NatWest

Piecing together the post-pandemic economy.

The Year Ahead 2022

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Welcome to the Year Ahead

John Briggs
Global Head of Desk Strategy

The Post-Pandemic Economy

When we published our Year Ahead outlook one year ago, the world was in a very different place. Global governments were battling a seemingly untamable virus, and lockdowns were not yet displaced by vaccinations – the real world effectiveness and societal impact of which were as yet unknown.

Yet we held a certain optimism for the coming year. Even as we published in the early days of vaccine approvals, we took solace in the fact that fiscal and monetary authorities the world over stood prepared to bridge the gap from pandemic to reopening.

As we look ahead to 2022, I feel optimistic once again, and this time with greater belief that the worst of the pandemic is behind us with most economies in some stage of reopening or having reopened.

But the outlook is by no means more certain than it was a year ago, and big questions remain over what the global post-pandemic economy will look like: Do inflation dynamics in 2021 represent a permanent shift in global economics, or will the steady "normalization" of the global economy bring a return to the dis-inflationary pressures that felt so insurmountable in the pre-pandemic world? Are labour market shortages set to wane in a less accommodative fiscal environment – or are more structural shifts to blame? Can global consumption hold up as governments start pulling back on pandemic-linked support? And how will central banks balance these risks?

That's precisely the focus of this year's outlook, in which we focus on five major themes we believe will fundamentally drive the outlook across regions, sectors, and markets:

(1) The "World of Shortages" and supply chain disruption

(2) The handoff from Big Fiscal (fiscal retrenchment) to Big Consumer (savings-fueled consumption)

(3) The post-pandemic change in central bank reaction functions

(4) China and the global implications of Common Prosperity

(5) And a look at just how 'greenflationary' the climate transition is.

Underlying all of these is a risk of higher inflation for 2022, and in several cases these issues are significant drivers into our higher inflation forecasts, though with great dispersion amongst the major economies. Given that dispersion of both expected inflation and central bank reaction functions, 2022 will also be about which monetary authorities are moving when, and by how much, which we expect will be the primary driver behind asset prices.

All of this may be unsettling for markets, businesses, and families. But there are reasons to be optimistic – not least, that as vaccinations become more widespread globally, we can now really begin to focus beyond the pandemic. And that is a very hopeful thing indeed.

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The Post-Pandemic Economy

John Briggs
Global Head of Desk Strategy

Five themes for 2022

We enter 2022 with major unknowns about the long term shape of the post-pandemic economy, and whether the disruptions we have seen coming out of the global reopening are durable and, if so, how long they may last. In an effort to answer these questions, we have focused on five major themes that we believe will fundamentally drive the outlook across regions, sectors, and markets.

I want to take this opportunity to thank our India Desk Strategy team, without whom this analysis, indeed this report in its entirety, would not be possible.

A World of Shortages

Shortages are everywhere. We look at several inter-related shortages to not only estimate how long they will last, but the potential impact on inflation: the US and UK labour markets, semiconductors, shipping and transport, and commodities and raw materials. The long and short of it - shortages will be with us for longer.

Listen to this podcast on Apple Podcasts or Spotify Watch this webinar on YouTube

Fiscal Retrenchment vs. Consumer Savings

Fears of fiscal pullback are common. How much will consumer savings, much of it accumulated from fiscal transfers, buttress consumption as governments pull back? We think quite a bit.

Listen to this podcast on Apple Podcasts or Spotify Watch this webinar on YouTube

Changing Central Bank Reaction Functions

Given the potential for significant, inflationary shifts in the post-pandemic economy, we see central banks reacting in different ways across different economies. How they react is likely to be a primary determinant for asset prices in 2022.

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China and Common Prosperity

China's Common Prosperity policy is a game-changer in our view, with wide implications for both China's domestic economy and the global outlook.

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How 'Greenflationary' is the Climate Transition?

The transition towards a greener economy poses macro uncertainties and short-term inflationary pressures. But the effects decrease significantly over the longer-term, driven by cheaper technologies. Policy-makers must navigate carefully.

Listen to this podcast on Apple Podcasts or Spotify Watch this webinar on YouTube

Our Five Themes for 2022 Webinar Series is available here.

To listen on Spotify, please click here.

A World of Shortages

The global economic reopening has been significantly marred by multiple shortages and supply chain issues across a range of products and industries. While some supply chain disruptions were expected, widespread shortages and bottlenecks have lasted longer, and been more severe, than most forecasters expected.

Demand has returned strongly after the pandemic, supported by high savings, changing lifestyles, fiscal transfers, and reopening.

Supply has been another matter. The pandemic has changed how (and sometimes if) people want to work. Sanitary measures still impair efficiency at factories and ports. Firms have built back capacity cautiously. Demand for tech has put strain on shipping. Bottlenecks are everywhere. But how long will they last?

There are several key shortages: labour in the US and UK, raw materials (including commodities and energy), logistics/shipping capacity, and semiconductors.

We expect that shortages of raw materials and commodities may ease reasonably early in 2022. Chips, logistics and labour may prove more durable problems, leading to more persistence in inflation pressure in many developed markets.

Labour Supply – The pandemic will cast a long shadow over the ways and will to work

For labour supply, we examine the US and the UK, two major regions where worker shortages have been particularly acute. Even though there are similar shortages, the reasons for labour shortages in each economy are not the same.

In the US, despite vaccinations and the economic reopening, workers may not currently be actively looking for work or are searching with little intensity. Possible reasons include continued health concerns around covid, working mothers remaining home to care for children (possibly reflecting a lack of childcare), retirement, and potential workers focused simply on other priorities temporarily.

Participation recovers slowly after recessions

In the four recessions before the pandemic, the lag has been about two years before the participation rate picked up suggesting that even with strong labour demand and output growth, the eventual boost to the participation rate is likely to be slow. The share of adults either working or looking for work stands at 61.6%, and has ranged from 61.4% to 61.7% since June 2020. The pre-pandemic peak in January 2020 was 63.4%.

Of the 261.9 million people aged over 16 in the US, 154.0 million are employed, while 7.4 million are unemployed (i.e. have looked for a job in the past four weeks). That leaves 100.4 million people outside the workforce, 4 million more than before the pandemic. Of these, 52% are "retired", 15% have a disability, 13% are caregivers, and 15% are students. The remaining 4% are "other", which likely includes those who have dropped out of the labour force due to concerns about covid.

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Head of G10 FX Strategy, US

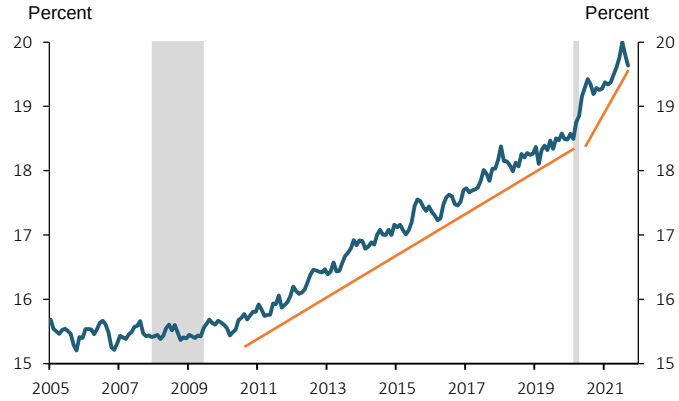
Covid accelerates pre-existing trends, including retirement

In the wake of covid, the share of retirees in the US accelerated dramatically (chart below). The share of the population in retirement increased from 18.5% in February 2020 to 19.6% in September 2021. While these gains partially reflect demographic changes, the surge suggests that some who retired during covid could return to the labour force as the effects of the pandemic fade. However, looking at BLS data that indicate those not in the labour force who are retired and do not want a job are 3.3 million higher than the pre-pandemic level. Getting the virus under control will help solve the covid-related barrier to participation in the near term. In fact, we suspect most of the "other" category (1.0 million) will re-enter the labour force

Those not in the labour force who are retired and do not want a job are 3.3 million higher than the pre-pandemic level

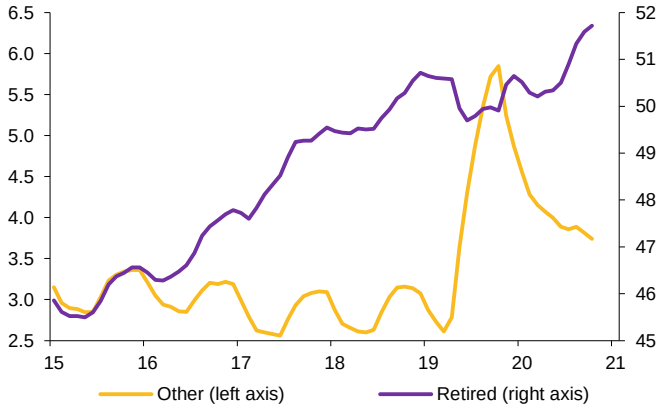
Share of retired in the population

Shaded bars represent periods of recession. Source: BLS, Census Bureau and NatWest Markets



% Share of not in labour force (6-month moving average)

*May or may not want a job. Source: BLS, Census Bureau and NatWest Markets



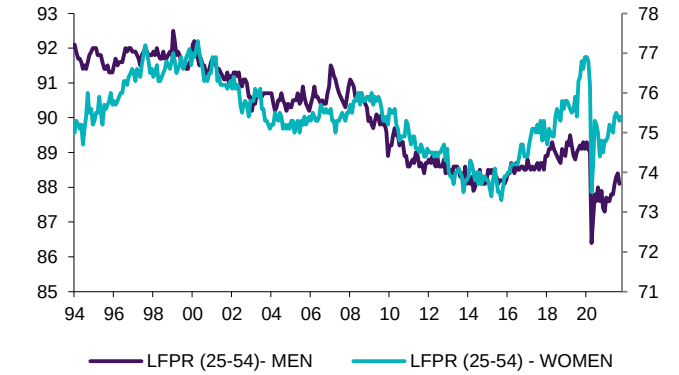
The pandemic's unequal burden and reintegrating women

Bringing more women into the labour force was one of the great successes of the pre-pandemic years, as the left-hand chart below shows. The pandemic reversed some of those gains relative to men. As of October, participation rate for prime working age men is 1.2 points below its 2019 level, while that for women is still 1.5 points below its 2019 level. Some of this is explained by the link between women and families in BLS data, which shows that women who maintain families and do not want a job have risen by 270,000 since the pandemic. That too may reverse, but history suggests gains are largely made in the context of a very strong labour market and therefore that this may not be a rapid reversal.

The participation rate for prime working age men is 1.2 points below its 2019 level, while that for women is still 1.5 points below its 2019 level

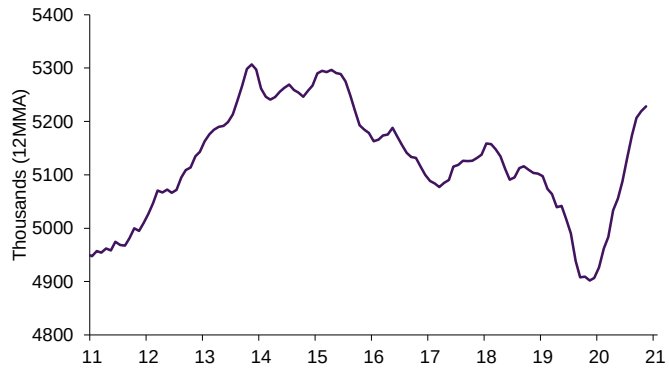
Prime-working age labour force participation rates by gender

Note: women on right axis Source: BLS



Women who do not want a job and maintain families

Source: BLS

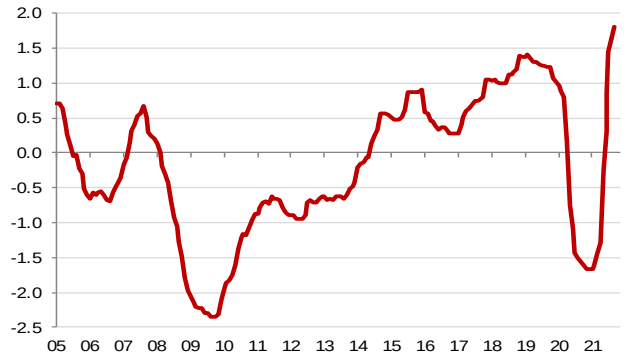


In the UK, tighter labour markets may be exacerbated by Brexit. The UK is experiencing many of the labour market pressures seen in the US and EU. But Brexit, which was delivered at the start of this year, is an additional challenge for labour market flexibility. The BoE Agents' survey of recruitment difficulties has surged to multi-decade highs – both the absolute level of the survey and the speed with which it has risen since the economy re-opened in the spring of 2021 are striking (chart below). Anecdotally, recruitment difficulties are broad-based but most acute in sectors such as transportation & logistics, hospitality, IT and construction.

Brexit, which was delivered at the start of this year, is an additional challenge for labour market flexibility

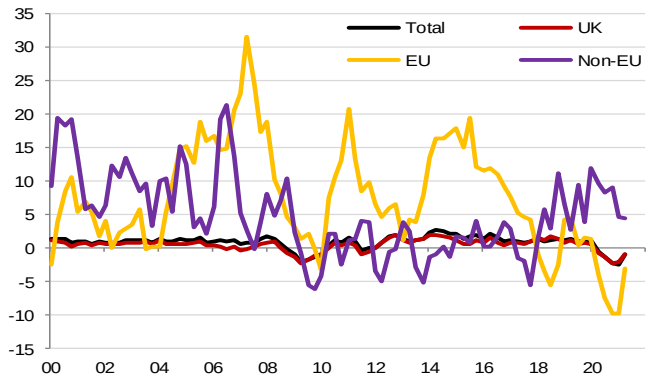
The UK Recruitment difficulties survey shows that employers perceive the tightest labour market in a generation

Source: BoE Agents



Growth in UK employment by nationality, % y/y

Source: ONS, NatWest Markets



A major uncertainty around Brexit remains the impact on net migration. The main information source, the *International Passenger Survey*, was suspended during the pandemic, but there is little doubt that net migration from the EU has fallen sharply in 2021 – as indicated by the 'employment by nationality' data (chart below).

The EU is unlikely to supply workers at the pre-2016 pace. Those leaving for the EU may not return. Employment of EU nationals had been trending lower since the Brexit referendum in 2016. It then fell sharply during the 2020 pandemic (-340k in Q2 & Q3 2020 combined) before rebounding slightly in 2021. The net decline of over 200k people (~0.6% of the workforce) is a material change. Many of those who left the UK will presumably not return, given the ending of the right to free movement of people between the UK and EU as a result of Brexit.

Many of those who left the UK will presumably not return

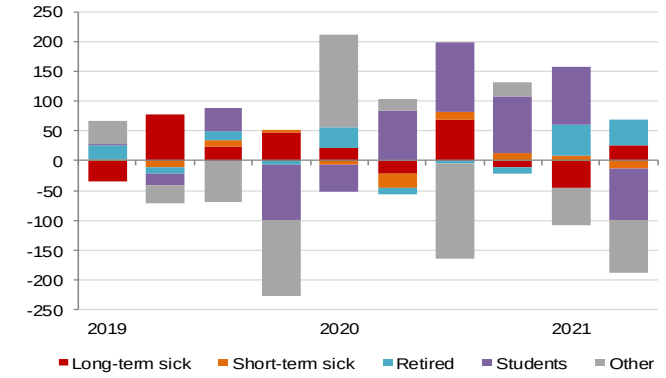
Not just Brexit: the pandemic has shifted participation in the UK too. During the 2020 pandemic, UK labour force participation fell dramatically (chart below).

UK working age population, % y/y

Source: ONS, NatWest Markets

UK labour inactivity, reasons (quarterly chg, 000s)

Source: ONE, NatWest Markets



Brits and books. The student surge will come back to work eventually. The biggest reason for leaving the labour force in the UK in the past 18 months has been to study, as the right-hand chart above shows. This trend has begun to reverse in Q2 2021, and even if students choose to remain in education for a period of time, presumably most will return to the labour market.

The pandemic does not seem to have left a legacy of long-term sick. But retirement may remove workers more permanently at a faster rate. There was a temporary spike in the number of people classified as long-term sick (notably in Q3 2020), but this subsequently unwound so there is no obvious evidence here of any significant damage to labour supply on health grounds. There has been some evidence more recently, during 2021, of an increase in retirement, which might prove more durable.

No supply-side special relationship. Supply-side impediments and skill shortages are prominent on both sides of the Atlantic. Intriguingly, there appear to be some significant differences between the US and UK, which tend to emphasise structural changes in post-pandemic labour markets. In the US, health concerns around Covid, childcare provision and retirement have been the dominant factors. Whilst these feature in the UK (particularly retirement trends, chart below), dislocations stemming from Brexit have made the situation in the UK more acute. With the UK government yet to fully articulate its approach to foreign labour mobility – there is clearly resistance to an 'open door' approach towards medium- and lower-skilled workers – it is not clear how protracted and inflationary the more restrictive post-Brexit arrangements will be. Nevertheless, there seems little doubt that this more restrictive approach will raise the NAIRU (from ~ 4½% pre-Brexit), though how far and how quickly is unclear.

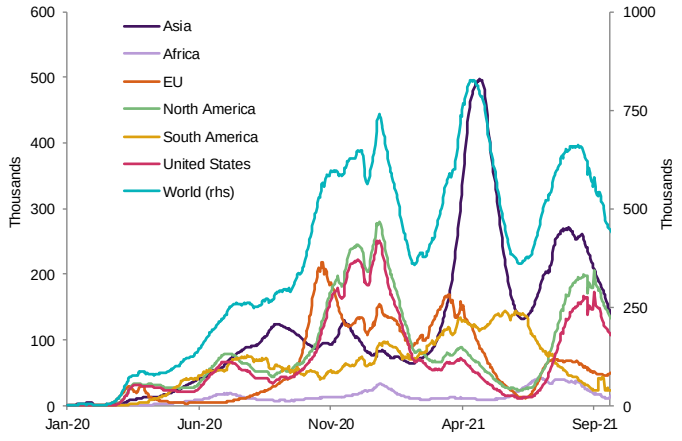
It is not clear how protracted and inflationary the more restrictive post-Brexit arrangements will be

Commodities and Raw Materials – Shortages likely to ease in early 2022

Asynchronous covid waves exacerbate supply and demand imbalances in commodities. Strong global demand for manufactured goods and construction materials has not been met by adequate supply. Resource exporting countries in LatAm and Middle East/Africa have experienced a slower recovery in exports. As a result, shortages in raw materials such as precious metals, industrial metals, coal, oil and gas have developed, leading to disruptions in the supply chain and higher prices.

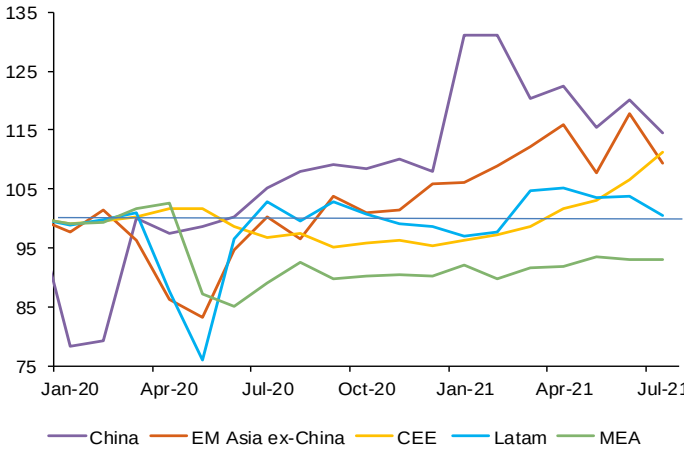
Asynchronous covid waves mean EM exporters don't keep up with materials-hungry regions

Source: Our World in Data, NatWest Markets. 7 day moving average



Export volume by region (Dec 2019=100)

Source: CPB Netherlands, NatWest Markets



As vaccination replaces movement restrictions and the pandemic becomes controlled endemic globally, exports of commodities and raw materials should normalise. But progress in reopening / increasing production of key raw materials may continue to lag surging demand, meaning upside pressure on prices could remain a theme through 2022. In energy markets, for example, crude oil inventories are already quite low and likely to remain below pre-pandemic averages throughout 2022. Supply increases in these products also face wider geopolitical drivers, including the role of fossil fuels amid rising demand for ESG and OPEC+ supply management. We discuss energy markets in greater depth here.

Progress in reopening / increasing production of key raw materials may continue to lag surging demand

Semiconductors – A vital input that will remain tight through 2022

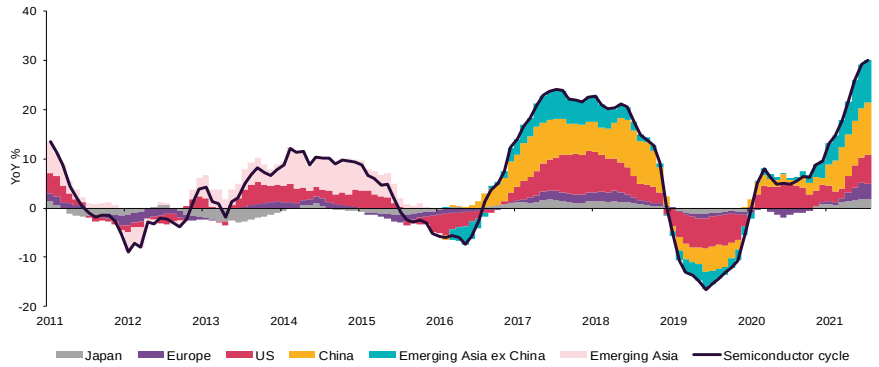
Semiconductor demand has soared due to home working, home improvement, and services-starved consumers spending on gadgets. The pandemic-induced work-from-home model has driven demand for electricals and electronic devices, coupled with greater adoption of smart home appliances. Higher demand looks here to stay as many working arrangements have permanently shifted.

Semiconductor capacity can't be built quickly. Historically, a semiconductor sales cycle has lasted roughly three years. However, explosive demand for semiconductors (chart below) has not been met by a timely supply production capacity increase, resulting in supply bottlenecks for chips. Production capacity is simply less elastic. It takes 1-2 years to redesign new production plants. As a result, we expect the chip shortage situation to last well into 2022 and early 2023.

We expect the chip shortage situation to last well into 2022 and early 2023

Global semiconductor sales value

Source: SIA, Bloomberg, NatWest Markets

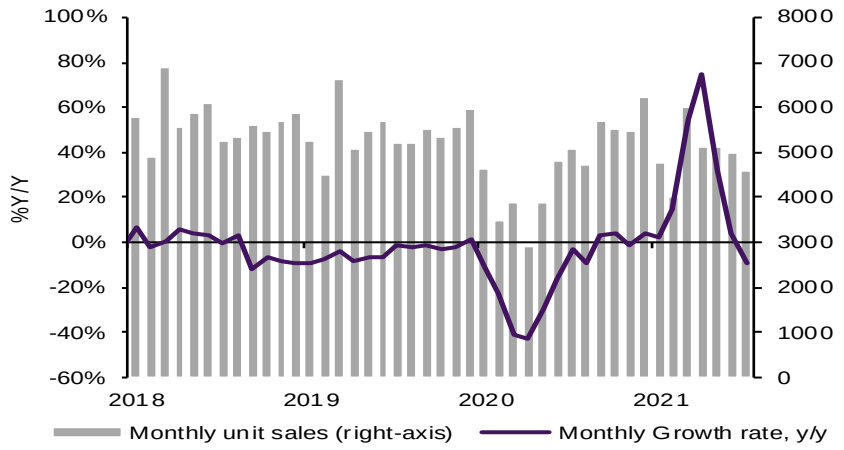


Semiconductor shortages are a bottleneck for major, high value-added supply chains globally and have an outsize impact on the growth rates of many economies. We estimate that the lack of automotive supplies in the US may be responsible for a loss of 1.4% of GDP in the third quarter, all else equal. As seen below, delayed production and a lack of inventories have contributed to global auto sales declining each month since March of this year (chart below). Other industries (smartphones, computers, etc.) are also reporting an inability to meet demand due to chip shortages.

We estimate that the lack of automotive supplies in the US may be responsible for a loss of 1.4% of GDP in the third quarter, all else equal

Global passenger car sales growth

Source: Haver, NatWest Markets



Shipping and Transport - The worst may be behind us, but costs may be slow in easing

Surging demand for goods meet port congestion. But prices are stabilising. Port congestion coupled with a mismatch between the demand for and the supply of containers has led to soaring shipping costs, especially along some specific routes. At end-September, global sea freight rates for container shipping were almost 10 times higher compared to January 2020, which has had a significant impact on inflation. However, whether these costs increases will be long-lasting largely depends on the persistence of the discrepancies. Shipping container costs have started to stabilise at elevated levels while some routes are still seeing rising costs.

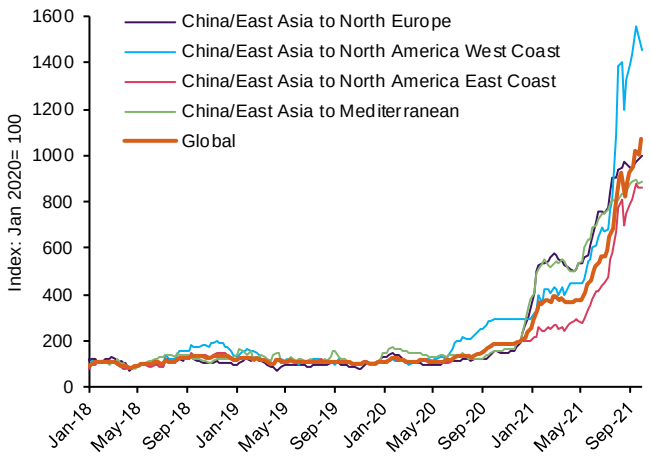
While the discrepancy in between the supply and demand for containers will eventually ease from currently elevated levels, it may require some time, likely well into 2022. Shipping costs may also normalise to a new equilibrium above 2019 levels without significant increase in shipping capacity in the medium term.

While the discrepancy in between the supply and demand for containers will eventually ease from currently elevated levels, it may require some time, likely well into 2022

In addition to boosting prices, limited capacity is leading to longer suppliers' delivery times globally. This has been more pronounced for DM than EM. Indeed the latest set of manufacturing PMI data suggests that the situation is unlikely to ease as we approach the holiday season, and thus is likely to last at least through Q1 of 2022, if not longer.

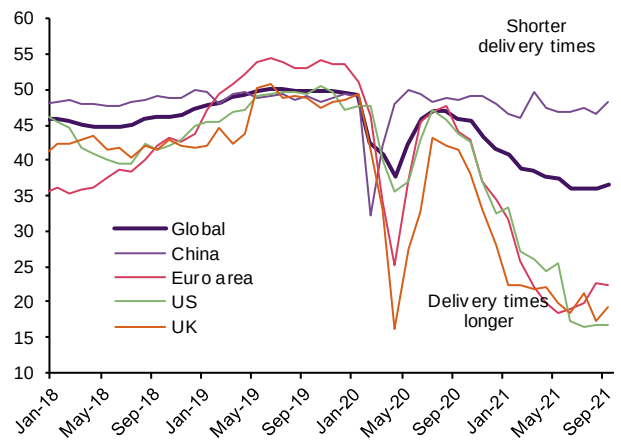
Shipping costs have surged

Source: Freightos Baltic Container Freight Rate, NatWest Markets ; Index: Jan 2020=100



Global PMI suppliers' delivery times remain long

Source: IHS Markit, NatWest Markets



Conclusion: Inflation risks will be higher for longer

Commodities and materials will ease sooner rather than later. Covid restrictions have continued to cause problems for material-exporters. As vaccination progresses, supply is likely to normalise. We are optimistic that that will mean early 2022.

Shipping is stabilising, but not normalising quickly. The covid-related component of port congestion may improve reasonably quickly. Some regions may struggle to add labour capacity to relieve that congestion rapidly, however. Demand for bulky imports is unlikely to drop away quickly. Neither is global shipping likely to be able to add substantial capacity to key routes fast. Shipping will clear, and prices may have peaked. But delivery reliability is still a question and high prices will be a persistent problem in 2022.

But labour markets will remain tighter for longer. DM employment seems to have made the easy recovery gains. Further progress toward pre-pandemic levels of employment will likely require both time and strong ongoing labour demand. We are optimistic that labour demand will close the gap, but some workers may need a clear wage signal. If retraining is required, firms will have to bear that cost. Productivity may lag. Otherwise, firms may conclude that poaching workers from the competition is a better strategy, implying some persistence in wage inflation. The cost may be a hit to productivity in either case.

The global microchip shortage will persist through 2022. Demand for microchips, including due to backlogs in production, will not be relieved by a global semi-conductor glut. The lead-time involved in reconfiguring and adding capacity is 2-3 years. That clock is running, but will continue to run for another year or more.

Fiscal Retrenchment vs. Consumer Savings

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Giovanni Zanni
Chief Euro Area Economist

Kevin Cummins
Chief US Economist

Household consumption will be supported by the normalisation of saving flows and a partial drawdown of the stock of savings accumulated during the pandemic. Excess savings can be viewed as a form of 'delayed' fiscal stimulus, the effect of which will be felt for many years to come.

The normalisation of the saving *flows* will boost consumption in the coming quarters. Private savings sky-rocketed during the pandemic. While many analyses focus on the *stock* of accumulated savings, the more powerful driver of consumption growth in the short-term is that of the *flow*: normalisation of the saving rate over the coming quarters will impart a significant boost, worth up to 5 or 6 percentage points of consumption over the next two years.

In addition, drawdowns from the accumulated *stock* of savings will also have some impact on consumption over the next few years. Estimates of the drawdown are large – between 'close to 0%' and 40% of the total accrued sums. Based on survey data and consumer behaviour since the re-opening of economies, we retain a 20% overall drawdown assumption over the next two-to-three years.

The savings-fiscal nexus lessens the 'fiscal cliff'. Fears of a 'fiscal cliff' causing an abrupt slowdown in growth from 2022 appear to be exaggerated. We believe it is more insightful to view actual and prospective fiscal policy tightening measures alongside the build-up of savings stocks during the pandemic. These 'excess' savings reflect in part previous fiscal stimulus measures. The normalisation that we expect in the coming years should be seen as the delayed deployment of part of the pandemic fiscal stimulus. While the mechanistic accounting of the fiscal impulse points to a move from expansionary to restrictive fiscal policy, the pandemic boost will in reality continue to exert its effects for many years to come.

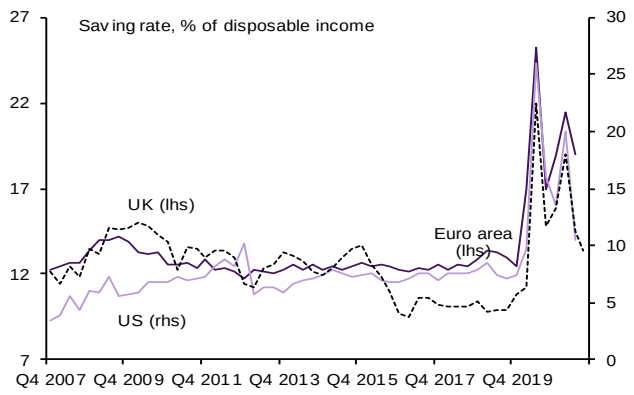
All you ever wanted to know about savings but were afraid to ask

Private savings skyrocketed during the pandemic in all major advanced economies. This largely reflected a drop in consumption due to the suppression of spending opportunities – while at the same time income levels were preserved by large fiscal transfers. The latter was sufficient to keep disposable income flat or thereabouts in the euro area and in the UK. In the US, fiscal transfers even provided an additional income boost to households.

Overall, 'excess savings' – i.e. the accumulated savings above pre-pandemic trends – amount so far to around 10% of GDP and 15% of disposable income in the US, and to around 6-7pp of GDP and 10% of disposable income in the euro area and the UK. With the saving ratio still not fully back to its long-term level, excess savings are still increasing (e.g. The most recent data point, US Q3 saving rate, stands at 9.6%: still more than 2pp above its long term rate).

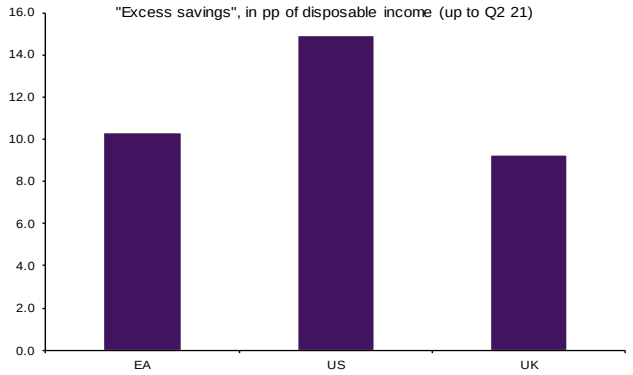
Saving ratios have shot up during the pandemic and are still above their pre-pandemic values

Source: Datastream, NatWest Markets
Data for euro area and UK: up to Q2; for US: up to Q3



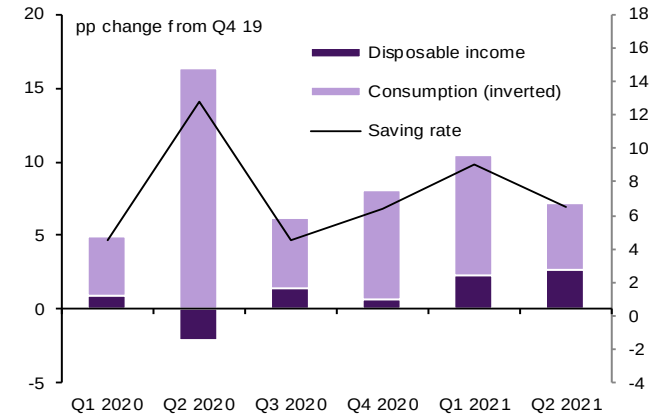
Excess savings so far larger in the US – thanks also to more aggressive policy support in 2020

Source: Datastream, NatWest Markets estimates



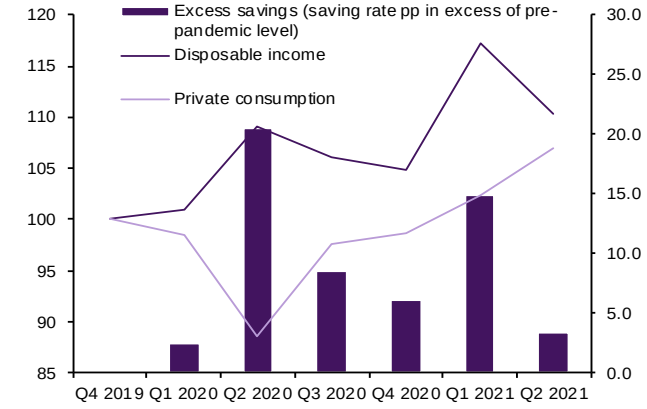
Two ways of looking at the same thing in the euro area and in the US: savings driven higher by low consumption…

Source: Eurostat, NatWest Markets



… despite broadly stable (in the euro area) or even rising (in the US) disposable income

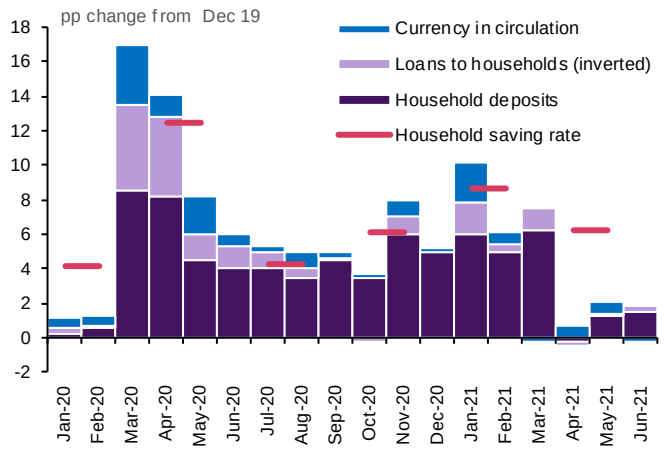
Source: Datastream, NatWest Markets



Savings largely parked in short-term, liquid, instruments: mostly bank deposits. Over the past 1½ year, euro area households and non-financial companies' deposits have risen by around €1.5 trillion – double the increase recorded in the previous 18 months. Some of this liquidity is bound to be reabsorbed as normalisation brings a renewed growth in consumption and investment. The slowdown in the growth of deposits and the fall in the saving rate are a first sign of the coming inversion of the dynamics that have accompanied the pandemic so far.

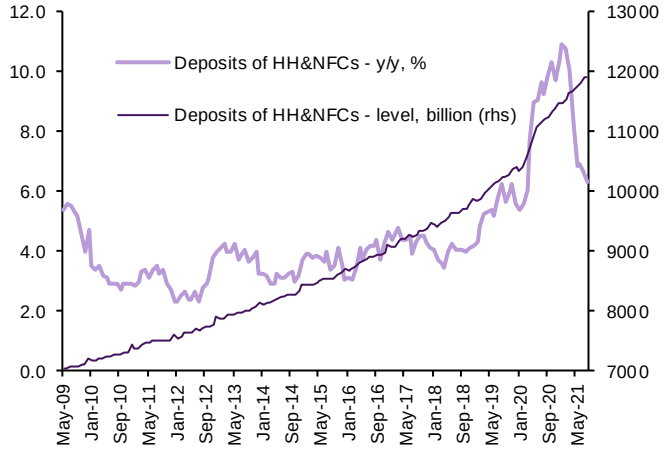
Euro area households' savings mainly in liquid form

Source: Eurostat, ECB, NatWest Markets



Normalisation in progress: deposit growth slowing

Source: Eurostat, ECB, NatWest Markets
HH: households NFCs: Non-Financial Corporates



Post-pandemic normalisation – how much can it boost growth?

Saving ratios are still above their pre-pandemic levels. Given that the increase was driven by the inability to consume (essentially "forced" savings on services consumption) it is likely that patterns will normalise once the pandemic is over.

This is probably the least controversial part of the story: with saving rates still 2-3 (in the US) and 5-6 (in the UK and the euro area) percentage points above their pre-pandemic levels, it is reasonable to assume a boost to consumption from the normalisation of this *flow* by, say, end-2022 – for a matching amount in each region.

With saving rates still 2-3 (in the US) and 5-6 (in the UK and the euro area) percentage points above their pre-pandemic levels, it is reasonable to assume a boost to consumption

On the other hand, how much the *stock* component – the excess savings accumulated during the pandemic – will filter through to consumption of goods and services is much more contentious.

Factors suggesting little spending propensity out of accumulated extra savings:

- **Likely low consumption propensities given the unequal distribution of excess savings.** High-income households have seen their savings rise much more than low-income ones. The former have also a low marginal propensity to consume and as such will tend to retain their excess savings stock.

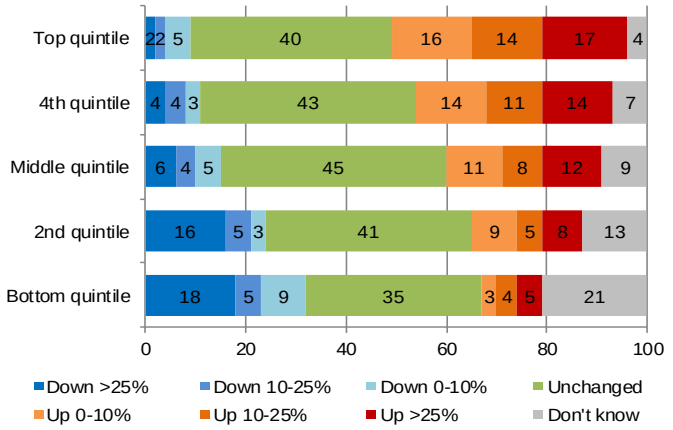
  In the UK, a recent survey by the Resolution Foundation found that almost one-third of the lowest-income quintile saw *a fall* in savings during the pandemic vs just 12% who reported a rise (see chart below). For the next lowest income quintile, 25% reduced savings vs 22% increased them, suggesting a broadly neutral savings effect for this cohort. Whilst the build-up in savings is most marked in the highest income quintile, the survey suggests the middle and 4th quintiles also saw sizeable savings increases – so we would expect a non-negligible percentage of this savings stock to be spent.

  Where will the money be spent? A recent BoE/NMG survey reported that 27% of respondents planned to spend their savings on consumer goods and services with a further 10% planning to spend on home improvements – up from 10 and 8%, respectively, late last year (see chart below). Similar dynamics apply to the US or the euro area.

- **The so-called 'Ricardian equivalence' – whereby consumers assume that high public debts imply future taxes on their incomes – also suggests some limitation in the drawdown of excess savings for consumption.** The support provided to households during the pandemic led to a strong dissaving in the public sector and an associated increase in public deficits and debt. Households may expect tax rises aimed at reducing the public debt accrued during the pandemic and aren't inclined to consume their accumulated excess savings.

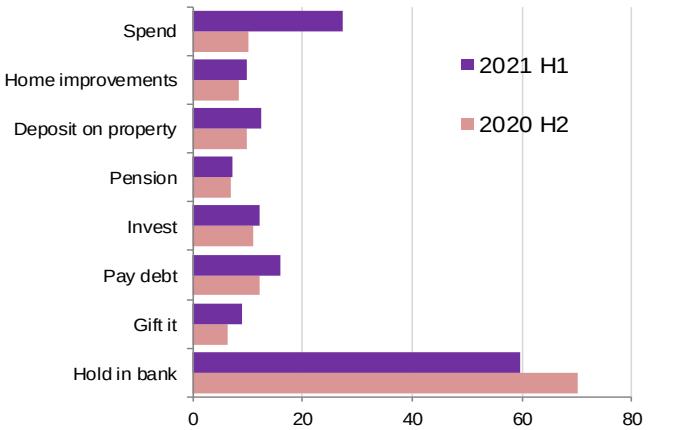
UK savings stock distribution, %

Source: Resolution Foundation, NatWest Markets



UK households' planned use of savings, %

Source: BoE/NMG, NatWest Markets



- **Households may also use part of their accumulated savings to repay debt or to invest in assets.** In the US, the Federal Reserve Bank of New York's Survey of Consumer Expectations suggested that most of the funds received by households in the form of stimulus cheques would go towards savings (41%) and debt payments (34%), while only about 25% would be used for consumption. In the UK, the most recent BoE/NMG survey reported that 16% of respondents intended to repay debt with their accumulated savings with 20% intending to invest the money (including topping-up pensions).

The Bundesbank did a survey earlier this year and came out with estimates ranging between 25 and 35% of drawdown of the accumulated savings by German households, on the back of the answers from the interviewees (see box p.25 in their report). The rest of the stock of savings is instead dedicated to pay off debts, invest in financial assets – or remain in bank accounts.

Overall, the bulk of surveys across advanced economies point to a ¼ or more of spending from the accumulated savings, over a period of time… but there are also other, more extreme, views. An article from Vox argued last year that (US) excess savings were, actually… not excessive, and as such implicitly suggesting a consumption propensity similar to that of financial wealth (i.e. less than 5%).

Factors pushing for higher consumption rate out of accumulated savings

- **Savings during the pandemic were largely involuntary (i.e. forced).** Many types of consumption were unavailable (e.g. hospitality and travel). Moreover, furloughs and other job supports not only provided immediate compensation for the loss of labour income, but also contributed to containing the risk of future loss of income and hence the need for precautionary savings. **This argues for a broad normalisation of savings patterns once consumption options (travel, etc.) are available again.**

- **Being held mostly in liquid assets, savings can be spent easily, funding pent-up demand and the recovery in private consumption.**

Spending intentions tend to increase as the risk perceptions recede

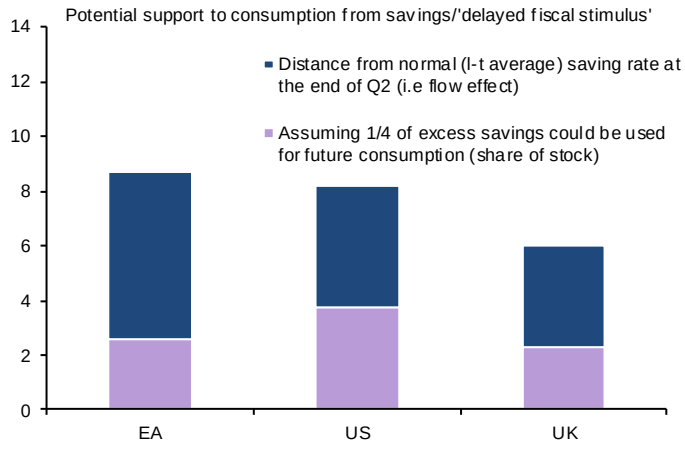
- **Spending intentions tend to increase as the risk perceptions recede.** It is worth noting – in the chart above on UK spending intentions – the evolution of spending intentions from last year: the "spend it"+"home improvements" share has increased noticeably, supporting the view of a progressive drawdown as the pandemic loses steam.

Overall, how much of the extra savings will be drawn down and in what period of time remains speculative. However, a reduction of 20% of the excess savings over a period of 2-to-3 years seems to us a realistic working central scenario, in light of the discussions, surveys and studies above. In addition to the normalisation of the consumption propensity out of disposable income, this should provide an extra boost to consumption of between 6 and 8 percentage points between now and end 2023, according to our estimates (see chart below for the projections in the various regions). The dynamics we assume imply both a return to the pre-pandemic saving rate, and even a period of below trend savings (the drawdown part, as we illustrate for the euro area in the chart below).

A reduction of 20% of the excess savings over a period of 2-to-3 years should provide an extra boost to consumption of between 6 and 8 percentage points between now and end 2023

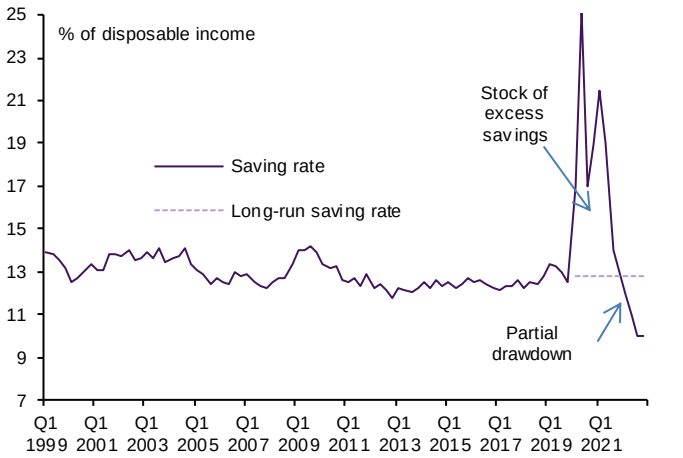
A scenario for the effective support to consumption in the 2-3 years ahead

Source: NatWest Markets



Possible dynamics of the saving ratio in line with our central scenario – an illustration for the euro area

Source: Eurostat, NatWest Markets



The fiscal-savings nexus

Relation with the fiscal cycle is the last crucial aspect of the current episode of savings accumulation we want to address in this note. Fiscal support has been extreme in 2020 (and 2021). For 2022 and 2023, the so-called 'fiscal impulse' – the change in the structural budget balance – point to a fiscal *retrenchment* instead. In the case of the US, for example, the structural balance is expected to move from -11% in 2020 to -7% in 2023. In the euro area, the structural deficit is expected to fall by around 2pp – from -4.5 % to -2.5% of GDP. Many have pointed out the risk of such a 'fiscal cliff', while economies haven't still fully recovered from the pandemic. However, as Fed's Clarida pointed out in a recent speech, the assessment of the fiscal position must include the savings accumulation episode:

> *"I judge that the support to aggregate demand from fiscal policy—**including the nearly $2 trillion in accumulated excess savings accruing from (as yet) unspent transfer payments**—(…), can fully offset the constraint (…) that the ELB imposes on the ability of an inflation-targeting monetary policy, acting on its own and in the absence of sufficient fiscal support, to restore (…) maximum employment and price stability".*

The contemporaneous relation between fiscal policy and economic activity is less telling than usual in the current crisis: some inverse relation between the saving rate and the government budget balance is normal (see chart overleaf), but it is particularly clear in this crisis that the fiscal boost of 2020 wasn't all spent the year it was disbursed, and largely for reasons independent of the will of households and companies, as we have explained. In other words, the recent fiscal boost is still 'in the system', ready to be deployed by households (and firms) as the pandemic situation improves further. As such, its impact too is delayed: **the current high saving ratio can be interpreted as a deferred form of fiscal support, with enough firepower to negate the (only apparent) 'fiscal cliff' that stands in front of us.**

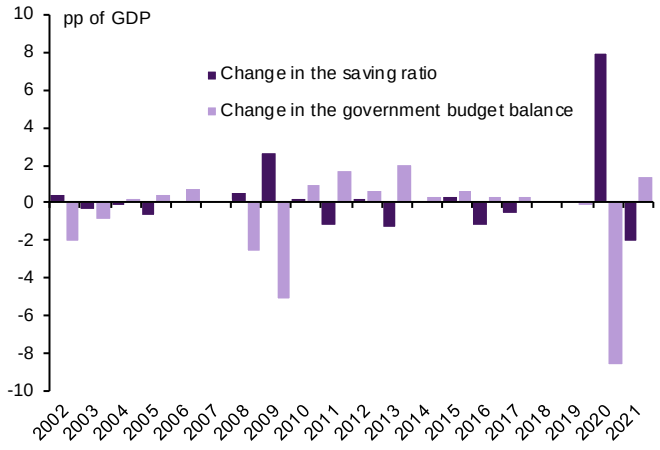
The current high saving ratio can be interpreted as a deferred form of fiscal support, with enough firepower to negate the (only apparent) 'fiscal cliff' that stands in front of us

In the case of the euro area, there is also an additional boost (not recorded in national deficit measures) coming from the support provided by the EU Recovery fund (see chart below).

The fiscal retrenchment is largely 'apparent', we believe, because of the lagged effect of savings as discussed above, but also as it stems mainly from the end of temporary fiscal support linked to the (also temporary) lack of activity created by the pandemic. Also, as the recent UK Budget session illustrates, governments are using some of the undershoot in borrowing in 2021, re-cycling it into additional stimulus in the following two years. The UK 'fiscal impulse' (i.e., the *change* in the structural deficit) inevitably diminishes when benchmarking against the historically-proportioned stimulus of 2020-21 FY, but from any conventional perspective UK fiscal policy is set to remain accommodative – and may yet become more expansionary as the next election approaches (by spring 2024).

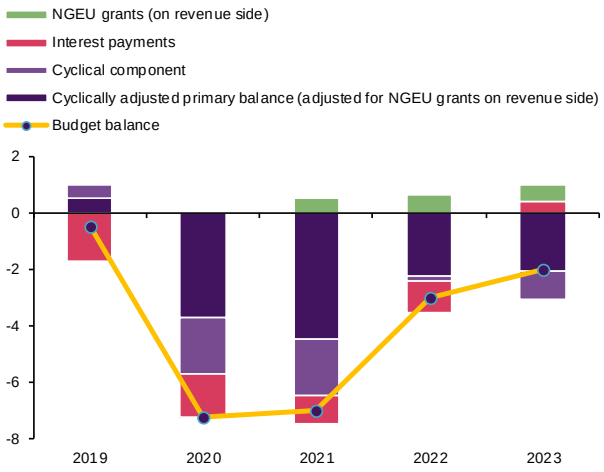
Fiscal-savings nexus: one goes up when the other goes down (especially in the current crisis with forced savings)

Source: IMF, NatWest Markets Unweighted average of US, UK and euro area



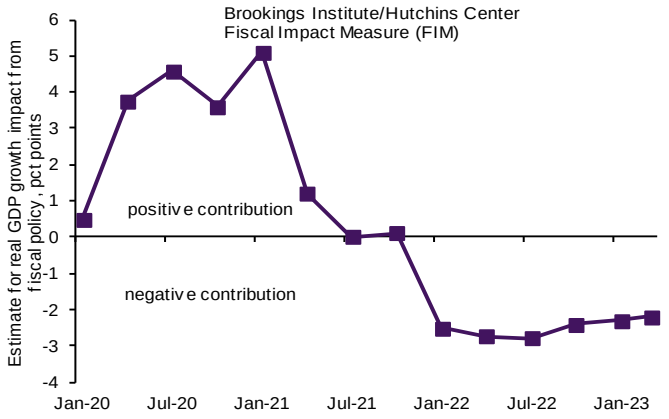
Euro area fiscal position, including the supporting impact of the Next Generation EU (NGEU) Fund

Source: ECB, NatWest Markets



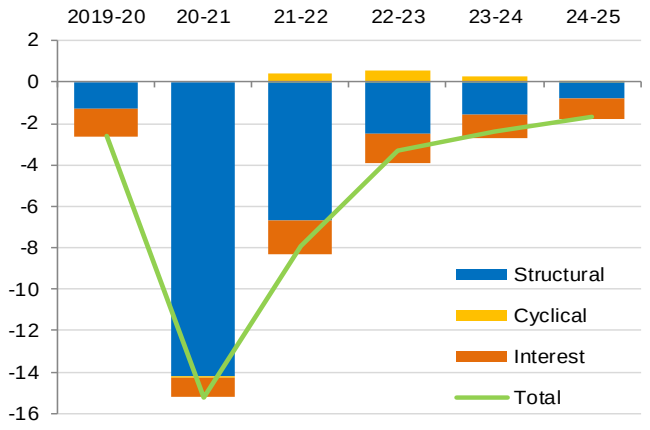
US: Fiscal policy will subtract from GDP growth but the magnitude is unclear and doesn't count the savings effect

Source: Brookings Institute, NatWest Markets[1]



UK fiscal position, % of GDP

Source: UK OBR, NatWest Markets



For the US, we expect a halving of the 2022 deficit relative to 2021: falling to $1.5 trillion (6.2% of GDP) from $2.7 trillion (12.4% of GDP), with the plunge reflecting the extent to which covid-related stimulus fades. The Fiscal Impact Measure (FIM) swings negative as the effects of fiscal stimulus fade (see chart above). However, the FIM forecast does not assume any additional legislation from Congress in 2021. Moreover, that expected 6.2% of GDP reduction in the budget deficit over exaggerates the impact on the economy after allowing for cyclicality and the lagged impact on consumer spending of earlier stimulus payments and build up in excess savings. While the trajectory of fiscal stimulus is clear, the exact magnitude and timing is not.

Bottom line – the fiscal cliff is a lot less frightening that it appears: because of the lagged impact of the fiscal support embodied by the accumulated excess savings; because some of the fiscal support is just not needed anymore in a fully functioning economy freed from (pandemic) restrictions; and, finally, because governments are using the better tax receipts to soften the cliff.

[1] *The FIM is a gauge of the contributions of federal, state and local fiscal policy to near-term changes in GDP. When the FIM is positive, the government is boosting the growth of GDP and when it is negative it is restraining it. It measures only the direct impacts of fiscal policy on demand; it does not include multipliers nor does it include any supply-side effects, such as the possibility that enhanced unemployment benefits are impeding labour supply or that the vaccine rollout is increasing economic activity.*

Changing Central Bank Reaction Functions

The covid pandemic accelerated change in nearly all aspects of life, from the personal and professional all the way up to markets and economies. When so much else has changed it is reasonable to ask to what degree central bank reaction functions have permanently shifted and what is the implication of these changes for economies and markets going forward?

In this section we examine this question for the Fed, the Bank of England, and the ECB.

We conclude:

The Fed may have already been on a shift towards more dovish policy, but the pandemic accelerated that along both "traditional" monetary policy lines, and along social lines. Still, the inflationary outlook means even with an expected late 2022 lift-off, they may find themselves behind the curve, necessitating a steeper path and higher terminal rate than expected.

The pandemic was the biggest of a long series of big steps in the ECB's decade-long dovish conversion. Its approach to inflation is different to that of the Fed, however. And in building out ambition beyond the control of inflation, it is looking for its role in social and "green" goals.

Bank of England rate rises are imminent but the underlying reaction function remains unclear: the extent to which the MPC would be prepared to depress the domestic economy in order to arithmetically offset an external cost shock.

The Federal Reserve – FAITed to be dovish? Not necessarily.

In August 2020, the Federal Reserve announced a new approach to monetary policy called Flexible Average Inflation Targeting (FAIT). Previously, the Fed sought to return inflation to 2% and would tighten policy early as inflation rose toward that target in order to prevent an overshoot. Under FAIT, by contrast, the Fed may not tighten policy before or even after inflation reaches that target because it is now seeking an *average* of 2% inflation over time. This change introduces more flexibility to the inflation side of the Fed's dual mandate, allowing it to push the envelope further on its employment mandate, since there is normally seen to be a trade-off between the two, but the nature of that trade-off is uncertain.

At the time of FAIT's announcement, US unemployment stood at 8.4% and the cumulative inflation shortfall compared to the 2% target over five, and even fifteen years, was wide. So this was, at that moment, a clear dovish shift from the Fed. The unemployment rate is now 5.2%, which is still well above the previous cycle low and most estimates of the level at which inflation is likely to accelerate more quickly, so we expect the Fed to continue to err dovishly in policy – we project a first rate hike in December of 2022. But whether FAIT constitutes a *permanently* dovish shift is debatable. The chart below shows that the Fed has made up for past inflation shortfalls over several time periods, and given we see headline inflation above 2.5% through 2022, the longer term gaps will be further reduced and potentially closed.

John Briggs
Global Head of Desk Strategy

Ross Walker
Co-Head of Global Economics & Chief UK Economist

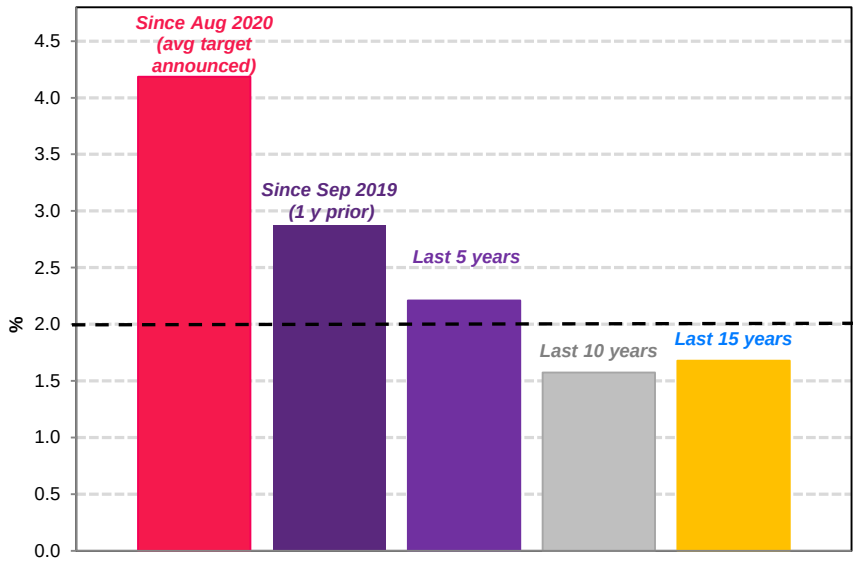
Kevin Cummins
Chief US Economist

Giles Gale
Head of European Rates Strategy

Giovanni Zanni
Chief Euro Area Economist

Average headline PCE

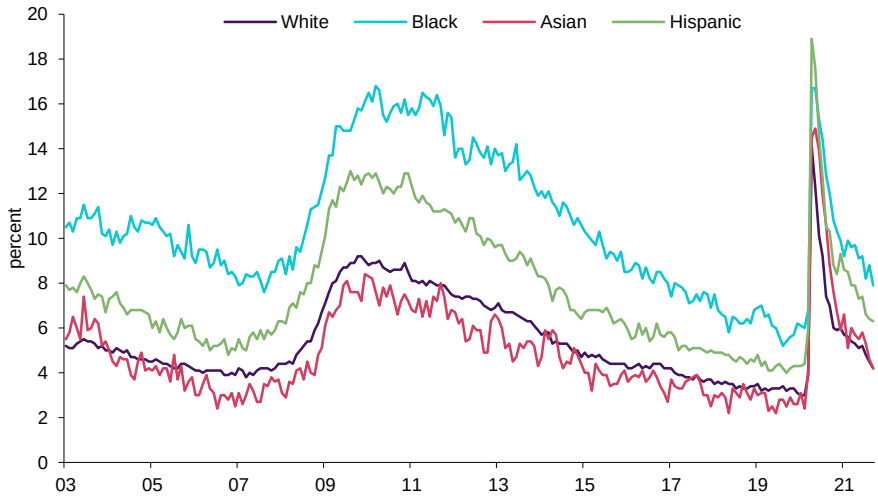
Source: BEA, Natwest Markets, Gavekal Research



Clearly the case for holding back on monetary tightening in order to raise inflation is weak, given that high inflation through 2021 has comfortably made up for accumulated shortfalls in inflation over any reasonable look-back period. This suggests that, as employment falls to full employment, the Fed may raise rates following a similar pattern to its behaviour in the past.

Unemployment rate by demographic

Source: BLS, NatWest Markets



So while originally a dovish change to the reaction function, we believe FAIT does not imply a dovish stance over the whole cycle. Averaging inflation suggests that longer, more dovish periods may need to be offset by longer, more hawkish periods. That is, by keeping rates lower for longer, allowing the economy to run hot and encouraging inflation to build up early in the business cycle they may be forced to work harder to cool the economy off later in the cycle to work off excess inflation potentially accumulated over a number of years.

While originally a dovish change to the reaction function, we believe FAIT does not imply a dovish stance over the whole cycle

However FAIT is not operating alone. Over the last year or so the Fed has also increasingly focused on social issues, specifically broadening its employment mandate to not just include the overall unemployment rate, but also unemployment at the level of various demographics. Some of those demographics have a long way to go to full employment, as shown in the chart above.

Fed Governor Brainard lays out the Fed's approach clearly:

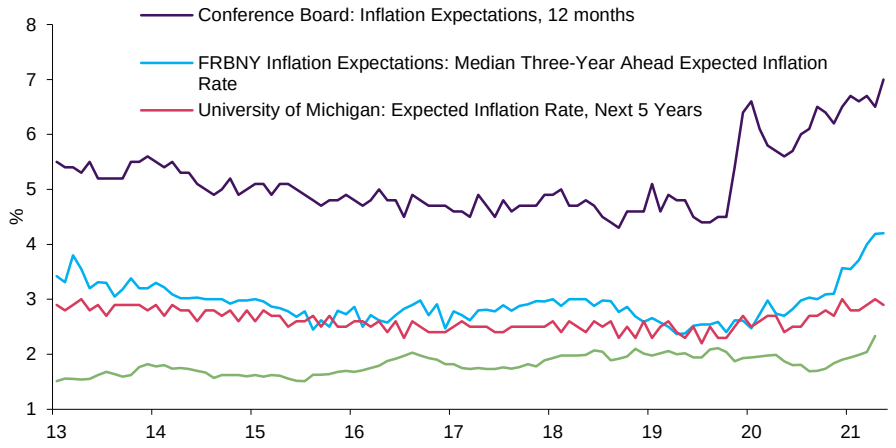
> *"For nearly four decades, monetary policy was guided by a strong presumption that accommodation should be reduced pre-emptively when the unemployment rate nears its normal rate in anticipation that high inflation would otherwise soon follow. But changes in economic relationships over the past decade have led trend inflation to run persistently somewhat below target and inflation to be relatively insensitive to resource utilization.* ***With these changes, our new monetary policy framework recognizes that removing accommodation pre-emptively as headline unemployment reaches low levels in anticipation of inflationary pressures that may not materialize may result in an unwarranted loss of opportunity for many Americans. It may curtail progress for racial and ethnic groups that have faced systemic challenges in the labour force, which is particularly salient in light of recent research indicating that additional labour market tightening is especially beneficial for these groups*** *when it occurs in already tight labour markets, compared with earlier in the labour market cycle. Instead, the shortfalls approach means that the labour market will be able to continue to improve absent high inflationary pressures or an unmooring of inflation expectations to the upside."* – Fed Governor Brainard speech "*How Should We Think about Full Employment in the Federal Reserve's Dual Mandate?* (link), February 24th, 2021 (our emphasis)

Indeed, there is a lot of evidence that the pandemic pushed the Fed further away from its new social goal, given the adverse impact on many demographic groups, notably minorities and women (for more, see Centre for American Progress on the impact on minorities, and McKinsey on the impact on female employment). Thus, as long as inflation expectations remain anchored, the Fed will look beyond the headline rate and seek to lower the unemployment rate across many demographics. And as the chart below shows, broadly, inflation expectations have remained anchored, though recent increases in both spot inflation and inflation expectations mean that the Fed is facing significant upside risks.

