Transition costs to net zero: significant but necessary

Monthly Investment Strategy

AXA IM Research

October 2021

Summary: October 2021

Theme of the month: Transition costs to net zero: significant, but necessary

- The COP 26 Climate summit begins in November with the UN's IPCC already warning that temperature increases in excess of the Paris goal of 1.5 degrees are likely over coming decades. World leaders are listening, and the US and China have both made important commitments to net zero.
- Estimated investments to meet this commitments are estimated at hundreds of trillions. However, these investments should boost growth. Costs will reflect increased taxes, regulations and production costs associated with endogenizing emissions externalities in market prices.
- Pessimistic assessments of the cost of such a transition are around 2-2.5% of global GDP over the longer-term. These estimates are far lower than the most optimistic estimates of the global costs of unmitigated climate change.

Macro update: The headwinds from prolonged, transitory inflation

- Increased demand for natural gas prices have boosted energy prices. This latest in a string of supply shocks will lift inflation further and make it more persistent. We raise our inflation forecasts in most regions. Yet this should still prove transitory unless expectations rise or labour shortages persist.
- The increases in inflation add to ongoing COVID disruptions in a number of regions and supply interruptions to soften the growth outlook for H2, despite a surprisingly solid H1. On balance, the 2021 growth outlook remains strong in most regions, but the growth outlook for 2022 is softening.
- Policy-making in the face of supply shocks is difficult. Most try not to reduce fiscal stimulus too quickly, if they do not continue to ease. Financial conditions are tightening as markets begin to price sooner central bank rate increases in most major regions, in part reflecting rising inflation. Yet recent moves appear extreme and current market pricing may fail to heed the scale of growth deceleration that could materialise over the winter.

Investment strategy: walking the inflation tightrope into a crucial earnings season

- FX: 'Higher for longer' inflation expectations have pushed markets to price earlier and further rate hikes, by central banks that don't have the benefit of significant inflation undershoot in the past, like the Fed. USD support has switched from tapering expectations to rising interest rate differential.
- Rates: Common yield factors have accelerated recently. Supply-side bottlenecks, commodity price rises and other exogenous factors (e.g. drought & freeze in Brazil) have charged the inflation theme, spilling over in tapering expectations and ultimately in rising term premia.
- Credit: The notable rise in global interest rates since mid-September has reignited investor concerns about the risks posed by higher yields on credit spreads. Such concerns are misplaced given the negative correlation between spreads and nominal yields (same for real rates & inflation breakevens).
- Equity: Q3 earnings season has begun and will be an important driver of year-end performance. Companies' guidance will give an insight into their ability to manage supply chain disruptions and to pass on rising costs. Market risk (VIX) does not seem to question the 'transitory inflation' narrative currently.

Central scenario

Summary – Key messages

Monetary policy

Fed prepares to taper. Markets consider closer to hikes. But policy remains key support and central banks should be wary of withdrawing it too quickly.

Inflation

Inflation persists after energy shock, base effects and bottlenecks. Medium-term depends on spare capacity and unlikely outside US and EMs.

Fiscal policy

US spending in flux, expect large package in Q4. In Europe fiscal support rolled out more slowly. UK suggest some tightening.

Growth

Strong growth and recovery remain. But virus, supply-chain issues and inflation softening the 2022 outlook. Virus risk remains.

Our central scenario:

2021 rebound as virus controlled, recovery needs policy support

We forecast global growth to rise by 5.6% in 2021 and 4.3% 2022.

Economic rebound on vaccine and stimulus, must overcome labour market and supply constraint headwinds. Monetary and fiscal policy support.

Emerging Markets

EM's see virus pressures rise with less vaccine access for now. Export economies still benefit. Less policy space for most.

Rates

Rates still rising. Macro argues for higher rates – and summer technicals unwind over autumn.

FX

USD appreciation has moved swiftly, particularly vs low yielding currencies. But current pricing assumes a lot.

