from stock market crashes to massive capital outflows and bank restructurings. But they have always managed to keep their growth model intact. China is now treading a distinctly different path in terms of economic development and participation in global politics and commerce (see themes earlier), with less emphasis on growth and an effort to reduce risks, including corporate and real estate leverage following a long-lasting property boom (Figure 24), and a crackdown on corruption and rogue oligarchs who do not toe the line. After initial success with COVID-19, China has yet to find a safe way out of its "zero COVID-19" strategy, which is also damaging output and employment. Longer term, geopolitical strains with neighbouring countries and the world's dominant superpower continue to cause tension, but the proximate risk is that the property downturn causes damage to household and bank balance sheets (Figure 25) and that negative wealth effects hamper spending, while credit loosening is too slow to cushion a severe downturn.

No emerging economy has transitioned to developed status without a few mistakes along the way

COVID-19 variants

The additional uncertainty introduced by the discovery of the Omicron variant is a timely reminder of the risks of mutations to the COVID-19 virus. Whether this latest version proves to be a major problem or a minor hiccup, it has become clear that as long as the virus is still with us (and that looks plausible for at least the next couple of years and quite possibly much longer), there will be bumps along the road to the post-COVID-19 future. The various waves of infection of the last two years have been driven in substantial part by the ebb and flow of these variations. These have, in turn, determined the timing and extent of any resulting lockdown restrictions and hence the magnitude of the economic hit that followed. That is likely to be the pattern again in 2022 and perhaps beyond, although the experience of the last year has demonstrated how quickly and how comprehensively businesses and households have been able to adapt to restrictions.

Further COVID variants have the capacity to influence the pattern of growth...

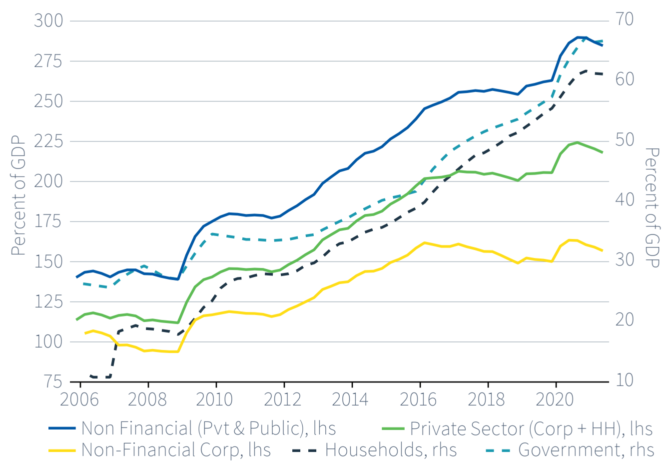
The combination of this escalating adaptability alongside the protection provided by vaccinations (and inflection-derived resistance) means that it is extremely unlikely that any single country will experience anything remotely comparable to the shocks of national lockdown of last year and early in 2021. But it is still possible that Omicron – or some future variant – may yet need to be countered by limited or localised restrictions to activity. Or that their existence leads to changed behaviours that impact supply, demand or both. To the extent that they do, macro-economic outcomes will be impacted. Again, these things are more likely to change the journey (growth, inflation and policy timepaths) rather than the end-destination. But while they exist, the impact of the virus – including both shorter-term inflation drivers (further supply-chain disruptions) and long-term scarring effects – should not be ignored.

...but it is very unlikely that we will see shocks like those of the last two years

Figure 24. **Property crash?**
Investment and land sales dropping precipitously

Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 25. **Debt by sector**
Leverage has grown tremendously, posing repayment risks



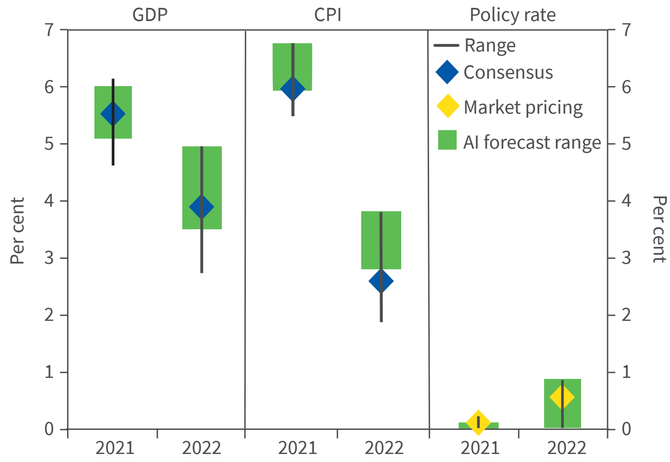
Source: Aviva Investors, Macrobond as at 1 December 2021

Macro forecasts charts and commentary

US

We expect the United States to deliver well-above-trend growth again in 2022, although moderating from the rapid pace seen in 2021 that was largely driven by the reopening of the economy. Growth should be supported by strong consumer demand, with household balance sheets the strongest they have been for many years. We expect rising business investment to create additional capacity in areas that are already constrained and inventory re-build in the wholesale and retail sectors. We expect the labour market to become as tight as any time in the last 50 years, with sustained high wage growth to add to underlying inflationary pressures. However, we expect inflation will ease overall, as pressure subsides in energy and goods markets. We think the Federal Reserve is likely to raise rates in mid-2022, with a risk that they need to increase more quickly than the last hiking cycle.

Figure 26. **US**

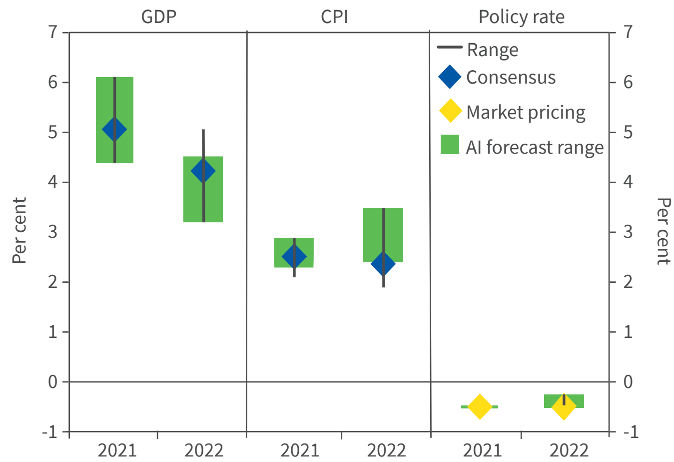


Source: Aviva Investors, Macrobond as at 1 December 2021

Eurozone

2022 should be another year of strong growth and post-COVID-19 recovery, although the distribution of growth over time will depend on the pattern of, and reactions to, virus transmission. Delta will, and Omicron may, crimp growth temporarily, but the pandemic playbook argues for setbacks rather than outright losses. A broad-based expansion is likely, with the revival of global trade flows benefitting the open economies of Europe, while domestic demand is supported by improving labour markets and inventory rebuild. It is widely hoped that corporate and public investment will be boosted by the NGEU fund in 2022 and beyond. High inflation is a concern but should fall back next year as energy prices drop, supply bottlenecks ease and base effects unwind. The ECB is on track to reduce stimulus gradually and eventually to deliver the first rate hike for more than a decade.

Figure 27. **Eurozone**

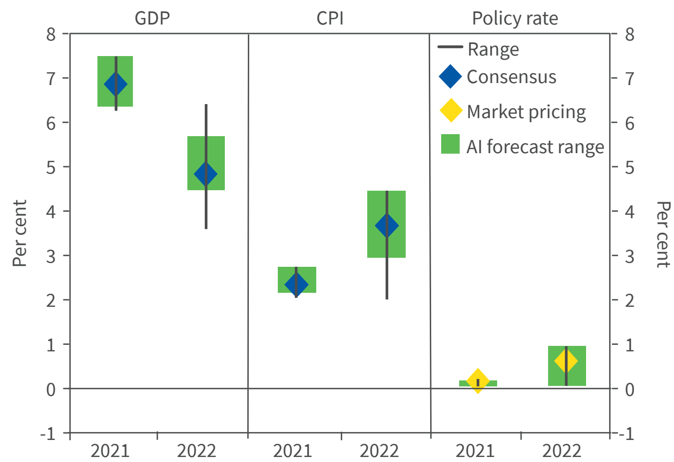


Source: Aviva Investors, Macrobond as at 1 December 2021

UK

Growth slowed after the bumper advance in Q2 but has still been at a clearly above-trend pace as the economy continues the post-pandemic catch-up. The latest virus trends could hurt growth in Q4 and Q1 next year if new restrictions are required, but any losses should be quickly regained later next year, as has been the pattern in the recent past. Within GDP, exports and business investment have been the weakest components, suggesting that Brexit in particular and uncertainty in general are having a significant impact. UK inflation may not peak until the spring and although it should then start falling, it is likely to remain well above target for most of 2022. The Bank of England has laid the ground for a gentle tightening of monetary policy but may now wait until next year before the first move on rates.

Figure 28. **UK**

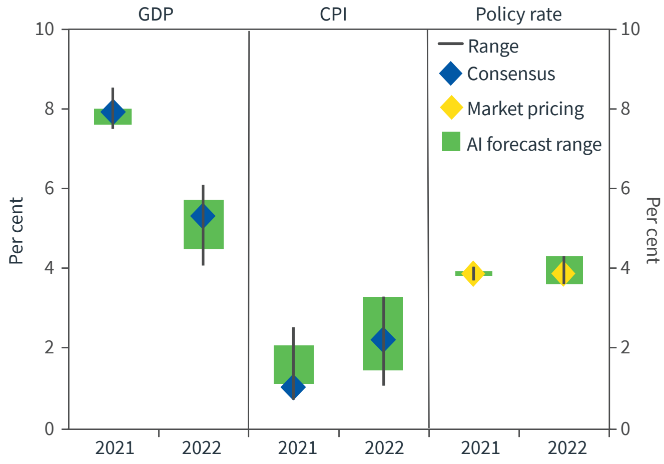


Source: Aviva Investors, Macrobond as at 1 December 2021

China

China's growth and global supply-chains are being disrupted by its stringent zero-COVID-19 policy, making GDP for 2022 unusually uncertain and conflicting with the CCP's mantra of stability ahead of the 20th Party Congress (Oct 2022). The goals of Common Prosperity mean limits on 'bad' activities and disorderly expansion of capital: tech firms listed overseas, leveraged property companies encouraging speculation and online gaming are some sectors being de-stabilized. Risks of negative spillovers exist, but overall GDP growth can be maintained around 5% with a modest infrastructure boost, and investments to enhance productivity, self-sufficiency and tech dominance. Capital inflows, exports and fixed asset investment in manufacturing are all very strong, keeping the renminbi expensive amidst rising inflation pressures, mostly manifest in PPI rather than CPI. Rate cuts are unlikely, but the central bank will keep an easing bias to provide plentiful liquidity.

Figure 29. **China**

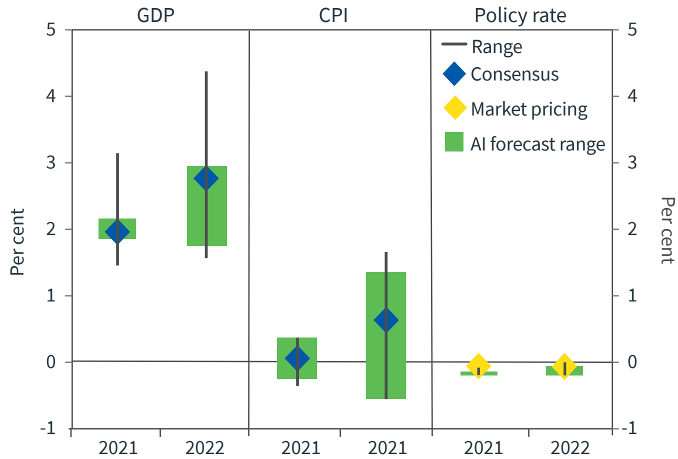


Source: Aviva Investors, Macrobond as at 1 December 2021

Japan

Japan's slow but positive growth in real and per capita terms should revert to trend after another year or so of above-trend normalization, particularly services, that was hampered in 2021 by COVID-19 waves. Kishida is ignoring the siren-calls of fiscal 'sustainability', wisely focusing on stimulus to overcome the cost of lockdowns, while hoping to pivot towards investments and reforms that will raise productivity. Growth will fall to sub-1% unless this is successful, with strong exports and a huge current account surplus offset by capital outflows. The BoJ's job is simply to monetize fiscal deficits with QE purchases, negative rates, and yield curve control; inflation is distorted by one-offs (energy, communications) but the underlying trend is barely positive. The currency will be under some pressure as the Fed tightens, but a weak yen will be a welcome boost to CPI and trade.

Figure 30. **Japan**

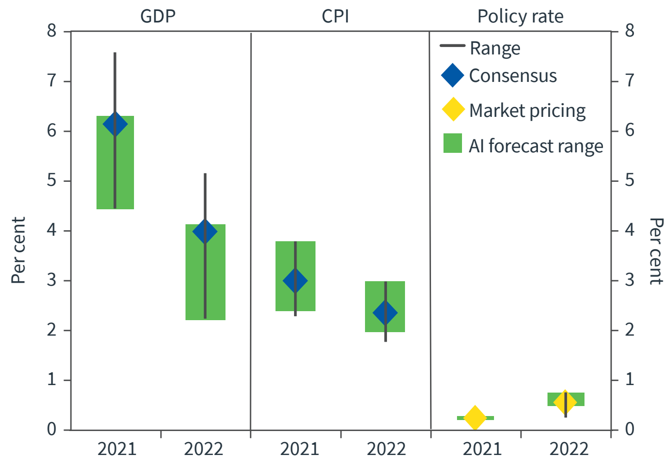


Source: Aviva Investors, Macrobond as at 1 December 2021

Canada

Extraordinary policy stimulus will continue to be removed in 2022 as the economy recovers further. New COVID-19 variants present the greatest risk to the outlook and may delay normalisation. Growth in the service sector remains strong while the goods market continues to be impacted by COVID-19-related supply issues. Predicting the level of maximum sustainable employment and the relationship between labour market conditions and inflation are two key questions for the central bank. Anticipating the persistence of inflation pressures will be fundamental in determining the pace and terminal rate for monetary policy tightening. The extension of COVID-19-related inflation pressures against potential drags to growth from prolonged COVID-19 mitigation policy will be a difficult balancing act for central banks. However, the BoC is expected to begin raising rates in mid-2022.

Figure 31. **Canada**



Source: Aviva Investors, Macrobond as at 1 December 2021

Global market outlook and asset allocation

- **Higher-than-expected inflation accelerates the removal of monetary policy accommodation and supports government bond underweights**
- **The inception of rate-hiking cycles is typically well-digested by equities**
- **Low real rates pose both a threat and a support to equities**
- **COVID-19 mutation introduces interim uncertainty and potentially poses downside risks to growth and central bank outlook**

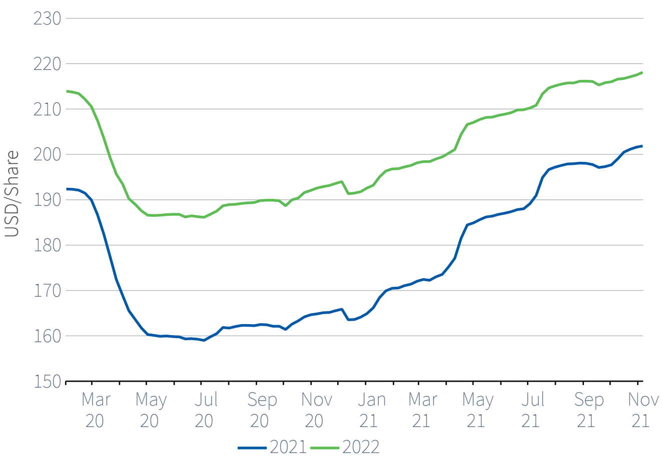
Going into 2022, the largest drivers in terms of themes and risks pertaining to asset classes' performance is the staying power of high – and higher than expected – inflation. Relatedly, when thinking about the two axes that risk assets typically trade on, economic growth and monetary policy, it is the latter that has moved into sharper focus over the past quarter and is the one that we think will dominate returns profiles over the coming year. As of early December, with the Omicron COVID-19 variant recently discovered, a renewed negative shock to economic growth cannot be ruled out. In our base case this and future variants do not escape vaccine efficacy altogether, or vaccines can be amended swiftly to combat new mutations. Therefore this episode, like Delta, is yet another delay in the path to normality as opposed to a re-set to a lower path altogether, especially as it may exacerbate inflation.

Global equities were confronted with a multitude of factors over the past quarter that could have weighed on returns, ranging from higher input costs and supply-chain disruption to slowing economic growth and a hawkish re-pricing of monetary policy expectations. Stocks powered through those concerns, however, supported by pricing power that contributed to margin resiliency, above-trend economic growth which triggered strong revenue growth, and low real rates that helped to sustain high multiples.

Higher input costs, slowing growth momentum and higher yields didn't derail equity returns

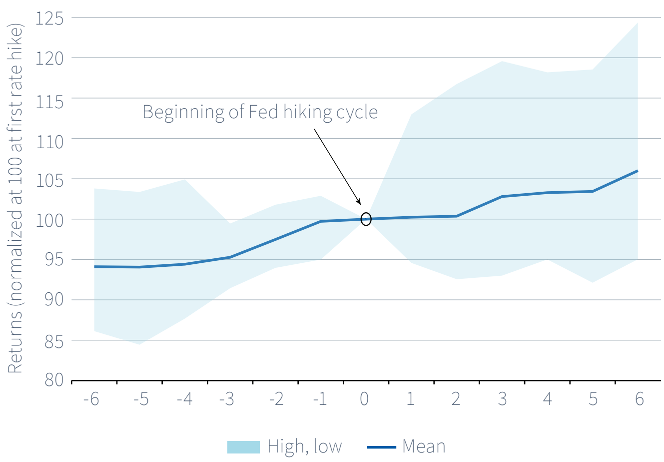
The third quarter earnings season in the US revealed not only a continuation of above historical earnings beats but showed a clear skew of those surprises being driven by margins, suggesting that consensus underestimated the strength of underlying demand and corporate America's pricing power in that context. Our assumption is that broad-based supply-chain pressures will ease going into 2022. Meanwhile, aggregate demand should remain strong, not least because backlogs are huge and depleted inventories need to be restored. This combination constitutes a supportive constellation for earnings growth near term and contrasts with fairly stable consensus' earnings expectations of late (Figure 32), laying the foundation for further positive earnings surprises.

Figure 32. **IBES consensus S&P 500 earnings per share expectations (in USD) for CY 2021 and CY 2022**



Source: Refinitiv Eikon, as of end November 2021

Figure 33. **S&P 500 price returns in the 6m before and after the inception of US rate-hiking cycle**



Source: Aviva Investors, Bloomberg, Macrobond as at 1 December 2021

Another topic gaining momentum over the past quarter has been the hawkish re-pricing of monetary policy – one of the key drivers for our underweight in position in government bonds. With the first rate hike by the Federal Reserve likely to occur by the middle of next year, we note that equities, on average, weather the beginning of well-telegraphed rate-hiking cycles positively. Figure 33 shows price returns of the S&P 500 in the six months before and after the first policy rate hike in each of the past eight rate-hiking cycles, with the shaded area representing the span between highest and lowest returns around the mean.

Equity returns typically remain positive around the inception of rate-hiking cycles

Every rate-hiking cycle, however, has its own peculiarities in terms of speed, the degree of forward guidance and the growth/inflation mix in which the cycle unfolds. We know that this time is different because the Fed itself told us so and has – so far – acted accordingly. Average inflation targeting has led the Fed to be significantly more patient in tightening monetary policy than otherwise would have been the case. This, in turn, has led to unusually low real rates (nominal rates minus breakeven inflation) for this stage of the cycle. The risk to equities continues to be a swift re-setting in real rates upon a realization that rate hikes need to come even faster than currently anticipated. This could lead to stock market volatility – however ultimately, we think real rates will remain negative for a while to come and would regard sell-offs as potential buying opportunities.

A re-set in real rates poses a risk to equity multiples

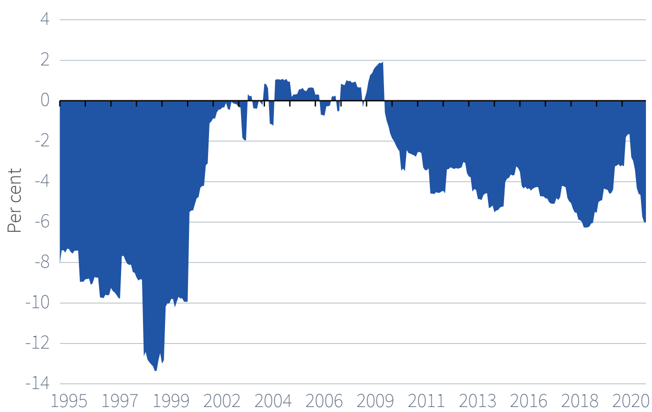
Having held only a small overweight to equities going into the recent increase of volatility on the back of another COVID-19 mutant, we await more clarity on the degree to which this variant differs from past variants in terms of severity of illness and vaccine efficacy before making wide-ranging adjustments to our positioning. The working assumption at this point in time is that vaccine makers will be able to adapt existing vaccines to combat the variant and that any large-scale sell-off is likely to be seen as an opportunity to add to risk into the new year.

Contrary to developed markets, where vaccines have been more broadly distributed and zero-COVID-19 policies largely abandoned, emerging markets would be less well placed to handle yet another large-scale COVID-19 wave and associated government-imposed restrictions on economic activity. Not only would economic growth be hurt disproportionately (particularly in the case of China, where authorities pursue a strict zero tolerance policy), but COVID-19 – for various reasons – turned out to greatly intensify inflationary pressures, leading to accelerated tightening cycles in EM, whereas developed markets are able to afford comparably more patience.

EM assets continue to face headwinds

We reinstated our preference for US over EM equities based on the outlook for slowing global growth (even in the absence of downside risks) and higher real rates in light of stronger than expected inflation outcomes. At the same time, regulatory, re-distributional and de-leveraging

Figure 34. **MSCI EM vs MSCI US Return on Equity spread (in per cent)**



Source: Refinitiv Eikon, as of end November 2021

Figure 35. **Spreads are low, but so is debt service**

Source: Bloomberg, Federal Reserve, Aviva Investors, Macrobond, as 1 December 2021 policies in China are not met with adequate policy easing measures, resulting in downside risks to Chinese economic and earnings growth. The fact that most observers are expecting significant easing results in an asymmetric return profile for the equity market. Next to these tactical considerations, we are holding the position out of longer-term considerations: US equities produce a superior RoE relative to EM equities (Figure 34). So long as this trend remains intact or intensifies, the expectation is that any drawdown in US/EM is likely to be tactical and limited. Capital inflows into the US from Europe and EM themselves also support this trend, while China's slowdown, domestic politics, and our expectation for DM policy normalization are headwinds for EM currencies and credit.

The success of vaccine deployment, the sustained strong demand driven by fiscal spending and reopening, and the subsequent emergence of inflation drove the sell-off in global bonds in 2021. Yet it was two steps forward, one step back: the midyear growth peak, scaling back of fiscal plans, and the scare from Delta provided a Q2-Q3 rally, and flattened curves as rate hikes approached (US, Canada) and then began (Norway, New Zealand) in G10 countries. If Omicron proves to pose only temporary challenges, it has the potential to turbo-charge the rates sell-off next year from a low year-end 2021 starting point, with the US and small, commodity-linked countries leading the way. Curve flattening is reminiscent of Greenspan's 'conundrum'; it is not necessarily wrong and may not reverse as short-end normalization continues, but longer-end yields embed precious little term premium, and are likely to be dragged higher over time by the rising front and belly of G10 yield curves.

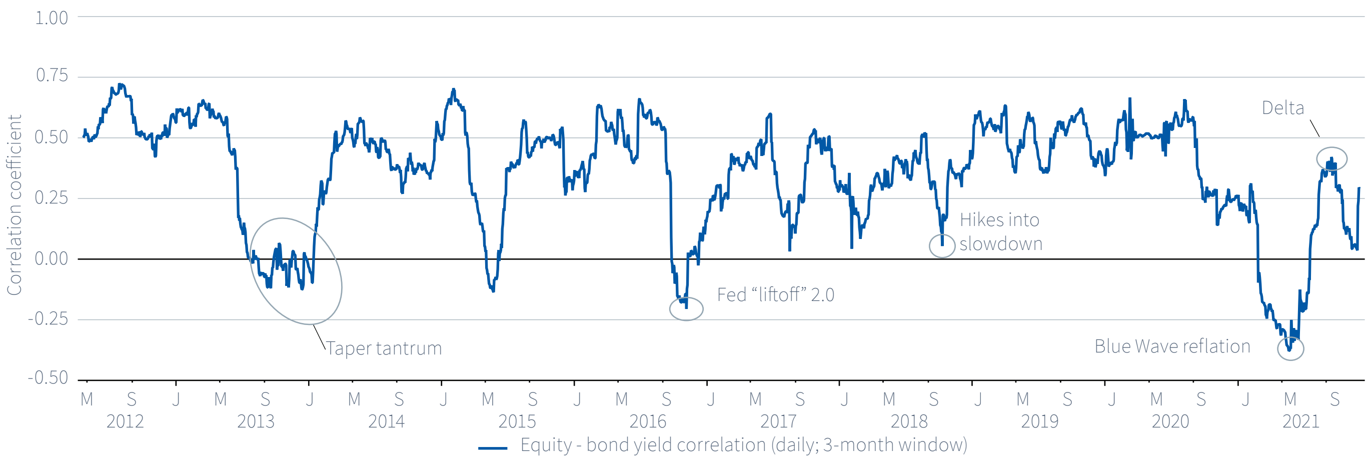
Maintain government bonds underweights as inflation risks are still tilted to the upside

Corporate and credit spreads remain relatively tight as well, but the late-2021 sell-off leaves them near their highs for the year. Cashflows and pricing power are robust, interest coverage is therefore high even as leverage increased (Figure 35), and as long as the growth theme remains intact, defaults and downgrades will remain toward the low end of their historical range. While inferior to equities in the middle stages of the stylized business cycle, credit is likely to provide positive excess return thanks to the improved entry point, after eking out only a few basis points in IG the past two years, and posting fairly modest returns in HY.

A major challenge for asset allocation is the instability of the bond yield equity correlation; this is not surprising as it happens whenever monetary policy stances undergo major shifts. This happened in early 2021, as the Blue Wave materialized and a stronger recovery became consensus, and again in Q4, after the Delta growth scare ebbed and inflation worries rose to prominence. This makes us more comfortable with our underweight in US government bonds, as with yields' low or negative correlation to equities and credit spreads (Figure 36), they do not act as a good diversifying hedge in the current environment and near-term future.

Long equities and short duration are a risky combination but the right one in times of shifting monetary policy regimes

Figure 36. **Equity-bond correlation is low when Fed shift is dominant**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure37. **Asset Allocation**

	Underweight										Overweight
	-5	-4	-3	-2	-1	0	1	2	3	4	5
Equities								2			
US									3		
Europe								2			
UK								2			
Japan								2			
Pacific Basin ex-Japan								2			
Emerging markets						0					
Nominal Govt				-2							
United States				-2							
United Kingdom					-1						
Germany						0					
France						0					
Italy						0					
Japan					-1						
Canada						0					
Australia						0					
Credit					-1						
US Investment Grade					-1						
European Investment Grade					-1						
Asian Investment Grade					-1						
UK Investment Grade					-1						
EUR High Yield						0					
US High Yield						0					
Emerging Govt (Hard Currency)						0					
Emerging Govt (Local Currency)						0					
Alternatives						0					
Cash						0					
Currencies (vs USD)						0					
GBP						0					
EUR						0					
JPY						0					
CAD						0					
AUD						0					
EM FX					-1						

The weights in the Asset Allocation table only apply to a model portfolio without mandate constraints. Our House View asset allocation provides a comprehensive and forward-looking framework for discussion among the investment teams.

Source: Aviva Investors, Macrobond as at 1 December 2021

ESG insight: Paris promised. Did Glasgow deliver?

It's not easy being green

Hosting a successful conference of the parties, COP for short, is a challenge. Rioting in Santiago ahead of the last one, COP25, led to a hasty rescheduling in Madrid – only to deliver "sloth-like" progress . In 2009, COP15 in Copenhagen was panned as a disaster after it ended without a global deal.

Collective action is never easy, particularly amongst nearly 200 countries and on a fiendishly complex issue like climate change, laden with equity considerations and entrenched positions. One COP delegate likened countries' competing priorities to "four-dimensional spaghetti".

Collective action is never easy, particularly amongst nearly 200 countries and on a fiendishly complex issue like climate change

COP21, in Paris, is the shining exception, where countries signed up to keep global warming well below 2°C and pursue efforts to limit it to 1.5°C. Crucially, all countries agreed to contribute, albeit with differentiated responsibilities. Signatories also agreed to periodically raise ambition by "ratcheting" national climate plans every five years.

With agreement on the destination and a process to help get there, COP26 in Glasgow was the first in what the UN has dubbed the decade of action.

Burdened by lacklustre progress since Paris and coinciding with the first five-yearly milestone, pressure and expectation were sky-high. A pandemic and associated postponement, an energy crunch blamed by some on climate policies and an uninspiring G20 leaders' summit provided extra headwinds.

Burdened by lacklustre progress since Paris, pressure and expectation for COP26 in Glasgow were sky-high

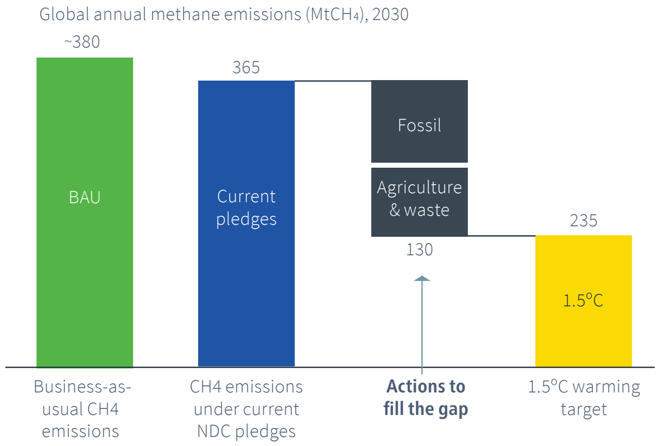
But what would constitute success? The ratcheting of national climate pledges over the last year shaved 0.2°C off the central estimate of future warming, leaving it at 2.4°C . For some, anything that did not credibly slash that to 1.5°C in one fell swoop would be a failure. For others, including the COP26 president, maintaining sufficient momentum to "keep 1.5C alive" was enough.

As COP26 approached, the Energy Transitions Commission set out six sets of actions they deemed necessary to do just that: on methane, deforestation, power, road transport, energy efficiency and supply-side decarbonisation (Figure 38 & Figure 39). Bloomberg NEF highlighted 16 more specific metrics and gave COP around a 45% chance of success. More simply, Prime Minister Johnson told us to expect progress on coal, cars, cash and trees.

Net zero but not yet

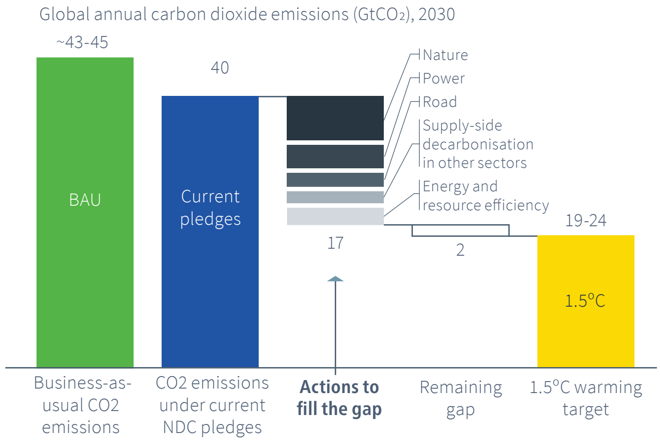
As the conference began, China and India revealed their long-awaited 2030 plans and long-term strategies. While China's was familiar to anyone who had tuned into the 2020 UN General Assembly, peak emission by 2030 and carbon neutrality by 2060, India's was new.

Figure 38. **What it will take to keep 1.5°C alive**
Reduce methane emissions by 40%



Source: Energy Transitions Commission, as at September 2021

Figure 39. **What it will take to keep 1.5°C alive**
Reduce carbon dioxide emissions by 45%



Source: Energy Transitions Commission, as at September 2021

India retained a focus on carbon intensity and added a bold renewable energy capacity target for 2030 but, most strikingly, pledged to be net zero by 2070. A symbolic, ground-breaking, and Paris-aligned coup for some. Jam tomorrow for others.

Other long-term net zero announcements came from the likes of Saudi Arabia, Nigeria and Vietnam, meaning net zero was no longer the preserve of wealthy countries (Figure 40). But the same questions remained – were the pledges a little too incredible?

COPs have never been the place for details on implementation – that is left to individual countries in the intervening months – but the flurry of announcements established an early key theme: incremental progress until 2030, vague acceleration thereafter.

Incremental progress until 2030 and vague acceleration thereafter was an early theme

The "mañana" approach applied to the ever-present issue of financing too, with rich countries having failed to reach the pledged $100bn of annual climate finance by 2020 (Figure 41) – but offering a "delivery plan" to (more than) do so from 2022.

Coalitions of the willing

The first week of COP was filled with plurilateral, sectoral-type deals amongst assortments of countries, states, companies and financiers. Highlights included 2030 commitments to reduce methane emissions by 30% and end deforestation, signed by two groups of more than 100 countries.