There is a lot of evidence that the pandemic pushed the Fed further away from its new social goal, given the adverse impact on many demographic groups

Various measures of inflation expectations

Source: Conference Board, FRB New York, University of Michigan, FRB Dallas



As long as inflation expectations remain anchored, the combination of FAIT and the social aspect of the Fed's employment goal results in a more dovish Fed post-pandemic versus pre-pandemic, on a *long term* basis. However if inflation expectations do begin to rise more broadly or spot inflation pressures continue *in the near term*, which we see as likely in 2022, we expect to see the Fed turn to a more traditional reaction function.

The implication of this for asset prices and markets is if inflation and in turn inflation expectations continue to rise and the market may determine that the Fed is meaningfully behind the curve. **In fact, this is our baseline for late 2022 and into 2023: With core inflation expected to bottom near 2.9% y/y next year, the Fed risks being forced to raise rates more aggressively to "catch-up". Thus, the terminal funds may be rate higher than we have experienced of late (i.e. 3%).**

If inflation and in turn inflation expectations continue to rise and the market may determine that the Fed is meaningfully behind the curve

For the USD this *ceteris paribus* is one of USD strength. The Federal Reserve is among the central banks that we see as vulnerable to having tightening expectations both increased and pulled forward in 2022, which can benefit the USD. More broadly, the uncertainty surrounding the timing and speed of the Fed's imminent tightening cycle can fuel wider developed market interest rate volatility that is expected to benefit the safe-haven USD.

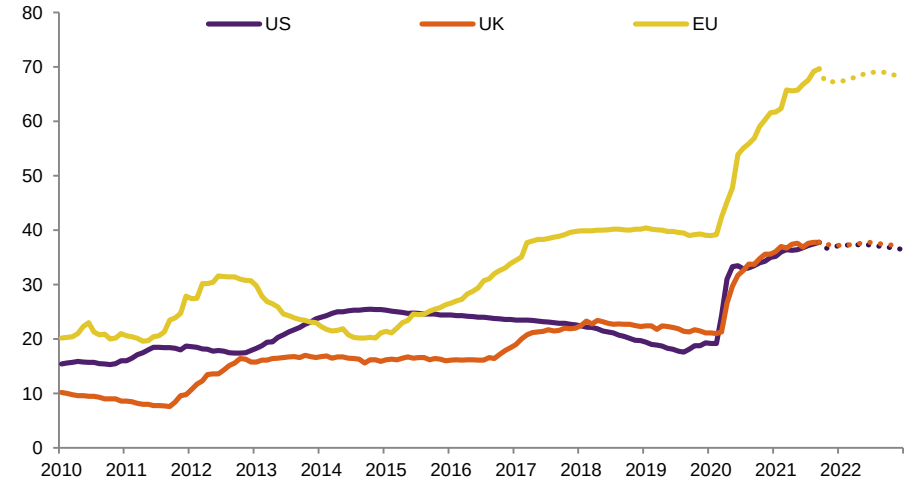
For rates, it could mean a steeper curve if accompanied an inflation rate that fails to fall back toward the Fed's 2% target as currently expected, pulled by expectations and more normal growth rates, and/or if the Fed loses its inflation fighting credibility. Alternatively though, it may imply a flatter curve if and when the Fed begins to hike aggressively. The timing of the Fed matters for the curve, in other words. But overall we are likely to see higher rates across the curve in either case.

Overall we are likely to see higher rates across the US curve

For risk assets, this could be a volatile period, with the level of vulnerability depending on the total measure of monetary tightening to be required to bring inflation and policy back into balance. The downside for risk assets more broadly may be limited however by the ongoing (albeit not increasing) large size of central bank balance sheets.

Central bank balance sheets as a % of GDP

Source: Bloomberg, NatWest Markets



Just how much a much more aggressive reaction to bring inflation back into check plays out depends on how far the Fed pushes the employment envelope given the inflation backdrop. For sure, FAIT and the new social aspect of the employment

mandate can create great societal gains, but it is a fine line to walk with risks to the overall economy if the inflation mandate is not handled appropriately as well.

The ECB – Symmetric, Holistic, Persistent … and Sustainable

The ECB culminated a decade-long dovish shift with its Strategy Review in July. Although well known to ECB-watchers by now, the main changes for the monetary policy reaction function are worth repeating:

(i) A new target of 2% for the y/y rate

(ii) The promise of a symmetrical response around that target

(iii) Particular attention to the existence of a lower bound for policy rates, for the first time explicitly recognised as a major constraint to policy

(iv) Assessment of financial conditions is now of fundamental importance. The new strategy explicitly elevates *'financial analysis'*, i.e. *'monetary and financial indicators, with a focus on the operation of the monetary transmission mechanism'* to the regular assessment alongside the economic and monetary analyses.

The reaction function is currently dominated by the imperative to escape the effective lower bound (ELB). The long period of sub trend inflation meant that very low inflation expectations risked becoming entrenched in a Japan-style low-inflation trap. The mistakes of the past, including as recently as 2019 when QE was ended as growth slowed, loom large. The response is essentially a stronger commitment to be dovish-for-longer.

The Strategy Review uses the slightly confusing formulation to describe this ELB-escape strategy, calling for *'especially forceful or persistent'* policy. In practice we have a mix of the two. (The *'or'* most likely addresses the legal need to observe proportionality: force is only justified temporarily.) Although it came before formally unveiling the Strategy Review, the PEPP acceleration in March 2021 could be viewed as reasonable force in reacting against perceived growth risks at the time. But it is persistence that really makes the difference now.

For practical purposes, persistence means the ECB needs *more confidence* that inflation will both reach target and stay there before shifting hawkishly. It is no longer enough for the central projection for inflation to reach target at some distant horizon, there have been too many disappointments. The hurdle now is for inflation to be on track to hit 2% *'well ahead'* of the projections horizon (i.e. between 12 and 18 months), along with strong evidence that it will stabilise at that rate.

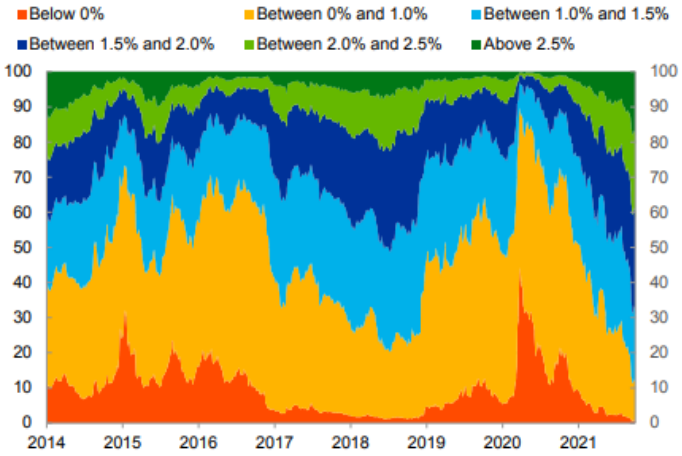
For practical purposes, persistence means the ECB needs more confidence that inflation will both reach target and stay there before shifting hawkishly

The Philips Curve is still the key framework for the ECB when it comes to the economic assessment. But like the Fed, it is paying more attention to the fact that its shape is uncertain. Other factors also matter, however. Inflation expectations and the output gap are the cornerstones of inflation forecasting at all major central banks and the ECB is no different. Because inflation expectations have slipped, partly because of a series of shocks as the ECB's official history of the low inflation period, 2013-19 (hopefully RIP) makes clear, caution means gently rebuilding expectations through higher inflation outcomes. The bottom line is that forecasting will be largely determined by the growth outlook, but the presumption will be to assume economic slack is larger than in the past. The assumption that high inflation is transitory will not be given up easily. Significant weight will be given to inflation outcomes, but even a reasonably persistent overshoot is likely to be seen as helpful in reanchoring inflation expectations.

Higher inflation is still well short of the standard required to lift rates from the lower bound. Inflation is now rising quickly and the point has not been missed by ECB speakers. The chart below-left is an ECB staple. It illustrates that markets now price a much more symmetrical skew around the inflation target over the next five years. But it is equally clear that the 'transitory' narrative is still dominant. Most professional forecasts (the ECB's included) see inflation declining again and taking a long time to get back to target. Meanwhile, the simple test that 'realised progress in underlying inflation is sufficiently advanced to be consistent' doesn't appear to be met at this point (core, PCCI etc.). Policy rates are likely to stay low for a long time to come – most likely until well into 2023 at least.

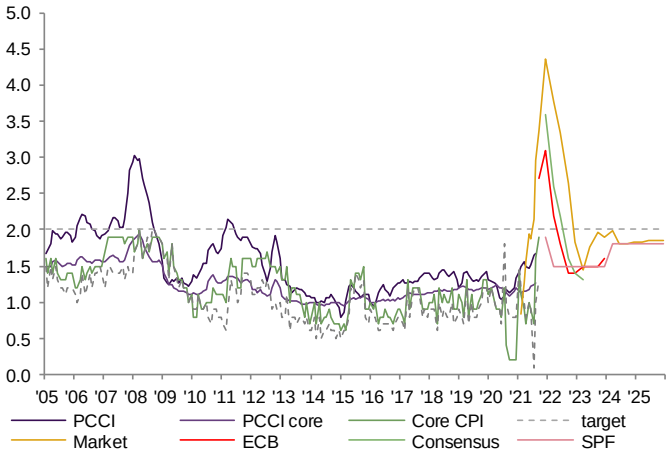
The market-based skew of inflation risks has become much more balanced around 2%: 60% prob that average inflation over 5 years will be below target.

Source: ECB, 7th of October, 2021



Still a significant gap to fill before inflation hits 2% 'well in advance' of the forecast horizon and sticks there

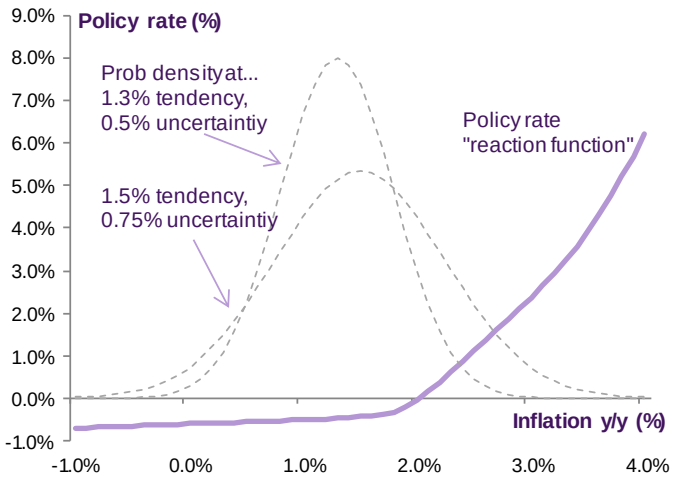
Source: NatWest Markets , Bloomberg, ECB



Market rates should not reflect an ECB 'base case', for nonlinearity matters. Because ECB rates are bounded on the low side at (or close to) current levels, and the 'ELB-escape' reaction function is clearly nonlinear, it is important to consider the average ECB response over a number of possible inflation paths. The chart below does that.

If the ECB reaction function is nonlinear in near-future inflation expectations or similar (purple line illustration) …

Source: NatWest Markets



… What average policy rate would it imply today? A little more uncertainty is as significant as a higher trend

Source: NatWest Markets

uncertainty \ Inflation's central trend	0.75%	1.00%	1.25%	**1.50%**	1.75%	2.00%
0.1%	-0.53%	-0.50%	-0.47%	**-0.43%**	-0.33%	-0.02%
0.2%	-0.53%	-0.50%	-0.47%	**-0.42%**	-0.28%	0.03%
0.3%	-0.53%	-0.50%	-0.46%	**-0.38%**	-0.21%	0.10%
0.4%	-0.52%	-0.49%	-0.43%	**-0.33%**	-0.14%	0.18%
0.5%	-0.52%	-0.47%	-0.40%	**-0.27%**	-0.05%	0.27%
0.6%	-0.50%	-0.44%	-0.35%	**-0.19%**	0.04%	0.36%
0.7%	-0.48%	-0.40%	-0.29%	**-0.12%**	0.13%	0.45%
0.8%	-0.44%	-0.35%	-0.22%	**-0.03%**	0.21%	0.53%
0.9%	-0.39%	-0.29%	-0.15%	**0.05%**	0.30%	0.60%

For 2022 however, the QE reaction function is more important than rates right now. After seven years and €4.5tn (give or take) of QE, the way QE ends will shape the outlook for asset prices into 2022 and beyond.

QE's persistence is bound to a similar reaction function by the promise that it will continue until 'shortly before' rates begin to rise. The idea that after all this time, higher rates might be so distressing for sovereign spreads that they will need to be covered by some level of QE is an appealing one, and we have some sympathy. Nonetheless, this 'sequencing' has been a key feature of forward guidance since early 2016 and we don't think the ECB will consider backing down on it for two reasons. First, forward guidance, although only an 'expectation', is a serious engagement if the ECB wants it to be a credible potential future tool. More tactically, the hawks - who might like higher rates - view QE as a greater abomination.

But the elevation of financial stability to the fundamental analysis alongside monetary and economic conditions also matters. Playing tough with moral hazard has not been a successful experiment – the short term pain too easily becomes long term and even risks breaking the whole machine. So the more moderate idea that the Eurosystem has a key (perhaps *the* key) role in ensuring reasonably homogeneous financial conditions across the euro area has been adopted. Financial 'fragmentation' can happen in other ways, but in the past decade it has always started with sovereign spreads. It isn't hard to conclude that the ECB is going to pay a lot more attention to volatility in sovereign spreads in the years to come.

In practice this means flexibility and perhaps further 'innovation' is possible. It isn't inevitable that higher rates will be bad news for sovereign spreads or risk assets. If they come with higher nominal growth, debt sustainability won't be an urgent problem, especially if the ECB simply clarifies that the Eurosystem will maintain its government bond holdings for a long time to come (something we consider obvious). On the other hand, if nominal growth is very low, it is likely the ECB will be keeping rates low and possibly continuing QE any way. But higher rates might discourage the reach-for-yield that has supported sovereign spreads, not least via banks, and may also affect bank loan quality. So a substantial and flexible capacity to deal with sovereign spreads will be needed. The options are reasonably simple: Reinvestment of APP and PEPP holdings may be enough (annual redemptions for Italy might be around €100bn) to address spreads if managed flexibly.

It isn't inevitable that higher rates will be bad news for sovereign spreads or risk assets. If they come with higher nominal growth, debt sustainability won't be an urgent problem, especially if the ECB simply clarifies that the Eurosystem will maintain its government bond holdings for a long time to come

The EUR sentiment is likely to strengthen as QE slows and higher inflation becomes more established through the year, although this may build as theme only slowly. Short-rates will likely rise more slowly than markets currently expect. Significantly higher rates will be slow to come, both as the ECB tries to reanchor inflation expectations somewhat higher, and because the natural rate of interest is low. Until then curves are likely to remain relatively steep.

For sovereign spreads, asset purchases and low rates, as well as potential innovations down the road, will continue to be supportive even if the ECB does eventually exit its low rate policy. We expect similar for risk assets.

A sustainable central bank. The ECB Strategy Review committed to include climate change considerations in its monetary policy strategy, in line with its obligations under the EU Treaties. The ECB will be integrating climate risks in its models and assumptions that feed into its baseline macroeconomic projections, will be developing indicators on green financial instruments and improving the data and statistics related to climate change, as well as proposing and adopting EU disclosure regulation and climate stress-testing the Eurosystem balance sheet.

For bond markets, this means that they are currently in the process of assessing the pros/cons of market neutrality as a guiding principal for purchases and will make a proposal for alternative benchmarks (if any) in 2022, for CSPP only (not PSPP). The climate change centre will also be developing proposals to adapt the CSPP framework to include climate change considerations, with any changes to be adopted by 2022. It has also committed to consider how climate change risks are reflected in the collateral framework (changes to be implemented in 2022 and beyond if necessary), as well as supporting sustainable finance innovation, as it did recently by accepting sustainability-linked bonds as collateral.

Although some of the commitments so far are vague and subject to further work, the ECB has clearly made climate change a central pillar of its monetary policy decisions, and will incorporate it into macroeconomic projections and risk assessments going forwards. Such a commitment should support growth and innovations in the market in the future.

Although some of the commitments so far are vague and subject to further work, the ECB has clearly made climate change a central pillar of its monetary policy decisions

The Bank of England – I know you think you understand . . .

The BoE's reaction function was clear throughout the pandemic. Shaped, it would appear, by the experience of the Global Financial Crisis (GFC), the MPC opted to *'go big and go fast'* in the words of Governor Andrew Bailey: slashing Bank Rate to 0.10%, doubling QE purchases to £895bn and reviving lending support mechanisms (including substantial loan guarantees).

As the UK economy emerges from The Great Lockdown (TGL) the BoE's proclivity for accommodative policy settings has waned. Of course, policymakers everywhere will have to rein-in stimulus and remove emergency settings at some point. But the BoE's abrupt hawkish shift in autumn 2021 – what its Chief Economist describes as 'regime change' – suggests it will be something of an outlier among the world's major central banks (there are always exceptions to the rule and we do not regard recent policy tightening by Norges Bank or RBNZ as bellwethers for the Fed, ECB, BoJ etc.).

"I know you think you understand what you thought I said but I'm not sure you realise that what you heard is not what I meant." - Alan Greenspan

Huw Pill [BoE Chief Economist] said that since he joined the BoE in September there had been a "regime change" in monetary policy

The proximate trigger for this 'hawkish' shift by the BoE is overshooting inflation and the fear that UK inflation expectations will lose their 2% CPI anchor. In the early phases of the rise in inflation from its lockdown lows in autumn 2020, the BoE adopted an intentionally cautious/dovish stance. The asymmetric guidance was that the Bank would not contemplate policy tightening '*at least until there is clear evidence that significant progress is being made in eliminating spare capacity and achieving the 2% inflation target sustainably*.'

A combination of improving economic fundamentals (notably in the labour market) alongside higher-than-expected inflation saw that guidance being ditched unceremoniously in the autumn. The BoE opting not to raise rates in November 2021 had the immediate effect of (further) undermining its credibility in markets. Although this has fuelled near-term uncertainty around Bank Rate, the November *Monetary Policy Report (MPR)* was clear that rate rises are imminent.

The BoE's November 2021 *MPR* inflation forecast showed a slight undershoot of the 2% target at the 3-year forecast horizon – with Governor Bailey noting that an ongoing undershoot would be the most like path beyond that – but that was premised on a fairly rapid rise in Bank Rate to 1.0% by end-2022. In the absence of any rises in Bank Rate, inflation was projected to overshoot its target by ~60bp during the policy-relevant 2-3 year projection. In other words, modest Bank Rate rises are required, probably to ~0.75% over the next year.

Whilst the BoE's near-term signalling is unambiguously hawkish, their underlying reaction function remains much more uncertain. Specifically, whether the BoE's intention is to deliver some modest tightening to shore-up credibility and ensure inflation expectations remain anchored or, more ominously, whether they would be prepared to tighten policy more aggressively and persistently in order to bring inflation back to target, in effect weigh much more heavily on the domestic economy in order to arithmetically offset external cost pressures.

The awkward reality of the situation is that BoE Bank Rate rises will do nothing to lower natural gas prices or alleviate supply chain disruption (that is, address the principal sources of inflation). Moreover, with around 80% of the UK mortgage stock at fixed rates, even once Bank Rate rises are delivered there will be a delayed pass-through. This must create some risk of excessive policy tightening – the metaphorical 'pulling on a brick with a rubber band'.

Whilst the BoE's near-term signalling is unambiguously hawkish, their underlying reaction function remains much more uncertain

The crux of the problem is that the BoE's near-term policy shift has not been accompanied by greater clarity around how far the BoE is prepared to go. This increases uncertainty around medium-term policy but also raises the risk of either policy error or a materially weaker domestic economy. **So it is here that the future reaction function amongst the major central banks is most uncertain.**

The risk scenario is that the BoE adopts a sort of '1970s Bundesbank' mind set to tackle inflation – the proverbial sledgehammer to crack a nut – and, in the process, suffocates the nascent recovery. The BoE's incoming Chief Economist is an acolyte of Bundesbank hawk Otmar Issing and has talked openly of a 'regime change' at the Bank since his arrival in September.

The bulk of the inflation in the UK is being driven not by UK domestic demand – from a UK perspective, it is primarily an external cost shock. Of course, that external 'cost' shock has a 'demand' element, but it is hard to find compelling evidence of excessive demand in the UK economy.

It is not that a sustained overshoot in inflation would carry no risks. Rather, it is the haste with which the BoE seems to be reaching the conclusion that underlying inflation and inflation expectations are becoming dislodged.

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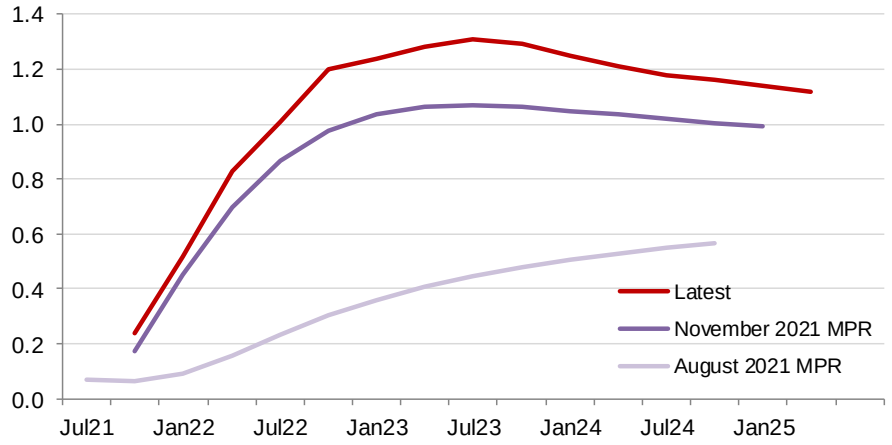
There are good reasons to believe that the underlying UK economy will, over time, become more 'inflationary' as a result of structural factors such as Brexit (which imposes barriers to the free flow of goods, services, capital and labour). Nevertheless, there does appear to be a risk that the Bank conflates such medium-term influences with more transitory factors such as commodity prices.

What do financial markets make of this? There are tentative signs of 'policy error' risk, with 3M LIBOR futures rates on a rising trajectory until autumn 2023 at which point rates then dip by around 10bp over the following year.

Bank of England interest rate expectations, %

Source: Bloomberg, BoE, NatWest Markets



Prior to the BoE's abrupt hawkish shift, 'policy error' discussions tended to focus on the US and were centred on the risks of excessive, politically-driven fiscal stimulus. The BoE, seemingly about to embark on multiple interest rate rises against the backdrop of soaring energy costs and tax rises, is the financial market guinea pig for pre-emptive monetary tightening. **If there is to be policy error, it is most likely to be made in Britain.**

If there is to be policy error, it is most likely to be made in Britain

For Sterling, the outlook can be seen as a balance between favourable moves in yields that play against a higher premium that includes policy mistake risks as well as the still uncertain impact that Brexit ultimately has on the economy. The BoE's decision to disappoint market pricing for a November rate hike shifts this balance more in favour of being positive for currency. It should also be seen in the context of UK assets remaining in demand given "cheap" valuations on a relative basis and better than average growth prospects. Sterling gains against the EUR are seen as more likely than against USD, at least initially, underpinned by our expectations for a stable to positive global risk outlook which is a likely necessary condition for strength.

China and Common Prosperity

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China's "Common Prosperity" policy will be a game changer, as it refocuses priorities away from breakneck market expansion towards a long-term goal of lowering domestic inequality.

The key takeaway is the government's willingness to tolerate lower levels of growth, which more broadly means that China will not be lending fresh impetus for a new commodity cycle.

Politics will matter even more for markets. Policy targets and regulation will be prioritised. But this will not imply a wholesale crackdown of markets; well-functioning markets are still viewed as a useful tool for allocating resources and encouraging innovation, but only to the extent that they align with the government's vision of the public good.

US-China Trade tensions will likely remain on the backburner, as the Biden administration focuses on the more technical aspects and plans at home over tariffs. Regional geopolitical tensions may fluctuate and generate headlines, but we do not expect open conflict.

Technology will remain a key theme, both for China's development policy and as the key source of US-China trade tensions. The push towards technological innovation and global competitiveness rules out a "decoupling" with the rest of the world. Persisting supply chain shortages will remain a boon to China's exports.

"Common Prosperity" is a game changer

China's Common Prosperity policy marks a paradigm shift, with its focus on narrowing inequality and overturning the prior 40-year consensus of rapid market expansion and "letting some people get rich first".

This is more than just political sloganeering, particularly as President Xi lines himself up for a third five-year term at the head of the country, Party, and military in October 2022. Politics and long-term policy targets matter in China, and we think there is very good reason for the government to deliver on the spirit of these politics.

This is more than just political sloganeering

The policy will be played out in the very long term – one of President Xi's speeches mentions broadening public services by 2035 as an initial target. Details still remain scant (and with Chinese policy having a history of incremental, rather than programmatic implementation), though recent speeches and documents have started to clarify thematic approaches. We identify several of the more tangible implications for 2022.

Four key policy implications

1) The era of backstopping GDP growth is over. The government will likely tolerate lower growth rates.

We think local government officials will no longer be pressured to achieve lofty GDP targets, and will be instead be incentivised to target a broader range of indicators to achieve "quality" growth. This was detailed earlier in March, as part of the government's 14th Five Year Plan. Crucially, this also means that the government will be willing to accept lower levels of growth.

The government will likely tolerate lower GDP growth. We see more downside risks in the near and medium term. As a result we expect minimal or no countercyclical policy intervention from local governments to "engineer a rebound" in real GDP. The read-through domestically is there will be an appetite to see housing price growth cool. While we do think that the credit impulse will rise after it was tightened too quickly in 2021, working in conjunction with infrastructure development to support growth, the *magnitude* of credit support will be smaller.

We see more downside risks in the near and medium term

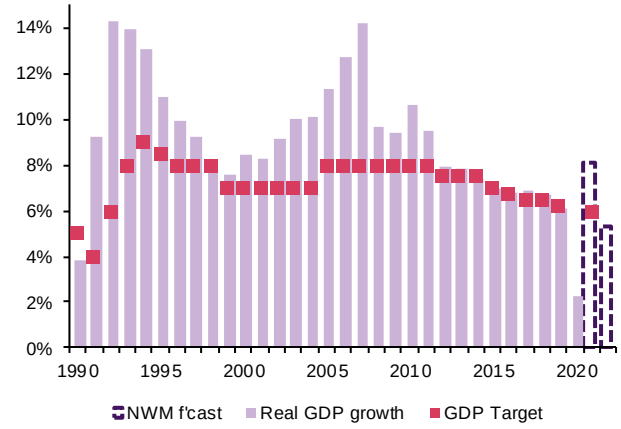
We expect growth targets to be set close to China's long-term potential growth rate of 5.0 – 5.5% in 2022, down from 6% in 2021. China's growth will likely settle well above the target of 6% in 2021 despite the slowdown to 4.9% in Q3, marginally below its long term potential growth rate. In 2022, we think that policy makers will still set a GDP target, but it will serve as guidance for macroeconomic policy coordination and a bottom for maintaining domestic economic stability (similar to this year's target), rather an ambitious target that might be difficult to achieve without policy intervention .

In the longer term, consumption by a rising middle class and higher manufacturing value-add should keep growth on the multi-year horizon well supported – a shift away from the debt-driven property and infrastructure investment of the past few decades

The policy outlook as growth falls will likely lean slightly dovish, with the PBoC's "prudent with an easing bias" policy stance to aid with a "soft landing". As a policy (but not growth) backstop, we think that the PBoC will continue to commit to preventing domestic growth risks from cascading to country or macro level risks (such as from the property sector). In terms of its policy tools, we think that the PBoC will continue to emphasise price-based policy measures (such as the 1y MLF and the LPRs) as the tools of monetary policy, rather than quantity-based tools such as the credit impulse or RRR.

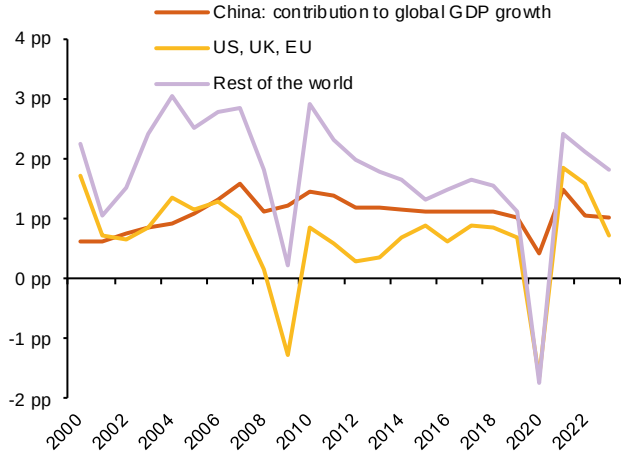
Real GDP growth will slow but remain above a looser target – and the government will tolerate lower growth rates.

Source: Bloomberg, NatWest Markets forecasts



China's contribution to global GDP growth is projected to fall below the joint US / UK / EU contribution for the first time in over a decade

Source: IMF forecasts, Haver, NatWest Markets



2) Politics will matter even more. Greater and more assertive state involvement in the economy in pursuit of policy targets is likely.

Headline political risks will persist. Further regulatory crackdowns are likely, much as how the tutoring, internet, entertainment and gaming sectors were targets in 2021. For 2022 and beyond, President Xi's speech also highlights cracking down on monopolies, as well as the "disorderly expansion of capital". We would not rule out continued risks for domestic markets, though would expect these to come with better signalling to the market.

Further regulatory crackdowns are likely…

But this doesn't suggest a wholesale crackdown on capital markets and foreign flows, nor a welfare state. The implication is that markets are still seen as the primary site for value creation, innovation, and raising productivity. The Common Prosperity policy foresees market activity generating wealth, with falling inequality coming from methods such as taxation (such as a property tax), a better social security system, the state provision of public services, and an increased focus on charitable organisations. There is pushback against notions of European welfarism – President Xi has stressed that the capitalist engine of hard work and innovation should remain.

… But this doesn't suggest a wholesale crackdown on capital markets and foreign flows, nor a welfare state

Domestic financial liberalisation will continue to be a part of this, with plans for Beijing's SME-focussed stock exchange, the expansion of southbound bond flows into Hong Kong, and the expansion of wealth management flows into the southern Greater Bay Area. Granting permission for foreign banks to take full ownership of their local JV entities in 2021 was also a significant pivot towards this direction.

3) Industrial policy and state support for critical sectors will continue to hold central prominence.

A key priority will be continued and intensive focus on the development and competitiveness of high-tech, high-value add sectors like electric vehicles, AI, high-end manufacturing, and semiconductors. This is not new – these sectors have been priorities for at least 5 years now – though they will likely take on even greater importance in the coming years. Some of these objectives include:

a) Moving away from two decades of low-cost manufacturing, and towards capturing the higher ends of the value chain (e.g. less assembly and more design or R&D),

b) Maintaining dominance in global supply chains (e.g. by being able to manufacture more technologically demanding products in the electric vehicles, semiconductors, and AI spaces).

c) Increasing self-reliance and reducing dependence on external imports and intellectual property, particularly in cutting edge sectors like semiconductors and AI.

The state's continued push towards indigenous technologies and innovation doesn't suggest a decoupling with the rest of the world. Rather, it suggests to us a desire for greater insulation from external trade and policy shocks like the Trump administration's trade wars, as well as increased competition with developed nations for dominance in tech. External capital flows remain an important source of funding to fuel the investment needed to achieve these goals. Indeed, FDI inflows have remained robust despite the pandemic and trade war with the US in recent years.

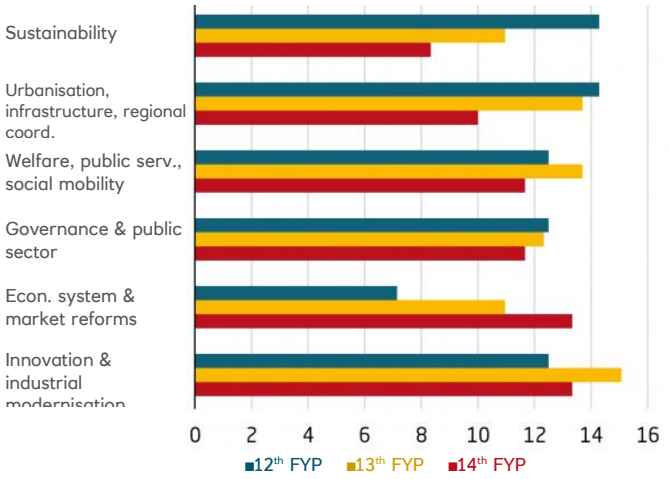
Over the multi-year horizon, imports will be important in the aim to increase domestic consumption and shift the growth model, with the current account surplus returning its earlier trend of narrowing, eventually moving to deficit.

Persistent shortages will remain a boon for China's industries and exports – a theme that will remain relevant into at least 1H '22. The consistent emphasis on higher value-add in supply chains has not changed the fact that China's manufacturing and exports have remained opportunistic in capturing global market share throughout the pandemic. Supply chains that have avoided the pitfalls of ever-lengthening supplier lead times and a lack of PPI pass-through will mean that export performance will persist as a theme into next year.

Industrial policy is one of the top priorities in the 15th Five Year Plan

Selected policy areas in Five Year Plans, % of all chapters.

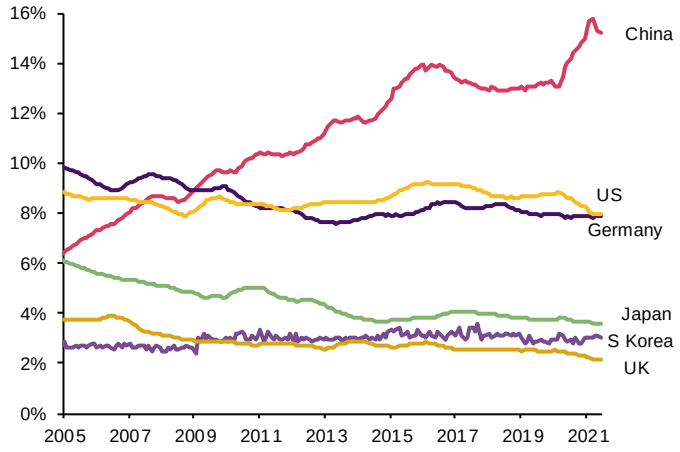
Source: Five Year Plans, MERICS



China's share of global exports rose markedly during the pandemic

12 month moving averages.

Source: IMF, Haver, NatWest Markets



4) No change to the trajectory of US-China trade relations.

Trade relations look set to "build back boring" in 2022

Trade relations look set to "build back boring" in 2022. The trajectory of US-China trade relations are pointed towards a less volatile, more technical setting in 2022. Recent speeches from the USTR suggest continued enforcement on the Phase I deal, no intention of removing existing tariffs, and continued marshalling of US allies on a coordinated China trade policy. But we've flagged that coordinated action and a common agenda against China will be difficult, given hugely varying bilateral exposures to Chinese trade, as well as the risk of persisting supply chain shortages into the year-end period.

It's clear that China will miss its Phase I purchase targets from the US by about half this year. Progress so far has been decent, suggesting little incentive for the US to press on commitments, and that an extension to the agreement will likely be sufficient for both sides. Purchase totals in 2021 have so far out-paced 2020 purchases by a notable margin, meaning the trajectory of imports of products under the agreements has increased alongside improving growth prospects.

Domestic policies look to be featuring more prominently on both sides, with the USTR emphasising that President Biden's infrastructure and domestic investment plans are key to building supply chain resilience. In China's case, we think sticking to its reactive and reciprocal stance will remain; ambitious domestic policy goals, keeping policy stable, and managing the growth slowdown collectively suggest little incentive for China to assume a more proactive or aggressive strategy on Sino-US trade.

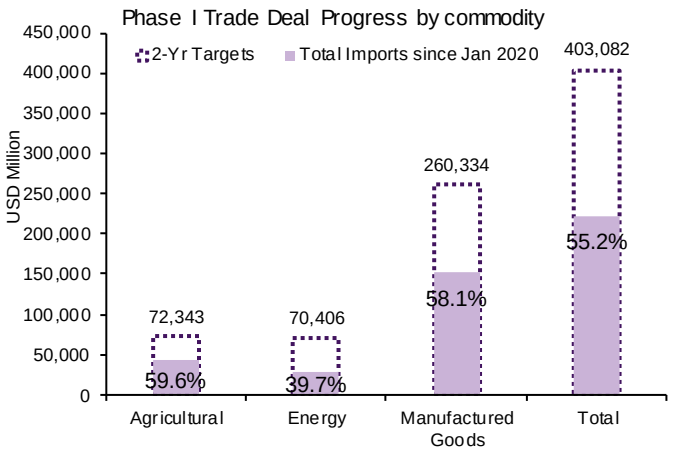
The heart of the issue isn't just about trade – it's about competition for technological superiority, and China's state-led development policies in the sector. In the words of USTR Tai, it's about "China's state-centred and non-market trade practices that were not addressed in the Phase One deal". If anything, we would expect the focus of tensions to shift more hawkishly towards tech, with the rules of engagement overall emphasising competition, rather than tariffs.

Geopolitical tensions will persist, but will probably not escalate into open conflict. In contrast to more constrained trade tensions, China's more assertive foreign policy will mean that regional tensions are likely to persist, and will be a source of headline risk. Issues such as Taiwan, the South China Sea, and relations with the AUKUS alliance could be particular focal points. Despite this we don't think escalation into open conflict is within China's agenda, and that they'll stick to their current diplomatic playbook of hawkish rhetoric and posturing instead.

China's more assertive foreign policy will mean that regional tensions are likely to persist, and will be a source of headline risk

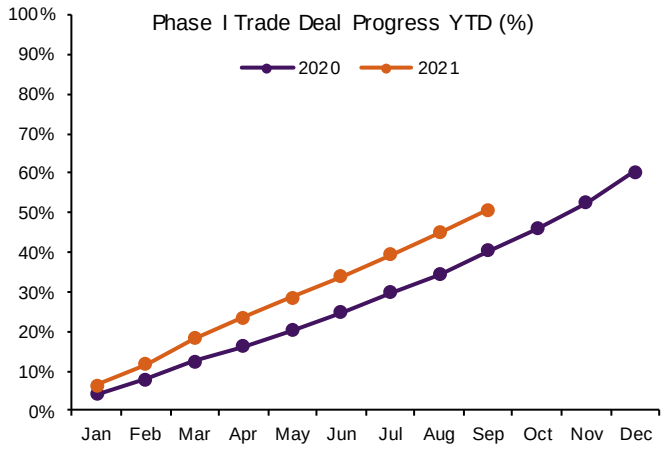
No change to US-China trade relations expected. China will miss Phase I purchase targets by about half.

Source: CEIC, NatWest Markets



Progress on 2021 purchases have outpaced 2020, but ultimately we think it's less about trade than technology

Source: CEIC, NatWest Markets



Four themes for the region and beyond

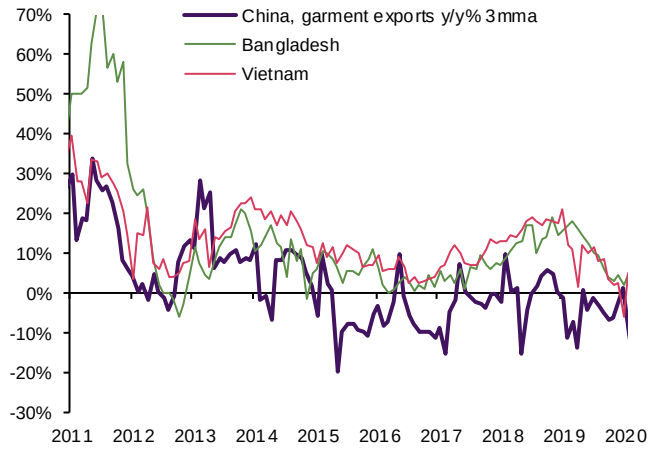
Theme 1. Common Prosperity should not be a source of global inflation worries into the medium term.

China's manufacturing ambitions do not mean that the country is able to rapidly shed lower-value manufacturing. Indeed, 2020 and 2021 have shown that China has been opportunistic in picking up trade and manufacturing share.

Common Prosperity will not be a source of global inflation worries into the medium term

Regional supply chain shifts have happened before. China's garment exports have broadly been in contraction from 2015 – 2020…

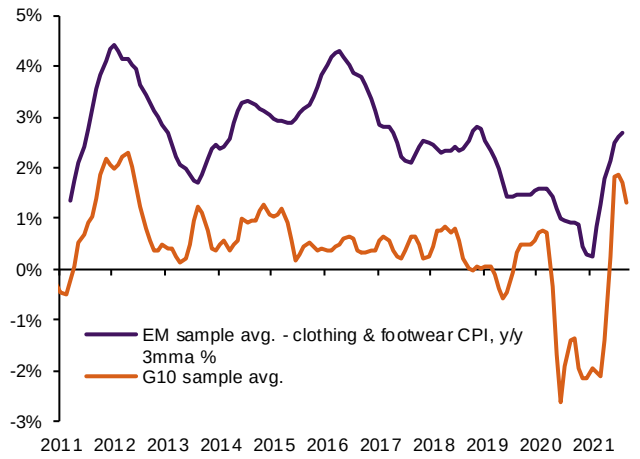
Source: Haver, NatWest Markets



…but the impact on inflation hasn't been consistent. Clothing CPI has been low or in decline.

EM sample: Brazil, Chile, Colombia, Mexico, China, S Korea, India, S Africa, Turkey, Russia. G10 sample: Japan, Eurozone, UK, US, Canada.

Source: Haver, NatWest Markets



Supply chain shifts have long been underway prior to the pandemic – the garment manufacturing chain partially relocating into South/Southeast Asia during the mid-2010s as Chinese wages rose being a good example – without significant inflationary impact on global markets.

If anything, decisions by western corporates to near-shore (or onshore) manufacturing, reduce supplier concentration and fragilities (by introducing redundancies), or take on board more ESG considerations are likelier sources of upside global inflationary pressures.

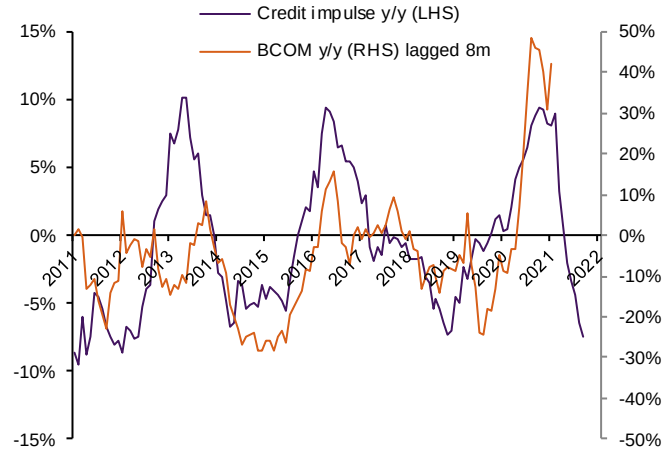
Theme 2. China will likely be less of a net support for commodities.

China's credit is likely to ease slightly, and China's inherently large demand is likely to continue to provide support for commodities. But the policy emphasis on sustainable, higher quality growth is not consistent with an upswing in the credit cycle large enough to turn China into the motor of a generalised commodity rally.

The read through to EM as a whole will be muted, particularly in the FX space. While EM FX has tended to broadly follow changes in commodity prices, performance has very notably lagged during this upswing in the commodity cycle, despite exports performing reasonably well. We attribute lacklustre performance more to a lack of significant growth in EM economies and subdued capital flows. EM FX underperforming exports is a theme which we think will persist into 2022.

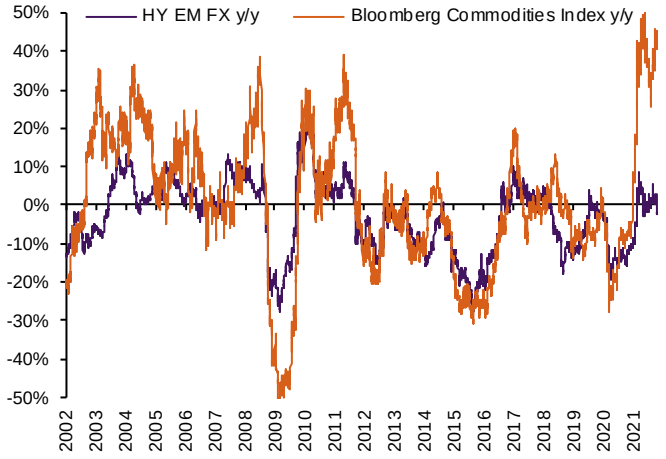
Credit impulse vs commodities: not expecting credit to rebound significantly to support a further commodities upswing

Source: Bloomberg, NatWest Markets



EM FX has sizeably underperformed commodities this cycle

Source: Bloomberg, NatWest Markets



Theme 3. Trade will likely continue to perform better than FX in 2022.

We expect export flows for China and Asian manufacturing peers to continue to perform well, as shortages persist into 1H '22. Financial flows into China will remain supported, particularly as passive inflows continue with the gradual inclusion of CGBs into the FTSE World Government Bond Index (WGBI) over the next three years.

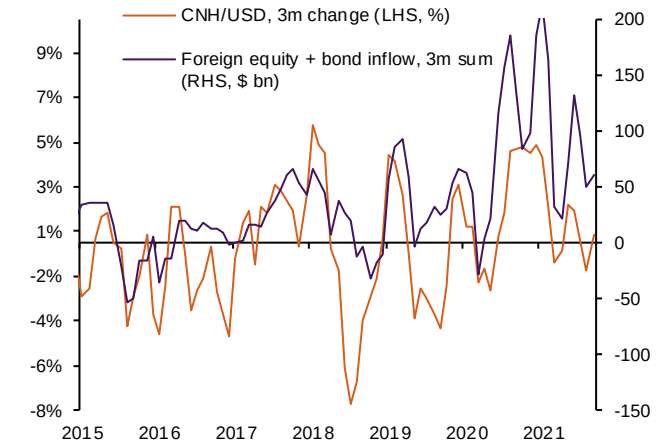
Importantly, we think that outflows will be constrained as well. Financial inflows slowed, but did not register outflows, even during the uncertainty of the regulatory crackdown during Q3. A belated reopening of borders will also mean that tourism, the primary source of current account outflows, will remain muted and will only resume later, rather than sooner. The lack of outflow will also support a stronger current account balance in China, providing support for the yuan.

As PBoC signals continue to suggest broad stability for the currency, we think the CFETS basket will continue outperform CNH, though EM FX as a whole will lag export performance, as we highlight in the section on EM and trade.

CNH will follow, not lead movements in the broad dollar, as relative policy differentials are tipped heavily in favour of the Fed and lift-off in Q4 2022. We think USD/CNH should remain broadly stable around 6.40 in 2022.

China's financial flows have been elevated during the covid period, though the beta to FX has fallen

Source: CEIC, Bloomberg, NatWest Markets



Export growth has remained resilient, and will continue to set the directional impetus for CNH

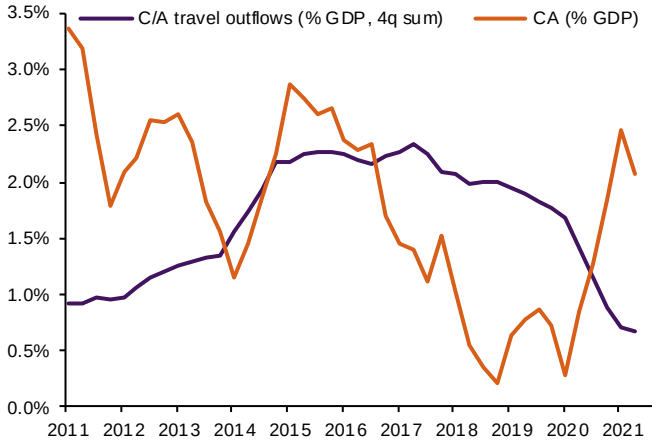
Source: Bloomberg, NatWest Markets

Theme 4. Chinese tourism will likely return later, rather than sooner.

We think that stringent border controls and the covid zero policy are likely to persist well into 1H '22, as the government keeps a tight lid on infections into the lead up to February's Winter Olympics and beyond. The return of Chinese outbound tourism flows will likely be belated, and the risks skewed towards a later and slower recovery of tourism-dependent economies in the region.

A covid zero policy and a belated border reopening will limit outflows from to outbound tourism

Source: Haver, NatWest Markets



Regional economies with high dependence on Chinese tourism will be impacted, such as Thailand

Source: World Bank, Haver, NatWest Markets

How 'Greenflationary' is the Climate Transition?

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In this piece we tackle some critical implications of ESG policies on inflation from different angles:

Will producers be able to pass higher prices for sustainable products to consumers? *Yes, but the ultimate impact is hard to estimate*

Are carbon taxes inflationary? *Over the long-term, no, but they can create immediate shocks*

What about the role of higher commodity prices? *Not really impactful, but some there could be some effects on crude*

How much can technology lower costs? *History tells us quite a bit*

So, how much do central banks have to worry about inflation from greenification? *Expect higher uncertainty and short-term shocks, but no reason to panic*

Could we see some backlash from voters? *Maybe, and that's why policy coordination and sequencing are key, including in the management of public finances*

On balance, our analysis highlights higher macro uncertainties and short-term inflationary effects from policies and frictions during the green transition. But the effects tend to be lower or even disinflationary over the longer-term, driven by renewable technology. Central banks and policy makers will have to navigate carefully, including shifts in fiscal policy to avoid widespread political backlash.

As climate and social sustainability issues increasingly come into focus, there has also been more questioning around potential negative macro implications, both in the short-term and long-term. As with any other policy, ESG involves prioritizing multiple goals across different stakeholders and, particularly for climate change, multiple generations. As such, proper study of these potential negative aspects is not only important to understand any potential drawbacks, but also an integral part of the policy design and implementation process.

With this in mind, below we tackle some critical implications of ESG policies (with a focus on climate-related measures) on inflation. These include overall price increases from rising demand for more sustainable products, carbon taxes, commodity demand for green energy generation/storage, as well as potential political-economy repercussions.

1. Will producers be able to pass higher prices for sustainable products?

Yes, but the aggregate impact is hard to estimate

> 69% of GenZs in Britain and 63% in the US agree with the following statement: "*I don't mind paying more for products that are good for the environment*"
>
> *- YouGov Survey April 2021*

One of the clearest trends in consumer preferences over the past few years has been the move towards products that are deemed more sustainable under various broad definitions. This includes goods and services across industries, from more environmentally sound packaging for staples goods, to greater attention to carbon emission from clothing or personal investment portfolios. By way of illustration, **a recent study showed that 85% of people across a sample of 17 countries indicate actual shifts in their consumer behaviour towards more sustainable products over the past five years** (here). Although most of the polling took place in developed markets (China was included), this is a very meaningful transformation of customers' preferences in a relatively short period of time.

85% of people across a sample of 17 countries indicate actual shifts in their consumer behaviour towards more sustainable products over the past five years

Further, given the increasing focus on ESG considerations in media and public opinion (internet searches, for instance, have spiked), it is not unreasonable to anticipate exponential growth in the future. This could be particularly important in emerging markets as they catch-up to Europe. There are important differences across generations, but they are lower than we would have guessed: 32% of millennials report having "significantly" changed their behaviour compared to 25% among older generations. And both generations report a similar propensity to choose a sustainable product when it is available.

Geographic differentiation is more prevalent in the survey. Unsurprisingly, European consumers have led the way among shoppers who are making significant changes to their behaviour. The top countries are Austria (42%), Italy (41%), Spain (35%) and Germany (34%). The pattern for US consumers is interesting, as only 22% indicate having made "major" changes to their purchase decisions, but 55% said they are making at least "modest" changes. This suggests that as climate change and sustainability factors gain more momentum, higher demand from a broader set of countries is likely to consolidate.

This demand has direct consequences for producers' pricing decisions, as more sustainable products tend to be more expensive to produce, although it is difficult to measure the exact magnitude across industries. The anecdotal evidence in some sectors is very clear. For example, the vast majority of executives in the fashion/textile industry report higher operating costs from the implementation of sustainability measures in a recent poll. Think of the additional costs of sourcing, distributing and monitoring the supply chain of organic vs regular materials.

More sustainable products tend to be more expensive to produce

Very similar patterns have been identified in the cosmetics, pharmaceutical, construction, and food sectors (here). For instance, the recently adopted building codes in California that require a shift towards electric energy (i.e., solar panels and batteries) has been estimated to increase the cost of a home by $20k (here). Likewise, internalizing some of the carbon costs in the agricultural sector could increase food prices by around 150% and 90% for meat and dairy products according to a 2020 German study (here).

Some of the clearest trends have taken place in the packing industry, as the demand for products with a sustainability label has outpaced the rest of the market

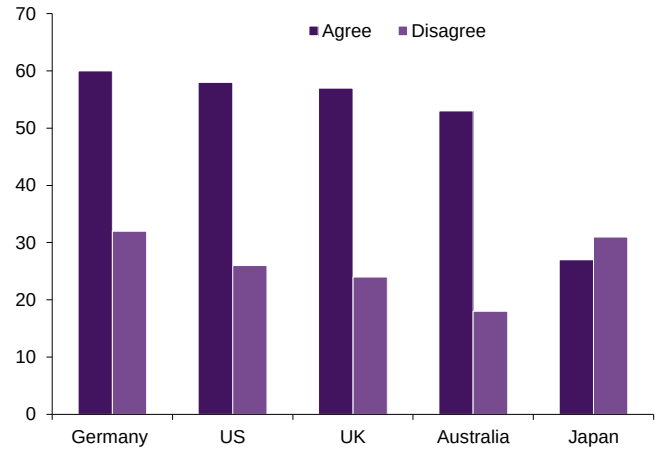
by a factor of more than 5 times (here). Moreover, consumers report rejecting products that are not seen as being sustainable, especially if there is an easily accessible alternative. This shift towards more expensive greener packaging could affect prices across many products, especially as online shopping has gained market share since the onset of the pandemic.

The European Commission has reported that two thirds of consumers would be willing to buy more sustainable products even if they were expensive (here). More directly, some studies have suggested that up to 25% of those polls would be willing to take a price increase of more than 10% - a very steep increase even in times of higher inflation – for greener products (here). Broader cross national surveys show that between 53 and 60% of consumers in most developed countries (Japan being the clear exception) are willing to bear higher costs for products that are seen as more environmentally friendly (YouGov), with a higher share among younger people (69% vs 53% in the UK, for instance). The obvious caveat is that these are surveys based on preferences, but will consumers incur the higher cost when it comes to the actual purchase decision?

The European Commission has reported that two thirds of consumers would be willing to buy more sustainable products even if they were expensive

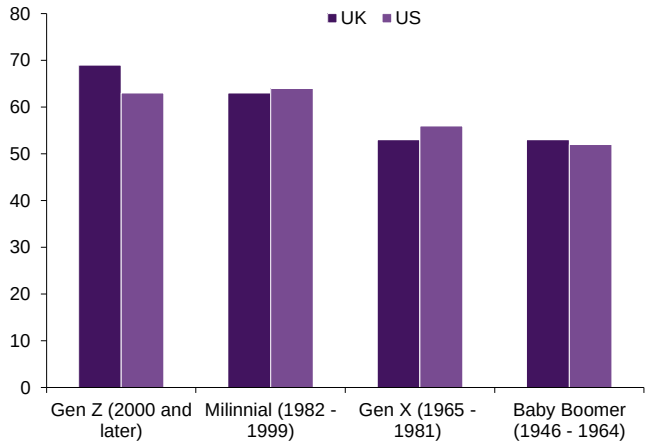
Consumers are willing to pay more for greener products…
Response to "I don't mind paying more of products that are good for the environment"

Source: YouGov Survey, April 2021



… especially among younger generations
Response to "I don't mind paying more of products that are good for the environment"

Source: YouGov Survey, April 2021



To tackle this, in a separate paper (here), we examined this behaviour of US car prices during the period of much higher post-covid demand earlier this year and also as commodities, which are more heavily used in Electric Vehicle productions, spiked. Strictly comparable series between the two are difficult due to a variety of issues, but we found that on average the price of Teslas increased by 6.3% this year through July, compared to 5% for new vehicles as a whole. This suggests some incidence of higher inflation, but the differential did not appear to be that substantial. And a critical consideration is that the price of production/storage of renewable energy has declined significantly over the past two decades, as we show in a separate section below.

2. Are carbon taxes inflationary?

Over the long-term, no, but they can create immediate shocks

> "We find that carbon taxes do not have to be inflationary, and may even be deflationary. Our evidence suggests that the increase in energy prices was more than offset by a fall in the prices of services and other non-tradables."
>
> *- Konradt and Weder di Mauro, July 2021*

A different angle that we find worth exploring is the potential inflationary impact of long-term policy actions (carbon taxes/pricing mechanisms in particular) that could push generalized prices upwards. This is particularly relevant as many countries have already implemented such schemes and many others are looking to expand or put them into place. Indeed, there are currently 64 pricing initiatives across countries that according to the World Bank cover more than 21% of global greenhouse gas emissions this year. Others, including Turkey, Brazil, and Colombia are considering such initiatives (see here for details) as a key component of the climate change policy toolbox.

Given the prevalence of carbon taxes as a policy tool, there are few systemic analyses of their implications for inflation in those cases where they have been implemented – in several cases for many years. The most detailed one (here) examines the dynamics following the implementation of carbon taxes in Europe and Canada over the past three decades. We find the comprehensive take and robustness checks (i.e., use of control groups to measure the counter-factual) in two separate cases particularly helpful in framing the future policy debate.

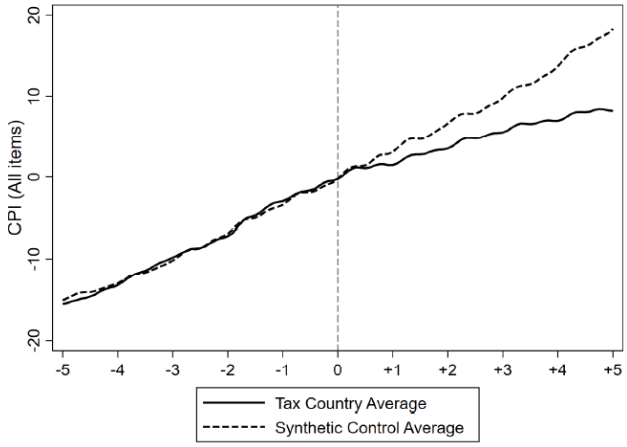
The main conclusion, which is summarized in the text box above, is that carbon taxes did not appear to have inflationary effects and could even have a disinflationary impact as other prices tend to fall due to a decrease in income. The left chart below provides a very good summary of the inflation path for countries with higher taxes vs the control group: inflation in the former is actually lower in the years following the implementation of the tax. Importantly, this holds both in countries that were early adopters of carbon taxes and more recent ones, as well as in countries with higher tax rates. In all of them the contractionary effects dominated.

The main conclusion is that carbon taxes did not appear to have inflationary effects and could even have a disinflationary impact

In particular, in the Canadian case, the authors find that real household income in provinces where the tax was implemented fell materially following the adoption compared to the rest of the country. Importantly, the income contraction was more prevalent among households in the top quartile. And, finally, the disinflationary effect was found whether the tax income was "recycled" towards other expenditures or not, lowering the potential effect on inflation due to the fiscal use of higher revenues.

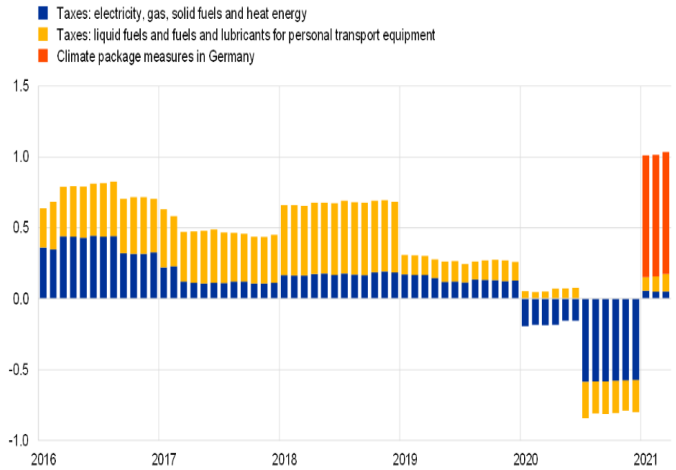
Inflation has been milder than control groups following the adoption of carbon taxes

Source: Konradt and Weder di Mauro, July 2021



New climate related measures increased Germany energy inflation at the start of the year

Source: ECB



This of course doesn't mean that there aren't any negative short-term effects on inflation. Most studies actually anticipate some inflationary effects over the transition to a zero carbon economy, as we explain below. The implementation of climate-related measures in Germany earlier this year provides a good example of the potential for short-term (i.e., intra annual) inflationary pressures as they are rolled out. Specifically, as part of the Federal Climate Action Plan, German air traffic taxes were increased from April 2020, while VAT on long- distance train journeys was lowered. These two measures combined have had almost zero net impact on inflation as measured by HICP. This shows that climate-related measures do not all have to be intrinsically inflationist. Some are, though, *to some extent*: in the areas of building heating and transport, the new German regulation required enterprises selling heating fuel and fuel for vehicles to purchase carbon emission certificates for CO_2 emissions beginning in 2021. The fixed prices for the allowances began at €25 per tonne (up from the initial plan of €10 per tonne) in 2021 and will gradually increase to €55 per tonne in 2025. From there, allowances will be auctioned in 2026 (within a range of €55 to €65 per tonne) and finally prices would be market-driven from 2027 onwards (with an option of price corridors to be decided in 2025). In addition, in June 2020, the EEG surcharge, which is an important component of electricity prices, was capped at 6.5 cents/kWh in 2021 and 6.0 cents/kWh in 2022.

Together, the climate package measures coupled with the cap on the EEG levy are expected to raise the HICP by 0.3 percentage points this year. Looking forward, prices for carbon emission certificates will continue to be raised, moderately, in the coming years - but the ongoing reductions in electricity taxes should make the impact on overall energy inflation beyond 2021 barely noticeable.

Together, the climate package measures coupled with the cap on the EEG levy are expected to raise the HICP by 0.3 percentage points this year

On the much broader question of the overall impact of the energy transition on inflation, one of the most comprehensive analyses is being carried out by the Network for Greening the Financial System (NGFS) – a network of Central Banks and Supervisors. The chart in section 4 of this note summarises their findings.

In addition to the direct and more visible effects from carbon taxes, they also stress the need for new investments in the energy sector as a factor causing frictions and upward tensions on labour and intermediate good prices during the transition. This is essentially an "investment glut" that will take some time to sort out. **The NGFS study points to an extra 1pp of inflation at peak transition time (2030), before a**

progressive moderation back to zero over the following 20 years. This longer-time estimate is clearly highly dependent on the sequencing on the transition and the technological path for renewables, which we analyse in a separate section below.