Credit

Tight spreads levels now more justified by improving corporate fundamentals, while central banks still at play as a backstop.

Equities

Value/Growth rotation remains attractive. Corporate earnings rebound may decelerate. Equity risk premium is compressed.

Alternative scenarios

Summary – Key messages

Persistent recession *(probability 20%)*

What could be different?

- Coronavirus mutations reduce vaccine effectiveness
- Labour market dislocation and business disruption create ongoing headwinds to demand recovery
- Fiscal policy fades amidst elevated debt and political opposition
- Geo-political tensions mount in post-Covid world

What it means

- Growth/inflation expectations weaken further, additional GDP disruption, corporates' earnings under more pressure
- Monetary policy outlook begins to soften again (including China). Government's continue with fiscal stimulus and divide between monetary financing blurs further.

Market implications

- Risk appetite deteriorates / equities sell off / credit widens
- Safe-haven rates rally resumes
- EM debt to come under pressure

Fast recovery *(probability 20%)*

What could be different?

- Vaccines suppress hospitalisations and governments can increasingly remove all constraints, easing supply constraints
- Labour market recovers, economies benefit from post-virus euphoria and faster consumption of 'excess saving'
- Virus-shock reshapes business practice, boosting productivity

What it means

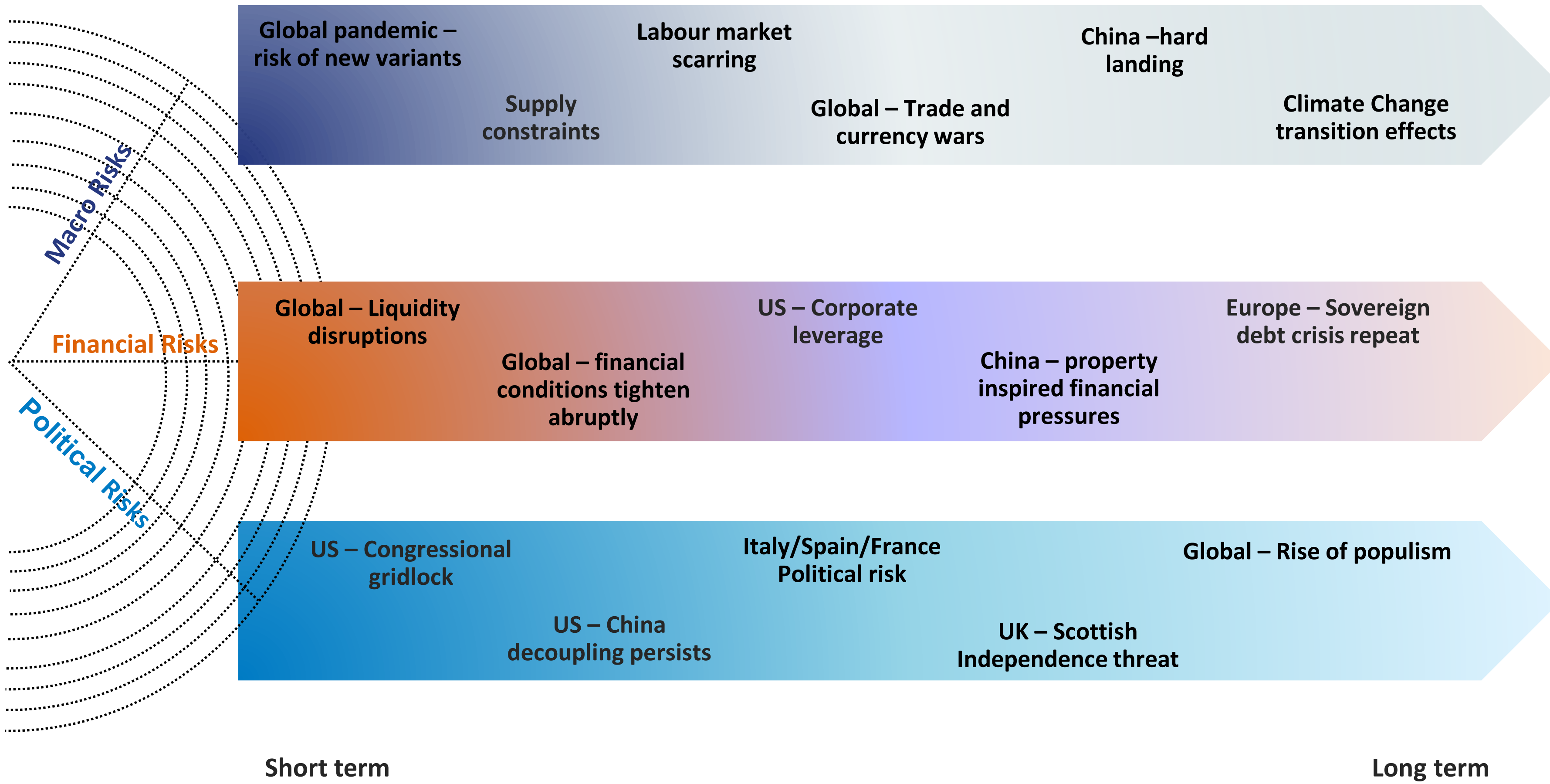
- Global/US/EMU growth surprise on the upside in a stronger and more persistent rebound
- Monetary policy fights expectations for swift tightening through forward-guidance