The first week of COP was filled with plurilateral, sectoral-type deals amongst assortments of countries, states, companies and financiers

Other smaller, variegated coalitions committed to phase out coal, end overseas financing of fossil fuels, prioritise zero-emission cars, favour purchases of clean steel and aluminium, and to "move first" on hard-to-abate sectors. A few even agreed to transition beyond oil and gas (BOGA) production.

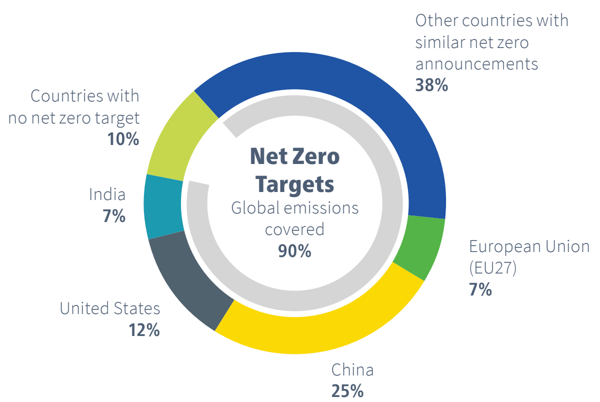
The nature of these deals – outside the formal, consensus-based UNFCCC process – was novel and helped build momentum. But there were often major players missing, like the five largest consumers of coal from the phase out pledge, and VW, Toyota and others from the auto deal. BOGA members accounted for just 0.2% of oil production.

The deforestation pledge did have the major players on board, covering 85% of the world's forests. Onlookers hoped the $12bn worth of funding attached to this deal could help it succeed where similar initiatives had so plainly failed. But Indonesia, a crucial signatory, appeared to backtrack only days later.

Elsewhere, an alliance of over 450 financial players, overseeing more than $100tr of finance, committed to transform the global economy for net zero. And a new body, the International Sustainability Standards Board, was launched to harmonise global sustainability reporting.

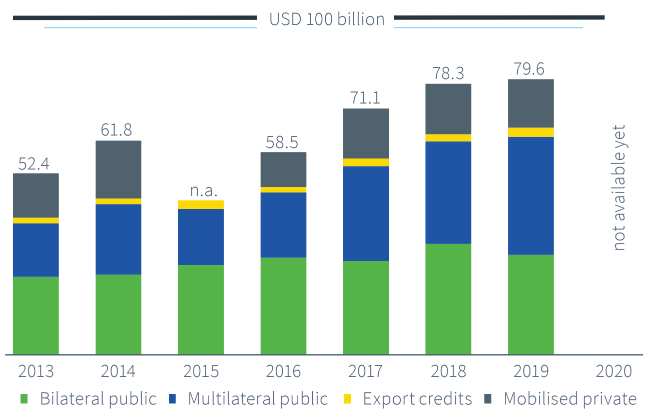
Two more targeted deals are worth flagging. The first saw the US, UK, France, Germany and EU agree an $8.5bn climate financing deal with South Africa, with funds earmarked for areas like renewable energy and associated job creation. That's a lot of money – over 2.5% of South

Figure 40. **Percentage of emissions covered by net zero announcements**
Agreed in law, as part of an initiative, or under discussion



Source: Climate Action Tracker, as at December 2021

Figure 41. **Climate finance is falling short**
Climate finance for developing countries



Private flows from 2016-18 cannot be directly compared to 2013-14
Source: OECD 2021, Climate Finance Provided and Mobilised by Developed Countries

Africa's GDP – and the partnership could serve as a "pay for progress" model for others facing challenging transitions.

The second, a joint declaration from the world's two largest emitters, the US and China, which included a commitment from China to develop a plan on methane (it hadn't signed the earlier deal). While it was mostly symbolic, it provided a welcome fillip as COP entered the home straight.

High stakes negotiations

In the final days, attention turned to finalising the Paris rulebook, including on international carbon markets, something that had long eluded negotiators. If poorly designed, the markets could "make or break" the entire Paris deal.

There really was a Glasgow breakthrough, here. Consensus was reached on thorny issues like legacy credits, double counting, and additionality – creating a system for trading credits that represent a tonne of carbon that has been reduced or removed from the atmosphere.

In the final days, attention turned to finalising the Paris rulebook. On international carbon markets, there really was a Glasgow breakthrough

That should lead to surge in funding for projects that can generate those credits, as purchasers look to offset emissions. For company-to-company transactions, 5% of the credits will be deposited into an adaptation fund for developing countries while 2% are retired so overall emissions are reduced, as well as moved around.

A wider adoption of these rules will bring much needed credibility to the ballooning voluntary offset market. And while it's not a global carbon price, the agreement means more carbon will be priced. The wider carbon markets are, the greater the opportunity to find efficient ways to reduce emissions.

While not a global carbon price, the agreement does mean more carbon will be priced

The agreed framework also enables credits to be transferred between countries – so those falling behind on national targets can make up ground. It could prove a boon for overachievers and those with vast natural climate solutions, like Brazil and the Amazon.

Contributions to the adaptation fund will be voluntary for credits bought by countries, though – to the dismay of many. And none of the credits are retired under that route.

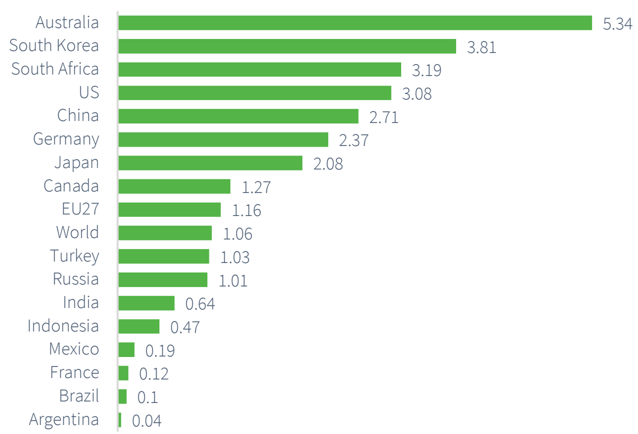
Finding the common denominator

And then came the crescendo, the final "cover decision".

Emotions ran high as wording on "phasing out unabated coal power" changed at the last minute and "deep regret" about insufficient climate financing did not translate into a new facility for compensating countries suffering unavoidable consequences of climate change.

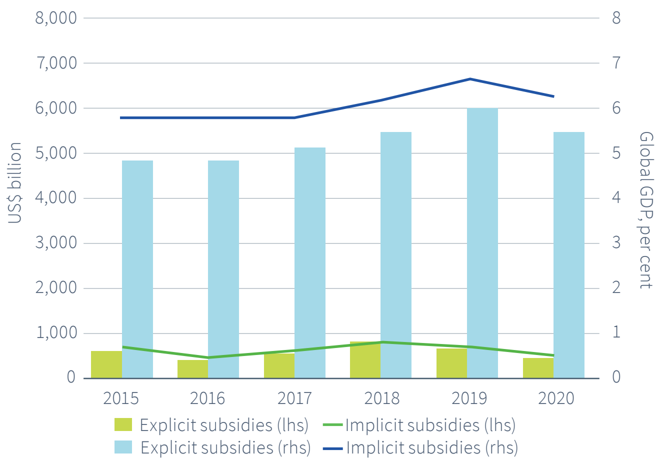
Still, it was – unbelievably – the first time coal had been mentioned in a COP text. The same applies to fossil fuels, for which signatories agreed to phase out inefficient subsidies (Figure 43).

Figure 42. **G20 coal power emissions per capita, G20**
Annual average from 2015-2020, in tonnes CO_2



Source: Ember, as at December 2021

Figure 43. **Global fossil fuels subsidies have remained stubbornly high**
Global fossil fuel subsidies



Source: IMF, as at December 2021

Three other elements stood out from the lengthy and wide-ranging political pact – itself a novelty, as something the UK presidency went beyond its mandate to push through.

First was the more central role given to 1.5°C, with signatories now "resolving" to pursue efforts towards it. A subtle addition to the Paris wording but one buttressed by a recognition that, since then, scientists have learned more about how much more damaging the extra 0.5°C to 2°C could be.

Secondly, a pledge to at least double adaptation finance to developing countries, which disproportionately face the most extreme impacts of climate change, by 2025. That would constitute $40bn a year. Progress – albeit a fraction of what's needed, with some countries already spending nearly 10% of GDP on adaptation, and a potential global $280bn to $500bn annual bill by 2030.

Finally, a hard-fought agreement that countries would review their 2030 climate plans again in 2022, rather than waiting until 2025 – the next five-yearly interval.

The signing of a lengthy and wide-ranging political pact was itself a novelty

Is 1.5°C alive?

As the curtain came down, there was no shortage of metaphors, with 1.5°C in intensive care, on life support or having a weakened pulse.

Modelling shows 2030 COP pledges – if implemented – could shave 0.1°C off central warming projections, reaching 2.3°C . Add the long-term promises and we could even reach 1.8°C.

But there are crucial gaps. The first is the obvious gap between all the projections and 1.5°C. That is particularly acute at the 2030 point, where emissions need to be roughly half their 2010 levels to give us a fighting chance. Annual emissions are currently above 2010 levels. The latest national climate plans and COP pledges close that 2030 emissions gap, but only incrementally (Figure 44 & Figure 45).

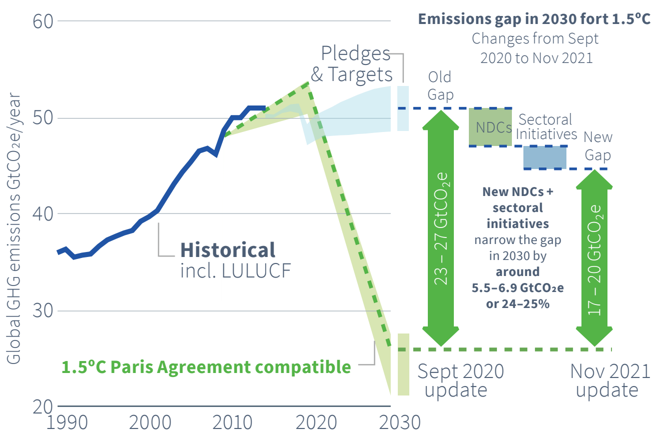
The second gap relates to delivery. Pledges are one thing, realising them another. The vague, post-2030 accelerations to net zero are, in most cases, simply aspirations. The 1.8°C should therefore be taken with a mountain of salt.

But momentum from COP26 can help close both gaps. Another round of climate plans in 2022, the roll-out of targeted financing partnerships and renewed US-China collaboration all offer hope. And public interest and scrutiny has never been greater.

John Kerry described an upcoming "10-year sprint". Given the narrowing pathway to 1.5°C, the track is uphill. Each positive stride – and COP26 was one – keeps 1.5°C alive but missteps or further delays will now be irretrievable.

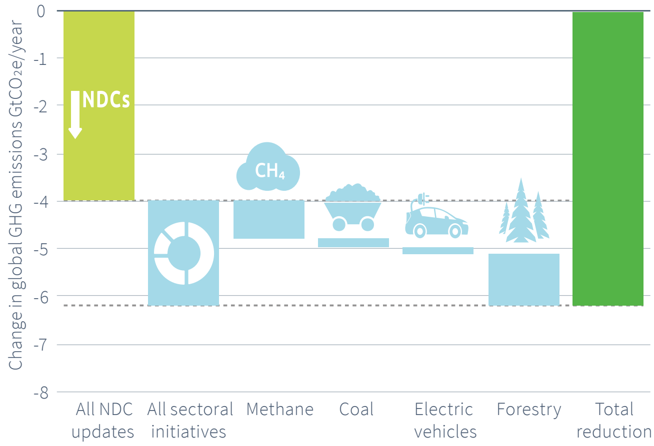
There are crucial gaps. The first is the obvious gap between all the warming projections and 1.5°C. A second gap relates to delivery

Figure 44. **The 2030 emissions gap remains**
CAT projections and resulting emissions gap in meeting the 1.5°C Paris Agreement goal



Source: Climate Action Tracker, as at December 2021

Figure 45. **Adding up the pledges**
Likely impact on the 2030 emissions gap from NDC updates + sectoral initiatives (Changes from September 2020 to November 2021)



Source: Climate Action Tracker, as at December 2021

What are investors looking for next?

Vaguely defined, longer-term threats like climate change are difficult for investors to price. But COP26 contained signals about where we should expect action – and therefore how companies and countries might be affected.

Already, the EU, a signatory to the deforestation pledge, has proposed banning products like beef and cocoa unless companies can prove supply-chains are deforestation-free. After singing up to coal phase out, Vietnam has ordered a revision to its 2021-30 national power plan, which proposed 43 new coal units. The EU ETS carbon futures prices were up nearly 10% in the week following COP (Figure 46). Switzerland has signed a deal with Peru to purchase nearly a million tonnes of carbon offsets under the new rules.

More change is ahead. And because there is no one-industry or one-fuel response, transitions and sequencing will vary by sector and country.

That will create opportunities as well as disorder. Especially if Dornbusch's law applies, where things take longer than you think to happen, then occur far faster than you imagined.

Portugal's experience suggests it might. In 2017, with coal representing 25% of the country's electricity generation, it proposed phasing out coal power by 2030. Shortly after COP, Portugal closed its last coal plant, nine years ahead of schedule (Figure 47).

Investors cannot afford to miss the signals, as talk increasingly translates into action.

Neither can they ignore atmospheric changes that have already occurred, and more that are baked in. The world is, on average, 1.2°C warmer than the pre-industrial period and in recent years we have seen heatwaves, floods and forest fires on unprecedented scales.

That means even shorter-term investors will need to broaden their climate focus to encompass resilience. The most resilient will be those that transition but also, increasingly, adapt. Even if 1.5°C lives on.

COP26 contained signals about where we should expect action – and therefore how companies and countries might be affected

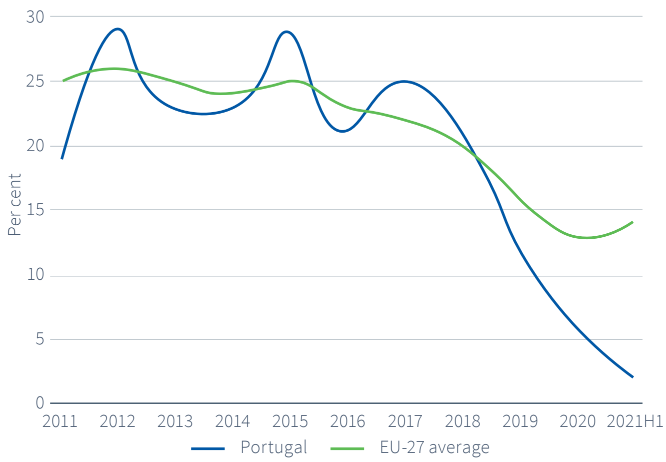
Investors cannot ignore the looming transition nor the atmospheric changes that have already occurred

Figure 46. **EU ETS futures prices climb after COP**

Source: Macrobond, Aviva Investors as at 1st December 2021

Figure 47. **Portugal's journey to phase out coal by 2021**

Share of coal in electricity generation



Source: Ember, EU Power Sector 2020

Risk and portfolio construction:
Inflation and the stock/bond correlation

The correlation of asset returns is an important consideration for building diversified portfolios, constructing hedging strategies and managing risk. Over the past two decades, Multi-Asset portfolios have benefitted from equities and bonds moving in opposite directions in the short term, but over the longer-term both performing positively to produce a better risk-adjusted return. In more recent years, this has become increasingly challenged, with historically low bond yields reducing both the overall portfolio return and limiting the effectiveness for bonds to dampen volatility.

Inflation is clearly the hot topic being debated amongst investors. A world with rising inflation and interest rates is a very different environment from what we have had in the last decade or more. Rising inflation has a direct negative impact on nominal bonds and potentially upon equities as both equity and bond prices can be thought of as being determined by a series of discounted future cash flows.

Figure 48 shows a simple macro framework using growth and inflation as the key drivers on bonds and equities, where we have the following scenarios:

(1) Balanced reflationary environment with strong growth, rising but controlled inflation and steady rising bond yields. (e.g. Quantitative Tightening)

(2) Everything rally based on strong growth driven by loose monetary policy and low inflation. (e.g. Quantitative Easing)

(3) Growth shock/Traditional flight to quality. (e.g. COVID-19, Fall'08)

(4) Rising inflation leads to higher interest rate expectations which hurt equities and bonds. (What's next?)

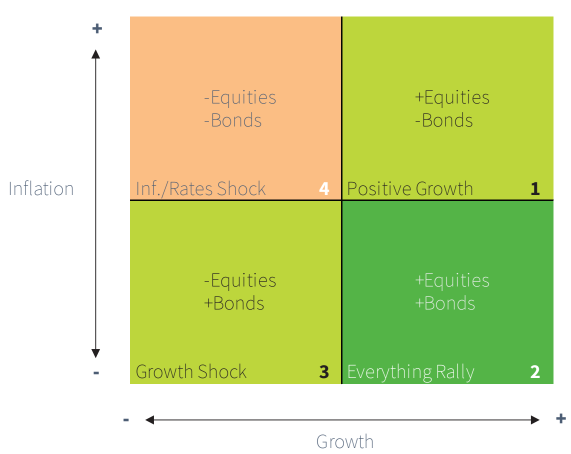
These scenarios help depict what is driving the co-movement between these asset classes. Scenario 1, 2, 3 present periods we can identify in the recent past, which balanced portfolios have managed to traverse through. However, scenario 4 will be a less familiar path and may prove more difficult to navigate.

A world with rising inflation and interest rates is a very different environment from what we have had in the last decade or more

Correlation conundrum

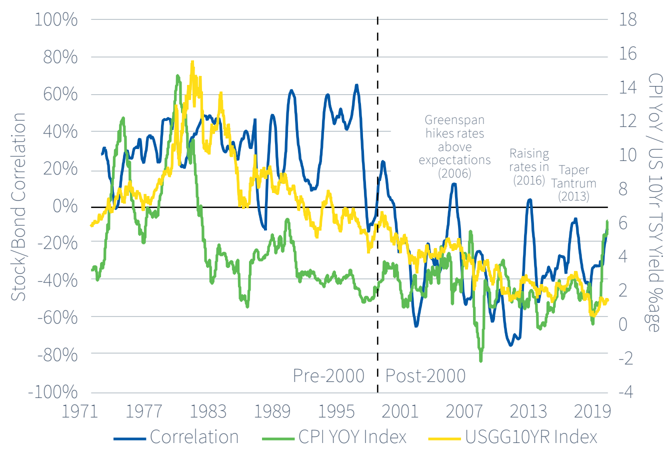
For simplicity, we focus on the US market, and specifically on the correlation between the S&P 500 equities index and US 10 Year Treasury bond. However, this analysis can be shown to have similar behaviour in other regions. Figure 49 shows that the correlation between the S&P 500 and US 10 Year Treasury bond prices historically has not been stable and has fluctuated over the past 50 years. For this analysis we use an exponentially weighted moving average correlation measure using weekly data with a 1-year half-life.

Figure 48. **Simple macro growth/inflation framework**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 49. **S&P 500/US 10Y Treasury EMA Correlation (Weekly Data, 1yr half-life), US 10Yr Treasury Yield and US CPI YoY**



Source: Aviva Investors, Bloomberg as at 1 December 2021

Here we see that there is a stark difference in this equity-bond relationship pre and post the year 2000. Where the majority of the period pre-2000 has positive correlation and where post-2000, we have the negative correlation that balanced portfolios have become accustomed to. Overlaying this chart with the US CPI YoY changes and US Treasury yields we begin to see some link between these levels to equity/bond correlation. We also observe a difference in the stability of inflation and a much lower level of interest rates in the recent past. Note that the weaknesses in correlation have coincided with expectations of raising rates or actual rate rises. Lastly, this shows us that perhaps the regime could again be shifting as inflation has been rapidly rising since Jul'21 and that the negative correlation has been weakening.

Figure 50 & Figure 51 again show the contrast in correlation between pre- and post-2000 periods, where we have highlighted the most recent co-moves since July 2021. Whilst a statistically small sample size, it does highlight that the negative correlation is still intact on risk-off days as we have seen with the re-emergence of COVID-19 fears late November 2021.

Will the correlation relationship persist? Are there other considerations?

We now look more closely at possible drivers of the correlation. The charts below explore inflation, rates, volatility (equity) and inflation variability (inflation volatility) as possible explanatory factors driving equity-bond correlation.

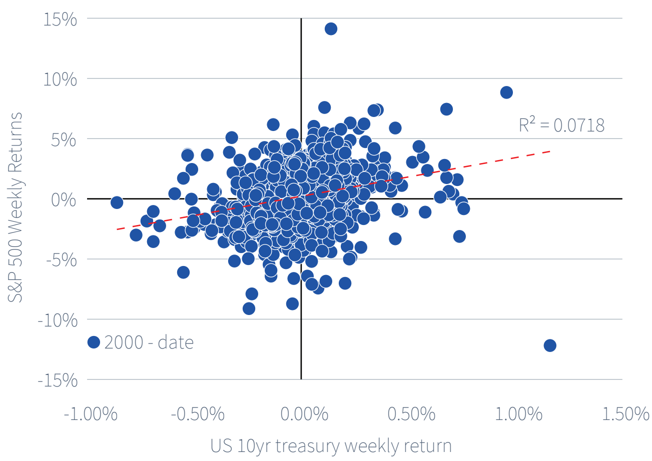
Stark difference in equity-bond relationship since 2000

Figure 52 reaffirms what was seen in Figure 49, where we see a clear relationship between correlation and inflation. Again, we see a large distinction in inflation levels pre-2000 compared to post-2000. Since central bank policy has been able to control inflation, correlation has been negative. This has been much the case throughout the post-2000 period. In contrast, inflation variability in the 70s & 80s was far higher where central bank action was arguably less effective.

Figure 53 evaluates the correlation through the lens of interest rates, and we observe a similar pattern. There is negative correlation in the post-2000 period, with the magnitude of this negative correlation increasing as rates have fallen from 6%->4%, plateauing below 2% yields. A logical explanation being that as interest rates move closer to zero, there is potentially less room for bonds to provide a meaningful offset in risk-off events.

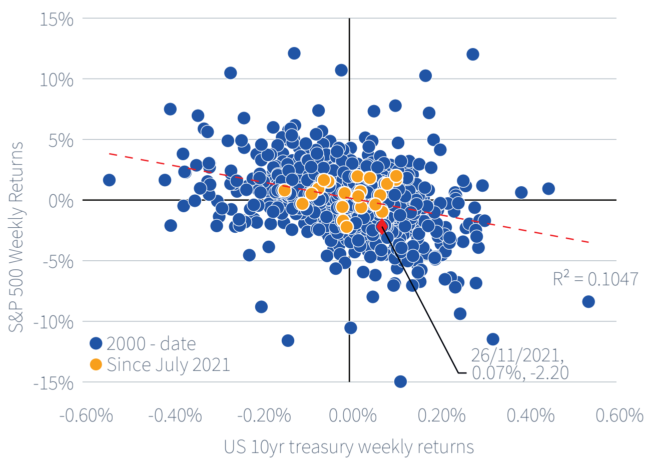
Using equity volatility as the explanatory axis, shows that there is a better-defined negative correlation with elevated times of market volatility post-2000. This is intuitive, as you would expect the equity-bond relationship to be firmly negative as treasuries are used as a safe-haven asset in times of market stress. This relationship is clearer post-2000, even with elevated volatility pre-2000 where we predominately only have positive correlation.

Figure 50. **Pre-2000 S&P 500 vs US 10Yr Treasury weekly returns**



Source: Aviva Investors, Bloomberg as at 1 December 2021

Figure 51. **Post-2000 S&P 500 vs US 10Yr Treasury weekly returns**



Source: Aviva Investors, Bloomberg as at 1 December 2021

What goes up with inflation?

In the face of less dependable equity-bond correlation, investors can access direct and indirect exposure to inflation to help manage the scenarios with rising inflation. We have shown that with higher levels of inflation, there is more inflation variability and so tangible benefits to employing a diversified set of strategies to improve the risk/reward profile of the portfolio.

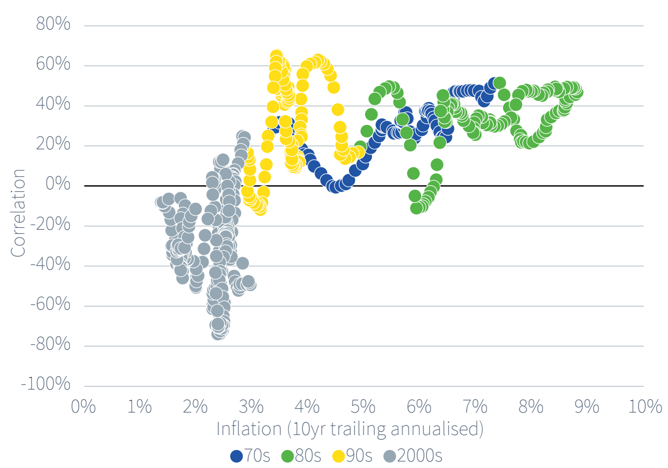
Direct exposure can be achieved via inflation, rates and curve positioning, with second order exposure achieved through commodities, currencies and equity sectors. For instance, physical securities, such as oil, should move with inflation and this in turn will move commodity-producing countries (respective FX) and companies. Figure 55 shows a correlation matrix with direct inflation exposure in US 5yr Inflation Break Even Swaps against inflation related strategies.

Correlation of these strategies to US inflation (5Yr US Break-Even) is low to moderately positive but we can observe that many of these strategies have low correlation to one another, and additionally to equities & bonds.

Correlation, and the stability of this equity-bond dynamic is an important consideration in portfolio construction. Duration will continue to be an important tool for most portfolio managers in managing broad risks but understanding when this may not be as effective is crucial. As discussed above, the current economic backdrop has the potential to be negative for bonds and equity simultaneously. However, with thorough portfolio construction techniques and the ability to access both direct and secondary exposures to instruments which can protect against inflationary shocks.

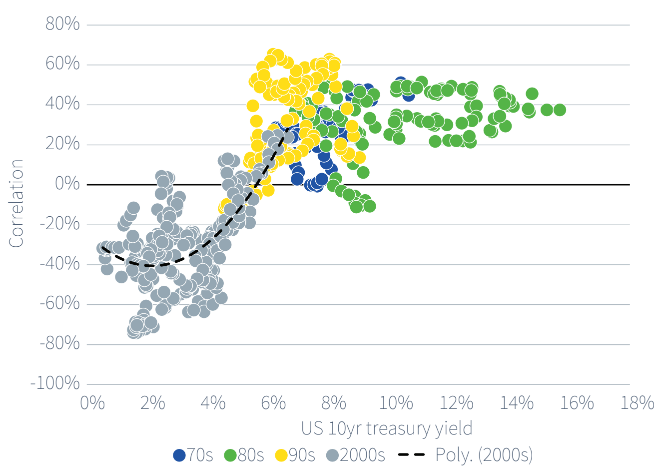
In the face of less dependable equity-bond correlations, investors can try to manage scenarios with rising inflation

Figure 52. **Stock/bond correlation versus inflation**



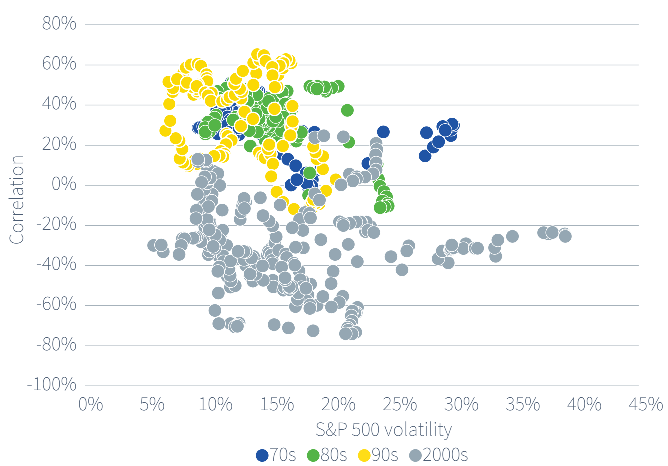
Source: Aviva Investors, Bloomberg as at 1 December 2021

Figure 53. **Stock/bond correlation versus interest rates**



Source: Aviva Investors, Bloomberg as at 1 December 2021

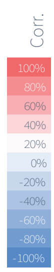
Figure 54. **Stock/bond correlation versus S&P 500 volatility**



Source: Aviva Investors, Bloombergas at 1 December 2021

Figure 55. **Correlation matrix (post-2000, weekly data)**

	US 5YR Inflation Break Even	US 2s5s Yield Curve Steepener	US 2s10s Yield Curve Steepener	Short US 10Yr Treasury Bond	NOKEUR	CADUSD	Crude Oil	Gold	S&P 500	S&P 500 Industrials (RV)	S&P 500 Banks (RV)	S&P 500 Energy (RV)
US 5YR Inflation Break Even												
US 2s5s Yield Curve Steepener	24%											
US 2s10s Yield Curve Steepener	18%	84%										
Short US 10Yr Treasury Bond	37%	70%	57%									
NOKEUR	30%	8%	10%	13%								
CADUSD	39%	15%	16%	14%	32%							
Crude Oil	40%	16%	14%	18%	38%	38%						
Gold	16%	-9%	-3%	-20%	17%	37%	19%					
S&P 500	43%	23%	14%	36%	38%	49%	26%	2%				
S&P 500 Industrials (RV)	16%	11%	9%	18%	15%	12%	3%	0%	21%			
S&P 500 Banks (RV)	11%	20%	18%	21%	5%	10%	3%	-14%	30%	22%		
S&P 500 Energy (RV)	33%	9%	12%	11%	30%	29%	55%	21%	9%	13%	4%	



Source: Aviva Investors, Bloomberg as at 1 December 2021

Economic Outlook

United States: careful what you wish for – too much inflation can be a problem too

- **Above-trend growth expected to continue through 2022**
- **Labour market likely to be as tight as any time in the last 50 years**
- **Sustained wage growth to add to underlying inflationary pressures**
- **Federal Reserve to raise rates in mid-2022**

Summary

The US economy is on track for 2021 to deliver the strongest annual growth in GDP since Bruce Springsteen released his acclaimed album "Born in the U.S.A" ... 37 years ago! The economic recovery from the COVID-19 crisis of 2020 has been far swifter than most expected. Compared to this time last year, when we published three possible growth scenarios, activity is expected to be only slightly below our bullish upside scenario. We now expect growth of around 5½ per cent in 2021 (Figure 56), with the level of activity expected to end the year around 3 per cent above the pre-COVID-19 level, and only around 1 per cent below the pre-COVID-19 trend in activity. We expect that growth will be above trend again in 2022, at around 4¼ per cent, supported on the household side by strong growth in personal income and spending, a pool of "excess" household savings and on the business side through an acceleration in business investment and an extensive re-build of inventories. While the support from monetary and fiscal policy will be less strong in 2022, particularly as various COVID-19-related support packages should no longer be required, it will not be outright contractionary. As a result, we expect activity to move above the pre-COVID-19 trend by the middle of 2022.

Above-trend growth set to continue in 2022...

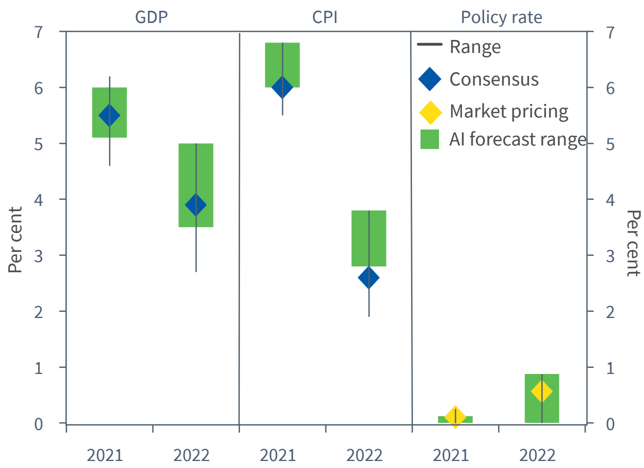
The strength of the recovery in 2021 came despite the emergence of the Delta variant, which resulted in a delay to reopening parts of the economy in Q3. However, as the vaccination rate increased and concerns around Delta subsided, the economy once again quickly accelerated into Q4. At the time of writing, the Omicron variant had just emerged as a potential new concern. While it could once again result in some caution on the part of households and businesses, unless it proves to be highly effective at evading the vaccine and/or far more deadly, we would expect any easing back in growth to be quickly recovered.

...although the Omicron variant could be a temporary headwind

The major economic surprise of 2021, though, has been the sharp rise in inflation. This can largely be attributed to four important factors; two of which were global and two domestic: 1) the sharp increase in energy prices from historic lows in 2020 has added around 2 percentage points to headline inflation; 2) the rise in global manufactured, and therefore consumer goods price inflation, reflecting the very elevated demand for goods (in place of services); 3) high demand for more recently reopening service sectors, such as accommodation and travel; and

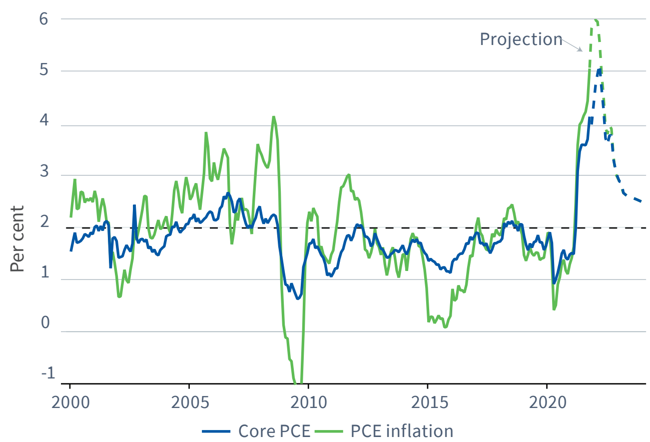
Inflation has surprised on the upside in 2021...