3. What about the role of higher commodity prices?

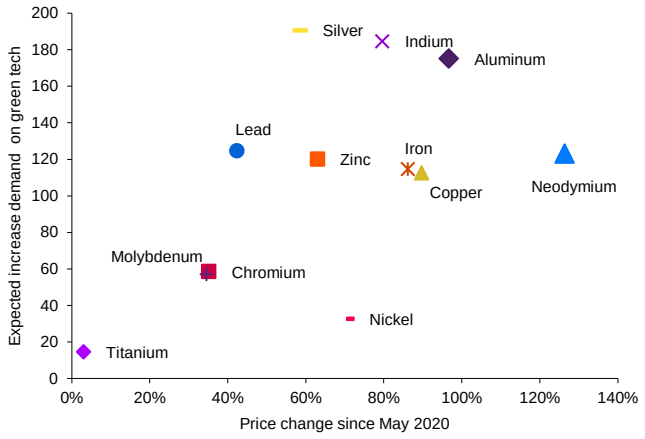
Not across the board, but some there could be impact on crude oil

> "Prices increasing due to major supply chain price pressure industry-wide. Raw materials especially."
>
> *–Elon Musk tweet, May 31, 2020*

Given the recent surge in commodity prices, the argument that the transition to more sustainable energy is at least partly responsible for more expensive energy has gained popularity. There are both supply and demand levers at play: carbon energy production could be turning more expensive as markets shy away from it, while other metals that are required for the production and storage of greener energy face increasing demand.

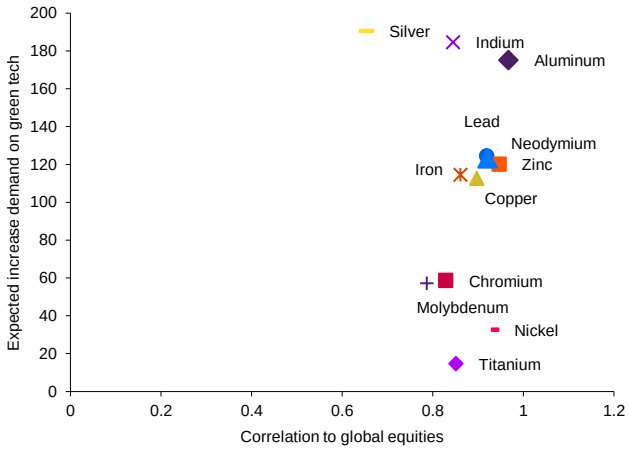
There is no pattern between expected increase mineral demand from greener energy storage and rally since May

Source: World Bank, Bloomberg, Haver and NatWest Markets



The correlation between mining prices and global equities is high irrespective of green-intensity

Source: World Bank, Bloomberg, Haver and NatWest Markets



We studied these potential effects in an earlier piece (see here for details). In it we compare the price behaviour of commodities depending on their intensity for green energy focusing on the rebound since May 2020. We find that the most green-intensive minerals such as silver and aluminium have underperformed, while some of the sharpest price increases have been in minerals with relatively low demand from greener technologies. **In fact, the overall correlation between increased expected demand and the recent price surge is generally weak.** The chart above plots the expected additional demand on the y-axis against the price change in the x-axis.

Furthermore, there are some discrepancies worth highlighting: nickel and silver have rallied by roughly the same in the period, although expected additional silver demand from electrification is much higher than for nickel. Furthermore, zinc and chromium also rallied by close to 60%, suggesting a common driver between them other than the adoption of greener technologies, which is expected to increase zinc demand twice as much as chromium. This makes it difficult to spot any regular patterns, yet alone direct causation from the expectation of higher energy demands into the recent spike in metal prices.

This doesn't necessarily imply that higher demand for cleaner energy will not become a commodity driver over the long-term. Indeed, for more specific minerals such as graphite, lithium and cobalt, the extra additional demand from emerging technologies present a challenge to current production levels. This will require additional technological innovation as well as investments in commodity production. As we have highlighted in previous pieces, sustainable investment doesn't necessarily mean excluding whole industries; rather, it is about steering investments towards more sustainable practices across sectors.

Sustainable investment doesn't necessarily mean excluding whole industries; rather, it is about steering investments towards more sustainable practices across sectors

The dynamics for crude oil are also worth mentioning, as the recent shift in policies might have contributed more directly to price action. This is especially the case in the US, given the well-known decrease in access to capital for oil producers, as well as other restrictions. For example, President Biden campaigned on both restricting new extraction activities on Federal land as well as phasing out or eliminating outright tax subsidies for production of fossil fuels. The former was implemented via executive order, though that order is currently stalled as it faces legal challenges. The latter provision may struggle to find its way into the Democrat's massive climate infrastructure bill amidst centrist opposition, though this plan does include over $500bn in funding aimed at alternative energy sources.

We think it is probably too simplistic to suggest that relatively low investment in oil / gas extraction in the post-pandemic period is purely a function of ESG demands. In fact, investor demand for oil producers to increasingly favour returns / profit over investment in new drilling has been a persistent theme in this sector since before the pandemic. But private investor demand for investment in clean energy alternatives paired with public sector pressure on energy production is likely to be a theme that overhangs global energy markets over the next decade and beyond.

Private investor demand for investment in clean energy alternatives paired with public sector pressure on energy production is likely to be a theme that overhangs global energy markets over the next decade and beyond

4. How much can technology lower costs?

History tells us quite a bit

> "Renewables are the cheapest source of new bulk electricity in countries representing more than two-thirds of the world population and 91% of electricity generation"
>
> *- Bloomberg NEF Study, June 2021*

The declining costs of greener technology are at the core of the inflation argument and likely to ultimately determine the net impact over the long-term. And while we have little to contribute from the technological side, the economics behind sustainable production and storage paint a very encouraging picture. According to Bloomberg analysis, the global levelized cost of Electricity (LCOE) for renewables has continued to decline, even accounting for the recent spike in commodities used in production.

In particular, compared to an average LCOE of $70/MWh for a power plant and $62/MWh for coal, the most recent estimates are as follows:

- Onshore wind has a global estimated LCOE of $41/MWh, which has been declining steadily in real terms since 2009 (when it was first estimated) from 112/MWh. That is a real decline of 63% over the past decade; quite a remarkable achievement. Importantly, the cheapest projects currently in operation (located in Brazil, India, Texas, Canada, etc.) can deliver onshore wind at a cost of between $17 and 28/MWh.

- The equivalent LCOE for offshore wind is at $82/MWh, which is almost 60% lower than in 2009, despite some increases in production over the past few months. Importantly, the cheapest offshore wind power is found in Denmark and the U.K., at $52-53/MWh, followed by the Netherlands, China and Belgium. These are all competitive with power plants and coal.

- The global LCOE benchmark for fixed-axis Photovoltaic is $48/MWh, slightly up from H2 2020, but again on a very steep decline over the past two decades. Current cost is only about 13% of what they were in 2009 (almost $370 MWh). The cheapest production installations are located in Chile, India, the UAE, China, Brazil and Spain, all at a cost of between $22 and 29/MWh.

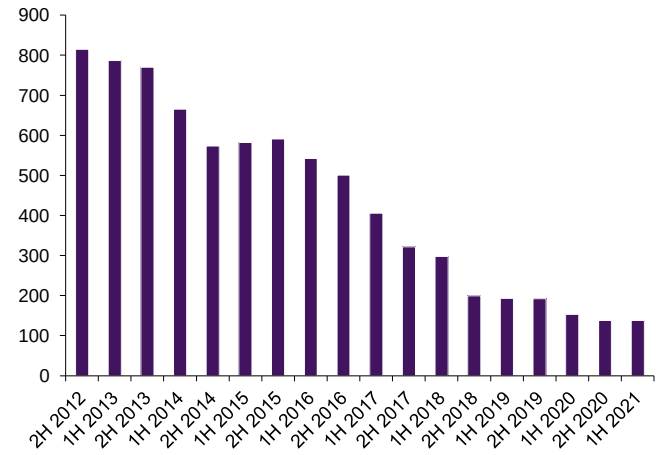
- Similarly, the global LCOE benchmark for battery storage is at $138/MWh, down from $300 in early 2018 and $500 in 2016. Again, the trend is extremely encouraging.

So two trends are currently taking place: **renewable energy is becoming cheaper at a much faster rate than traditional power generation (essentially static over the past few years), and most renewables are now cheaper on absolute levels**. They both point towards *technological disinflation*, as a higher share of energy comes from renewables. In addition, these cost reductions have taken place amid a significant increase in cumulative installed capacity, particularly for offshore wind and solar PV. It is obviously hard to predict how the cost of technology will evolve, but the increased policy push can only help accelerate the trend. From the long-term policy perspective (including monetary policy), it is hard not to see this as a positive development.

Renewable energy is becoming cheaper at a much faster rate than traditional power generation (essentially static over the past few years), and most renewables are now cheaper on absolute levels

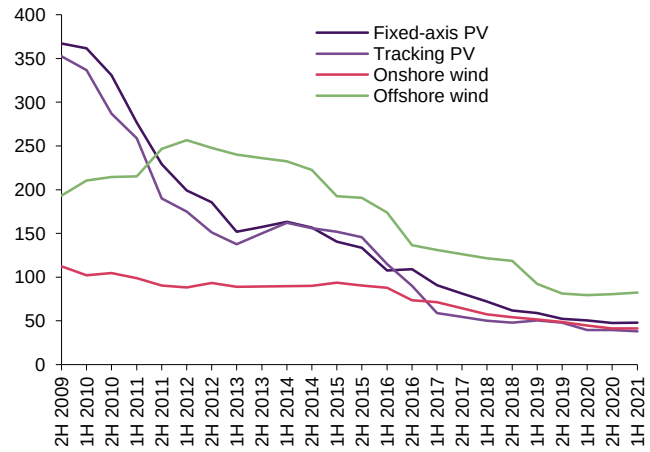
Battery costs have declined drastically as technology improves

Source: Bloomberg NEF



Costs of renewables have decreased significantly over the past decade, and are now cheaper than carbon

Source: Bloomberg NEF



5. So, how much do central banks have to worry about inflation from greenification?

Expect higher uncertainty and short-term shocks, but no reason to panic

> "The third trend – which is probably the most important yet least explored – is the green transition, the shift towards a low-carbon economy"
>
> *- Christine Lagarde, September 2021 speech*

Initially at least, inflationary pressures and downward pressures on economic activity seem warranted during the transition. As some recent studies (for instance Pisani-Ferry) have pointed out, higher energy costs (ETS, carbon taxes), the need to substitute the by-products of fossil production with likely more expensive alternatives, frictions related to the redirection of resources towards green sectors (labour and materials), and increased investments are all clear sources of inflationary pressures as economies moved towards the net zero goals.

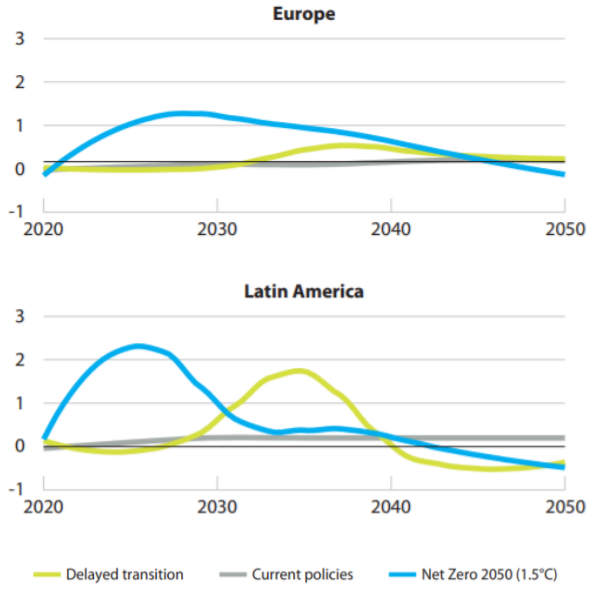
Initially at least, inflationary pressures and downward pressures on economic activity seem warranted during the transition

However, some of these consequences can be mitigated through policies and over time – especially if large investments in green technology end up boosting GDP and eventually offer some price relief, as we discuss in the sections above. In this context, Lagarde's reference quoted above – made in a speech on monetary policy following the pandemic (full speech here) – is important. Specifically, she put the energy transition as the third main element shaping inflation dynamics, next to supply and demand drivers.

The motivation to highlight this issue was particularly poignant given the increase in energy prices that have introduced an additional dimension to the recent inflation spike. As we highlighted in the previous sections, more volatile energy prices, in part coming from new energy policies in countries like Germany, have added to the pressures coming from the demand rebound and severe shortages in many sectors. ESG considerations have undoubtedly contributed to the policy uncertainty for central banks, both in G10 and EM. However, **the steady decrease of energy prices from renewable technology reduces the likelihood of them becoming intractable issues for inflation, even over the medium-term.**

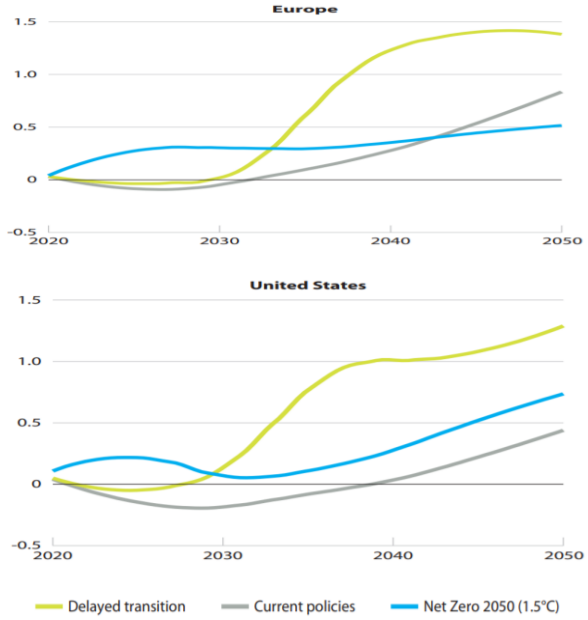
Some estimates point to higher inflation in Europe and Latin America from the transition to 2050 net zero

Source: NGFS Impact on y/y GDP growth in percentage points



As well as higher long-term interest rates in Europe and the United States

Source: NGFS



In addition, the effects of the lack of climate policy action on the environment need to be taken into account, including the already visible impact on weather patterns that have increased food price volatility. According to estimates cited by the ECB (from NGFS), the maximum net impact of European inflation over the next decade is about a 1pp increase annually under a net zero 2050 policy, compared to insignificant effects under current policies. The latter is also because a "no change" policy would depress economic activity, and hence inflation through the demand channel, countering the upward price pressure from weather disruptions. Interestingly, in the NGFS central scenario, **long-term interest rates would also tend to increase** "reflecting the inflationary pressure created by carbon prices as well as the increased investment demand that the transition spurs on."

6. Could we see some backlash from voters?

Maybe, and that's why policy coordination and sequencing are key, including in the management of public finances

> "The CO2 law [increasing carbon taxes] isn't going to save the glaciers in Switzerland."
>
> *- Patrick Eperon, one of the leaders against the new tax*

The transition to more sustainable economies intrinsically embodies winners and losers, whose interests are currently being sorted out through sometimes messy local politics. At its core, how aggressive the policies end up being depends on the weight placed on inter-generational and special group priorities. **This poses the classic political economy tension: those benefitting from the policies are widespread while those opposing tend to be concentrated but much more motivated.** Simply from this perspective, the potential for a substantial backlash among electorates deserves careful consideration and ought to be a key aspect in policy design and priorities.

The potential for a substantial backlash among electorates deserves careful consideration and ought to be a key aspect in policy design and priorities

There are several arguments that are currently being used to oppose more sustainable policies, from employment losses in carbon intense industries, to the potential for widespread higher costs to consumers. Most of the studies on carbon taxes have found an insignificant effect on output levels (here), but the argument that some measures are too expensive has been more successful in shaping political opinions. At the end of the day, politics are local while tackling climate change is a very global issue.

In particular, the recent rejection (51% vs 48%) of an increase carbon tax by Swiss voters offers some important lessons for future policy implementation. The proposal would have increased the maximum tax rate on emissions from 120 to 210 francs and put in place a new tax on commercial and private aviation, as part of the efforts for the country to achieve carbon neutrality by 2050. The new policies were brought into a referendum (the first one for a carbon levy) as a group of voters (the "No to the CO2 law" committee) argued that costs were excessive given the limited impact that they would have on overall emissions levels. Indeed, the opponents claimed that the new levies would have increased by up to a thousand franc a year for a family of four, while the impact would be minimal on a global level. There was also an equity angle, as opponents claimed that the burden would fall disproportionally on lower income and rural groups. These are claims that go directly to voters' wallets.

On the other hand, the proponents of the higher taxes were regarded as making lofty goals without showing the clear path from policy to outcome. This issue might be particularly challenging in smaller countries that are seen as already having moved ahead of the rest on the climate agenda. Coordinated global action will help to provide the overall direction, but careful policy design based on local political constraints, including the potential for substantial transfers between groups, will be required.

Careful policy design based on local political constraints, including the potential for substantial transfers between groups, will be required

This brings up critical consequences on public financing arising from climate transition:

- **Inequality effects from shifts in public finances.** As described above, the transition can have direct costs for certain sectors of the population, including some of the most vulnerable. In addition, energy taxes often disproportionally hit the lower income brackets given the differences in consumption baskets.

  As such, while the initial intention was to use the receipts from carbon taxation to invest in green projects, in the end it is likely that a significant portion of the extra revenue will have to be directed to support low income households. This could lessen some of the political backlash, but also lower the efficiency of such taxes as a climate-policy tool.

- **There is a strong bias towards higher public spending.** Another general implication is that the greening of the economy is likely to push deficits and debts higher due to this type of political economy factors. In addition, as demand for sustainable projects increases (as we describe in section one), so will the public's tolerance towards higher debt burdens, especially following the pandemic.

Regional Macro Outlooks

2022 Market Themes and Expressions

Here are our top global macro themes alongside the key related trades in an easy-to-print format

Key Theme		Best Trades
DM growth will remain strongly above trend in 2022	Supported by a normalisation of high savings rates and strong household balance sheets, developed market growth will maintain its strong momentum as bottlenecks ease slowly. Europe will be the upside surprise, while China will slow.	• Short US 5y, flatter US curve • Short 10y bund • Short EUR/SEK • Long BTP and banks spreads
Shortages in labour and key production inputs will persist	DM job gains will increasingly a hot labour market and a wage signal. Raw materials may come back on tap as covid restrictions ease, but chips and global shipping will be slower to correct, as may energy prices. Inflation pressure will be persistent.	• USDi 5s30s breakeven flatteners • Buy 30y UK breakeven • Short 10y bund
Unsynchronised central banks will be a key driver for FX and rates in 2022	Anglo central banks are in the lead to tighten monetary policy, while the ECB will lag. FAIT has caught up on the Fed, the central bank most likely to tighten faster/more than forwards, UK well priced, fade European pricing of any 2022 hikes. Look for FX upside in the 'squeezed middle' of central banks playing catch up.	• Long GBP/CHF • Long USD/JPY • Long EUR 1y1y, steeper 5s30s • Rec May'22 vs Feb'22 SONIA
QE ending will have least impact where it is happening soonest	The end to QE in the UK and US is well anticipated. In the US lower QE will mirror lighter government supply. US and UK ALM demand is also likely to stay strong. ECB QE policy is more uncertain, the change in net bond flows likely greater, and the signal regarding rate rises will be more important.	• Short 10y bund • EUR 5s30s steepeners • USD 5s30s flatteners vs EUR steepeners • Long 10y gilt vs UST and bund
Defensive and selective in EM	Lower global liquidity and Chinese growth will make 2022 a challenging year for EM, despite higher carry and strong commodities. Short purely cyclical currencies, but CNH should outperform peers. Exporters of natural resources, especially energy, will outperform importers. Very selective on local duration and EM green issues.	• Long USDZAR strategically • Long CNH vs KRW and TWD • Short USDBRL • Long front-end Russian bonds • Long basket of AUD, CAD, NOK vs EUR, CHF
Higher rates and the end to QE will be kinder to sovereign spreads and credit	European political risk has a market-friendly skew in 2022, although France's May election is a small, temporary negative for French spreads. Supply dynamics and debt fundamentals supported by strong growth will keep Periphery tight. Banks will benefit from higher rates and demand for credit will stay strong.	• Long 10y BTP/Bund • Long subordinated financials spreads
Rapid market growth and maturing institutional frameworks in ESG	Global GSSS grew by 150% in 2021. This growth rate will be maintained in 2022. GSSS liquidity will continue to improve, supported by improved disclosures and sovereign and supra benchmarks, for no loss of 'Greenium' to motivate issuers. The ECB will put substance behind its pledges to bring climate into its operational and economic assessments. EM green bond market growth is slow compared to DM, but we expect a catch-up in '22	• Look for opportunities in the emerging private sustainable market • Long Poland EUR, Chile USD and Colombia local green bonds

Source: NatWest Markets

Global Economic Outlook

After growing at a 5.8% clip in 2021, we expect the global economy to expand by 4.5% in 2022 and 3.2% in 2023, slightly below median estimates.

We remain upbeat about global growth prospects in 2022, despite potential headwinds from higher energy, tax and interest rates. In particular, we believe household consumption will be supported by the normalisation of saving flows and a partial drawdown of the stock of savings accumulated during the pandemic. We see this excess savings as a form of 'delayed' fiscal stimulus, the effect of which will be felt for many years to come.

Economic reopening, a reduction in the severity of the pandemic, and supply chain disruptions boosted global inflation to multi-year highs in 2021. We expect some of these factors – such as a resurgence in energy prices and supply chain disruptions – to sustain into 2022. This is likely to keep inflation elevated in H1 2022 before moderating somewhat over the course of H2 2022. Still, we expect both headline and core inflation to end next year squarely above central bank target levels.

The combination of continued strong growth and a firm inflation trajectory is likely to turn the tides of monetary policy. We now expect central banks across some developed economies (in particular, the US and UK) to start removing accommodation in 2022 and to continue raising rates gradually through 2023.

Michelle Girard

Co-Head of Global Economics and Deputy Head, US

Thanks to Deepika Dayal for her contribution to this section.

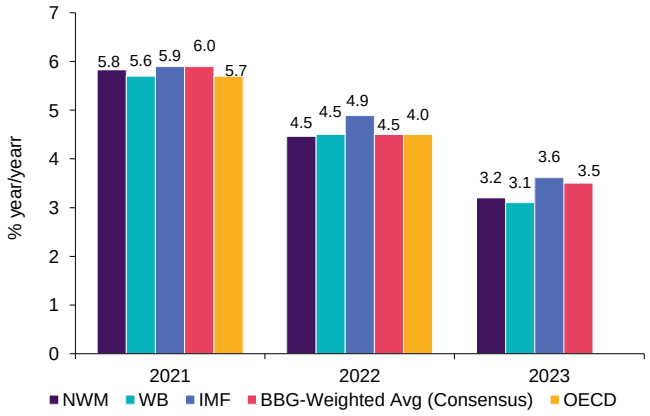
NWM Global Forecast Summary

	% q/q, seasonally adjusted								% year/year		
Real GDP Growth	**Q1 22**	**Q2 22**	**Q3 22**	**Q4 22**	**Q1 23**	**Q2 23**	**Q3 23**	**Q4 23**	**2021**	**2022**	**2023**
US	1.0	0.7	0.6	0.5	0.5	0.5	0.5	0.6	5.4	3.4	2.2
Euro Area	1.0	1.0	1.0	0.9	0.6	0.4	0.4	0.4	5.2	5.1	2.6
UK	1.0	0.7	0.4	0.3	0.3	0.3	0.3	0.3	7.1	4.8	1.4
China	0.8	1.1	1.3	1.9	0.9	1.2	1.3	1.9	8.1	5.0	5.3
Japan	1.1	0.8	0.4	0.4	0.3	0.3	0.3	0.3	1.8	3.0	1.4
Global*	**1.0**	**1.0**	**0.9**	**0.9**	**0.7**	**0.7**	**0.7**	**0.8**	**5.8**	**4.5**	**3.2**

Source: NatWest Markets. 2021-2023 =forecast, 2022 Q1 – 2023Q4 = forecast. *Our global growth aggregate includes 18 countries together accounting for 82% of global growth. Countries included are the UK, US, Euro Area, China, Japan, Australia, Brazil, Canada, India, Mexico, Norway, Poland, Russia, Singapore, South Africa, South Korea, Sweden and Turkey.

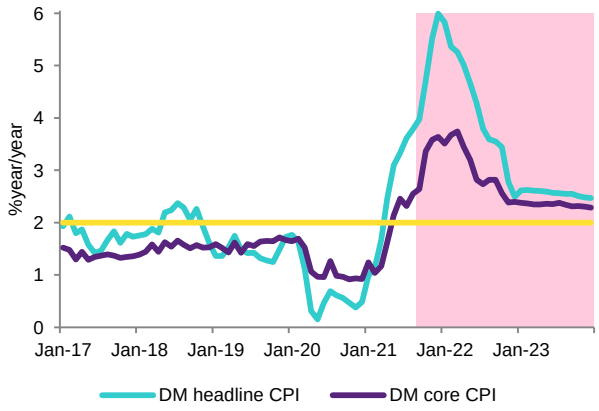
NWM Global GDP forecast

Source: NatWest Markets



Developed Markets CPI Inflation Rate

Source: NatWest Markets. Shaded area shows forecast



US Economic Outlook

Kevin Cummins
Chief US Economist

Growth: Momentum in the economy appears to be picking back up again. Some of the headwinds the economy faced in the late-summer/early autumn are diminishing, as the drag on growth from the delta variant fades. This sets the stage for a reacceleration toward pre-pandemic economic conditions. Our outlook for the first half of 2022 is something similar to what is likely to be reported in Q4 2021: Above-trend GDP growth driven by strong consumer spending. An acute worker shortage could further delay progress a bit, although household fundamentals are well positioned (e.g., strong wages and salaries growth, an elevated savings rate) for spending to likely be robust.

Inflation: In 2022, we suspect higher inflation will linger longer than the Fed expects. In fact, we believe the surge in inflation will broaden across services categories, particularly the heavily-weighted rental components. With strong demand for labour still outpacing supply (potentially well into 2022), wage growth is likely to put upward pressure on service-sector inflation. Goods prices account for only about 1/4 of core inflation, while services account for 3/4 of core. Wages are key for the latter.

Fed Policy: We expect the Fed's hiking cycle to begin in Q4 2022 and look for a gradual rise in rates—one hike in Q4 2022 and four hikes (one per quarter) in 2023.

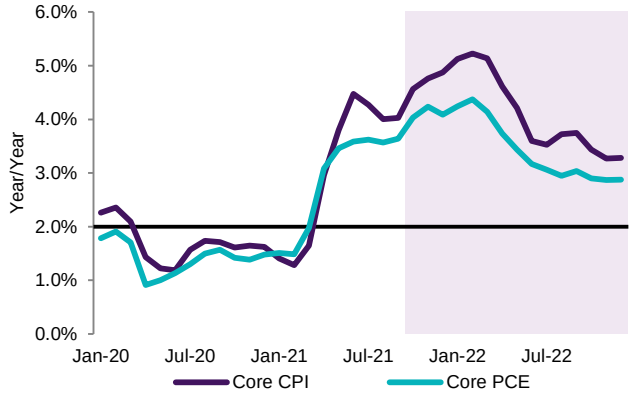
US forecast summary

	% q/q, seasonally adjusted, annualised								% year/year		
	Q1 22	**Q2 22**	**Q3 22**	**Q4 22**	**Q1 23**	**Q2 23**	**Q3 23**	**Q4 23**	**2021**	**2022**	**2023**
Real GDP	4.0	3.0	2.3	2.0	2.1	2.0	2.2	2.3	5.4	3.4	2.0
Household consumption	3.3	3.0	2.0	2.0	2.5	2.0	2.3	2.5	7.9	3.3	2.4
Non-residential fixed investment	3.3	3.0	2.4	2.5	2.0	2.0	2.0	2.0	7.4	3.2	2.7
Residential investment	1.0	1.0	1.0	1.0	3.0	3.0	3.0	3.0	9.1	-1.2	1.2
Government expenditure	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.7	1.4	1.8
Inventory investment (% pt)	1.0	0.2	0.3	0.0	-0.2	0.0	0.0	0.0	-0.2	0.9	-0.3
Net exports (% pt)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	-0.4	0.0
Nominal GDP	6.6	5.7	4.8	4.5	4.4	4.2	4.4	4.6	9.5	6.6	4.3
Unemployment Rate, % (average)	4.4	4.1	3.8	3.5	3.2	3.1	3.1	3.1	5.4	3.9	3.1
PCE inflation, % y/y	5.1	4.2	3.5	3.0	2.9	2.8	2.7	2.7	3.7	3.7	2.5
PCE core inflation, % y/y	4.3	3.4	3.0	2.9	2.8	2.7	2.6	2.6	3.1	3.2	2.4
Fed Funds Target Range, %*	0.00-0.25	0.00-0.25	0.00-0.25	0.25-0.50	0.50-0.75	0.75-1.00	1.00-1.25	1.25-1.50	0.00-0.25	0.25-0.50	1.25-1.50

Source: BEA, BLS, FRB, NWM. *End of period

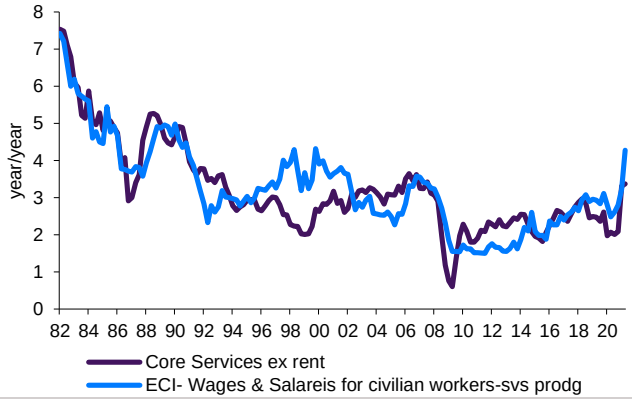
Core inflation: CPI vs PCE

Source: Bureau of Economic Analysis, Bureau of Labor Statistics and NatWest Markets; *Shaded area shows NWM forecast*



Core services accelerating into 2022

Source: Bureau of Economic Analysis, Bureau of Labor Statistics and NatWest Markets



Economic Growth

Momentum in economic activity appears to be picking back up again after slowing in Q3. Some of the headwinds the economy faced in the late-summer/early autumn are diminishing, as the drag on growth from the delta variant fades. This sets the stage for a reacceleration toward pre-pandemic economic conditions. Our outlook for the first half of 2022 is something similar to what is likely to be reported in Q4 2021: Above-trend GDP growth, driven by strong consumer spending. Aggregate resources available to fund consumption continue to be exceptionally high, suggesting continued strength in 2022. Moreover, conditions in the labour market have improved further and demand for workers remains robust. We project job growth will average around 250,000 per month in 2022. In turn, we expect the unemployment to fall to 3.5% by year end 2022 (matching its pre-pandemic level of 3½%) and closer to 3% by year end 2023. To some extent, an acute worker shortage could further delay progress in 2022, although household fundamentals are well positioned (e.g., wages and salaries growth poised to stay sturdy/elevated personal savings rate) for spending to likely be robust even with the economy transitioning from the initial re-opening phase in 2021 to a more-typical pace of growth in the second half of 2022 and early 2023. We project real GDP of 3.4% in 2022 and 2.0% in 2023.

Some of the headwinds the economy faced in the late-summer/early autumn are diminishing, as the drag on growth from the delta variant fades. This sets the stage for a reacceleration toward pre-pandemic economic conditions

Inflation

Core inflation is higher than it has been in several decades. Much of the pickup reflects supply constraints associated with production and distribution issues related to the pandemic and a demand shock arising from the unprecedented reopening of the economy. The persistence of these bottlenecks constraints may persist well into 2022 putting additional upward pressure on inflation. In our view, the pickup in inflation will broaden across non-covid impacted categories in 2022, including the heavily-weighted residential rent and OER components (account for over 40% of the core CPI). At the same time, labour supply constraints are also making it challenging for businesses to keep up with demand. This dynamic will continue to support robust wage growth in 2022, adding further upward pressure on prices. While these supply-side issues are likely to boost core CPI more than the core PCE deflator—due to different weighing schemes between the two measures— core PCE inflation is still expected to remain elevated over the course of 2022. We expect the core PCE deflator to finish 2022 at 2.9% year/year (after an estimated 3.9% y/y in 2021) and 2.6% y/y in 2023.

Labour supply constraints are making it challenging for businesses to keep up with demand. This dynamic will continue to support robust wage growth in 2022, adding further upward pressure on prices

Monetary Policy

The FOMC officially announced tapering starting from mid-November at a reduced pace of $15bn per month. The breakdown is: $10bn in Treasuries and $5bn in MBS. Interestingly, the November FOMC statement mentioned specific purchase targets for November and December, but not beyond. While the statement and press conference made it clear that the Fed saw the "base case" as similar adjustments in future months, the lack of pre-commitment nevertheless opens up the possibility of announcing a faster pace at future meetings. We think this detail is important because the pace of tapering will be key to tell markets when we should expect the first hike.

On that front, the combination described above in our forecast should be a recipe for a solid economic performance and a persistent overshoot of inflation in 2022. In our view, once the taper is completed the FOMC will need to start to consider injecting a modest dose of monetary restraint to counteract the likely tightening of labour and product markets and the overshoot of inflation. We expect the Fed's hiking cycle to begin in Q4 2022 and look for a gradual rise in rates—one hike in Q4 2022 and four hikes (once per quarter) in 2023. (*Note: Our expectation is that Powell will be re-nominated for a second term as Fed Chair. In our opinion, a Powell-led Fed will not be willing to tolerate the persistent inflation overshoot that we expect and will begin lift-off in Q4 2022. However, if Lael Brainard were to be the next Fed Chair in 2022 that could increase risks somewhat that lift-off could be delayed until 2023.*)

Once the taper is completed the FOMC will need to start to consider injecting a modest dose of monetary restraint to counteract the likely tightening of labour and product markets and the overshoot of inflation

EUR Economic Outlook

Giovanni Zanni
Chief Euro Area Economist

The recovery is not over: we look for strong growth in 2022, too. Surveys are off their recent all-time highs but remain elevated, with some even suggesting a re-acceleration. Excess savings and supportive economic policies should provide a convincing and lasting recovery for 2022 after the strong performance seen in 2021.

Peak in sight, but inflation is turning out to be more persistent than thought. Inflation is still expected to slow considerably throughout 2022. But this is happening from a higher base and within an overall more persistent inflationary context.

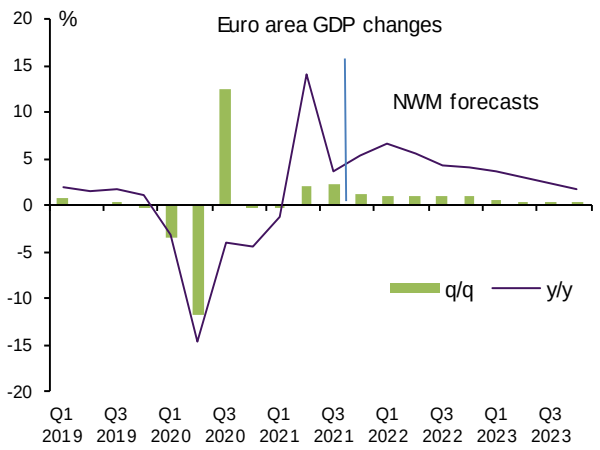
ECB 'recalibrating' QE purchases: expect more of it in 2022 – a rate hike is still a distant prospect, though. The ECB is ready to tolerate higher inflation for some time. The dovish turn in the reaction function post Strategy Review compensates for the higher inflation prints seen so far. A rate hike in 2022 is extremely unlikely – and, we argue, in 2023 too. 2024 seems the most likely first port of call for a hike.

Euro Area forecast summary

Source: Eurostat, ECB, NWM	% q/q, non-annualised								% y/y		
	Q1 22	Q2 22	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23	2021	2022	2023
Real GDP	1.0	1.0	1.0	0.9	0.6	0.4	0.4	0.4	5.2	5.2	2.7
- Household consumption	0.8	0.7	1.0	0.6	0.8	0.6	0.6	0.6	4.1	6.9	2.9
- Investment expenditure	1.5	1.5	1.5	1.5	0.9	0.6	0.6	0.6	5.4	6.9	4.1
- Gov't consumption	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	3.5	3.0	2.1
- Domestic demand	0.9	0.9	1.0	0.8	0.7	0.5	0.5	0.5	4.7	5.9	2.9
- Net exports (% pt)	0.0	0.1	0.1	0.1	-0.1	0.0	-0.1	0.0	0.8	-0.5	0.1
Nominal GDP, % y/y	9.7	8.0	6.4	5.6	5.3	4.7	4.1	3.6	7.7	7.4	4.4
Unemployment rate, %	7.2	7.2	7.2	7.2	7.0	7.0	7.0	7.0	7.8	7.2	7.0
HICP inflation, % y/y	3.0	2.4	2.1	1.5	1.6	1.7	1.8	1.8	2.5	2.2	1.7
HICP core inflation, % y/y	1.7	2.0	1.7	1.4	1.5	1.6	1.7	1.8	1.4	1.7	1.7
ECB depo rate (EoP), %	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
QE, end of period, trn									4.2	4.9	5.2
Fiscal balance									-7.2	-4.0	-3.0

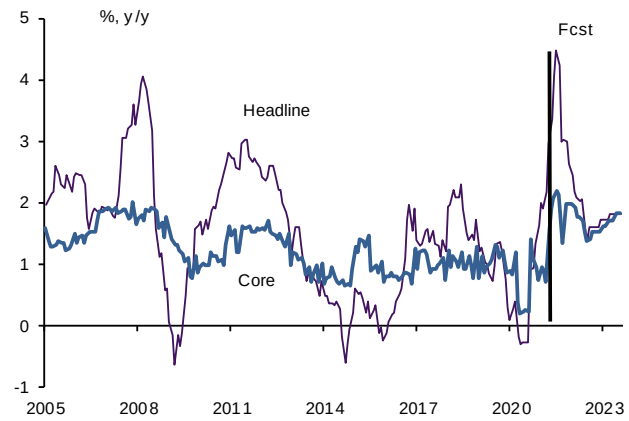
GDP growth normalisation has further to go

Source: NatWest Markets estimates, Eurostat



Peak in sight but inflation to stay higher than in the 2010s

Source: NatWest Markets estimates, Eurostat



Looking for another strong growth year in 2022 – energy (and covid) permitting. Consensus forecasts have been ramped up over the past months, converging towards our numbers for 2021. We believe the same should happen to 2022 figures, provided energy price dynamics evolve in line with futures and covid dynamics continue to remain under *sufficient* control (i.e. no new lockdowns). Private expenditure has been the growth driver in recent months, but in reality consumers have remained cautious with their excess savings accumulated during the pandemic: as such, solving the current supply bottleneck problems should come with a further boom in consumption, supported by those huge reserves of savings. While the recovery momentum might ease somewhat after the very strong Q2 and Q3 of 2021, it should still provide healthy growth going into 2022 and beyond, as restrictions continue to ease, bottlenecks recede and policies remain in support of the return to trend consumption and GDP. We expect a 5% rise in GDP (also) in 2022. Our 'bullish' view of the economy, however, is simply consistent with a normalisation of trend growth to pre-pandemic levels by the end of next year. That should be possible thanks to the support coming from fixed investment too: demand remains particularly strong, despite supply bottlenecks, while green investment projects are also prompting the need for new production capacity.

While the recovery momentum might ease somewhat after the very strong Q2 and Q3 of 2021, it should still provide healthy growth going into 2022 and beyond

Inflation should fall back to close to 3% in H1 2022 – and back below 2% by the end of 2022 by our estimates – after having reached a local peak of over 4% in Q4 21. Energy is by far the main driver of inflation right now, boosted by a combination of base effects and renewed tensions in gas and electricity prices. Tentative peaking (or at least plateauing) in a number of commodities and intermediate goods suggest that inflation should moderate in 2022, especially for industrial goods. Meanwhile, service prices have remained muted. While services inflation should re-accelerate from next year, 2022 will also see the end of various base effects – including that of the German VAT and likely of the pandemic-related energy price swings. Longer-term, we see underlying inflation moving higher – progressively – from the current low 1%s, with inflation due to move persistently close to 2% only in 2024-5.

Longer-term, we see underlying inflation moving higher – progressively – from the current low 1%s, with inflation due to move persistently close to 2% only in 2024-5.

The ECB has significantly revised up its growth and inflation forecasts for 2021-2022 in recent months but has continued to downplay short-term inflation volatility, and has only modestly upgraded its 2023 forecast. Still, the removal of the "significantly higher" qualifier to its PEPP asset purchases and the explicit announcement of the end of PEPP in March 2022 signal increased confidence in the recovery and inflation normalisation to come. With the new reaction function post

strategy review, however, a slow policy normalisation remains our central scenario: we don't expect a rate hike until 2024, despite markets having raised their bets for a first hike as soon as in (late) 2022. We think the latter is an extremely unlikely scenario and believe the ECB has recently reclaimed some degrees of freedom relative to an earlier rate lift-off, but only for (late) 2023: their forward guidance point to only an infinitesimal risk of rate rises next year.

Fiscal after-party? Not so fast… After a big boost in 2020/21, it seems that 2022 will get significantly less stimulus – or even an outright retrenchment on some measures. 2022 draft budgets – and fiscal dynamics so far – are compatible with a deficit reduction, from around 7% this year to around 4% in 2022, on our estimates. It is worth considering three key elements, though: first, the fiscal support of 2020/21 hasn't been spent in full: higher private savings are the other side of the medal of past fiscal intervention, which will release its effects slowly and pervasively in 2022 and beyond. That's not correctly captured by the mechanistic fiscal metrics, such as the so-called "fiscal impulse". Second, there is fiscal support 'below the line' in the EU, via the EU recovery fund: 2-3pp of GDP will be disbursed over the next five years via that route, especially to non-core countries, supporting activity while not being recorded in national deficit metrics. Third, some of the fiscal retrenchment is not 'real': a reduction of fiscal support to sectors that have started to function normally again post-pandemic cannot be considered fiscally restrictive in any practical sense. Overall, fiscal policy will still support growth – directly or indirectly – in 2022 and possibly beyond.

UK Economic Outlook

Ross Walker

Co-Head of Global Economics & Chief UK Economist

A UK interest rate raising cycle is imminent. We forecast BoE Bank Rate rises of +15bp to 0.25% in December 2021, +25bp to 0.50% in February 2022 and +25bp to 0.75% in August 2022. The BoE's underlying reaction function remains hazy: our central case is that they deliver relatively modest, tactical hikes to reinforce the 2% CPI anchor; the risk scenario is that more protracted policy tightening is required (~1½%) to bear down on domestic demand in order to offset external inflation.

No sooner has GDP returned to pre-pandemic levels than the headwinds of energy, tax and interest rate rises are hitting consumers and businesses. The ongoing normalisation in consumption flows, together with a draw-down of 'excess' savings stocks, will underpin growth despite a squeeze on real disposable income (+0.7% in 2021 & -0.6% in 2022).

Inflation is forecast to peak in spring 2022 (CPI at 5.2%) but the pervasive nature of the energy price shock leads us to expect the overshoot of the 2% target to persist into 2024.

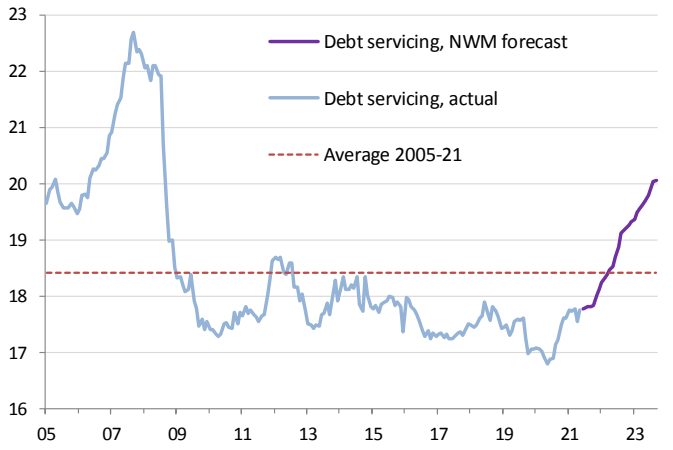
UK forecast summary

	% q/q, non-annualised								% y/y		
	Q1 22	**Q2 22**	**Q3 22**	**Q4 22**	**Q1 23**	**Q2 23**	**Q3 23**	**Q4 23**	**2021**	**2022**	**2023**
Real GDP	**0.9**	**0.7**	**0.5**	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**7.4**	**4.7**	**1.4**
- Household consumption	1.0	0.8	0.5	0.2	0.2	0.3	0.4	0.4	4.6	6.2	1.4
- Investment expenditure	1.1	1.0	0.9	0.7	0.7	0.7	0.7	0.7	5.4	4.1	3.0
- Government consumption	1.2	1.0	0.9	0.8	0.7	0.6	0.5	0.5	17.3	6.1	2.9
- Domestic demand	1.0	0.8	0.5	0.3	0.2	0.3	0.3	0.3	8.3	5.4	1.4
- Net exports (% pt contrib.)	-0.1	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	-1.2	-0.8	0.0
Nominal GDP	1.9	1.8	1.2	0.8	0.8	0.7	0.7	0.6	8.1	7.3	3.5
Unemployment rate, %	4.7	4.8	4.7	4.6	4.6	4.5	4.5	4.4	4.7	4.7	4.5
CPI inflation, % y/y	**4.8**	**5.1**	**4.8**	**3.8**	**3.5**	**2.6**	**2.5**	**2.4**	**2.5**	**4.6**	**2.7**
RPI inflation, % y/y	6.9	7.1	6.5	5.3	5.0	4.0	4.0	3.8	3.9	6.4	4.2
BoE Bank Rate, %*	**0.50**	**0.50**	**0.75**	**0.75**	**0.75**	**0.75**	**0.75**	**0.75**	**0.25**	**0.75**	**0.75**
QE stock, £bn (Gilts & corporate)	895	892	886	886	886	872	851	851	895	886	851
Fiscal balance, % GDP									-7.3	-3.4	-2.7

Source: NatWest Markets, Haver Analytics, ONS *End of period.

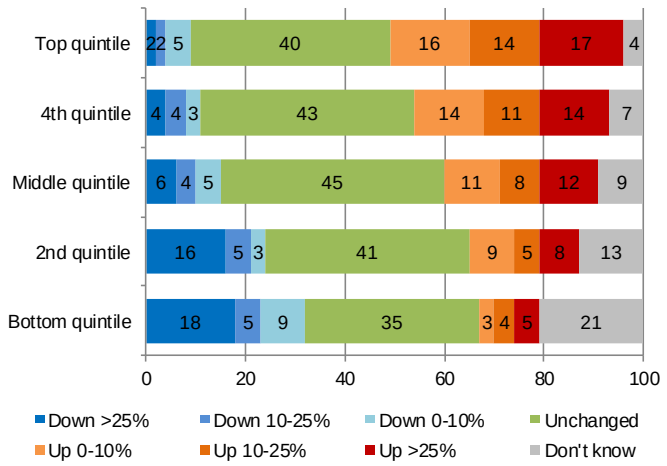
UK household debt-servicing costs, % of income

Source: ONS, UK Finance, NatWest Markets



UK household savings, % of respondents

Source: Resolution Foundation



GDP – Head above water in 2022

UK GDP is set to return to pre-pandemic levels before the end of 2021 – a respectable recovery given the setback of the Q1 2021 lockdown, but one which still leaves some slack to be absorbed (1-2% of GDP). Eliminating that slack will get a little tougher as consumer confidence and demand are tested by tax, inflation and interest rate rises (left-hand chart). We forecast real household disposable income growth to be tepid in 2021 (+0.7%) before falling -0.6% in 2022 on higher inflation, with a corresponding slowdown in consumption growth over the course of 2022. Still, 'scarring' appears far less severe than feared during earlier stages of the pandemic and around two-thirds of households report higher savings stocks during the pandemic (right-hand chart).

Eliminating slack will get a little tougher as consumer confidence and demand are tested by tax, inflation and interest rate rises

Early adverse Brexit effects are apparent in the trade data – with UK trade volumes vis-à-vis the EU running persistently below those with the rest of the world during 2021. We forecast net trade to lower UK GDP growth by 0.8% points in 2022 and for economic frictions with the EU to weigh to some degree on capex (4.1% in 2022).

Inflation – Q2 2022 peak but a more protracted overshoot

Although the majority of the rise in UK inflation from its autumn 2020 lows has stemmed from energy and goods prices, there is growing evidence of a broader pick-up in domestically-generated inflation. To the extent that the energy price shock intensifies and/or persists, the pervasive nature of energy costs means the risks of second-round inflation build. We forecast inflation to peak in spring 2022 but for the descent to be slower than previously forecast, with inflation above target until 2024.

We expect some uplift in underlying average earnings growth, but this should not be unduly problematic for monetary policy

The key battleground will be wage inflation. Thus far, evidence of acute upside wage pressure remains largely confined to specific sectors – though we are only now entering the key time of year for wage settlements. We expect some uplift in underlying average earnings growth – AWE of 5.3% in 2021 & 3.2% in 2022 – but this should not be unduly problematic for monetary policy.

Monetary policy – Regime change

The incoming BoE Chief Economist has spoken of 'regime change' as 2022 looks set to be defined by Bank Rate rises. Yet, the BoE's underlying reaction function remains hazy. Our central scenario is that the Bank believes that only modest policy tightening is required – we forecast +15bp to 0.25% in December 2021, +25bp to 0.5% in February 2022 and +25bp to 0.75% in August 2022. On our estimates, this

65bp of Bank Rate rises would lower CPI inflation by ~55bp (the approximate overshoot in services inflation).

The risk case is that, in order to hit the 2% CPI target, the BoE will need to bear down heavily on the domestic economy in order to arithmetically offset higher external price pressures – Bank Rate to ~1½%. Raising Bank Rate will do little to address the main sources of upward price pressure (global energy costs, supply-chain dislocations etc.) which, together with a delayed pass-through, suggests a risk of excessive tightening.

Raising Bank Rate will do little to address the main sources of upward price pressure (global energy costs, supply-chain dislocations etc.) which, together with a delayed pass-through, suggests a risk of excessive tightening

The large proportion of fixed-rate mortgages (almost 80% of the stock) will provide some temporary insulation form households but the bulk of this mortgage debt is fixed for relatively short periods of time. Our estimate of the impact on debt-servicing costs assumes some delay in pass-through – but also a larger uplift for households which re-set later. Overall, we estimate that Bank Rate rising to 0.75% would return debt-servicing costs to pre-GFC levels (left-hand chart). Although this is still a relatively low level historically, it would represent a significant increase compared to the last decade – the 'indirect' effects of monetary policy (e.g., on confidence) can be powerful. We therefore regard this sort of territory as being a reasonable proxy for the 'neutral' level of Bank Rate (~1.0%).

UK households' limited direct exposure to longer-dated yields means than any 'Quantitative Tightening' is unlikely to pack much punch in monetary policy terms (reverberations may be greater in financial markets without the BoE as the gilt buyer of last resort).

China Economic Outlook

Peiqian Liu
China Economist

China's growth drivers are expected to rotate away from exports and the property sector towards consumption and infrastructure investments. Common Prosperity means less focus on the headline GDP growth rate and more emphasis on the higher quality and more inclusive growth.

Producer price inflation will likely ease in 2022 as we expect some improvements in supply shortages. Food inflation may lift headline CPI marginally but is unlikely to limit the room for monetary policy easing.

For monetary policy, we expect only a mild rebound in the credit impulse. The PBoC will adopt targeted easing to support green financing and SMEs. We do not expect broad-based benchmark rate cuts but expect the PBoC to provide ample liquidity.

The key risks to our outlook are 1) China's "zero-covid" strategy; 2) a more prolonged and broad-based slowdown in the property sector.

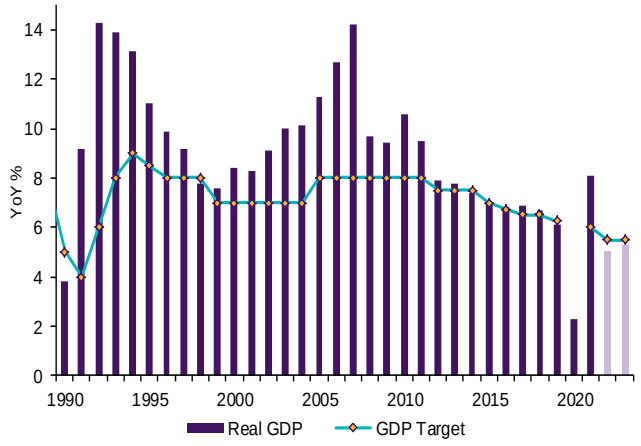
China forecast summary

	% y/y								% y/y		
	Q1 22	**Q2 22**	**Q3 22**	**Q4 22**	**Q1 23**	**Q2 23**	**Q3 23**	**Q4 23**	**2021**	**2022**	**2023**
Real GDP (%YoY)	4.7	4.6	5.7	5.1	5.2	5.3	5.3	5.3	8.1	5.0	5.3
- **Retail Sales**	4.5	4.9	5.7	6.2	6.2	6.2	6.2	6.2	9.7	5.4	6.2
- **Fixed Assets Investment**	4.7	4.9	3.2	3.7	4.1	4.1	4.1	4.1	7.8	5.3	4.1
- **Industrial Production**	5.4	5.2	5.8	6.2	6.0	6.0	6.0	6.0	9.4	5.6	6.0
- **Net Export (%pt)**	1.0	0.8	0.3	0.3	0.2	0.2	0.2	0.2	1.5	0.8	0.2
Nominal GDP, % YoY	7.6	6.6	6.3	5.7	6.4	6.4	6.4	6.4	9.4	6.6	6.4
Current Account (% of GDP)	1.5	1.3	1.0	1.0	0.7	0.7	0.7	0.7	2.2	1.2	0.7
CPI inflation, % YoY (average)	1.2	2.7	2.9	2.4	2.4	2.4	2.4	2.4	0.9	2.1	2.4
PPI inflation, % YoY (average)	8.5	5.8	3.6	1.2	1.2	1.2	1.2	1.2	8.3	5.5	1.2
1Y Loan Prime Rate, %*	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85	3.85
Reserve Requirement Ratio, %*	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
M2 Money Supply, % y/y	8.5	8.5	8.5	8.5	8.0	8.0	7.5	7.5	8.5	8.5	7.5
Aggregate Financing, % y/y	10.5	10.5	10.5	10.5	10.0	10.0	9.5	9.5	10.2	10.5	9.5
USD/CNY*	6.35	6.40	6.45	6.45	6.45	6.45	6.45	6.45	6.35	6.45	6.45

Source: Haver Analytics, PBoC, National Bureau of Statistics, NWM. *End of period.

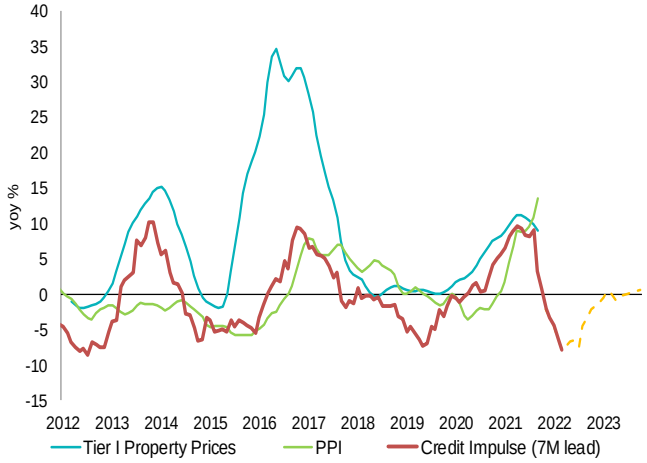
GDP to normalise towards long term potential growth

Source: CEIC, NatWest Markets



Credit Impulse will likely rebound mildly in 2022

Source: CEIC, NatWest Markets



China Economy

Growth drivers will rotate towards consumption in 2022

China's growth momentum has slowed in H2 2021, led by the weakening property sector and still sluggish consumer sector recovery. Exports and industrial production continue to outperform due to strong external demand. However, the outlook for exports and manufacturing sectors is dampened by disruptions from covid-related lockdowns and shortages of electricity, energy and raw materials into year end.

In 2022 we expect the supply side growth to stabilise in the first few months but growth drivers may rotate away from industrial and exports sectors towards consumption and infrastructure investments if China signals clearer departure from its current "zero-covid" pandemic management and reopens further.

PPI inflation normalises; monetary policy remains neutral

Producer price inflation surged further in Q3 and continued to make records as headline PPI reached 13.5%YoY in October. However, there was very limited pass-through to the consumer sector as domestic demand remained soft. CPI did pick up on the back of rising vegetable prices but remained well below the government's target of 3%. We expect CPI to rebound slightly into 2022 as food prices are set to rise but core CPI may be subdued as domestic demand recovers only gradually.

Since this round of PPI reflation was mainly driven by supply shortages of raw materials globally, the monetary policy response from the PBoC has been muted. Instead, the government has stepped in to release state reserves and increase imports to alleviate supply shortages. We expect PPI to ease in 2022 as demand for industrial metals has slowed due to weakening property sector activities.

In terms of monetary policy, the PBoC tilted towards an easing bias in Q3 2021 as growth momentum slowed and rising regulatory risks dampened financial market sentiment. We believe that policy makers have prioritised long term goals such as reducing debt growth, pushing forward regulatory changes and cracking down on monopolies, to the detriment of short term growth rates. In 2022, we think the priority will be shifted to stabilising cyclical growth momentum again, ahead of the 20th National Congress in late 2022. On the policy side, we expect a mild rebound in the credit impulse and think the PBoC will keep benchmark rates unchanged until at least end-2022.

"Common Prosperity" pivots away from GDP-centric policies

President Xi Jinping elevated achieving "common prosperity" as a long term policy goal for China in August, overturning the political and economic goal of letting "some people get rich first" since 1979. We think the emphasis on "common prosperity" as a policy goal signals a turning point in the long term economic policy priority. It marks the beginning of bureaucratic level reforms whereby local government officials will no longer be pressured to achieve lofty GDP targets. Instead, they will be assessed by a variety of indicators to achieve higher quality growth. This points to more downside risks to headline GDP growth but we believe the growth momentum will likely be more balanced and less debt-driven.

Risks to outlook: "zero-covid" strategy and property sector slowdown

Despite the accelerating pace of reopening globally after the steady adoption of covid vaccines, China remains firmly strict with the "zero-covid" strategy. Even though local governments' response to recurring domestic outbreaks has been more targeted and swifter, the uncertainties around lockdowns and regional travel restrictions are still weighing on consumer sentiment. China's borders remained mostly closed and tourism outflows will likely return later rather than sooner. Ongoing deleveraging in the property sector has also weighed on growth even though the impact has been limited. We caution any contagion from drastic property related slowdown may lead to systemic risks in China's broad growth momentum, from consumption to investments.

Japan Economic Outlook

Yoshio Takahashi
Chief Japan Economist

The lifting of the state of emergency on September 30th is expected to bring a rebound in private consumption in Q4 2021, following the -0.8% contraction in GDP in Q3. Government stimulus measures will also provide a tailwind and we forecast buoyant GDP growth in 2022 (3.0%).

Rising energy prices pushed CPI (ex-fresh food) inflation into positive territory in September at +0.1% y/y. However, sluggish wage growth is forecast to continue to limit domestic price pressures. We do not expect the Bank of Japan to begin to normalize monetary policy.

The key to maintaining growth after pandemic will be the extent to which the government is able to achieve structural reforms. The Liberal Democratic Party won a stable majority (261 seats out of 465 in the House of Representatives) and if Kishida survives the Upper House elections in 2022 his government may become a long-term administration.

Japan forecast summary

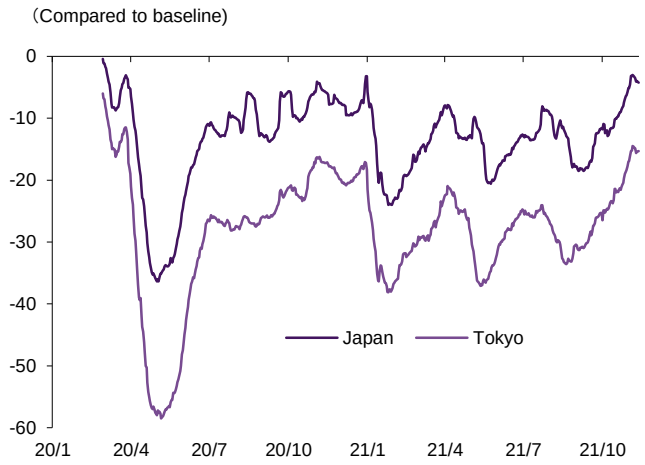
	% q/q, non-annualised								% y/y		
	Q1 22	Q2 22	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23	2021	2022	2023
Real GDP	**1.1**	**0.8**	**0.4**	**0.4**	**0.3**	**0.3**	**0.3**	**0.3**	**1.8**	**3.0**	**1.4**
Private consumption	1.0	0.7	0.4	0.3	0.2	0.2	0.2	0.2	1.4	3.1	1.1
Business investment	2.0	1.0	0.7	0.7	0.5	0.5	0.5	0.5	-0.3	3.8	2.4
Government consumption	0.5	0.5	0.0	0.0	0.2	0.2	0.2	0.2	2.6	1.7	0.6
Domestic demand	0.9	0.7	0.4	0.3	0.3	0.3	0.3	0.3	1.0	2.6	1.3
Net exports (% pt)	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.9	0.6	0.2
Nominal GDP	1.2	0.9	0.5	0.5	0.4	0.4	0.4	0.4	1.2	3.3	1.9
Unemployment rate, %	2.8	2.7	2.6	2.5	2.5	2.4	2.4	2.3	2.8	2.6	2.4
Core CPI inflation, % y/y	**0.2**	**0.8**	**0.6**	**0.6**	**0.6**	**1.0**	**0.8**	**0.8**	**-0.2**	**0.6**	**0.8**
BoJ short-term interest rate, %*	**-0.10**	**-0.10**	**-0.10**	**-0.10**	**-0.10**	**-0.10**	**-0.10**	**-0.10**	**-0.10**	**-0.10**	**-0.10**
BoJ long-term interest rate, %*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: Cabinet Office, Ministry of Finance, Ministry of Internal Affairs and Communications, Ministry of Health, Labour and Welfare, Bank of Japan, NWM. *End of period.

People are returning to restaurants (covid-19 Community Mobility Report, Retail & recreation)

Note: 14 days moving average

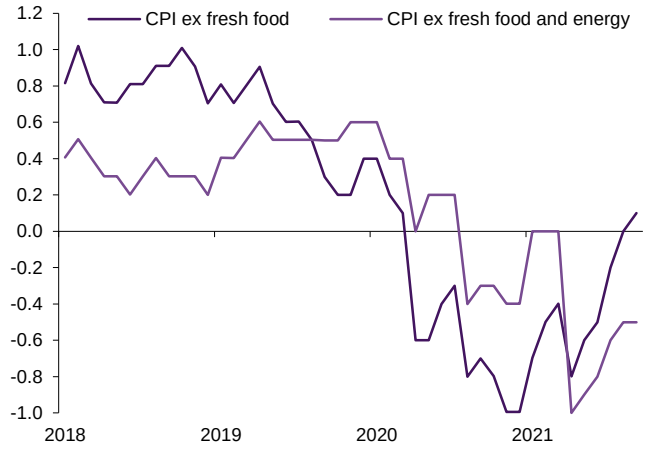
Source: Google, NWM



Inflation remains subdued (y/y, %)

Note: Excluding the effect of consumption tax hike in Sep 2019

Source: Ministry of Internal Affairs and Communications, NWM.