Market implications

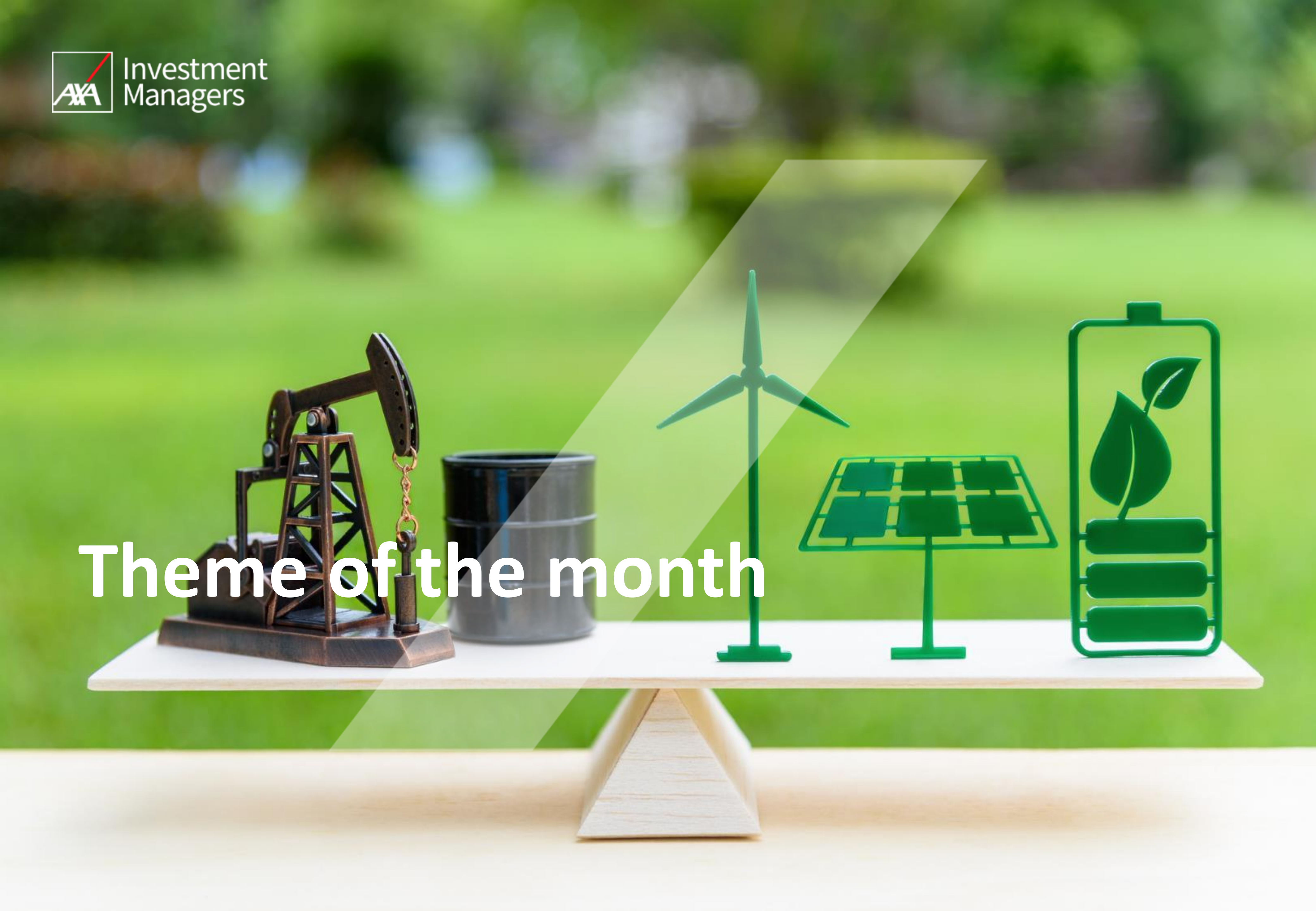
- Risk-on environment with equities making further gains amidst broader rotation
- UST and EUR break-evens rise
- Spreads grind tighter