Figure 56. **US economic projections**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 57. **US inflation outlook**
Headline and core PCE expected to remain above target through to the end of 2023



Source: Aviva Investors, Macrobond as at 1 December 2021

4) declining spare capacity and tightening labour market that has seen wage growth pick up and a broader range of goods and services than those highlighted above pass those increased costs on to consumers.

Looking ahead, we expect the contribution from the first three factors to ease over the course of 2022, but the fourth factor to play an increasingly important role in driving underlying inflation. That is the consequence of running a "high-pressure" economy that the Fed framework review advocated following a recession. The net of those effects should see a decline in inflation in 2022, albeit a notably slower one than we had previously expected. We expect core PCE inflation (the key measure for the Federal Reserve) to end 2022 around 2¾ per cent (Figure 57), declining somewhat further thereafter, reflecting the slowing in demand and the impact of expected rate increases from the Fed in 2022 and 2023. Indeed, the higher inflation outlook is a key factor in our expectation of an earlier start to the Fed hiking cycle, which we expect to come in mid-2022.

...but should ease back towards the target in 2022

Time to take the foot off the (policy) gas

The rapid economic recovery that continued through 2021 was led by strong consumer demand. That reflected the vast amount of income support (through a range of fiscal transfers) received through 2020 and 2021, when the parts of the economy were shut down. Coupled with the restrictions on spending on services during lock downs, aggregate household balance sheets improved markedly. Moreover, significant gains in asset prices over the past 12 months has further bolstered household balance sheets. While households were constrained on service sector spending, they substituted a significant amount of spending into goods – in particular durable goods, which saw demand grow at nearly three times the usual pace since the start of COVID-19 (Figure 58). As such, despite service sector spending (which normally accounts for around 65% of total spending) still being around 1½ per cent below pre-COVID-19 level in October, overall spending was 4¼ per cent above that level.

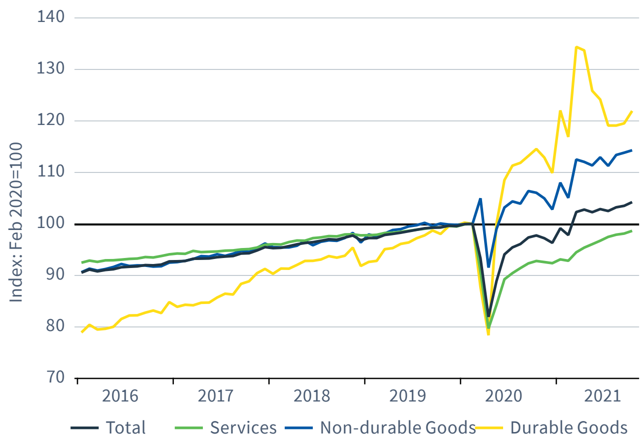
Looking ahead we expect the recovery in service sector spending to continue, with demand for goods to ease back a little, with overall spending rising strongly through 2022. While household income and balance sheets are in a strong position, one dampening factor will be the impact of high inflation on real disposable income and wealth. Recent developments in some measures of consumer sentiment suggest households are becoming increasingly concerned about the rise in inflation. That said, there are also risks to the upside on goods spending in 2022, as supply constraints on certain lumpy durable goods, such as motor vehicles, have likely delayed purchases that would have otherwise taken place in 2021.

Inflation will be a drag on disposable income, but likely outweighed by positive factors...

The strong outlook for consumer demand will once again be the primary driver of overall growth and increasing demand for labour. The recovery in the labour market has already seen the unemployment rate fall much of the way back to the pre-COVID-19 historic low (Figure 59).

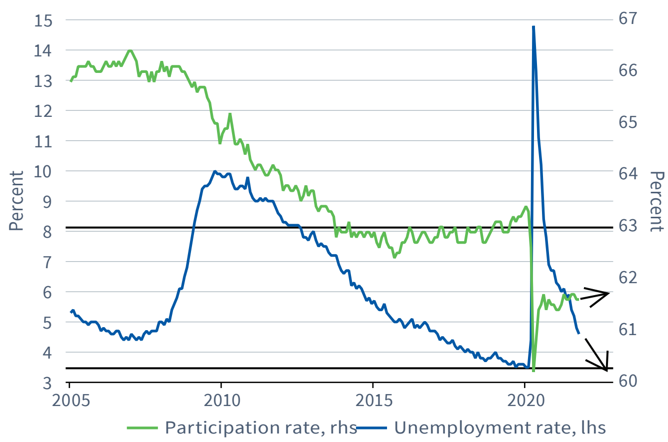
...including an historically strong labour market.

Figure 58. **Household spending**
Strength in consumer durables



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 59. **Labour market**
Unemployment rate falling sharply, participation rate slower to improve



Source: Aviva Investors, Macrobond as at 1 December 2021

We expect that low of 3.5 per cent will be reached by 2022H2, with a further decline towards 3 per cent. The number of job vacancies is already at a record high and the ratio of unemployed to vacancies at a historic low. It is perhaps somewhat surprising that the strong demand for labour has not drawn more people back into the labour force, with the participation rate still well below pre-COVID-19 levels. However, part of that can be explained by the slow demographic trends that are structurally putting downward pressure on participation, while part of it seems to reflect a reluctance amongst older cohorts (55+) to re-enter the labour force. That may reflect healthcare concerns related to COVID-19, but may also reflect the outsized wealth gains seen by older cohorts, bringing on earlier retirement.

That backdrop has led to an already tight labour market – even tighter than what may be implied by aggregate measures. That reflects the pressures in some specific sectors where demand has outstripped capacity (e.g. manufacturing), or in sectors that are now rapidly re-opening (e.g. leisure). That has resulted in wage growth picking up notably in those sectors, particularly at the lower end of the wage distribution. A key measure of wage growth, which takes into account compositional changes in the labour force, is the employment cost index. It is already at multi-decade highs (Figure 60) and is expected to remain strong through 2022. Unless met by a material improvement in productivity growth (which we do not anticipate), the increase in unit labour costs is likely to add to underlying inflationary pressures through 2022 and 2023.

Wage growth is strong and should strengthen further given a tight labour market

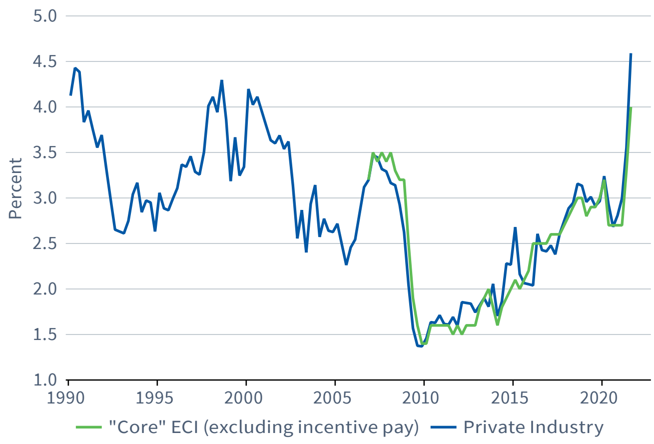
The tight labour market, low level of inventories (particularly in wholesale and retail trades), strong profitability and positive demand outlook should encourage businesses to expand capex more aggressively in 2022. Surveys currently indicate growth could be in the range of 7-10 per cent in non-residential investment. Moreover, the recent passage of the infrastructure bill through Congress will further boost capex spending over the coming years.

Capex should expand more quickly to create more capacity

When the Fed undertook its framework review it was with a backdrop of a decade of moderately below target inflation. The outcome of that review was that the policy framework should be adjusted to provide for a period of above-target inflation (following a period below target). That was particularly so if the policy rate had been moved to the effective lower bound. Then the economy should be run “hotter” to ensure maximum employment was reached before raising rates. The review could never have envisaged a shock like COVID-19, and the associated economic consequences and broader policy response. However, with inflation having consistently surprised on the upside, the labour market soon to be even tighter than pre-COVID-19 and the prospects for growth solid, the time to take the foot off the gas has likely arrived. However, with the process of tapering of QE required to be completed through at least Q1 and maybe Q2, the first rate hike is likely to come in June at the earliest. We expect policy support to be withdrawn over 2022-24, with rates moving back up to around 2½ per cent.

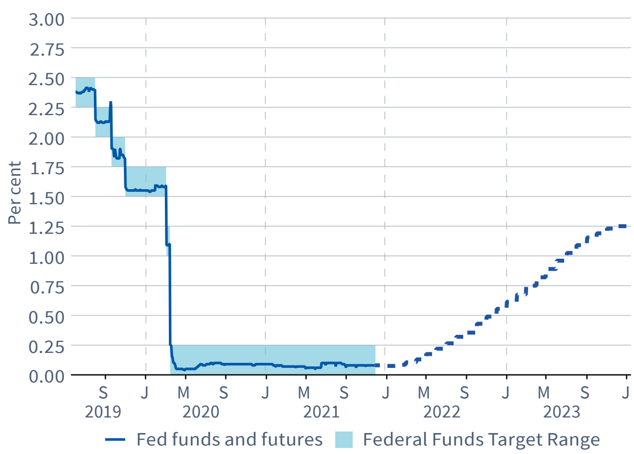
We expect the Fed to start raising interest rates in mid-2022

Figure 60. **Wage growth**
Already at multi-decade high



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 61. **Policy rates**
Monetary conditions set to tighten



Source: Aviva Investors, Macrobond as at 1 December 2021

Eurozone: Strong growth, above-target inflation, tighter policy – is this really Europe?

- **Above-trend growth even with virus complications**
- **High inflation should fade in 2022, but remain above 2%**
- **ECB is steering a course towards exit from extreme policy stimulus**

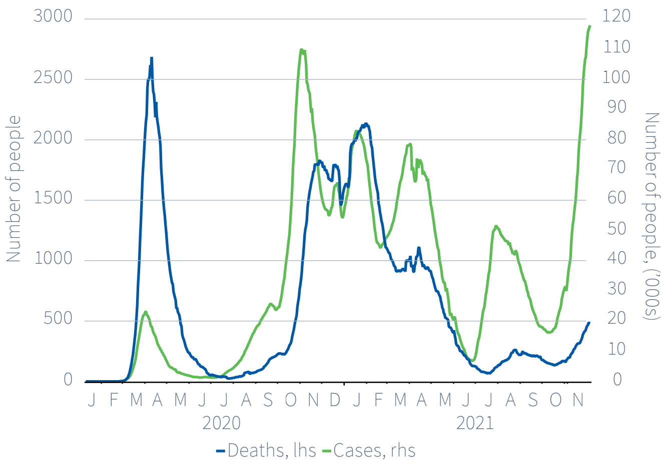
After the virus-related setbacks at the start of the year, the Eurozone had been enjoying better fortunes in the middle of 2021, recording GDP increases of more than 2% in each of Q2 and Q3 as economic recovery and COVID-19 catch-up underpinned strong growth. The impact of vaccination programmes kept death rates and cases of severe illness much lower than earlier episodes, even in the face of successive waves of infection (Figure 62). But even before Omicron, Europe had been experiencing another worrying upsurge in cases. The latest trends are being met with a range of containment measures including face-mask wearing guidance, modest restrictions in key areas (capacity limits, vaccination passes) and stricter constraints on international travel. There have also been noticeable efforts towards increasing vaccinations and boosters. The mild containment measures, alongside the likelihood of more cautious behaviour from some groups of people, mean that activity levels in Q4 and Q1 may well be impacted. The scale of any disruption is not expected to be on anything like that seen in 2020 and earlier this year – at this stage they are only expected to result in slower growth rather than outright stagnation. But they are a reminder that the pattern of growth is still going to be influenced significantly by the virus and the policy reactions to it for some time. For now, it is about Omicron, but there could yet be further road bumps on the pandemic exit route.

Latest virus trends may crimp growth modestly in Q4 and Q1, but there are downside risks

Nevertheless, the shadow hanging over the short-term outlook should not be allowed to obscure the longer-term prognosis of a return towards normality in 2022 and beyond. While we are wary about some downside risks to growth in late 2021 and the first part of next year, if they did materialise, it is our strong belief that any such losses would be swiftly offset by stronger growth outcomes in Q2 and Q3 2022 when any restrictions are lifted, and case numbers retreat once more. The playbook of the last two years has amply demonstrated that virus-related weakness is generally temporary, as long as activity is free to recover following the self-imposed periods of restraint. So, while growth has been – and may continue to be – quite volatile quarter to quarter, both 2021 and 2022 will see very strong growth outcomes across the Eurozone. GDP should increase by more than 5% this year and close to 4% in 2022, two of the highest readings since the Eurozone's inception in 2000 (Figure 63).

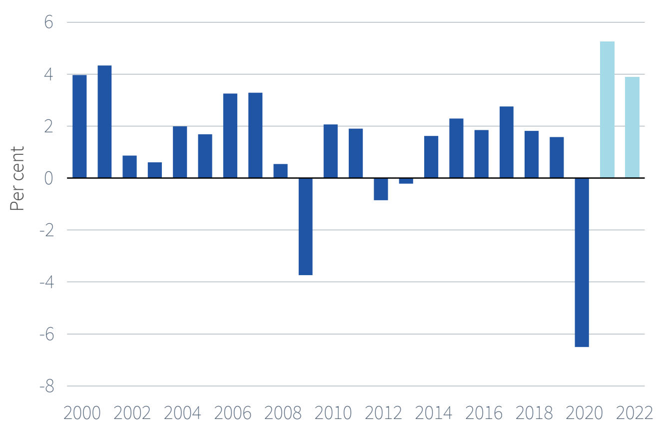
Longer-term prognosis is still good: 2022 should see strong growth across the Eurozone

Figure 62. **Eurozone big 4 nations: change in cases and deaths, 7-day MAVG**
Already rising before the impact of Omicron



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 63. **Annual Eurozone GDP**
2021 and 2022 should see very strong growth



Source: Aviva Investors, Macrobond as at 1 December 2021

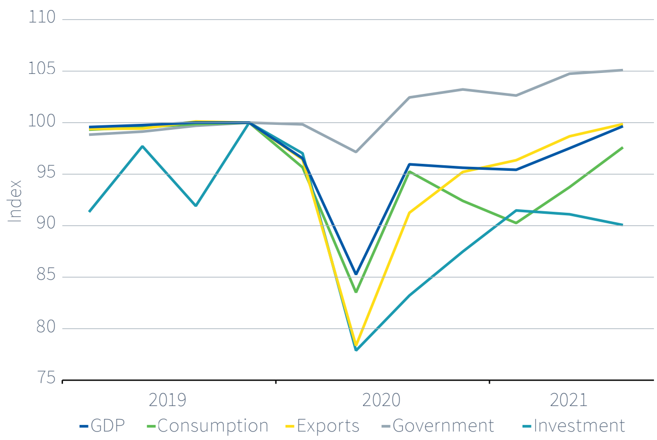
Looking at the components of GDP, all of the private elements of demand fell sharply at the start of COVID-19 but have since rebounded (Figure 64) to a greater or lesser extent. Public sector demand has, as would be expected, remained resilient and helped support growth throughout (after a small initial shock). Consumer spending has moved in line with the ebb and flow of lockdown, with expenditure on services falling most and recovering least, while spending on goods adapted quickly to the new environment and revived quickly. As elsewhere, vast transfers from Government to the private sector have helped enormously in smoothing household incomes and corporate bottom lines and preventing far more catastrophic outcomes and lasting damage. Surprisingly, Eurozone exports had actually returned to pre-COVID-19 levels by the end of Q3 this year, an outcome rather at odds with the idea that supply-chain disruptions have hurt trade flows significantly. But perhaps we should take note of the fact that Eurozone exports had grown by between 4% and 5% a year on average since 2000. So, a return to pre-COVID-19 levels after two years still leaves them significantly lower than where they might otherwise have been. Global trade flows are now reviving, and the open economies of Europe should be one of the main beneficiaries of this, especially if shortages of key tech componentry do start to ease, as we expect. It has been noticeable, for example, that the far less tech-heavy industrial base in Italy has outperformed its ostensibly leading-edge German counterpart by more than 10% (in output terms) since the start of the pandemic. This followed two decades of consistent underperformance.

All components of demand are recovering, but the path back may not be smooth

Perhaps the most disappointing element of European demand has been investment. The aggregate level of capital spending is still some 10% below its pre-COVID-19 mark and although business surveys have continued to report a generally upbeat mood among Eurozone corporates, this has not yet been reflected in any worthwhile recovery of investment spending, other than the initial bounce in the second half of last year. It seems highly unlikely that the explanation is the lack of access to finance since the ECB is keen to encourage lending and borrowing rates are at all-time lows (Figure 65). The more likely explanations are an absence of the famous "animal spirits" in the face of the uncertainty created by the pandemic, alongside the reality of no clear-cut capacity shortages yet at a macro level. Whatever the reason, corporate balance sheets are generally in good shape, borrowing rates are unlikely to spike higher and if demand does recover as we hope, supply capacity should be ready to respond too. One of the catalysts for increased investment (business and public sector) in coming years should be the fast-growing interest in the green agenda, including climate change initiatives. Here it is hoped that the pioneering Next Generation EU Recovery Fund, with its total capacity of €750bn, will really start to make a difference in 2022.

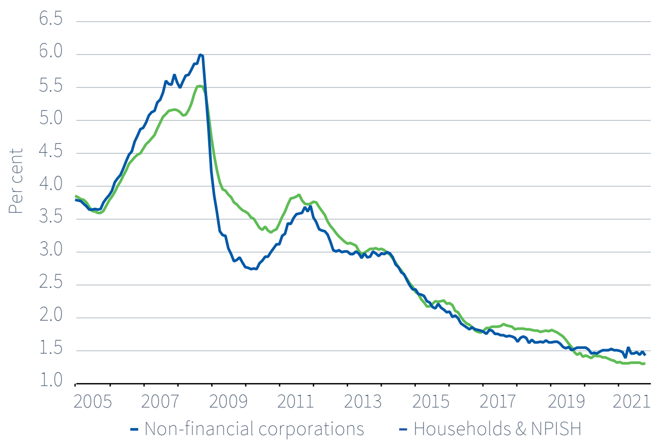
Investment spending will be helped by NGEU funding, but would be further boosted by reductions in uncertainty

Figure 64. **Eurozone GDP components, 2019 Q4 = 100**
Some components have recovered better than others



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 65. **Eurozone interest rates for new business**
Borrowing rates are at all-time lows



Source: Aviva Investors, Macrobond as at 1 December 2021

We now estimate that the region overall will regain its pre-COVID-19 levels of output by the end of this year and be within a per cent or so of the pre-crisis trend, by the end of 2023. Given where we have been, that would be a remarkable achievement and a ringing endorsement of the wide-ranging policy support that has been put in place. On several occasions over the last two years, many were suggesting pandemic-related damage that could take a decade to remedy. Of course, there are still clearly identified downside risks and, even if recovery were complete, or close to it, it has not all been plain sailing and there will be a number of longer-term consequences as a result of what has happened since the start of 2020.

Estimates of permanent damage from COVID-19 have been revised lower

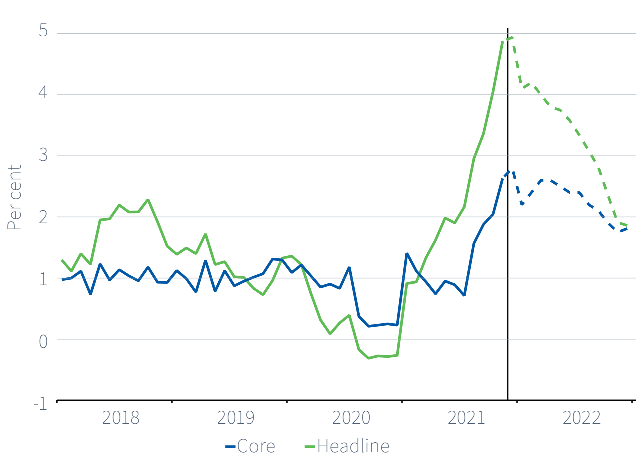
The biggest macro-economic surprise in 2021 has been the sharp rise in inflation. At the start of the year, it was not at all clear whether the COVID-19 experience would be a deflationary or inflationary phenomenon. We now have our answer. And while we remain of the view that many of the drivers of higher inflation will ease or even reverse over the next year or so, in some ways that hardly matters. High inflation today is both a problem and a worry – for everyone, including, of course, inflation-fighting central banks. It is already eating into real incomes, which will suppress discretionary spending. More importantly, the longer it remains, the greater the danger that it becomes more entrenched in the mindsets of companies, households and financial markets. If it feeds in more forcefully to wage bargaining processes, or if bond markets begin to fear a lasting and more disorderly outbreak of higher inflation, we run the risk of returning to the macro-economic problems of yesteryear and the need for more aggressive tightening of monetary policy. We do not believe that this will happen, but the risks have clearly risen quickly over the last year. In Europe's case, having yearned for a 2% inflation rate for years, the actual rate has surged through that mark and may well peak at close to 5% (Figure 66). It should fall back sharply next year, but the ECB's amended inflation regime adds weight to the idea that it may remain higher, on average, than in the past.

The Eurozone has burst through the 2% inflation target in 2021

Overall, our central case is that above-trend growth in the Eurozone will continue between now and the end of next year (Figure 67), with the exact pattern dictated by the pattern of the virus and regulations and guidance introduced in response to those trends. Omicron is the latest headwind and while there are clearly downside risks, we believe that vaccination programmes – both now and in the future – will win the pandemic battle eventually as we all learn to live with the virus. Inflation should peak at the end of this year and be falling throughout most of 2022. If this reasonably optimistic scenario plays out, then it is right for the ECB to be planning its exit route from settings of extreme policy stimulus. Asset purchases under all programmes will be reduced and if all goes well, the first rate hike could come as early as the end of next year. Unlike the last two, that should not be a policy error this time around.

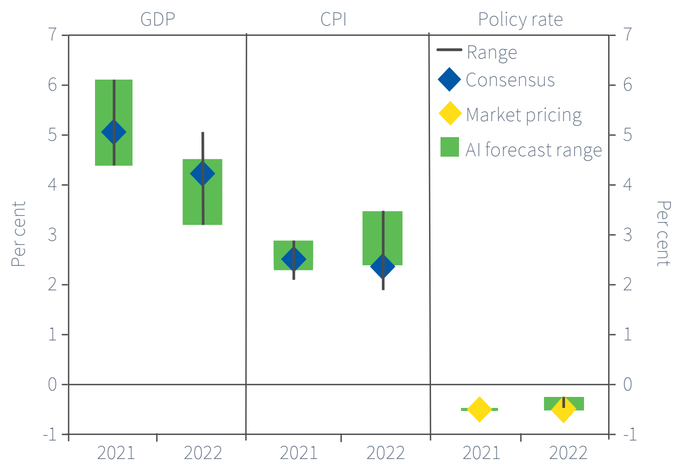
The last two rate hikes in the Eurozone were mistakes; the next one is not imminent, but looks justified

Figure 66. **Eurozone CPI inflation rates, %**
Inflation should be falling back in 2022



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 67. **Eurozone economic projections**
Strong growth, falling inflation, higher rates



Source: Aviva Investors, Macrobond as at 1 December 2021

UK: solid growth in 2022, but some headwinds

- **2022 should see further above-trend growth in the UK**
- **But there appear to be headwinds for both investment and exports**
- **Inflation to move higher until the spring, but should fall thereafter**
- **Bank of England to deliver limited rate hikes next year**

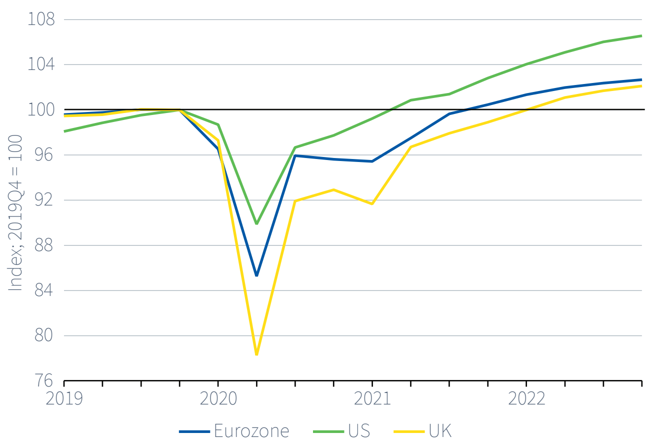
The underlying rhythm of macro-economic swings during the pandemic has been broadly similar in most developed market economies over the last two years. But as time goes on there may be more national variations, with the extra dynamic from vaccinations adding a further variable as we look forward and this may result in some additional differences in experience in 2022 and 2023. The UK suffered a larger GDP fall than many other nations, but then saw a sharper rebound (Figure 68). Part of the explanation is peculiarities in the way that GDP is calculated in the UK. But it was also true that the UK was much quicker out of the blocks with initial vaccination efforts than many others and that has allowed for a slightly different approach to the pandemic and hence resulted in a marginally different growth profile. Protection from the virus is built up from the complex interplay between several things including vaccinations and immunity built up from previous infection. In the UK case numbers fell steeply in the early part of 2021 but then rose again from the middle of the year to levels far above the averages in much of the rest of Europe (Figure 69). Putting it in rather insensitive terms, between June and November this year the UK had close to 6 million new confirmed COVID-19 cases. Over the same period, Germany had around 1.5 million and Italy perhaps 700,000.

The UK has seen some especially sharp falls and rebounds in GDP growth

Those sorts of differences are sufficient to alter the dynamics of virus transmission in the future. Whether it was an actual aim of UK policy – and for understandable reasons it was never explicitly presented as such – the British approach effectively allowed for case numbers to rise, but not to run out of control. Essentially the “natural” wave of transmissions was flattened and extended over the summer and autumn, a time of year when infection rates would automatically be lower and when health systems would not become overwhelmed with cases. Many European nations are now seeing latest waves develop (now exacerbated by Omicron) and coincide with usual seasonal upswings and rising pressure on hospital and health services. Omicron has complicated matters, but it may be that the UK will have greater degrees of freedom to react to virus trends with lower adverse impact on activity levels between now and the spring. We project above-trend increases in UK GDP between now and the end of next year, with the pattern probably front-loaded but still dependent on virus trends.

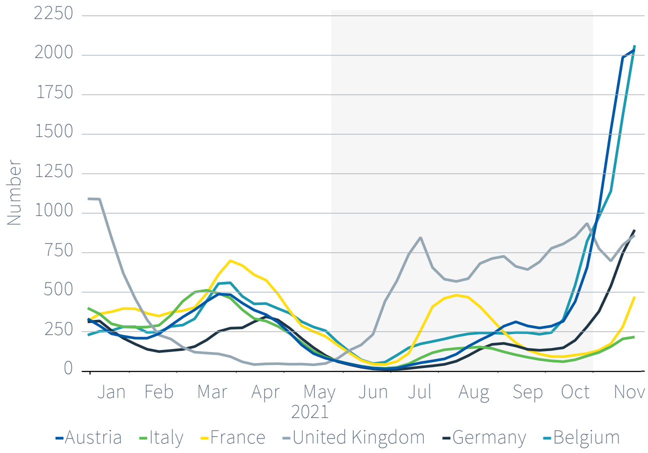
Trends in virus transmission will still determine the pattern of recovery

Figure 68. **UK, Eurozone and US GDP timepaths**
Bigger dips, sharper recoveries in the UK



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 69. **Cumulative cases 14-day sum per 100K of population**
Pattern distinctly different in UK in 2021



Source: Aviva Investors, Macrobond as at 1 December 2021

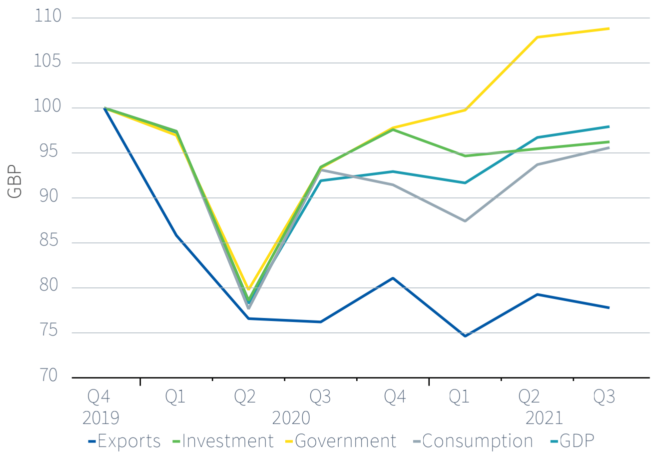
The bottom line is that, partly because of the higher level of acquired immunity and good progress made on booster shots, our base case is that we do not expect the UK to impose a major tightening of COVID-19 restrictions over the winter and foresee no return to national lockdown measures, with the attendant hit to GDP that would inevitably entail. There are obvious downside risks if latest trends do take a turn for the worse in coming months. But for now, we trust that the recent (Plan B) precautionary guidance on working from home, mask wearing and self-isolation and testing as well as more stringent restrictions on travel will be enough to stem the latest wave. These measures are less onerous that the stricter rules imposed last year and early this, but they may still crimp growth outcomes marginally in Q4 and Q1. The level of GDP by the end of next year, however, is unlikely to be affected significantly. At the end of Q3 the overall level of GDP was just 2% below its pre-COVID-19 mark and that lost ground should be made up by Q1 next year. A year ago, many estimates suggested a "permanent loss" as a result of COVID-19 at up to 4% or 5% of GDP. Revised figures now point to perhaps 1% or 2% at worst. Although there are still legitimate concerns, we should not lose sight of the fact that outcomes have generally been much better than initially feared.

The latest "Plan B" restrictions should have only a modest impact on growth

Decomposing UK GDP into its component parts reveals that both household spending and aggregate investment have risen again after the virus-related hiatus in Q1 this year (Figure 70), but that both remain 3% or 4% below pre-COVID-19 levels. A further layer of granularity shows that, in common with other countries, it is consumer expenditure on services which still lags significantly (Figure 71). For obvious reasons it is spending on services that has been most impacted by lockdown restrictions, with both supply and demand factors at play. And it is these same areas that would be most vulnerable if new containment measures were to be imposed. Even if they are not, more cautious attitudes from parts of the population would affect demand in several areas. A full recovery could be delayed for several quarters yet, but with household balance sheets in reasonably good health (the savings ratio is estimated to be well over 10%), there is scope for upside surprises here when conditions allow. The chancellor's October Budget did not add significantly to the measures already announced. Overall, the fiscal stance planned for coming years is for a modest tightening, but nothing on the scale of that which followed the GFC. As in Europe, we speculate that business investment is being held back more by uncertainties than anything else. It is also worth noting that construction output is more or less back to pre-crisis levels and that order books are robust. It is mainstream business investment that remains weak (Figure 72).

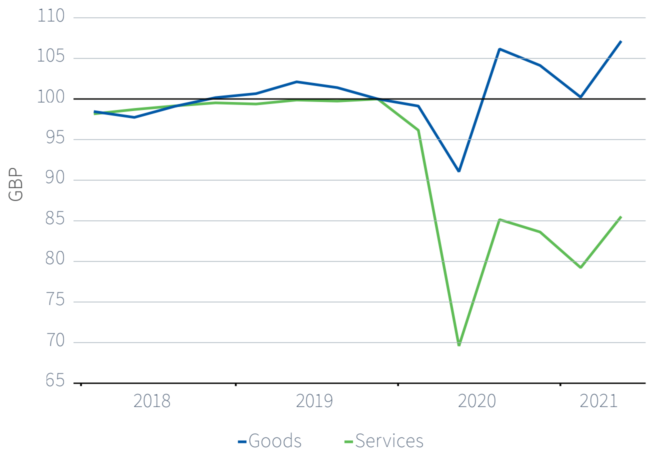
UK domestic demand has recovered well, but there is further to go...

Figure 70. **Composition of UK recovery**
Exports have lagged badly



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 71. **UK household spending on goods and services, 2019 Q4 = 100**
Spending on goods has fully recovered; services still lag



Source: Aviva Investors, Macrobond as at 1 December 2021

But a case could be made that it is UK exports trends which are giving most cause for concern. In marked contrast to Europe, also an open economy dependent on free trade, UK export volumes (typically comprising 25% to 30% of UK GDP) have remained firmly in the doldrums since the COVID-19 collapses of last year. It is undoubtedly true that UK exporters are feeling the strains of global supply-side bottlenecks, but unless a case can be made for why the UK should be feeling this more than other nations – and there seems nothing obvious – then we need to look for alternative explanations. The UK has a greater proportion of service sector exports than many other countries, so it is possible that more subdued activity within services is impacting the UK disproportionately. But that sits rather uneasily considering that at least some of the key areas where UK comparative advantage is considered to be greatest (financial services, software, creative and media, gaming) are thought to be least impacted by lockdowns. A more worrying explanation is that UK trade flows are being hurt by frictions and worse related to the post-Brexit environment. Moving away from the most favourable trading relationship possible with our largest trading partner was never going to be painless. But it may be compounding the hit from supply-chain difficulties that is being felt by everyone in a way that hurts Britain most.