Japan Economy

Negative growth in Q3, but rebound in Q4 likely

The Japanese economy continued to stagnate in 2021 due to intermittent actions aimed at preventing the spread of covid-19. Real GDP for Q3 shrank 0.8% (-3.0% SAAR). In addition to the downturn in consumption, supply chain constraints have put downward pressure on the economy. The level of GDP in Japan is still 4.1pp below the pre-pandemic peak in Q3 2019.

However, with the lifting of the state of emergency restrictions on September 30th, the number of covid infections plummeted from its peak of over 25,000 new infections per day in August this year to around 200 cases. The share of people fully vaccinated against covid-19 has already reached 75%. Moving forward, private consumption is expected to recover gradually because of (i) the normalization of social and economic activities, (ii) the resumption of the government's 'Go To' campaign to support service industries, which was suspended in December last year, and (iii) the drawdown of the accumulated savings during the pandemic. The government's stimulus measures will also provide a tailwind for the economy. We expect the growth rate in Q4 to rebound. Provided there is no strong resumption in the spread of covid, real GDP is expected to return to its pre-covid level in 2022.

Despite the CPI returning positive, upward pressure is limited

With the rise in energy prices, core CPI (CPI excluding fresh food), turned positive in September for the first time in 18 months, at +0.1% year on year. However, CPI excluding fresh food and energy remains sluggish at -0.5% year on year. The impact of higher commodity prices and the depreciation of the yen are likely to continue and as economic activities resume, the output gap is also expected to improve. However, we believe sluggish wage growth will continue to limit domestic price pressures

With little concern existing over rising prices, the Bank of Japan, unlike other major central banks, is not looking to normalize its policy. The economic forecast presented by the Bank of Japan in its October outlook report indicates that core CPI inflation is expected to be +0.9% in 2022, +1.0% in 2023, and thus fail to reach the price stability target of +2%.

Possibility of Kishida Government being a long-term administration

The Liberal Democratic Party won a stable majority of 261 seats out of a total of 465 seats in the House of Representatives election held on October 31st. Although a poll that was scathing of the ruling party was released in advance, it could be said that the result indicates that the priority of the people is for the maintenance of stability. At the same time, the fact that the reform-oriented Japan Innovation Party made progress would seem to suggest the public understand that structural reform, rather than pork-barrel policies, is required to rebuild the economy.

Prime Minister Fumio Kishida, in his campaign for the LDP presidency and the general election, called for a review of neoliberalism and lauded the "virtuous cycle of growth and distribution". However, at present, he has not broken in any significant way from the policy line of the Abe and Suga administrations. If the covid infection rate remains low, the economy continues to recover, and Kishida survives the Upper House elections of 2022, his government may become a long-term administration. The key to maintaining growth after normalization from the pandemic will be the extent to which the government is able to achieve structural reforms. In particular, rigidities in the labour market are hampering wage increases, so there will be a lot of attention on whether useful measures can be taken in this regard.

Energy Outlook

Brian Daingerfield
Head of G10 FX Strategy, US

A core oil supply / demand imbalance looks set to continue into 2022 as global production rises but struggles to keep pace with surging demand. Rising prices naturally bring a greater impetus for increased oil production, but global oil production is not immune from labour and materials shortages. For developed market producers especially, ESG considerations from both private investors and public regulators may also factor into how quickly production can rise to meet demand. We don't expect OPEC+ to shift their slow-and-steady strategy on returning production, and we aren't exactly optimistic on an Iran deal being clinched during a US election year.

On the demand side, we expect demand to stay strong throughout 2022. Global growth is set to moderate next year, but 2022 growth should remain above pre-pandemic norms.

We expect further upside in oil prices next year. Covid-19 represents the most glaring downside risk for energy prices, but we expect demand for energy products (and goods demand in general) to remain strong. Rising vaccinations may allow global governments to further shift away from zero-tolerance covid-19 policies, making major travel restrictions that hamper oil demand less likely in 2022.

Global growth to moderate, but remain strong

We expect 2022 to be a year where growth moderates from 2021 levels. Nevertheless, we expect delivered growth in 2022 will remain well above pre-pandemic norms. Whilst the 'fiscal impulse' will inevitably diminish, fiscal policy settings remain clearly expansionary in the US and Euro Area. Consumer demand looks likely to remain healthy, broadly speaking, though shortfalls in consumer demand may reflect lack of supply (and higher prices) rather than a lack of demand, buttressed by high levels or savings.

We expect solid global growth to underpin energy demand

Markets have pulled forward expectations of policy tightening across developed markets and several EM central banks have already tightened policy aggressively. That said, we think monetary policy throughout 2022 will remain quite accommodative overall in many of the world's largest economies. In most major economies, we see inflation (particularly core inflation) relatively steady, albeit at levels higher than most policy makers may prefer. Energy prices will of course be a key input into inflation next year, but base-effects are set to be more restrictive next year.

Demand could stay resilient in the face of downside risks

A re-emergence of either an existing or new covid-19 variant presents a clear risk to demand. But we expect the impact from covid-19 on global demand for energy to wane further in 2022 as government reliance on zero-tolerance lockdowns and restrictions lessens, particularly in Asia. While vaccination rates have stalled in developed economies, vaccination rates are set to increase across the developing world in 2022 (albeit at sharply different rates, with different implications for growth in EM economies that we discuss here).

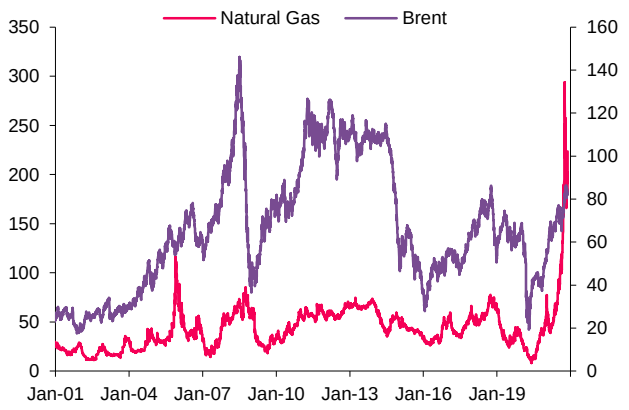
Demand for energy may prove resilient despite covid-19 risks

Demand for energy products due to travel is likely to continue to rise in 2022, with business and international travel likely to "catch up" with substantial rebounds already observed in leisure travel. KASTLE Security's Back to Work Barometer for the US enters 2022 at fresh post-pandemic highs, and saw only modest dips over the surge in the Delta variant through the summer. Of course, energy products also play a pivotal role in the global supply chain, and strong demand for durable goods (and, by proxy, demand to transport those goods) is set to remain elevated.

We think upside risks to demand are likely to persist at least through the winter heating season. While crude oil is set to close 2021 at or near multi-year highs, crude oil remains "cheap" compared to both record-high natural gas and crude oil levels seen before the 2008/9 Global Financial Crisis. Where possible, demand for switching away from natural gas should keep both crude oil and coal prices supported in the early months of 2022.

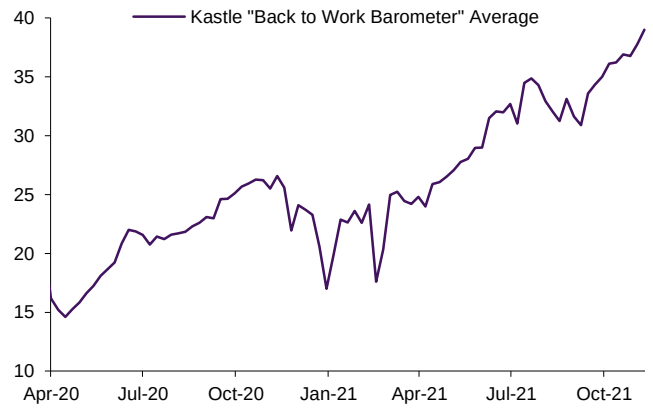
Oil vs. Natural Gas Comparison (EU Benchmarks) – Oil is relatively "cheap" to record high natural gas

Source: Bloomberg, NatWest Markets



KASTLE return to office barometer

Source: KASTLE, NatWest Markets
Data shows estimate commercial building occupancy rates based on entries into commercial buildings with Kastle security (i.e. uses of key fobs)



Prices probably have to rise before a "self-fulfilling prophecy" effect

We normally think about demand for energy as a driver of higher energy prices, rather than the other way around. But one could argue that the most pressing risk to a higher energy price outlook is…higher energy prices themselves. The extent that higher energy (and wider goods) prices weighs on overall global growth is a key risk in 2022. However, we do not see current price levels as sufficiently high to merit this type of "self-fulfilling prophecy" effect.

Higher prices themselves can be a risk to energy prices, given impact on confidence and monetary policy

Supply – inventories are just too low

High demand and slow-to-recover supply have contributed to a shortfall in crude-oil inventories, one which we do not expect will "correct" itself in the near-term as supply struggles to keep pace with demand. Low inventories, along with expectations of strong demand, are likely to keep energy prices supported through much of 2022.

OPEC+ - (still) slow-playing the global recovery

One of the persistent themes in energy markets in 2021 was the consistently conservative decisions by OPEC+ as regards global energy demand. OPEC+ oil production is almost certain to rise in 2022 as further quota reductions are approved and confidence in the oil-demand recovery continues to rise. That said, we think the orientation of OPEC will remain conservative in its oil quota increases, which on balance is a positive for oil prices. By contrast, a full abandoning of quotas in favour of a "max production" strategy, which would be a significant negative for oil prices, is unlikely.

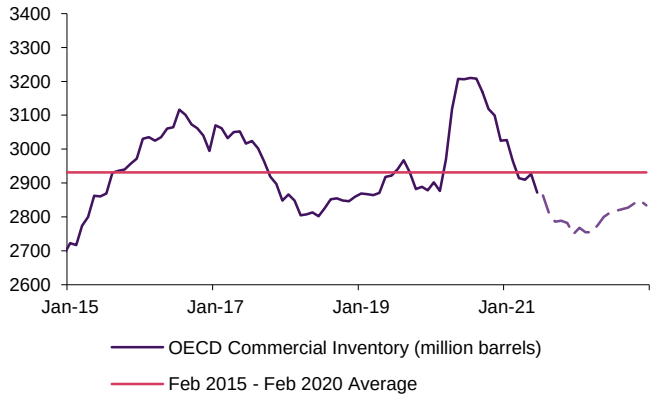
OPEC+ is expected keep a conservative approach to returning oil production

Periodically, developments in energy / geopolitics fuel concerns that the OPEC+ cooperation, formally in place since 2016, may fall apart. Those fears were most pressing in April 2020, when OPEC strategy disagreement briefly contributed to negative oil prices. We expect fears of an OPEC breakdown to once again feature as a risk for 2022, as higher prices pressure some OPEC+ members to argue for

faster supply increases to fight for market share. Those fears may once again prove unfounded, even though discord amongst OPEC+ nations on issues such as production baselines is likely to continue. Production capacity, while difficult to estimate, has likely fallen over since the pandemic in most OPEC nations – spare capacity remains high (owing to slow removal of quotas), though fear of OPEC "overproduction" may be met with capacity limits.

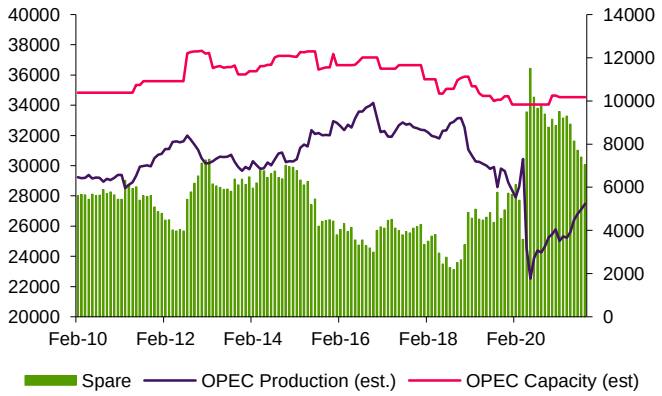
OECD Inventories (w / EIA estimates)

Source: EIA, Natwest Markets



OPEC spare capacity (est.)

Source: Bloomberg Estimates, NatWest Markets



Iranian production back in 2022? We're not confident

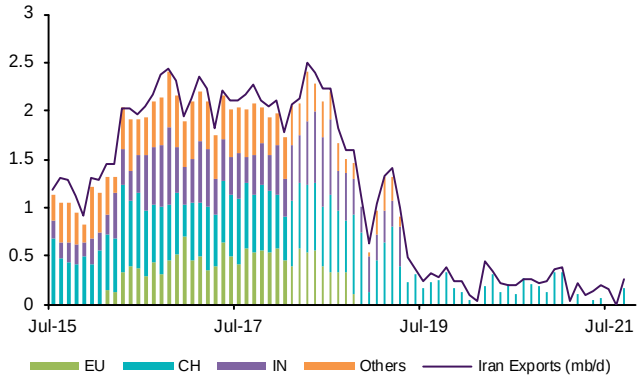
Iran nuclear talks, aimed at reviving the JCPOA (aka the Iran deal), stalled in the summer of 2021. With a new (and more conservative) Iranian government in place following August elections, the parties are reportedly set to return to the negotiating table as soon as this month. A desire to reignite talks at a time when energy markets in continental Europe are stressed is probably not a coincidence.

A quick return of Iranian oil to the market via a renegotiated JCPOA looks unlikely near-term

We remain pessimistic that Iranian oil will return to the market quickly in 2022. At the core of the dispute between Iran and the JCPOA negotiators is sequencing of sanctions relief from the US. Iran wants immediate relief from sanctions imposed by the Trump administration following the US withdrawal from the pact in 2018. The Biden administration has reportedly considered some more limited (and delayed) sanctions relief, with additional relief unlocked as Iran meets its JCPOA commitments.

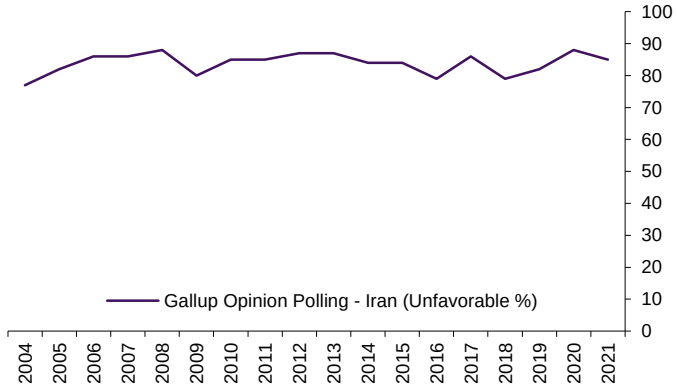
Iran oil exports by destination (mb/d)

Source: Bloomberg, NatWest Markets



US voter opinion – Iran (Unfavourable %)

Source: Gallup



Politics in both the US and Iran may also work against a quick revival of talks. As noted, Iran's new government is more conservative while the Biden administration may struggle to sell a revived Iranian nuclear deal to the US public. We expect 2022 will already be a challenging election year for the Democratic Party (see here), Even though returning to the deal has long been among his priorities. US voter opinions on Iran are not exactly positive.

But we acknowledge that the night is often darkest before the dawn, and the recent combative public tone could still mask real progress taking place behind the scenes. Mood music before talks broke down earlier this year suggested a deal may have been very close, so we hardly rule out a deal even if our base-case is highly sceptical. A completed deal could bring as much as 2mb/d back into global oil balances. China, the EU, and India were among the largest importers of Iranian oil prior to the US re-imposition of secondary sanctions on Iran's oil industry. The risk of an Iran deal adding fresh barrels to global markets has long contributed to OPEC+ cautiousness on increasing oil supplies, and may continue to do so.

Non-OPEC production faces challenges, including ESG

Non-OPEC production is seen rising next year as high prices and demand yield higher production…

Oil production in the US, the largest by-far of the world's non-OPEC aligned oil producers, stalled in 2021. While US GDP has rebounded the entirety of its pandemic decline, US oil production has hardly rebounded at all. Global oil production is hardly immune from the labour / raw materials shortages impacting global industry, with 50% of oil and gas executives surveyed in the Dallas Fed's 3Q 2021 energy survey noting difficulty in finding workers. Higher prices will naturally increase energy production in the US and other non-OPEC nations in 2022, but we think a return to the pre-pandemic production highs in the US is unlikely. The EIA forecasts us production growth at 11.9mb/d by end-2022, leaving US production still 1mb/d off its pre-pandemic highs.

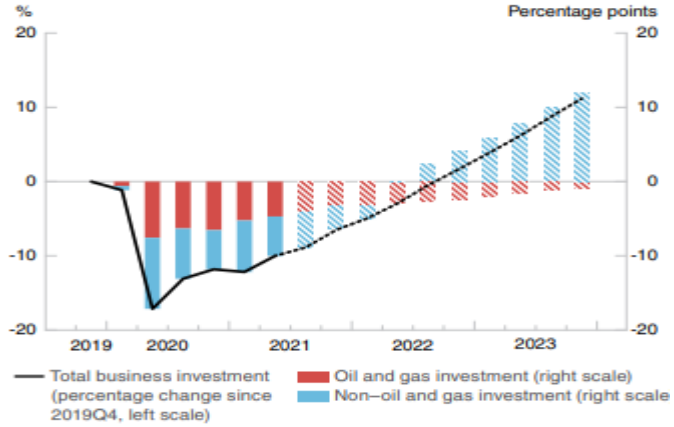
… But ESG considerations are long-term factors that can disincentive investment in / production of fossil fuels

A more fundamental question underpinning energy supply, particularly from non-OPEC nations, is the role of ESG and the long-term future for fossil fuels in global energy consumption. It is impossible to ignore the challenge in transitioning away from fossil fuels as a driver of structurally higher energy prices. In the US, President Biden campaigned on both restricting new extraction activities on federal land as well as phasing out or eliminating outright tax subsidies for production of fossil fuels. The former was implemented via executive order, though that order is currently stalled as it faces legal challenges. The latter provision may struggle to find its way into the Democrat's massive climate infrastructure bill amid centrist opposition, though this plan does include over $500bn in funding aimed at alternative energy sources. In Canada, the Bank of Canada forecasts that investment in the oil and gas sector is unlikely to return to pre-pandemic highs next year, lagging broader business investment.

We think it is probably too simple to suggest that relatively low investment in oil / gas extraction in the post-pandemic period is purely a function of ESG. Investor demand for oil producers to increasingly favouring returns / profit over investment in new drilling has been a persistent theme in this sector since before the pandemic. But private investor demand for investment in clean energy alternatives paired with public sector pressure on energy production is likely to be a theme that overhangs global energy markets over the next decade and beyond.

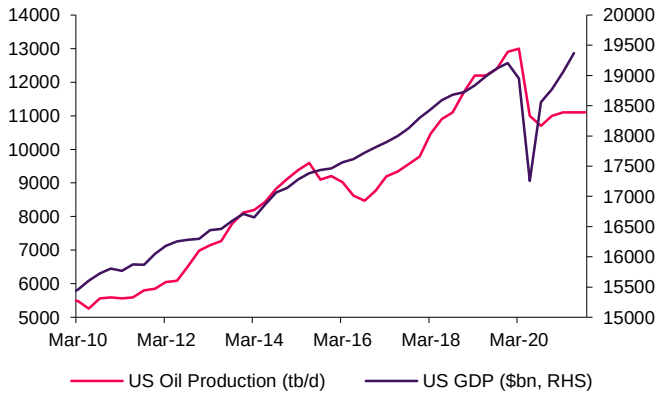
Bank of Canada business investment forecast by industry vs. 4Q 2019 benchmark

Source: Bank of Canada October MPR



US oil production vs. GDP growth

Source: EIA, NatWest Markets



Strategy Outlooks

US Rates Strategy

Stubborn inflation in 1H will lead markets to worry about more rate hikes. Core PCE's expected plateau at 2.9% will be a challenge for the Fed and the markets. We think inflation tail risks in the US will lead investors to demand further protection for US inflation. Front end US CPI swaps should remain well supported.

Bear flattening to continue. Inflation pressures should lead the market to price in more uncertainty around the Fed's reaction function. We think the Fed will remain credibility within its new framework, implying a front end driven bear flattening. An accelerated pace of taper leading to a faster bear flattener is a risk.

Fiscal spending is likely to slow. Supply and demand presents a more balanced picture. Covid remains an omnipresent risk. Split government after 2022 midterm elections could gridlock government spending. Treasury's supply cuts will roughly be balanced out by taper, but the demand side remains less certain as the Fed enters a hiking cycle.

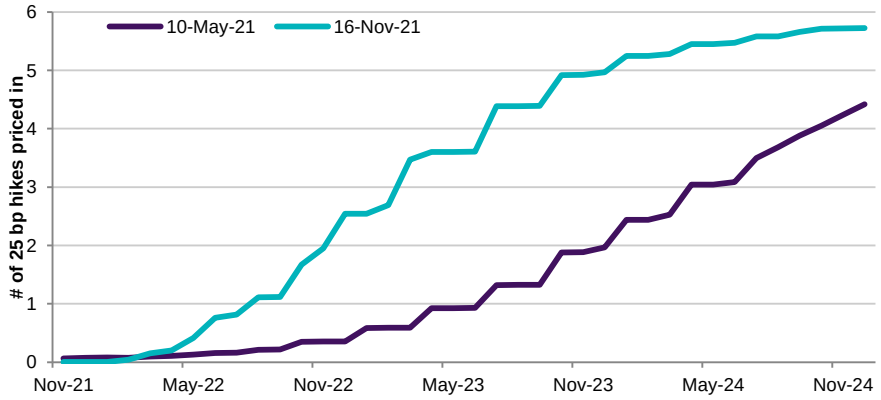
2021 was defined by two distinct periods for US rates: Q1's bear steepening, followed by bear flattening from May to November.

The first was spurred by expectations of stronger growth and inflation as vaccinations pointed us to a strong reopening backed by fiscal stimulus.

The second began with Vice Chair Clarida's signal in May that growth risks were balanced, and the risks for inflation were to the upside, culminating in a hawkish shift at the June meeting. When inflation, as we expected, remained durable and not transitory, the expected pricing of future rates (chart below) led to a bearish, belly-led flattening of the curve, we reached our objectives in both duration and curve flattening for our core views held since Clarida's sign in May.

Forward rate hike expectations – May vs November

Source: NatWest Markets



Looking ahead to 2022, we believe the first phase of future rate hike pricing has been completed, but it is not the last. NWM Economics sees core PCE inflation at 4%+ in Q1, but only falling to 2.9% y/y by Q4 next year.

So while the market pricing of 2.5 rate hikes for 2022 and 5 hikes for 2023 is in our view adequate at the moment, it is likely that another bearish move will occur early in the year given our expectation that inflation will not fall as much as expected, or in the Fed's case, hoped. Continuing from this year, as long as the Fed remains credible on its inflation mandate as we expect, the curve is likely to bear flatten. As rate hikes near, that flattening is likely to be increasingly front end led.

John Briggs
Global Head of Desk Strategy

Jan Nevruzi
US Rates Strategy

Theo Chapsalis, CFA
Head of UK Rates Strategy

As we look ahead to 2022, we believe the first phase of future rate hike pricing has been completed, but it is not the last

Based on this, and backed by the economic and inflation forecasts from NWM Economics, we present our rate forecast grid below.

NWM rates forecast grid

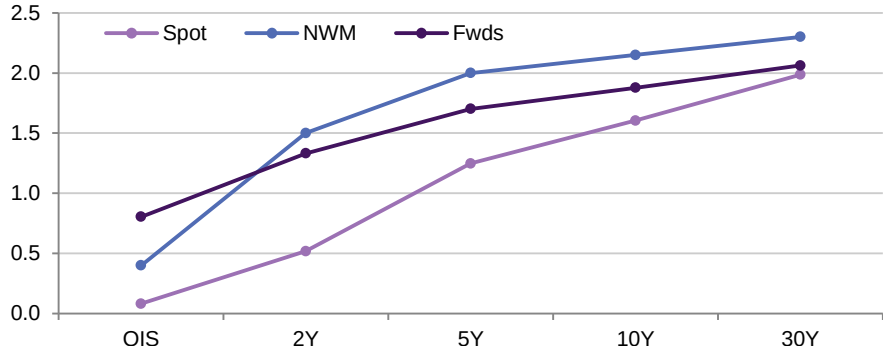
		2022				2023			
	Now	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
3m OIS	0.08	0.08	0.10	0.10	0.40	0.65	0.90	1.15	1.40
2s	0.52	0.85	1.15	1.35	1.50	1.65	1.80	1.95	2.00
5s	1.25	1.50	1.75	1.90	2.00	2.05	2.10	2.15	2.10
10s	1.60	1.80	2.00	2.10	2.15	2.20	2.25	2.30	2.25
30s	1.99	2.05	2.15	2.25	2.30	2.35	2.40	2.40	2.35
2s10s	109	95	85	75	65	55	45	35	25
5s10s	36	30	25	20	15	15	15	15	15
10s30s	38	25	15	15	15	15	15	10	10

Source: NatWest Markets, Bloomberg

Our forecasts in the table above are thus for higher yields than expressed currently by market forwards, as per below.

NWM vs. market pricing of forwards for YE 2022.

Source: NatWest Markets



Given our forecasts, we enter 2022 with four core themes:

Key Themes		Best Expression
Bear flattening in the yield curve to continue	Inflation pressure and strong demand will bring pricing for the Fed further forward into Q2. As long as Fed credibility holds (our view), further flattening should occur.	• Core 5s30s flatteners targeting ~35bps
Weaker belly in H1	Use any consolidation to reset 5yr shorts, pay belly on fly. Into Q2 shift to front end shorts (potentially also on curve).	• Sell 5yrs on rallies to ~1.00% • Pay 5s on 2s5s10s on retracement to +10bps
Risk for higher short dated BEs in Q1-Q2	We continue to favour shorter maturities across US inflation-linked; upside tail risks are imminent.	• 5s30s breakeven flatteners; receive short date US CPI swaps on retracement
Wider swap spreads	Wider spreads on the back of higher demand for cash, improved supply outlook and risk for regulatory relief.	• TU-OIS wideners • Long 5y & 20y spreads

Risks and themes

As noted in our Post-Pandemic Economy Themes, developed in this Year Ahead, while the uncertainties of last year regarding the pandemic, vaccination rates, and reopening are no longer broadly with us, these have been replaced by uncertainties about how the global economy will operate as we emerge from the pandemic. Many of the themes outlined have a clear impact on the outlook for US rates: indeed, our outlook for higher rates as Q1 progresses and into Q2 is predicated on less of a fall in core inflation than expected much due to lingering supply chain issues, amongst other things. We elaborate on some of these as well as other risks to the outlook and expected themes for 2022.

Inflation – risks remain skewed to the upside

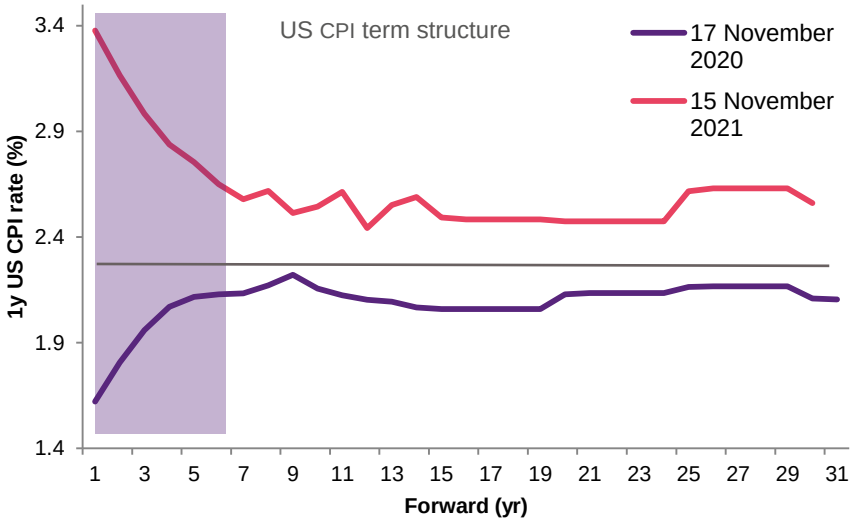
The topic of US inflation has been covered in great detail in other segments of our year ahead, more specifically in our US Economic Outlook. Even so, it is worth reiterating that even against our higher inflation forecasts, the risks for inflation remain skewed to the upside from several issues: tighter US labour markets post-pandemic, supply chain issues, strong demand, and only belatedly tighter monetary policy. Fiscal policy is sequentially weaker, but as argued in our Post-Pandemic Economy section Fiscal Retrenchment vs. Consumer Savings, we feel strong consumer balance sheets should outweigh any drag caused by pullback in fiscal spending. All these factors provide upside risks to US inflation-linked securities and' as we believe the Fed will remain credible, we focus our positive skew more to the front end.

Investors will demand protection for US inflation right now, not in the future so we expect the front-end of the US CPI swap curve to remain well supported, with less support for upcoming forwards. Clearly valuations are substantially richer than when we described this dynamic about one year ago (see chart below). At that time we recommended buying 1y1y US CPI swaps. This time we suggest investors continue with overweight positions in the sub-5y sector of the US CPI curve, especially as the tail of inflation risks is skewed to the upside.

Investors will demand protection for US inflation right now, not in the future

An inverted US CPI curve is here to stay

Source: Natwest Markets

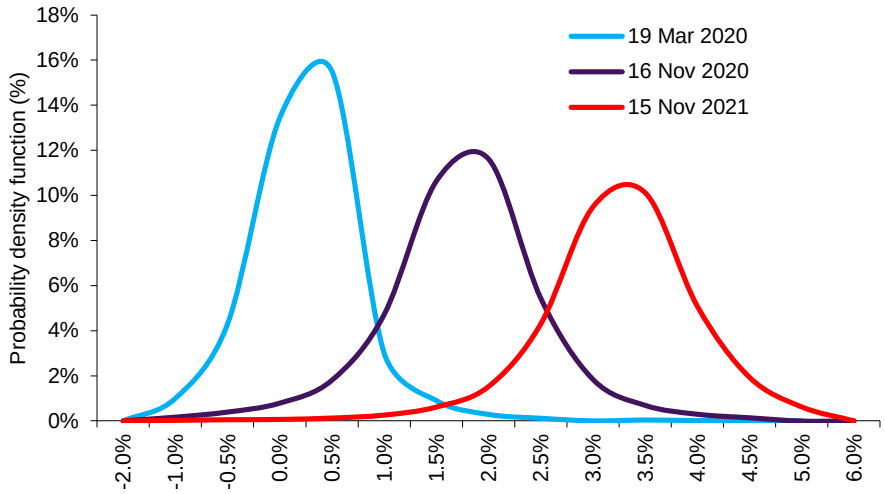


Inflation tail risks are best described through the risk-neutral density function (see chart below). This chart shows the distribution of inflation expectations over the 5y horizon and has been used by policy makers and investors as a guide for monetary policy. Since the peak of the covid stress in March 2020, inflation uncertainty has increased. This can be seen as the peak of the distribution is getting lower with less market conviction around the mean. Right tail events, which in the past were seen only as a fantasy, are now perceived by the market as realistic. For example the market currently assigns a 3.7% probability for CPI inflation to exceed on average 5% over the next 5 years. This probability was less than 0.1% same time last year. We also find that the market assigns practically no chance to deflation.

Going forward we expect this skew of risks to persist and potentially to become more acute. The pace of the recovery appears to be the strongest in the US vs other market so the risks are high that this transitory nature of inflation sticks around for a few years rather than months. Therefore, we have a strong preference for sub 5y CPI swaps and BEs while ongoing supply and tapering will push back-end inflation premia lower.

Evolution of the risk-neutral probability function

Source: NatWest Markets



Fiscal – added downside risks on slowing impulse

We believe the view of a looming "fiscal cliff" is well-known and is in our view consensus by now. As noted in Fiscal Retrenchment vs. Consumer Savings, to a certain degree we disagree with that notion. But there is a less considered downside risk to fiscal spending, that of a likely split government after the 2022 midterm elections.

There is a less considered downside risk to fiscal spending, that of a likely split government after the 2022 midterm elections

The November 2021 elections showed GOP success both at the higher level of state governors, as well as down ballot and with independents, who in 2020 helped Biden ride to victory over Trump. The strong showing for Republicans in November 2021 follows a very clear trend in American politics – the party out of power tends to dominate in the following cycle's midterm elections. The President's party (in this case, the Democrats) have gained net seats in the following cycle's midterm election *just once since 1942*, and President Biden already enters a difficult cycle with razor thin majorities in both the House and Senate.

Midterm Election History – The President's Party almost always sees substantial losses in midterms.			
	Presidential Party	House Seats Gained/ Lost for President's Party	Senate Seats Gained / Lost for President's Party
2022*	D*	-5* (to flip control)	-1* (to flip Control)
2018	R	-42	1
2014	D	-13	-9
2010	D	-64	-6
2006	R	-30	-6
2002	R	8	1
1998	D	-4	0
1994	D	-54	-8
1990	R	-8	-1

Source: Brookings, NWM, US House and Senate.

*Note 2022 is shown for Comparison, with Red text showing changes needed for Democrats to lose majorities.

The loss of majority control in Congress for Democrats would likely lock down further legislation until the 2024 elections, in nearly all scenarios except that of a significant re-emergence of the pandemic.

In the meantime, there are two infrastructure plans that we think are likely to be implemented starting from next year. The first bipartisan one is already signed into law and will include about $256bn of net spending spread over a decade. The second, Democrat-only plan is still in the works and is meant to come with spending offsets. Therefore, despite all the headlines about the new infrastructure packages, the fiscal boost from those is not even comparable to the earlier covid-linked packages.

From a legislative perspective, we are likely approaching (if not already past) peak Biden. A tougher legislative environment may yield a shift to a greater foreign policy focus, even before 2022 midterms. This would mirror the Trump experience, who spent year one on legislative priorities and focused more clearly on trade in year two.

Covid – an omnipresent risk to the downside for growth, yields and inflation

While we are optimistic that covid is evolving into an endemic situation and will not remain at a pandemic level for 2022, we regrettably need to flag that a clear downside risks to our forecast is the emergent of a vaccine or treatment resistant variant more virulent than the delta variant turned out to be. While perhaps a minor risk at this stage, it must be recognized. In general terms, a re-emergence of covid-19 related lockdowns could bring with it a combination of lower growth expectations while simultaneously lengthening out expectations for resolution of global supply shortages. Put another way, variant risk is stagflationary, in our view.

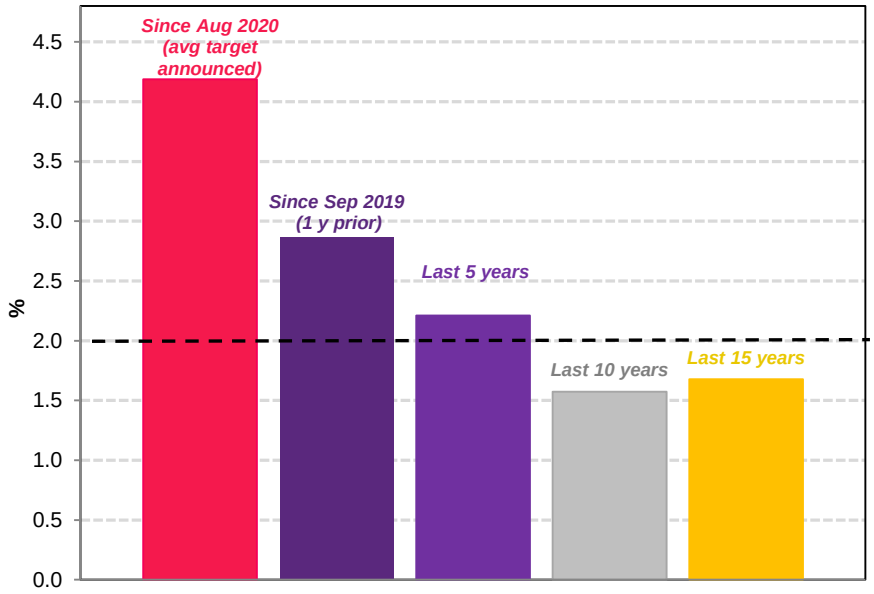
Taper and Employment – risk to increased pace of taper and faster bear flattener

We believe the threshold to change the pace or timing of tapering is high, but not unattainable. While markedly higher inflation can force the Fed to change its reaction function, in our view the easier path to a faster taper is through the employment mandate. The Fed has made it clear that its inflation goals under FAIT have been met and the weak link currently is the unemployment side of the picture. Indeed, as the chart below indicates, the Fed has already made up for inflation's undershoot over a 5-year lookback period, and gaps for a 10- and 15-year period (essentially the entire post-GFC shortfall) are small and narrowing quickly.

If we continue to get consistent upside surprises in job gains, there is a chance the Fed may wish to end asset purchases earlier than June

Average Headline PCE

Source: BEA, Natwest Markets, Gavekal Research



The October jobs number released on November 5th was strong at +531,000, but in our view not enough to begin speculation of a December change in the taper timeline. However if we continue to get consistent upside surprises in job gains, there is a chance the Fed may wish to end asset purchases earlier than June. Indeed, we feel Powell's November press conference was designed to communicate that optionality: *"We are prepared to speed up or slow down the pace of reductions in asset purchases, if it's warranted by changes in the economic outlook. And again, if we feel like something like that's happening, then we'll be very transparent about it. We wouldn't want to surprise markets."*

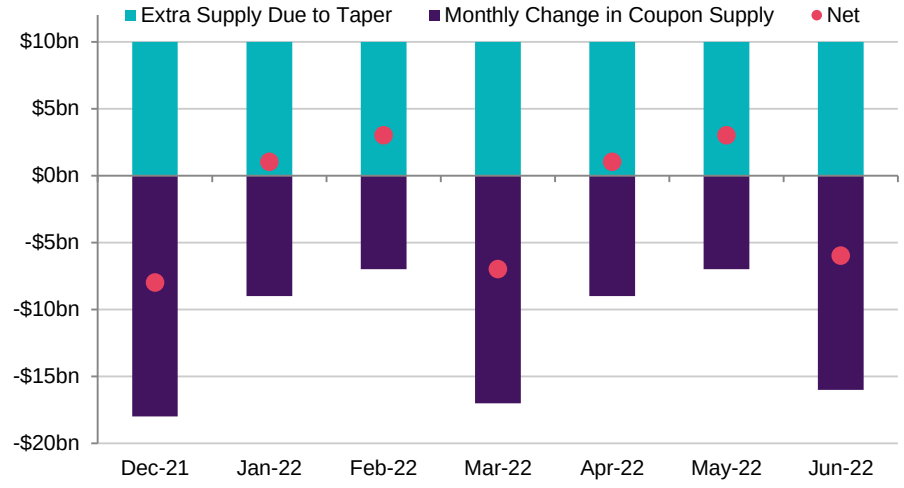
Supply and Demand – balanced risks

In a coincidence not lost on many, the US Treasury embarked on its first rounds of coupon issuance cuts the same morning that the Federal Reserve announced its taper of asset purchases.

As the chart below shows, the reduction in Treasury supply on a notional basis over time generally matches that of the Fed taper, at least through the end of taper (assuming current monthly pace maintained) in June. At a high level these may offset reasonably well, but bear in mind that the Fed buys across a range of securities, while Treasury by definition issues on-the-runs, leading to a liquidity mismatch.

Change in supply left for market after taper and lower Treasury issuance

Source: NWM, Bloomberg



As the pandemic related support programs diminish and the government's cash needs decrease, public financing needs in 2022 will be significantly lower compared to 2021. We estimate that Treasury will need to finance $1.5tn of deficits in FY22 compared to a deficit of just under $2.8tn in FY21. From a supply perspective, we expect the Treasury to continue to cut issuance through the August 2022 refunding, as shown in the table below. The first round of cuts was overweight in 7s and 20s and we expect the trend to continue into next year. Our supply outlook is discussed in more detail in the Global Supply section.

As the pandemic related support programs diminish and government 's cash needs decrease, public financing needs in 2022 will be significantly lower compared to 2021

NWM Coupon auction size forecasts

Source: U.S. Treasury, NatWest Markets

	Nominals										TIPS					
Date	2	3	5	7	10	r	20	r	30	r	5	r	10	r	30	r
Oct-21	60	58	61	62		38		24		24	19					
Nov-21	58	56	59	59	39		23		25					14		
Dec-21	56	54	57	56		36		20		22		17				
Jan-22	54	52	55	53		36		20		22			16			
Feb-22	52	50	53	50	37		20		23						9	
Mar-22	50	48	51	47		34		17		21				14		
Apr-22	48	46	49	44		34		17		21	19					
May-22	46	44	47	42	35		17		21					14		
Jun-22	44	42	45	40		32		14		19		17				
Jul-22	42	40	43	38		32		14		19			16			
Aug-22	40	38	41	36	33		15		19							8
Sep-22	40	38	41	34		30		12		17				14		
Oct-22	40	38	41	32		30		12		17	19					

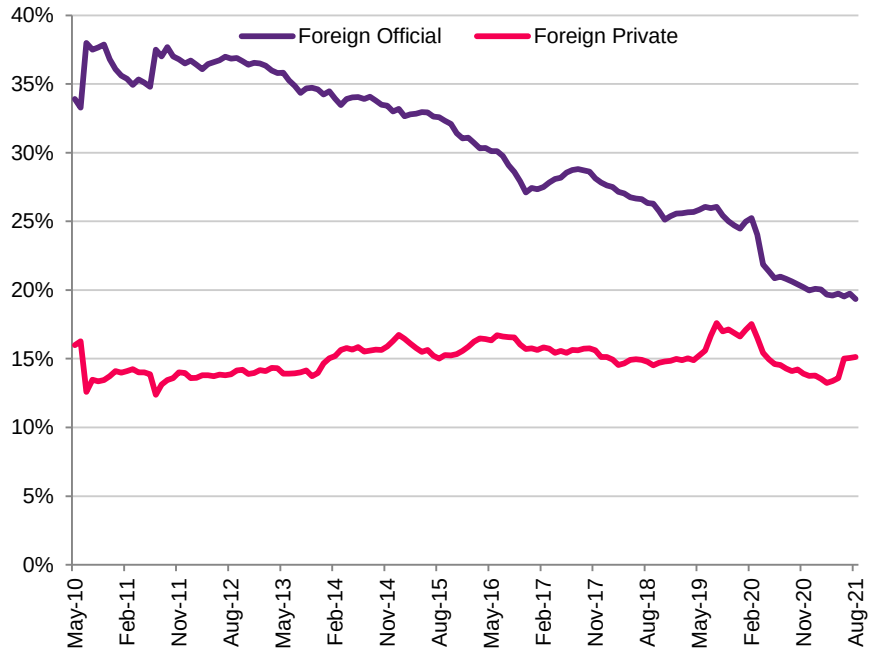
The less certain variable is the demand side, in particular foreign demand as the Fed enters a rate hike cycle. Granted, even now US yields are attractive on a 3m rolling hedged basis, and foreign investors may benefit from a rising USD, but the risk of capital losses may be a concern. Indeed, over the last several years, foreign demand has generally been declining as a share of overall demand.

The less certain variable is the demand side, in particular foreign demand as the Fed enters a rate hike cycle

% of marketable treasury debt held by foreign owners*

Source: US Treasury, NatWest Markets

*Foreign holdings taken from TIC data, which isn't inclusive of every country but should include all meaningful holders of UST.



That said, a falling share of holdings does not represent less nominal demand, only that foreign demand did not keep pace with the massive rise in issuance (they bought about the same in notional, but Treasury issued a lot more and other account types had to make up the slack). In addition, lack of Fed QE may reduce governmental crowding out, albeit at potentially higher yields (not our view, but it is possible). So while we are cautious on foreign demand heading into 2022, we do not have enough conviction for this to overly influence our forecasts.

Geopolitics and specifically China - risk of rising tensions

While we analyse China and their seismic shift to Common Prosperity in a separate section in this Year Ahead, we also want to flag that in a highly partisan Washington D.C., China is one topic that unites both parties. As discussed above, as Biden's legislative focus declines in 2022, there is scope for his foreign policy focus, and specifically China policy, to increase.

Our baseline for US / China relations in 2022 is for continued tension, but not Trump-style escalation

That said, our baseline for US / China relations in 2022 is for continued tension, but not Trump-style escalation. When engaging in various trade wars, President Trump had the benefit of strong domestic growth alongside a low and stable inflation environment. Biden's willingness to use and employ tariffs / trade barriers in 2022 should be extremely low at a time when reducing inflation is a top priority of the White House. Note that another relatively quiet year for US/China relations under Biden is widely anticipated – in our investor survey, no respondents identified US/China trade risk as the biggest risk to Chinese growth in 2022.

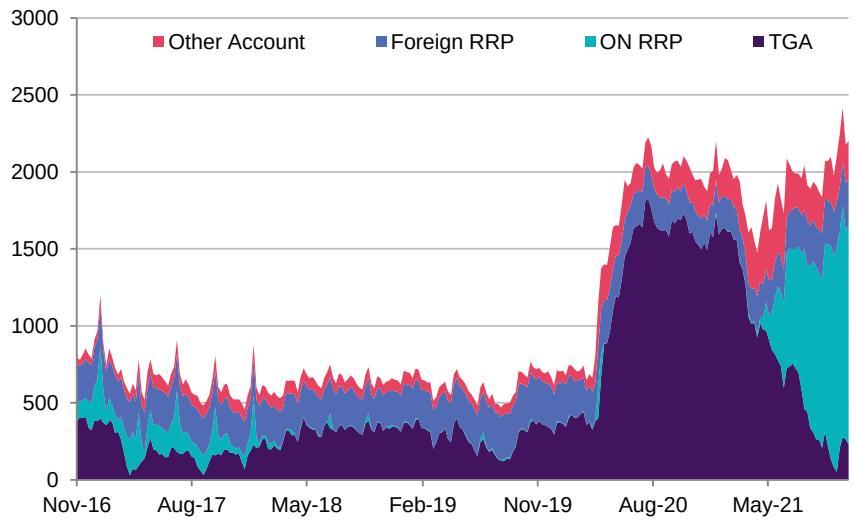
Liquidity, front end and spreads

The Fed has officially started tapering, which tends to be the driving narrative about diminishing liquidity in the system. It is hard to deny that the pullback of Fed flows would create liquidity problems in specific segments of the market (e.g. between off-the-run and on-the-run securities). However, by this point, the banking system is so saturated with cash that almost all of the new money injected into the economy through large government spending has been re-routed into the Fed's liquidity absorbing ON RRP facility, which at the time of writing sits at about $1.5tn. This was largely driven by banks 'pushing' non-retail deposits to money market funds, who in turn invest it at the facility due to a shortage of front end risk free paper. Therefore, we think liquidity in the front end will remain abundant and money market rates will remain relatively compressed, especially bills which we think are likely to remain anchored at/below the ON RRP rate.

By this point, the banking system is so saturated with cash that almost all of the new money injected into the economy through large government spending has been re-routed into the Fed's liquidity absorbing ON RRP facility

The Fed facilities that are absorbing liquidity out of the system

Source: Bloomberg, NatWest Markets



In spreads, we see a few themes that could have a slightly longer shelf life than tactical trades. First, front end spreads have started moving higher and we think they will continue to do so. There is plenty of liquidity in the system and a corresponding demand for front end paper as yields are reaching attractive points for hold-to-maturity portfolios. Treasury issuance cuts will compound richening pressure on cash. Meanwhile if markets move to price in more hikes in Eurodollars, swaps will see upward pressure. We therefore see wider TU-OIS spreads.

Moving along the curve, we think the largest risk for belly spreads next year is potential SLR relief. The Fed has acknowledged they are still investigating the issue and banks have made it clear that they are reaching balance sheet capacity with respect to total leverage exposure. If we get some SLR relief for reserves (or reserves and Treasuries), banks will on balance have more balance sheet capacity to absorb Treasuries, leading to wider belly spreads.

Finally, in the longer end, we think 20-year spreads could outperform. Treasury overweighed cuts in the 20y bond in the last round of refunding announcement and are likely to remain maintain that trend. Additionally, CME's plans to introduce a futures contract based on the 20s should lead to improved liquidity in the cash product and potentially helping with the sector's structural cheapness.

Appendix: 2021-2022 versus the 2016-2018 cycle

When we initiated our bearish belly trades in May of 2021 (5s at 0.80%, 5s10s flatteners at ~80bps, short 5s on 2s5s10s at -10bps), we were emboldened by the view that the 2021 cycle would have echoes of the 2016-2018 cycle. In brief, both cycles began with large expectations of growth and fiscal stimulus that led to an early bear steepening, only to shift to a bear flattening as those expectations were validated (at obviously different speeds).

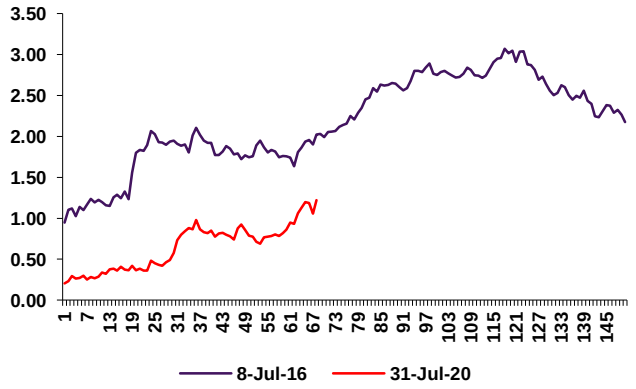
Of course no cycle is the same, and we recognize there are stark differences in the global inflationary outlook as well as the fact the Fed is likely to not be raising rates on its own in 2022, thus global yields may rise along with US Treasury yields (and all the FX implications that arise from that).

But even so, we continue to see similarities: namely that flattening should continue and like in that cycle, after an initial bear move, a second bear move should emerge. But as with all bear moves and bear trades that tend to be negative carry, timing is critical, which is why we have turned neutral for now and look to re-enter outright duration shorts after a period of consolidation.

With all this in mind, we present a series of charts below to show how the two cycles have tracked, with strong similarities.

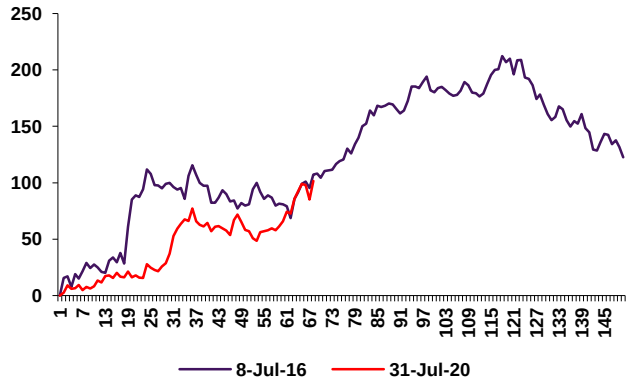
Recent history vs. 2016-2018 cycle, 5yr yields, level, from prior yield low (date indicated) in weeks

Source: Bloomberg, NatWest Markets



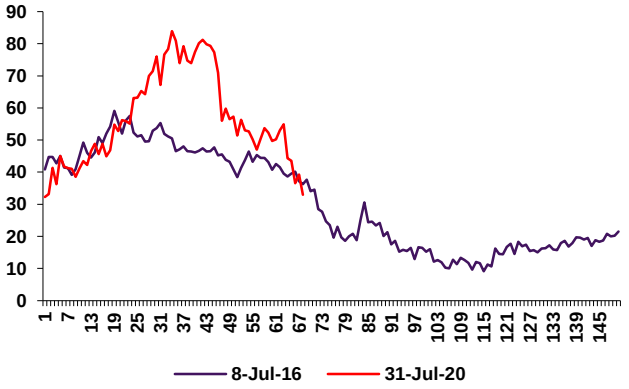
Recent history vs. 2016-2018 cycle, 5yr yields, cumulative change, from prior yield low (date indicated) in weeks

Source: Bloomberg, NatWest Markets



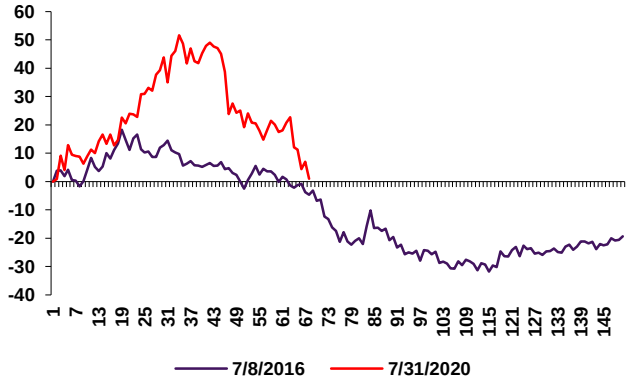
Recent history vs. 2016-2018 cycle, 5s10s curve, level, from prior yield low (date indicated) in weeks

Source: Bloomberg, NatWest Markets



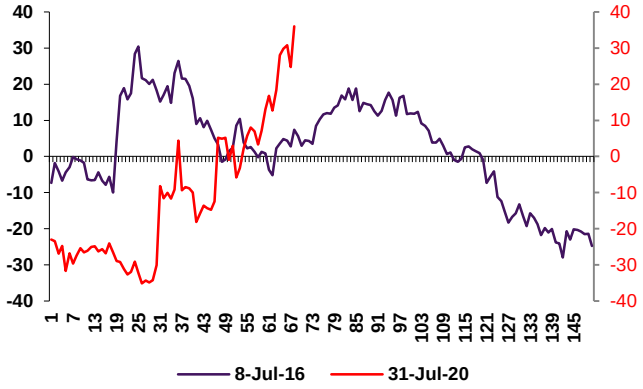
Recent history vs. 2016-2018 cycle, 5s10s curve, cumulative change, from prior yield low (date indicated) in weeks

Source: Bloomberg, NatWest Markets



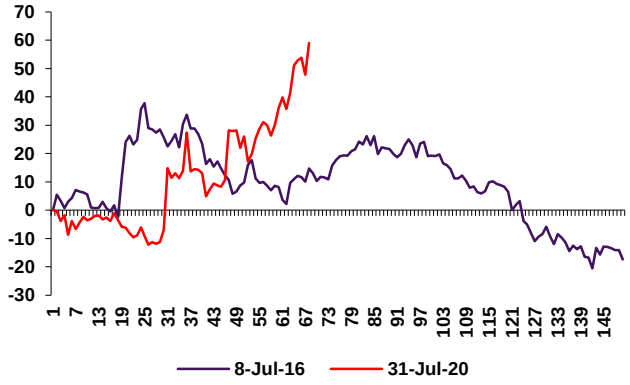
Recent history vs. 2016-2018 cycle, 2s5s10s curve, level, from prior yield low (date indicated) in weeks

Source: Bloomberg, NatWest Markets



Recent history vs. 2016-2018 cycle, 2s5s10s curve, cumulative change, from prior yield low (date indicated) in weeks

Source: Bloomberg, NatWest Markets



EUR Rates Strategy

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Head of European Rates Strategy

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European Rates Strategy

ECB policy rates will stay put in 2022. You wait ten years for some inflation and then it comes along all at once. It might be frustrating, but it's also an opportunity for the ECB to re-anchor expectations. The mistakes of 2011 have been learned. Rates are unlikely to be raised in 2022 and perhaps not 2023 either.

QE tapering will start, and perhaps end, however, and that is what will dominate for markets. Above all higher inflation and lower asset purchases will mean higher rates. There are no new reasons to expect buyers at these levels as the ECB pulls back. We target 0.5% for the 10 year bund yield.

2021 stresses in curves and spreads will be 2022's opportunities. Curve steepening was one of 2021 great frustrations, but we see 5s30s as 2022's all-weather option. Swap spreads end the year at the wrong level and should tighten.

Politics is back after a quieter year but less excitement may be the surprise from both France and Italy. Overall we are positive sovereign spreads, and neither taper nor higher rates are insurmountable structural problems.

ESG's growth and development will maintain 2021's momentum. Green finance, meanwhile will have another strong year, led by the EU and as the ECB puts substance into its intention to establish climate thinking throughout its frameworks.

The ECB. The race to zero is about QE, not the policy rate!

1. The long countdown to ECB lift off will start, but not end in 2022

Market expectations for rate hikes in 2022 will not be vindicated. Inflation should moderate quickly enough to sustain QE until 2023 (see our economic section) and nothing suggests any weakening in commitment to the forward guidance that makes ending QE priority number-1. The key points are:

1. The ECB will be more dovish for longer... The Strategy Review sealed a dovish shift, which we discuss in detail in a separate section. After a decade of inflation undershoots, 2021's overshoot may be more than hoped for, but it's an opportunity to re-anchor expectations closer to the 2% target nonetheless. 2011's policy mistake, meanwhile, still casts a long shadow. Even the most hawkish GC members (Austria's Robert Holzmann preens those feathers) don't see QE ending before September (or later) next year.

2. ... especially when it comes to rates: Sequencing is iron-clad. Anglophone central banks have been more agile (or clumsy) on policy guidance in recent months, and markets love to think of central banks as dominoes. That doesn't work for the ECB. Sequencing (i.e. stop QE first, then hike rate) has been a key part of forward guidance for years and we detect no appetite to raise rates earlier. On the contrary they are as clear as ever on the rationale. Schnabel concluded this November that low rates are 'fairer' than asset purchases overall, for example. Unless QE ends very quickly, it will be hard to fit in a rate rise before 2023. It may well be longer still.

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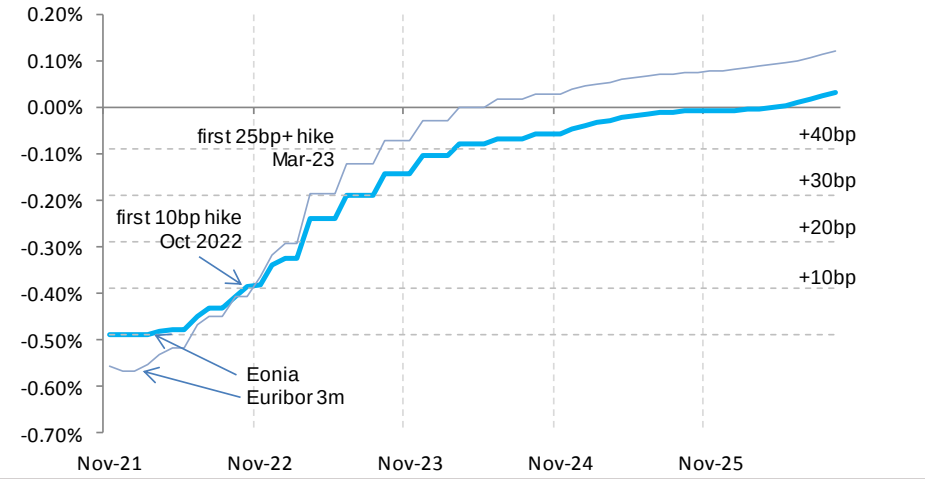
3. 10bp, not 25bp hikes when they come. After seven years of sub-zero rates and 13 years of falling rates, 25bp is an enormous move. If you're way behind the curve, there could be a justification, but it isn't realistic that the ECB will be so far offside next year. If they need to get moving, 10bp per quarter would get them back to zero in just over a year. It's hard to imagine them feeling that's not enough to start with.

4. Significant upside in inflation is unlikely. The threshold for action on inflation is worth committing to memory: It has to forecast CPI at 2%, we are told, by the mid-point of the projection horizon – that is, between one year and 18 months. The projection then has to stay there *"durably for the rest of the projection horizon"*. That forecast has to be sufficiently robust: *"realised progress in underlying inflation [must be] sufficiently advanced to be consistent with inflation stabilising at 2% over the medium term"*. This is a tough hurdle to meet. The ECB will publish 2024 macro projections for the first time at the December meeting, which we expect to show just 1.8% inflation – still well below the (new) 2% target.

Conclusion: Rate hikes are not a 2022 story, and probably not even in 2023. Markets have far to go. The chart below shows market pricing at the time of writing in late November. There is upside in the front end.

Markets price a 10bp hike by Oct-22, and rates back to 0% by 2025

Source: NatWest Markets



2. QE in 2022. A taper, but not to zero

Euro rates in 2022 will be dominated by what happens with asset purchases, not rate hikes. Our base case (in line with consensus) is for PEPP to be replaced with an increase in APP that adopts some flexibilities of PEPP (with respect to the capital, and Greece, etc.), and plugs *some* of the gap left by PEPP purchases.

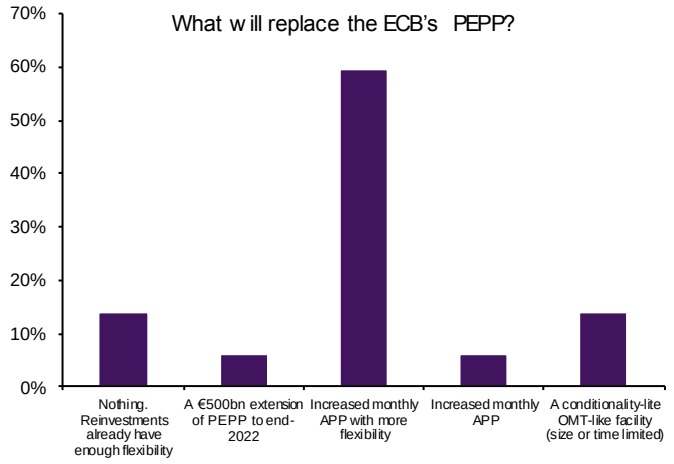
Our base case taper scenario has net purchases falling from €70bn in Q1 to €30bn by year-end. That would mean total purchases of close to €600bn, compared to the more than €1tn this year. The chart below illustrates, together with 'hawkish' and 'dovish' alternatives. Although we see the skew on the hawkish side, a taper ending earlier than October seems very unlikely to us.

"On the issue of flexibility, I think we have demonstrated, when forming PEPP, under the conditions that we know, that we can actually have the flexibility necessary in order to deliver on our mission […] we need to make sure that that remains the case. We've demonstrated it, and I'm sure that we can do so in the future."

Lagarde, October Press Conference

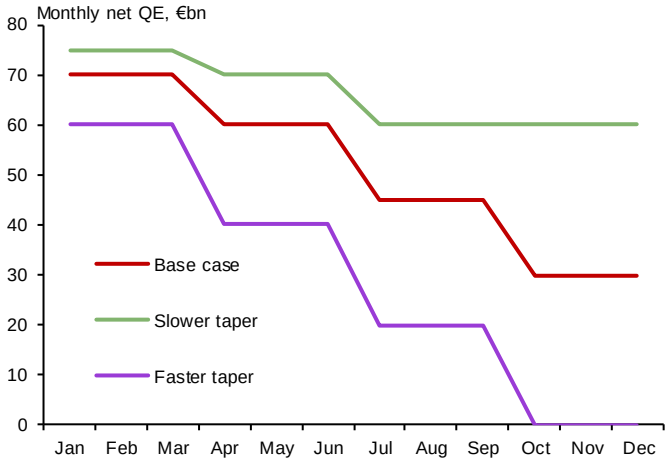
We expect the APP to increase and replace (some) PEPP purchases, in line with consensus

Source: NatWest Markets 2022 Investor Survey, % of respondents



Net QE in 2022 – NWM base case

Source: NatWest Markets



3. TLTROs. Smoothing the taper means smoothing the June liquidity cliff

Cheap liquidity – get it before it's gone. December will bring about the final planned TLTRO-iii operation. Expect take-up to be bigger than the last few, as banks may well consider it the last chance to borrow such cheap money (as low as -1% until Jun-22).