RISk Radar

Summary – Key messages



Contents



Theme of the month

Transition costs to net zero: significant, but necessary

Our last best chance ..

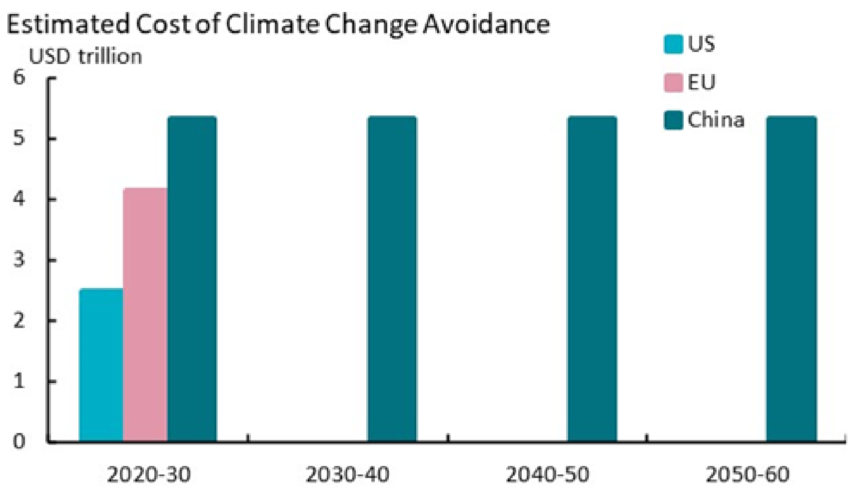
COP 26 – “the last best chance to get runaway climate change under control”

- The UN’s 26th annual Conference of the Parties in November is a gathering of world leaders under the shadow of the latest Intergovernmental Panel on Climate Change report that concluded that it was more likely than not that the 1.5 degree limit targeted in Paris would be exceeded in the coming decades. The global community has begun to take heed. Both the US and China – the world’s largest emitters – have committed to reducing emissions to net zero by 2050 and 2060 respectively.