...but exports have been especially weak, a marked contrast to the pattern in the rest of Europe

As elsewhere, higher inflation has become a dominant macro-economic theme in the UK during 2021. And it has happened extremely quickly (Figure 73). This has of course been a global phenomenon, but there have been some local drivers too. In the UK's case, the common energy price spike has been further distorted by utility price regulation. This has generated sudden violent price moves, the next one of which is due to come in March/April next year, meaning that UK CPI inflation is unlikely to peak (perhaps above 5%) until then, whatever happens to energy prices in the meantime. The high inflation debate is therefore certain to continue for many months and the longer it is here, the greater the danger that it becomes stickier. The inflation-targeting Bank of England had prepared the ground for the first rate hike this month but may now choose to delay because of the latest virus worries. However, unless circumstances change substantially for the worse, 2022 is likely to be a year of sequential, but modest, rate hikes in the UK. The key here is to deliver monetary tightening in a way that doesn't stall recovery, doesn't cause disorderly and damaging financial market reactions and doesn't dislodge inflation expectations.

Inflation will move higher between now and the spring

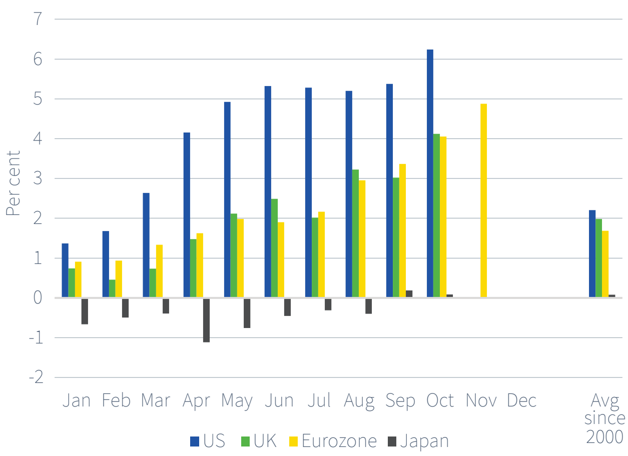
Figure 72. **UK business investment**

Still 10% to 15% below pre-COVID-19 levels

Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 73. **CPI inflation in 2021 versus average since 2000**

Inflation has soared higher almost everywhere this year



Source: Aviva Investors, Macrobond as at 1 December 2021

Japan: can Kishida catalyse catch-up?

- **COVID-19 suppression damaged the recovery in Q3, and threatens 2022's hopes of regaining momentum**
- **Consumption and services should rebound, thanks to fiscal expansion, as trade continued to benefit from global demand**
- **Inflation and investment will remain low, but ending the strict suppression policies and more effective government spending are upside risks to both; the BoJ will not budge**

At the beginning of 2021, we were hopeful that with vaccinations being rolled out successfully, the Q1 pause in the rebound would quickly be forgotten. This was not to be, as across all of Asia, Q3 saw harsh measures intended to keep virus prevalence extremely low (Figure 74 and Figure 75). As with China, this strict suppression policy is turning victory into failure, contrasting with most advanced countries that are able to reopen fully and keep hospitalizations and deaths from COVID-19 usually on the order of 1/10th to 1/4th of previous peaks. Japan's population was only 11% fully vaccinated as of mid-2021, so it was not yet in a position to emulate the US or the UK – a key question is what the 2022 official policy and the societal response will be when Omicron or some other COVID-19 variant inevitably arrives on Japan's shores.

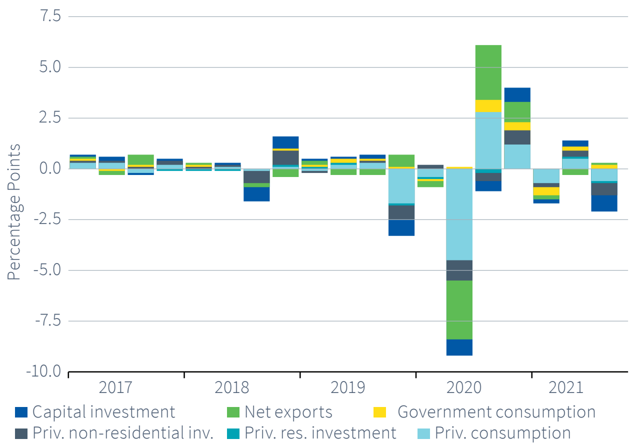
Japan has made an expensive trade-off to keep COVID-19 numbers and deaths low

As a result of two years of uncertainty, consumption and investment overall remain weak, and are unlikely to rebound strongly. However, Japan remains a wealthy country with abundant savings that increased further during the forced closures; some pent-up demand should lead to a rebound in services when they are released. Goods demand is decent internally and a powerful boost for exports; manufacturing expansion and the bright outlook for industry that have lifted equities contrast starkly with the bleaker outlook for domestically oriented services (Figure 76 and Figure 77).

As in 2021, Japan still has a long way to go to get back to a normal level of GDP, and some economic scarring may occur; there will be bounces in GDP with annualized growth far above potential, and periodic setbacks of currently indeterminate size if and when the government imposes lockdowns or if supply-side problems cause serious setbacks – this is a House View theme for 2022 even as some sectors, such as autos, gradually overcome earlier issues. A harder landing in China's economy is also a risk. Eventually, Japan should settle along its potential growth of 1-1¼ % per year; its current output gap is estimated at 2% by the IMF which means another year or two of 'strong' growth, from the current low level. But output gaps are only approximations and unobservable; it is unclear what the post-crisis

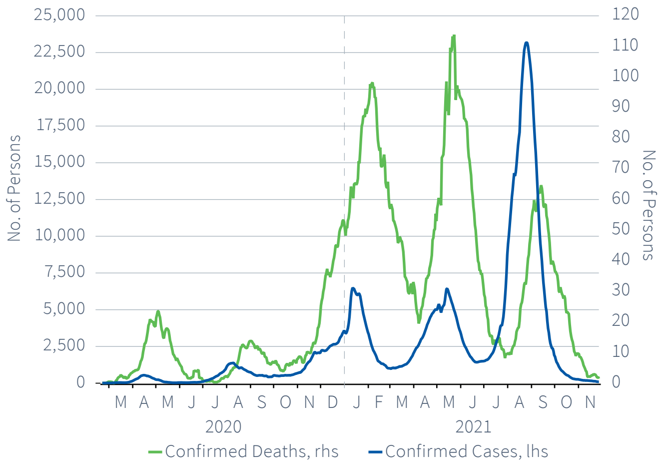
A weak recovery will remain sluggish, despite a very large fiscal push

Figure 74. **GDP – A step forward, a step back**
Contributions to GDP



Source: Japanese Cabinet Office, Aviva Investors, Macrobond as at 3 December 2020

Figure 75. **Five COVID-19 suppressions came at a cost**
Japan: COVID-19 cases and deaths, daily change, 7 day mavg



Source: Aviva Investors, Macrobond as at 1 December 2021

"new normal" will be for Japan or the global economy. PM Kishida's task is to try to revive the economy via investment and productivity, to avoid falling into the bad equilibrium that Abenomics partially lifted Japan out of, before the policy error of the 2019 consumption tax and the COVID-19 crisis stuffed out the better dynamism experienced from 2015-18.

After running 8% of GDP fiscal deficits the past two years, 2022 should see a slight decrease, but the plan for a gigantic fiscal stimulus is in the works. Spending could be around 6% of GDP or ¥35 trillion, though not all of the budgeted items will be spent next year and not all of that figure is 'new'; multipliers will be low and much will be wasted or saved. The bulk of the supplementary spending will be spent on medical needs, subsidies to help the struggling hospitality sector, and transfers to poorer households. Still, more than 1% of GDP will end up going towards priority investment projects such as digitalization, technology research such as chips and clean power generation and storage, and other measures that will enhance productivity. Japan remains stuck in a liquidity trap, so government spending cannot 'crowd out' private borrowing, but it can still displace it, especially where there is simply little capacity, such as infrastructure.

Fiscal stimulus will be large, but its multiplier to GDP will likely be low

The Bank of Japan (BoJ), is locked into negative interest rate policy, with YCC keeping 10-year Japanese government bond (JGB) yields around zero. Unlike Australia's failed experiment with YCC, Japan has had no major issues with keeping the 10-year yield between +/- 0.15%; the RBA experience merely suggests that it's probably smoother to try to widen the bands of, and eventually "float" the target bond before the horizon for rate hikes nears. At this time, that point is nowhere on the horizon: the BoJ will continue to monetize the debt for as far as the eye can see, allowing a version of MMT to operate until fiscal policy or other factors generate inflation. Inflation has been slightly negative and is showing little inclination to rise, even as some energy, food, and import cost increases inevitably get passed through. The Abe/Suga policy of forcing decreases in mobile phone service costs (causing a -34% y/y CPI contribution for that subsector for October) will drop out by midyear, but most likely, so will energy prices (+11.3% y/y in October) and CPI for hospitality/recreational services, now back near pre-pandemic levels even as the sector still may be impacted by closures and subsidies which distort prices. All in all, we expect mild inflation in the 0.5-0.9% range, consistent with the BoJ's expectations and hopes (Figure 78); that makes nominal growth comfortably positive again, and above the debt service costs of the government and corporates. This is also vindicated by the rise in breakeven inflation rates (Figure 79).

Inflation is low and BoJ has no interest in higher interest rates

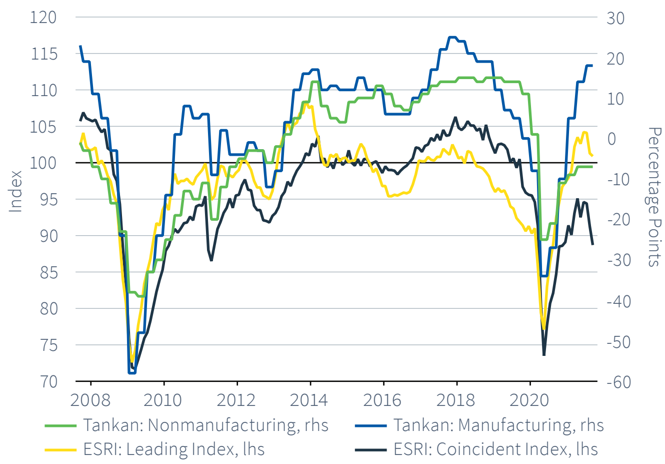
Japan's gross public debt is now 257% of GDP, having increased by around 20% of a year's worth of output during the crisis; net debt is a mere 170% due to BoJ and intra-government holdings. The debt service cost on this mountain of debt is a puny 0.5% of GDP: the debt can never practically be repaid, but it can easily be serviced or exchanged for money, and as it is denominated in yen presents no risk to creditworthiness or burden on the state or its taxpayers, nor does it crowd out any spending priorities. Indeed, Japan's debt dynamics

Large public debt is a feather-light burden

Figure 76. **PMI surveys finally brighter**
Japan PMI surveys

Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 77. **Goods production strong, services weak**



Source: Aviva Investors, Macrobond as at 1 December 2021

improve with more debt as long as nominal interest rates are less than nominal growth; eventually large government deficits must close but this should not be imposed by deliberate austerity, but be the result of increased spending by consumers and businesses; reduced private savings will then allow for decreased public dis-saving, i.e. smaller deficits. Over time, growth and inflation will make domestic debt sustainable: a combination of the high structural savings rate, low investment by corporations, and a growing current account surplus that is back around 3.5% of GDP necessitates government deficits.

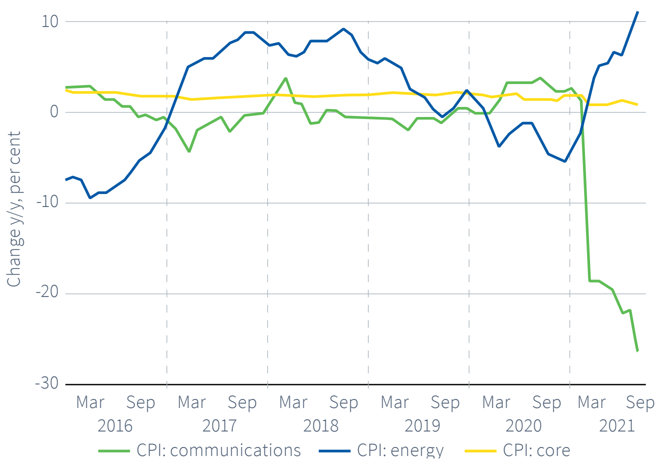
The yen has weakened by around 10% versus the dollar, despite that strong current account; the two main drivers are (i) that the trade balance has likely peaked due to high oil and domestic economic recovery, and (ii) that foreign interest rates, particularly in the US, are moving higher. The hedging we saw last year can still continue for a while, but higher US interest rates, as well as stronger economic growth in other G10 countries, will continue to attract Japanese capital. In real terms, the Yen is close to all-time lows (Figure 79), reached in 2015 thanks to Abenomics – 30% weaker than a decade ago, and down almost 50% since the start of the millennium. It is more likely that this is a structural trend, due to low growth and demographics, as well as the 'MMT' strategy of helicopter money to monetize, and – fingers crossed – eventually inflate away a portion of the accumulated debt. As we expect the Fed to begin its hiking cycle in 2022, JGB yields beyond the 10-year target point of YCC will be influenced by global rates and should rise, pricing in a small probability of eventual exit from negative rates. Meanwhile, absent global growth scares such as the Omicron virus, and short-lived risk-off episodes that temporarily strengthen the yen and particularly non-dollar crosses like EURJPY, rate differentials will continue to support a depreciation trend.

Currency weakness is a welcome boost, and may be structural

A year ago, we highlighted that the Suga administration was pushing a reform agenda around digitalization and efficiency; the Digital Agency was launched in September 2021 and will seek to streamline antiquated and duplicative systems across parts of government, and to improve private sector competitiveness as well. This impetus is not only the case for the public sector, which has been mired in bureaucracy for many decades, as poignantly portrayed in Kurosawa's Ikuru (1952). Despite popular mythology of technologically developed culture and business, Japan has fallen behind as a result of the dearth of investment (some argue that a weak yen and government support, rather than tough love and market forces, are partly to blame). The pandemic and government incentives could continue to change that, as companies start to need to invest in capex to expand again, but find that a shrinking labour force and expensive capital goods are inferior to moving functionality online, making use of 5G, mobile apps and robotics, and using big data to improve efficiency, information flow, and advertising. Whether this will be enough to close the gap with the US, Korea, or Taiwan – or stay ahead of Europe, and China – time will tell. Kishida's legacy will rest on that as much as moving past the traumatic two years of COVID-19 disruption.

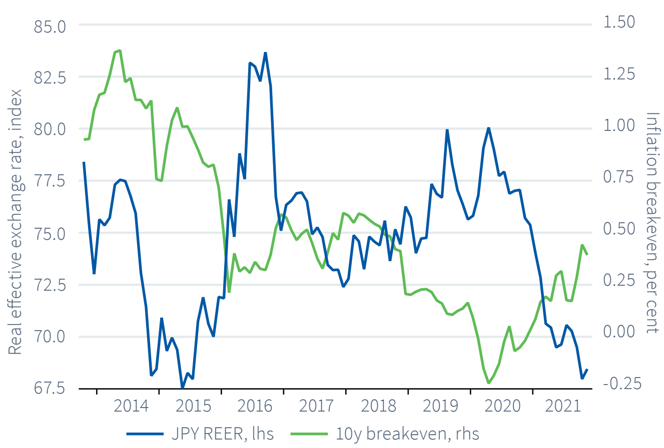
New administration to shift priorities to productivity and digitalization once COVID-19 threat diminishes

Figure 78. **Small inflation rebound in '22 expected**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 79. **Yen has weakened towards all-time lows**



Source: JPMorgan, Bloomberg, Aviva Investors, Macrobond as at 3 December 2020

China: growth, risk and stability trade offs

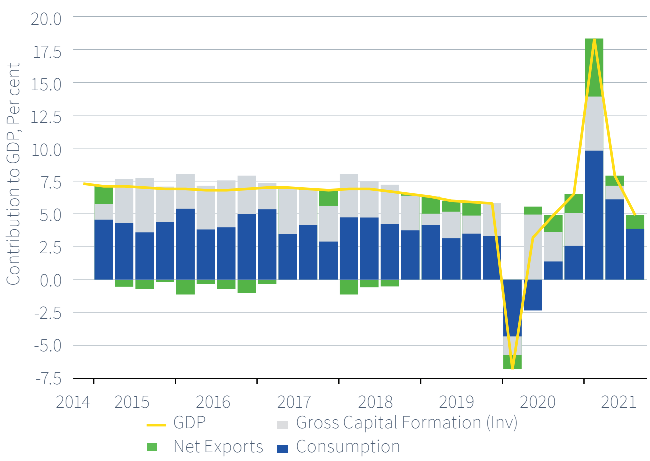
- **It is still unknown when China's zero-COVID-19 suppression policy will end, but it now threatens to be disruptive to activity and cause external supply problems throughout 2022.**
- **President Xi will direct policies around stability ahead of the 20th Party Congress, but will shift emphasis from growth at any cost to Common Prosperity and decreasing dependence on external forces, while strengthening Communist Party priorities (see "New China" theme).**
- **The property market is being forced to retrench, taking a toll on growth. Support measures will be necessary but these will not reverse a sharp slowdown. CNY strength is likely to keep a lid on inflation, as PPI peaks but CPI rises; the PBoC will supply ample liquidity but is unlikely to cut rates much if at all.**

In 2021, following its initial V-shaped recovery, China's economy stalled in aggregate, growing barely 2% from Q1-Q3. China's rebounded quickly in 2020 because of its ability to keep COVID-19 cases low; this past year, however, that same determination badly damaged output and growth in Q1 and Q3 (Figure 80), and exacerbated supply-chain issues globally. The "New China" theme section discusses the evolving approach to internal development and interaction with the outside world; how this is actually applied will be crucial in determining not just headline growth but which sectors are winners and losers. An intentional de-risking campaign to push capital away from property into other sectors more aligned with China's long-term strategic goals has proved to be harsher than predicted, with developers suffering a cash crunch: investment and sales are likely to contract for several quarters, with a risk of a hard landing. Resolve to meet climate goals and decarbonize was likewise too heavy-handed, and caused a power crunch that has since been largely reversed, with coal production and power plants fired up. On the more positive side, exports continue to be very strong, and we expect that global demand will continue that trend; internally investment in infrastructure and social safety nets is expected to pick up and keep growth from falling off too much, and full reopening for services and eventually tourism and travel can lift consumption (Figure 81).

China is moving into new territory: slower, but trying to be more sustainable

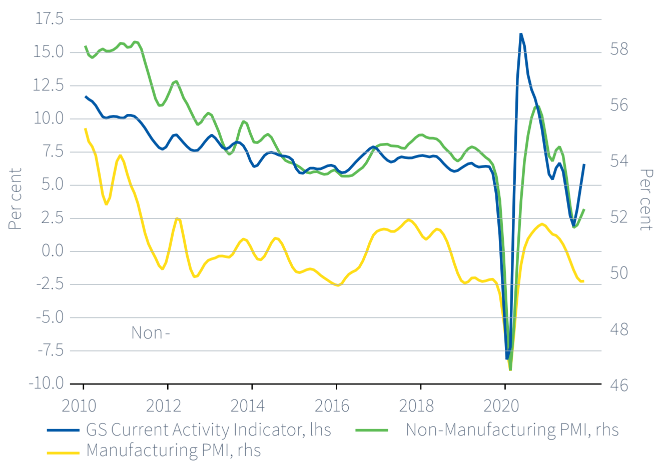
Last year we already identified that after the H2 bounce, trend growth was closer to 5%. This is still the case, but realized growth will continue to be choppy in 2022 as China has not yet transitioned to 'living with COVID-19', despite a successful vaccine rollout. Coping with

Figure 80. **Investment, consumption slowing rapidly**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 81. **Growth momentum is erratic**



Source: Bloomberg, Markit, Goldman Sachs, Macrobond as at 1 December 2021 that associated sickness once lockdowns are no longer deemed needed will not be easy, as hundreds of millions of infections will mean inevitable variant scares, and some restrictions may return. Yet the current policy does not seem a permanent solution; Korea and Japan will be important test cases for a more careful reopening. The consensus guess is that policies will become less restrictive in Q2, after the Winter Olympics/Paralympics, but it is possible that they last until after the 20th Party Congress. If restrictions aren't lifted, China could of course get lucky and not need to lock down much anyway, but the experience of this year suggests otherwise. In late October 2022, President Xi plans to be installed for a third term, and politburo changes will also shift policy; while continuity and Xi's perpetual dominance are all but assured, China is likely to push on infrastructure and long-range investment to help boost potential growth, become less dependent on external demand and capital, and take the lead in critical industries in tech and clean energy.

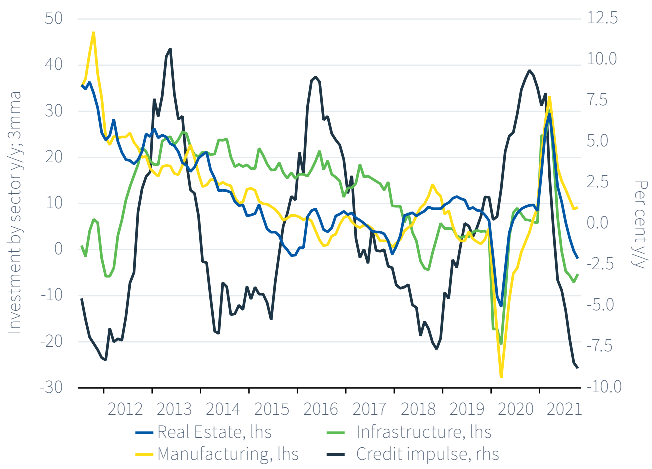
Downside risks to growth in 2022

Given the above uncertainties, it is quite hard to predict growth; 5.0-5.4% is likely even with the contribution of exports and industrial production being less significant, but there are major downside risks including but not limited to Omicron and other COVID-19 variants. Property investment will stay negative, with housing starts and sales likely down more than 10% compared to Q1-Q3. This will have repercussions for credit growth, which has stalled, as well as for the growth of trade partners. If property prices fall, negative wealth effects and further slowdowns could ensue, but this seems less likely; in 2014-15, a large inventory overhang existed, but that is less the case today, and a slowdown in building may soon make supply tight. How this will help achieve common prosperity is unclear, but the authorities' view is that too much housing investment was 'speculative' and that capital is better spent in areas that will raise competitiveness and productivity, and to provide public goods.

Credit growth (Figure 82) has been sluggish, first because the infrastructure push of 2020 was not repeated, and local governments were constrained in borrowing because approval for projects was less forthcoming, and second, as real estate investment fell off a cliff following the 'Three Red Lines' being imposed on borrowing by developers in 2021. In contrast, manufacturing growth and indebtedness has been robust, and should continue to be solid. Over the next year, there will be no large-scale stimulus or rate cuts absent a crisis, but state-owned banks have been directed to support local governments and the property sector, making it likely that infrastructure investment will rebound, and that credit overall, including to real estate, will find a floor as developers make good on pre-sold flats and the suppliers completing unfinished and unstarted projects.

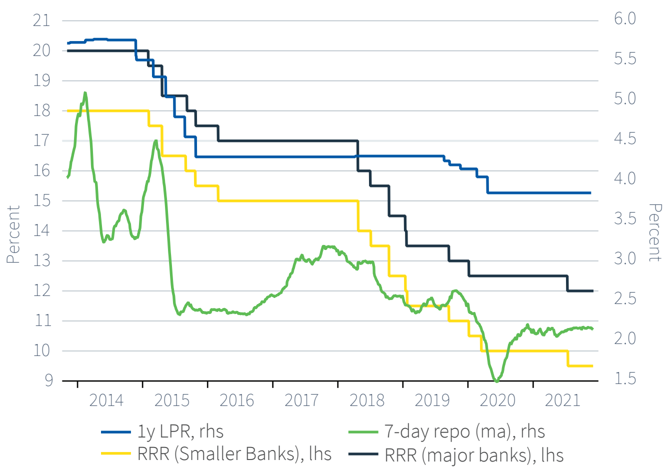
In contrast to the property bust, exports, FDI, and portfolio inflows have been strong all year (Figure 84) – the latter partly driven by index inclusion, but also because currency stability and yields of over 2% are a rare and attractive mix in today's world. Net exports are at an all-time high, and global goods demand shows little signs of slackening, while import growth is contained (as a corollary, China will fail to meet its obligations of the Phase I trade deal with

Figure 82. **Credit growth weak as investment falls**



Sources: Bloomberg, Aviva Investors, Macrobond as at 1 December 2021

Figure 83. **PBoC policy stuck in neutral**



Source: Aviva Investors, Macrobond as at 1 December 2021

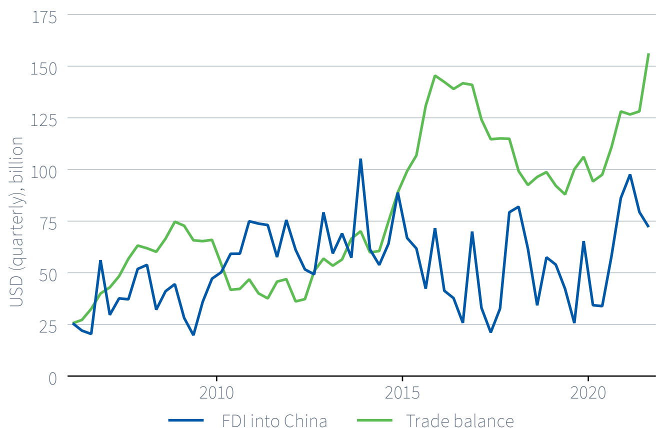
the US, but while there is little appetite for increased tariffs, reducing them seems politically difficult for both sides until late 2022). China is a commodity price-taker, and the demand-driven rise in prices has caused PPI to soar there as elsewhere (+13.5% in Oct-2021); combined with the strength of the basic balance and the desire for stability, this has led the PBoC to keep the CNY very iunvolatile against the dollar, and hence, extremely strong in real terms. A devaluation would be contrary to terms-of-trade fundamentals, alienate the US, and risk inflation staying high and spilling over to CPI, which has stayed at low levels (around 1½% y/y for both headline and core); consumer prices will probably rise from these low levels as food, energy and producer prices are passed through to final goods.

Along with price pressures, reducing risks and avoiding speculative borrowing is one reason why the central bank will avoid rate cuts, but slowing growth and a need to supply funds for fiscal spending means liquidity will remain ample, and yields will remain under downward pressure and inured to global rates, unless global inflation and Fed tightening rapidly accelerate. The PBoC will continue to use a combination of repo interventions, MLF loans, RRR cuts, and other moneymarket tools to implicitly monetize deficits, but is also increasingly inclined to support specific policy goals through targeted programmes such as its Green Lending Facility.

China's plans to achieve net zero still lack details, but investment and promotion of electric vehicles, alternative energy from solar panels to hydrogen and nuclear power, and carbon sequestration technologies (including 'clean coal') will all benefit – and as these are scaled up, the global economy and progress toward COP26's climate goals may benefit as well. More worryingly for the US and other countries involved in Strategic Competition with China, the priorities of the 5th Plenum, and Five Year Plan, as well as the previous Party Congress, all point to increasing efforts to invest in, and dominate, key areas of current and future technology, from decarbonization to microchips, rare earths to artificial intelligence, 5G/6G and beyond; investment in military capability and expansion into South and East Asia is also at odds with China's claims of peaceful development. The US and its allies are pushing back more effectively with a multilateral approach, greater attention to global standards and rule-setting/enforcement, and will target China's subsidization of trade and other 'unfair' practices and intellectual property theft, as well as limiting its access to key inputs where China's catching up would be a threat to competitiveness and military superiority, though this may at times be hard to separate from populist politics and protectionism.

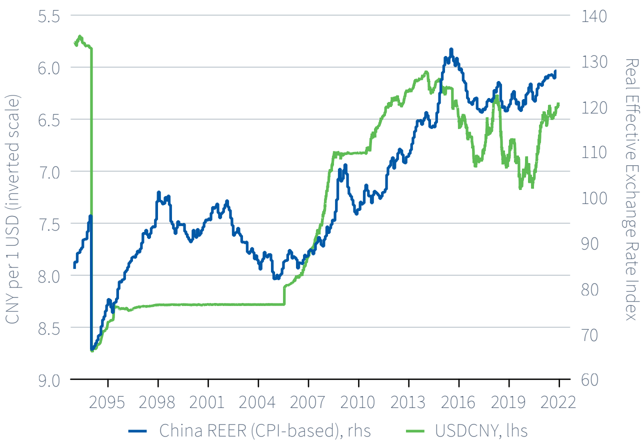
Tackling pollution and carbon emissions gets renewed emphasis in the 5th Plenum plans

Figure 84. **China's basic balance is very strong**



Source: CCS, SAFE; Aviva Investors, Macrobond as at 1 December 2021

Figure 85. **CNY has appreciated in nominal & real terms**



Source: IMF, Bloomberg, Aviva Investors, Macrobond, as at 1 December 2021

Australia: space to grow

- **A second major lockdown in 2021 saw growth stall this year, but should bounce back quickly in 2022**
- **Households have a large saving buffer to draw on and easy fiscal policy is set to continue**
- **Moderate wage growth and inflation should keep RBA on hold in 2022**

Australia began 2021 in better shape than most. Highly effective containment measures had effectively eliminated COVID-19 cases (albeit with international borders remaining closed), while the vast amount of fiscal and monetary policy support had allowed households and businesses to bridge through the lockdowns of 2020 with strong balance sheets and considerable amounts of excess savings. Indeed, by 2021Q1 activity in Australia had already exceeded the pre-COVID-19 level, one of the most rapid recoveries in the world. However, the second half of 2021 proved to be far more challenging, as the emergence of the Delta variant proved impossible to keep out of the country, and once spreading in the community led to widespread strict lockdown procedures once again in New South Wales and Victoria. Those lockdowns resulted in activity declining by 1.9 per cent in Q3, as constraints on household consumption of services once again drove down output (Figure 86). In response to the Delta variant and lockdowns, Australia accelerated its COVID-19 vaccination programme, moving from one of the lowest vaccination rates in the OECD to near the top. The lockdowns once again lowered case numbers significantly, and the high vaccination rate allowed Australia to once again emerge from lockdown and this time begin to open international borders as well.

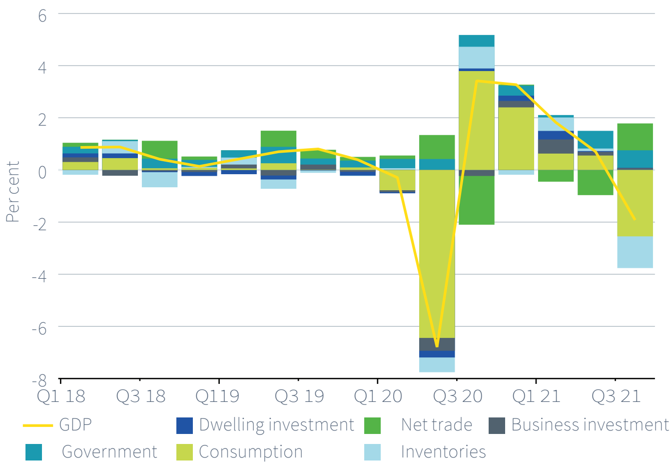
Renewed lockdowns negatively impacted growth in 2021, but accelerated vaccination programme

As had been the case in 2020, the fiscal support was forthcoming throughout 2021. Indeed, household disposable income has continued to rise more quickly than the pre-COVID-19 trend (Figure 87). With consumption of services constrained during lockdowns in 2020 and 2021, and with only partial substitution to goods, Australian households have built up a very large pool of savings that we expect to drive overall consumption growth well above income growth in 2022. Indeed, as we enter 2022 consumer and business confidence remains robust, with pent-up demand seeing forward orders also remaining resilient. While the support from fiscal policy will be reduced, reflecting the normalisation of activity, there remains a large number of longer-term public sector investment projects in the pipeline, as well as a potential further boost in federal spending ahead of the next Federal election in May.

A large pool of excess saving should support a rapid bounce-back in spending in 2022

Figure 86. **Contributions to GDP growth**

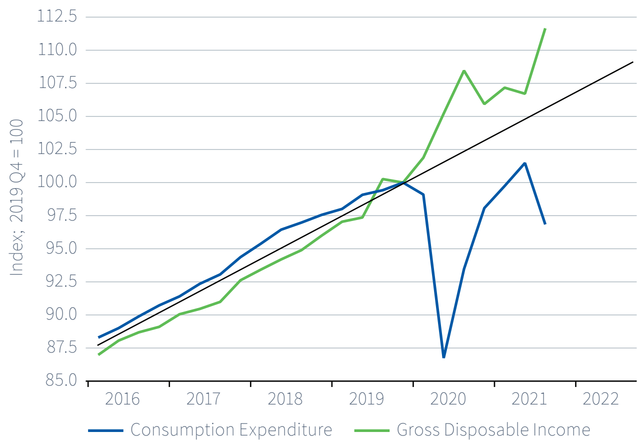
Rapid recovery expected from Delta lockdown in Q3 2021



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 87. **Household disposable income and consumption**

Income support measures and tax cuts have boosted disposable income



Source: Aviva Investors, Macrobond as at 1 December 2021

Of course, risks remain with the recent emergence of the Omicron variant, with cases appearing in Australia soon after it was first identified in South Africa. Should it prove to be able to evade existing vaccines, then lockdowns may once again be required until new booster jabs are available.

While the growth outlook for 2022 is strong, employment growth should reflect that as well, with the unemployment rate likely to fall to around 4 per cent by the end of 2022. That should start to put upward pressure on wages, as the degree of slack in the labour market shrinks. That said, wage growth has been particularly weak in Australia over the past five years, and today sits just over 2 per cent compared to a year ago (Figure 88). That is well below the rate that the Reserve Bank of Australia considers to be consistent with inflation being sustainably consistent with the 2-3 per cent target range. While we expect wage growth to pick up, it is likely to only reach the range consistent with meeting the inflation target in 2023.