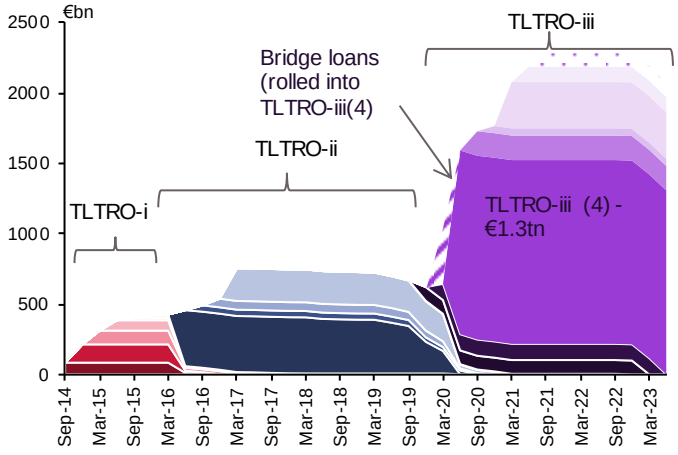
But when it's gone in June, repayments could be huge. We expect the 'liquidity cliff' to be softened. Currently the incentive rate on *all* outstanding TLTRO-iii cash ends in Jun-22, at which time all operations can be voluntarily repaid. The risk is that a very large part of the €2tn TLTRO-iii cash is destroyed at that point – that is a lot, even in the context of around €4.5tn excess liquidity. The ECB is likely to want to avoid leaving this to chance, as Lagarde recognised in the November press conference: *"On TLTRO […] I think that we should do* ***everything possible*** *in order to avoid a cliff edge effect"* (emphasis ours). The cliff may be especially sensitive as it coincides with the slowing QE.

From TLTRO-iii cliff to slope: extend an incentive rate, update conditions. How could the ECB proceed? We expect that it will extend an incentive rate on existing or new operations beyond Jun-22. The incentive rate could be above -1%, perhaps with stricter conditionality.

Conclusion. Liquidity will stay superabundant for most of 2022. Look at FRA/OIS. The exact operational details are secondary to the conclusion that we expect the provision of easy liquidity to continue, and the cliff-edge to be avoided. FRA/OIS which price in a rapid return to a positive spread for Euribor above Eonia may not correct as quickly as expected. See here for more on this.

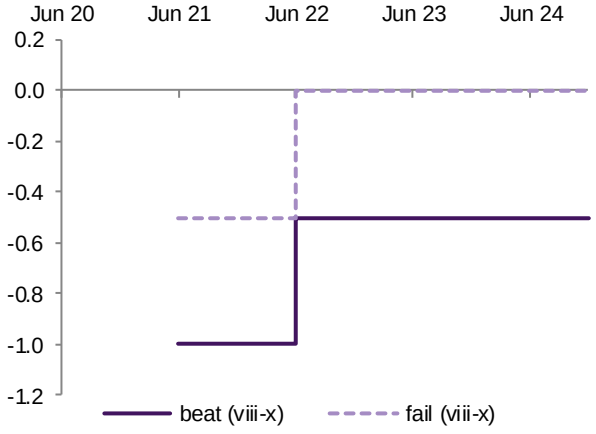
TLTRO-iii take-up has been significant

Source: NatWest Markets , ECB



TLTRO-iii current rate profile for the final 3 operations

Source: NatWest Markets , ECB



Flows

Government bond supply will shift from deficit to balance. Net government bond supply is likely to total close to €375bn in 2022, down from just over €500bn. Against that, net QE purchases of government bonds are likely to drop to around €400bn (out of the total €600bn bond buying), perhaps less. In other words, the significant deficit in the market for government bonds will come back into balance.

The market for euro fixed income held outside the Eurosystem should grow. That will feel different. A much broader view, including supply and Eurosystem purchases across euro area bonds from all issuer types, is the most relevant assessment of 'supply' for the market. Overall we think 2022 will make around €420bn more bonds available. Before considering how the demand side themes stack up, it is worth highlighting how different this will feel compared to the pandemic, when the supposed funding glut was locked away in the Eurosystem's vaults (aka 'monetised', if you prefer.)

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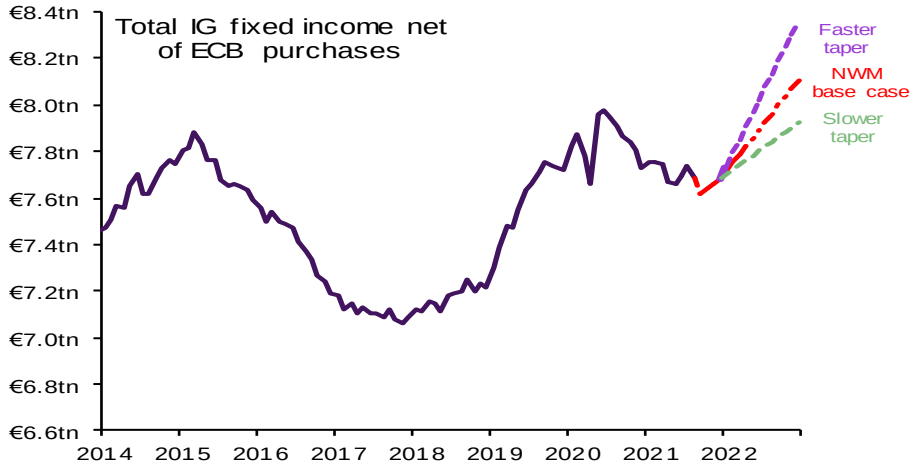
The squeeze, eased. 2022 should see the universe of euro investment grade bonds grow again.

Source: NWM

Scenarios for net ECB asset purchase in 2022: Faster = €360bn, Base = €615bn, Slower = €795bn



Who matters on the demand side? The assessment of supply and the eurosystem's structural demand always poses the same question: Of those selling bonds to bridge the supply gap, who will turn into a buyer and what is their sensitivity? The main sectoral themes are gathered below. The simple conclusion is that there is no compelling story for behavioural change other than valuations. The high-level answer to the question then, is given in the next section where we look at our bund model and conclude the market is likely to clear at substantially higher rates next year.

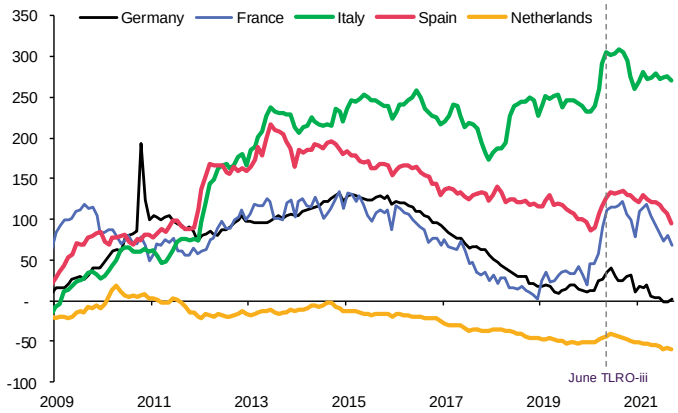
The market is likely to clear at substantially higher rates next year

Banks should remain stable sellers. In principle banks are the great stabiliser. Thus in 2020 they bought roughly €200bn of government bonds from March to June, encouraged by the TLTRO-iii and the backstop of PEPP on market functioning, and since then they have been selling those securities back (eventually to disappear into the Eurosystem). Although this creates room to add, if circumstances change, it makes sense to expect banks to continue to sell while yields and spreads remain low (we come back to this in the discussion of asset swaps below).

Regionally, German and French banks have been generating lots of mortgages (euro area banks lent net €245bn in the year to September but that masks very strong replacement in long-term fixed rate mortgages, largely by France and Germany) and government bond yields are low. They are likely to be happy with that mix for now. Italian bank holdings of BTPs have dipped back to around 10% of assets, but remain high as a percentage of capital. Spanish banks may have created more room to add SPGBs.

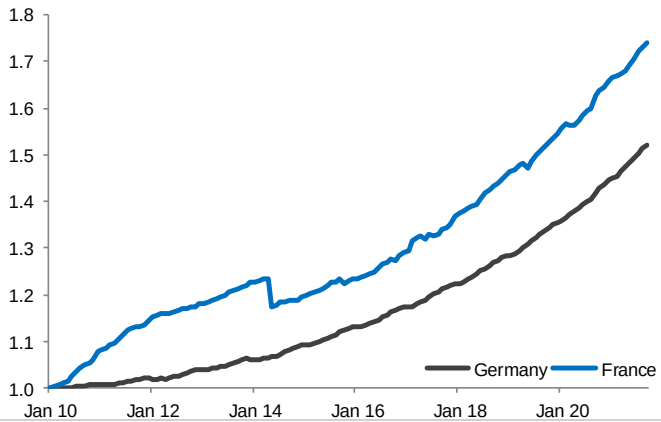
Banks' cumulative transactions in government bonds. TLTRO-iii was the point to load up. But since banks have been consistent sellers.

Source: ECB, NWM. Lines indicated are cumulative transactions from 2001.



Who needs bonds when you've got mortgages?

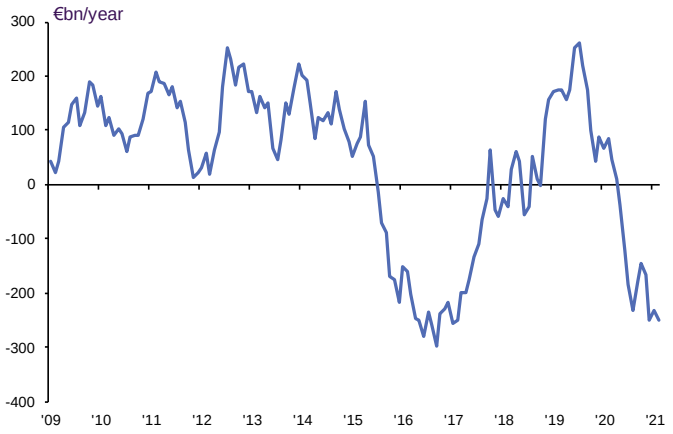
Source: ECB, NWM. Mortgage loans, indexed to 1 at January 2010.



Foreigners have plenty of bonds and too little incentive to keep them. The foreign official sector has a basic need for euro cash, up to a point. Reported FX reserves edged up by around €150bn in the year to June 2021, in line with their share in total reserves. There probably won't be much movement there. Portfolio flows have been very negative, though. Foreign investors overall have sold around €250bn in the past year. Banish any thought that this could run out. What is sold is a small sliver of the ~€2.3tn total non-FX foreign holdings of euro bonds. Indeed with revaluations, holdings have fallen very modestly since 2018. But continue for the simple reason that there are better options than Europe's low yields. The charts below illustrate.

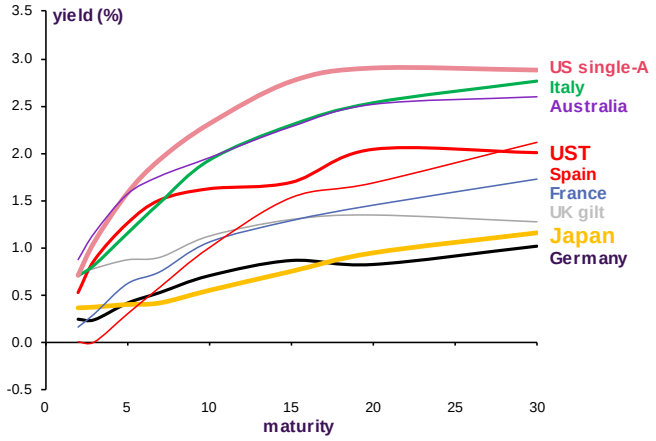
Foreigners have been big sellers of euro area bonds

Source: ECB



… because (other than Italy) better alternatives are easily found

Source: NWM. All in yields for USD investors, hedged via 3m forward FX



Insurance and pensions. ALM's long wait can wait a while longer. It is a long time since insurance and pension funds were in the driving seat for European fixed income.

Overall, they have maintained, but not added to, their government bond exposures and they have reduced corporate bond exposures, while broadly allowing their equity exposures to grow and directing investments toward funds. What fixed income interest they may have is likely to be through funds, therefore, and likely to have a foreign focus, following the same economic logic as above.

The main likely driver for behavioural change is pension solvency, which has been lifted by strong equity markets. After two decades of trouble from under-allocation to fixed income, there will be some pressure to reduce risk more quickly if stocks continue to do well. Conversely, what's bad for stocks may be bad for bonds too. That matters if you're thinking about 'stagflation' risk – see below. It also matters when considering the value of equity-bond diversification in a less liability-driven world. That matters because the main structural change ahead is the gradual Dutch pension transition to collective defined contribution (CDC) schemes. In any case, the Dutch transition has been delayed (transitional plans are for mid-2024) leaving 2022 as a year of strategic uncertainty. The incentive to pursue a substantial reallocation now is low.

Core and spreads. Bearish bunds. Steepening for all weather. Tighter spreads.

10 year bunds to 0.5% in 2022. What does all this mean for bund yields? As a starting point our model flashes an unsurprisingly bearish signal.

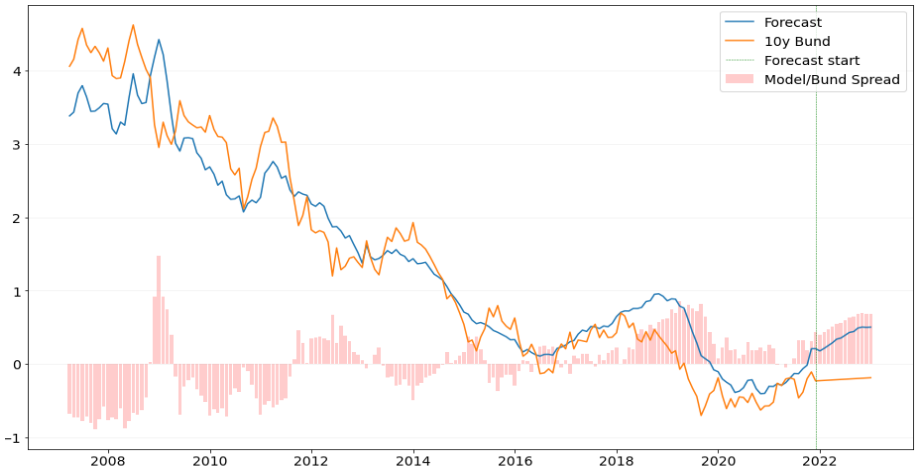
The key drivers of our projection are the way inflation will shift ECB rate expectations, and bond supply. For the illustration below we assume 6m eonia OIS rises to -0.5% by end-2022 and that markets price 25bp tightening between spot and the 1y1y period.

These assumptions are more bearish than our economics base case, but given high inflation uncertainty and the nonlinear ECB reaction function, we feel they are reasonable for illustration. Markets currently expect 15bp tightening in 2022 and a steeper path thereafter. The major driver of the projection is supply, however, which follows our base case discussed above. Fair value, according to this model, is 0.5%, which is well above the forwards, shown as the blue line in the projection.

Fair value for 10y bunds will move towards 0.5%, which is well above the forwards

Our bund model puts 10y yields at 0.5%, nearly 70bp above the forwards

Source: NWM



Is a model too backward-looking? We started 2021 with a similarly aggressive target for 10y bunds of 0.25%. Are we at risk of being led into too strong a view again by too rigid a reliance on historical model-driven approach?

We are more concerned about extrapolating from a challenging 2021. We believe we misjudged 2021 in two key ways. First, covid has been a more persistent problem than expected, confusing markets with thoughts of self-limiting growth and policy mistakes for fixed income. The ECB was also more aggressive with QE than we expected. These factors are changing, however. Notably covid, as a standalone subject, does not feature in this Year Ahead and we'd be surprised if it did in any, despite the serious difficulties emerging in central Europe at the time of this publication. The risks around ECB QE now seem skewed toward a faster taper as inflation replaces covid as the top concern.

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Japanification, liquidity trap… a bonfire of old paradigms. We are also sensitive to market psychology: One of the key legacies of 2021's inflation will be to break the liquidity-trap mind-set, which had become so heavily ingrained in the European market's psychology. On the way up, bonds were supported doubly by the right fundamentals of low inflation, crisis-led risk-aversion, and very heavy asset purchases. All these are going into reverse now, with the key confusion of the 'stagflation' trade, which we view as fundamentally a risk scenario for the curve.

Rich rates, cheap front end… curve steepening. 2021's great frustration will be the all-weather trade for 2022. The most frustrating position of 2021 was the curve steepener. The themes largely worked out, but the trade did not. Ex-post, the blame was mostly put the blame at the door of 'stagflation' fear – if investors doubt that growth will be sustained, they buy long forward rates. We disagree. In the US, it makes sense: as discussed in our separate section on central banks, inflation has ripped through the cushion the Fed thought FAIT would give it much more quickly than expected. The Fed has to catch up. Strong stocks probably mattered as much – when stocks make 25%, there are serious gains to protect. We called the death of the macro hedge much too soon. But in Europe, the theme was just too clear for its own good, bringing in too many, only to be squeezed out by the ECB in the summer, dooming it to an early year end.

Inflation is a steepener in euro rates. Especially with slower growth

The exhausted market is an opportunity. Front-loaded supply looks likely to start the year at levels that investors will quickly regret as global tapering actually starts. We also like the risk-reward characteristics of the curve steepener. That's best summarised with a 'consultants 2x2'. To be clear, by 'steepener', we have in mind the 5s30s as the key expression.

The all-weather 5s30s steepener. Curve drivers across growth and inflation scenarios. More red? More green? Inflation is a steepener in euro rates. Especially with slower growth.

Source: NWM

Growth →

Inflation ↑

Stagflation		Inflationary recovery	
Front end…		*Front end…*	
CB path	low path … steepening	**CB path**	Higher path … flattening
Long end…		*Long end…*	
QE	faster path … steepening	**QE**	faster taper … steepening
Fiscal effort	ambiguous, bias to more effort … steepening	**Fiscal effort**	Less pressure … flattening
Neutral rates / term premia	higher inflation risk premium, real term premium ambiguous … steepening	**Neutral rates / term premia**	Much higher … steepening
Asset allocation	everything down … steepening	**Asset allocation**	Equities do better than bonds … neutral
Weak recovery or worse		**Goldilocks: low inflation, strong growth**	
Front end…		*Front end…*	
CB path	lower path … steepening	**CB path**	CB rates stay low, broadly follow forwards … neutral
Long end…		*Long end…*	
QE	More QE … flattening	**QE**	Slow taper … moderate steepening
Fiscal effort	More pressure … steepening	**Fiscal effort**	Less pressure…. Flattening
Neutral rates / term premia	Lower pressure … flattening	**Neutral rates / term premia**	Low .. Flattening
Asset allocation	everything down … steepening	**Asset allocation**	Everything up… equity into bonds continues … Flattening

EUR steepening, USD flattening. Put them together. Curve steepeners in Europe, curve flattening in the US. The cross market box doesn't look special on a scatterplot but fits the relative central bank assessment well, and in a low-growth scenario, the Treasury curve looks less clearly a steepener as the great fiscal experiment will look to have failed and the Fed will be back in force. The 1y forward 5s30s is 27bp in EUR and 19bp in US, compared to 40bp and 46bp today. If the Fed is hitting its stride with rate normalisation in a year's time and the ECB is just getting near the end of QE, those terms look attractive to us.

Asset swaps are too wide, especially at the front end. The 2021 positioning wash-out's other opportunity. For asset swaps, the key themes are likely to be: (i) banks unwinding front end pay hedges as the ECB path becomes clearer and they consider reducing securities bought with TLTRO-iii money, (ii) reduced QE, (iii) new year letting carry traders back in to fade very wide front end spreads, (iv) ongoing mortgage originations, but at a slower pace. The apparent year end pressure on short-dated asset swaps in particular, are another dislocation that is an opportunity.

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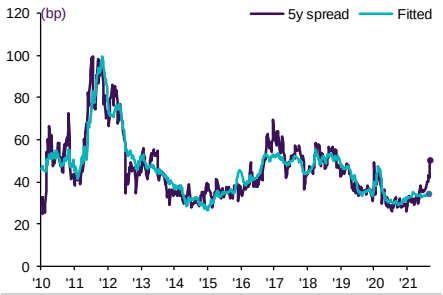
Long end spreads are more likely to be supported as banks continue to generate duration through mortgages, and possibly by asw buying in longs, particularly early in the year given the strong flattening in October and November. If rate locking is to have any impact, meanwhile, it is most likely at the long end where liquidity is thinner. We also still see possible NGEU rate locking of loans as an asymmetric risk.

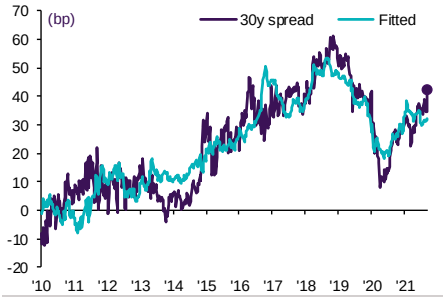
Bobl spreads should come back quickly in 2022

Source: NWM
Modelled on repo-Libor, and BTP spreads



All spreads are surprisingly wide, but buxl spreads should be better supported (see text above)

Source: NWM
Modelled on Repo-OIS, US-EU 10y spread, BTP spreads, and long-term mortgage new business volumes



Sovereign spreads. Periphery is more than PEPP

1. Politics

After a relatively quiet 2021 in European politics, 2022 has more risk events on the calendar, led by Italian and French Presidential elections. Markets fear a change of role for their talisman, Mario Draghi, and the elevation of one of France's market bogeymen (or women). Coalition talks in Germany will set the tone for Germany's ambitions on European reforms, fiscal and green policies, meanwhile.

Germany. A new government for the New Year

Traffic light coalition could be agreed by end of the year. Coalition negotiations are underway. The traffic light coalition (SPD-FDP-Green) has released an early outline, with the ambition to reach a formal agreement by Christmas.

More fiscal, particularly for climate issues. The 12-page document is light on detail. The key market points are (i) that the debt brake remains, but the door seems open to a carve out for items such as climate spending. (ii) On Europe, wording is ambiguous but again leaves open the door to making use of 'flexibilities' for some spending (more on this below): "*The Stability and Growth Pact has shown its flexibility. Within the framework, we want to ensure growth, maintain debt sustainability and [permit] sustainable and climate-friendly investments…*" (Translation is ours).

Pro-fiscal and pro-EU government should be supportive for sovereign spreads. "Instinct" might matter for markets more than the coalition agreement itself. How this government would react to the next crisis, if and when it comes, is important. We think this coalition – we assume an agreement will be found – confirms the recent shift in Germany to a more pro-European and somewhat less dogmatic fiscal stance. This should support growth in Germany and beyond, and provide a backstop to sovereign spreads to a certain extent.

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Italy. Strength goes beyond Draghi as PM

Mario Draghi unlikely to 'run' in Presidential election… The Italian Presidential election takes place in January. Mr Mattarella reportedly intends to step-down and the key question for markets is whether this is the moment for Mr Draghi to step back from the front line as Prime Minister to become Head of State. Our base case is that he will not, at least not immediately. Influence over key reforms may be too important to relinquish prematurely.

…which – if we are right in our assumption – leaves questions about what happens in 2023. The current legislature comes to a natural end in 2023, at which point Italians will head back to the polls, and Mr Draghi's term as Prime Minister will end. As it stands, polls are little changed compared to the start of Mr Draghi's term. The far-right Fratelli d'Italia (FdI) has outperformed, but largely to the detriment of Mr Salvini's League, leaving the total vote share of the right and far right unchanged.

Strength in Italy goes beyond Mr Draghi, we think. Whether or not Mr Draghi has his sights set on the Presidency should be a short-lived concern for BTPs. Mr Draghi's arrival has already marked a regime shift in Italian politics (as we have discussed in much more detail here and here). His nomination – with the support of the League and M5S – represents a seismic shift in Italian politics that goes beyond the immediate positives of just having a pro-EU leader. It marked a clear shift away from the Eurosceptic origins of the previous legislature, consolidating a shift that was already happening within fractions of the League, which, coupled with developments at the European level (the NGEU, most notably) render the anti-Euro posture obsolete.

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France. Fluid politics may run back toward the centre

2022 is not 2017, but French politics has plenty of room to surprise. A second term for Emmanuel Macron is very likely, but markets agree. What are the risks?

The surprise might be the traditional right. Marine Le Pen is in the unexpected situation of being squeezed on the right by Eric Zemmour, but also on the left by the traditional right (LR) that is toughening its identity credentials. The surprise may well be a more traditional run-off between Mr Macron and Les Republicain's candidate, then. Markets would probably quite like that.

Outside the centre-right, Ms Le Pen is still the more likely challenger. There is still a long time for the debate to change, but the left and greens look unlikely challengers, so the market risk is still that a far-right candidate passes. We put Mr Zemmour's early polls down to the shock of the new and expect him to fade. Ms Le Pen's more direct appeal and party network is a more solid base. Mr Macron would likely win reasonably easily against either, but abstention in a run-off against Ms Le Pen is a risk.

First round scenarios lean mildly bearish OATs on balance. Our political scenarios in the sidebar probability-weight to small downside risks for OATs. But take this with the health warning that for OATs, not everything comes down to the politics. We develop some of the other themes below. OATs are already reasonably wide in their range outside periods of specific or general EU stress and overall we are positive French spreads against bunds, but not swaps.

How might French spreads react to France's presidential election first round outcomes?

Source: NWM

	Prob (%)	OAT spreads
Macron vs …		
Le Pen	25	+5bp
Zemmour	10	+7bp
Les Republicains	30	-5bp
Left/Green	5	-
Melenchon	5	-
Les Republicains vs …		
Le Pen	10	+5bp
Zemmour	3	+10bp
Left/Green	1	+2bp
Melenchon	1	+5bp
Le Pen vs…		
Zemmour	2	+70bp
Left/Green	3	+25bp
Melenchon	2	+30bp

SGP Reform. More simple, more flexible

Rules simplified… The Stability and Growth Pact rules are complicated (a copy of the Vade Mecum on our desk testifies) and too reliant on unobservable indicators for compliance (the output gap, for example). SGP reform should endeavour to change this, as called for by the European Fiscal Board and the ESM. Both the Fiscal Board and ESM are calling for the 3% deficit rule to stay, with differing opinions on the 60% debt/GDP rule (the ESM calls for an increase to 100%, the Fiscal Board calls instead for a permanent fiscal capacity like NGEU). How the NGEU debt is accounted for within the SGP rules will also be an important clarification.

…With added flexibility. Having been suspended for the pandemic period, the SGP has already shown some flexibility. The Fiscal Board argues more clarity around the flexibility in the rules, particularly in the absence of a more permanent central fiscal capacity. We also think that some sort of 'golden rule' option should be included, in order to facilitate and incentivise green investment, by exempting them from the main set of Maastricht rules on deficits and debt. This would be key to making the SGP rules viable and consistent with the Green Pact.

Flexibility means a slower fiscal consolidation over the medium term. The lessons of the sovereign crisis' self-defeating austerity, which dragged on investment where it was most needed, have been learned, we think. This is all the more important politically given that environmental investments should be safeguarded. A return to the pre-pandemic SGP would not bind in the near-term, thanks to the post-pandemic recovery's impact on fiscal aggregates, but would pose a the longer-term problem – not just for Italy, as we discuss in more detail here. Above all, then, new rules should not be an impediment to 'optimal' fiscal policy in the euro area. This is a 'boring but important' theme to watch.

Timeline: expect implementation in 2023. The European Commission launched the public consultation – the first stage of the reform process – in October 2021. In principle this should allow discussions to begin in Q1 2022. It is unlikely they will progress meaningfully until after the French elections, but as France has the rotating Presidency of the Council, Mr Macron will want to be seen to be (even more) energetically leading pro-EU, pro-growth reform. We expect implementation to begin in 2023.

2. Sovereign RV. Debt sustainability (1): How much does tapering matter?

i) **Despite the taper, QE will remain a substantial support for periphery.** QE is likely to slow in 2022. We pencil in just €600bn of buying, compared to over €1tn this year, and with risks skewed to the downside (see the Supply section for more). That slowdown is likely to dominate a more modest slowdown in government supply overall, but for Italy, Spain and other smaller countries, net supply, net of Eurosystem purchases will stay negative in 2022. Core countries will likely see this turn positive next year. The table below illustrates on a country-by-country basis. Periphery spreads have this protection, at least.

"Other issues that need to be considered include strategies to promote medium-term and green budgeting, public investment management, and ways to better reflect risks from climate change in budgetary planning."

European Commission, Oct 2021

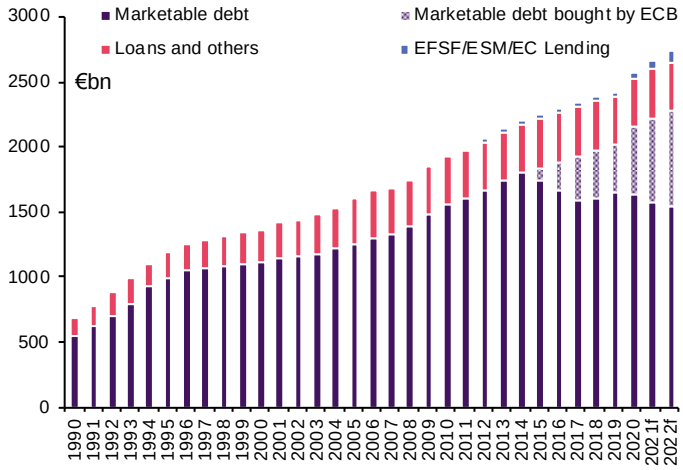
Supply in 2022 vs in 2021 (€bn)
Source: NatWest Markets, EC, National governments and treasury agencies

Country	2021 Gross bond supply	2022 Gross bond supply	Bonds, net of ECB and redemptions - 2021	Bonds, net of ECB and redemptions - 2022	Gross bonds less gross ECB purchases - 2021	Gross bonds less gross ECB purchases - 2022
Germany	291	**272**	-39	**18**	79	**87**
France	260	**260**	-49	**23**	62	**97**
Italy	313	**287**	-88	**-26**	123	**142**
Spain	117	**91**	-43	**-26**	-2	**-9**
Netherlands	52	**57**	-26	**3**	-6	**13**
Belgium	38	**34**	-24	**-11**	-3	**5**
Austria	44	**46**	-12	**2**	10	**17**
Finland	18	**23**	-9	**1**	-2	**3**
Ireland	22	**20**	-6	**-3**	3	**1**
Portugal	14	**15**	-19	**-9**	-10	**-4**

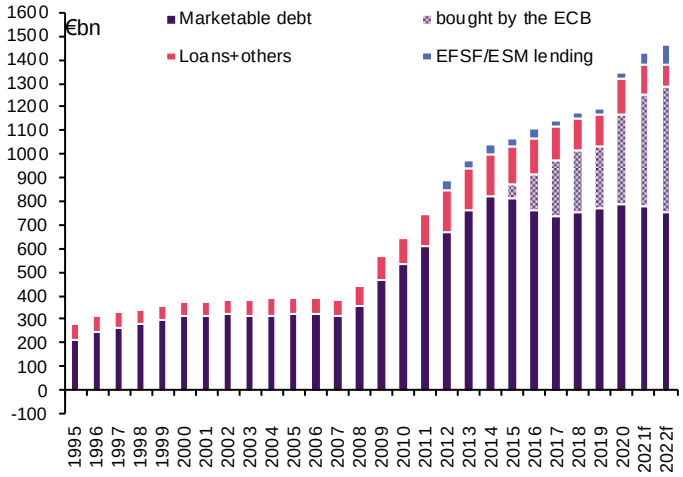
ii) **The ECB is still a long-term investor.** Exactly as we wrote in last year's *Year Ahead*, "*any discussion about the ECB running down its holdings will be one for many Year Aheads' time*!" The ECB may be reducing its pace of net buying, but unlike others, it will not be shedding its holdings any time soon. The ECB will be a long-term holder of a significant proportion of euro area debt, and that should matter to markets.

The ECB will be a long-term holder of a significant proportion of euro area debt, and that should matter to markets

Marketable debt after ECB buying is still negative in Italy…
Source: NatWest Markets



…and in Spain next year
Source: NatWest Markets



3. Sovereign RV. Debt sustainability (2): How bad will higher rates be?

Rising rates are bad for debt sustainability, in principle – particularly for those countries with large debt stocks. Higher rates will mean a shallower trajectory of improvement in debt metrics, but there's little to be concerned about given the scale of real rate rises that can reasonably be expected in Europe over the next few years.

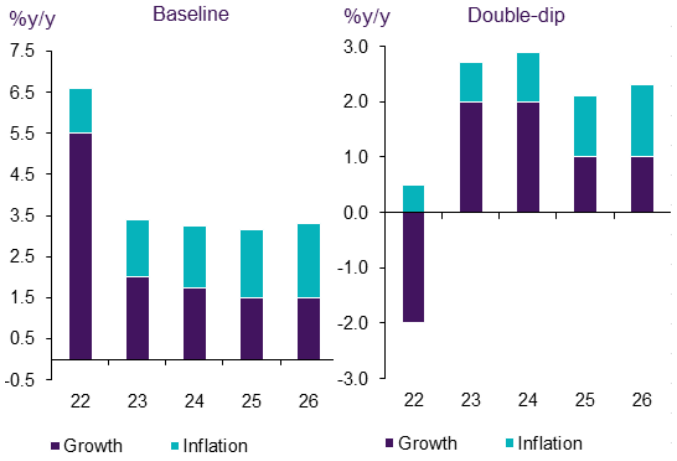
We use Italy mostly as the worked examples below, largely because that's where markets tend to be most concerned about debt sustainability, but the same conclusion can be drawn for other EMU-10 countries too.

Higher rates will mean a shallower trajectory of improvement in debt metrics, but there's little to be concerned about given the scale of real rate rises that can reasonably be expected in Europe over the next few years

i) **Short-term, Italian debt is likely to be stable even in weak growth.** The charts below illustrate debt/GDP trajectories, under a range of economic outcomes. Even in a 'weak' scenario, with growth falling to 1% in 2024 and staying there, Italy's debt stabilises in the coming years (albeit at high levels). In our baseline, debt/GDP is on a solid downward trajectory.

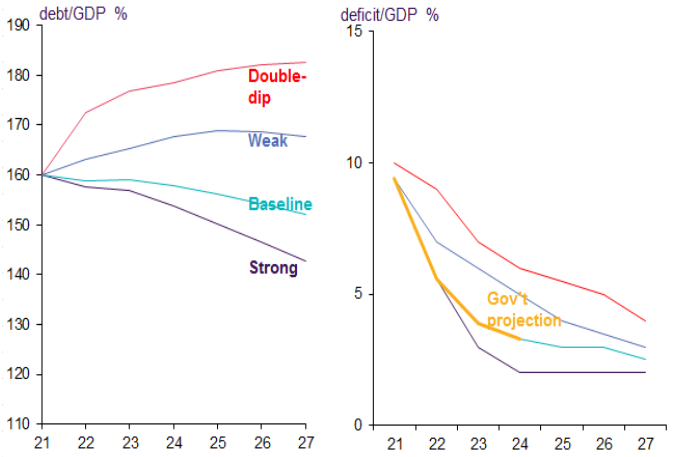
Inflation and GDP scenarios…

Source: NatWest Markets



…with associated deficit and debt/GDP outcomes

Source: NatWest Markets



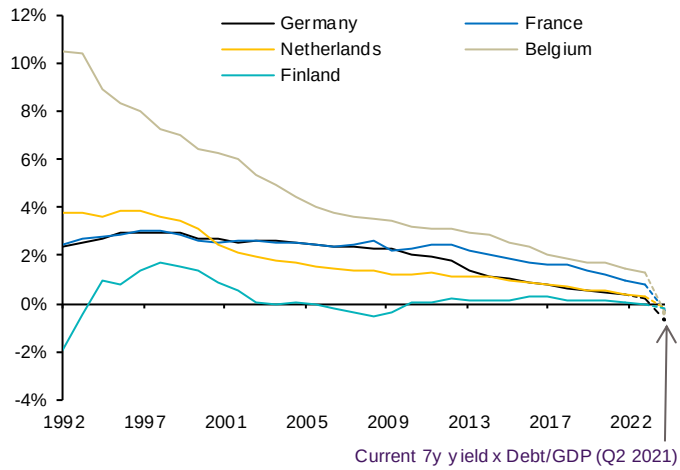
ii) **Longer-term, debt sustainability is robust**

Debt is cheap to governments, and will get cheaper. Average debt-servicing costs are at or close to record lows across the Euro Area, and will continue to fall because interest rates on new debt are lower than the current weighted average rates paid. Debt servicing is also reduced by Eurosystem holdings returning interest to national treasuries. For Italy, for example, we assume this reduces the average interest rate from 2.2% to 1.5%.

There is margin for rates to rise. Even as rates rise, they will remain low in both a historical and economic context. In realistic growth and inflation scenario for Italy (say 1% trend growth with 1.5% inflation), and with an interest rate of 2% nominal, the primary balance that stabilises the debt level can be low – negative even. A primary balance of -0.4%, which is more pessimistic than IMF long-term projections, debt stabilises at an average interest rate of 2.25%. Anything below this and debt would be on a downward trajectory.

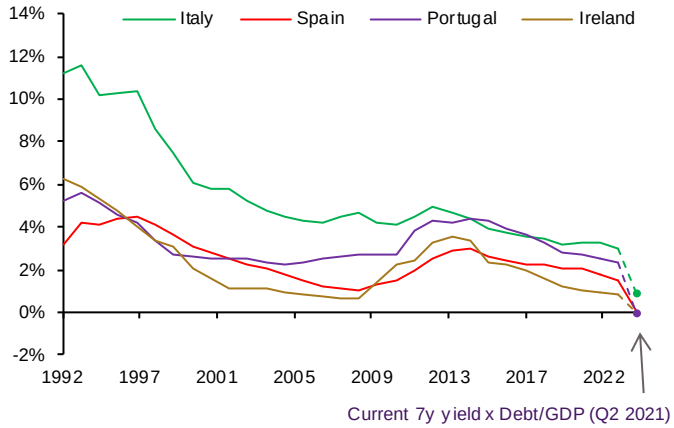
Interest expenditure as % of GDP: core / semi-core

Source: NatWest Markets



Interest expenditure as % of GDP: periphery

Source: NatWest Markets



4. Sovereign RV – fundamental scorecard

The long-term view aligns with the short term. Core is rich. Periphery has value. A *Year Ahead* is the right place to take stock of the longer-term assessment of sovereign debt resilience. This year's update supports the main conclusions already expressed: core, Germany in particular, is rich, while periphery, with the exception of Portugal, is cheap.

Core, Germany in particular, is rich, while periphery, with the exception of Portugal, is cheap

The NWM fundamental scorecard weights 36 different indicators into a single 0-100 score per country (the higher the better). The indicators cover productivity and long-term potential growth, external trade and finance, politics and institutional strength and debt risks. See a more in-depth explanation and category weights here. The heatmap below shows the scores for each country in each category.

NWM fundamental factor scorecard

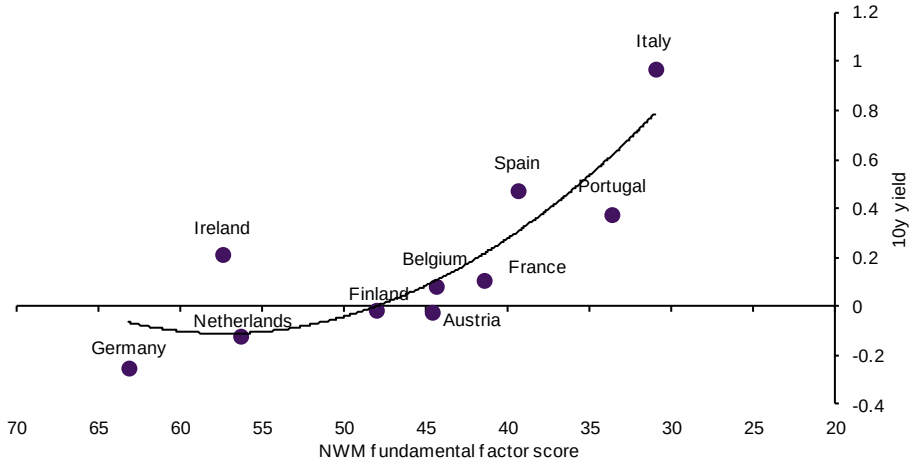
Source: NatWest Markets, Bloomberg, Haver, European Commission, World Bank, OECD, IMF, BIS, ECB

	Productivity and LT potential growth	External sector: trade	External sector: finance	Politics and institutional strength	Debt risks
Austria	30	47	48	30	55
Belgium	33	43	65	53	44
Finland	48	32	35	54	51
France	45	18	49	28	48
Germany	48	72	74	59	68
Ireland	53	39	40	73	60
Italy	26	29	70	18	33
Netherlands	42	84	69	57	55
Portugal	28	18	49	56	30
Spain	40	26	40	46	39

Applying the subjective weights in each category to create an aggregate score, then plotting this against current yield levels allows us to take a view on relative value.

NWM fundamental factor score vs yields

Source: NatWest Markets, Bloomberg, Haver, European Commission, World Bank, OECD, IMF, BIS, ECB



Three key conclusions emerge from these analyses:

- **Ireland's fundamentals are core.** Ireland's long-term potential growth and productivity score (with the second highest weighting) sets it apart significantly from its semi-core peers and causes it to look "rich" on the chart. Brexit and global tax reform may have been headwinds to its convergence, which we see resuming.

- **France scores poorly on the political scale.** In an election year that may be a problem. We agree, and see small widening risk into the election cycle. But France nonetheless belongs to the semi-core group and is the most liquid of these.
- **Periphery looks cheap, except Portugal.** This has been a long held view of ours, which is supported by fundamentals. Peripheral countries have been recovering well, despite initially faring worse in the covid crisis, and the support of the Recovery Fund gives them the foundations to grow faster than peers in the coming years. Spain's proximity to France in our scorecard jars with its periphery yield spread. This is validated partly by Spain's lower credit rating, but labels stick, and markets cling to old ideas about who is semi-core / periphery.

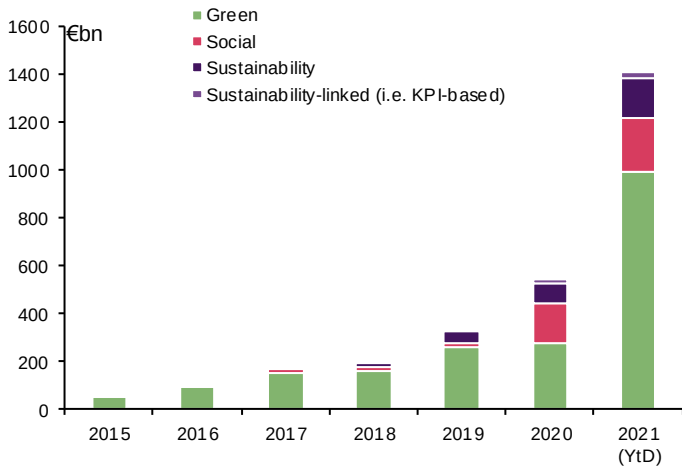
ESG: The jolly green giant

Sustainable finance went mainstream in 2021. This was a key theme of our *Year Ahead* last year, although perhaps not a difficult call. Global green, social, sustainable and sustainability-linked (GSSS) supply so far in 2021 - now at close to €1.5tn - is more than 2.5x larger than it was in 2020. The increase is broad based, across all four "flavours" of GSSS, but it has been green issuance that was the significant driver, particularly in H2 2021 with a notable boost from sovereign and SSA issuance.

Global green, social, sustainable and sustainability-linked (GSSS) supply so far in 2021 - now at close to €1.5tn - is more than 2.5x larger than it was in 2020

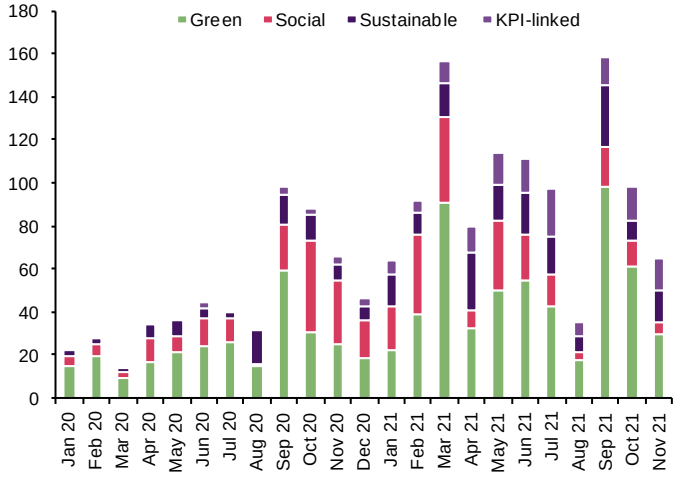
GSSS has ballooned in 2021

Source: NatWest Markets, Bloomberg



GSSS bond supply by month in 2020 and 2021

Source: NatWest Markets, Bloomberg



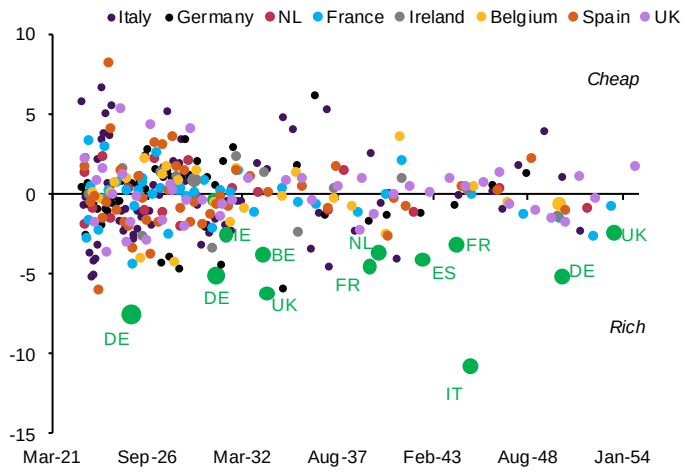
Expect more of the same in 2022... We don't expect this issuance to slow in 2022. Pressure on governments to speed up the green transition by increasing green investments is matched by strong demand for sustainable finance by investors. We would look for sustainable issuance of a similar scale next year, with European governments that haven't already issued green bonds expected to do so, and those that have to build out their curves.

We would look for sustainable issuance of a similar scale next year, with European governments that haven't already issued green bonds expected to do so, and those that have to build out their curves

...as greenium attracts issuers. This ramp up in supply is just a case of issuers trying to keep up with demand. Greenium is significant, and it goes beyond just a net issue premium. The charts below illustrate the richness of most European sovereign green bonds vs their non-green peers. The greenium in some instances is whopping, and does not cheapen significantly after issue. We expect demand for sustainable finance to grow even more next year – as indicated in our NWM Investor Survey – which should continue to outstrip supply, and keep greenium alive.

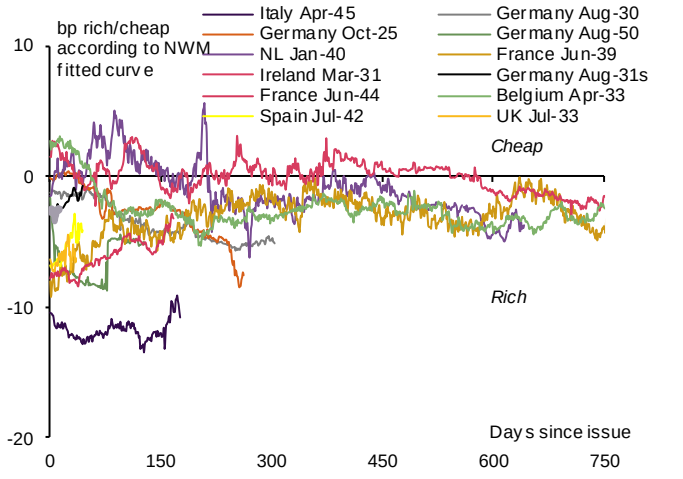
Green bonds tend to trade very rich vs their non-green peers (rich(-)/cheap(+) vs NWM fitted curve)

Source: NatWest Markets



Greenium is more than just a new issue premium – green bonds trade rich well beyond their issue date

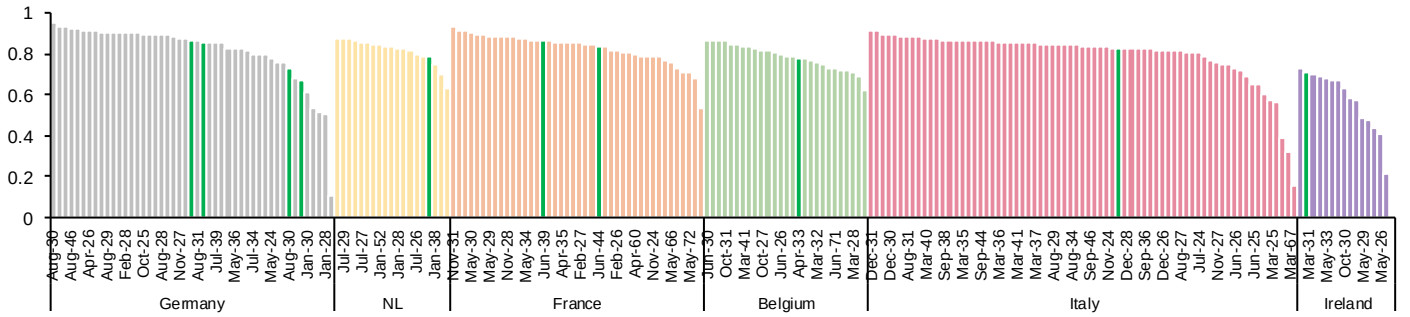
Source: NatWest Markets



Greenium is not a liquidity premium. We created the NWM liquidity index – the PV01 adjusted bid-ask spread (where 1 = most liquid and 0 = least liquid) – to assess green bond liquidity against their non-green peers. As the chart below indicates, green bonds tend to sit around the mid-range of sovereign bond liquidity.

NWM liquidity index (1 = most liquid, 0 = least liquid)

Source: NatWest Markets



The green transition in finance will be supported by the EU institutions. Namely the EU and the ECB, who will both play vital roles next year and beyond:

i) The EU, from standards to benchmarks. The EU has already supported the transition by setting standards around environmental reporting and definitions. It now will soon become one of the largest green bond issuers over the coming years, setting a reference for the market and underpinning overall growth. 25% of the €750bn fund will be issued as green bonds in the next 4 years. It's worth noting that part of the green bond boost in H2 2021 was thanks to the inaugural green EU issuance in October – a record month for green bond issuance.

ii) The ECB aims to support the sustainable finance market via both monetary policy role and supervisory. The ECB's ambitions here range widely, including: (i) Integrating climate risks in its models and assumptions that feed its macroeconomic projections. (ii) Developing indicators on green financial instruments. (iii) Improving data and statistics related to climate change. (iv) Proposing and adopting EU disclosure regulation. (v) Climate stress-testing the Eurosystem balance sheet.

Green QE then? For bond markets, this means that ECB is assessing the pros/cons of market neutrality as a guiding principal for asset purchases. It will make a

proposal for alternative benchmarks (if any) in 2022 for CSPP, but not PSPP. The Climate Change Centre will also be developing proposals to adapt the CSPP framework to include climate change considerations, with any changes to be adopted by 2022. It has also committed to consider how climate change risks are reflected in the collateral framework. Changes, for example perhaps to haircuts or eligibility, are to be implemented in 2022 and beyond if necessary. Finally, support for sustainable finance innovation – as the ECB did recently by accepting sustainability-linked bonds as collateral – is also a priority.

GBP Rates Strategy

Theo Chapsalis, CFA
Head of UK Rates Strategy

No doubt, 2022 will be an exciting year. After almost four years the BoE will be raising rates. Emergency easing conditions are no longer needed, and by the end of H1 2022 we should reach the level where maturing QE holdings are no longer reinvested. The pace of hikes will dictate the flatness of the yield curve with faster hikes pointing to a lower terminal rate. But this flattening will be counterbalanced by the potential non-reinvestment of maturing gilts (after May 2022) or even active sales. The end to APF reinvestment is likely in 2022, but outright sales may be too much of a risk to volatility at the long-end to consider next year. We would not expect to see active sales of gilts before 2024, even though the market prices in a SONIA rate above 1.2% by end of 2022.

Duration supply will pick up and steepeners will be an opportunity, but look for levels early next year. Gilt valuations, cross market and curve alike, are highly sensitive to the weight of duration supply. Net DV01 is likely to pick up in the FY 2022-23, especially after the end of APF, so there is an underlying propensity for steepeners, but such trades may find a better entry level early next year.

Inflation will be a (if not *the*) major theme again. Global bottlenecks (see our dedicated section in this Year Ahead) have driven strong support for short-dated RPI swaps. A lot is already in the price, hence the unusually inverted shape of the RPI forward curve (chart below). The lack of short-dated linker issuance (compared to the Euro Area or the US) is a key driver of this inversion and the BoE is aware that higher valuations across short-dated RPI swaps are largely a reflection of such linker scarcity. RPI reform has faded away as a market theme. Although RPI is likely to print 80-100bp lower after 2030, the market seems to have grown to accept the higher premium.

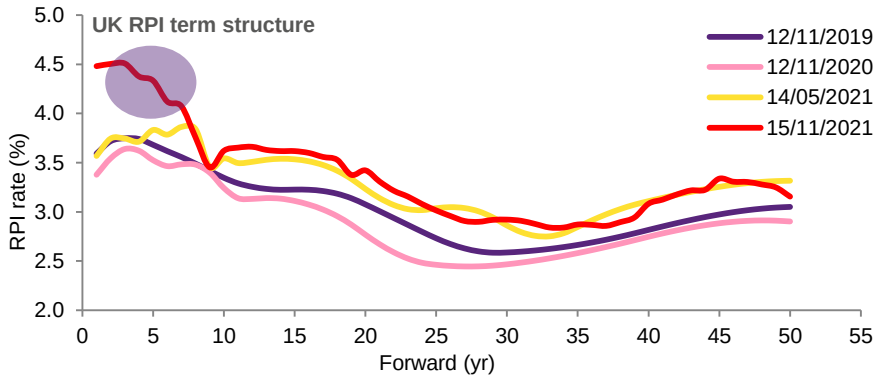
Key UK rates forecasts

	Current	Q1 2022	Q2 2022	Q3 2022	Q4 2022
BoE Bank Rate	0.1	0.5	0.5	0.75	0.75
3m SONIA	0.17	0.55	0.65	0.75	0.90
5y SONIA swaps	0.98	1.05	1.1	1.1	1.1
10y gilts	0.92	1.00	1.00	1.00	1.00
30y gilts	1.10	1.20	1.35	1.35	1.35

Source: NatWest Markets

Higher RPI forwards for at least 5 years

Source: NatWest Markets



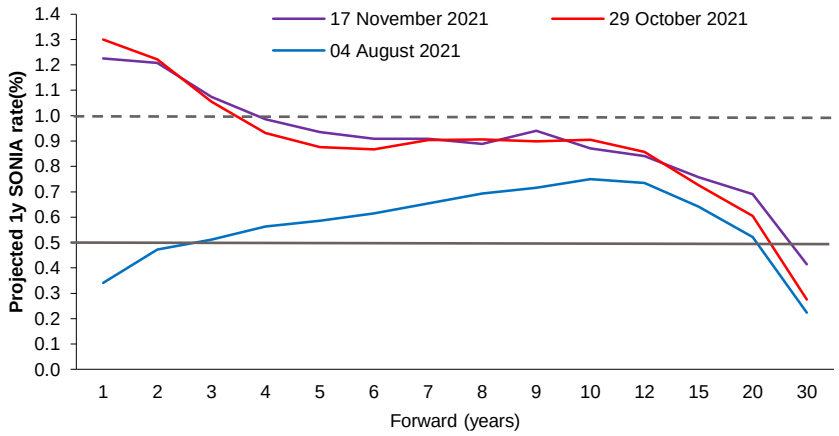
Is the BoE about to embark on a policy mistake?

Front end inversion is not BoE 'pricing to disaster'. Despite the marked correction following the Nov MPC meeting (see Chart below), the flatness of the curve still stands out. Market participants tend to associate steeply upward-sloping curves with central banks that are "doing the right thing" and inverted curves with a strong risk of recession, but this is too simplistic and does not adapt to today's circumstances for a number of reasons:

- Clearly, the BoE feels the need to move rates to a non-emergency level, especially given higher inflation expectations. Some hikes will have to come.
- The broader backdrop is that we remain in an environment of low neutral rates.
- The market seems happy to push SONIA forwards above 1%, but this is the threshold at which APF sales will be considered. It is therefore possible, perhaps likely – that some form of tightening will be delivered through balance sheet reduction from this point. The case for further tightening of the policy rate becomes less clear, from around this level, in other words.
- It may also be relevant that, in the next downturn, the lower bound may not be where it was this cycle. The BoE may have to cut into negative territory. A more symmetric distribution of possible future rates, with a full tail extending into negative territory may justify the hump around the 5y sector to an extent.

SONIA forward evolution

Source: NatWest Markets



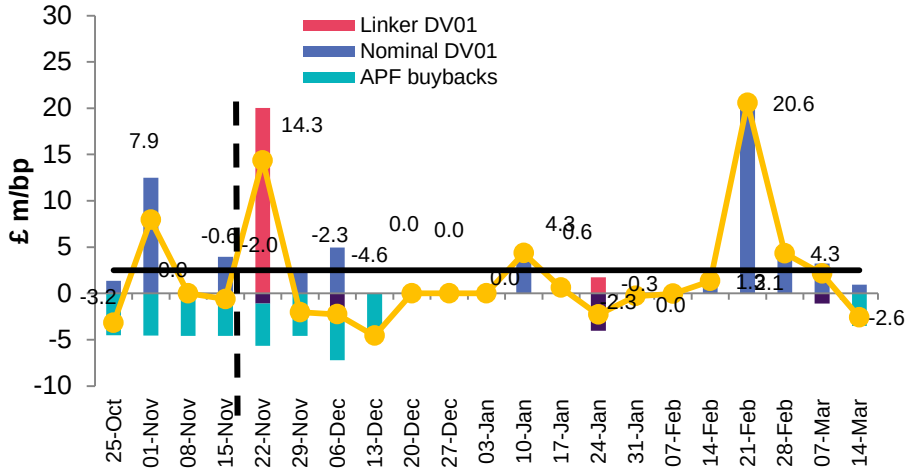
Long 10y gilts vs other FI markets

Non-economic reasons for UK curve inversion may also be reasons for UK rates outperformance compared to other currencies. In this respect we continue to like 10y gilts vs 10y Bunds and 10y USTs:

- Lack of duration supply: Over the next 4 months, the net DV01 profile looks particularly supportive for gilts (chart below), as we move into a period of reduced long linker supply and ongoing QE operations.

Low net DV01 at least in the first three months of 2022

Source: NatWest Markets



- LDI de-risking: 2021 has been yet another strong year for equities, raising the risk of rebalancing-derisking flows into bonds. This is
- Low terminal rates: earlier tightening may imply less tightening is ultimately required. That is, the terminal rate may be lower for this cycle.

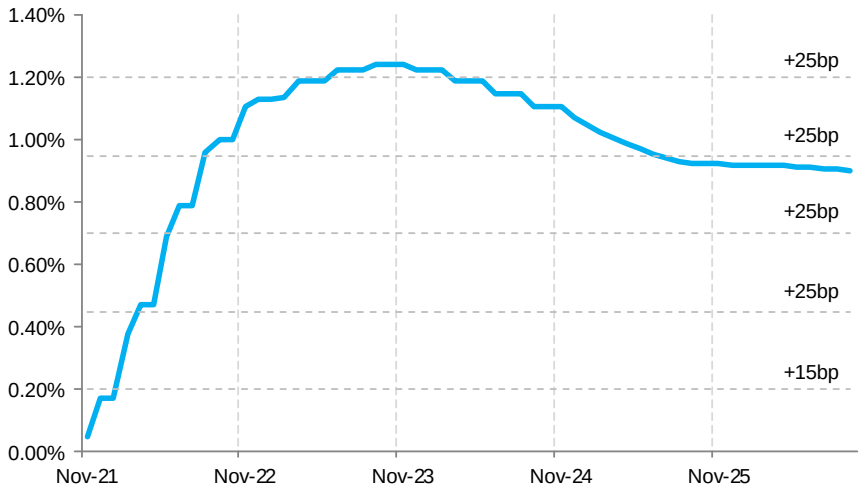
We can see this theme playing out in the first months of 2022 but clearly the narrative may shift once the balance sheet reduction debate comes to the fore.

Money market opportunities – May'22 vs Feb'22 SONIA flattener

Fade 50s. The chart below illustrates the current market pricing be the SONIA market. We believe that following any move away from the emergency Bank rate level (0.1%) and once we reach 0.5% the BoE will slow down in their tightening pace. The most likely hiking path is 15bp in Dec'22, followed by 25bp in each Feb'22, Aug'22 and Feb'23 meetings. **The 31bp priced between the May'22 and Feb'22 meetings is too much. The pricing towards end 2022 is also too aggressive**.

Opportunities in money markets, a very steep path into late 2022

Source: NatWest Markets, PPF



Stopping QE + strong pension schemes = wider back-end breakeven inflation

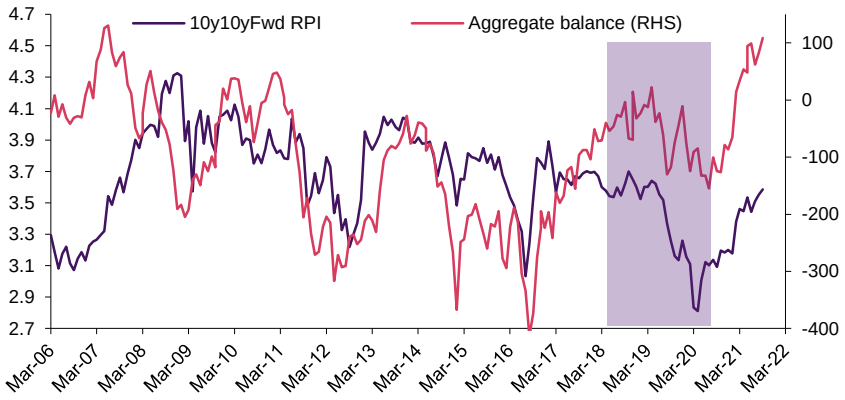
QE supported nominals directly and its loss will be a relative negative for nominals compared to linkers. QE has facilitated the smooth functioning of the gilt market during challenging periods, helped to absorb supply and created favourable dynamics for gilts. Conversely, the market will need to price in less support for conventionals and wider break-evens once we move to an environment without QE and this is likely to be the case after May 2022. While the potential reinvestment of UKT 4 22 may continue to support conventional duration this is likely to change around end of April when those reinvestments finish (we assume 7 weeks of QE for £28bn).

Better funding in pensions means derisking and that disproportionately means linkers. The chart below shows the historic link between RPI forwards and the aggregate balance across DB schemes. The link is striking – when pensions have a surplus to lock in, they turn to linkers. Solvency is at a 15-year high, but breakevens have lagged. **We like long 30y UK breakevens.**

30y conventionals are rich on the curve, supporting our preference for 30y breakevens. This is a part of the curve which is currently expensive, as we have witnessed various stops in steepener structures that involve the 30y point. However, this is also a key liquidity point and we expect the UK DMO to offer more supply of conventional longs (especially 30y).