Vast investments needed to achieve the interim 2030 commitments

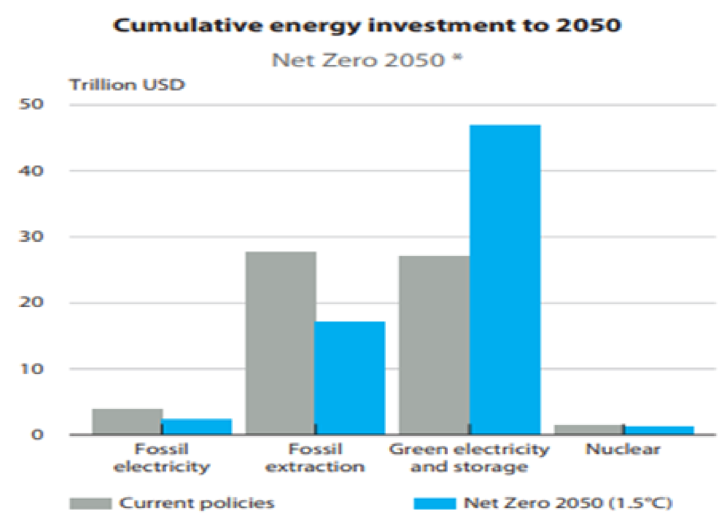
- Estimates of the significant investment required have accompanied commitments to deliver material GHG reductions. Princeton University estimated $2.5trn (11% of GDP) of investment required to meet the US’s 2030 target (50% of 2005 level), the European Commission has estimated a similar €3.5trn (25% of GDP) to meet the EU’s “fit for 55” (55% of 1990 level) goal. Meanwhile, Tsinghua University estimates RMB 138trn (c. 30% GDP per decade) over four decades in China. The International Renewable Energy Agency estimate total investment of $130trn required by 2030.

Investment estimates by region



Source: European Commission, Princeton University, Tsinghua University and AXA IM Research, September 2021

NGFS cumulative energy investment outlook



Source: NGFS, September 2021

Transition costs to net zero: significant, but necessary

Investment is not cost

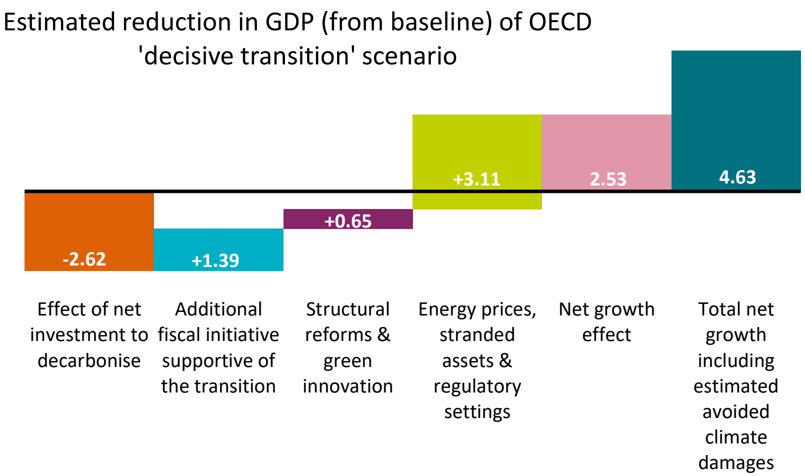
Investment will provide a boost to activity

- Investment to reduce GHG emissions will provide a lift to activity, driving research and creating jobs. The surge in public and private investment should boost growth and it is a key component of some government's fiscal boost, including the EU's Next Generation package. This boost to activity is illustrated in decompositions of the OECD and IMF's estimated total impact on GDP from transition scenarios. Both consider the investment/infrastructure components to be positive (GDP enhancing) components of the overall change.