Wage growth remains modest, but should start to pick up over 2022

Headline CPI rose to over 3 per cent in 2020H2, largely reflecting the unwinding of large base effects from a year earlier when government grants and subsidies had pushed down on inflation. Core measures of CPI inflation, such as the trimmed-mean and weighted median, moved into the bottom of the inflation target range in 2021Q3 (Figure 89). We expect the trimmed mean measure of inflation to remain in the lower half of the target range of 2-3 per cent in 2022.

Inflation is expected to remain near the bottom of the target range in 2022

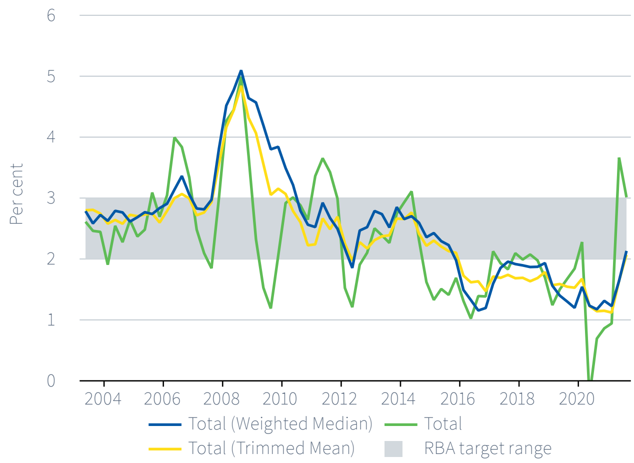
In November the RBA called a close to the yield curve targeting policy that kept the curve pinned at policy rate until 2024; the message being that policy rate would likely increase sooner than previously anticipated. That said, the new RBA framework places greater emphasis on inflation outturns, rather than projections, with a desire to see a sustained period of inflation near the centre of the target range – perhaps two or three quarters – with a degree of confidence that it won't slip lower again. That raises the bar for tightening policy rates compared to previous cycles, particularly while wage growth remains subdued. Given that, we don't expect the RBA to raise rates in 2022, but instead look to early 2023. However, the risks are likely tilted to a somewhat earlier start if patterns we are seeing play out in other developed economies, where wage and inflation dynamics are more advanced, begin to show up in Australia.

RBA expected to be on hold in 2022

Figure 88. **Wage growth**
Remains low, but expected to steadily rise

Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 89. **CPI inflation**
Core measures expected to remain in bottom half of target band in 2022



Source: Aviva Investors, Macrobond as at 1 December 2021

Canada: normalisation: a fine balancing act

Extraordinary policy stimulus both monetary and fiscal will continue to be removed in 2022, justified by declining spare capacity and inflation pressures in the economy. New COVID-19 variants such as Omicron present the greatest risk to the growth outlook in 2022 and will make managing policy normalisation more challenging.

As with many economies the most recent growth data in Canada depicts a strong service sector which should continue to be the main driver of growth as the impact of the global pandemic continues to fade. Offsetting this somewhat, growth in the goods sector continues to be negatively impacted by ongoing supply bottlenecks in transportation and many manufacturing inputs. Floods in British Columbia and the emergence of the new Omicron variant will likely weigh on growth near term as supply-side issues become more persistent than previously expected.

The labour market is recovering well (Figure 90) and groups who suffered more significant job losses during the pandemic, such as women and youth, have regained jobs.

There continues to be significant slack in some sectors of the economy which is masked by more traditional measures of the labour market.

Predicting the level of maximum sustainable employment and the relationship between labour market conditions and inflation are two key questions for the central bank. This analysis has become more difficult in an environment where conventional measures of spare capacity are less effective than they once were.

As highlighted in a Nov 21 speech the Bank of Canada (BoC) is now using a broader range of metrics to assess the overall level of employment and therefore is likely to be less sensitive to changes in any one metric such as the unemployment rate relative to the past.

Market participants too will need to look to a broader range of metrics when evaluating the health of the labour market and anticipating subsequent monetary policy response to it.

Ongoing supply disruptions have created cost pressures globally, this combined with higher energy prices is leading to higher than expected inflation in many economies. Anticipating the persistence of inflation pressures will be fundamental in determining the pace and terminal rate for monetary policy tightening.

COVID-19-related supply issues have more significantly impacted cost pressures in the goods sector with inflation in this sector outpacing other areas of the economy (Figure 91). That said, price growth has broadened since pre-pandemic levels, with service and core inflation also trending meaningfully higher. Given the breadth of inflation pressures and the emergence of the new Omicron variant we believe risks to the inflation outlook remain to the upside.

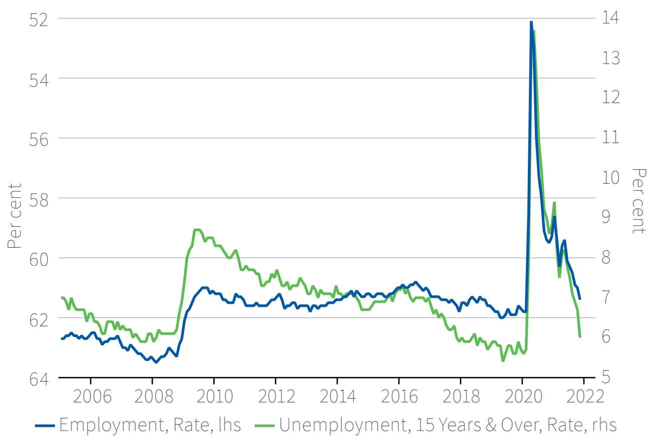
Extraordinary policy stimulus will continue to be removed in 2022, new COVID-19 variants present the greatest risk to the outlook

Growth in the service sector remains strong while the goods market continues to be impacted by COVID-19-related related supply issues

Predicting the level of maximum sustainable employment and the relationship between labour market conditions and inflation are two key questions for the central bank

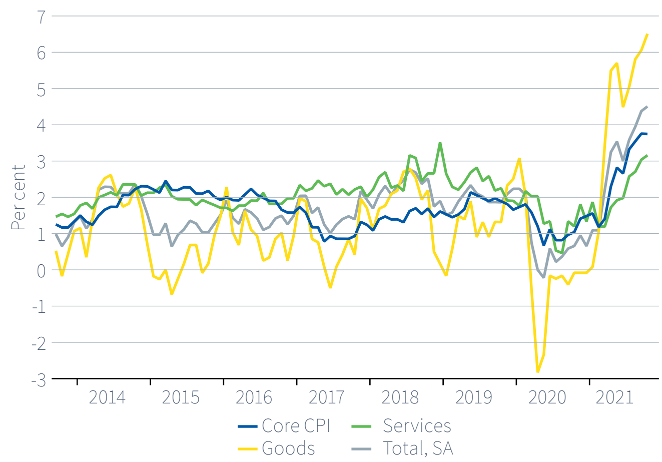
Anticipating the persistence of inflation pressures will be fundamental in determining the pace and terminal rate for monetary policy tightening

Figure 90. **Unemployment and employment rate, SA**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 91. **Canada inflation, per cent**



Source: Aviva Investors, Macrobond as at 1 December 2021

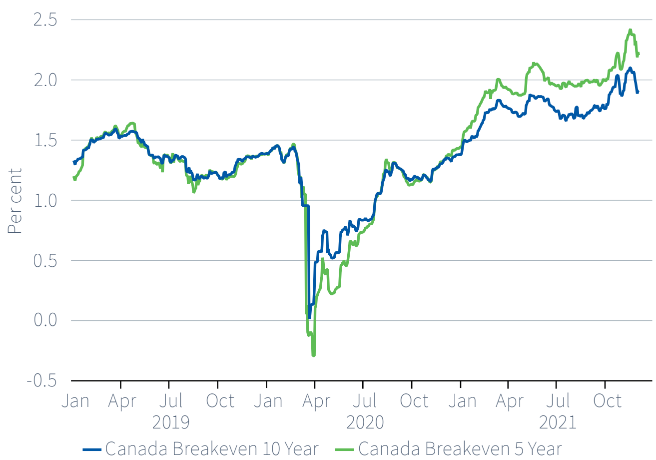
Market pricing of inflation has risen from around 1.5% at the start of 2021 to near 2% currently (Figure 92). With long-term inflation expectations well anchored around 2% the Bank of Canada (BoC) expects inflationary pressures to ease with inflation falling back towards the 2% target by the end of 2022.

With the labour market recovering and inflation likely to remain above 2% throughout 2022, conversations naturally turn towards monetary policy normalisation. Currently the policy rate is set at 0.25% with no change expected to be announced at the next policy meeting in December. At its October 2021 meeting the BoC judged that the quantitative easing (QE) programme is no longer needed, and this was taken as a hawkish shift by the market. The BoC did stress however that the significant stimulus the central bank has injected through QE remains in place, they simply will not be adding to it further. This will be known as the reinvestment phase, where the central bank will only purchase bonds to replace those that are currently maturing, such that the overall holdings of bonds remain roughly constant over time. How long the reinvestment phase lasts will depend on the strength of the recovery and the evolution of inflation but is expected to continue at least until the BoC lifts rates.

Balancing the extension of COVID-19-related inflation pressures against potential drags to growth from prolonged mitigation policy will be difficult. However, the BoC is expected to begin raising rates in mid-2022

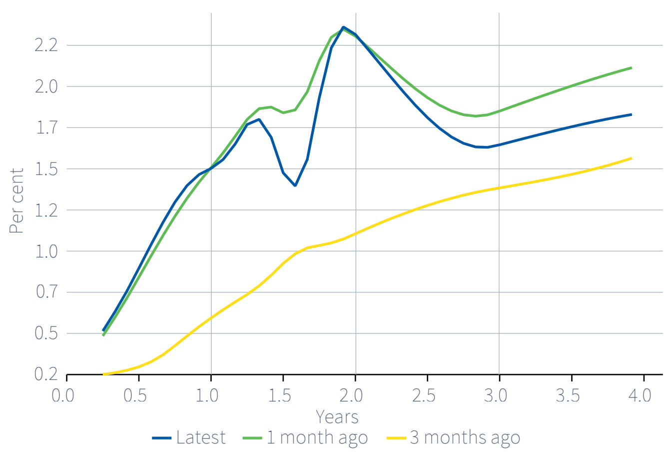
The BoC plans to begin its hiking cycle once economic slack is absorbed so that the 2% inflation target is sustainably achieved. It seems unlikely that this condition will be met in early 2022, the BoC currently expects this to happen sometime in the middle quarters of 2022. The development of the new Omicron variant may delay the full removal of COVID-19 policies and so continue to hamper the economy, impacting those sectors where slack remains, for longer. At the same time, supply bottlenecks from lockdowns could persist for longer than hoped given new waves of COVID-19 variants, extending cost pressures. Balancing the extension of COVID-19- related inflation pressures against potential drags to growth from prolonged COVID-19 mitigation policy will be difficult for central banks. If the beginning of the hiking cycle is delayed, the greater the risk that policy rate normalisation happens at a faster pace after lift-off. Currently the market is pricing a policy rate of 1.5% by the end of 2022 (Figure 93).

Figure 92. **Inflation expectations**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 93. **BoC policy expectations (OIS)**



Source: Aviva Investors, Macrobond as at 1 December 2021

Asia ex-Japan: steady recovery enabled by vaccines, but plentiful hurdles remain

- **Global goods demand has remained strong, with tech exports buoying exports from the region; China's slowdown and COVID-19 mutations are major risks for the region**
- **Large fiscal deficits and low rates have helped recovery, but outbreaks of COVID-19 damaged GDP, with tourism also largely MIA; this hurts SE Asia and India more than north Asia (Figure 94)**
- **Vaccine rollouts have progressed significantly, and should help normalization of services, while investment picks up and shrinks CA surpluses. Rates and inflation should remain lower than in other EMs (Figure 95 & Figure 99), but hiking cycles have begun or are imminent**

India: India had managed to be one of the first countries to exceed its pre-pandemic GDP level. But the Delta outbreak caused Q2 to contract 17% in real terms; the anticipated double-digit growth path did not come to pass. Expected 8-9% growth next year will still leave a sizeable gap, and India remains at risk to new variants and travel bans, which impact tourism and FDI; a slow consolidation of the fiscal deficit (6.8% in FY21) will support growth while sovereign creditworthiness is stable. The overall reform effort has stalled, as many pro-business promises have been delayed if not scrapped. External conditions are no longer benign, with energy and food prices much higher and inflation likely to stay in the 5-6% range (Figure 95), but with upside risk. The RBI will look through temporary shocks as much as possible, and the rupee will be under pressure when the Fed and other G10 and EM central banks raise rates. Gradual rate rises to 5%, meaning a real rate of zero, may need to be accelerated to stabilize inflation expectations and the FX, even if this slows the recovery. While Modi retains solid support, local elections in Q1-22 in several states may show if the past two difficult years have dented the BJP's strength.

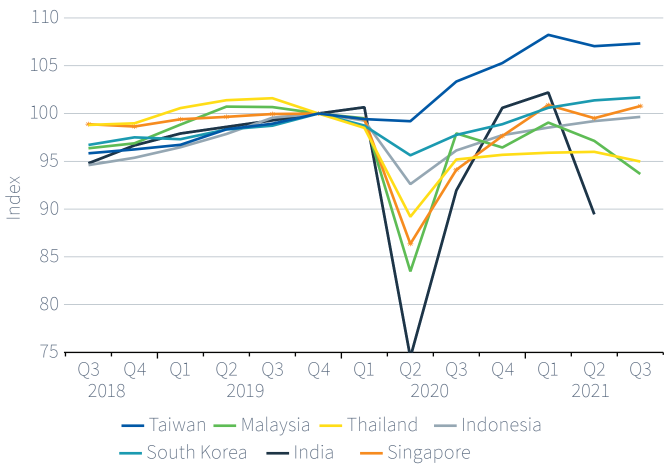
How long can RBI look through inflation is a key question amidst memories of 2013

Korea: The export and manufacturing driven recovery should gain more support from services in 2022, with growth again close to 4% (a percent higher than we or consensus expected last year). Delays in reopening and supply-chain disruptions remain the main downside risk, but the speed of pent-up savings being spent, and election-related fiscal giveaways, are upsides. Revenue strength should mean the fiscal deficit contracts from 3.5% to 2.5% of GDP. Politics will be quite interesting, as right-wing populist firebrand and Milton Freidman devotee Yoon is riding high in the polls; tensions with North Korea and China may rise. We underestimated the

Korea and Taiwan enjoying tech exports powered supply-chains, Korean elections and relations with China are possible risks

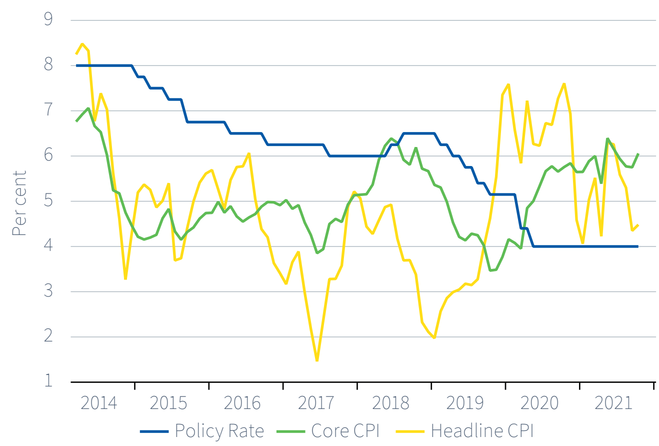
Figure 94. **Recessions ranged from deep to mild**

Real GDP (4-2019 = 100)



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 95. **India rate cuts likely to be reversed**



Source: Indian Ministry of Statistics, Aviva Investors, Macrobond as at 1 December 2021 inflation impulse this year, which has put BoK behind the curve even after its two hikes, and contributed to high housing prices that, together with a series of minor scandals, have dented the ruling Liberals' popularity. Low real rates and the Fed hiking cycle will continue to put KRW under mild downward pressure, as net export demand and terms of trade turn less favourable at the margin and 2021's current account surplus of +5% of GDP declines (Figure 96).

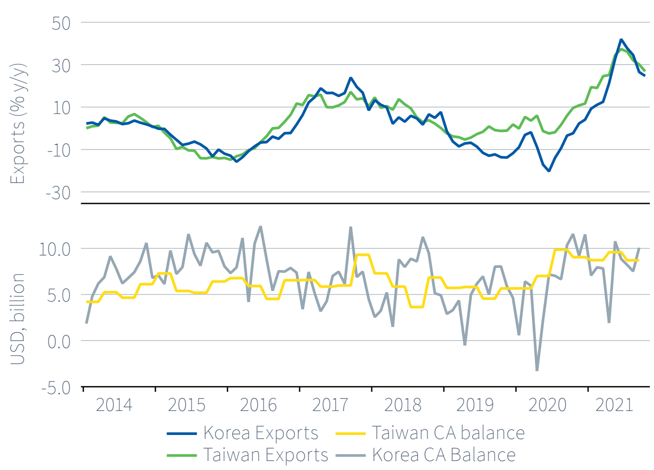
Taiwan: Taiwan's growth will slow from a likely 6% rate in 2021, return to a great 3.5-4% growth rate after a truly stellar year that exceeded our expectations. Output is far above the pre-crisis trend as exports and tech investment have surged and continue to grow at double-digit rates. This bodes well for future growth, though there are some downside risks: COVID-19 can disrupt the domestic economy if vaccines fail to perform well against new variants, and disruption in energy or inputs to the chip/tech industries can cause temporary wobbles. The current account surplus ($110bn or over 14% of GDP) keeps TWD strong, making its use as a funding currency dangerous even at negative implied yields: CBC will tolerate appreciation as a way to tighten conditions and dampen inflation. CPI should stay close to 2%, and some small rate hikes alongside the Fed may be needed. China is not a military threat at this point thanks to US protection, but nationalism may rise around Xi's reelection; in reality it is the mainland that is moving further away from Taiwan, not vice versa.

Malaysia will hope for some post-COVID-19 political stability later in 2022

Malaysia: A political crisis/stalemate that has continued since September 2019, combined with the return of COVID-19 and the lockdown-induced double-dip recession, have been the unfortunate fate of Malaysia in the past year. There are hopes that the pact for no elections before July 2022 will mean fresh polls soon thereafter to bring resolution; the agreement provides a short window for more effective governance. For domestic capex and FDI to pick up, Malaysia will need to have a more stable, and ideally outward oriented, reformist government in place, and to avoid further lockdowns now that the population is largely protected by vaccines. These are large potential upside risks – in the base case, Malaysia will grow 5-6% in 2022 but this will still leave it 11-12% below the pre-crisis trend and with elevated unemployment. Weak, erratic output means large budget deficits and low inflation of around 2%, after nearly 5% y/y early in 2021. This should keep BNM on hold at 1.75% possibly all year; MYR may weaken on dollar strength but this will be welcome, while the current account surplus provides support for the currency.

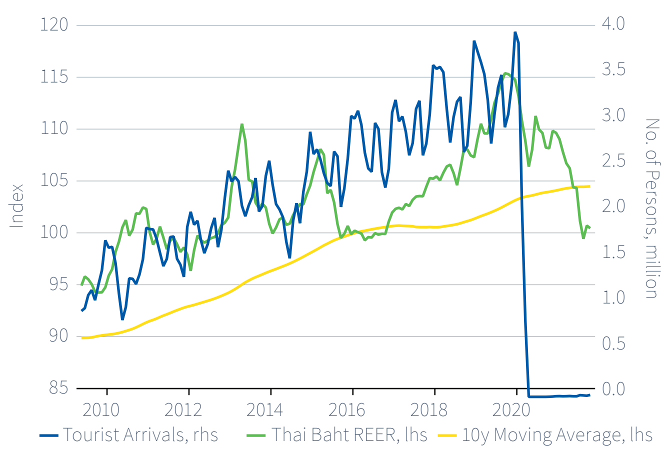
Indonesia: COVID-19 flare-ups damaged several quarters' output: growth should record only a 3.5% y/y figure for 2021, compared to a 5+% pre-pandemic pace and a -2% recession year in 2020. A return to potential growth is unlikely, as COVID-19, and supply-chain issues and weak investment are likely. Amazingly, Indonesia has the lowest inflation in the region, and as long as the rupiah stays stable, there is little pressure on Bank Indonesia to hike rates. This may change in H2-2022, as global rates rise and inflation pressures build, even with growth lacklustre. China's import demand has been solid, making a sharper slowdown there, or faster rate normalization by the US, the principal external risks; dodging more COVID-19 restrictions

Figure 96. **North Asian exports buoyed by Tech**



Source: Taiwan Ministry of Finance, Korean ministry of Trades, Aviva Investors, Macrobond as at 1 December 2021

Figure 97. **Thai Baht rebound relies on tourism**



Source: BIS, Bloomberg, Thailand Ministry of Tourism, Aviva Investors, Macrobond as at 1 December 2021 and a quicker normalization of services, tourism, and capex would be an upside and allow for 5-6% growth, and come with faster import growth and price pressures.

Singapore: The City-State has been a leader in transitioning from the over-protective zero-COVID-19 attitude prevalent in Asia to one that allows for economic normalcy and mobility, in a trade-off for much higher COVID-19 cases, with vaccines preventing that translating into hospitalizations and deaths. A rapid recovery in 2021 (6.7% growth) should slow only slightly in 2022, assuming travel and business activities resume and provide support for the financial hub of Southeast Asia. The MAS has responded to this, and the upside risks to inflation (above 2% , after many years of 0-1% CPI), by tightening its monetary stance via SGD appreciation. Real estate prices, the ongoing labour shortage, and the Fed provide upside risks to inflation and the MAS reaction function, which will probably continue to push SGD stronger.

A test case for the region, Singapore looks set to transition to "Living with COVID-19"

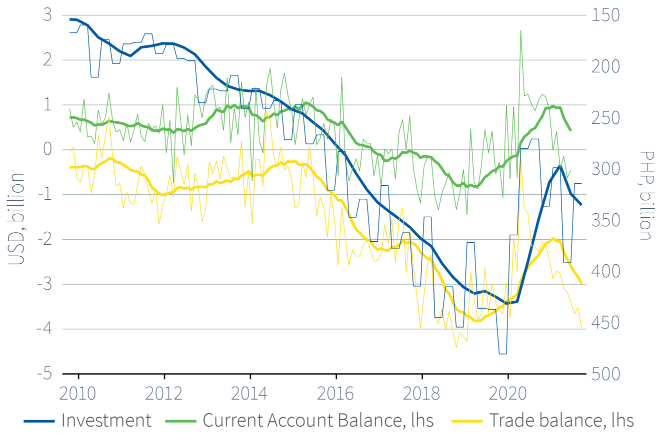
Thailand: As we warned a year ago, optimism over vaccines, which led to THB appreciation early in 2021, was premature: Delta and associated lockdowns damaged recovery while Omicron means that the collapse in tourism will not rebound for a long while, especially as China refuses to tolerate any infections (Figure 97). Meanwhile, the rise in energy and food prices has lifted inflation to 2.7%, but core inflation is subdued at 0.4% and the trade balance and the current account are both in deficit. Currency weakness is appropriate, as is the BoT's dovishness which helps the government to easily finance large deficits of around 5% of GDP. An eventual return to leisure travel will spark a recovery in the economy and the baht, with tourism being around 13% of Thailand's GDP, but this will depend on other countries' scrapping travel restrictions and deciding to Live with COVID-19 – a key theme for our House View, but likely to be erratic and haphazard based on experience. This will mean Thailand's growth rebound will still leave it with a sizeable output gap, but avoiding lockdowns will boost output and also help key exporters alleviate global supply-chain disruptions.

International tourism failed to materialize in 2021; will 2022 bring a reversal of fortune for the beleaguered baht?

Philippines: The island archipelago suffered a double-dip recession as China's erratic growth and the Delta variant crippled what should have been a fast 2021 recovery, even if vaccinations badly lagged the developed world. New variants will make full reopening difficult; the economy is now some 17% below its previous trend output meaning there will be sizeable slack even after a strong rebound, which could reach 7-8% if reopening and fiscal spending continue. However, there are many downside risks: (i) inflation both global and domestic (Figure I shows inflation is the highest in the region, and core is also elevated at 3.4% y/y), (ii) the Fed and the BSP reaction – the latter should be dovish but a weak FX or deanchored expectations, possibly as an investment rebound re-widens the CA deficit (Figure 98), may force the central bank's hand (iii) COVID-19 variants, including but not limited to Omicron, and (iv) the May election, in which the populist Duterte must step down, but may seek to spend to support his successor while wielding power behind the scenes, causing social unrest and investor uncertainty.

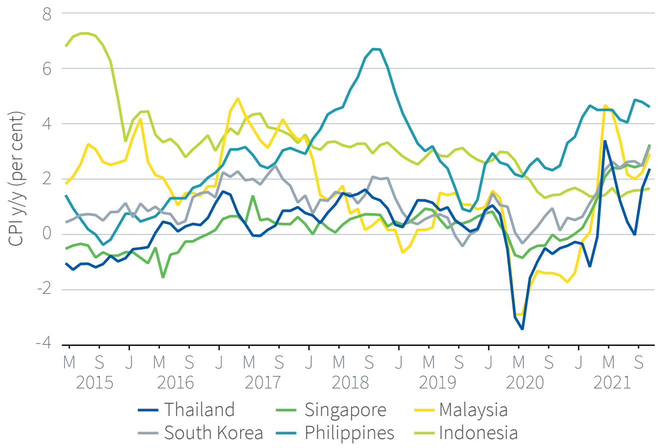
Inflation, elections, and the risk that growth will widen trade imbalances are concerns in the Philippines

Figure 98. **Trade deficit widens again**
Philippines: fixed investment and trade data



Source: Philippine CB & stat agencies, Aviva Investors, Macrobond as at 1 December 2021

Figure 99. **Inflation is rising across the region**



Source: Local Statistical Offices, Aviva Investors, Macrobond as at 1 December 2021

Latin America: where inflation meets politics

After a strong rebound in 2021, growth is set to moderate next year. The region has made significant progress on vaccination rates, with the share of their populations fully vaccinated now above the EM median (Figure 100). This has allowed for a quicker-than-expected economic recovery this year, with real GDP already near or above pre-pandemic levels except in Mexico (Figure 101). But growth rates are set to moderate next year, as political cycles, investment uncertainty high inflation, and restrictive monetary policy take a toll on activity.

Good progress on vaccination has allowed for a better-than-expected recovery across most countries in Latin America

Two main themes will dominate the outlook in Latin America: inflation and politics. On inflation, Latam has been at the mercy of the same global forces creating cost-push inflation, from supply-chain shortages to higher energy prices, the effects of which have been compounded by currency weakness this year and a large share of food and energy weights in CPI baskets compared to peers. But strong demand pressures, driven in some cases by material fiscal transfers (Chile, Brazil) are creating strong second round effects. As a result, while inflation could peak in Q4 2021 or Q1 2022, the ensuing disinflation process is set to be only gradual, with inflation remaining above targets next year (Figure 102). Latin American central banks may find themselves in the unenviable position of having to continue hiking rates (even frontloading them in the case of Chile and Brazil (Figure 103)).

But the outlook is increasingly dominated by inflation and politics. On the former, tighter monetary policy to fight inflation may coincide with slowing growth next year

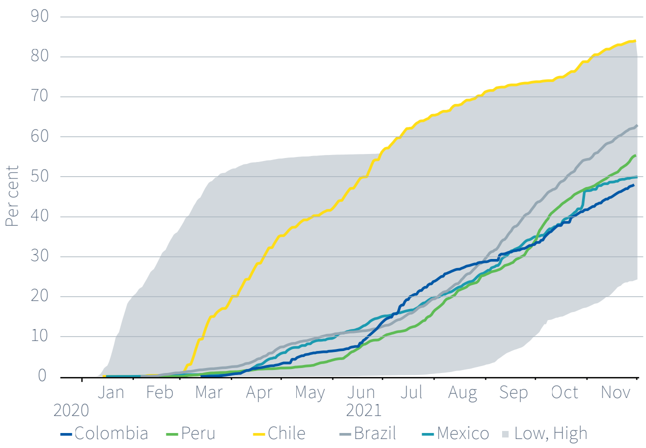
Meanwhile, Latin America is in the midst of a polarizing political cycle, with significant repercussions on macro policy. Demand for change has been rife for many years now, a trend which the pandemic has only accelerated given the building stress on social contracts after years of underspending on vital services like healthcare, education and pensions. But there are challenges that will accompany the inevitable move towards larger social welfare states: a permanent increase in spending without a commensurate increase in revenues risks deteriorating fiscal/debt metrics, and the risks of market-unfriendly policies could end up deterring investments and hampering growth in the longer run.

Latin America remains in the throes of a highly polarized political cycle, with significant implications for macro policy

The outlook is particularly challenging in Brazil. Despite the central bank (BCB) being one of the first in EM to tighten policy, price pressures continue to build, risking a de-anchoring of inflation expectations. Meanwhile, despite a material improvement in the fiscal outturn in 2021 and a lower debt ratio, concerns over the fiscal outlook have not abated given the political willingness to breach the spending cap which is a key pillar of fiscal credibility. As such, the risk premium in Brazilian assets is likely to remain elevated, especially against the backdrop of a contentious presidential election in 2022 that is likely to pit Bolsonaro against former president Lula and delay reforms.

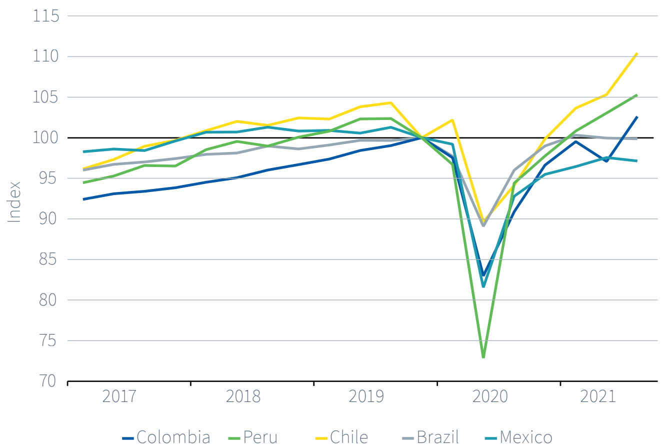
Brazil's outlook is challenged by twin fiscal and inflation risks, against the backdrop of a highly contentious presidential election in 2022

Figure 100. **Latin America vs EM: vaccination rates**
(% of population fully vaccinated)



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 101. **Latin America: Real GDP**
(Indexed 2019 Q4 = 100)



Source: Aviva Investors, Macrobond as at 1 December 2021

In Mexico, an incomplete recovery meets high inflation. Activity weakened in H2 2021 on the back of the supply-chain bottlenecks and sluggish domestic demand. But the meagreness of the recovery stands in stark contrast to inflation, which continues to surprise to the upside, with core inflation remaining high and sticky. This has necessitated cautious rate hikes from Banxico, though not at the pace seen in peers given the still-large output gap. Looking ahead, a key obstacle to achieving higher growth continues to be the drag from private sector investment, which has been curtailed by policy uncertainty despite Mexico's more robust credit and fiscal metrics relative to Latam peers.

Mexico's recovery has been more sluggish than peers, while core inflation remains high and sticky, posing challenges for monetary policy

Colombia's fiscal and external vulnerabilities will be exposed in a politically challenging year in 2022. 2021 saw the country lose its investment grade credit rating and backtrack from tax reform in the face of massive street protests. The government eventually passed a less ambitious version of its reform, which nevertheless contains some important mechanisms to improve the fiscal framework. That said, the eternal environment will prove challenging for Colombia. It will run one of the largest twin fiscal and current account deficits among emerging markets, making it more sensitive than peers to a withdrawal of monetary accommodation by the US Fed. Meanwhile, investor concerns will remain high as the country heads into a contentious presidential election in mid-2022.

Electoral concerns cloud the outlook in Colombia, which will have one of the highest twin fiscal and current account deficits in EM next year

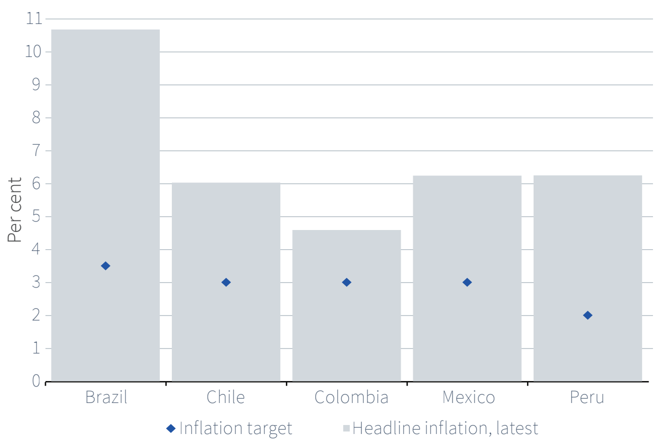
Chile's political cycle does not end with the upcoming presidential elections. Whoever occupies the office of the presidency early in 2022 will likely need to move towards the centre and contend with a highly fragmented congress. Meanwhile, the changes to the constitution proposed by the ongoing Constituent Assembly will be put to a vote in Q3 2022. Growth is set to slow sharply next year as fiscal transfers are withdrawn and the lagged impact of aggressive tightening in monetary policy starts to be felt. But beyond that, the pace at which Chile's strong fiscal fundamentals can be eroded depends in large part on the willingness and ability to raise enough revenue in the face of demands for permanently higher social spending.