Close link between funding ratio and RPI forwards

Source: NatWest Markets, PPF
We use 10y10y RPI forward to remove noise from current inflation which is not linked to supply and ALM demand. The shaded period corresponds to period distorted by RPI reform, which is fundamentally worth around 80bp.



Supply Outlook for US, EUR, GBP

Imogen Bachra, CFA
European Rates Strategy

Government bond supply will fall sharply in 2022. Global government bond supply was impressive in 2021, although down from 2020. Although it shouldn't be confused with the change in the 'fiscal stance', which we discuss in a separate section, deficits will be down sharply, and with them, funding. Across the US, EU and UK, bond sales may fall by nearly 45%. Tapering as a prelude to rate hikes is one thing. But tapering's impact across the curve must be viewed in this context.

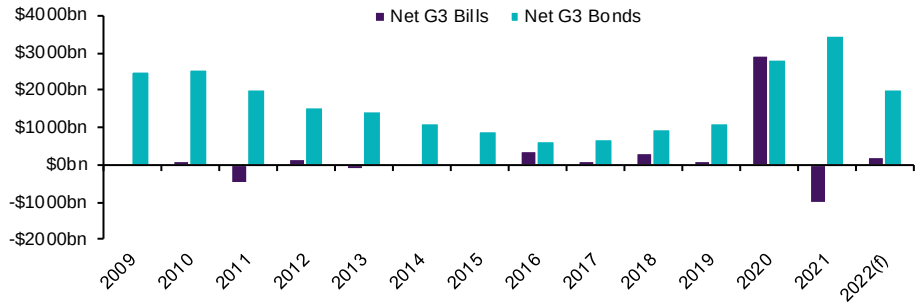
Taper-tightening? Much of tapering's curve force is neutralised by the way it will be matched by supply, particularly in the US. In the US, net supply to the market, will be little changed (although composition may matter). In the UK, the end to QE may leave around £40bn more gilts for investors than this year. In the Euro Area, around €375bn net government bond supply will likely be more than swallowed up by QE again. But the 'squeeze' on the market will be much reduced and in aggregate (including non-government supply) there is likely to be reasonable surplus for investors after the Eurosystem takes its share.

US, UK, and EU government net bond issuance set to fall by over 40%. Global bond supply is set to shrink next year as economies emerge from the pandemic and intense fiscal support is no longer required. For G3 economies the shift in supply varies a lot by country. 2022 will see a 73% fall in net gilt supply in the UK, but only 25% in the euro area, for example. But in aggregate the decline is significant. We pencil in net G3 bond issuance falling to ~$2tn, down from ~$3.5tn in 2021.

We pencil in net G3 bond issuance falling to ~$2tn, down from ~$3.5tn in 2021

G3 net bonds and bills chart NEED UPDATING

Source:



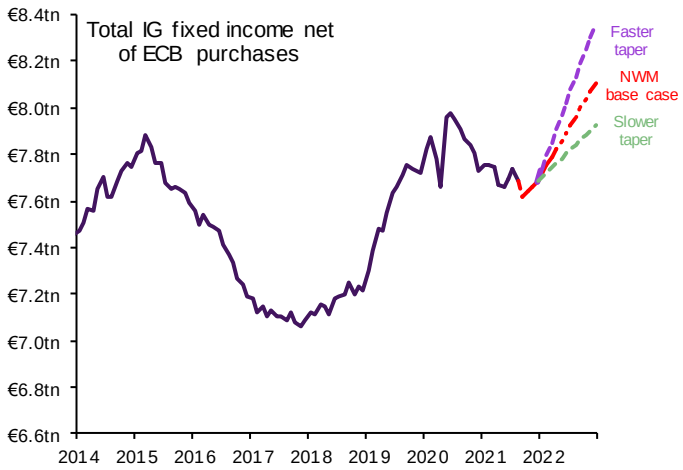
European bonds to fall, but only marginally. Deficits are lower and the Recovery Fund substitutes for bond financing in some countries, especially Spain and Italy. In total, though, sovereign bond supply will not feel that different in 2022. We pencil in ~€100bn reduction in gross issuance across EMU-10. The country-by-country numbers are fleshed out in more detail here.

The market will feel less tight for EUR paper as the ECB steps back. The biggest difference in "flows" next year will be the ECB. The (small) step down in issuance will be more than offset by reduced ECB purchases. We pencil in ~€600bn next year, with risks skewed to a lower total. That compares with €1tn this year. The chart to the left below shows how that looks in the context of supply compared to the pandemic period.

The biggest difference in "flows" next year will be the ECB. The (small) step down in issuance will be more than offset by reduced ECB purchases

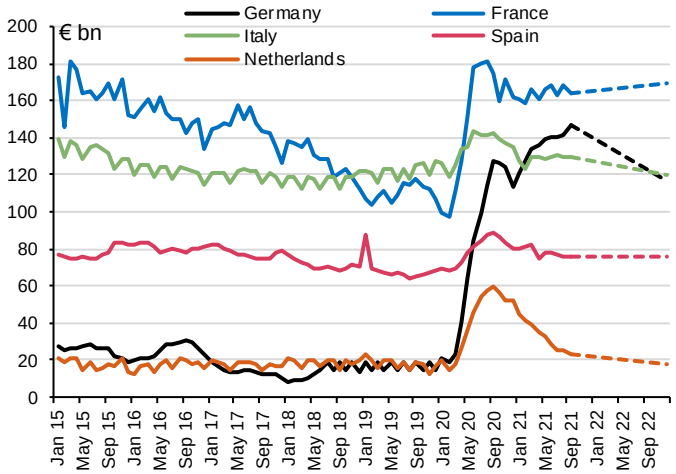
Free float of EUR IG debt next year depends on your ECB views

Source: NWM, Bloomberg



EMU-10 bill stocks set to fall, after a significant pandemic-related increase

Source: NWM, Bloomberg



Unlike the UK and the US, the euro area should see fewer bills in 2022. Many European governments opted to fund some emergency pandemic measures via bills, which we expect to gradually be termed out into bonds next year. We expect the net bill stock to fall by ~€50bn next year. Of the major countries, France is the exception, where the AFT plans to increase the bill stock by €5bn in 2022.

The UK will see the sharpest drop in net issuance. Net issuance in the UK will fall from £161bn in 2021 to £44bn in 2022, thanks to a bigger than expected reduction in the Central Government Net Cash Requirement (CGNCR) announced for the fiscal year 22-23. Most of that reduction is being driven by a drop in the proportion of front-end bonds vs the long-end, whilst the proportion of green gilts is set to increase significantly as the sterling amount of green gilts planned for FY 22-23 remains unchanged vs the previous year.

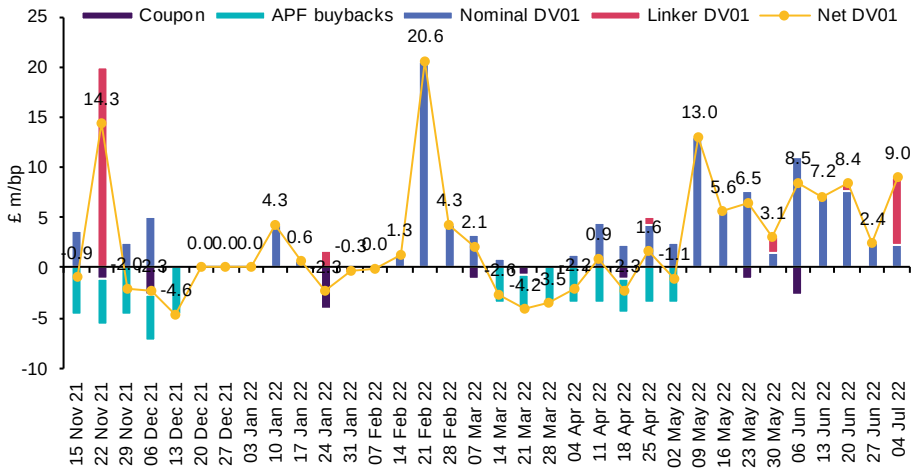
Net issuance in the UK will fall from £161bn in 2021 to £44bn in 2022

Expect more UK bills. Despite a reduction in the proportion of short conventional bonds, expect the DMO to issue more bills in 2022 – we pencil in €20bn. Most of this increase will come after April 2022, where we expect issuance to pick-up aggressively. This comes after a net negative year of bills in 2021 (-€12bn), to accommodate for the revised budget, similar (albeit in smaller size) to what happened in the US.

Quantitative tightening to begin, offsetting the reduction in net issuance. Our base case expectation is for a 15bp rate hike in February followed by an additional 25bp in May, bringing Bank Rate to 0.5% - the BoE's threshold for not reinvesting maturing bonds. This implies €9bn of bonds maturing next year that will not be reinvested, against net buying of £150bn in 2021. In other words, although net issuance is set to fall by £117 in 2022, a step back in BoE buying of £159bn would leave around £40bn more net gilts for the market than this year.

UK net DV01 by week into 2022

Source: NatWest Markets, DMO, Bloomberg

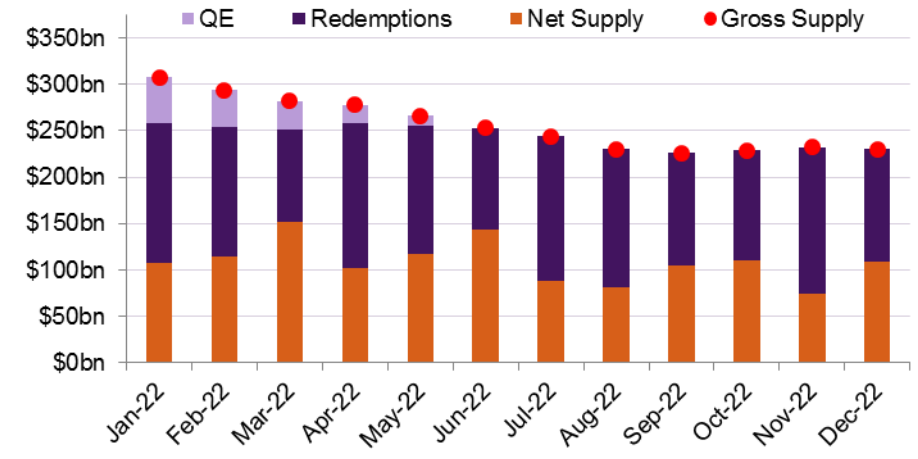


Lower US deficit... Similar to rest of the developed economies, public financing needs in the US will be materially reduced in 2022 compared to this year. Our deficit estimate for the fiscal year 2022 is $1.5tn (which assumes the Democrat-only infrastructure bill will pass and spending begins from 2022). For reference, the deficit for FY21 was just under $2.8tn and the current coupon issuance rate would leave the government significantly overfunded. To address that, Treasury started their first round of issuance cuts in the November refunding.

...implies lower coupon issuance. We estimate that coupon issuance in Jan-Dec 2022 will be about $1.1tn less than the same period in 2021. We estimate gross issuance of $3.3tn across nominals, TIPS and FRNs, down from $4.4tn in 2021. Net of redemptions, the figures for 2022 and 2021 are $1.5tn vs. $2.7tn respectively. We think Treasury will continue to reduce coupon auction sizes through the August refunding announcement and further cuts are also likely to overweight 7s and 20s.

Treasury supply in 2022

Source: Federal Reserve, U.S. Treasury, NatWest Markets



The 'taper-illusion'. Lower Treasury sales will closely offset lower Fed support via QE. The Fed will likely purchase close to $1tn fewer Treasuries in 2022, which is slightly less than our forecast reduction in treasury sales. We acknowledge that this is not a direct offset – by definition, Treasury issues the on the run securities, while the Fed buys across a range of issues. We may therefore see a relative richening in on-the-runs. Overall, then, the net Treasuries left for the public to absorb might be slightly lower next year despite the taper.

US T-Bills – significantly more than 2021. Our base case is for $250bn of net bill issuance next year (vs a cut of $1tn in 2021) and for Treasury to maintain about $650bn in the TGA. It's important to note that the bill issuance forecast is pretty dynamic at this stage as the pandemic is still not fully behind us and Treasury's cash needs remain much more volatile compared to the pre-covid period. Naturally, the volatility in the cash flows leads to more fluctuations in the bill supply. Additionally, the outlook for bills and the TGA is still fairly unclear given the debt ceiling debacle and the large demand for short-term risk free securities in the market. Our working assumption is that the debt ceiling will be increased through the reconciliation process this year, which would lead to a surge in bill issuance in December in order to replenish cash balances.

The net Treasuries left for the public to absorb might be slightly lower next year despite the taper

G10 FX Strategy

The New, New World

The covid-19 recovery is shifting into a new phase, marked by solid, but slower and more differentiated global growth. Vaccination status, political risks, commodities exposure, and services / manufacturing balance each contribute to unsynchronized growth. And monetary policy divergence is contributing as well. High inflation is set to stay, at least for the first half of 2022 as supply / labour shortages remain prevalent. That high inflation uncertainty can drive elevated interest rate volatility in DM, and implies a challenging environment for directional trades ahead. 2022 will be a year where higher volatility requires tactical thinking and flexibility on funders, particularly for the USD. Raw materials producers should continue to benefit in early 2022 as shortages persist and prices stay elevated.

In G10, some central banks can fight against the tightening tide while others can lean into it – where central banks sit on this question is key for relative value. Current dovish stalwarts are set to remain that way through 1H 2022, but might begin to feel the pressure (and see FX strength) later in the year. The RBA, Fed, and Riksbank look most at risk for hawkish pricing being pulled forward. Sterling policy error risks look overdone, and the ECB taper may be the next major tightening domino to fall in late-2022. China's growth is set to slow as their credit impulse becomes less aggressive in defending GDP targets, but we believe that risk is already at least partially "in the price" for a reopening Asia. High global inflation means that "currency wars" of the past may be over and tolerance of stronger FX could become more welcomed.

Top themes and trades

A more volatile world: Higher DM interest rate volatility should remain the norm in 2022 as DM hiking cycle expectations are tied to uncertain inflation trends. This, alongside a Fed tightening cycle and unsynchronized growth, likely means it will be a challenging year for EM. **Trades: Long USD/ZAR, Long USD/COP** (more here)

Finding the "squeezed middle" in DM central banks: We feel most confident in tightening cycles where commodity exposure is high and housing and/or labour markets are tight. Risk of pulling forward tightening expectations in 2022 appear highest in the US, Australia, and Sweden. Higher US rates (here) are expected to drive a stronger USD/JPY. **Long USD/JPY, Short EUR/SEK**

Resources prove resourceful: Those with exposure to much-needed natural resources should continue to benefit over those where such materials need to be imported. This is especially true for energy, where seasonal demand strength is running up against a shortfall in supplies. **Long Basket of AUD, CAD, and NOK vs. EUR and CHF**

Central bank intrigue across Europe: A growth sensitive BoE tightening cycle and attractive equity valuations are expected to see Sterling strength against Europe's safe havens. We are above consensus on European growth but interest rate expectations are likely to be a primary FX driver, so the EUR ticks the "funder" box and relative growth is better expressed via long Scandis. **Long GBP/CHF, Short EUR/NOK and EUR/SEK**

Thinking long-term: Our long-term fair value analysis suggests strong cyclical driven Sterling gains, EUR losses may reverse quickly in H2, suggesting '22 is going to a year to be nimble.

Brian Daingerfield
Head of G10 FX Strategy, US

Paul Robson
Head of G10 FX Strategy, EMEA

Yuan Cheng
FX Strategy

Rates volatility, strong DM growth is challenging for EM

AUD, SEK, and USD can benefit from monetary policy expectations

A more volatile world

The first stage of the post-covid-19 recovery was marked by synchronized global growth, but the next phase of the recovery has been both more discordant and differentiated. NatWest Markets economists anticipate global GDP growth to slow, albeit to a rate that remains slightly on the optimistic side of the consensus. That said, the breakdown of *where* that growth is expected looks more favourable for developed markets over emerging markets than at any point over the past two decades, a point our EM colleagues elaborate on here.

We anticipate global inflation will likely remain sticky for longer than global policy makers and consumers would like. As our economists discuss in *A World of Shortages*, we do see some scope for shortages in some areas to ease next year, but many current shortages are set to persist throughout 2022. Labour market shortages, which are themselves a key input into shortages in other sectors, likely have more medium-term implications for DM policy makers given the potential feedthrough into wage growth.

The result of these developments has been a decisive shift in monetary policy, both expected and delivered. How central banks react to hawkish market pricing is important for relative value in 2022, but from a global perspective it is clear that the path forward for global interest rates will be uneven, and plagued by trends in inflation that are difficult to time and predict. Put another way, **interest rate volatility is likely here to stay as a theme for 2022**.

For FX, we think a world of higher volatility has two major implications.

1) **It favours developed markets over emerging markets.** Desynchronized growth and elevated rate volatility means riskier / less liquid EM economies may struggle to see consistent, steady inflows, particularly those with high political risks and / or fading fiscal impulse. As our EM colleagues detail here, they recommend long USD/ZAR and long USD/COP (from March)

2) **It favours relative value over directional trades in FX, particularly in terms of funding in USD.** Broadly speaking, bouts of interest rate volatility are expected to generally favour the world's reserve currencies, most obviously the USD as the Fed faces pressure from sticky inflation. We generally favour the USD, given monetary policy expectations, and we expect to be highly tactical with cyclical longs funded out of USD. Notably, FX market volatility has continued to lag the increase in rates vol.

We prefer commodity "catch-up" trades in DM (AUD, CAD, NOK) vs. EM

EUR can lag as ECB stays dovish, but the region is recovering. We like high beta Europe FX (GBP, SEK, NOK)

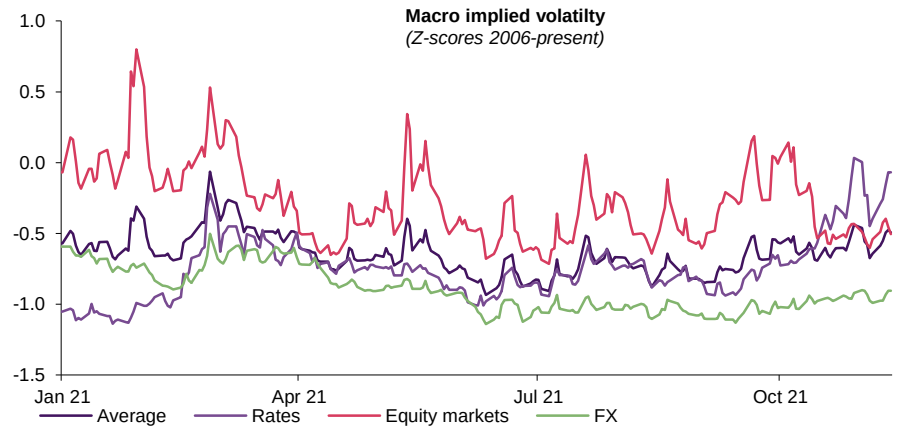
Our long-term framework suggests early EUR/GBP declines could reverse in H2

Inflation uncertainty can continue to support interest rate volatility…

…which is positive for the USD, and favours DM over EM FX

FX volatility has remained low even as rates volatility has increased

Source: NWM, Bloomberg



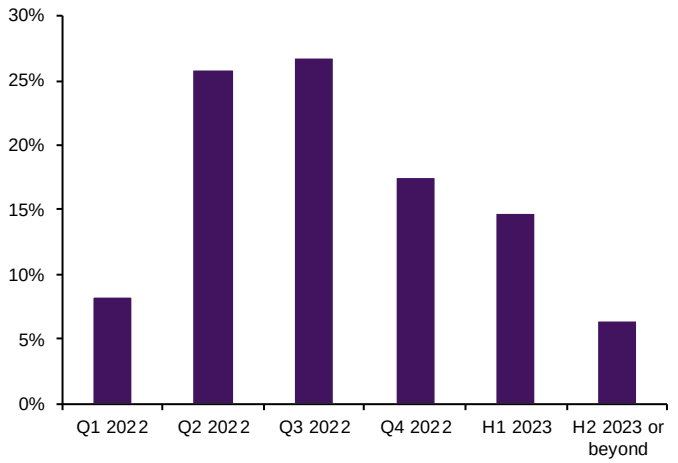
A higher volatility world merits a defensive stance in FX, in our estimation. That said, **the clear risk to this view relates to the timing / voracity of the easing of global supply shortages.** An earlier, more decisive drop in inflation driven by earlier-than-expected alleviation of supply constraints would be a game-changer for our FX views, one which would significantly improve the outlook for cyclical-linked FX. A rapid easing of supply constraints could simultaneously arrest expectations of DM tightening cycles and boost global growth expectations, as goods supply catches up to voracious demand.

Easing of supply shortages may be a 2H'22 story, and can be a game-changer for risk

Our investor survey suggests a plurality expect easing of supply shortages will begin to materialize in the second or third quarter of next year, though the distribution of responses sees the risks towards longer lasting shortages.

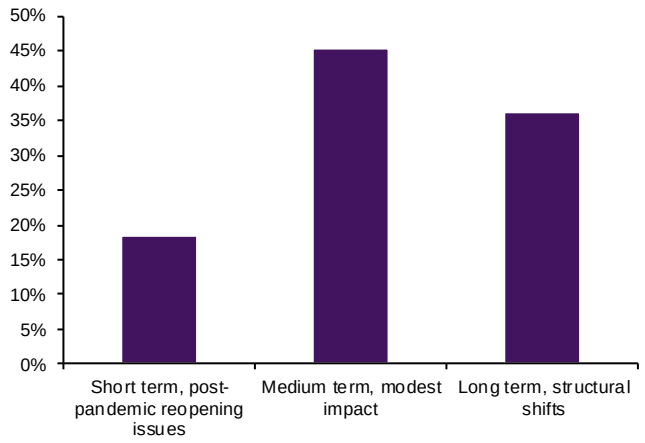
NWM Investor Survey – When do you expect supply chain disruptions to end?

Source: NatWest Markets Year Ahead 2022 Investor Survey



NWM Investor Survey – Labour supply problems in developed markets are…

Source: NatWest Markets Year Ahead 2022 Investor Survey



Finding the squeezed middle in developed market central banks

Excluding Japan, market participants are now pricing monetary policy tightening in every developed market economy over the next two years. That said, policy cycles are vastly different across economies, and assessing which central banks are priced too aggressively vs. those that are at risk of further hawkish drift is critical for relative value in FX. We discuss the implications of a shift in central bank reaction functions between the Fed, Bank of England, and ECB in greater depth here.

Divergent monetary policy can drive relative value in FX

In FX, we think the best value comes in currencies where market pricing is relatively low next year but at the greatest risk of being pulled forward. We loosely call this group the "squeezed middle".

Below we show market pricing of policy tightening over the next two years as well as a representation of the spread between what's priced over the next 12 months vs. the following 12 months. Economies where markets are pricing more aggressive hiking cycles in 2023 but only modest moves in 2022 may be most at risk of seeing drift forward in tightening expectations. The currencies that stand out in this regard are AUD and USD. NZD tightening expectations for the 12-24 month window are also fairly high relative to the next 12 months, but we caution that market pricing for RBNZ in 2022 is already the most hawkish in the developed world, meaning pull forward risk may be more limited.

And we favour currencies where "pull forward" risk is highest, including AUD, SEK, and USD.

Other standouts, for a different reason, are Sterling and NOK. Market pricing shows relatively aggressive tightening in the next twelve months in each economy but also almost *nothing* priced for the following 12 months. The pricing likely reflects "policy error" fears in the UK. We are sceptical of policy error pricing in the UK, and see

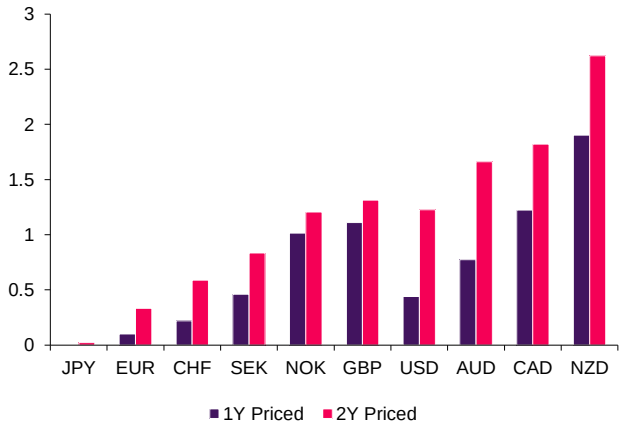
NOK as likely to be supported by strong energy prices. We are positive on both currencies, as we touch on further in our discussion of European currencies below.

Finally, current market pricing is least aggressive in Switzerland, the Euro-area, and Japan. We anticipate these three economies to remain the most resistant in the face of hawkish market pricing, though the ECB presents the clearest risk of a shift in late 2022. NWM Economists are above the consensus on European growth, and the ECB is set to map out the transition away from its PEPP program in December. We think this is best expressed via SEK, rather than EUR, which can benefit from stronger European growth and is also within our "squeezed middle" currencies – the spread between 12 and 24 month pricing in Sweden is the highest in DM Europe.

The ECB's ultra-dovish stance may be challenged in 2H 2022, supportive of SEK

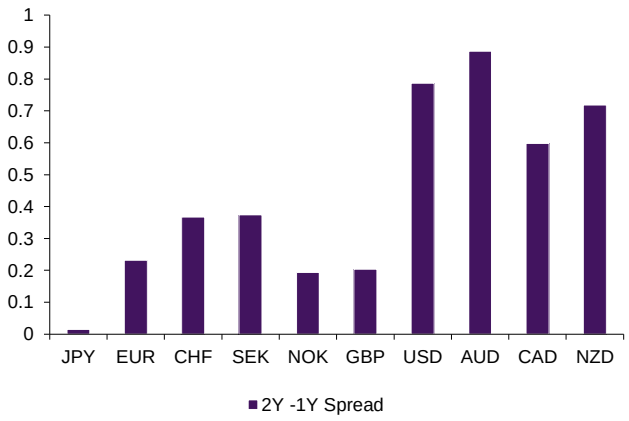
What's Priced In for G10 Central Banks over the next 12 and 24 months (%)

Source: Bloomberg, NatWest Markets



Economies where markets price relatively large tightening in 2023 vs. 2022 are most vulnerable to pull-forward in tightening expectations

Source: Bloomberg, NatWest Markets



Resources prove resourceful

Commodity-linked FX, generally speaking, has underperformed relative to the significant in strength commodity prices in 2021. In EM especially, the divergence between FX performance and commodity price moves has been quite dramatic. We see three fundamental drivers that can help explain this relative underperformance:

1) **A higher volatility world:** Higher commodity prices have fed into rising inflation expectations and, with it, higher interest rate volatility. As we discuss above, we expect this higher interest rate volatility environment to remain a factor in 2022.

2) **Desynchronized growth / political risks:** Underlying growth may simply not be strong enough, nor carry high enough, to draw sustained inflows into many commodity exporter economies in the face of both higher volatility as well as significant political risks in some nations.

3) **Supply, not demand, the driver**: To the extent that supply shortages are the driver of higher prices, exporter economies are less able to "take advantage" of higher prices. This is something that should alleviate over time.

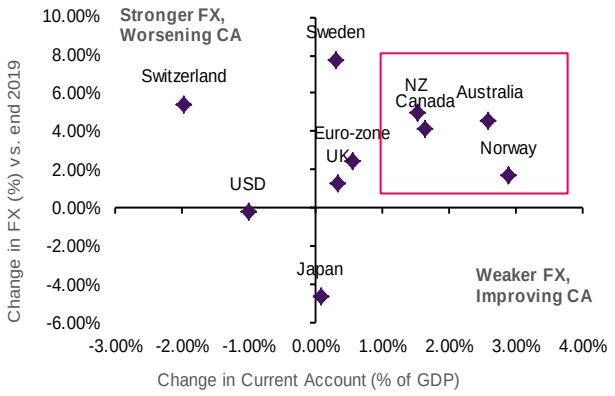
We think several factors have contributed to underperformance in commodity-linked FX

Many of these themes are set to remain headwinds, especially in the first half of 2022, and for these reasons we think it is reasonable to expect commodity currencies to remain "undervalued" vs. underlying commodities. That said, stronger commodity prices have driven meaningful improvements in current account dynamics in developed market commodity exporters, and we think there is still room for some FX catch-up. We are most confident in commodity catch-up trades in economies with strong local growth momentum and where we are confident in upcoming monetary tightening cycles. Where we are most confident remains energy-linked economies, as higher prices look set to remain, absent a dramatic shift in global demand. In G10, the resource-linked currencies we prefer include Canada and Norway.

There is still room for catch-up, especially in those with energy exposure (CAD and NOK)

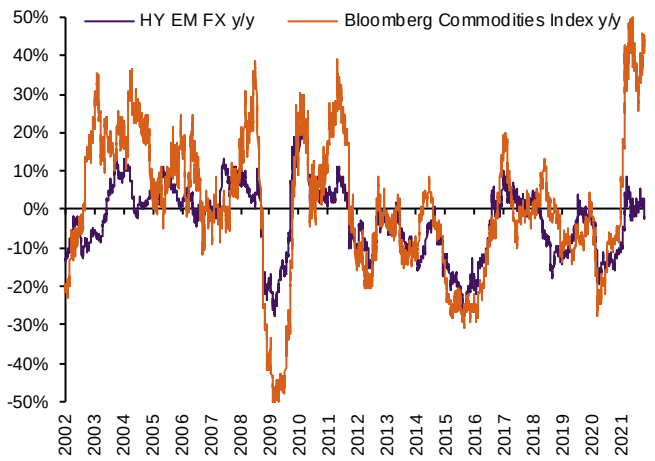
Post-pandemic, commodity exporter DM currencies have seen significant CA improvements. CHF notable, given strong FX performance despite narrowing CA surplus

Source: Bloomberg, NatWest Markets. FX Performance as of November 12th, Current Account data as of 2Q 2021.



EMFX has deeply underperformed commodities during this cycle

Source: Bloomberg, NatWest Markets

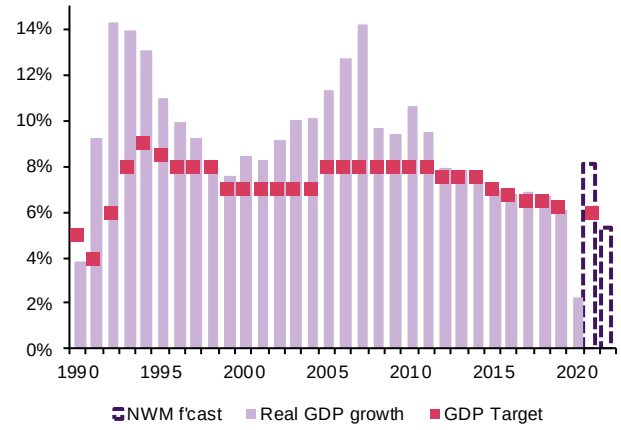


We also prefer Australia, which has both natural resource exposure as well as a central bank we view as vulnerable to additional hawkish market pricing. The ultra-dovish posturing by the RBA, which until recently put it on par with dovish stalwarts like the ECB and BoJ, looks out of place to us, as discussed above. But Australia does face regional risks from a slowing growth outlook in China. The shift toward common prosperity in China implies both a tolerance of lower delivered growth as well as a lower reliance on countercyclical policies aimed at shoring up GDP growth – both of these could imply that China's credit impulse is a lesser support for raw materials than it has in the past. Our colleagues discuss this theme in depth here. The fortunes of AUD and its regional peers are deeply intertwined with China, while energy exporters have lower direct China exposure. We think this risk is at least partially in the price. Indeed, our investor survey showed China growth expectations deeply below both the consensus as well as NWM economics.

We are constructive AUD, but a slowing in China is a headwind, but the "Common Prosperity" shift may already be in the price

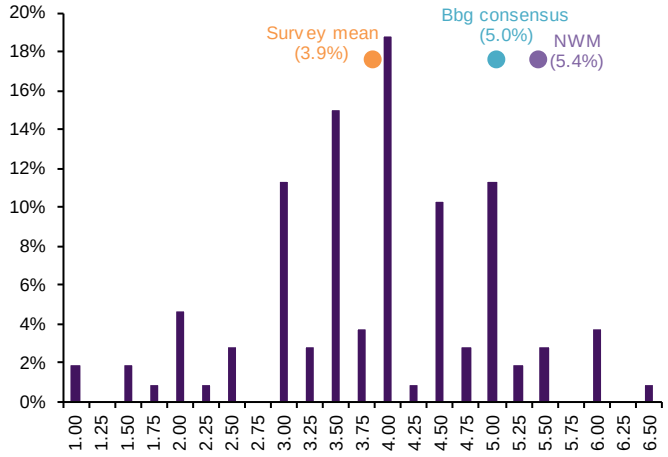
NWM economists expect lower GDP growth (and a lower growth target) in 2022…

Source: CEIC, NatWest Markets



…but both we and the consensus look far ahead of our NWM Investor Survey response

Source: NatWest Markets Investor Survey



Favouring Europe's high beta currencies

The year ahead Sterling outlook is framed by the economy's adjustment to a "new normal" that reflects the persistent impact of both covid and Brexit.

At this time last year, the UK had been the worst performing OECD economy during the pandemic. Estimates of economic scarring have been significantly revised down and the level of activity is now broadly in line with most European and major economies. While this is a positive, it now means that the scope for catch-up is now largely exhausted.

The year ahead Sterling outlook is framed by the economy's adjustment to a "new normal" that reflects the persistent impact of both covid and Brexit

A better UK economic performance has seen the public finances improve more quickly than expected. This has allowed the government to plan higher spending in coming years. The deficit is still high in relative and absolute terms, but the election cycle should ensure the recovery isn't curtailed by fiscal tightening.

It now appears that the UK jobs market remained robust through the end of job retention (furlough) scheme, with unemployment not appearing to surge as the schemed closed. This is also supportive of the near-term growth outlook.

Covid-19 case counts are high in the UK and are rising in Europe. But the hurdle for renewed restrictions is high. The ratio of cases to severe outcomes has improvement dramatically, particularly those that have recovered a third vaccine dose. The fact that the government chose not to tighten restrictions in early summer, when the impact of vaccines wasn't fully known and cases were surging, also suggests that the outlook would have to deteriorate considerably before a meaningfully change is considered.

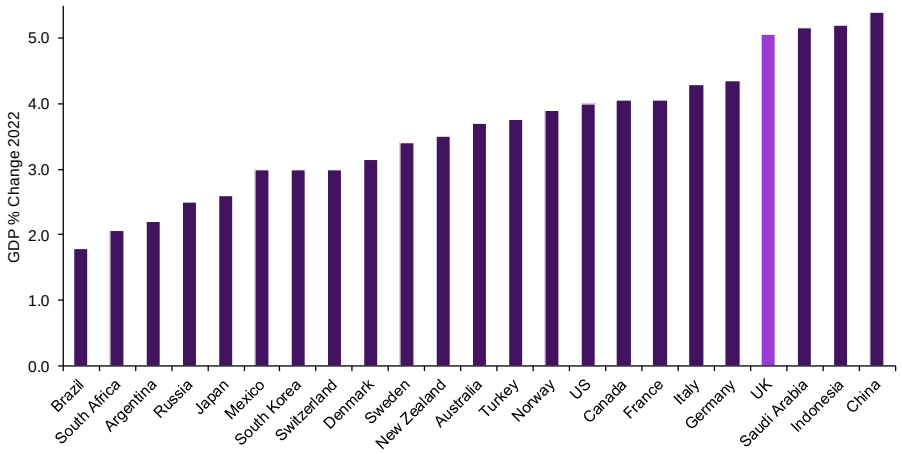
UK capital inflows driven by relative growth prospects and valuations are once again expected to be supportive, as are monetary policy expectations

Taken together, it shouldn't be a surprise that the consensus is for the UK to enjoy one of the strongest growth of the developed economies.

This should mean that capital flows driven by relative growth prospects and valuations are once again expected to be supportive, as are monetary policy expectations. UK assets appear "cheap" on a relative bases supported by better than average growth prospects and a growth sensitive central bank tightening cycle.

UK is expected to enjoy one of the highest growth rates in the OECD in '22

Source: NatWest Markets, Bloomberg consensus estimates



The SEK tends to be supported by confidence in the European growth outlook. Our European economics team expect a solid and higher than consensus rebound in 2021 and 2022 in the Euro-area. Despite supply bottlenecks and rising electricity prices, current trends (i.e. surveys) remain supportive of continued normalisation, with a significant pandemic savings offering a strong base for booming consumption growth in the next couple of years and a protection from weaker real disposable income growth due to energy and commodity price increases (further details could be found in our Euro-area economic outlook section).

Post-pandemic deglobalisation will likely ease Sweden's import deflation and this has potential to have an important impact on re-anchoring inflation expectations. Imported goods and services constantly ran negative in the past 20 years as the development of globalisation helped to drive global prices lower. A certain degree of deglobalisation after the pandemic looks likely to raise imported inflation for a number of years. With inflation expectations tightly correlated with headline inflation, the Riksbank may feel the need to raise the overall level on interest rates.

EUR/SEK could see significant downside on strong European growth and a probable re-anchoring of Swedish inflation expectations

A faster pace of Riksbank's policy normalisation relative to the ECB should play positive to the SEK. Swedish underlying inflation will likely start to show signs of persistently going above its historical average in 2023 after edging lower in 2022, and we expect the Riksbank to lift off their policy rates in H2'23, much earlier than what is implied by its current rate path. Hawkish shifts including a higher projected rate path and plans to stop reinvesting matured bonds appear likely in 2022. The ECB, however, will likely maintain its dovish stance in the next few years, and our European economics team think that they might not lift off until at least end of 2023.

The SEK traditionally has a significant positive correlation to risk sentiment. Global risk appetite should remain solid as we head into 2022, with the worst of the pandemic likely behind us and most economies in some stage of reopening or having reopened. Solid global risk appetite in 2022 could lend support to the SEK.

The continued steady local economic recovery should also be a support to the SEK. Resilient forward-looking survey data continued to suggest steady growth. Recent supply chain pressure might have had some impacts on their export-driven manufacturing sector. But the ease of the supply chain disruptions in 2022 will likely see some pick up in the manufacturing sector. The resilient services sector will likely continue to be a more important driver of economic recovery heading into 2022.

Thinking long-term

The writing of our Year Ahead provides an opportunity to update and refresh our thoughts on long-term themes and valuations. It's an invaluable exercise as it's often all too easy to only focus on the near-term cyclical and event driven outlook. This exercise is most relevant at the moment for European economies, as our longer-term valuation framework suggests a more favourable picture for EUR and a more challenging one for GBP relative to our view on cyclical drivers.

Our long-term framework suggests stronger cyclical Sterling buy, EUR sell themes may reverse quickly in H2'22

As we note above, H1'22 looks set to be dominated by strong cyclical stories, which must be balanced against the risk of higher volatility. But long-term valuations are still a relevant for those with a longer investing or hedging horizon.

Our framework for assessing long-term trends is based on currency misalignments/deviations derived from three fundamental driving factors of FX across regions: 1) Fundamental Equilibrium Exchange rate (FEER) 2) Purchasing Power parity (PPP) 3) Real effective exchange rate REER.

Buy/sell signals for currencies are generated by computing z-score of the combined score. The model generates a buy signal when z- score of the combined score is one-standard deviations below its 15-year average and a sell signal when its one-standard deviations above its average.

The bilateral score for each currency pair is calculated as the difference of the weighted average of the three driving factors between the two currencies. We then compare the bilateral scores with its 15y average, and define it as sell signal if the bilateral score is above (15y avg + stdev) and buy signal if the bilateral score is below (15y avg – stdev). Further details on the model can be found here.

The next step is to filter the signals for hit rates and performance. Backtesting was undertaken for G10 currencies against USD, EUR and GBP for the last 15 years using the buy/sell signals based on the combined z-scores mentioned above.

The tables below show the backtesting results for different pairs for buy/sell signals in the descending order of hit ratios. For our high conviction trades, we select pairs where the hit ratio (success %) is above 80%. The rows highlighted in blue are the currency pairs where the hit ratios are above 80% and there is a buy/sell signal for the month of November. The number of buy/sell signals column in the table gives us further evidence whether the hit ratios are based on a small/large sample of historical signals.

For November, the model has generated buy signals for EUR vs GBP, NZD, NOK and USD. The number of buy signals over the sample period for all the pairs are reasonably high except for EUR/NZD. The model has generated sell signals for GBP vs SEK, AUD and CAD; USD vs CHF. The number of sell signals for all the pairs are high and the hit ratios are also 100% for GBP vs SEK and AUD. The 1 year sell returns of GBP/AUD is the highest (13.43%) followed by buy signal for EUR/GBP (13.1%) and sell signal for GBP/SEK (10.3%).

NWM long-term valuation framework back-test – BUY signals					
Currency Pair	Number of Buy Signals	Buy signal hit ratio (%)	Buy signal monthly average return	Buy signal 1yr returns	Latest Month Buy Signal (Y/N)
EUR/GBP	19	100.0%	1.1%	13.1%	Y
EUR/AUD	30	93.3%	0.9%	10.5%	N
EUR/NZD	12	91.7%	0.8%	9.2%	Y
EUR/SEK	33	84.8%	0.3%	3.7%	N
EUR/NOK	26	84.6%	0.2%	2.7%	Y
EUR/USD	32	81.3%	0.5%	5.6%	Y
GBP/USD	32	81.3%	0.5%	5.6%	N
USD/CAD	50	78.0%	0.4%	4.8%	N
USD/AUD	43	77.0%	0.9%	10.3%	N
USD/SEK	44	75.0%	0.9%	10.8%	N
USD/NZD	43	72.0%	1.0%	11.6%	N
USD/NOK	34	71.0%	0.4%	5.2%	N
USD/CHF	41	66.0%	0.3%	3.6%	N
EUR/JPY	31	61.3%	0.8%	9.8%	N
GBP/NOK	35	60.0%	0.1%	0.8%	N
GBP/NZD	36	58.3%	0.2%	2.4%	N
GBP/CHF	23	56.5%	-0.1%	-0.7%	N
EUR/CHF	32	56.3%	0.1%	1.6%	N
USD/JPY	39	56.0%	0.5%	6.0%	N
EUR/CAD	36	55.6%	0.2%	2.4%	N
GBP/CAD	31	51.6%	0.0%	-0.5%	N
GBP/SEK	33	48.5%	-0.1%	-1.0%	N
GBP/JPY	33	36.4%	0.1%	1.2%	N

Source: NatWest Markets, Haver, Bloomberg. Shaded rows show currencies with current buy signals as of November. Number of buy signals shows the sample of total signals given over the past 15 years, with corresponding hit rates percentage as well as average monthly and annual return on buy signals.

NWM long-term valuation framework back-test – SELL signals					
Currency Pair	Number of Sell Signals	Sell signal hit ratio (%)	Sell signal monthly average return	Sell signal 1yr returns	Latest Month Sell Signal (Y/N)
EUR/SEK	26	100.0%	0.6%	7.4%	N
GBP/NZD	31	100.0%	1.3%	15.3%	N
GBP/SEK	26	100.0%	0.9%	10.3%	Y
GBP/AUD	17	100.0%	1.1%	13.4%	Y
USD/NZD	31	97.0%	0.8%	9.5%	N
USD/CHF	29	93.0%	0.4%	4.4%	Y
EUR/USD	38	86.8%	0.8%	9.0%	N
GBP/CAD	26	84.6%	0.7%	8.5%	Y
EUR/NZD	24	83.3%	0.9%	10.5%	N
GBP/JPY	36	83.3%	1.1%	13.6%	N
EUR/GBP	37	81.1%	0.3%	3.0%	N
GBP/USD	37	81.1%	0.8%	9.1%	N
EUR/CAD	31	77.4%	0.5%	6.4%	N
USD/CAD	25	76.0%	0.3%	4.1%	Y
EUR/AUD	31	74.2%	0.8%	9.5%	N
USD/SEK	31	71.0%	0.4%	4.8%	Y
USD/NOK	31	65.0%	0.2%	2.9%	N
USD/AUD	29	62.0%	0.3%	3.1%	Y
USD/JPY	31	61.0%	0.2%	2.8%	N
GBP/NOK	35	51.4%	0.0%	-0.6%	N
GBP/CHF	38	50.0%	0.4%	4.3%	Y
EUR/CHF	39	43.6%	0.2%	1.8%	N
EUR/NOK	32	37.5%	-0.2%	-2.4%	N

Source: NatWest Markets, Haver, Bloomberg. Shaded rows show currencies with current sell signals as of November. Number of sell signals shows the sample of total signals given over the past 15 years, with corresponding hit rates percentage as well as average monthly and annual return on sell signals.

EM Strategy

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Galvin Chia

Emerging Markets Strategist

Not a good year for EM

We anticipate that, despite elevated commodity prices and still accommodative global financial conditions throughout 2022, the year will be challenging for EM assets as a whole. It is not necessarily that we forecast a drastic removal of liquidity to affect EM (DM central banks have made that abundantly clear); it is more that the bar for actual EM (out)performance has risen. This more demanding backdrop has consolidated over the last quarter. Many of the traditional drivers for EMFX (growth rebound, higher carry and high commodity prices) have become secondary, and local curves have been pressured by local inflation and weaker flows. We expect this to continue, at least into the first half of 2022.

The bottom line and our main message is that *more sustained and sustainable* EM growth will be required to bring back portfolio inflows to support local assets across the board. This has become more critical for the FX medium-term outlook, given that net exports and real investment flows have lost steam as the global recovery cycle consolidates. While there are very significant growth divergences across EM countries, which we highlight below, aggregate EM growth is expected to post the lowest outperformance vs developed markets since 2008. Coupled with the risks of a more hawkish Fed amid sticky inflation, as well as shallower Chinese growth, this creates a rather challenging starting point for EM.

Against this backdrop, we argue for a defensive stance for EM currencies through a few directional trades, while being extremely selective on our longs (an 'all the boxes need to ticked' approach) for local duration. Improved carry-to-vol ratios will certainly support valuations for those with high carry vs fundamentals (RUB) and where outright carry will limit the ability to keep structural shorts (BRL). But it will not be enough for sustained gains across EMFX in our view. In terms of high-beta commodity plays, we anticipate that cyclical G10 currencies (such as AUD) will be better and cleaner expressions than their traditional EM counterparts. We recommend long USDZAR as a strategic trade, as well as long CNH vs a basket (KRW, TWD) to capture continued manufacturing outperformance.

Geopolitical and domestic election risks will be limited in our opinion, but the mid-year Colombian presidential election represents a significant risk that has yet to be priced in. Finally, we find value in some recent green EM bonds, as strategic demand grows, but there are very few investable options. We like Chile and Poland hard currency and Colombia peso denominated green bonds.

Our trade themes and recommendations into 2022 are:

- **Growth resilience, manufacturing outperformance:** Long CNH vs KRW, TWD
- **BRL as the EM FX outlier:** Short USDBRL through 1Y options
- **Commodity expressions in EM are less attractive:** Long USDZAR
- **Corrections in front-end rates:** Receive Mexico vs South Africa front-end rates
- **Local duration that ticks the boxes:** Buy front-end Russian OFZ bonds with RUB exposure
- **Colombian election risks:** Long USDCOP from March
- **Value in EM ESG:** Long Poland EUR, Chile USD and Colombia local green bonds

Theme #1: Growth, not carry, will be the strategic driver

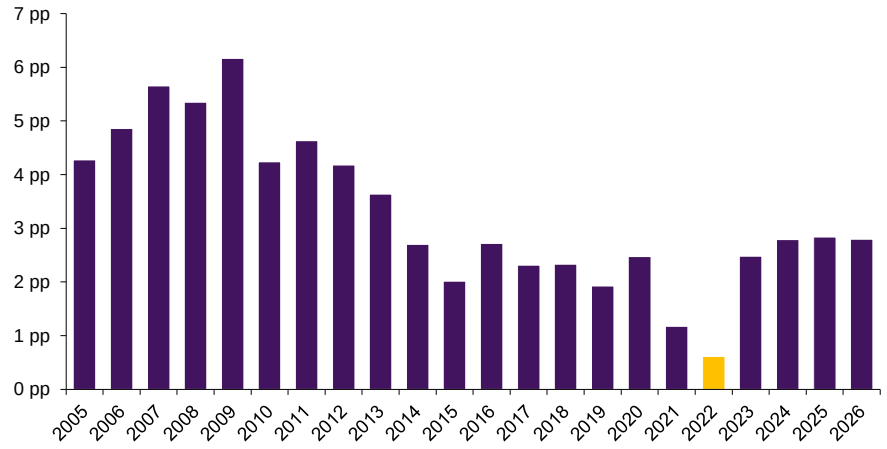
EM's growth '22 outperformance will be the lowest in decades

Focus more on growth, not so much on carry. We think that the most important factor for EM valuations next year is a simple but powerful one: 2022 is expected to deliver the lowest EM growth outperformance against advanced economies (AE) since 2008, by a large margin (see chart below).

In particular, according to the latest IMF forecasts, EM as a group will grow 5.15% next year versus 4.54% for advanced economies. This implies a +0.6% growth outperformance compared to an average of +3.0% over the preceding decade. Indeed, next year will be a true outlier, as the growth differential is expected to increase to around 2.7% from 2023 onwards, much closer to the historical trend. There are obviously risks in both directions for both groups of countries, but it is hard to over-emphasize how critical this lack of growth premia will be for EM assets next year.

EM growth outperformance vs DM expected to dip significantly next year

Source: NWM, Bloomberg, IMF WEO database



What is behind this EM underperformance? Lower Chinese growth expectations as the economy responds to shifting long-term priorities certainly plays a role in lowering the EM aggregate. But much of EM's underperformance next year actually derives from AE's *more resilient* recovery due to a host of factors, some of which could intensify over the coming quarters. This is a very important - and to some extent new angle - for markets as we move into 2022.

Against this backdrop, a few questions become more relevant, which raise the bar of what will be required for EM to perform on a sustained basis next year:

- Is EM worth all the additional intrinsic risks and lower liquidity when growth conditions will be more supportive in AEs?
- How will local markets react amid mediocre growth if global financial conditions tighten earlier/by more than anticipated?
- How much remaining space do EM policy makers have to provide additional stimulus given tighter restraints from inflation and higher financing costs?

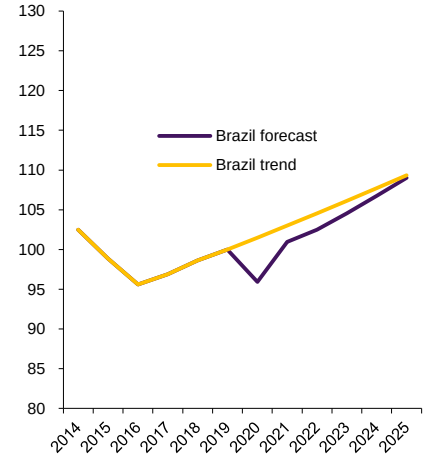
There are substantial differences in the medium-term growth trajectories across EM countries, as we explain in detail in this framework and summarize in the charts below.

Our "Resilient Five" picks are top growth performers: Russia, China, Korea and Brazil are expected to have the lowest total output loss over 5 years following the onset of covid compared to the pre-pandemic trend. This comes from a combination of a lower initial negative shock (China, Korea), more resilient sources of growth (Russia), or significantly higher stimulus (Brazil). For these five most resilient countries the expected output loss is only 16% of GDP, a meaningful outperformance vs the rest of the world (with a loss of 25% GDP) and EM (31% GDP loss). Both stimulus and vaccination progress is higher among this group, although China has had less need for stimulus and Russia's public single-dose vaccination rate remains relatively low.

The EM growth outperformers: Brazil, Chile and Russia

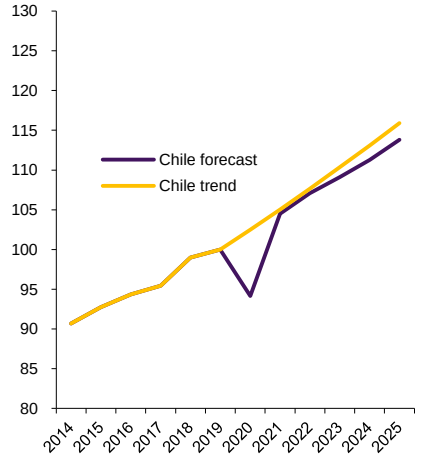
Brazil

Source: IMF and NWM Strategy



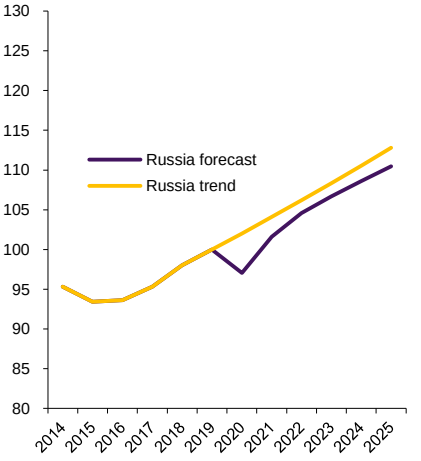
Chile

Source: IMF and NWM Strategy



Russia

Source: IMF and NWM Strategy

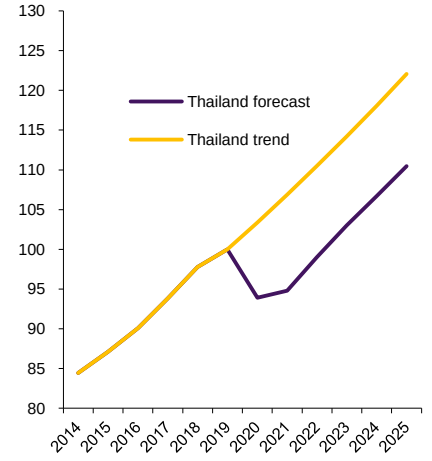


Those with the largest output loss are Peru, India, Thailand, Malaysia and the Philippines with an average loss of 78%, with clear underperformance by the Philippines. This is a critical shift in growth drivers, as better covid management among Asian economies was seen as a reason for optimism last year. However, vaccination rates in this group remain in the mid-50s and stimulus measures have also lagged. The Philippines is the clear outlier on both fronts, with very low overall vaccination rates and the second lowest level of aggregate policy stimulus.

The EM growth underperformers: Thailand, Malaysia and the Philippines

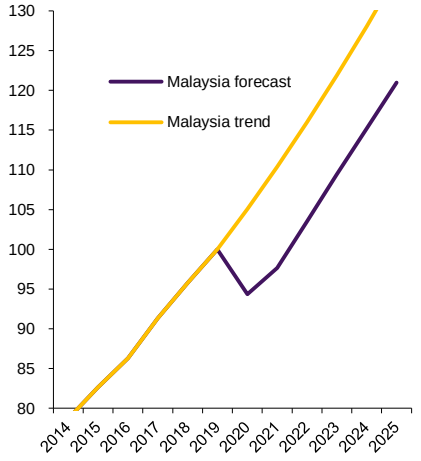
Thailand

Source: IMF and NWM Strategy



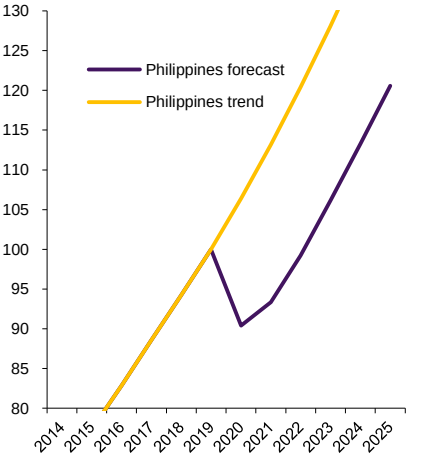
Malaysia

Source: IMF and NWM Strategy



Philippines

Source: IMF and NWM Strategy



What could change EM's growth dynamics in 2022? The most relevant is of course a significant Chinese policy response, but this is unlikely to play out. Indeed, we think Chinese growth risks are skewed to the downside, for two main reasons:

- China's "first in, first out" position during the pandemic means that it is naturally further ahead in the cycle than other economies;
- China's growth policy shift (in 2021's Five Year Plan and as part of the wide-reaching "Common Prosperity" policy agenda) will mean that the government will both tolerate lower growth and hold off from countercyclical policy stimulus. Part of this will be driven by a cooling housing market, as well as smaller credit injections relative to prior cycles.

Don't expect Chinese stimulus to come to the rescue

The implications are material: we expect growth at close to its long-term potential rate of 5 – 5.5% in 2022, while China's contribution to global growth will be overtaken by the collective contributions of the UK, US, and EU for the first time since 2006.

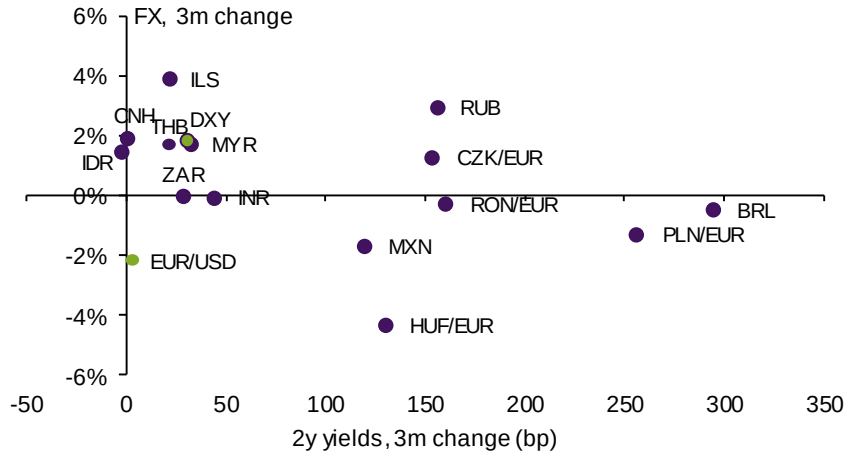
Among EM growth laggards, the broader rollout of vaccinations and some additional policy stimulus should also provide a stronger footing for those countries. The overall contribution to the aggregate EM growth rebound will be marginal, however.

The risk of policy mistakes and need for flows will be critical. The situation could become particularly complex if global inflation remains elevated and markets continue to price in the withdrawal of global liquidity by developed markets. Indeed, a move towards the dovish side by major central banks is unlikely to be read as positive for EM, as it will imply much lower growth expectations. In other words, EM markets are currently pricing a rosy scenario of some growth recovery and plenty of global liquidity, which could be challenged over the next few months.

Carry has already moved to the backseat. We could face a situation in which EM central banks are forced to overtighten due to overshooting inflation, but the positive impact on FX is eroded by the global backdrop. The lack of correlation between improved carry and FX performance has been prominent recently, as some early hikers are also facing broader questions around their longer-term credibility. Our worry is that this becomes more generalized next year as carry fails to attract substantial portfolio flows, which are particularly needed as real flows normalize. In fact, after peaking in 2021 as a reaction to the pandemic, EM current account positions are likely to slowly contract over the next few years towards 2016-2018 levels. Again, the driver comes back to growth.

Front-end yields and EM FX: no clear correlation

Source: Bloomberg, NatWest Markets



Manufacturing exporters will continue to benefit. We expect an extension in cyclical dynamics from supply chain shortages, to the benefit of global manufacturing hubs like China. This should lead to sustained export-led outperformance. Combined with the desire by China's policymakers to see broad (nominal) currency stability, and a challenging environment for EM broadly, we think that this points to more upside still for China's trade-weighted CFETS basket. We think that these factors will outweigh risks to China's economic outlook posed by a later-cycle recovery and lower reliance on countercyclical stimulus. We prefer to express this against a basket of KRW and TWD, which benefits from positive carry and insulates it against a stronger USD and higher US rates.

We like long CNH vs KRW, TWD

BRL is an interesting outlier. We think that the BRL will be an important outlier next year and recommend longs through options, as we find current valuations and specific drivers very appealing. First, outright carry (expected to reach 13% by the middle of next year) will increasingly become an important anchor, insofar as it hinders structural local dollarization and we don't see a fiscal or BoP crisis brewing. In fact, while the recent pressures on the fiscal accounts have raised questions on longer-term sustainability, we think that those policy risks are priced in, including from the next election.

BRL is an outlier

Second, the external accounts have further room to improve and, more importantly, the real remains undervalued within the commodity complex. We expect that as carry increases and policy headlines subside, the BRL will come into focus with potential for appreciation towards 4.50. Given the headwinds from the global backdrop and potential local noise, we prefer expressing the view through options.

Trade Expressions:

- ***Continued Chinese manufacturing outperformance: Long CNH vs KRW, TWD.***
- ***Short USDBRL through 1Y options targeting 4.50.***

Theme #2: Pure commodity EMFX cyclicals aren't worth it

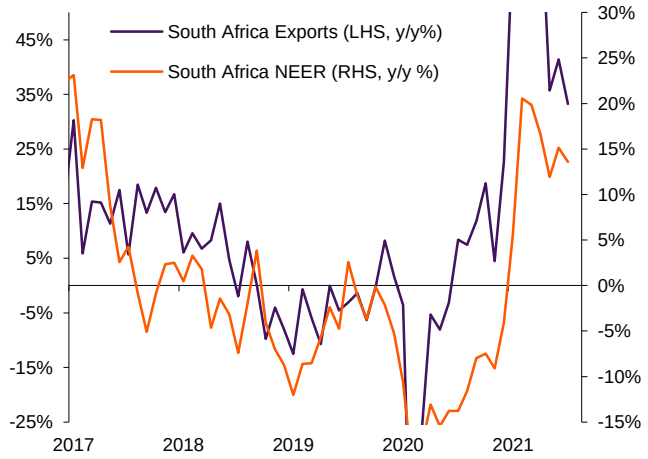
The commodity impact will subside. While we expect EM exports and commodity prices to remain elevated, their impact on trade flows and FX are unlikely to be as stark in 2022 as they were in 2020. This simply follows the cyclical macro normalization following the pandemic shock. Indeed, we have already seen a (sometimes sharp) reversal in the trade balances of many EMs, as domestic demand has been buoyed by reopenings. That has led to a historic divergence between commodity prices and aggregate EMFX (as we explained in this piece). We think that 2022 will be more of the same.

Stay away from (purely) EM cyclicals

Commodity expressions in EM are less attractive. This lessens the appeal of using EM currencies as purely cyclical commodity trades, given their inherent risk and lower liquidity. We think higher global volatility will mean a turn away from EM assets as expressions of global themes, as volatility-adjusted returns become less compelling. For example, one of the most direct expressions of China-linked commodities and improved current accounts in EM has been ZAR (1Y implied vol at 15). The G10 expression in AUD, in comparison, is materially less volatile (1Y implied vol at 9).

South Africa's trade balance is plateauing

Source: Haver, NatWest Markets



China's exports will continue to set directional impulse for the CFETS basket

Source: Haver, NatWest Markets

In fact, despite the prospect of high commodity prices benefitting trade balances for a little longer, we think ZAR is a mature trade that will face headwinds from:

- A relative carry perspective, as the SARB lags the tightening cycle vs its EM peers;
- A significantly smaller commodity impulse from Chinese demand and/or AE growth downgrades; and
- Long positioning overhang from earlier this year, especially if the Fed were to turn more hawkish.

As such, we continue to find the rand the most vulnerable EM currency into 2022 (we have been defensive since July), with spikes above 16.0 likely in our view.