The indirect benefits of investment

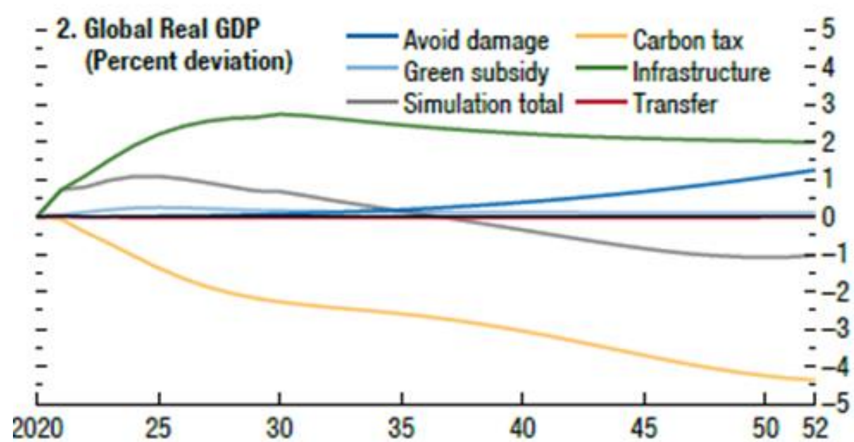
- As well as the direct lift to growth, we can consider indirect benefits that should further mitigate costs. These should include
  - **Cost reductions -** investment in new industries is likely to see significant production cost declines. This has been the case with solar panels and other renewables.
  - **Productivity gains –** investment should boost efficiencies, productivity and potential growth.
  - **Overcoming underinvestment** – as a public good infrastructure is often underprovided in market economies, these are likely to provide positive externalities.
  - **Health benefits –** specific positive externality: improvements in public health are envisaged, for example, a reduction in asthma from improved air quality

Decomposition of the OECD's "decisive transition" scenario



Source: OECD, AXA IM Research, 2017

Decomposition of GDP impact of IMF's assessment



Source: IMF, October 2020

Transition costs to net zero: significant, but necessary

The costs of avoiding climate change

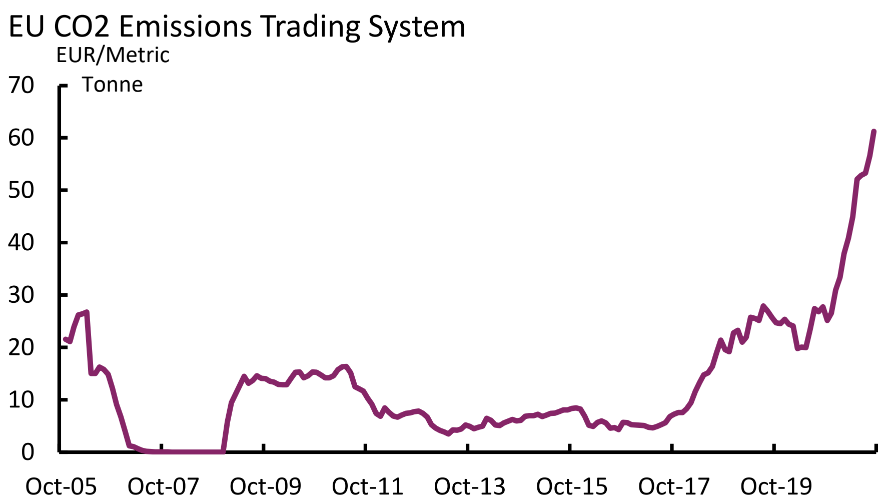
Endogenising GHG emission externalities

- The cost of avoiding climate change will come from the lost output from the methods of reducing GHG emissions: these will include increased production costs associated with the endogenization of GHG externalities; increased taxes to pay for public spending; tighter regulations; as well as the opportunity costs of diverting investments from other areas and from the risks of stranded assets.