Political risk is front and centre in Chile, as a new administration takes power in early 2022 amid the backdrop of a constitutional re-draft and risks to the country's fiscal and debt metrics

In Peru, while the first few months of Castillo's presidency suggest that the most radical elements of his agenda have been curtailed, the balance of risks is still skewed to the downside, with an exceptionally high level of policy uncertainty challenging traditionally strong credit metrics. The pace at which fiscal and external buffers can be eroded remains a function of political uncertainty and governability challenges. But the direction of travel is clear given the high demands to increase social spending and improve socioeconomic conditions, amid a volatile political backdrop.

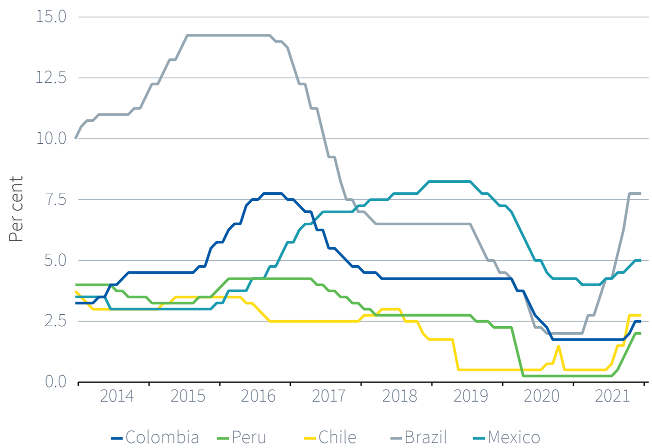
Peru's political landscape has moderated somewhat, but policy uncertainty will continue to challenge macro-fiscal policy

Figure 102. **Latin America: inflation vs targets (per cent)**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 103. **Latin America: central bank policy rates (per cent)**



Source: Aviva Investors, Macrobond as at 1 December 2021

Central Europe, Russia, Turkey and South Africa: Inflation and its discontents

In no EM region has inflation been so dominant as in CEEMEA, and monetary policy responses have been no less divergent. The debate over the transient nature of inflation has been part and parcel of the macro narrative in CEE-3 this year. Robust economic recoveries and tight labour markets have fed into strong demand-pull pressures on prices, which, combined with high global commodity prices and supply-chain disruptions produced a toxic mix for inflation. Headline prints have reached multi-year highs in all three countries and are considerably above target across the region (Figure 104 & Figure 105). But the reaction from the region's central banks has been stark in its differences. Whereas the Czech central bank (CNB) hiked rates early and aggressively, Poland's central bank (NBP) continues to remain behind the curve. Somewhere in the middle lies the Hungarian central bank (MNB). Still, real policy rates remain in negative territory (Figure 106), necessitating even further rate hikes in coming months as inflation is unlikely to peak before Q1 2022. The silver lining is that, as monetary conditions tighten globally and the Fed embarks on a rate hike on its own, CEE might find itself in better stead. In Romania, of greater concern than inflation has been a bout of political uncertainty late in 2021. However, the formation of a new coalition should offer some stability in the short term, with the outlook for growth and fiscal consolidation continuing to be underpinned by the EU's recovery funds and other reform anchors.

Inflation has risen sharply across CEE this year, necessitating a strong monetary response by the region's central banks

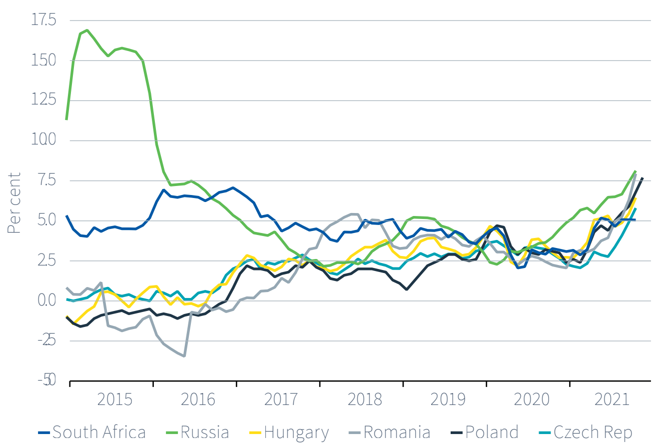
Where policy orthodoxy has been on strongest display is in Russia. Recognizing the inflation risks early on, the central bank of Russia (CBR) was one of the first central banks in EM to embark on a hiking cycle. Despite having raised rates by 325bp this year, upward pressures on inflation remain, necessitating further tightening measures ahead, now that real GDP has surpassed its pre-pandemic levels (Figure 107). That said, barring a material escalation of geopolitical tensions, Russia is likely to emerge as an outperformer next year. Having already raised interest rates will leave it in good stead when the US Fed starts its hiking cycle as expected in 2022. And strong credit metrics – supported by a strong sovereign balance sheet, low public debt, and robust fiscal and external accounts – means Russian assets will likely feature among our favourite picks for 2022.

Russian assets could outperform next year as policy orthodoxy this year bears fruit

Turkey's policy missteps could turn into an economic debacle in 2022. The Turkish central bank is aggressively cutting rates, at a time when most are hiking. Driven largely by political pressure from President Erdogan. The authorities were initially comfortable with a weaker exchange rate believing it would support current account surpluses. However, a 60% drop in the value of the lira against the dollar proved too much, and central bank took the decision to start defending the exchange rate and erode limited reserves. Net reserves, which strip out swap facilities, are

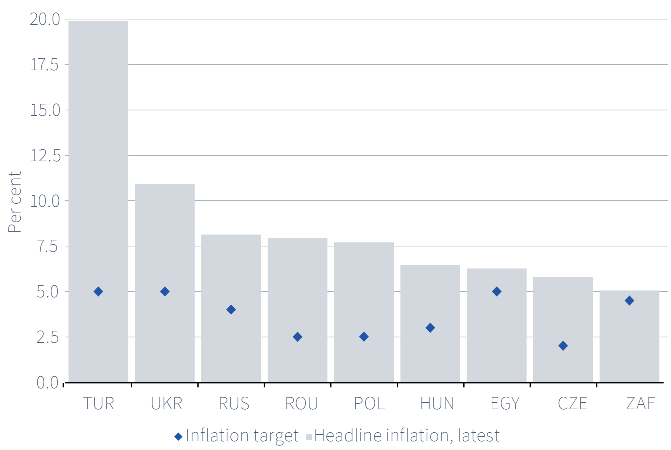
Turkey's pursual of unorthodox economic policies has caused a sharp depreciation of its currency and is likely to put further pressure on reserves

Figure 104. **CPI inflation (% y/y)**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 105. **Inflation vs targets**



Source: Aviva Investors, Macrobond as at 1 December 2021

already extremely low, given Turkey's large external financing requirements. The decision to start using reserves adds to our concerns on Turkey. Into early 2022, we expect financing pressures to mount, if we see residents put their cash into dollars, capital flight and if the current account turns back into a deficit.

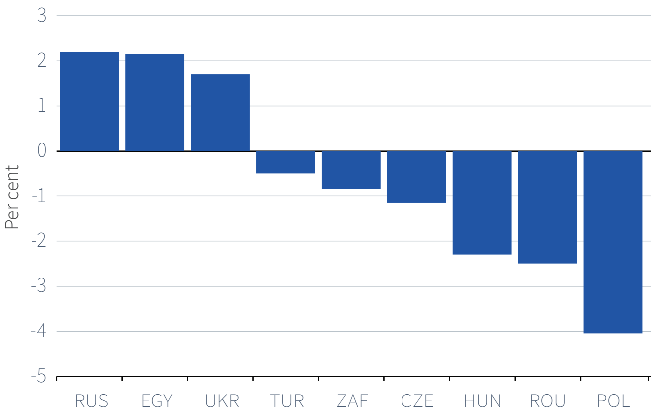
Countries' economic prospects in SSA may well diverge further in 2022. South Africa should fly under the radar in 2022, there are no elections taking place, public finances are consolidating slowly, a moderate current account deficit should not prove challenging to finance. The emergence of the new Omicron variant, and the sharp pick-up in cases, risks jeopardising the recovery if the government were to place additional curbs on activity. South Africa's recovery has already been buffeted by violent protests in 3Q2021 and ongoing electricity shortages. Growth below 2% in 2022 could jeopardise fiscal consolidation and already vulnerable debt dynamics. While additional spending on social grants, in response to protests earlier this year could also add to fiscal pressures. The impact of higher oil prices should begin to have a more materially positive impact on both Nigeria and Angola's outlook in 2022. While growth is expected to remain sluggish in both, their external balances should improve further. In contrast, Ghana is expected to face increasing pressure to approach the IMF as 2022 progresses. Their fiscal consolidation plans are unlikely to prove sufficient to restore market access.

Economic prospects among sub-Saharan countries are set to diverge further in 2022

The recovery in GCC is expected to continue into next year, supported by high oil prices and solid progress on vaccination rates. The GCC could grow in excess of 5% next year, following an expansion of 3% in 2021. The region is potentially set to run both budget and current account surpluses if oil prices average $80/b. Qatar, Saudi Arabia, UAE and Oman are all expected to run budget surpluses and see government debt to GDP fall further in 2022. Bahrain remains the regional exception, with its high break-even oil price of $100/bd, which should see the budget remain in deficit and debt still edging higher. In the broader MENA region, we remain most concerned about Egypt. The end of the IMF programme in June 2021, has coincided with high and rising external financing requirements.

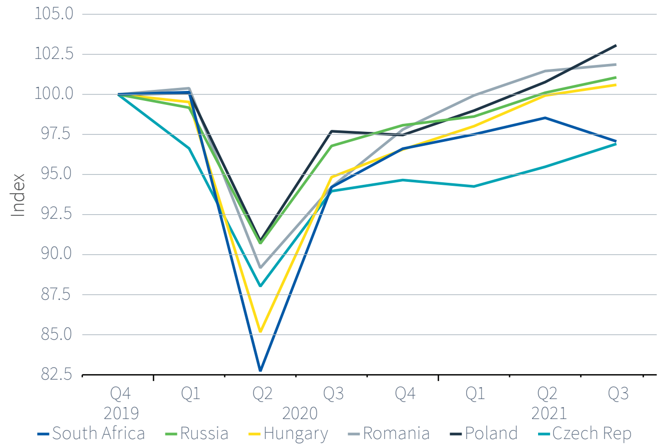
Higher oil prices and solid progress on vaccination are set to continue supporting a recovery in GCC countries

Figure 106. **Real (ex-ante) policy rates**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 107. **Real GDP (index 2019 Q4 = 100)**



Source: Aviva Investors, Macrobond as at 1 December 2021

Market Outlook

DM equity: upside earnings surprises

Buoyant corporate earnings driving the asset class

Strong trends in corporate profitability

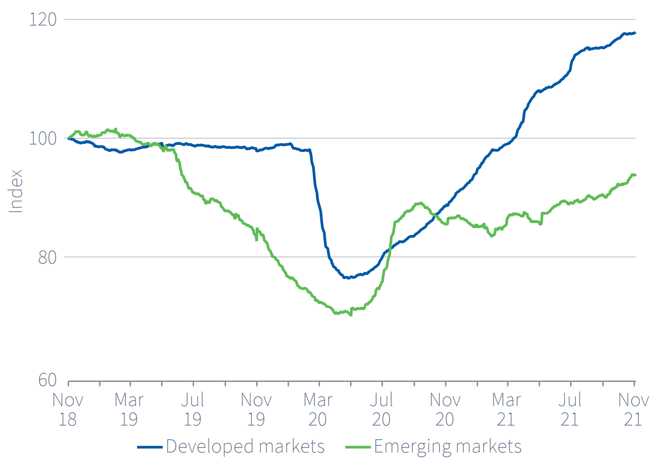
Despite the uneven global economic recovery and a myriad of shortages and cost pressures corporate earnings surprised on the upside in 2021 and this was the main driver of the asset class. As we discussed in last year's House View, stock market recovery after a recession is typically driven first by price/earnings expansion, then by earnings rebound taking over the heavy lifting. Although global macro developments over the last two years have been unprecedented, with governments' efforts to protect their populations through limiting contact, mobility and economic activity very different from the traditional economic cycle, the equity market cycle has followed its usual pattern. We saw share prices starting to rally even as activity collapsed last year, leaving valuations looking very stretched, but the robust recovery in earnings in 2021, demonstrably better than expected, has been the main market driver. Figure 108 tracks the evolution of earnings for MSCI World, also showing the extent to which developed markets have recovered better than their emerging counterparts so far. We see further potential in 2022, with significant scope for a global rebound in capital expenditure as a response to the severe supply-side and logistics constraints, and with corporate balance sheets in very good health. Valuations remain high in most regions against their historical averages, but earnings growth should continue to support the asset class.

Stock selection with a long-term focus and geographical diversification will be key

US equity market leadership continued in 2021, with total returns well ahead of those from European and Japanese markets, let alone the emerging market laggards. Figure 109 shows the strong relative performance of US equities against other regions from May onwards. Although the US market appears expensive its consistent outperformance also reflects relative earnings trends, with US management's excellence in optimising RoE combining with the global dominance and market share gains of US technology companies. Will this reverse in 2022? Many investors have tried in vain to call the top of US outperformance in the past years. European equities remain cheaper but have the prospect of higher earnings growth in the next 12 months as well as more of a cyclical and industrial mix to their earnings base which should be relatively attractive, and the same arguments apply for Japan.

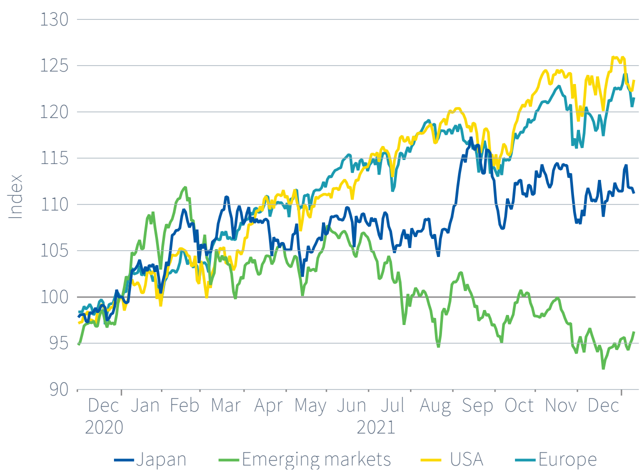
Equally important will be the type of company that outperforms in 2022. With end demand growth rates normalising, and companies suddenly having to deal with significant input cost inflation for the first time in years – linked both to the aforementioned global supply-side constraints and to labour market issues – the performance gap between those with genuine pricing power and enduring cash flows and those without is likely to be stark and this is a key area where we are focusing our bottom-up analysis. Equally there is the overwhelming

Figure 108. **Corporate earnings recovery**
NTM earnings for MSCI World v MSCI Emerging Markets



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 109. **Equity performance by region, 31st December 2020 = 100**
US outperformance continues



Source: Aviva Investors, Macrobond as at 31 December 2021

importance of long-term sustainable capital allocation to companies which can help the world deal with its deep-seated problems in climate change, loss of biodiversity and social inequality, and we have re-structured the shape of our global equity business at Aviva Investors accordingly.

Significant impact of supply constraints now easing

One of the most remarkable features of global corporate activity in 2021 was the speed with which surplus in most sectors turned dramatically to shortages. The swing in spot oil from negative territory to $70-$80 was the most striking example of this (Figure 110 demonstrates the outperformance of the under-owned Energy sector) but there were many others, particularly in the strategically vital semiconductor sector. Compared to a typical economic cycle we saw global employment, trade, investment and inflation all rebounding quickly, reflecting the different nature of the demand shock this time, but the supply side has not been able to match this, with acute shortages of certain components paralysing production and having a significant aggregate impact on global production as well as earnings growth in sectors such as technology, industrials and automobiles.

Looking forward we see potential for many of these shortages to ease. A proportion of the supply constraints resulted from extra COVID-19 measures in South East Asian countries, bringing to life the extent to which global production can be excessively concentrated in geographical locations. For example, Malaysia is the centre for semiconductor testing and packaging for the automobile industry, so new measures to control the spread of COVID-19 there swiftly had a severe impact across the world. At the same time the impact of similar measures in China on local ports and global logistics was also profound.

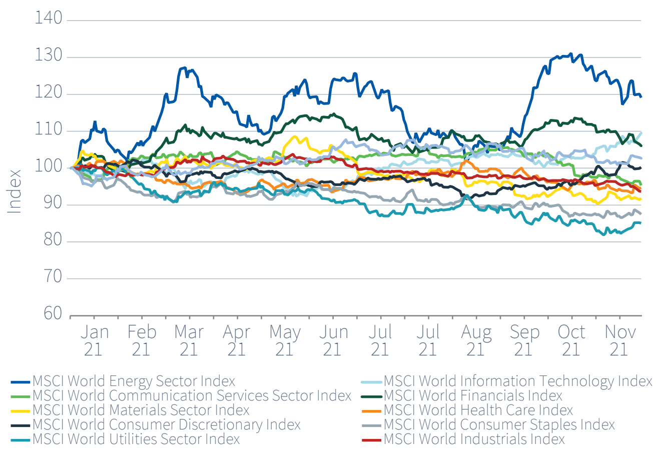
Forthcoming boom in corporate capital expenditure

The good news is that with South East Asian vaccination rates ramping up and restrictions easing the bulk of these issues may prove short lived. Equally we are seeing capital expenditure expanding, and many countries and companies are planning to build up local capacity, ensuring their supply-chains are resilient to cope with future problems. This may be inefficient from the perspective of maximising global returns on capital employed, building latency into the system, but rational from a national and company perspective. Simultaneously we expect a shift away from 'just-in-time' supply-chain management to 'just-in-case' with a structurally higher level of inventories and capacity built into the system. Companies that are well positioned to supply capital equipment into these trends should enjoy protracted boom conditions. Despite a recent acceleration in investment, the global stock of capital is below where it would have been without the pandemic – capital spending intentions in the US are now at 20-year highs.

Continuing shortages in high-end technology products

That being said, we expect some supply shortages to persist. Demand for cutting edge semiconductor foundry services continues to exceed the capacity ramp up from the only companies that can provide them, TSMC and Samsung Electronics, meaning that high performance semiconductors, such as those essential for artificial intelligence, cloud

Figure 110. **Energy – the top performing sector in 2021**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 111. **Value versus growth stocks**

Source: Aviva Investors, Macrobond as at 1 December 2021

computing, flagship smartphones, graphics cards, cryptocurrency mining and games consoles, will see supply constraints throughout 2022. It will be fascinating to track the ability of US and China to (re-) build their semiconductor manufacturing expertise here; Intel's loss of competitiveness to its Asian rivals at the leading edge has been a major geopolitical development. Equally, with the recovery from COVID-19 still precarious and dependent on many factors such as the ability of vaccines to keep up with variants, there could be further production constraints around the world.

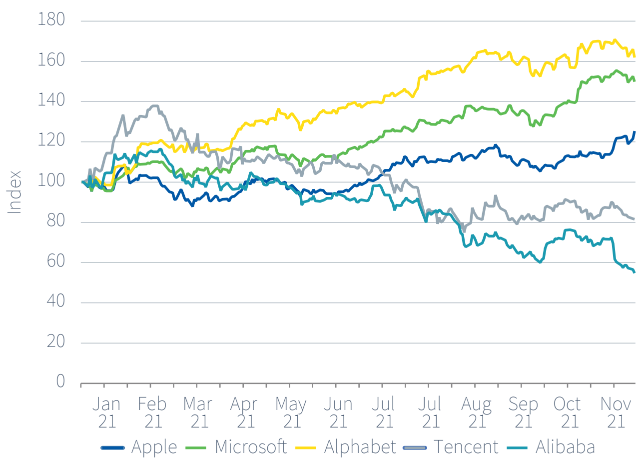
Further upside potential in Value stocks

As we predicted in last year's publication, the markets' obsession with expensive technology, service and pharmaceutical stocks, particularly those benefitting from trends in working from home and home entertainment, reversed to an extent in 2021 and we see further general potential for rotation from 'growth' to 'value' in 2022. The partial normalisation of peoples' lives post-lockdown has naturally implied a slowdown in growth rates in areas such as e-commerce, home delivery, gaming and video-conferencing, and companies engaged in these sectors struggled to keep hold of lofty valuations. Conversely, as commodity and energy prices started to rebound then hitherto abandoned stocks in out of favour sectors showed signs of life. However, as Figure 111 shows, value struggled to hold onto its performance in the second half of 2021 as bond yields remained stubbornly low. The relentless march upwards of mega-cap US technology names such as Alphabet, Nvidia, Microsoft and Apple continued, a dramatic contrast to their Chinese peers (Figure 112) where local regulation has been harsh enough to have a meaningful impact on corporate prospects and valuations. It remains to be seen if regulatory pressures and investor focus on areas of ESG weakness will have a similar impact on developed market technology stocks.

New equity market participants

We also saw the flourishing of new genres of investing, with 'meme stocks' – companies with appeal coming from their popularity on social media rather than their corporate fundamentals, for example, Gamestop (Figure 113) and AMC – achieving remarkable if in some cases short-lived returns. Although many traditional investors are content to dismiss this phenomenon, alongside cryptocurrencies and NFTs, as deeply inappropriate and an unsustainable bubble, it is a reminder that the composition of 'consensus' that we are trying to beat when setting up equity funds against a benchmark is continually evolving. We retain our belief that a longer-term focus in fundamentally strong and sustainable companies is the key to good returns in this asset class.

Figure 112. **US tech vs China tech**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 113. **The Gamestop phenomenon**

Source: Aviva Investors, Macrobond as at 1 December 2021

EM Equity: how long 'till dawn?

Whilst 2021 has brought the recovery in emerging market economies anticipated following the widespread economic damage caused by 2020's COVID-19 lockdowns, it has not translated into positive equity returns at the broad index level, with the MSCI GEM Equity Index falling 4.1% to the end of November 2021. After a similar trajectory in Q1, fresh COVID-19 lockdowns from March in EM contrasted a combination of successful vaccination programmes, looser monetary policy and more expansionary fiscal accommodation in developed markets and began to drive a divergence that has accentuated over the course of the year. Consequently, EM performance has trailed by 21% to the end of November and if it persists, would see the largest underperformance of EM since 2013.

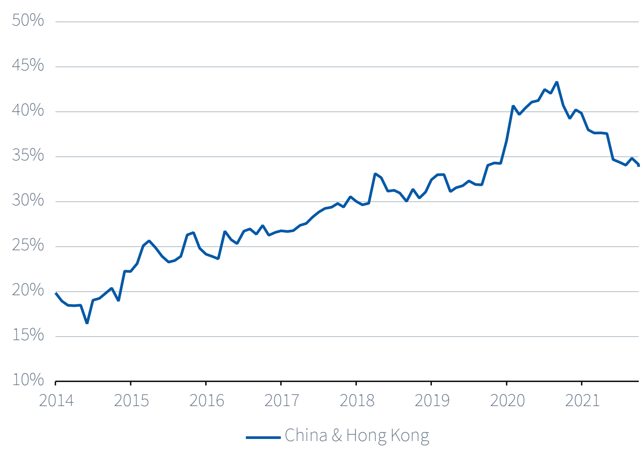
China – the drag on 2021 EM equities

Given its elevated weight in the MSCI GEM Index, which reached a high of 43% as of November 2020 (Figure 114), China has been the largest contributor to these poor returns falling 20% year to date, second only to Brazil with its political, economic and COVID-19 quagmire. Stripping out the impact of China, EM has managed a positive +5.3% return to the end of November, led by oil rich Saudi Arabia and India as the beneficiary of investor rotation from China (Figure 115).

China's red tape revolution

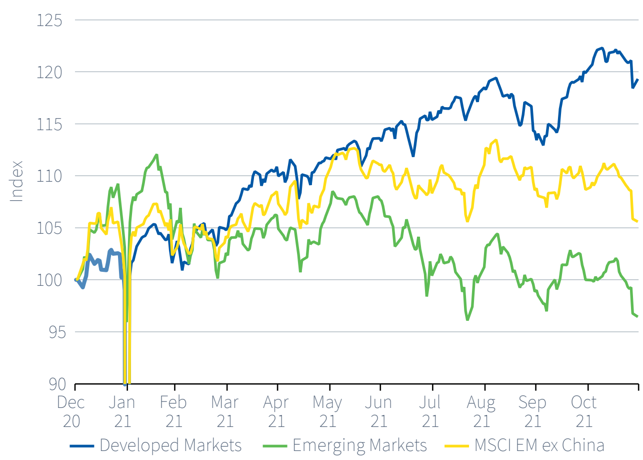
So why has China been such a disappointment? Q1 started with a strong economic recovery as the country cycled the worst of its COVID-19 pandemic in 1Q20 and strong global demand drove Chinese export growth. This provided the platform for President Xi to re-escalate the rebalancing of the economy, most notably a massive increase in anti-monopoly regulations and the emergence of the "Common Prosperity" policy. This has been felt across many sectors, but perhaps no more acutely than in education where the government has effectively terminated private involvement in K9 after-school tutoring resulting in largest player New Oriental Education losing 89% of its market cap. Dominant ecommerce has also been a target – following Alibaba founder Jack Ma's criticism of Chinese regulators in November 2020 resulting in the last-minute blocking of Ant Financial's IPO, there was still minimal expectation of the torrent of fintech and anti-competition regulations to emerge during 2021 which has seen Alibaba shed 60% of its value. Even the systematically critical property sector has found the regulators' sights as the high debt levels of developers have been addressed but within a backdrop of tightening liquidity – top-selling developer Evergrande has been the poster child for the sector's woes as it has flirted with default through 2021 and seen its market capitalisation collapse by 85% (Figure 116). Most recently supply bottlenecks, elevated PPI pressuring cost control, power rationing and sporadic Delta variant COVID-19 outbreaks have continued to put a dampener on growth expectations for both this year and next. This has all combined to seriously rattle both domestic and international investor sentiment, has driven a 14% reduction to consensus 2021 EPS over the year, a trend diametrically opposed to most global markets, and a poor set of 3Q21 earnings. The market has suffered a PE derating from

Figure 114. **China/HK as a % of MSCI GEM Equity**



Source: Bloomberg, MSCI, Aviva Investors at 1 December 2021

Figure 115. **DM vs. EM vs. EM ex China Performance**



Source: Bloomberg, MSCI, Aviva Investors at 1 December 2021 a peak of 18.5x in mid-February to trade in line with its 5- year average at 12.8x by the end of November, although there are a number of sectors which still trade above their historic average such as healthcare on a positive re-rating, and the consumer sectors on depressed earnings. Conversely IT, energy, financials and real estate are all at incredibly low valuations (see Figure 117).

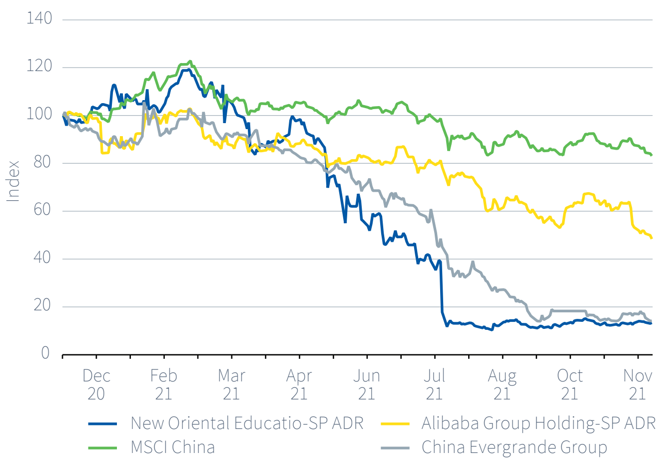
China to prioritise stability over growth in 2022

Looking out into 2022, China remains the key market to call for the EM asset class and confidence remains low – Morgan Stanley track global MNC sentiment in China and have recorded the largest sequential drop in 3Q21 since they started this index in 2018. Although monetary policy is gradually reversing and some efforts to re-stimulate the property sector have been seen, it seems likely that policymakers will tolerate continued slowing whilst focusing on their social policy agenda in the run up to the 20th Party Congress in October 2022, unless the economy declines materially from here. A relaxation of the growth sapping Zero-COVID-19 policy is not expected prior to the Beijing Winter Olympics in February and then only gradually due to Xi Jinping's determination to maintain stability into the Autumn event which is likely to secure him a third term as party leader and one step closer to a lifetime tenure. So whilst it is always darkest before dawn, the risk is that China's cold winter nights extend well into 2022.

Global headwinds to EM performance

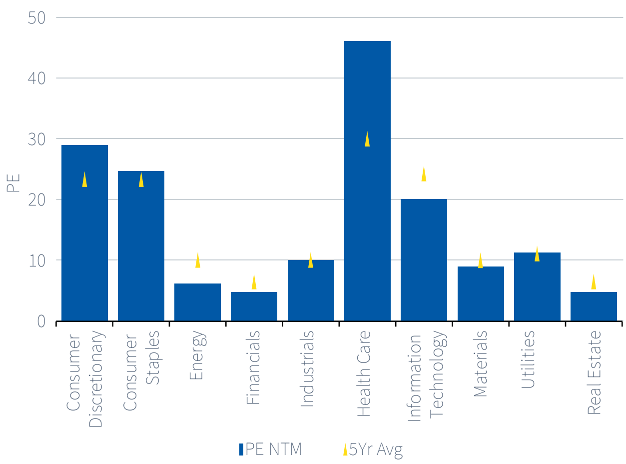
Turning to the rest of EM, at first glance the economic and political backdrop is not ostensibly supportive. Global liquidity looks set to peak in 1H22 whilst inflation is running hotter than at any time in the past 10 years, presenting the risk that tightening will be faster and stronger than currently anticipated, a concern fuelled by Fed Chairman Powell's end of November commentary despite the elevated risks presented by emergence of the Omicron variant. US rate hikes and dwindling global liquidity are typically a headwind to EM currencies and equity returns. There are a number of key political events in the 2022 calendar which may also have a bearing on the outlook – November's US mid-term elections which could see a heightening of US/Sino tensions as candidates play to the domestic audience, the run into Brazil's October presidential elections which are likely to bring increased populist policy as Bolsonaro attempts to erode Lula's popularity, Indian presidential and state elections which always provide noise and the previously mentioned 20th Party Congress in China which will be eagerly awaited for signs of a policy shift. Throw in the ongoing risk of emerging coronavirus variants and varying political responses combined with the lower vaccination rates and limited fiscal flexibility of much of EM, and the path seems fraught with danger. In terms of valuation, although much more attractive than at the start of 2021, GEM equities are at a 12-month forward PE ratio of 12.6x and Price to Book of 1.7x for a respective 7% & 16% premium to their 10-year average (Figure 118).

Figure 116. **Key negative performers in China**



Source: MSCI, Aviva Investors, Bloomberg at 1 December 2021

Figure 117. **MSCI China Sector 12m Fwd PE vs. 5-year average**



Source: MSCI, Aviva Investors, Bloomberg at 1 December 2021

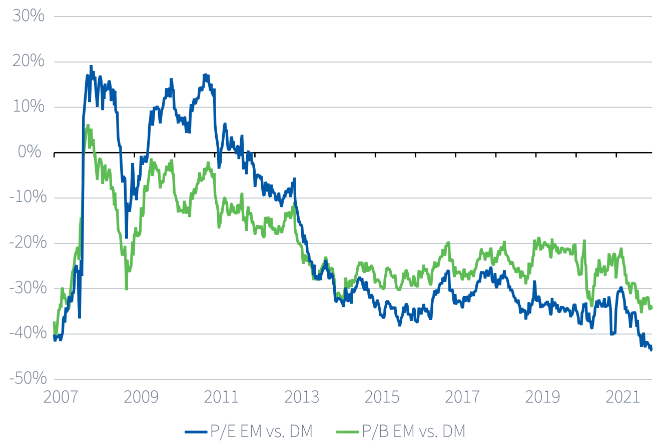
This dimmed outlook for EM is however fairly consensual, so where could the surprise come from? Nominal global GDP growth is expected to accelerate, a positive for export demand out of Korea, Taiwan, China and ASEAN. The ongoing inflationary backdrop and increasing global infrastructure spend should be positive for commodity pricing which has historically demonstrated a strong correlation with the GEM Index performance. Oil prices are expected to continue their ascendancy on the back of stronger growth and limited capital investment, positive for the economies of Russia and the Middle East. Concerns around the threat of COVID-19 remain material for EM, hence any sign that new variants could transform this pandemic into a highly transmissible but non-deadly flu would completely change the risk appetite, outlook and earnings trajectory, whilst easing bottlenecks and moderating inflation expectations. Global equity investors have a large underweight position in EM equities – according to recent EPFR data, EM's share of global equities' assets under management stands at a mere 6.6%, which compares to a 20-year average of 8.9% and a post-GFC peak of 13.4%. Any shift in sentiment could have a quite significant impact on flows, encouraged by EM's 38% valuation discount to its developed market counterpart – the largest divergence in over a decade (Figure 119). Whilst the outlook remains clouded for now, any break in the storm could drive a substantial turnaround in fortunes for EM equities.

EM equities are a consensus underweight

Figure 118. **Historic EM P/E & P/B valuation**

Source: MSCI, Aviva Investors, Bloomberg at 1 December 2021

Figure 119. **P/E & P/B discount EM vs. DM**



Source: MSCI, Aviva Investors, Bloomberg at 1 December 2021

Rates: The 3-peak challenge – growth, liquidity and inflation

- **2022 will see a paring back in liquidity provided by central banks**
- **From emergency easing to tightening to controlling inflation**
- **Greater divergence emerging between central banks**

Overview

After a strong rebound in global growth post the unprecedented shock from the global pandemic, we head into a period of uncertainty over the economic outlook and how strong and sustained the global recovery will be. Even assuming we do not see a resurgence of the virus that materially impacts the economy, inflation has now reached levels we haven't seen for decades with consistent revisions higher during 2021 (Figure 120). Whilst we expect inflation to fall in 2022, the speed and to what level remains unclear. In turn, this means the corresponding global central bank response will also be uncertain. We see this backdrop translating into wider yield ranges, greater divergence, and periods of higher volatility in developed market rates (Figure 121).