Trade Expressions:

- ***Stay away from (purely commodity) EM cyclicals: Long USDZAR***

Long USDZAR

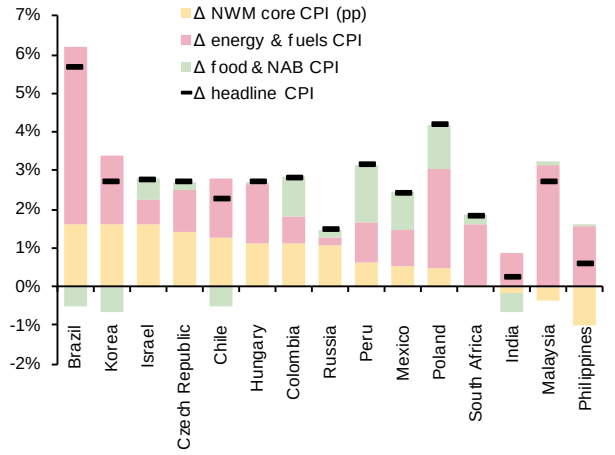
Theme #3: Defensive central banks, some value in Russian duration

Output gaps will determine inflation again. We expect 2022 to consolidate as the year of almost full EM central bank normalization, driven by well-known global supply constraints and the inflationary effects of the pandemic's deeply simulative measures. Some policymakers (notably the BCB and CBR) have already led the way as output gaps have closed for the most part. Over time, the size of the remaining output gaps and the time it will take to converge to potential will be the main determinants of inflation. Indeed, we view the recent surge in EM inflation as mostly cyclical, meaning that in most countries long-term inflation expectations will eventually revert to levels implied by fundamentals.

Inflation turning points are likely at hand for most EM economies over the coming months. Our breakdown of inflation's base and seasonal effect mechanics shows that a majority of supportive effects (i.e., contributing to lower headline inflation) will materialise in December and January CPI prints, suggesting that the prior months will be local peaks in the data. This might provide some reprieve to market pressure on front-end rates and rate hike expectations.

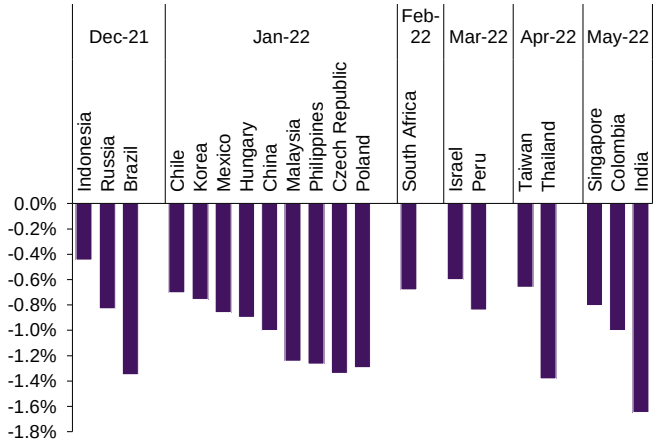
YTD changes in headline CPI – mostly external shocks, but also sizeable increase to core too

Source: Haver, NatWest Markets



Headline CPI in most EMs see the largest downside base + seasonal effects in Dec / Jan prints

Source: Haver, NatWest Markets



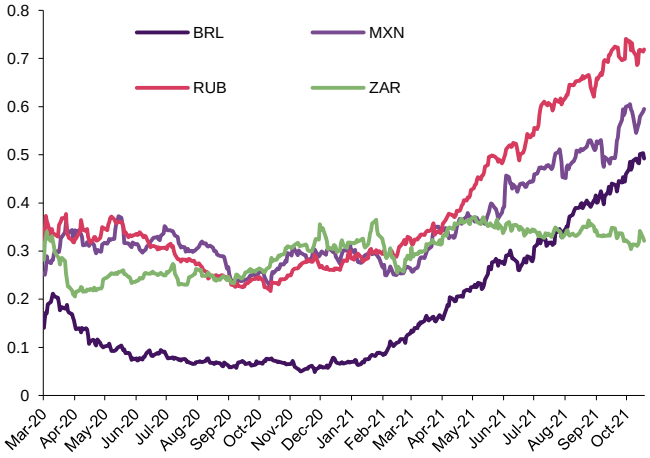
But this doesn't mean that economies have escaped high inflationary environments yet, particularly with inflation materially above targets across LatAm and CEEMEA economies, and with inflation prints continuing to surprise to the upside. The response of real policy rates and transparent central bank communication will remain important, particularly as we approach turning points in headline CPI.

Receive Mexico vs South Africa front-end

This leaves cycles priced in at the front-end of many curves a bit high as the market has rushed to price in significant hikes. In particular, we think that implied front-end rates are too high in Colombia (1Y fwd at 6.45) and Mexico (1Y fwd at 7.30) compared to South Africa (1Y fwd at 5.4) and Hungary (1Y fwd 3.60) as we previously highlighted. Brazil is an obvious candidate to receive at the front-end as implied real rates have become excessive, even when accounting for a significant deterioration of CPI expectations. But we think it's too early to put on the trade now, given the lack of clarity on the next steps by the BCB. Indeed, given their current policy stance, the cycle could be further extended over the next couple of meetings without specific guidance on the terminal rate.

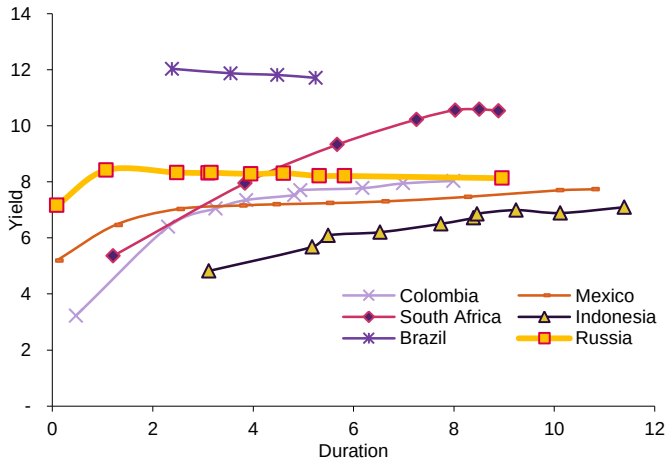
RUB's carry-to-vol is well ahead of its peers (3M implied yields vs 3m implied vol)

Source: Bloomberg and NWM Strategy



Russian nominal yields are attractive vs EM peers

Source: Bloomberg and NWM Strategy



We are very selective on EM local duration, given the more challenging external environment as described above. The recent widening of spreads at the long-end provides an opportunity to add some duration, especially given the very low current offshore positioning. At the same time, we do not expect an indiscriminate surge of flows into local markets until we have more clarity on the monetary policy path by both DM and individual EM central banks. 2022 will also be a key year for some needed fiscal consolidation following the expansion of debt ratios during the pandemic.

Selective on EM local duration:

Long Russia

The Russian local curve offers the most solid value in our view:

a) The CBR has been ahead of the curve as an early and decisive hiker, even if the terminal rate materialises somewhat below current lofty market pricing. As it stands, Russia offers one of the highest FX-implied carry-to-vol ratios (0.72 for 3M compared to 0.50 for Brazil and 0.33 for South Africa), making unhedged exposure to the curve particularly attractive. At the same time, the credibility of the central bank remains more solid than in its peers even as inflation expectations have risen.

b) Yields towards the front-end of the curve are the highest among liquid EM markets, with the exception of Brazil. Contrary to Brazil, fiscal and political uncertainties in Russia should remain modest, as government spending has remained contained and as geopolitical and sanction risks with Europe and the US have subsided. Given the shape of the curve (see chart above), we prefer to stick to the front-end of the bond curve, which already incorporates a hawkish view of monetary policy over the coming months.

c) Windfall oil and gas revenues support Russia's fiscal outlook. While government expenditures and issuance is also expected to increase over the 2022-24 budget horizon, high commodity prices imply strong twin surpluses. Prudence overall in fiscal policy (e.g. with the fiscal rule channelling excess oil and gas revenues to the sovereign wealth fund) mean that fiscal risks remain very well contained, relative to higher-beta EM peers.

d) Foreign participation in the local markets remains very low. This comes both from the low offshore appetite for local duration across EM, as well as in the aftermath of sanction uncertainty in 2021.

Trade Expressions:

- ***Receive Mexico vs South Africa front-end rates***
- ***Buy front-end Russian OFZ bonds with RUB exposure***

Theme #4: Away from geo-politics to just politics

Geo-political risks less biting

We expect geopolitics to become much less of a market driver in 2022, as the Biden administration's approach to competitors like China and Russia shifts focus towards longer-term and less market relevant issues.

US-China relations are likely to change tack relative to the pre-pandemic trajectory. We think that tech, not trade, is likely to take greater importance in the bilateral agenda, as competition for technological superiority remains at the heart of the issue in US-China trade relations. The risks are likely skewed towards more hawkish policy expressed via competition, rather than tariffs. Trade relations will not see a return to the trade wars of 2019; rather, we think 2022 will see trade policy shift to a less volatile, more technical setting.

Russia-related geopolitical risks will likely remain quiet, although tail risks remain. We don't expect this to become an immediate market risk: the Biden administration's sanctions in April 2021 were milder than initially feared, and June's Biden-Putin summit showed that bilateral engagement was also an issue of strategic importance (in line with our thinking in late 2020). Concerns have risen around rising Russian influence in areas such as European gas supply, or persisted in areas regarding foreign policy and military projection. Should these risks materialise, they're more likely to surface as headline risks rather than as shocks to risk premium the way sanctions uncertainty was priced in the past.

This creates a much more stable global backdrop, which brings the spotlight to domestic politics, particularly upcoming elections in Brazil and Colombia.

Colombia's elections are more concerning than Brazil's, given both the uncertainties around the outcome and the risks from the least market-friendly outcome. Indeed, we feel that a lot of the fiscal noise is already priced in the BRL and local curves following the massive Brazilian stimulus implemented during the pandemic (still by far the largest in EM according to our indicator). Moreover, the alternative of a Lula government will at least be familiar to investors, especially as the market itself will restrict the ability for substantial increases of social expenditures.

Select 2022 election calendar and risks

Country	Date	Election	Risk factors
South Korea	9 Mar 2022	Presidential Election	Risk that Conservative opposition People Power unseats incumbent Democratic Party; potential for a more hard-line stance towards North Korea and rising geopolitical noise. Incumbent Democratic Party to retain legislative majority.
Hungary	Apr 2022	Legislative Election	Risk in the United Opposition coalition unseating the incumbent Fidesz-KDNP alliance. Opposition win would likely move towards a less confrontational, pro-EU and pro-Western government.
Colombia	29 May and 19 June 2022	Legislative & Presidential Election	Social discontent compounded by the pandemic is likely to drive the election outcome next year, as the popularity of President Duque has declined significantly. Current front-runner Gustavo Petro's policies could damage market confidence.
Philippines	9 May 2022	General Election	Highly contested electoral landscape. Regional foreign policy likely to pose the largest risk factor, particularly China relations. Outgoing Pres Duterte had preference for closer ties with China than historic Western allies.
Brazil	2 Oct 2022	General Election	Mishandling of the pandemic, rising unemployment rates and high inflation could act as a risk to incumbent President Bolsonaro. His appeal beyond core supporters has eroded. Election of former President Lula could represent a threat to economically liberalising reform efforts.
China	Oct 2022	Communist Party Congress	President Xi likely to secure a third five-year term as party Chairman, alongside greater assertiveness over policy. Risks lie in orientation on domestic and foreign policy - and whether these will be a source of volatility or market concern.
South Africa	Dec 2022	ANC Conference	Risk lies in primacy of incumbent Pres Ramaphosa, ability to drive through reform agenda; incumbent ANC has ceded ground in municipal elections. Pres can be challenged for party (but not executive) leadership. Risk also of broader political, social tensions.

Source: NatWest Markets

On the other hand, the current leading candidate in the Colombian election, Gustavo Petro, has proposed a series of policies that in our view are not fully priced in. In particular, his calls for agrarian reform and to stop crude oil exploration are likely to imply (both implicitly and explicitly) a weaker peso on a structural basis. Similar to the process of domestic asset dollarization that we have seen in Chile and Peru recently, we expect this policy background to create a strong demand for dollars in the months *leading into* the elections. The obvious caveats are that there are still a few months until the elections (the run off is not until June), and Petro's leading position for so long makes him an obvious target by the other candidates. We think that COP could head towards 4200 as the elections could coincide with the Fed moving towards rate hikes and recommend building short peso positions closer to the first round.

Long USDCOP in Q1

Expression:

- ***Long USDCOP from March***

Theme #5: EM ESG remains slim pickings

A slower, smaller ESG market. Compared to the sharper focus on ESG considerations and higher sovereign green issuance among developed markets, the development of the green market in EM has been slow. We think this is due to catch up in 2022, as EM gains further attention as an integral part of the move towards sustainability, and as funding becomes a bit tighter for EM sovereigns.

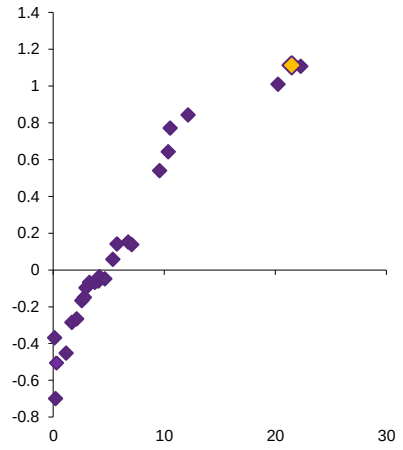
EM green bonds attractive:

Long Poland EUR, Chile USD and Colombia local

Long-end Poland most attractive for Green EUR EM

Mid yield vs duration (green vs conventional)

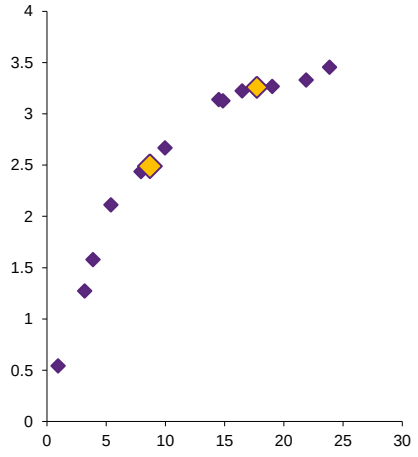
Source: Bloomberg and NWM Strategy



Belly of Green Chile offers pickup with little premia in USD curve

Mid yield vs duration (green vs conventional)

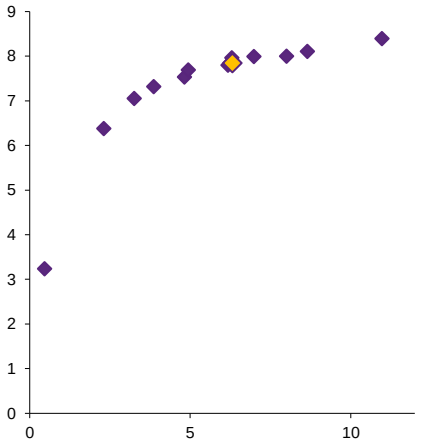
Source: Bloomberg and NWM Strategy



Coltes green bond ahead of the curve among EM local curves

Mid yield vs duration (green vs conventional)

Source: Bloomberg and NWM Strategy



Turning towards sustainable finance will likely become a priority well beyond the immediate value offered in comparison to the regular curve. In other words, we expect some natural diversification towards more developed sustainable curves across issuers, which will take some time to develop, though 2022 is likely to be a key year. With this in mind, we think that there are already a few attractive opportunities among existing EM green bonds:

- In the EUR-denominated curve, we find Poland's green bond at the long-end of the curve as the most attractive, despite its low liquidity (see Chart above). We prefer Poland's fiscal stability vs higher-beta names as a cleaner expression of ESG themes, with its history of green sovereign issues and potential for larger sponsorship among European-based investors.

- In the USD-denominated curve, we expect the early adoption of green financing in Chile to continue to pay off. Indeed, the country has amply surpassed their ambitious targets for renewable use, adding a broader theme as an outperformer beyond the use of proceeds from green bonds. The two green bonds' premia to the conventional curve is modest (Chart above), and we expect the risks around Chile's overall fiscal and policy risks to compress over time, independent of election results (second round is scheduled for December).

- For local green bonds, Colombia offers one of the few alternatives with some significant yield among EM sovereigns, making it the obvious pick. At the time of writing the premia vs the regular Coltes curve is marginal, and both inflation break-evens and steepness of the curve already reflect many of the fiscal risks. While the 2022 election remains a substantial risk, we prefer to express it through the FX and expect the green bond to outperform as some of the policy proposals by the leading candidate incorporate a move away from fossil fuels and towards more sustainable energy.

Credit Strategy: Financials

David Alam
Financials Credit Strategy

Panos Toskas
Financials Credit Strategy

European bank profitability looks set to benefit from higher and steeper interest rates curves driving net interest margins and revenues higher next year. Despite provisions likely to increase from their extreme lows in 2021 towards more normalised levels in 2022, we think the impact on asset quality and NPL formation should be manageable for banks.

In 2022 we think bank capital ratios will gradually decline from all-time highs as banks use excess capital to pay shareholders or pursue M&A opportunities. As TLTRO funding matures next year, we think banks will increase their supply of senior debt as a partial replacement.

Insurers remain strongly capitalised and also stand to benefit from higher interest rates in the long run, in our view. Insurers can enjoy higher re-investment opportunities for their assets, particularly life insurers. However, non-life insurers' underwriting profitability may be more challenged by inflation pressures (e.g. motor repair costs). We also expect a hardening market for re/insurers next year but with slower premium rate increases.

Banks and insurers will increase their ESG related disclosures next year. For example, banks will disclose a "Green Asset Ratio" as part of their 2022 Pillar 3 disclosures whilst reinsurers will report the first European-wide dashboard on the natural catastrophe insurance protection gap. We do not expect climate change capital requirements in 2022 but regulators could consider this in the longer term.

European Banks - Higher rates help bank profitability

For several years, the link between the low/negative interest rate environment and the declining trend in European banks' profitability has been well documented by the EBA. We think 2022 could be the year that this trend finally changes to the positive for banks' profits. In a post-covid world where central banks are grappling with **higher inflation**, **higher interest rates** are seen by the market as a likely policy response. As such the market has priced in higher and steeper interest rates curves, which we think could be beneficial to the **net interest margins** and **net interest income** revenues of European banks.

Whilst the prospect of higher revenues and bank profitability can be perceived as a clear positive for shareholders, we think that creditors also stand to gain. In our view, higher bank profitability is a structural strength for the sector as it enables banks to take larger loan loss provisions when necessary to deal with NPLs. It also allows banks to enact stricter underwriting standards instead of engaging in a "race to the bottom" with riskier lending in search of profits. Therefore **higher profits will allow banks to better protect asset quality in 2022**, in our view.

Are provisions "transitory"?

As we have been tracking with our quarterly notes on bank provisions, 2021 has been characterised by **net "negative provisions"** (i.e. net impairment releases), whereby banks are releasing provisions taken in 2020 as asset quality has not deteriorated as severely as feared. In the latest round of 3Q21 results, we saw several banks **revise down their expected FY21 cost of risk**, indicating that banks' actual loan loss provisions have been significantly below expectations. From banks' guidance on earnings calls, we think that European banks are guiding towards a **more normalised level of provisions in 2022**.

From banks' guidance on earnings calls, we think that European banks are guiding towards a more normalised level of provisions in 2022

Overall **we do not expect provisions to be a major issue** for most European banks in 2022. Whilst there could be some NPL formation next year as government

support measures expire, we do not expect significant widespread deterioration in asset quality metrics; we think **defaults should be limited and manageable for most banks**. As indicated by an ECB speech, banks themselves expect that the peak of NPLs could be behind us once we enter 2022.

CET1 capital buffers to gradually decrease

During 2022 we expect to see banks' CET1 ratios begin to decrease, as they conduct share buy-backs and return capital to shareholders via dividends. We think that the decrease will be a **gradual glide path** downwards over the medium term towards company target ranges. If done gradually, we think this should not be a concern for AT1 holders – although lower headline CET1 ratios would reduce surplus capital levels above MDA requirements, **we still see AT1 coupon-miss risks as minimal**.

During 2022 we expect to see banks' CET1 ratios begin to decrease, as they conduct share buy-backs and return capital to shareholders via dividends

Instead of returning surplus capital to equity holders next year, an alternative use for capital could be **M&A**. 2021 has been a relatively busy year for M&A among European banks – although a UniCredit-Monte merger appears to be off the table for now, 2021 saw completions of mergers such as Intesa-UBI, Credit Agricole-CreVal. CaixaBank-Bankia, and Unicaja-Liberbank. We believe that M&A will continue to be a key theme for banks in 2022, although we think attempts by the ECB to foster M&A such as changing P2R requirements and badwill recognition have so far failed to materially accelerate M&A in the industry.

Finally, we believe regulation will not be a significant headwind for bank capital in 2022, as shown by the European Commission's implementation of the recent **Basel III banking package**. Although a "parallel stack" approach for the output floor calculation was not adopted which some banks had lobbied for, we think that the overall package's delay by two years to 2025 should help dilute some of the potentially harsher negative impacts on capital that the EBA had initially calculated.

Banks to issue more senior debt as TLTRO funding rolls off

As written by our European Rates Strategy colleagues, the final three TLTRO-iii's are repayable on 29 June 2022 when the -1% incentive rate expires. If banks repay the **maturing TLTROs next year**, we think banks are likely to increase their reliance on **senior debt for funding** as a partial replacement. Having seen an increase in funding sources from deposits and central banks since covid, banks were less reliant on market funding but we think this trend could reverse next year.

As highlighted in the EBA's report on EU bank funding, banks are planning to increase their senior unsecured debt issuance during 2022 and 2023, particularly for MREL eligible instruments. Therefore we think that there are **significant supply risks to senior debt next year** as TLTRO matures in 2022/2023, for both **senior preferred debt** issued as a partial replacement for TLTRO, and also **senior non preferred debt** issued for MREL purposes.

European Insurers

European insurers did well to navigate the challenges posed by the pandemic to report overall good performance in 2021. **Strong capital adequacy** and **cautious underwriting** proved to be key strengths to help overcome the headwinds of an ultra-low interest rate environment and covid-19 related losses. 2022 feels like an opportunity for insurers to return to more normalised conditions, with many of their pre-covid challenges still remaining broadly relevant.

Potential substantial interest rates hikes would be a credit positive for the industry in the long run because of higher earning re-investment opportunities

The low interest rate environment has challenged insurance companies' business model by putting pressure on investment margins. In our view, potential substantial **interest rates hikes** would be a credit positive for the industry in the long run because of higher earning re-investment opportunities, despite a potential short-

term negative hit on investment results. The UK's life insurance market growth is likely to be supported by bulk annuity deals, while we expect continental European **life insurers** to continue focusing on more capital light products rather than traditional products with guaranteed returns.

Inflation is also relevant to insurance companies, with claims inflation and consequently higher repair costs likely to affect **non-life insurers'** underlying profitability. We expect property and motor lines to be under pressure – strong competition across developed markets makes it harder for P&C insurers to pass on price increases to consumers, in our view. Further risks in 2022 could be that an end to covid lockdowns increases motor insurers' claims frequency, whilst casualty lines could also face inflation headwinds as inflation impacts more negatively on longer-tail liability lines.

The **reinsurance** industry experienced strong **premium rate increases** in 2021 which benefited the large EU reinsurers (Hannover Re, Munich Re, Scor SE and Swiss Re). We expect a hardening market again in 2022, especially in loss affected lines, but with lower premium rate increases. Higher-rated reinsurers' growth is likely to be further assisted by increased demand for reinsurance coverage next year due to high-frequency and high-severity natural catastrophe losses. Despite large catastrophe losses impacting reinsurers' profitability, large EU reinsurers have high enough capital buffers to be resilient, in our view.

Following the European Commission's Solvency II review in September 2021, attention is now redirected to the European Parliament and Member States for finalisation of the legislative texts. The timeline for this process is uncertain but we think this could last for more than 12 months. The proposed changes will ensure insurance companies can invest in more long-term projects, while increasing policyholders' protection and making the overall **insurance sector more resilient**. The UK is also reviewing certain features (risk margin, matching adjustment, calculation of solvency capital requirements and others) of its own prudential regulatory regime, with consultation for the package of reforms expected in early 2022.

ESG importance ramps up in 2022

As highlighted in *Green FINgers*, our quarterly ESG focused publication, we have seen an increase in the scrutiny of environmental credentials for financials in terms of both disclosures and requirements.

In the EU, banks will have to disclose key performance indicators such as a **Green Asset Ratio** as part of **Pillar 3 disclosures from 2022**. The EBA has acknowledged there are "data quality issues" that "pose significant challenges when comparing results across banks". As such, we expect that the initial data will be imperfect, and therefore we expect 2022 will be an important milestone in starting ESG disclosures, rather than being the finished product to allow for immediate bank-by-bank comparisons.

We also note that regulators have increasingly considered how **climate-related risks** could interact with bank **capital requirements**. In the UK, the PRA's Climate Change Adaptation Report explores the links between climate change and the regulatory capital framework. The PRA reached the conclusion that regulatory capital is not the right tool to address the causes of climate change (greenhouse gas emissions), but should have a role in dealing with its consequences (financial risks). Therefore whilst **we do not expect climate change capital requirements in 2022**, we think that over time, regulators may incorporate this more.

Whilst we do not expect climate change capital requirements in 2022, we think that over time, regulators may incorporate this more

We expect to see progress in 2022 towards the reporting of assessment of climate-related risks from the insurance and pensions industry as a part of their own risk

and solvency assessment (ORSA) as well as the finalisation of the **first** European-wide **dashboard** on the **natural catastrophe insurance protection gap**. The aim of this will be to "*raise the awareness on the role of insurance against climate related perils and inform policy measures and private sector initiatives to secure the future availability and affordability of insurance coverage*". Furthermore, according to EIOPA, insurers "*will need to disclose how their activities contribute to the transition to an environmentally* ***sustainable*** *economy*".

In Focus

Macro and markets in 2022: What you told us

Imogen Bachra, CFA
European Rates Strategy

We launched our Investor Survey in late October, asking for your thoughts on growth and inflation next year – how will the recovery progress, particularly in the face of a slowing China? Are supply shortages and bottlenecks here for the long(er)-term? – And of course, what does this all mean for markets in 2022?

We received 130 responses from a broad range of institutions; thank you for your participation. We highlight the 10 key takeaways that emerged from the results and how they compare to NWM's view. Full, aggregate responses to all of the questions can be found at the end of this note.

NWM Year Ahead Investor Survey: Top 10 takeaways:

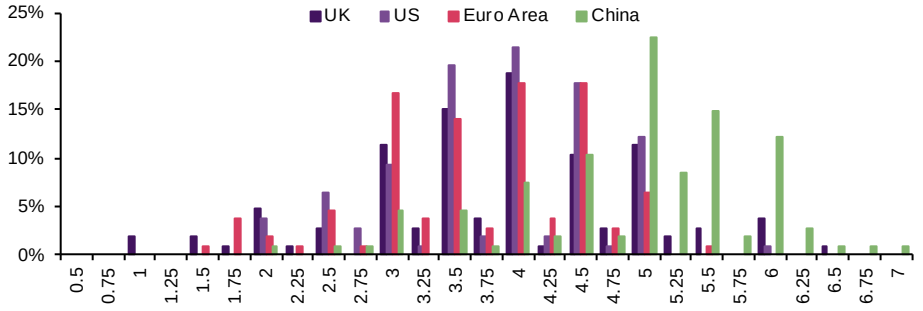
1. Investors are less bullish on **growth** than consensus…
2. …but expect higher **inflation**
3. Which should allow (some) **central banks** to hike in the near future, but there are concerns about how this could impact the recovery
4. Premature tightening of **fiscal policy** is less of a risk
5. **Politics** may not be that exciting, but US mid-terms will matter for EM
6. Domestic policy is the biggest risk to **Chinese growth**, which in turn is a risk to global growth in 2022
7. **Rates** markets have not priced in enough of a recovery – expect higher rates and steeper curves
8. **Risk assets** are expected to outperform
9. Expect **higher volatility** next year, albeit less so in rates
10. The **green transition** is expected be inflationary

1. Investors are less bullish on growth than consensus…

Little divergence in growth forecasts. Survey respondents see the highest growth in China next year, with the mean response expecting growth of 4.9%. In the other three regions we asked about (UK, US and Euro Area), investors are expecting growth to look surprisingly similar: 3.9%, 3.8% and 3.7% respectively.

Where do you expect growth in 2022?

Source: NWM Year Ahead 2022 Investor Survey

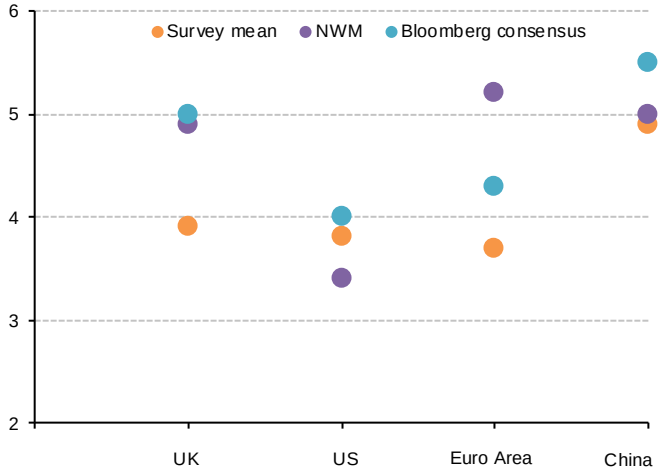


Sub-consensus, and mostly sub-NWM growth views. Notably, these views are below Bloomberg consensus across all four regions. With the exception of the US, investors are also less bullish than NWM 2022 forecasts. The biggest divergence of views between the survey, consensus and NWM is in the euro area, where the average of survey respondents pencil in growth at just 3.7%, some way below Bloomberg consensus of 4.3%, which in itself is much less bullish than NWM forecast of 5.2%. Somewhat inconsistently, though, it was viewed that the Euro Area was the region where growth could surprise the most to the upside in 2022. The largest spread of responses was in the UK, where growth estimates ranged from 1% to 6.5%.

It was viewed that the Euro Area was the region where growth could surprise the most to the upside in 2022

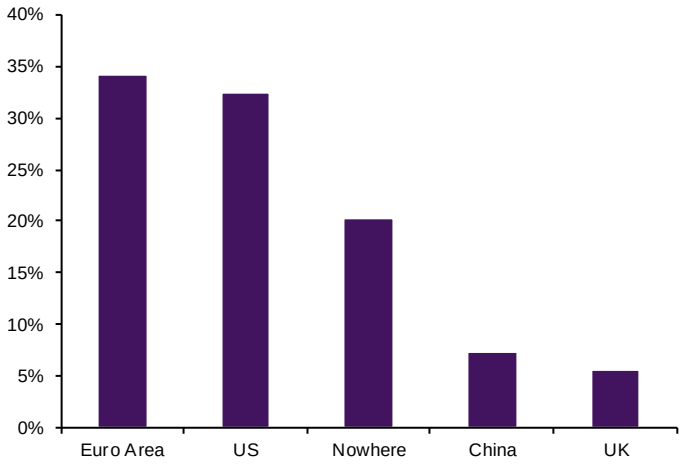
Survey expectations for growth vs NWM views and BBG consensus

Source: NWM Year Ahead 2022 Investor Survey, Bloomberg



Where will growth surprise on the high side the most next year?

Source: NWM Year Ahead 2022 Investor Survey



2. ...but more bullish on inflation

High confidence in higher inflation, but split on what kind of growth will accompany it. When asked to characterise views on growth and inflation in 2022, an overwhelming majority (95%) opted for a high inflation scenario. Views on the growth outlook, however, were much more evenly split with 45% expecting an inflationary recovery (high inflation and strong growth) and 40% expecting stagflation (high inflation and weak growth).

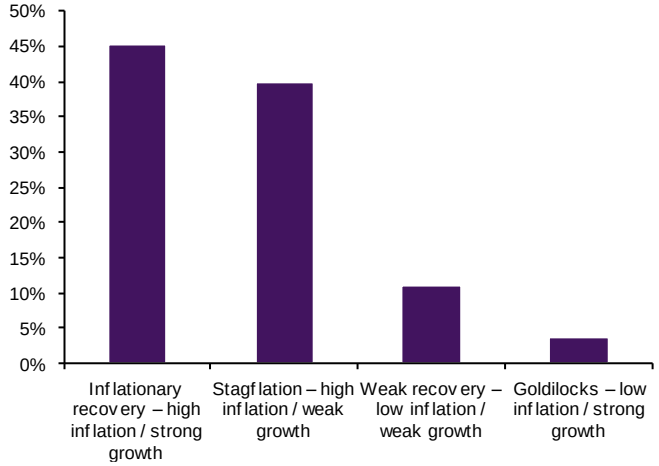
Shortages are for the medium term (at least). This was a strong consensus response by investors. Fewer than 20% of respondents thought that labour supply problems in developed markets are just a short-term issue related to post-pandemic reopening issues (the majority opting for medium-term, modest impact), and only 34% thought that supply chain disruptions would have ended by H1 2022. We

Fewer than 20% of respondents thought that labour supply problems in developed markets are just a short-term issue related to post-pandemic reopening issues

largely share this view, and expect that, while shortages of raw materials and commodities may ease into 2022, those of chips, logistics, and labour may prove more durable, creating the risk of higher inflation from these sectors for the developed world.

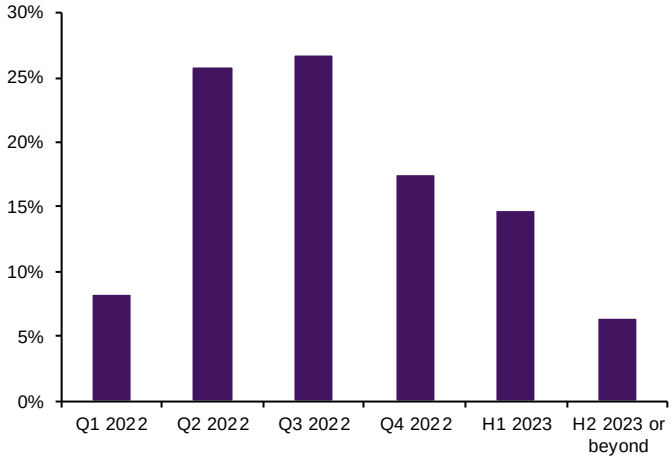
How would you best characterise your views on growth and inflation in 2022?

Source: NWM Year Ahead 2022 Investor Survey



When do you expect supply chain disruptions to end?

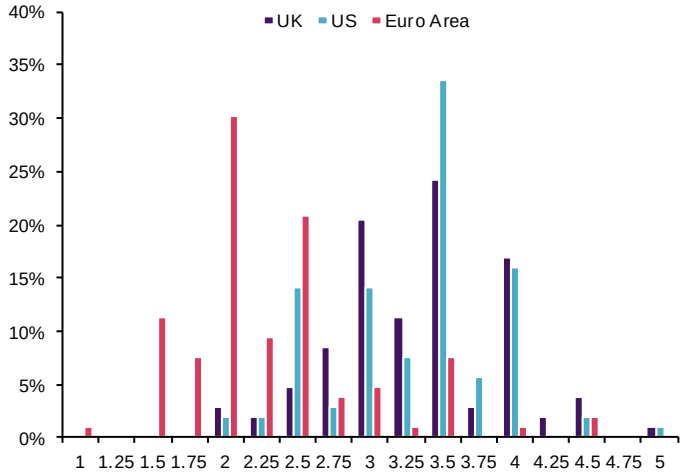
Source: NWM Year Ahead 2022 Investor Survey



This feeds through to higher-than-consensus inflation expectations. Across the US, UK and Europe, the average survey respondent sees inflation at least 0.2pp higher in 2022 than Bloomberg consensus. That said, in both the UK and the US, the average survey response was still considerably below NWM forecasts (3.4% vs 3.9% in the UK, and 3.3% vs 3.7% in the US). Similar to growth expectations, however, the euro area was viewed as the region where inflation could surprise most on the upside.

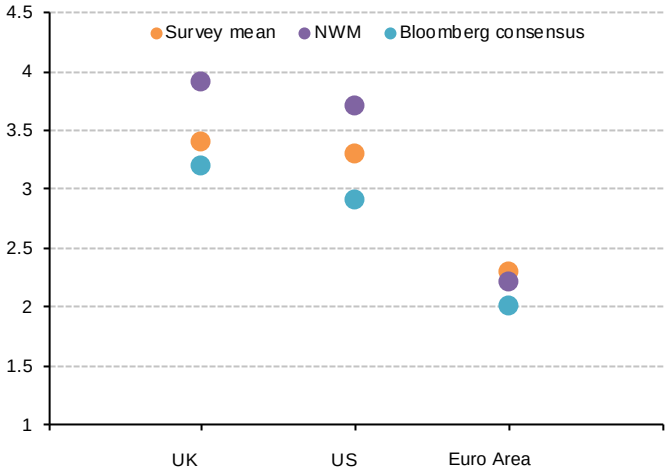
Where do you expect inflation in 2022?

Source: NWM Year Ahead 2022 Investor Survey



Survey expectations for inflation vs NWM views and BBG consensus

Source: NWM Year Ahead 2022 Investor Survey



3. Higher inflation will allow (some) central banks to hike in the near future, but will this risk choking the recovery?

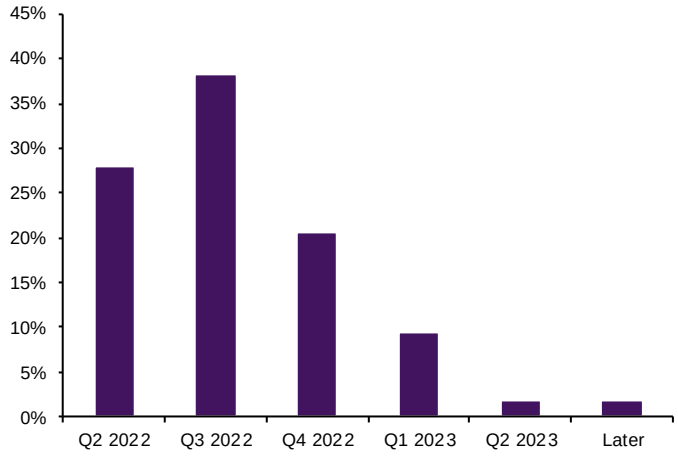
A more dovish Fed is still set to hike in 2022. Despite the widely shared view that the Fed had become structurally more dovish in the post-pandemic period, most

respondents expected a lift-off in US rates in 2022. Of those, one-third though that it could come as early as H1.

Tapering, rather than rate hikes, should dominate the narrative in Europe next year. Consensus in the survey was for ECB net asset purchases to end by H1 2023, although there was a relatively long tail of answers beyond that, and 15% thought responded that the ECB would never be able to end net asset purchases. We share the view that net asset purchases are likely to reach zero by 2023, which suggests that market pricing for a rate hike by end-22 is inconsistent with the ECB's current guidance and needs to be pushed back further.

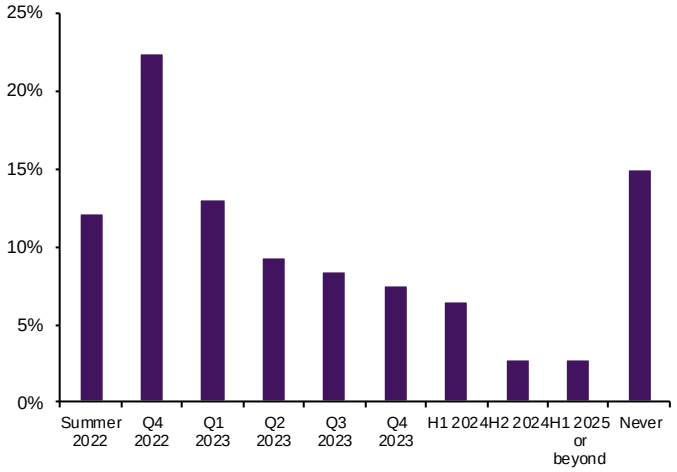
When do you expect the first Fed rate hike?

Source: NWM Year Ahead 2022 Investor Survey



When will the ECB end net asset purchases?

Source: NWM Year Ahead 2022 Investor Survey



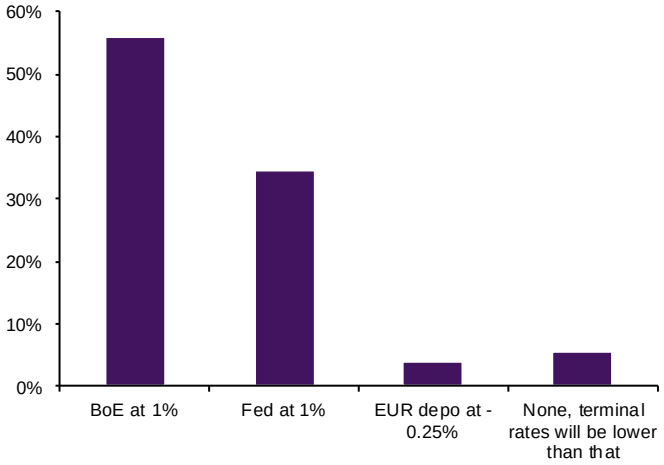
Terminal rates to be reached first in the UK. Only 6% of respondents thought that terminal rates would be *lower* than 1% in the UK and the US, or -0.25% in the ECB. Survey consensus was strongly in favour of the BoE reaching 1% before the Fed did, or before the ECB reached -0.25% (only 4% of respondents thought that the ECB would reach -0.25% *before* the Fed or the BoE reached 1%).

Biggest risk to growth? The field was split on this one. Most said central bank overreaction was the main concern. We think concerns of a policy mistake are overdone. But a China slowdown and fiscal austerity were close runners up for key risks. Of those offering free-form worries, several mentioned supply constraints or inflation. Others worried about covid and a few about Brexit.

Most survey respondents said central bank overreaction was the main concern for growth in 2022

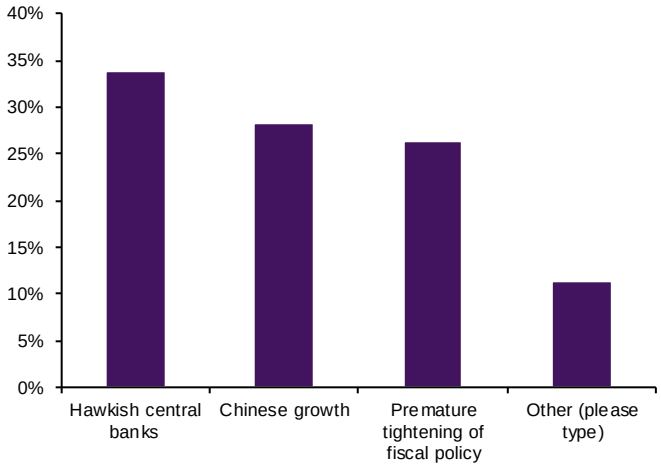
Which one of these will we see first?

Source: NWM Year Ahead 2022 Investor Survey



What will be the biggest risk to growth in 2022?

Source: NWM Year Ahead 2022 Investor Survey



4. Tightening fiscal policy may be less of a risk to the recovery

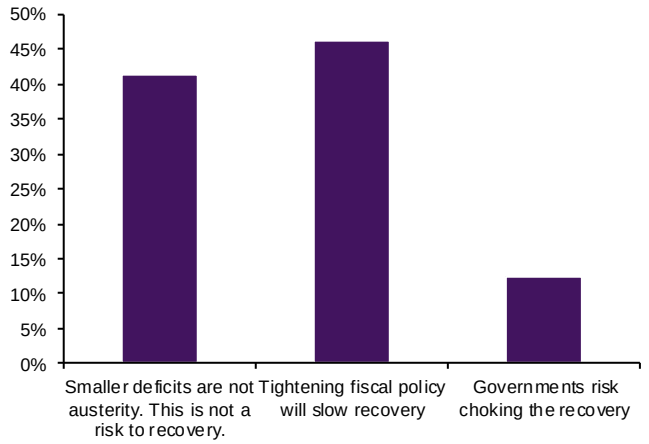
Risks of slowing, not choking, the recovery. There were some concerns that smaller deficits next year might slow the recovery, but only a small minority thought that this risked choking the recovery. Answers were clearly skewed towards the "no risk" rather than "choking" outcome.

We think concerns about a "fiscal-cliff" are overdone. In part, because of high savings ratios in the developed world, which should be sufficient to negate this "fiscal cliff". We think these can be interpreted as a deferred form of fiscal support – one that is "still in the system", ready to be deployed by households as the pandemic situation improves further. But also because the apparent loss of fiscal support is less worrisome than first appears – economies will naturally need less fiscal support as they are freed from pandemic related restrictions, tax receipts have been stronger than expected which can be used to soften the cliff and, in the case of the euro area, there is an additional (multi-year) boost from the support provided by the EU Recovery Fund.

Investors agreed that the Recovery Fund should support growth. Less than one-third of respondents thought that the Recovery Fund would not result in more growth in 2023-27. 55% expected at least a 0.25% boost to growth, whilst almost 20% expected a game-changing impact.

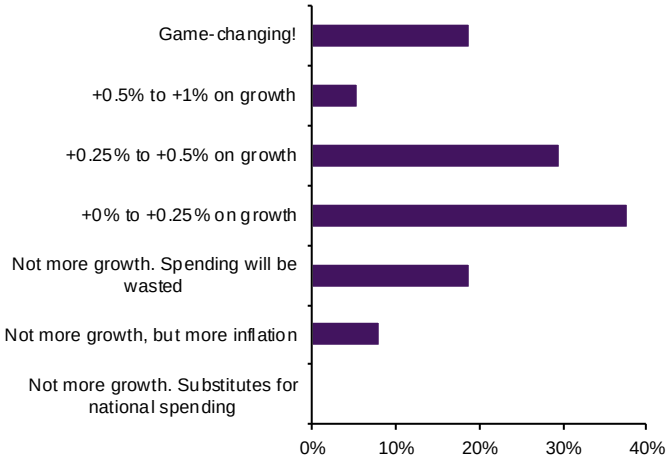
How do you view fiscal policy in 2022?

Source: NWM Year Ahead 2022 Investor Survey



What does the Next Generation EU Fund mean for growth 2023-27?

Source: NWM Year Ahead 2022 Investor Survey



5. Politics may not be that exciting, but US mid-terms will matter for EM

A small swing to the Republicans likely in US mid-terms. Investors expect the Republicans to win the mid-terms next year, with 55% expecting a small swing in their favour, and 12% expecting a big swing, resulting in the Republicans taking both the House and the Senate. This fits with history – midterm elections are often unkind to the sitting President and their party – and also with NWM view. We expect the Republicans to take the House. The Senate is a closer call, particularly this far out, but it's possible the GOP edge out the Democrats there too.

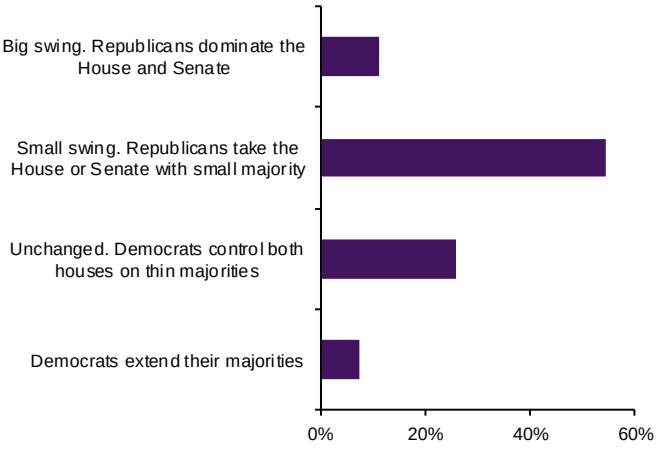
This will matter for EM. Interestingly, of all the EM elections on the calendar next year, EM investors are most concerned about the mid-term results. Over 50% of respondents think these will be the most concerning, with Brazil ranked second with one-third of the votes. We tend to believe that Colombia's elections are more concerning than Brazil's, given both the uncertainties around the outcome and the risks from the least market-friendly outcome.

Despite all the EM elections on the calendar next year, EM investors are most concerned about the US mid-term results

Optimistic about European political risks. Investors were fairly evenly split over what will matter most politically for Europe next year. Nearly half thought either that there is nothing to worry about especially or that a (likely market positive) German shift toward more fiscal tolerance would be the big change. For those more focused on the negative risks, French elections were the front runner, but only with one-third of the votes. Poland leaving the EU did not rank highly, nor did Draghi stepping down as PM next year. A survey of BTP bulls, perhaps, but who share our view.

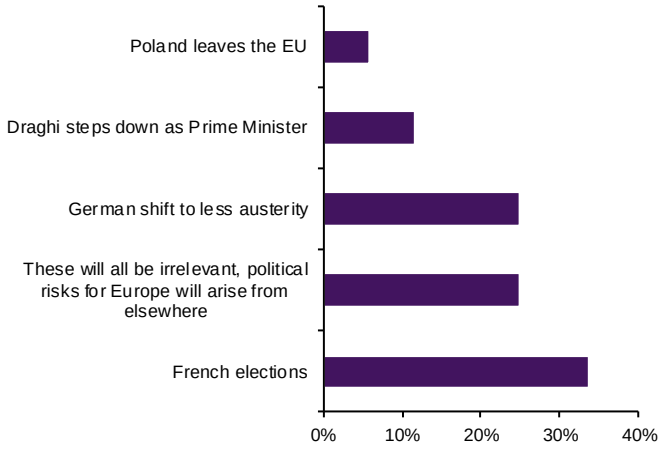
After 2022 US midterm elections...

Source: NWM Year Ahead 2022 Investor Survey



What political themes will matter most for European markets next year?

Source: NWM Year Ahead 2022 Investor Survey



6. Domestic policy is the biggest risk to Chinese growth, which in turn is a risk to global growth in 2022

Common Prosperity could mean lower growth in the future. Investors see this at the biggest risk to Chinese growth in 2022. We tend to agree – we think the government will prioritise quality over quantity and will be happy to tolerate lower GDP growth. We pencil in 5% in 2022 (down from 6% in 2021) which is very much in line with the survey mean of 4.9%.

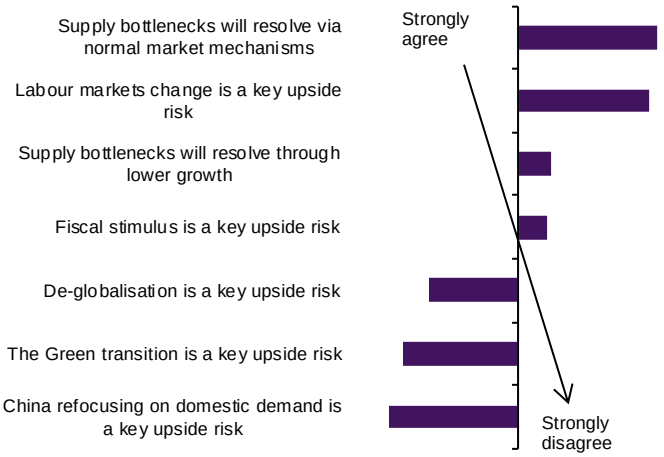
Investors see Common Prosperity as the biggest risk to Chinese growth in 2022

Investors are not worried about the impact of this on inflation... When asked to rank a set of statements on inflation (see chart below for full list), investors disagreed most strongly with the idea that China refocussing on domestic demand presented an upside risk to inflation. We tend to agree that Common Prosperity should not be a source of global inflation worries in the medium term.

...but they are about the impact on global growth. Nearly one-third of investors thought that Chinese growth post the biggest risk to growth in 2022 (second biggest risk after hawkish central banks), although Chinese domestic policy was ranked fairly low in the list of tail-risks to risk assets in 2022.

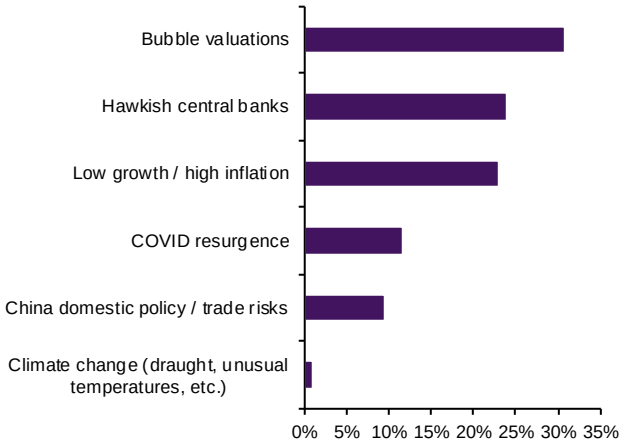
When thinking about inflation risks please rank these statements…

Source: NWM Year Ahead 2022 Investor Survey



What is the largest tail risk to risk assets in 2022?

Source: NWM Year Ahead 2022 Investor Survey



7. Rates markets have not priced in enough of a recovery – expect higher rates and steeper curves

Investors are bearish rates, most notably so in Gilts. Across Gilts, Treasuries and Bunds, survey respondents expected yields to end 2022 higher than the current forwards (around 35bp higher in bunds, 20bp higher in USTs and 43bp higher in Gilts). Notably, the consensus on Gilts is also significantly higher than our own forecasts – we pencil in 1% in 10y Gilts at end-2022. By contrast, we're much more bearish Treasuries, pencilling in 2.15% in 10y by year-end 2022 (45bp more than the forwards and 25bp more than the survey mean), and even more so in bunds, with a year-end target of +0.5% (70bp higher than the forwards, 30bp higher than the survey mean)

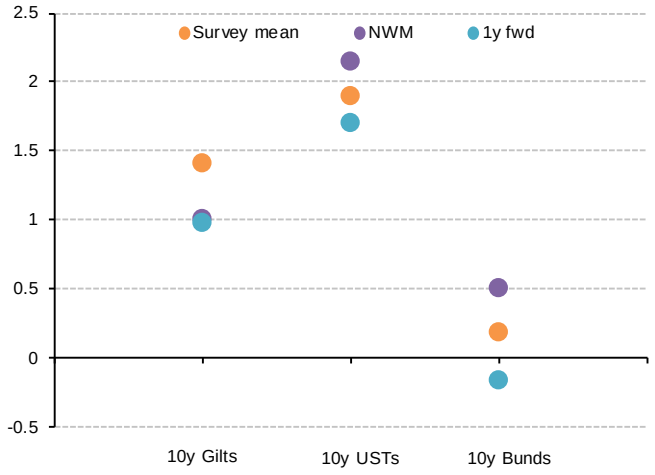
Across Gilts, Treasuries and Bunds, survey respondents expected yields to end 2022 higher than the current forwards

Higher rates should bring about steeper curves. Over 50% of respondents thought that curves would at least be steeper next year, with a further 5% expecting much steeper.

Expect inflation-linked to outperform. Strong growth and bullish inflation expectations next year leave investors expecting inflation-linked to be the best performing asset in 2022.

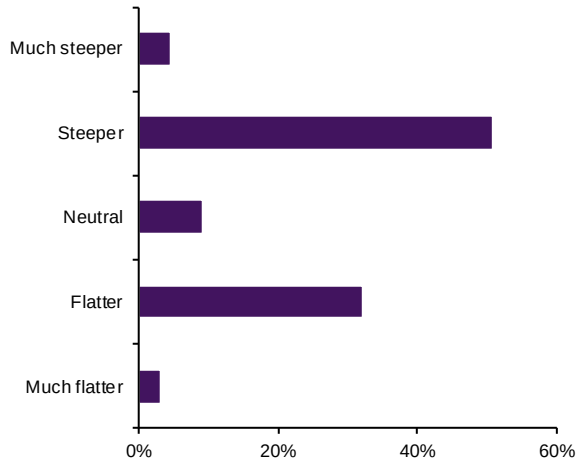
Survey expectations for yields vs NWM views and forwards

Source: NWM Year Ahead 2022 Investor Survey, Bloomberg



US, UK and EUR bond curves in 2022 will be...

Source: NWM Year Ahead 2022 Investor Survey



8. Risk assets are expected to outperform

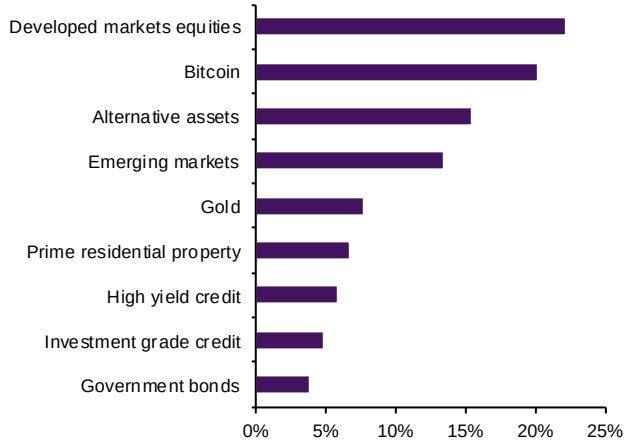
Equities and bitcoin are top of the table. DM equities, bitcoin alternative assets and EM are expected to outperform next year, supported by a continued recovery. It's no surprise, therefore, that fixed income assets were ranked the lowest in the list of "best performing assets in 2022". High yield credit is expected to outperform IG and government bonds, which were bottom of the list.

DM equities, bitcoin alternative assets and EM are expected to outperform next year

Bubble valuations are a concern, however. This was ranked higher than a potential policy mistake and the risk of a stagflationary environment for risks assets.

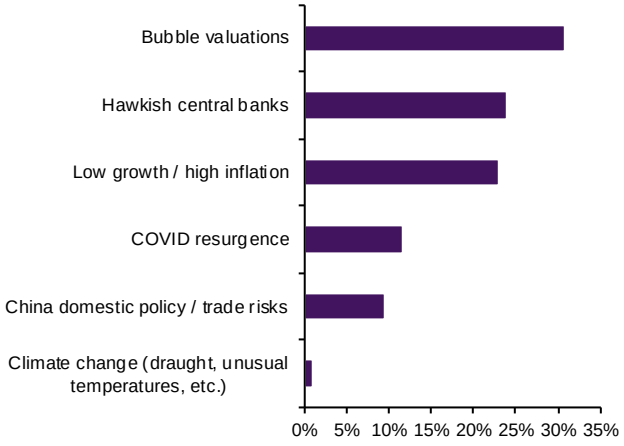
What will be the best performing asset in 2022?

Source: NWM Year Ahead 2022 Investor Survey



What is the largest tail risk to risk assets in 2022?

Source: NWM Year Ahead 2022 Investor Survey

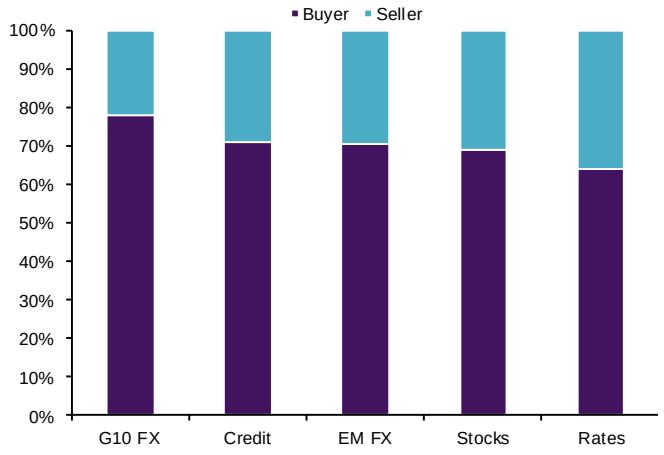


9. Expect higher volatility next year, albeit less so in rates

Higher volatility, across the board. This was a consensus view across asset classes. The vast majority of investors are buyers, rather than sellers, of volatility. There was relatively less certainty in rates than in other asset classes (only 64% buyers, vs 78% in G10 FX) but this is not that surprising given i) how relatively low volatility has been this year – our core++ macro volatility index sits well below its long-term average (since 2007) and ii) the fact that recent volatility has been led by rates, with other asset classes remaining relatively well insulated.

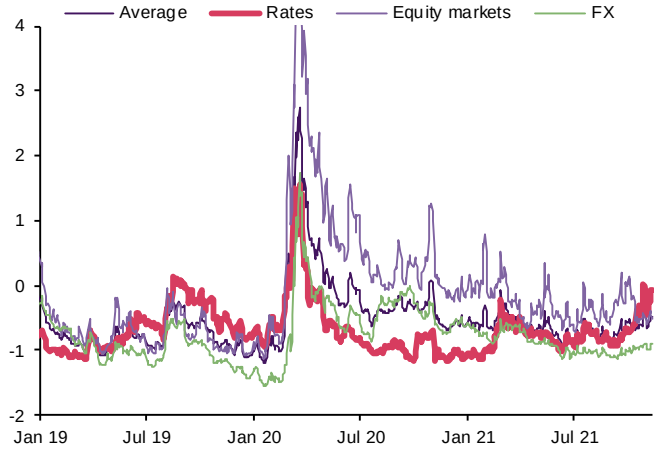
Are you a buyer or seller of volatility in...

Source: NWM Year Ahead 2022 Investor Survey



Macro implied volatility – rates have led the way

Source: NWM, Bloomberg



10. The green transition is expected to be inflationary

Expect another boost to sustainable finance next year. Nearly 70% of respondents will be actively looking to add to their sustainable finance interest in 2022 compared to 2021, with the majority citing client demand for more products as a key driver.

The shift towards sustainability in public policy is expected to be inflationary, at least in the short term... When asked about the impact of the green transition, there was a clear consensus that it would result in higher inflation. Most thought that this would be a long-term impact, but nearly a quarter of those that thought it would be inflationary expected it only to be so over the near-term.

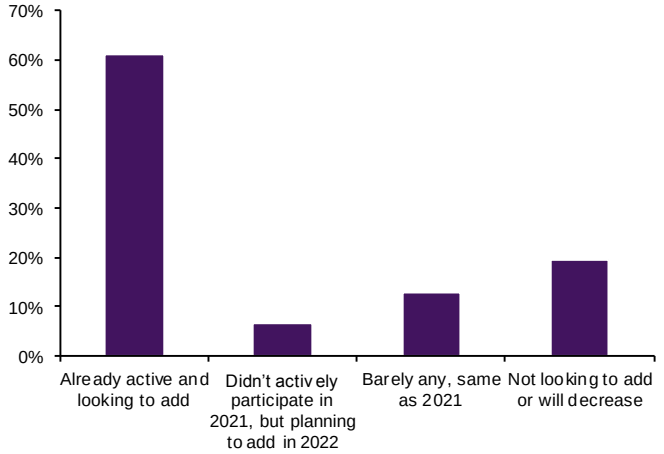
Nearly 70% of respondents will be actively looking to add to their sustainable finance interest in 2022 compared to 2021

...we think it could be deflationary over a longer time horizon. We tend to agree with the quarter of responses that thought it would only be inflationary in the short term. Short term inflationary effects may arise from policies and frictions during the transition, but we think the effects are actually disinflationary over the longer-term, driven by renewable technology.

This was not ranked highly on investors list of concerns about inflation. Investors are more concerned about labour markets and supply bottlenecks rather than the green transition. See chart above.

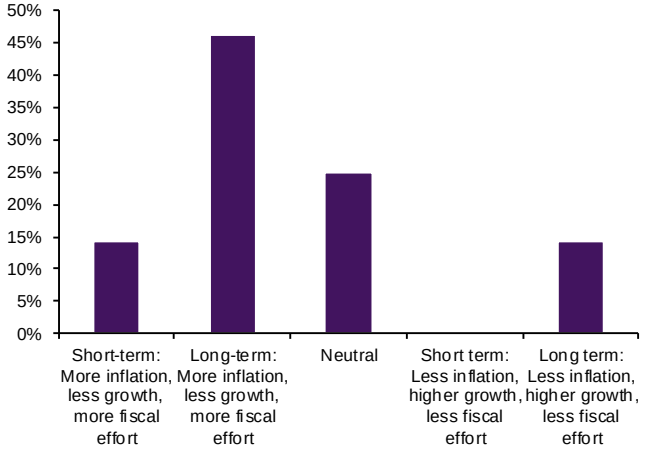
How would you characterise your interest in sustainable* finance in 2022?