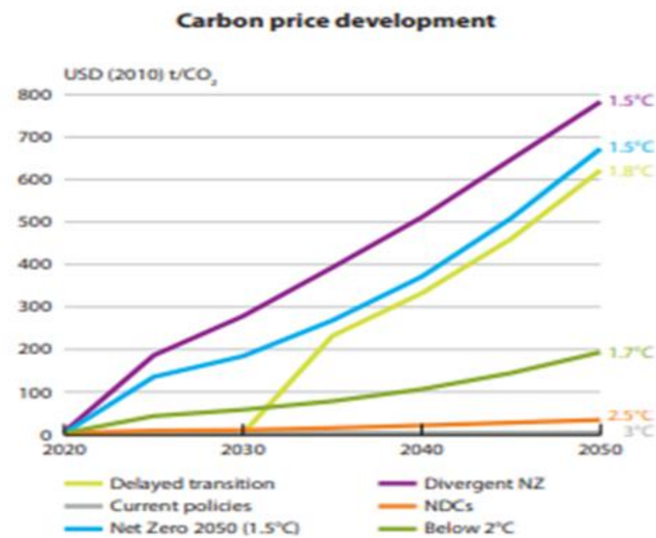
Carbon pricing

- Much of the cost of avoiding climate change will reflect increases in the cost of production accounting for externalities of carbon and other emissions in the production process. The most direct way of achieving this outcome is through green taxation, increasing price and deterring consumption. But such a drop in spending incurs an economic cost. More efficient schemes have been applied to determine the appropriate level for such taxes. Emission Trading Schemes set a market price for carbon. In recent years, the world's largest scheme, in the EU, has seen carbon prices rise sharply. Estimates of future carbon prices see a further sharp rise in these costs over the coming decades.

EU ETS carbon price evolution



Longer-term carbon price projections



Source: Refinitiv and AXA IM Research, October 2021

Source: NGFS, June 2021

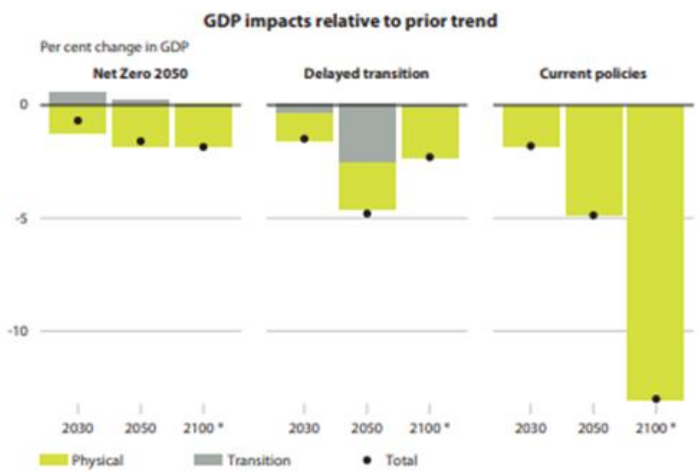
Transition costs to net zero: significant, but necessary

Estimated costs of avoiding climate change

A range of views surround uncertain, long-term estimates

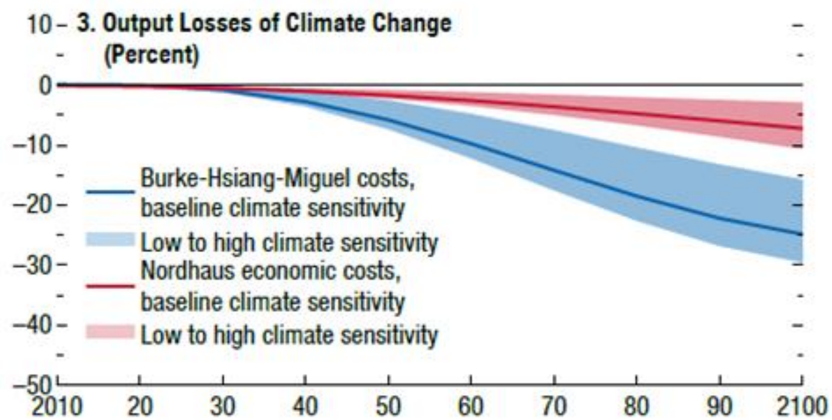
- The net cost of avoiding climate change includes the positive contribution of increased investment spending offset by the loss of output from increased production costs and regulations. These estimate are also conducted over a long timeframe. There is understandably a range of estimates around these outcomes
  - The OECD's "decisive transition" scenario is estimated to deliver a 2.5% boost to GDP by 2050
  - The IMF estimates that its scenario to limit climate increases to just 1.5 degree would lower global GDP by 1% by 2050
  - The Network for Greening the Financial System (NGFS) estimates a total cost of 2% of GDP by 2050, which remains steady by 2100. However, it also considers a "delayed transition" scenario that would see GDP 5% lower by 2050, before recovering to -2.5% by 2100.