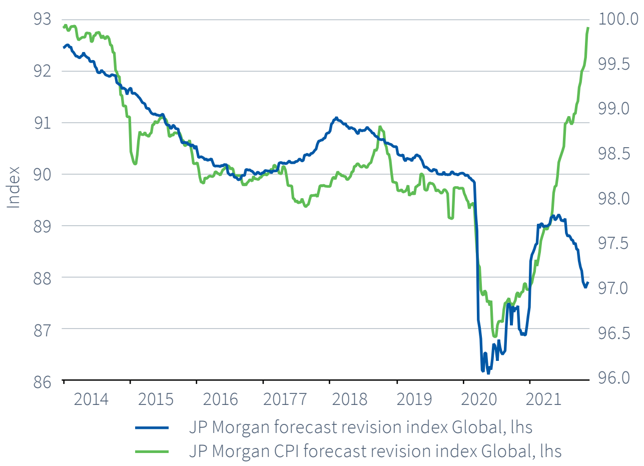
Rates volatility to remain elevated

Regional breakdown

The United States continues to lead the way in the recovery and is expected to reach its pre-COVID-19 trend growth by the middle of 2022. The Fed has been very cautious about removing support but 2022 will see the peak in monetary stimulus as the Fed tapers their bond purchases. We believe that the US stands out as the country with the most broad-based inflationary pressure and the most lagging monetary policy. The market is not priced for the potential for more aggressive hikes to tackle inflation. Overall, with the expectation for more upward pressure on inflation (Figure 122) our base case remains for yields to move gradually higher through 2022. Consequently, we see more value in being long inflation and short nominal rates in the US relative to other markets. We still believe, however, that there is a limit on how high yields can move with structural downward forces on global yields remaining unchanged post pandemic and ongoing strong demand for the safe haven of US treasuries (Figure 123).

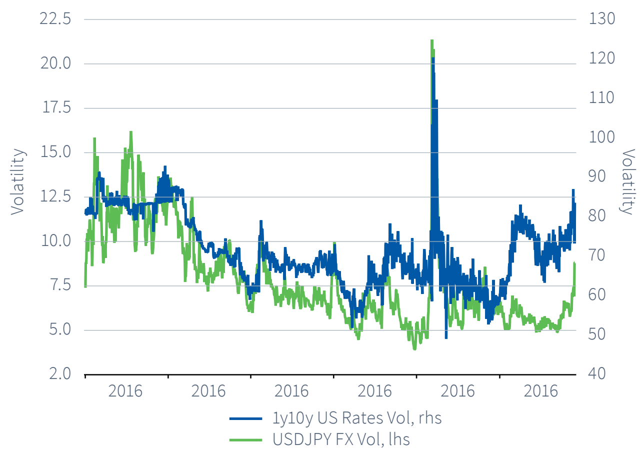
We expect US inflation to outperform on a relative basis in 2022

Figure 120. **JPM growth and inflation forecast revisions**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 121. **USDJPY vol and US rates vol**



Source: Aviva Investors, Macrobond as at 1 December 2021

We remain aware that throughout 2022 the Fed could shift to a more hawkish stance via accelerated rate hikes. This would see a change in the market pricing of sustained higher inflation leading to a reversal of the rally in inflation breakevens that could extend further as the Fed approaches lift-off. This dynamic would switch our preference from being long breakevens to outright short nominal rates.

A more hawkish Fed remains a risk case

In Europe, 5y inflation rates reached the ECB's 2% target this year for the first time in over eight years (Figure 124). This has provided some optimism that Europe is finally coming out of a sustained period of low inflation, but we caution that much of the pickup in inflation has been driven by energy prices and that underlying core inflation is rising far slower. Much like the rest of the world, this does not mean the region needs emergency pandemic accommodation and so we see the emergency bond purchase programme (PEPP) ending in 2022 and moving back to the pre pandemic purchase programme (APP) which will then be tapered throughout the year.

ECB emergency pandemic support will stop in 2022

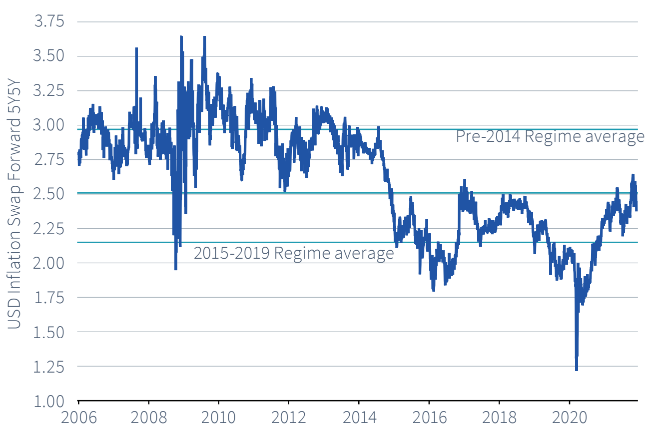
We see German yields moving slowly higher through 2022 as the case for rate rises next year remains low and net supply dynamics continue to be favourable, albeit less so than in previous years. For the rest of the Euro government bond market, we expect spreads to be largely range bound, with pressure from increased net supply and political risk premia being offset by an overall favourable Euro area backdrop.

The Bank of England (BoE) potentially find themselves in a more uncomfortable predicament than most other developed central banks. Not only do they have to tackle any pandemic-related scarring on the economy, but Brexit-related factors also need to be considered. Both factors will hold significant sway over prospects for growth and inflation going forward. Elevated inflation has remained far more persistent than the Bank was expecting, but the labour market's resilience has also surprised to the upside. Overall, while we expect gradual hiking from the Bank, there is the risk they fall too far behind the curve and will subsequently need to hike faster and to a greater level than what the market is currently pricing. We believe that UK rates deserve a greater risk premium for this uncertainty as it currently looks too low (Figure 125). Further to this, the quicker the BoE reaches a base rate of 50bps, the quicker the passive unwind of the balance sheet begins. This refers to the non-reinvestment of QE proceeds which will ultimately increase net Gilt supply for FY 2022-23.

Risk premium in UK rates remains historically too low

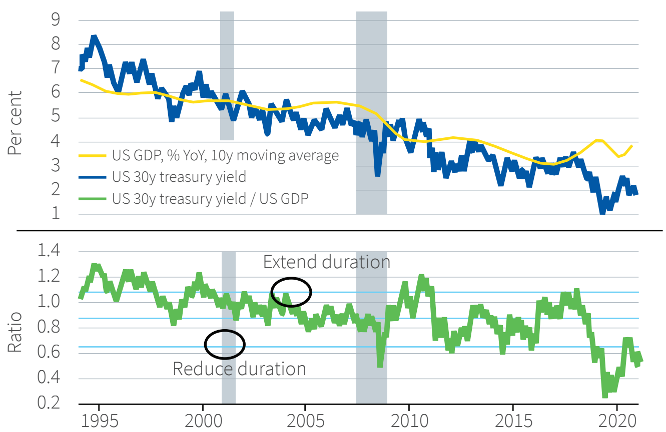
So, while a somewhat benign path of interest rates is currently being priced by markets, there is the risk that both wage growth and the levels of inflation remain persistently higher than expectations, forcing the Bank to act to a greater extent than currently believed. This could well result in seeing Gilt yields reach levels that are in some excess of their forwards.

Figure 122. **US inflation regimes**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 123. **United States, the 'Golden Rule' and long term yields**



Source: Aviva Investors, Macrobond as at 1 December 2021

Green bond issuance:

2021 has seen continued interest in Green bond issuance with roughly €70bn being issued by December. Whilst developed market sovereign issuers have not yet finalised their funding plans for 2022, we expect Green bond issuance to continue to grow in 2022. The inaugural Green bond issues in the UK, Italy and Spain this year were all met with huge demand and the fact that there is growing evidence of a green premium suggests issuers will continue to issue Green bonds, which remain a small percentage of overall debt issuance. We expect this Green bond issuance to be dominated by the European countries, but other countries are also showing interest with the likes of New Zealand bringing a potential deal in the coming year.

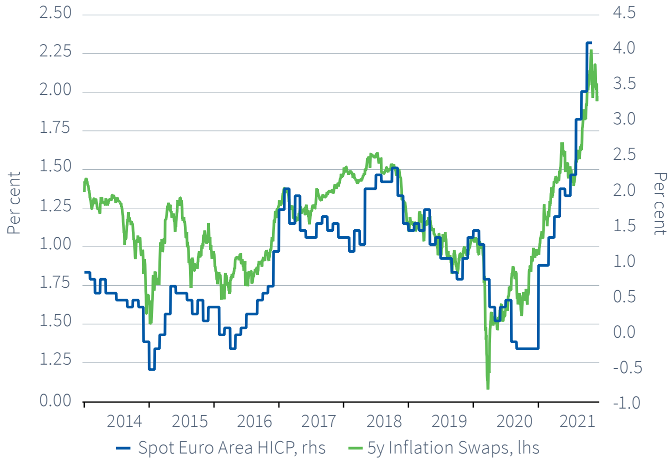
2021 has seen huge demand for sovereign green bonds

Summary

The outlook for inflation and the reaction of central banks here remains uncertain. The ending of emergency monetary policy accommodation as we move away from the pandemic is the natural first step to take for central banks. Post the GFC, central banks raised rates with a slow and gradual narrative within a backdrop of moderate inflation pressures. Whilst they hope this can again be their playbook for tightening policy, the upside inflation risks mean they may be forced to act sooner and more aggressively. We believe that the repricing of rate expectations is correct and central banks are credible in their willingness to tackle inflation. As a result, we expect upward pressure on yields to remain and inflation risks skewed to the upside. Despite this, as we move further into 2022 the speed of the recovery and the risks stemming from a China slowdown and other vulnerable regions could well limit the global demand story. If central banks are forced to react sooner, we could potentially find ourselves in a late cycle environment far quicker than the market currently anticipates.

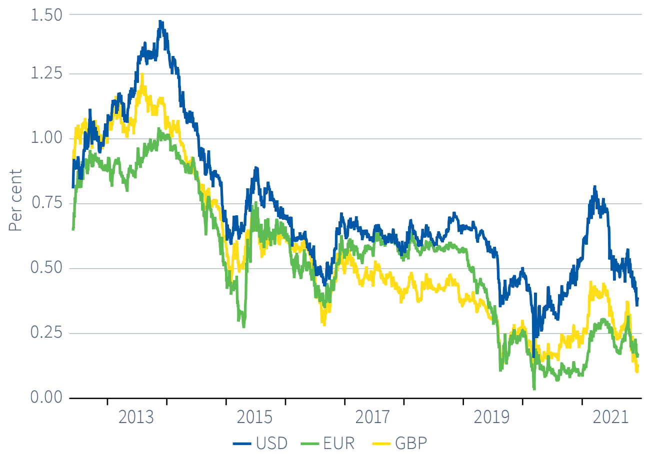
Central banks are correct in showing a willingness to react to the uncertain path of inflation

Figure 124. **Eurozone inflation swaps and spot HICP**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 125. **UK, bond risk premium**



Source: Aviva Investors, Macrobond as at 1 December 2021

Credit: pandemic policy pendulum

Global investment grade

We have become moderately more nervous about the outlook for global investment-grade credit over the last quarter of 2021 as the prospect of reduced central bank support will be a challenge for the market over the course of 2022. Tight valuations and an overweight bias across the investor base also leave little room for further compression. Even in a benign macro environment, with normalising inflation and easing of supply-chain disruptions, we think the market will gradually start to price in the eventual end of Central bank support, leading to (i) greater name and sector specific dispersion, (ii) quality decompression and (iii) steeper credit curves.

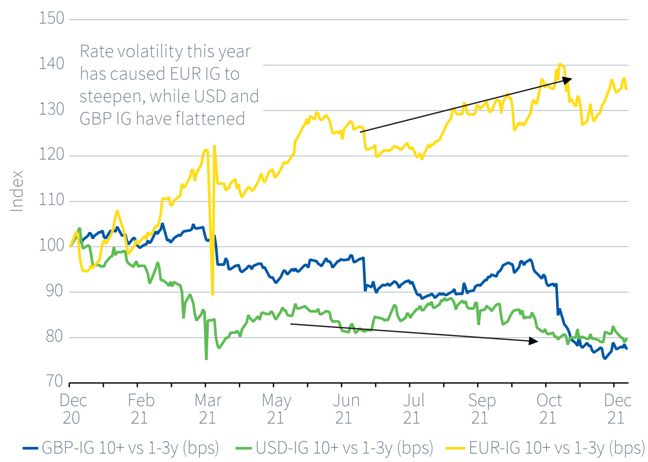
Moderately cautious in the face of diminishing central bank support

We are therefore expecting a modest correction in investment grade spreads, however as we write this, the uprising of a new strain of COVID-19 is pushing spreads wider and dispersion higher. This has come at an especially illiquid period and is likely to cause some overreaction in spreads. As Figure 126 shows, Euro investment grade spreads have steepened over the year and this latest volatility has exacerbated the move. Hence the valuations as we head into the new year are looking a lot less stretched than they have been for most of 2021, especially in Europe. The 'hunt for yield' has remained in place, and credit spreads have shown tremendous resilience to the macro hurdles faced over the last year and 'buying on weakness' has been the appropriate strategy. Figure 127 shows how investment grade credit spreads at the index level have been flat over the course of the year, with some outperformance of the longer-dated maturity buckets. In the US market, negative total returns have been dominated by higher Treasury yields this year, which has fuelled additional demand from the non-US investor base who still see value in investment grade credit spreads. We therefore believe that benefitting from our cautious positioning to tactically take advantage of current levels and adding some European risk heading into Q1 is appropriate. US investment grade spreads are still slightly tighter year to date, while they are currently 18 basis points higher in Europe over the same period. This relative valuation gap leads us to pivot towards Euros.

Preference for European over US investment grade

Corporate fundamentals within investment grade have rebounded strongly from 2020 and continued throughout 2021. Overall high earnings and cash generation, alongside debt reduction have led to lower leverage than the pre-COVID-19 environment. Upgrade-to-downgrade ratios from rating agencies confirm this trend and suggest more upgrades are still to come. However, over time we expect another headwind to emerge as corporates look to move away from debt reduction and towards more shareholder friendly activity. For now, we see this as a risk facing the second half of this year and beyond rather than an immediate threat.

Figure 126. **OAS curve direction over 2021**



Source: Deutsche Bank, as at 1 December 2021

Figure 127. **Global investment grade yield change on the year**

Source: Moody's, as at 1 December 2021

Finally, on supply dynamics, we believe gross supply volumes in both the US and Europe will moderate given the ample liquidity on corporate balance sheets. In Europe the volume of maturing bonds is higher this year but the ECB purchase program will continue, even after the PEPP programme unwinds, leaving net supply in negative territory. In the US, where we expect the conditions for more aggressive corporate behaviour to be more prevalent, (i.e. more M&A and Capex led supply) we are expecting similar to slightly higher gross and net supply for the coming year, further supporting our bias towards Europe.

Global high yield

We are cautiously constructive on global high yield heading into 2022. Strong fundamentals, positive ratings migration and minimal defaults will be supportive for spreads. Additionally, valuation has become more attractive post the November sell-off. Despite record issuances in the past two years, we expect supply to remain elevated as M&A and LBO financing grows. Less accommodative fiscal and monetary policies and prolonged inflation are key risks.

Strong fundamentals, positive ratings migration and minimal default rates will support spreads

High yield companies are starting 2022 with strong fundamentals: earnings have mostly recovered from COVID-19, leverage is back to pre-COVID-19 levels and interest coverage is above pre-COVID-19 levels. Rising stars was a big theme in 2021 (Figure 128) and we expect this to accelerate in 2022. Additionally, as fundamentals continue to improve, ratings migration within high yield
should follow.

M&A is another potential tailwind. Typically, we see high yield credits benefit from being acquired by higher-rated entities. Notably, 2021 also saw several transactions within the high yield market where two high yield entities combine to form a larger, more diversified entity. Specifically, the energy sector saw several stock-funded mergers that have led to improvements in scale and credit metrics of the combined entity. Lastly, default rates are at record lows (Figure 129) and are expected to stay well below historical averages, further supporting spreads.

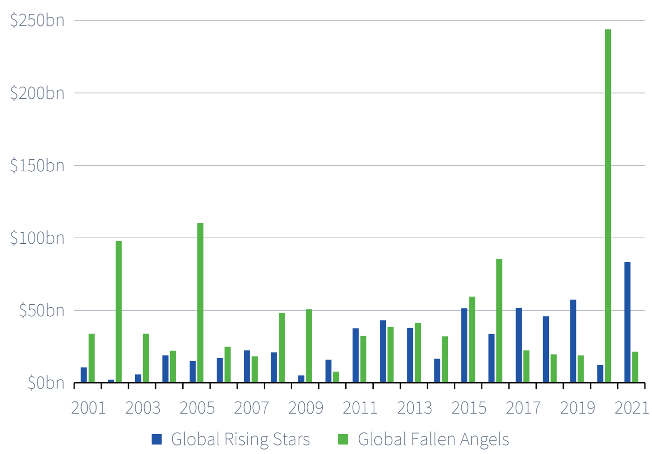
Valuation has become more attractive post the November sell-off

Risk assets globally sold off sharply in November due to Omicron concerns (Figure 130). High yield spreads erased most of its year-to-date tightening in November. However, spreads are still tighter compared to the beginning of the year. While we are not expecting substantial spread tightening in 2022, low defaults and a higher quality high yield market will support for spreads.

Supply is expected to remain elevated despite record issuances in the past two years

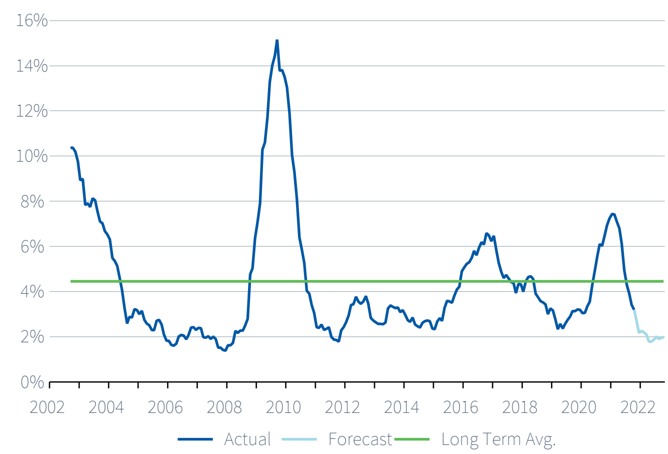
2021 saw record issuance in the high yield market as companies refinanced their maturities – over 50% of issuance was for refinancing. Net of refinancing, issuance was still a record in dollar terms due to growth of the market in recent years. Looking ahead, we expect both gross

Figure 128. **Rising stars was a big theme in 2021 and we expect this to accelerate in 2022**



Source: Deutsche Bank, as at 1 December 2021

Figure 129. **Default rates are at record lows and are expected to stay well below historical averages**



Source: Moody's, as at 1 December 2021

and net issuances to decrease slightly from 2021 levels. Specifically, we expect the decrease in refinancing and issuers funding in the loan market to be partly offset by growth in M&A and LBO financing (Figure 131). Importantly, we believe demand for the asset class will be supportive due to its yield advantage relative to other fixed income assets.

ABS and covered bonds

In the UK, the Term Funding for Small and Medium Enterprises (TFSME) scheme continues to reduce the need for UK banks to fund in both the securitisation and covered bond market. Supply is expected to remain limited during 2022 supporting the higher valuations. Opportunistic entry points may be found from pockets of volatility or by investing in the higher carry generated by the higher beta collateral found in Non-Conforming (NCF) or Buy-to-let (BTL) which is expected to take up the majority of the ABS issuance over the next 12 months. ABS generally continues to offer high carry versus other asset classes with similar risk profiles.

RMBS defaults and arrears continue to be low due to mortgage payment holidays, the furlough scheme and high house price inflation. The BoE's peak unemployment is forecasted to peak below 5% which remains supportive of these low arrears and near to zero defaults supporting strong fundamental performance of this asset class.

Prefer non-bank issuers in UK RMBS, versus bank issuers

We continue to prefer non-bank issuers in UK RMBS, versus bank issuers, but with less conviction than 12 months ago due to some of the premium being taken off the table. There may be better entry points if markets return to more normalised conditions. We also favour covered bonds over UK residential mortgage-backed securities (RMBS) as we are not currently compensated for the incrementally higher volatility of RMBS versus covered bonds.

Auto loans

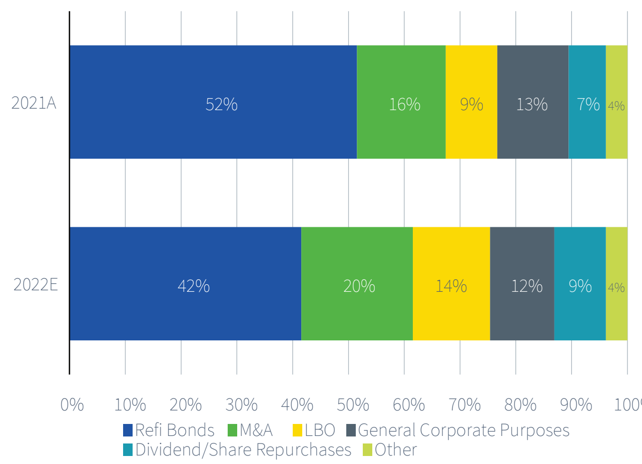
Auto ABS collateral continues to perform very strongly. Global supply-chain issues continue to reduce the supply of new cars suppressing new car sales but supporting the value of the second-hand car market. This is very supportive of residual values and auto ABS collateral.

We favour autos within ABS given the continuing strong performance of the underlying collateral

Figure 130. **Global high yield sold off sharply in November, but spreads are still tighter than the beginning of the year**

Source: Bloomberg, as at 1 December 2021

Figure 131. **M&A and LBO financing is expected to increase while refinancing decreases**



Source: Barclays, as at 1 December 2021

Emerging market debt: a year of two halves!

Introduction

With all the current concerns around inflation, 2022 could turn out to be a year of two halves for emerging market assets. Global accommodative monetary policy from developed market central banks should still provide support for the hard currency (HC) asset class, although we should see emergency measures removed as asset purchases come to an end during the year. The pace of tapering and timing of the first potential hikes will prove more crucial for returns in the local currency (LC) universe in the first half of the year. Valuations will be key in assessing both LC and HC throughout the year as there is potential for unwarranted underperformance in the near term as inflation concerns remain elevated. Once these concerns begin to ease this should provide some relief and lead to more attractive returns from both asset classes for 2022. Volatility should remain elevated throughout the year so the ability to adapt and have a flexible approach will be key. With many countries in the emerging market universe still feeling the effect of COVID-19 on their economies, a bottom-up country selection fundamental approach will be crucial to assessing the winners and losers throughout there year.

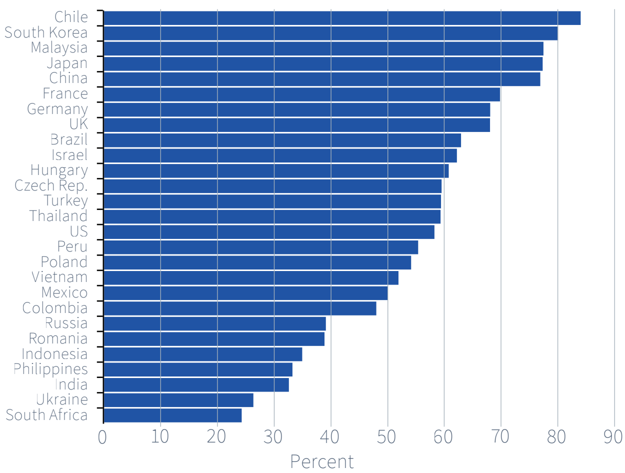
2022 is set to be a year of two halves for emerging market assets

Local currency

As we approach the new year, headwinds emanating from an uncertain global macro backdrop suggest a cautious approach towards local currency at least for the early part of the upcoming calendar year. A largely self-imposed slowdown in China risks worsening EM growth prospects, already under pressure from the lasting economic, social and political effects of the pandemic, which in turn supports our increasingly divergent expectations for asset prices across the regions and countries in the local currency universe. Whilst underlying growth has been somewhat of a longer-standing issue in EM, more recently the inflationary effects of both demand and supply impulses have led to increasingly hawkish and pro-active central bank policy even in the face of lingering uncertainties around growth and the pandemic. Much has been made of the potentially transitory nature of global inflation, however in developing economies we expect inflation to remain sticky into the new year, driven in part by the stronger pass through of second round effects into inflation expectations than in their developed market peers. This will require tighter policy settings, which, when set against a backdrop of policy accommodation withdrawal by developed market central banks and most notably the Federal Reserve, will expose the fundamental vulnerability of some EM, particularly those with relatively low vaccination rates (Figure 132) and increased debt levels. As always the path of the USD remains critical to the outlook for the asset class

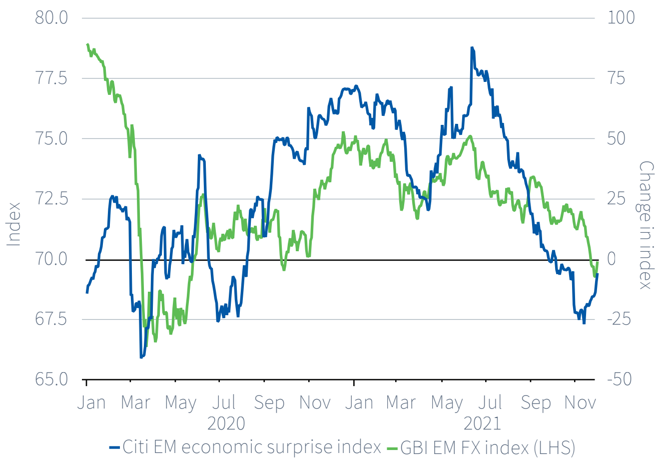
A cautious approach to local currency debt in the early part of next gives way to a more balanced and even positive outlook later in 2022

Figure 132. **EM & DM: share of population fully vaccinated (% total)**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 133. **EM FX vs EM economic surprises**



Source: Aviva Investors, Macrobond as at 1 December 2021

and we do expect emerging market currencies to remain under pressure in the early part of the year given waning growth differentials and whilst policy makers and politicians tackle the fundamental challenges highlighted previously.

We expect this more defensive outlook to evolve into a more balanced and perhaps even positive outlook as the year progresses due to increasing signs of policy support from China, a likely peak in EM inflationary impulses and a realisation by investors that attractive real yields and undervalued currencies make for a compelling investment opportunity, particularly in countries that continue to have strong macro-fiscal frameworks (Figure 133 & Figure 134). Obviously, the asset class will remain sensitive to the global macro backdrop, particularly the pace of policy accommodation withdrawal from the Federal Reserve and to the developing narrative on COVID-19. However, we expect to remain in an environment where diverging political and policy frameworks will require an ongoing focus on bottom-up fundamental views to navigate the asset class and capture selective opportunities. On that basis we expect countries with strong credit metrics whose central banks have managed to remain ahead of the curve (Russia, Czech Republic) along with countries with strong recovery potential (Malaysia, Indonesia) to outperform those that continue to exhibit vulnerabilities driven by fiscal and political risks (Latin America).

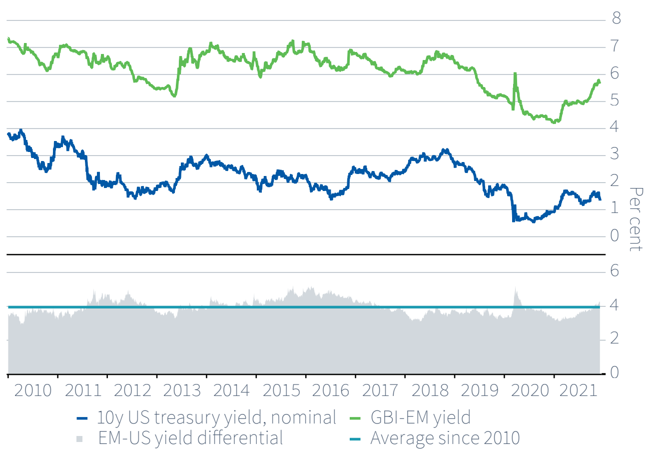
Diverging political and policy frameworks will require a focus on bottom-up fundamentals to navigate the asset class and capture selective opportunities

Hard currency

2021 will be remembered as the clean up operation after what can only be described as a once in a lifetime unprecedented turn of events in 2020. With global liquidity awash in the system at the start of the year, the question that would inevitably be asked was when would we start to see signs that the emergency measures would start to be removed. The low rate environment was supportive for the asset class through the first half of the year, but increased concerns around supply-side disruptions leading to higher and prolonged inflation sent some warning signs to emerging markets. The big question now is where that leaves the outlook for the asset class into 2022. The current shift to slightly less accommodative monetary policy in the US needs to be closely monitored. With the backdrop for the global growth recovery still very much uncertain, we believe that the Fed would need to see more signs that the inflation pick-up is longer lasting than currently forecasted, for them to realise market pricing for just over two hikes before the end of 2022. A slower and lower growth environment with inflation falling in the middle of 2022, should allow the Fed to be a little more cautious in raising interest rates. This should lead to a more benign environment for EM HC as an asset class and in particular should allow the value in the high yield universe to be realised. Overall we believe that high yield should start to outperform investment grade with that differential now above 500bps

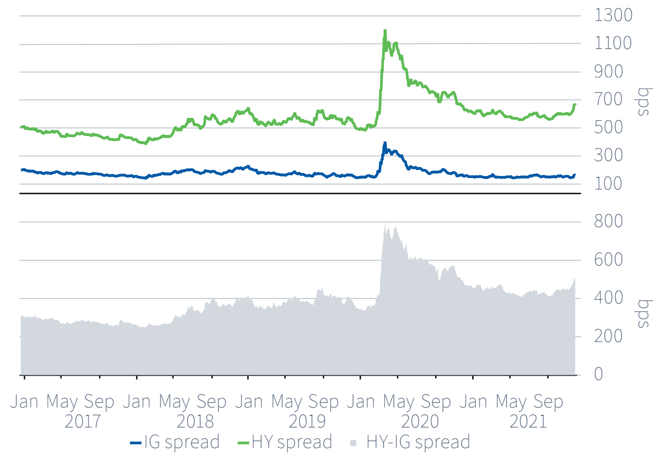
In 2022, we expect a more benign environment for EM hard-currency debt, allowing value in the high yield universe to be realised

Figure 134. **EM local-currency bond yields vs US treasuries**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 135. **EMBI spreads: HY vs IG (bp)**



Source: Aviva Investors, Macrobond as at 1 December 2021

(Figure 135). However, the impact of COVID-19 is something that will have a lasting impact on fundamental factors. Investment grade countries were generally coming from a position of strong credit metrics. However, social factors post the recovery need to be understood and we can see the potential for much broader dispersion within the investment grade universe, as governments try to balance the weaker fiscal metrics with voter support. High yield should continue to see a higher dispersion of returns into 2022, so country selection will remain key.

EM credit fundamentals remain vulnerable. Within HY, weak public finances, but particularly high government debt levels are unlikely to improve further in the short term. In 2021, a rebound in GDP, helped push debt to GDP lower. Going forward, the pace of fiscal consolidation is expected to remain slow, as governments face limited space to raise revenue against growing social pressure and a desire to support growth. Rising interest costs (Figure 136), already a challenge within the HY space, could add to unfavourable debt dynamics as both local rates and treasury yields rise. Any sustained weakness in EM currencies next year, risks adversely impacting debt metrics, particularly countries with a high share of external debt.

Weak public finances and high debt levels are unlikely to improve in the near term, keeping EM credit fundamentals vulnerable

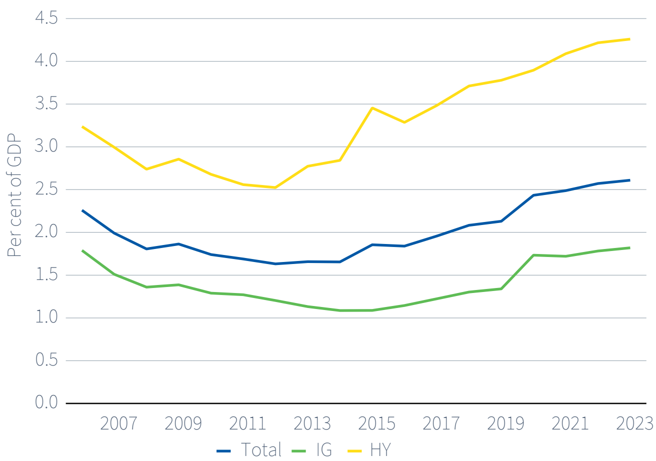
During 2021, fiscal cracks were papered over by improving external positions, as current accounts narrowed on higher commodity prices and the IMF provided a fillip to reserves through an increase in special drawing rights (SDRs). In 2022, we look for countries that can weather higher borrowing costs and at times more challenged market access. We therefore prefer countries that have low external financing risks (Figure 137), because external debt service is low or reserve buffers are large. Nigeria stands out, with extremely low external debt service, and reserve buffers that should rebuild as oil prices are expected to remain high. The IMF will remain a key anchor for many HY credits, supporting reforms and co-opting in cheaper multilateral financing. Both Ukraine and Ecuador are expected to push forward with IMF-led reform and fiscal consolidation. Countries that combine strong growth, political and policy space will also remain top picks, Ivory Coast remains a favoured pick.