Source: NWM Year Ahead 2022 Investor Survey



The shift toward sustainability in public policy will be...

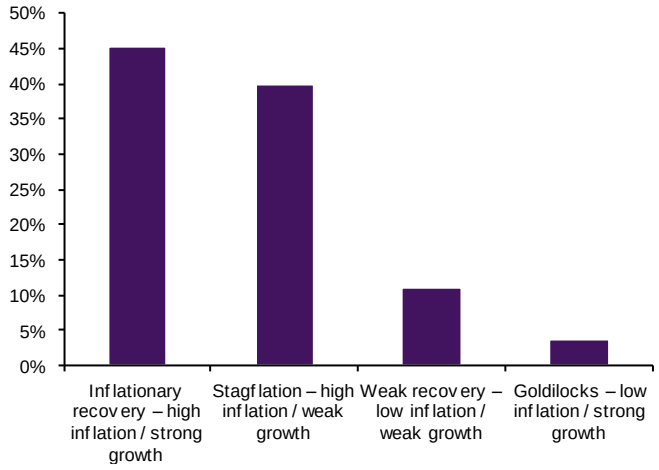
Source: NWM Year Ahead 2022 Investor Survey



1) Growth

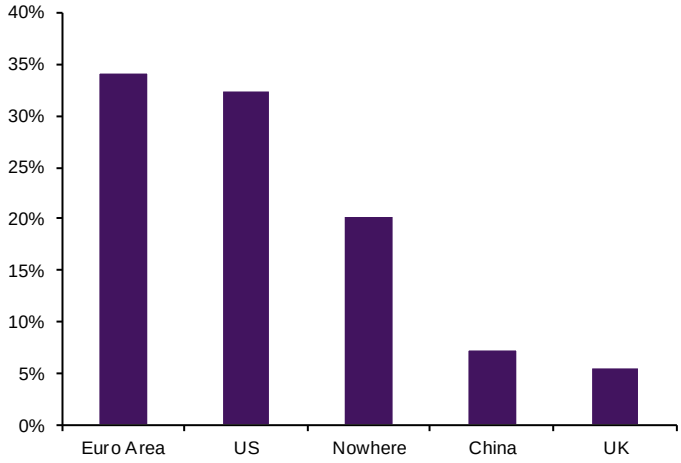
How would you best characterise your views on growth and inflation in 2022?

Source: NWM Year Ahead 2022 Investor Survey



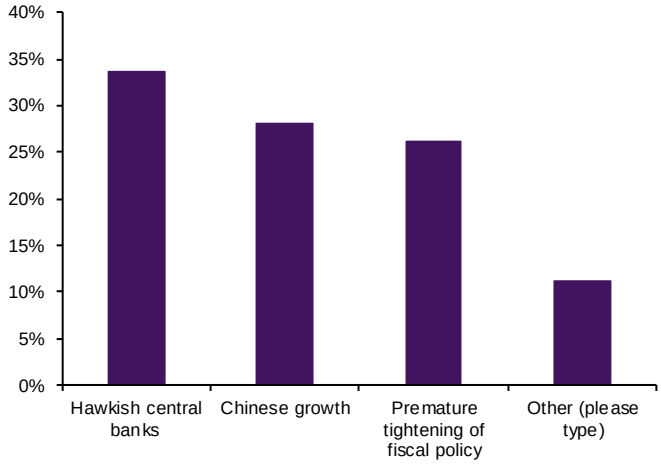
Where will growth surprise on the high side the most next year?

Source: NWM Year Ahead 2022 Investor Survey



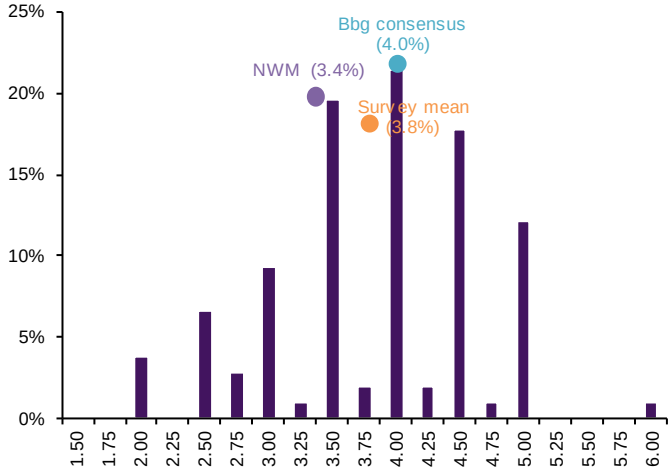
What will be the biggest risk to growth in 2022?

Source: NWM Year Ahead 2022 Investor Survey



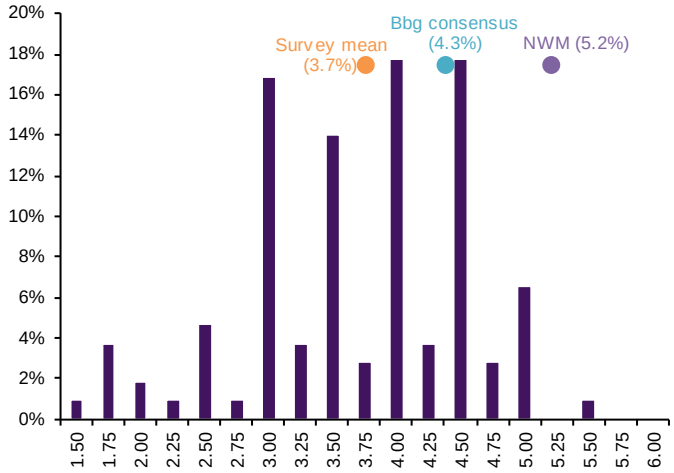
US growth expectations at end-2022

Source: NWM Year Ahead 2022 Investor Survey



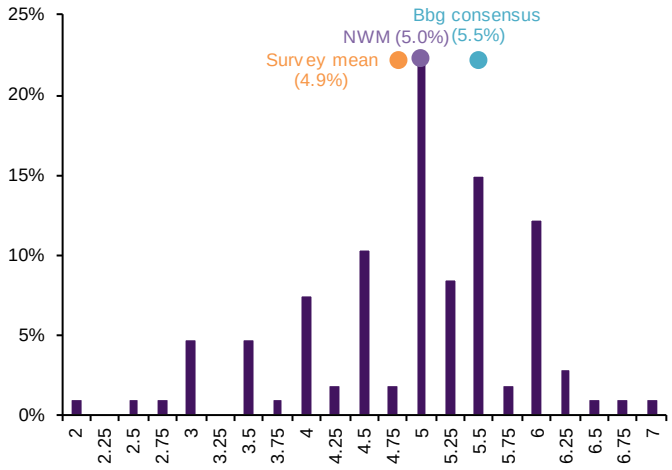
Euro Area growth expectations at end-2022

Source: NWM Year Ahead 2022 Investor Survey



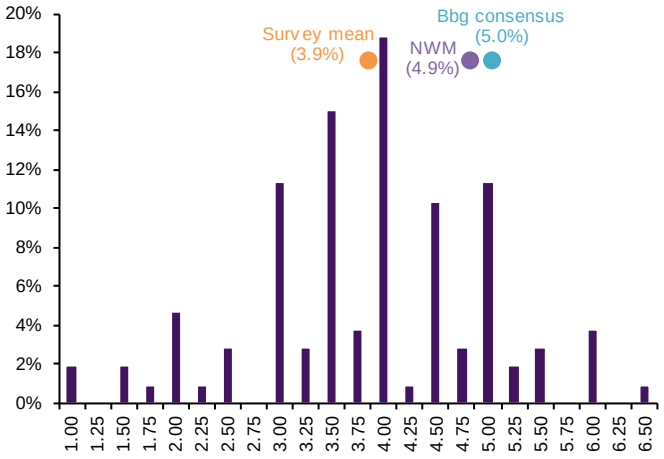
China growth expectations at end-2022

Source: NWM Year Ahead 2022 Investor Survey



UK growth expectations at end-2022

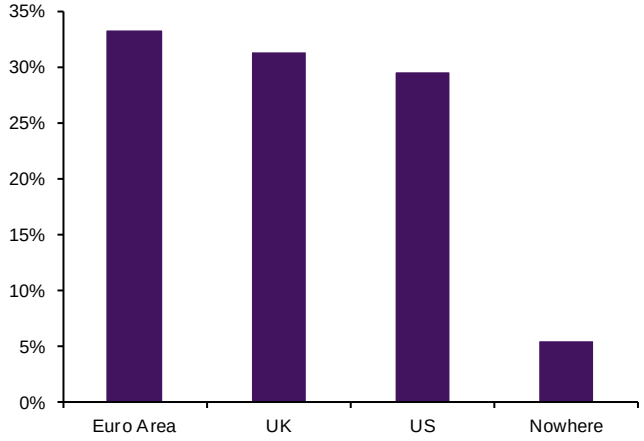
Source: NWM Year Ahead 2022 Investor Survey



2) Inflation

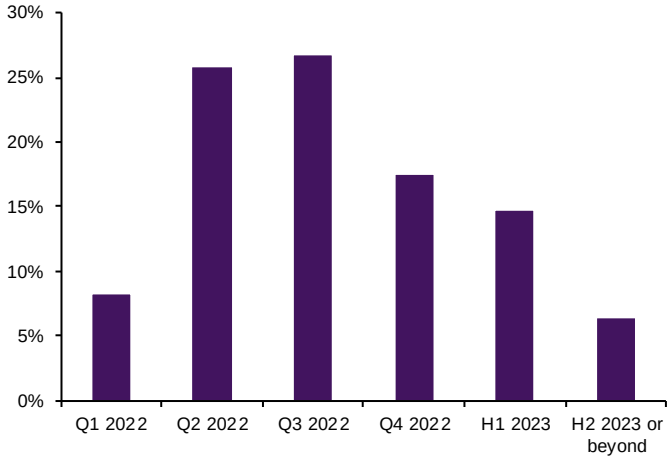
Where will inflation surprise most on the upside in 2022?

Source: NWM Year Ahead 2022 Investor Survey



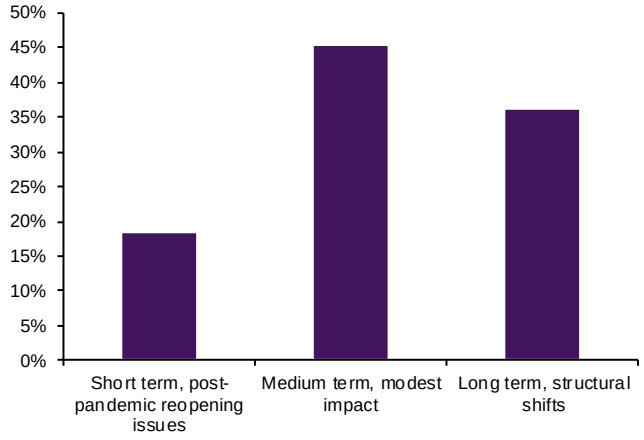
When do you expect supply chain disruptions to end?

Source: NWM Year Ahead 2022 Investor Survey



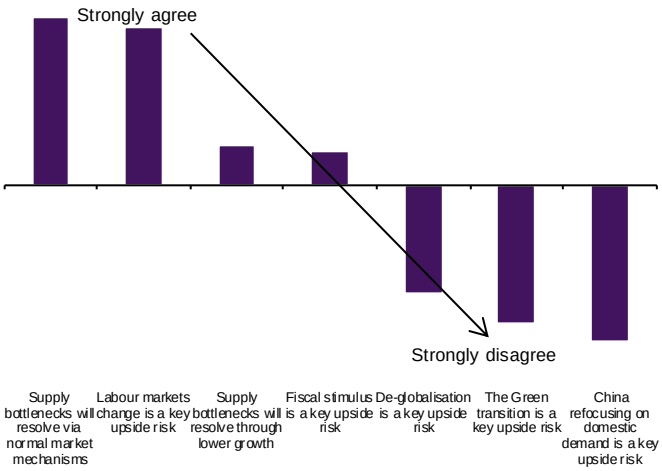
Labour supply problems in developed markets are…

Source: NWM Year Ahead 2022 Investor Survey



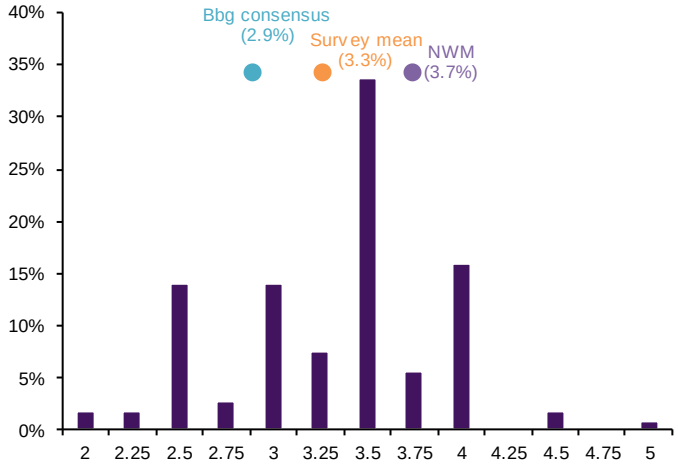
When thinking about inflation risks please rank these statements

Source: NWM Year Ahead 2022 Investor Survey



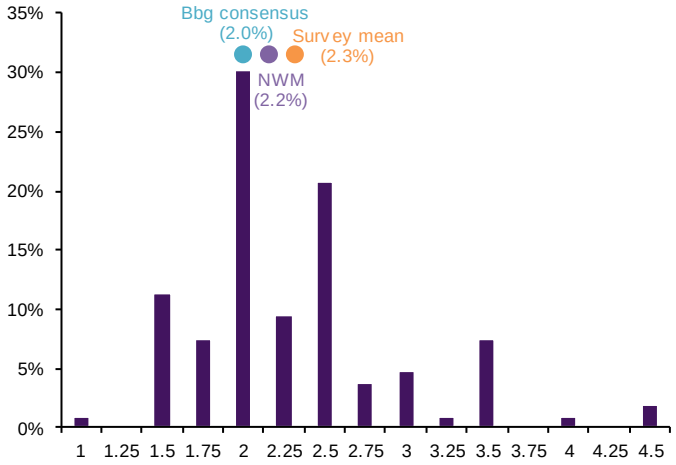
US inflation expectations next year...(%)

Source: NWM Year Ahead 2022 Investor Survey



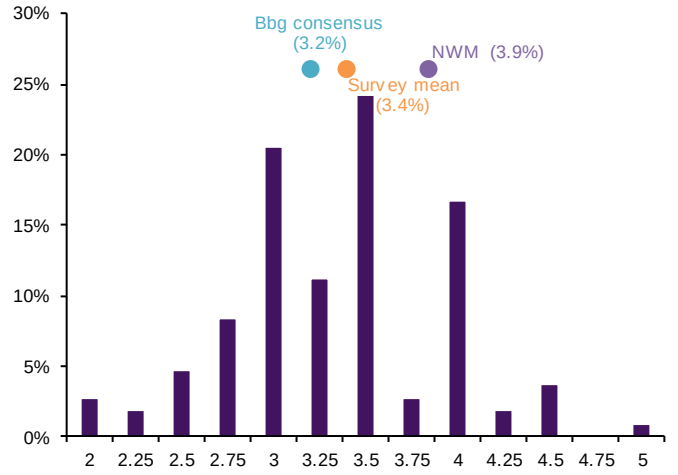
Euro Area inflation expectations next year...(%)

Source: NWM Year Ahead 2022 Investor Survey



UK inflation expectations next year...(%)

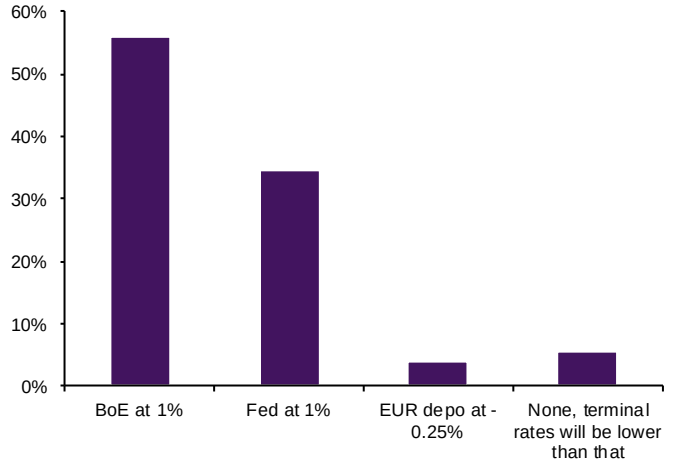
Source: NWM Year Ahead 2022 Investor Survey



3) Monetary Policy

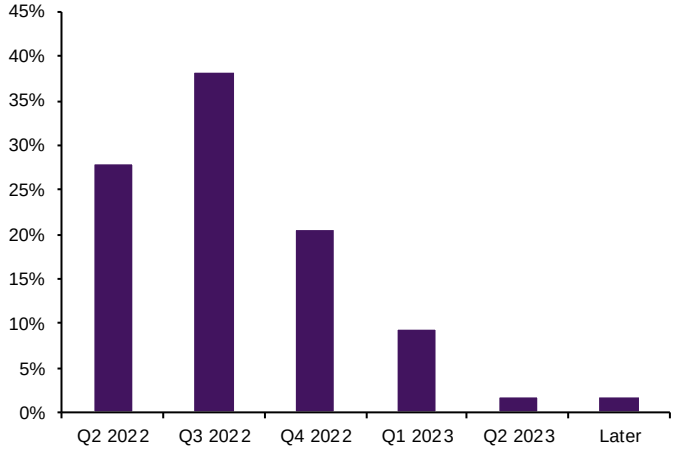
Which one of these will we see first?

Source: NWM Year Ahead 2022 Investor Survey



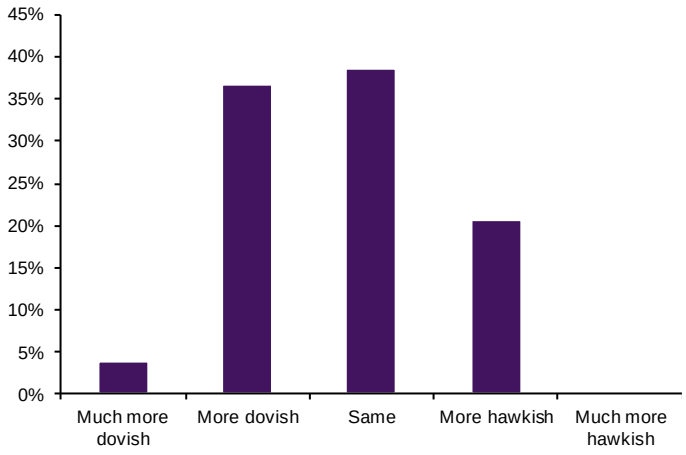
When do you expect the first Fed rate hike?

Source: NWM Year Ahead 2022 Investor Survey



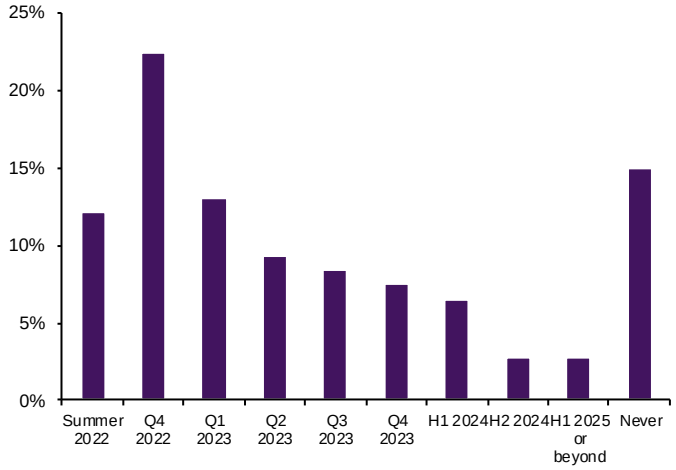
Has the Fed structurally changed its reaction function post-pandemic versus pre-pandemic?

Source: NWM Year Ahead 2022 Investor Survey



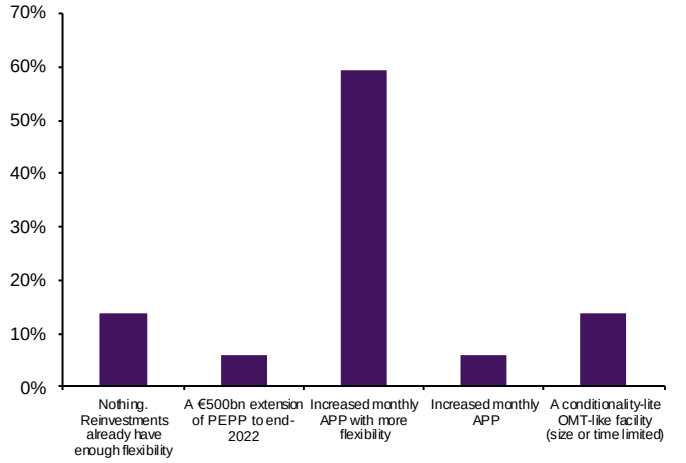
When will the ECB end net asset purchases?

Source: NWM Year Ahead 2022 Investor Survey



What will replace the ECB's PEPP?

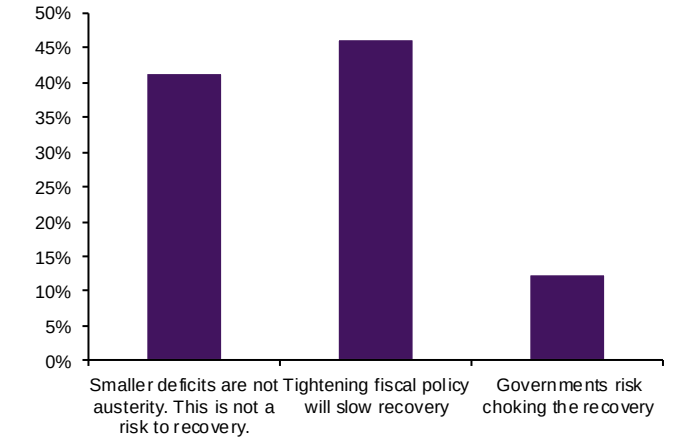
Source: NWM Year Ahead 2022 Investor Survey



4) Fiscal Policy

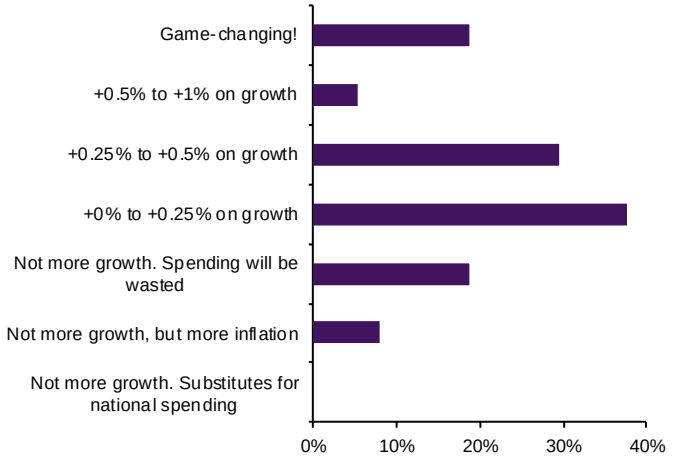
How do you view fiscal policy in 2022?

Source: NWM Year Ahead 2022 Investor Survey



What does the NG EU Fund mean for growth 2023-27?

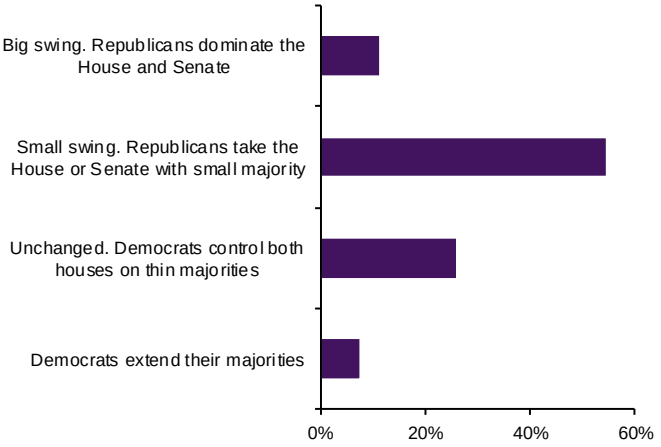
Source: NWM Year Ahead 2022 Investor Survey



5) Politics

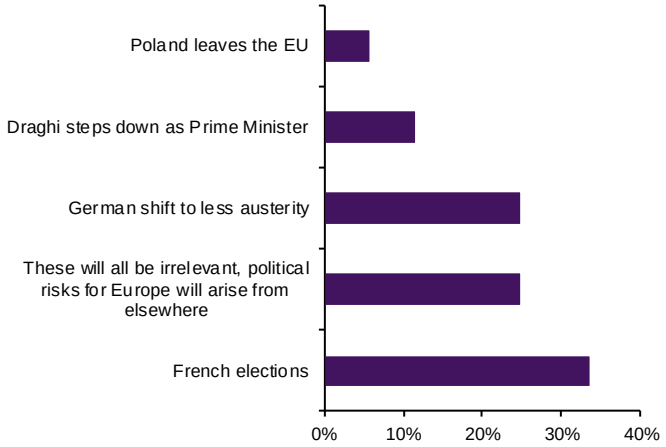
After 2022 US midterm elections...

Source: NWM Year Ahead 2022 Investor Survey



What political themes will matter most for European markets next year?

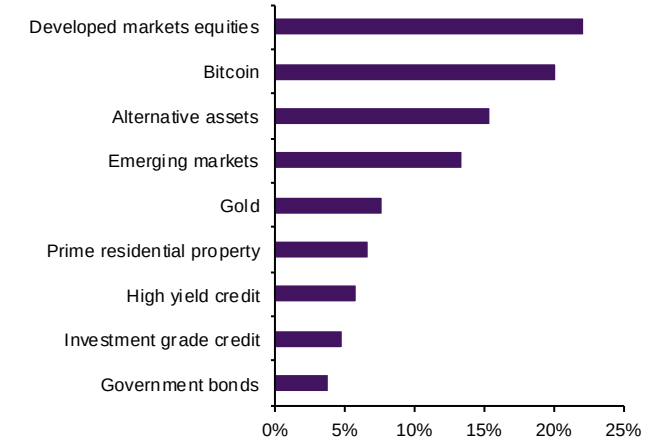
Source: NWM Year Ahead 2022 Investor Survey



6) Cross Asset

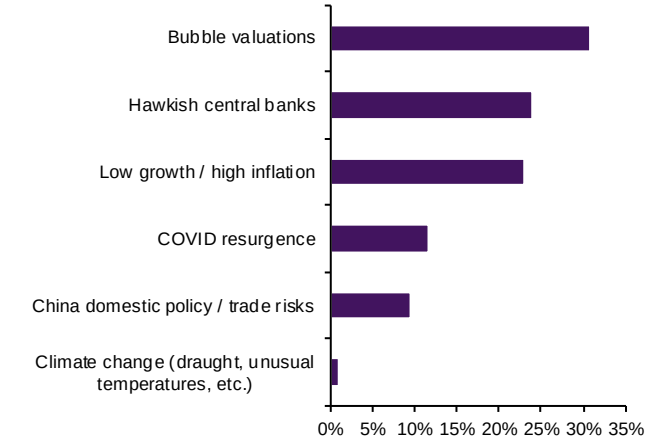
What will be the best performing asset in 2022?

Source: NWM Year Ahead 2022 Investor Survey



What is the largest tail risk to risk assets in 2022?

Source: NWM Year Ahead 2022 Investor Survey



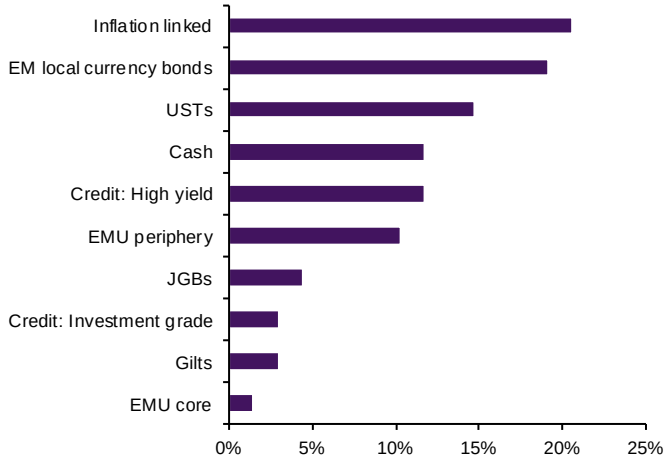
Are you a buyer or seller of volatility in...

Source: NWM Year Ahead 2022 Investor Survey

7) Rates

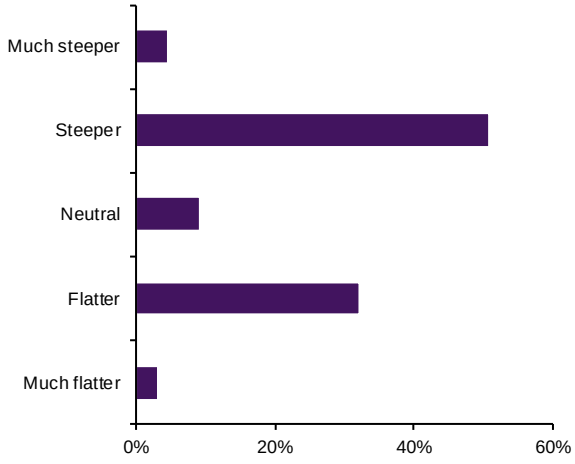
Best performing fixed income asset in 2022?

Source: NWM Year Ahead 2022 Investor Survey



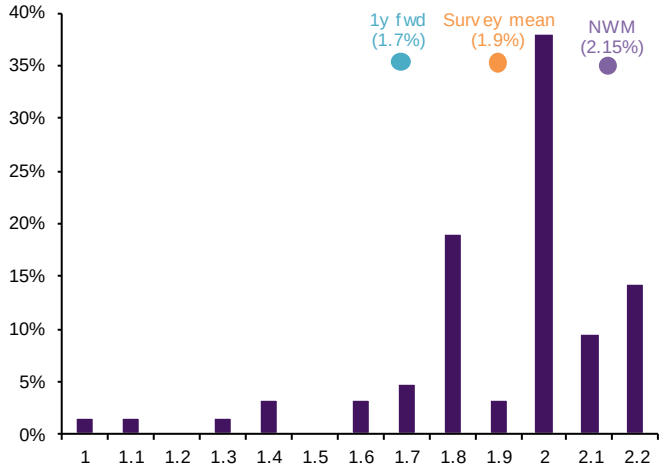
Core bond curves in 2022 will be...

Source: NWM Year Ahead 2022 Investor Survey



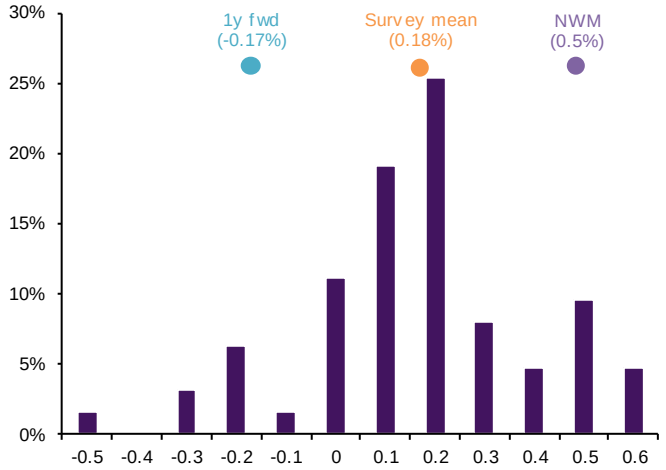
10y USTs at end-2022?

Source: NWM Year Ahead 2022 Investor Survey



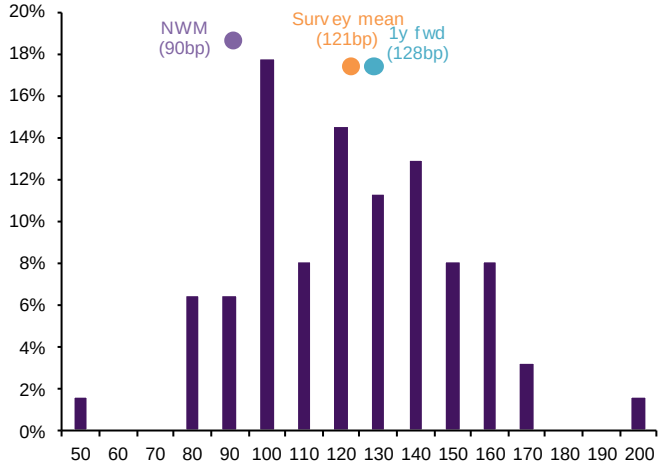
10y bunds at end-2022?

Source: NWM Year Ahead 2022 Investor Survey



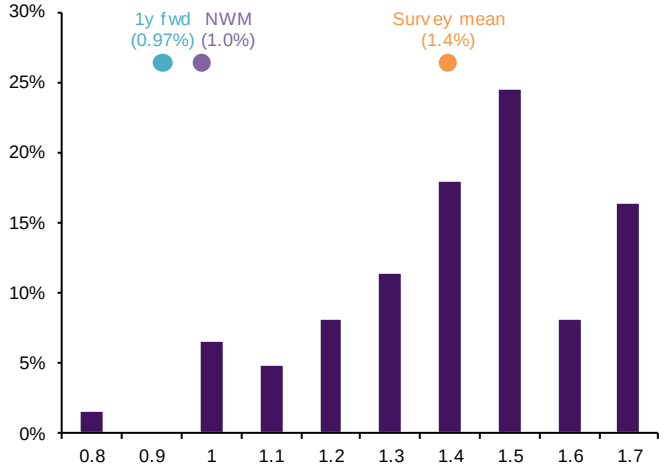
10y BTP/bund spreads at end-2022?

Source: NWM Year Ahead 2022 Investor Survey



10y gilts at end-2022?

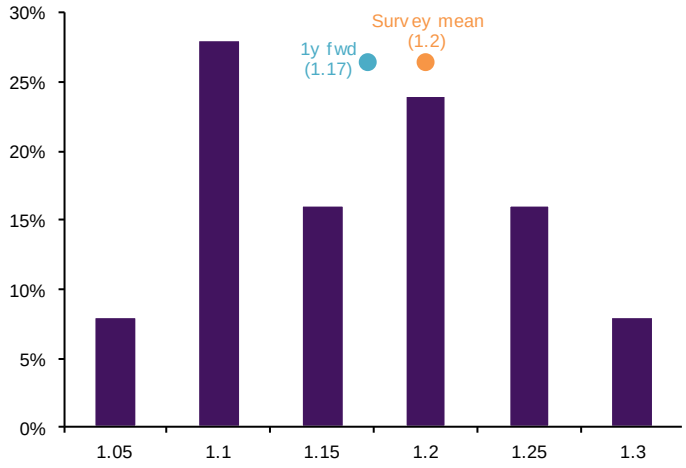
Source: NWM Year Ahead 2022 Investor Survey



8) FX

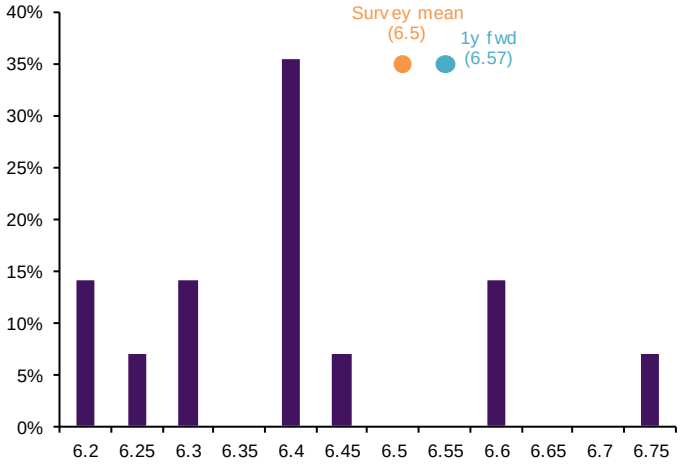
EUR/USD at end-2022?

Source: NWM Year Ahead 2022 Investor Survey



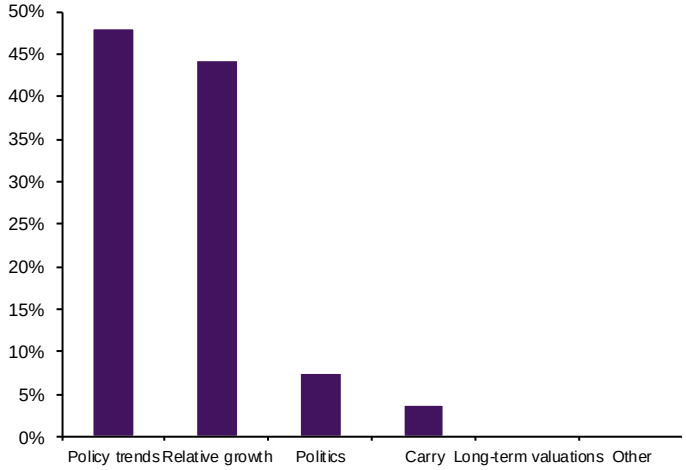
USD/CNY at end-2022?

Source: NWM Year Ahead 2022 Investor Survey



What will be the main driver of G10 FX in 2022?

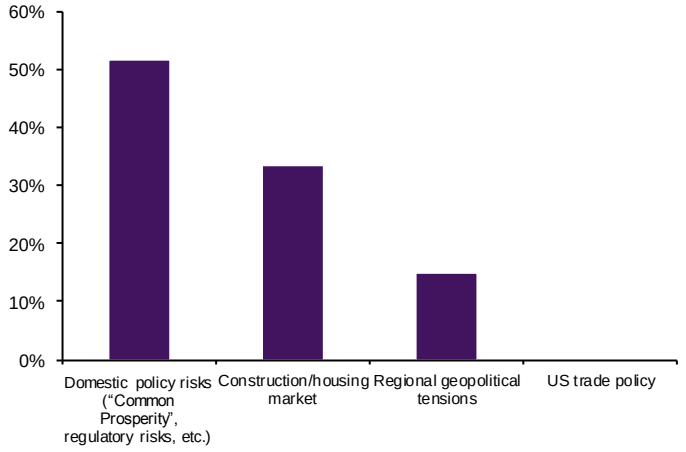
Source: NWM Year Ahead 2022 Investor Survey



9) EM / China

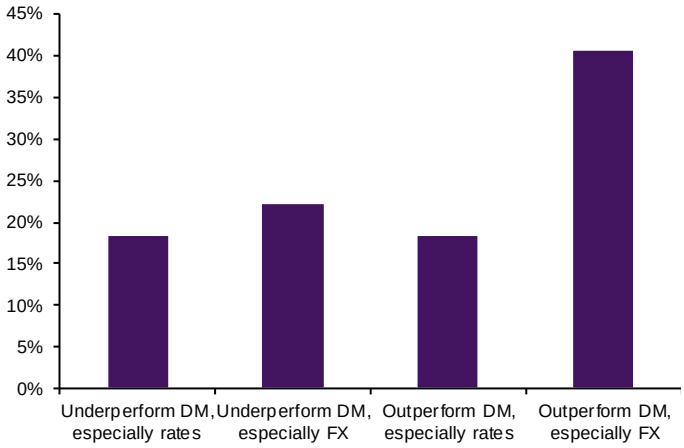
What is the biggest risk to Chinese growth?

Source: NWM Year Ahead 2022 Investor Survey



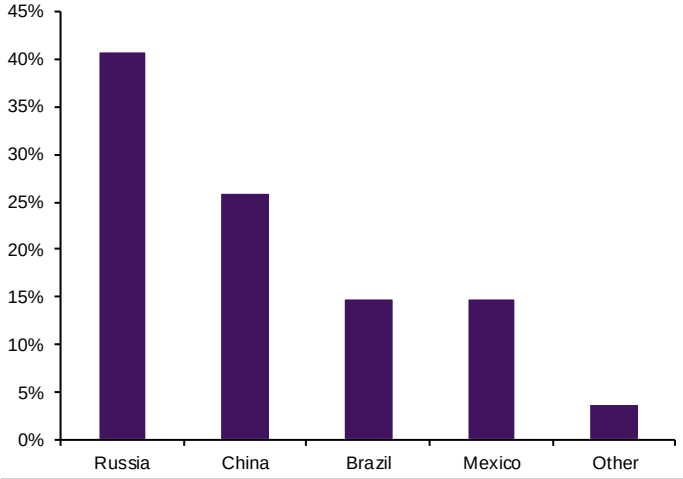
In 2022, EM FX and rates will...

Source: NWM Year Ahead 2022 Investor Survey



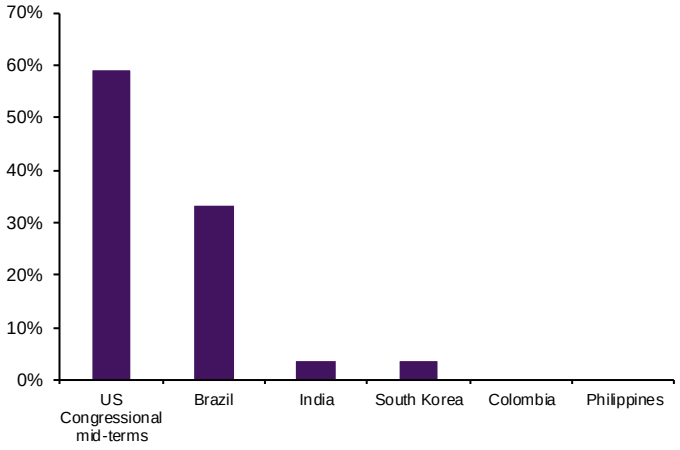
The most attractive EM local market in 2022 will be...

Source: NWM Year Ahead 2022 Investor Survey



Which elections are you most concerned about?

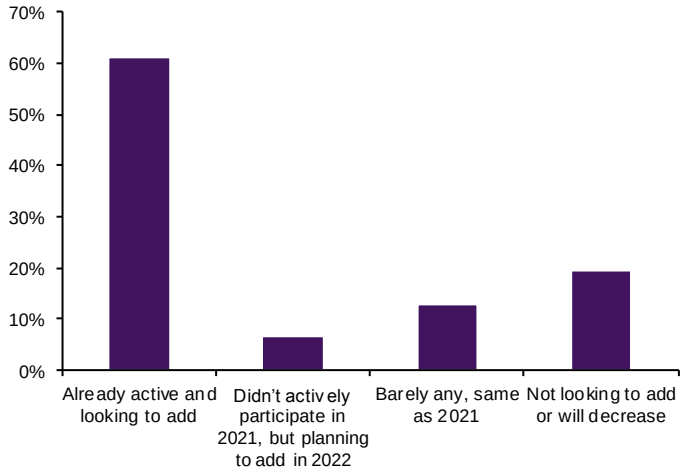
Source: NWM Year Ahead 2022 Investor Survey



10) ESG

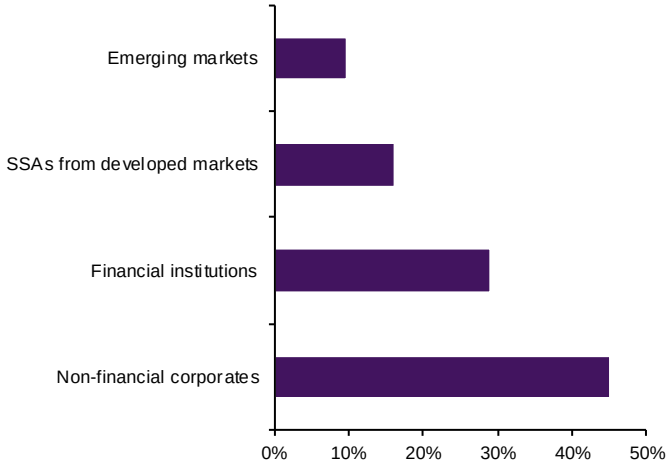
How would you characterise your interest in sustainable* finance in 2022?

Source: NWM Year Ahead 2022 Investor Survey (*including green, social, sustainable and sustainability-linked debt)



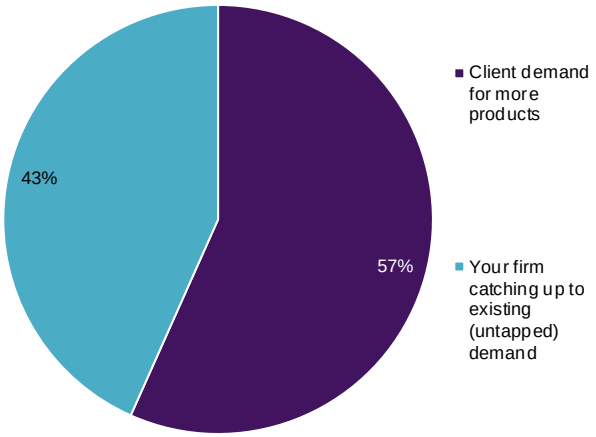
In the future, do you expect increased ESG demand to come mostly from...

Source: NWM Year Ahead 2022 Investor Survey



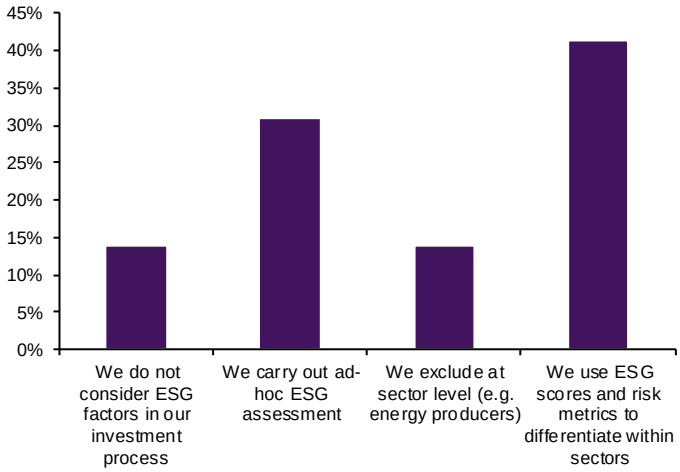
In the future, do you expect increased ESG demand to come mostly from...

Source: NWM Year Ahead 2022 Investor Survey



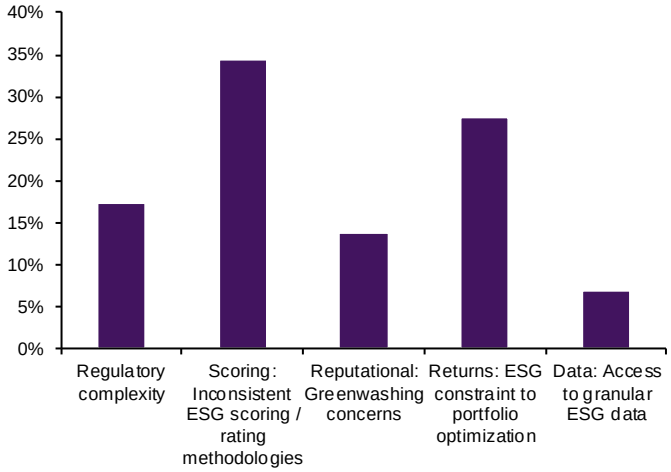
Regarding your ESG analysis of corporate exposure...

Source: NWM Year Ahead 2022 Investor Survey



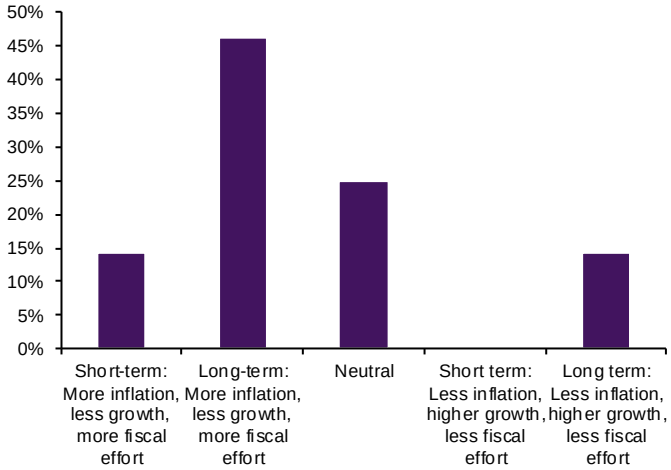
What are the barriers to use of ESG indicators in your investment decision making?

Source: NWM Year Ahead 2022 Investor Survey



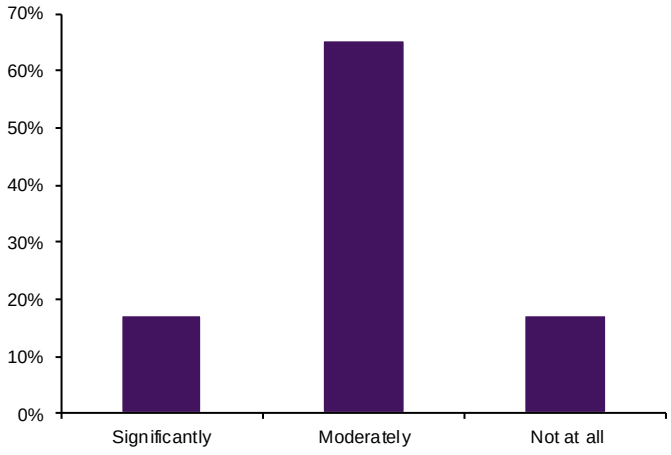
The shift toward sustainability in public policy will be...

Source: NWM Year Ahead 2022 Investor Survey



Are you concerned about a "green bubble"?

Source: NWM Year Ahead 2022 Investor Survey



Six Themes for Corporate ESG in 2022

Arthur Krebbers
Head of Sustainable Finance, Corporates

Sustainability continues to edge up the corporate agenda – so what does 2022 have in store? Our specialists discuss six key themes that will dominate the corporate sustainability outlook in the year ahead.

Listen to this podcast on Apple Podcasts or Spotify *Watch this webinar on YouTube*

#1. ESG data to become more democratised

While many companies voluntarily disclose environmental, social, and governance (ESG) data, there is a lack of reporting regulations to define the metrics employed. This can make it difficult to evaluate them – and the targets that companies are meant to be hitting – against peers. Increasing the availability of comparable and meaningful ESG information, or 'democratising ESG data', – is essential to assess whether companies' sustainability strategies and initiatives are effective. It will also help investors make better-informed decisions about which companies to support.

The year ahead will see increased availability of freely accessible resources that will help us evaluate companies' sustainability performance. A good example is the Transition Pathway Initiative (TPI), which provides assessments of companies' transitions to net-zero. The TPI's new Global Climate Transition Centre, set to open in 2022, will expand the number of companies assessed from 400 to 10,000, a 25-fold increase.

Regulation also has a role to play as it can ensure the process of reporting ESG data is simplified, streamlined, and standardised. For example, the EU introduced the Non-Financial Reporting Directive in 2014, requiring around 6,000 large companies to publish standardised reports on the ESG policies they implement. In April 2021, the initiative was expanded to nearly 50,000 companies via the Corporate Sustainability Reporting Directive, with the first set of standards to be adopted by October 2022.

#2. Holistic decarbonization to become the priority

The past twelve months has seen a growing number of companies set carbon reduction targets and make commitments alongside improvements in sustainability governance, transparency, and reporting mechanisms. Building on this foundation, 2022 is likely to see entire value chains play a more pivotal role within transition strategies.

We'll see further pressure on companies to reduce greenhouse gas emissions in line with the science-based targets and report on their progress. Wherever firms are unable to target all of their Scope 3 emissions (indirect greenhouse gas emissions within a company's value chain), they'll increasingly be expected to implement targets for their most material activities.

As companies seek to address Scope 3 emissions, the ability to engage with supply chains in emerging markets to reduce emissions is likely to present challenges. We expect companies to rely on partnerships across sectors to deliver on broader decarbonisation targets.

#3. Green and social taxonomies will move to the fore

From 2022, the EU Taxonomy Regulation will oblige companies to report on their alignment with climate change mitigation and adaptation objectives. Alignment criteria for the remaining four categories (sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems) will be outlined in 2022 and enforced from January 2023.

In addition to the 'Green' Taxonomy, the EU has signalled its potential expansion to include social factors. Further details about the development of a Social Taxonomy are expected in 2022 and as a result, stakeholder pressure to account for social aspects will increase.

Taxonomies of sustainable activities aren't exclusive to the EU. As part of its 'Build Back Better' report in July, the UK government announced its intention to produce its own green taxonomy.

The development and application of sustainable taxonomies in 2022 will increase firms' reporting obligations and result in ESG criteria being further embedded in financing activities. Taxonomies will also provide an additional benchmark for investors and other stakeholders to assess corporate performance against, and lead to higher quality and more consistent reporting.

#4. Scrutiny of greenwashing will intensify

ESG markets have come under intensifying scrutiny in recent times, not least because of a series of high-profile whistle-blowers providing details about questionable practices in organisations that claim to adopt a sustainable approach.

With awareness of greenwashing on the rise, we expect investors to analyse corporate disclosures in greater depth and breadth in 2022. We also expect healthy scepticism from various stakeholders – not just investors – about companies' ESG claims and targets.

"Additionality" – the positive net-benefit associated with an activity or project – is therefore expected to remain high on investors' wish-lists, with corporates able to use labelled financing to bring the biggest impact, whether targeting benefits to society or the environment. This is likely to sharpen the focus on companies, activities, projects, and expenditures, to ensure they can evidence the real-world impact of their claims.

#5. Private ESG funding markets to take off

Sustainable finance first emerged within the public funding market – the first labelled ESG instruments were bonds issued by multinational organisations. The concept is now gaining traction in private markets, with around €2 billion of ESG-labelled private debt transactions in 2021 according to Bloomberg.

A key driver of this trend is that improved ESG disclosures and data are enabling investors to evaluate the sustainability characteristics of private assets. Companies seeking to issue a sustainable private placement (PP) can now use a sustainability-linked structure, and US-domiciled investors – which are among the largest investors in PPs – are under increasing pressure to incorporate sustainability into their mandates.

Sustainability looks set to drive execution dynamics in the private markets in 2022, and issuers with strong ESG narratives or those introducing ESG structures are likely to prove attractive to a broader investor base and, in certain cases, secure a greenium (more attractive pricing).

#6. Carbon markets transparency will improve

About one fifth of the world's largest companies have set out a net-zero or carbon-neutral pledge. With a wave of commitments in 2020 and 2021, attention has now turned to how firms are using voluntary carbon markets and buying carbon credits and offset emissions to achieve these goals. Companies will need to be more transparent in the use case of carbon credits, either to offset residual emissions, compensate for emissions in the value chain (Scope 3), or pursue "negative emissions". Nascent but fast-developing industry platforms like Project Carbon are helping to accelerate this trend.

With an agreement for implementing Article 6 cast at COP26, we expect the transparency of carbon offset projects to improve in the near-to-medium term, as companies will want to understand what the return on each credit looks like (particularly as they seek to avoid accusations of greenwashing). This will help carbon to be accurately priced on a company's or lender's balance sheet, and in turn, help develop the liquidity of carbon as an asset class.

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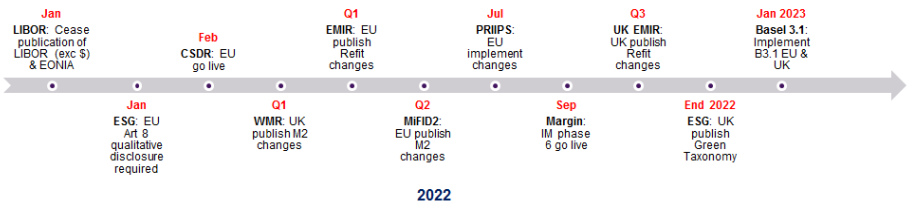
2022 Regulatory Outlook

With LIBOR transition largely 'done' (except for the small matter of USD…), what regulatory topics do we expect to see dominate the landscape in 2022?

Looking down the road here is a brief list of what to look out for:



- **LIBOR** – January will see LIBOR end, except for USD; no *new* transactions in USD LIBOR in any asset class are permitted from **1 January 2022** except for derivatives for risk management of existing positions, with USD LIBOR finally ceasing in June 2023. The FCA announcement permitting tough legacy transactions in GBP & CHF LIBOR to reference synthetic LIBOR rates will provide a welcome safety net for any positions that don't transition or fallback at year end, but it will leave a tail of trades still to deal with in 2022. EONIA also ceases publication in January (but EURIBOR continues);
- **ESG** – climate related and other ESG disclosures are going to become ever more prevalent in the industry. The EU has led the charge with SFDR and CSRD (see our PIEs note), but the UK has recently made strong statements in their Green Finance Roadmap about their commitment to reporting under Sustainability Disclosure Requirements (SDR) and the UK Green Taxonomy. First up in **January 2022** the EU is mandating qualitative disclosures under EU Taxonomy Regulation;
- **CSDR** – the Central Securities Depository Regulation (CSDDR) is scheduled to go live in EU on **1 Feb 2022**, although a delay to at least some of the requirements seems likely. The rules mean buy side firms that trade in-scope securities that settle on an EEA CSD will be subject to mandatory buy-ins and a penalties regime, as well as needing various contractual agreements and operational processes to be in place. The UK did not onshore CSDR but there may be extra-territorial impacts for UK firms operating in the EU;
- **WMR / MiFID2** – the Wholesale Markets Review (WMR) is the UK review of the MiFID2 regime it inherited from EU. A consultation took place earlier in 2021, the legislative results of which are expected in Q1 2022. Though details and timing not yet clear, changes could have a significant impact in the area of transparency and the liquidity determination for fixed income / derivatives. Meanwhile the EU is also revising MiFID2 with announcements expected in Q2 following multiple CPs over last 2 years, though given EU trilogue process likely a further year before implementation;
- **Margin** – Initial Margin Phase 6 goes live on **1 Sep 2022**. This pulls in a wide range of additional firms with AANA above $/€8bn. As with Phase 5 (where repapering across the industry is still not complete with reliance on Threshold Monitoring to alert counterparties to when they are approaching levels where IM would be required), this will require a huge lift in legal docs and operational set up;

Phil Lloyd
Head of Customer Sales Delivery

John Stevenson-Hamilton
LIBOR Client Strategy & Engagement

- **Clearing –** the temporary equivalence decision by the EU permitting EU firms to clear trades on UK based CCPs was due to expire in June 2022, however in November 2021 the Commission agreed to extend the exemption (though as yet we don't know for how long). At the same time, the UK has announced plans to consider relying on 'comparable compliance' from their home country for non-UK CCPs. It will be interesting to see whether this new spirit of cooperation between the EU and UK at least in this particular area might extend more broadly in the future;
- **PRIIPS –** the change to the PRIIPS regulation is due to go live in EU on **1 July** (having been delayed from 1 January 2022). It revises the performance calculations for category 2 to 4 PRIIPS significantly, with only a minor modification to category 1 PRIIPS calculations. Following agreement on a delay, the UK on-shored version of the revised regulation will be published in Q1 – it is not yet known what lead time there will be before implementation, but it is hoped it will not go live until Jan 2023;
- **EMIR Refit –** both the EU and UK are reviewing their versions of EMIR under the general heading of 'EMIR Refit'. In the EU, final results expected to be published in an RTS in **Q1 2022** which will give final detail for example on the Trade & Transaction Reporting changes that will be required, with go live probably 18 months later. In the UK a consultation is expected by end 2021 with final rules published in **Q3 2022** for implementation the following year; in both cases quite substantial revisions expected to T&TR. There are also changes in the pipeline from CFTC for Dodd Frank reporting, meaning the scale of impact to operations teams is likely to be substantial;
- **Basel 3.1 –** will apply in both EU and UK from **January 2023**, implementing remaining Basel 3 provisions; the EBA has suggested that these rules will have an estimated increase of capital of 18.5% for EU banks. The PRA has been given significant discretion of how Basel 3.1 will be implemented for UK banks and plans to issue a consultation paper in Q3 2022;
- **Crypto Assets** - the draft 'Markets in Crypto-Assets Regulation (MiCA) is scheduled to come into force at the end of 2022; MiCA will establish a fully harmonised EU wide regulatory framework for crypto-assets which will include crypto-asset service providers (CASPs). The FCA published a consultation paper concerning crypto assets in January 2021, which ended in March.

For a more exhaustive list of the FCA's planned regulatory agenda see the Regulatory Initiatives Grid they published In November.

Phil Lloyd, NWM Sales

John Stevenson-Hamilton, NWM Regulatory Client Engagement

David Thomas, NWM Upstream Risk

Key Forecasts

Euro Area (end of period)

		Macro			Central Banks	German Gov't Bond Yields				Swap spreads		Sov 10y vs Germany		
Year	End of Period	HICP y/y Headline	HICP Core, y/y	GDP, q/q	ECB depo rate	2y	5y	10y	30y	10y	30y	France	Italy	Spain
2022	Q1	3.0%	1.7%	1.0%	-0.50%	-0.70%	-0.50%	-0.10%	0.25%	40bp	24bp	37.5bp	110bp	67bp
	Q2	2.4%	2.0%	1.0%	-0.50%	-0.65%	-0.40%	0.20%	0.60%	37bp	22bp	42.5bp	110bp	60bp
	Q3	2.1%	1.7%	1.0%	-0.50%	-0.60%	-0.25%	0.35%	0.75%	36bp	20bp	35bp	100bp	55bp
	Q4	1.5%	1.4%	0.9%	-0.50%	-0.55%	-0.10%	0.50%	0.90%	35bp	20bp	30bp	90bp	55bp

United States

		Macro			Central Banks	Gov't Yields
Year	End of Period	PCE y/y Headline	PCE Core, y/y	GDP, q/q SAAR	Fed Funds Target Range	10y yield
2022	Q1	5.1%	4.3%	4.0%	0.00-0.25	1.80%
	Q2	4.2%	3.4%	3.0%	0.00-0.25	2.00%
	Q3	3.5%	3.0%	2.3%	0.00-0.25	2.10%
	Q4	3.0%	2.9%	2.0%	0.25-0.50	2.20%

United Kingdom

		Macro			Central Banks	Gov't Yields
Year	End of Period	CPI y/y Headline	RPI y/y	GDP q/q	BoE Bank Rate, %	10y yield
2022	Q1	4.80%	6.8%	0.90%	0.50%	1.00%
	Q2	5.10%	7.1%	0.70%	0.50%	1.00%
	Q3	4.80%	6.5%	0.50%	0.75%	1.00%
	Q4	3.90%	5.3%	0.30%	0.75%	1.00%

Japan

		Macro			Central Banks
Year	End of Period	CPI y/y Headline	Core CPI y/y	GDP q/q	BoJ Bank Rate, %
2022	Q1	0.3%	0.2%	1.1%	-0.10%
	Q2	0.8%	0.8%	0.8%	-0.10%
	Q3	0.6%	0.6%	0.4%	-0.10%
	Q4	0.5%	0.6%	0.4%	-0.10%

China

		Macro			Central Banks
Year	End of Period	CPI y/y Headline	PPI Inflation y/y	GDP y/y	1Y Loan Prime Rate, %
2022	Q1	1.2%	8.5%	4.7%	3.85%
	Q2	2.7%	5.8%	4.6%	3.85%
	Q3	2.9%	3.6%	5.7%	3.85%
	Q4	2.4%	1.2%	5.1%	3.85%

FX

Year	End of Period	EUR	GBP	JPY	CNY	EUR/GBP
2022	Q1	1.11	1.35	117	6.35	0.82
	Q2	1.13	1.38	118	6.40	0.82
	Q3	1.15	1.37	119	6.45	0.74
	Q4	1.18	1.39	120	6.45	0.85

Source: NatWest Markets

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