Countries with low external financing risks and those supported by IMF programmes are likely to outperform

We remain extremely cautious on countries that might continue to have their ability to access the market questioned over an extended period. Adding to default fears. While countries like Ghana do not have Eurobonds maturing over the next year or two, Eurobond coupon payments are very high. Default risks remain contained next year, potential defaults in Sri Lanka and Ethiopia have been well flagged.

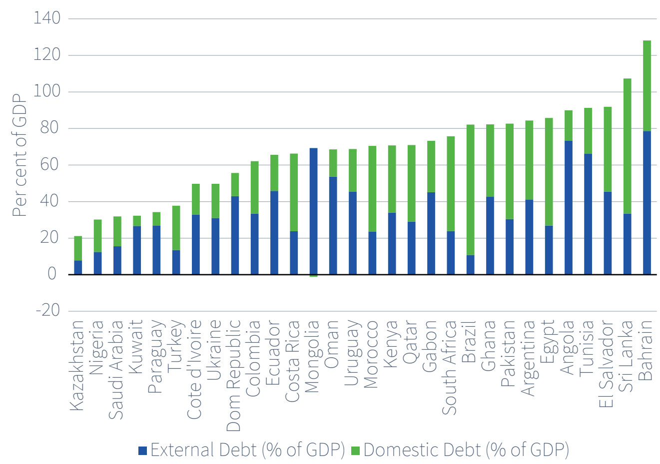
We remain cautious on countries that might continue to have their ability to access the market questioned over an extended period

Figure 136. **Interest cost (% of GDP)**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 137. **Composition of Government Debt**



Source: Aviva Investors, Macrobond as at 1 December 2021

Currencies: divergence creates opportunity

While COVID-19 remains very much with us, 2021 saw the global economic recovery continue as lockdowns eased and vaccines were rolled out. Despite a universal economic rebound there was a significant divergence in performance of G10 currencies in REER terms YoY (Figure 138), with the USD appreciating over 7% and JPY depreciating over 8%. The further we move away from the initial COVID-19 shock the more disparity we will see in economic growth outlooks. Economies with greater COVID-19 protection from vaccines will have more resilience to the emergence of new strains. Fiscal support will further adapt to a world no longer in lockdown while central banks debate the extent to which inflationary pressures are transitory and the timing of tightening. As growth and policy divergence increases, it makes sense that asset prices, particularly those which reflect the macro-economic outlook such as FX, diverge also. We expect 2022 to be a year where idiosyncratic stories drive currency returns, creating opportunities for macro investors who can correctly predict these differing paths.

As growth and policy divergence increases, asset prices - including fx - can diverge too

The evolution of inflation and subsequent policy response from central banks will be a key market driver in 2022. We expect inflation within G10 economies to continue to rise with risks to the upside. Over the long run, significant inflation differentials drive exchange rates, with the currency of a high inflation economy depreciating to offset the higher domestic price pressures. In recent history this has been a factor to consider only in emerging economies, however, as inflation pressures within developed economies rise and inflation rates diverge more significantly this could become a factor market participants need to be cognisant of when forecasting longer- term currency trends.

Idiosyncratic stories will drive currency returns, creating opportunities

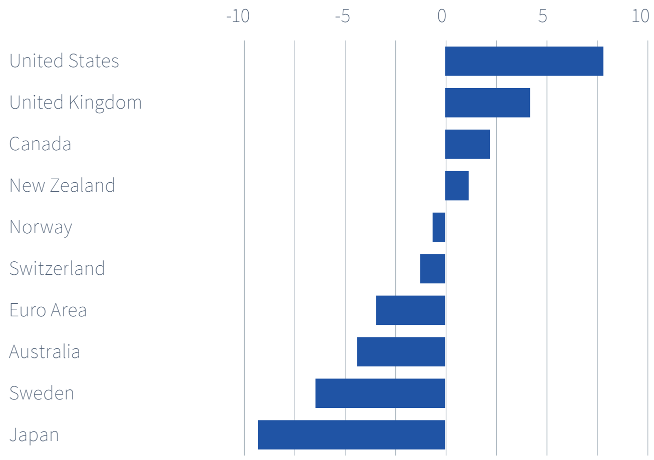
While understanding the USD is always useful it has less informational value in determining broader FX market trends than it has done in the past. We are not in a USD dominant environment currently; idiosyncratic drivers are dominating currency moves and with economic recovery and policy response divergence increasing we expect this to remain true in 2022. Below, we consider the idiosyncratic drivers that are likely to dominate FX markets in 2022.

We are not in a USD dominant environment

The strength of the USD over the 2nd half of 2021 can be explained by both its relationship to global growth and US exceptionalism. This trend will likely continue into 2022. Historically, the USD has had a counter cyclical relationship to growth, depreciating as growth accelerates and appreciating as the pace of growth declines. This relationship held true in 2021 with the start of the stronger trend in USD coinciding with the decline in our global growth nowcast (Figure 139). US growth outperformed Europe both in terms of pace and relative to expectations, captured here as the spread between Citi's economic surprise indices. This outperformance does a good job of explaining recent price action in EURUSD, with the EUR

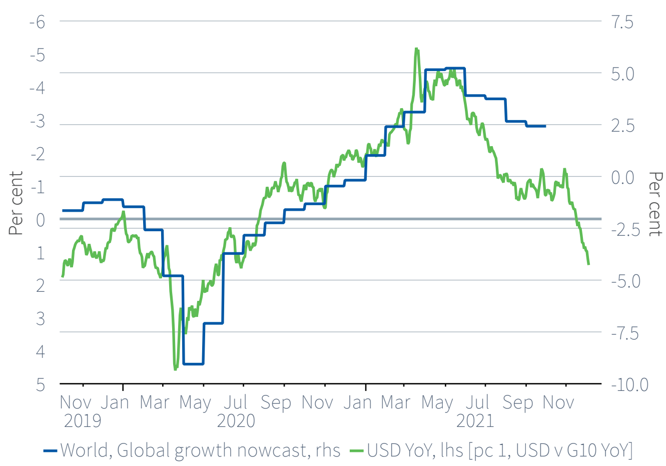
Global growth and US exceptionalism explain recent moves in the USD

Figure 138. **REER percentage performance YTD**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 139. **USDv G10 YoY (PC1) vs Global growth**



Source: Aviva Investors, Macrobond as at 1 December 2021

weakening as economic data disappointed (Figure 140). US exceptionalism will likely be a theme that continues into 2022, with stronger price pressure in the US also supporting a more hawkish stance at the Fed relative to their European counterparts.

Despite the rebound in growth and rising inflationary pressures, real rates have remained relatively low. Time will tell just how transitory inflation pressures are, but our view is that risks remain to the upside and some of that pressure will prove more persistent. In the absence of another major setback from new variants such as Omicron, 2022 will see the normalisation debate extend with most G10 central banks beginning a hiking cycle. Currencies of economies where policy normalisation lags will prove to be good funders against more growth sensitive crosses. Both EUR and JPY could see their sensitivity to risk assets increase in 2022 if short market positioning becomes stretched. The interplay of inflation pressures and central bank policy reaction will have significant implications for the market pricing of real rates. While Omicron may delay lift-off, we expect 2022 will see an increase in both breakevens and real rates. Rising US real rates is another factor supporting an extension of the stronger USD trend. The week-on-week change in USD tends to be positive in rising real rate environments (Figure 141). On the other hand, a delay in the Fed's normalisation path will weaken the USD and high valuations may limit further USD appreciation. The USD is now well above its long-term average REER.

Currencies of economies where policy normalisation lags should be good fx funders

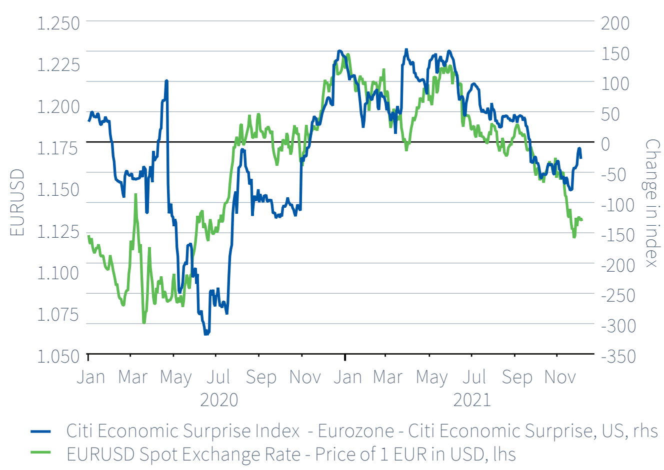
Higher commodity prices have led to significant terms of trade (ToT) shocks, 2022 could see these shocks pass through to currency pricing. Commodities rallied significantly over 2021 with the Bloomberg commodity index rising over 35% between January and mid-October, even following the subsequent decline the index is up over 20% year to date. This rally has led to a substantial ToT shock to commodity currencies. Looking at the standardised YoY change in Citi's ToT indices shows the shock to commodity currencies to be significant, falling above the 95th percentile (Figure 142). Despite the significant ToT shock the subsequent repricing in commodity currencies has been more muted. For example, while the YoY, ToT shock in Norway represents a 2.5 standard deviation move the comparable move in Norway's real effective exchange rate has been just 0.3 standard deviations. Given that much of the commodity shock is driven by supply-side constraints perhaps it is fair that the market views these shocks as transitory and therefore does not fully price the impact into the currency. That said, the longer ToT shocks persist, the more likely it is that this adjustment will need to be priced into commodity currencies.

Terms of trade shocks may pass through to currency pricing

With Omicron creating an uncertain environment, investors may be looking to traditional risk reducers such as JPY and CHF to help protect their portfolios. Figure 143 shows G10 currencies where the trend in each currency is taken as the 1st principal component of that currency verses the other G10 crosses. We then look at how each currency trend is correlated to the broad equity market, showing the latest reading relative to the historic range and

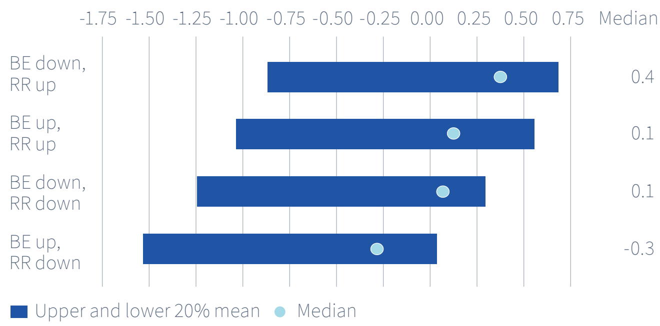
Risk reducers are best played against crosses other than the USD

Figure 140. **EURUSD vs Eurozone – US Citi Economic Surprise spread**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 141. **Weekly performance of DXY in different regimes**



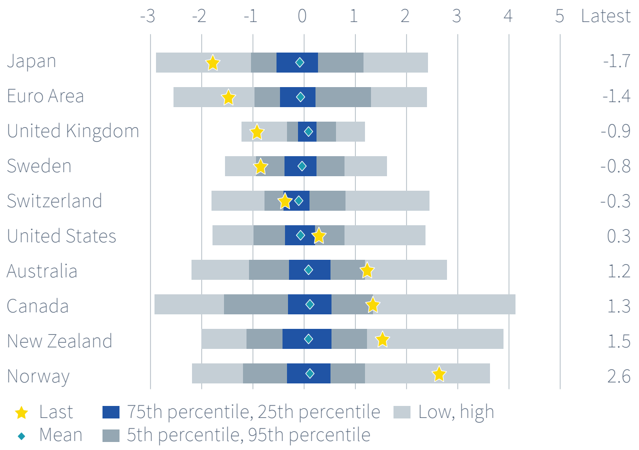
Source: Aviva Investors, Macrobond as at 1 December 2021

median. Currently, the USD is more negatively correlated to global equities than any other G10 currency. Therefore, risk-reducing positions will need to be constructed with care as if paired against the USD the risk-reducing element will be neutralised. Hence, risk reducers are best played versus crosses other than the USD.

Emerging market currencies are likely to continue to struggle given worsening growth prospects and continued pandemic-related uncertainty. While the growth impulse has deteriorated, inflationary pressures in emerging markets have grown significantly leading to increasingly hawkish and pro-active policy moves from EM central banks. The subsequent increase in carry leads to substantial differences in the performance of currencies from a total return perspective. Going forward, increasing divergence across the emerging market universe in terms of resilience to further COVID-19 uncertainty, growth outlook and policy response will create opportunity for investors, most likely in those economies where currencies are undervalued and real yields remain attractive, such that total return can remain positive even in a challenging environment.

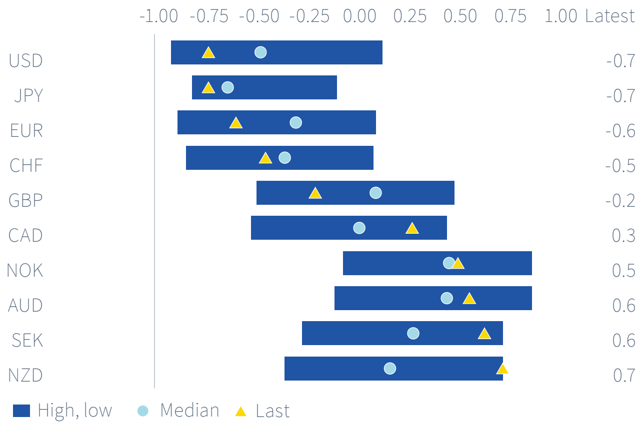
EM currencies are likely to continue to struggle

Figure 142. **Standardised Citi ToT (YoY value chg)**



Source: Bloomberg, Aviva Investors, Macrobond as at 1 December 2021

Figure 143. **G10 correlation to global equity**
Rolling 26 weeks, 5y window



Source: Bloomberg, Aviva Investors, Macrobond as at 1 December 2021

Real assets: resilient performance spurs capital inflows

Despite the exceptional challenges of COVID-19, real assets have delivered robust income streams, underpinned by consistent returns and lower volatility relative to other asset classes, bringing further recognition of the all-round qualities real assets can provide to a portfolio beyond being simply a diversification play. Consequently, significant capital inflows continue but the best investment opportunities are exploited by a nuanced appreciation of the different aspects of real assets.

European real assets – increasingly targeted for resilience and growth

Within real estate, logistics remain flavour of the month supported by a secular trend towards increased ecommerce. Indeed, the European logistics sector has demonstrated exceptional performance throughout 2021 and is showing no signs of a slowdown. The sector is likely to remain the stand-out performer in the years to come (Figure 144), supported by strong occupational and investor demand (Figure 145) coupled with tight supply, especially for high-quality space. Given this lack of supply in Europe and the sharp rise in the price of construction materials, the sector is likely to sustain strong rental growth over the next few years until supply catches up to align with demand.

Investors paying premiums to gain exposure to the logistics sector

However, due to heightened investor demand, pricing has moved significantly and therefore remaining disciplined and selective is essential to delivering value. Focusing on 'last mile' logistics facilities that serve consumers directly seems to offer the most attractive investment proposition. Dense, urban locations will continue to be the most desirable.

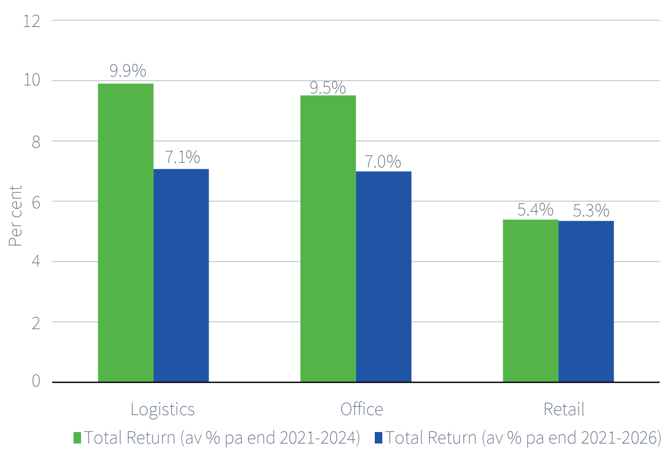
Whilst non-food stores have reopened across Europe, the outlook for the retail sector generally remains challenged. Some fashion retailers, for example, are closing stores and shifting their focus towards ecommerce. The recovery in footfall and in-store retail sales have varied by location. The dependency of some locations on office employees and overseas tourists has hurt them.

Improved sentiment towards UK retail as capital values bottom out

However, after many years of depressed performance in the retail sector, investor sentiment is improving, especially in the UK. It appears as if capital values for UK retail have generally bottomed out. Whilst the leasing outlook continues to look challenging in many markets, a degree of competitive tension can be found in pockets.

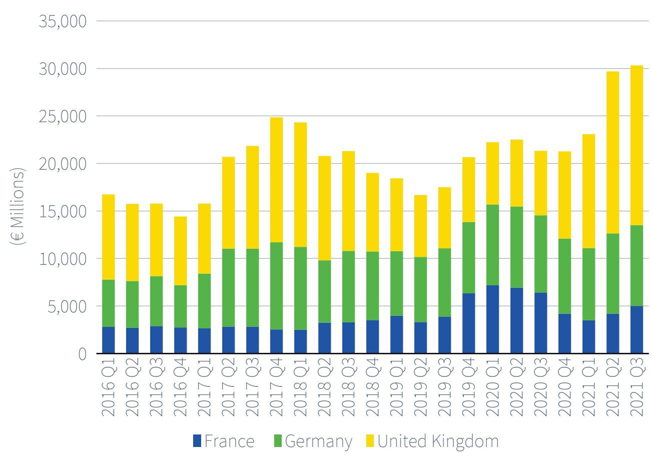
In continental Europe, the move towards ecommerce is less well progressed. Generally, European high streets have been afforded a greater degree of protection than seen in, for example, the UK. Nevertheless, headwinds are likely to persist for retail property for some time.

Figure 144. **Total return forecasts**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 145. **European logistics investment volumes**



Source: Aviva Investors, Macrobond as at 1 December 2021

Across Europe, the last year has seen investor and occupier demand start to pick up. We have also seen an increase in public transport usage (Figure 146) and office utilisation levels as companies have encouraged more employees to return to the office. Businesses are currently right-sizing and redesigning their office space to accommodate their new hybrid working model. This implies that we may not be able to identify the true impact of the pandemic on office demand for some time yet.

Flight to quality as occupiers seek ESG-aligned offices

The most apparent structural trend points to a flight to high-quality office space with a greater focus on ESG and 'post-COVID-19' requirements. We therefore continue to believe that high-quality office space in dense urban locations, which can accommodate post-COVID-19 requirements and a hybrid way of working, will continue to see strong demand in the future.

Long lease attractive on risk-adjusted basis relative to traditional sectors

Bidding on long lease assets has become increasingly competitive over the course of 2021 with investors recognising the benefits of long duration income streams with inflation linkages. Despite yield compression, UK and European long lease continues to be relatively attractive on a risk-adjusted return basis. On a 5-year horizon, we expect European long lease to provide similar returns to industrial and office markets but with much lower volatility. In fact, for returns per unit of risk, we find UK and European long lease outperform traditional sectors such as office and industrials on both 5-year and longer-term horizons.

Record investor appetite for private debt

Despite concerns on the impact of lockdowns and restrictions on the private debt market, investor appetite has continued to grow year on year with 2020 fundraising doubling the heights reached pre-GFC (Figure 146). Investors seeking attractive risk-adjusted returns in both growth and income strategies have increased their investments in infrastructure, real estate and private corporate debt. Given the lower-than-expected impact of COVID-19 on private debt, we expect investor appetite will continue to grow.

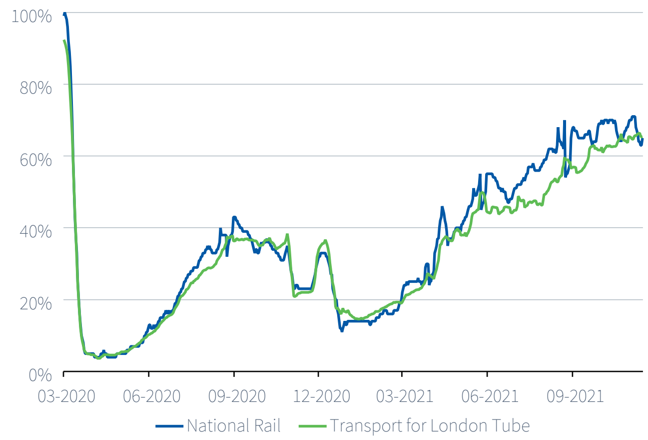
Corporate defaults weathering COVID-19 storm

There is often an expectation in periods of economic stress that corporate defaults, particularly sub-investment grade, are likely to increase significantly. However, all corporate and sub-investment grade corporate defaults reached 3.1 per cent and 6.7 per cent in 2020 compared to 5.0 per cent and 12.1 per cent in 2009. This in part was driven by unprecedented government support in the form of government-guaranteed loans, which came with restrictions and there will be strong incentives for banks and borrowers to refinance them. We believe this will create the potential for increased investment opportunities as economies recover.

Fixed rate debt continues to be attractive to risk averse investors

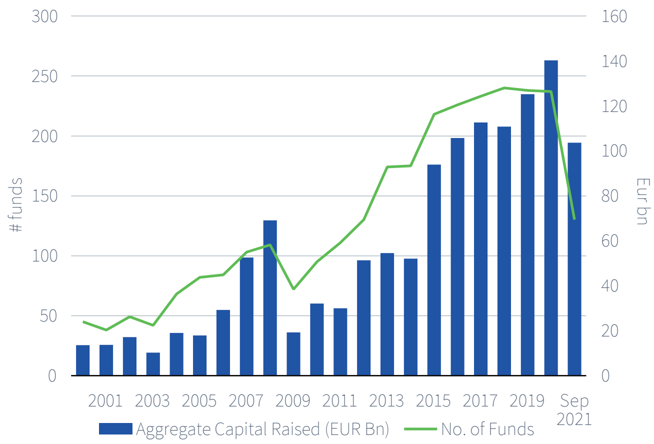
For income-focused investors who are concerned with return volatility, our relative value analysis shows fixed rate infrastructure and real estate debt will continue to provide some of the lowest risk compared to other sectors within real assets. In fact, fixed rate debt across corporate, infrastructure and real estate provide the highest return per unit of risk (Figure 148). However, the COVID-19 crisis has accelerated the transformation of the economy. While some

Figure 146. **TFL tube and National Rail usage**
(% relative to average 2019 levels)



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 147. **Private debt fundraising**



Source: Aviva Investors, Macrobond as at 1 December 2021

of the more exposed sectors include retail and transport, technology and telecoms have proven more resilient. Understanding the fundamental risks of each sector is more important than historic correlations or relative value outperformance.

Infrastructure remains a source of idiosyncratic risk, enhancing portfolios by bringing significant diversification benefits. For example, the biggest risk driver for onshore wind would be power price, while greenfield fibre risk is linked to the speed of deployment, as well as potential competition or regulatory intervention. The correlation between these factors is very low so combining all these sectors in a portfolio with an equal weighting would therefore diversify portfolio risk between non-correlated factors – reducing the total risk below that of a portfolio allocated to a single asset class (Figure 149). In the UK, the recent launch of the government's Net Zero Strategy will shape investment opportunities in the years ahead. The document sets out its priorities to reduce emissions in power, transport industry and buildings. It is clear on the importance of private capital, anticipating this will provide the bulk of the additional investment needed.

Infrastructure offers deep and ever-evolving opportunity set

Assets that have strong environmental credentials, particularly those that align to a net-zero pathway, are in high demand. The big question is whether there will be enough quality assets to satisfy demand. UK market activity over the past 12 months has been characterised by continued secondary asset acquisition activity and associated debt refinancings, but there has been little primary greenfield investment in assets that align to the government's net-zero strategy.

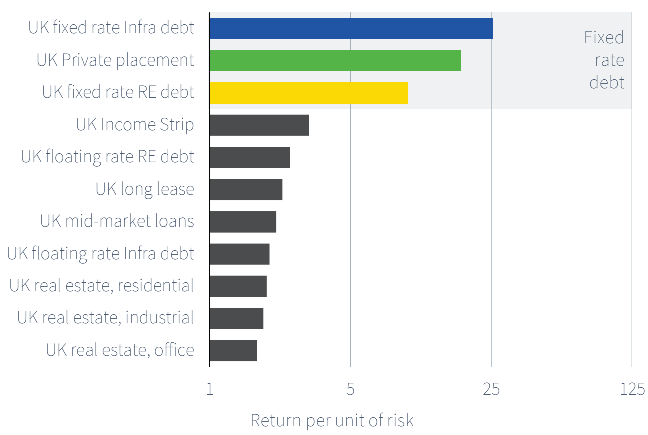
Investment in renewables to adapt and grow

Core renewable investment remains small in advance of the next Contracts for Difference auction. The challenge for offshore wind is how the industry can increase the scale to meet ambitious targets. For onshore wind and solar, the market will need to adapt to a subsidy-free environment, taking into account the availability of corporate power purchase agreements.

While there are emerging opportunities in battery storage and early-stage investment into EV charging, the development of carbon capture storage and usage (CCUS) and hydrogen remain at a very early stage. The financing of green buses may be another area of growth.

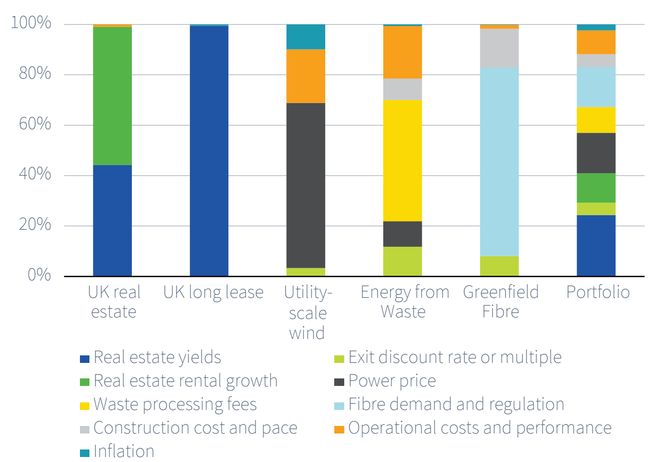
Elsewhere in the infrastructure universe, development of fibre networks in the UK continues to offer good relative value for growth-focused investors while bringing improved connectivity to our communities.

Figure 148. **Expected return per unit of risk**



Source: Aviva Investors, Macrobond as at 1 December 2021

Figure 149. **Five-year IRR return driver breakdown**



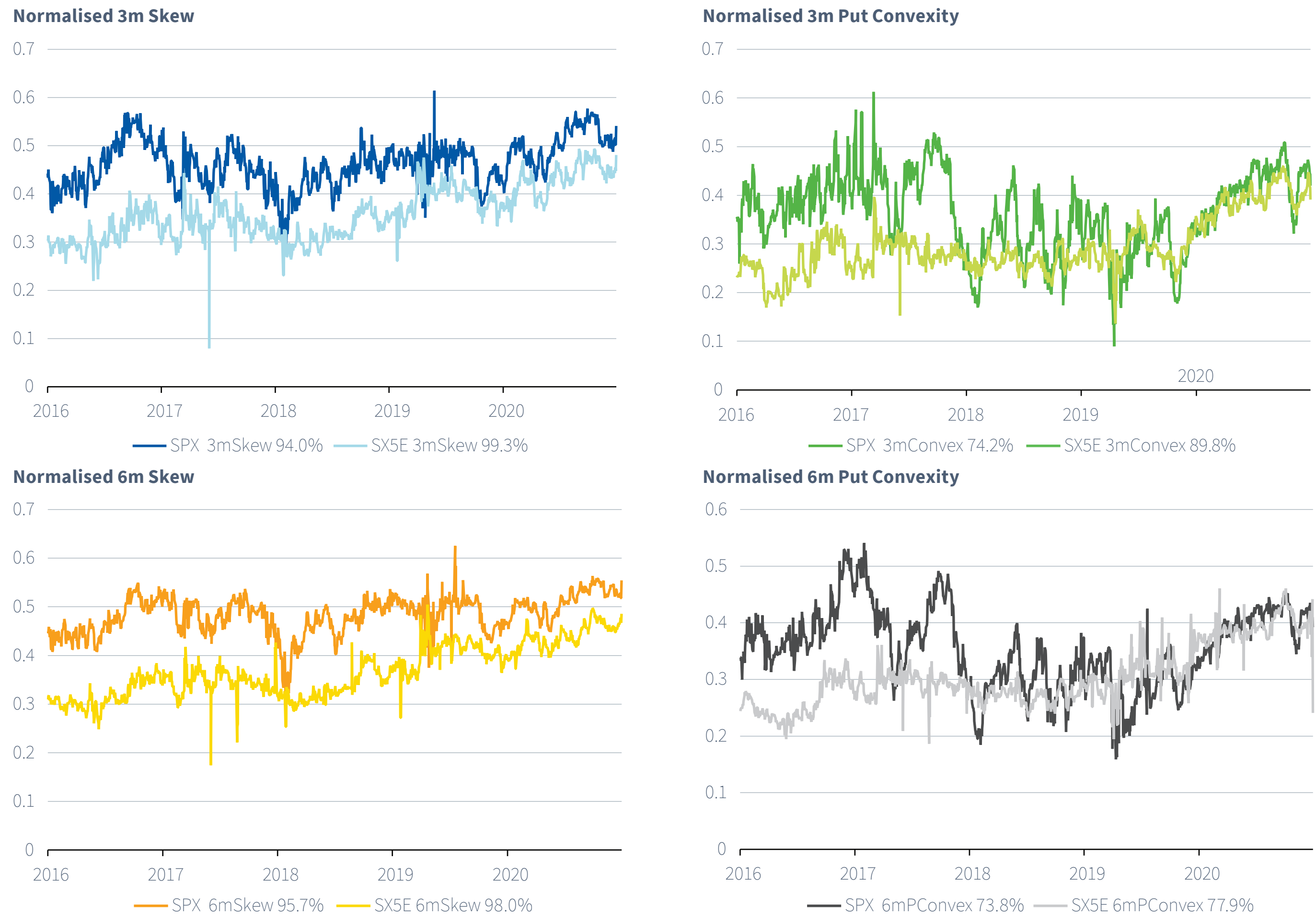
Source: Aviva Investors, Macrobond as at 1 December 2021

Cross asset volatility: in order to look forward one has to be cognisant of the past

The last year was dominated by rising yields, tech, oil, value but also by extremely low realised volatility across equity & credit markets and high realised volatility across interest rate markets. Yet the implied volatilities across equity markets have remained elevated, with parameters such as skew, the volatility differential between call and put volatility, and convexity, the volatility differential of out of the money puts with different strikes, firmly stuck on extremely elevated historical levels (Figure 150). On the other hand, we had a strong shift in participants in the US, with retail clients becoming a force of nature, driving "meme-stocks" to new highs, and driving call options volumes to unprecedented levels, often outstripping the underlying stock market in volumes. This newly observed dynamic, fuelled by cash handouts by the Fed, is unlikely to recede any time soon. The fear of inflation and the fact that with rising yields bonds no longer can be easily used as natural portfolio hedges, have provided a newly found appetite for hedging via index options. As long as bond yields are looking to rise, this appetite will remain big and the demand for put options and volatility will remain high. This high demand and the long period of extremely low realised volatility, have led and will continue to lead, to a historically steep term structure across the major indices and a historically high volatility risk premium in the three to nine-month area.

The strong rally in 2021 has also provided positive returns, sufficiently big to free up significant budgets for hedging, again driving the belly of the volatility curve higher. It will likely take some time until implied volatilities will recede back to levels seen pre COVID-19, and at this point bonds are likely to again be attractive risk-reducing assets as bond yields find an equilibrium. We expect this to reduce demand for put hedging as the added uncertainty of yield moves come out of the market.

Figure 150. **Market measures of skew and convexity**



Source: Aviva Investors, Bloomberg, Macrobond as at 1 December 2021

We find that the predictive value of implied volatility is low. The prevailing high level of implied volatilities, often proxied by the VIX index or VIX futures, have been driven by supply and demand imbalances rather than being a measure of the ambient level of 'fear'. Markets have ground higher whilst implied volatility levels have remained persistently high – and this sets up equity volatility as an interesting premium to consider capturing. Another reason for this is a tightening of risk limits and a reduced appetite for P&L volatility. This combination has significantly reduced the appetite to sell the mid- and long-term volatility and has further aggravated the supply and demand imbalance.

Currently the main supply of volatility is in very short-term optionality, with maturities of one month or less, supplying the market with a vast amount of Gamma, further reducing the daily moves and thus the realised volatility, but not with Vega exposure, leaving the dealers imbalanced and exposed. We should expect the realised volatility of the major indices to increase from the currently very low levels, but for implied volatility levels to remain around the currently elevated levels, slightly reducing the extremely high level of risk premia to more normal levels. The explicit support for credit in the US has distorted not only the absolute level, but also the level of volatility for "Investment Grade" and "High Yield" credit options, both in realised and implied terms, offering less appealing volatility premium than equities.

Support from the Fed should continue to suppress implied volatility and spread levels in the High Yield and Investment Grade sectors. A removal of support would lead to more idiosyncratic price development of credit levels and likely to a higher absolute spread level. So far this is not priced in and the market would be susceptible to such a development. The outlook for interest rates volatility is less clear, with too many drivers pushing and pulling in different directions, and central banks trying to walk a tight path, trying to avoid a policy error on either side of being too early or too late to hike. COVID-19 and supply-chain problems aggravate these uncertainties and could likely lead to a more diverse approach of different central banks, depending on the jurisdiction. This means we should expect a higher shock frequency followed by periods of low realised volatility. This will keep both implied and realised volatilities elevated but risk premia unattractive.

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