Estimated impact of different mitigation scenarios



Source: NGFS, June 2021

IMF estimates of unmitigated climate change



Source: IMF, October 2020

Transition costs to net zero: significant, but necessary

The cost of not avoiding climate change

Comparing the cost of action with inaction

- The key comparison is the difference between the cost of avoiding climate change compared with the costs of unmitigated climate change. Estimating the latter is also a highly uncertain process and includes assumptions of linear systems and economic costs for things like bio-diversity.

The IPCC's five illustrative scenarios

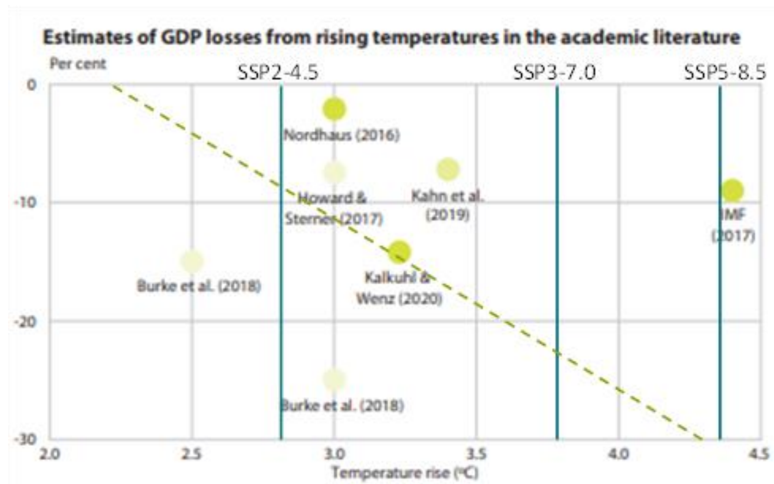
- The latest IPCC report included five illustrative scenarios with varying degrees of effort to avoid global warming. Scenario 1-1.9 was a scenario that expected to keep temperature increases to below 1.5 degree over the long term. The other scenarios did not.
- We combine the expected longer-term temperature increases of the IPCC's other scenarios with a survey of academic studies relating temperature increases to global GDP loss.
- **The inferred global GDP losses in the most optimistic of IPCC scenarios of unmitigated climate change is far in excess of the most conservative estimated cost of avoiding climate change**.

IPCC estimates of five illustrative scenarios

	Near term, 2021–2040		Mid-term, 2041–2060		Long term, 2081–2100	
Scenario	Best estimate (°C)	*Very likely* range (°C)	Best estimate (°C)	*Very likely* range (°C)	Best estimate (°C)	*Very likely* range (°C)
SSP1-1.9	1.5	1.2 to 1.7	1.6	1.2 to 2.0	1.4	1.0 to 1.8
SSP1-2.6	1.5	1.2 to 1.8	1.7	1.3 to 2.2	1.8	1.3 to 2.4
SSP2-4.5	1.5	1.2 to 1.8	2.0	1.6 to 2.5	2.7	2.1 to 3.5
SSP3-7.0	1.5	1.2 to 1.8	2.1	1.7 to 2.6	3.6	2.8 to 4.6
SSP5-8.5	1.6	1.3 to 1.9	2.4	1.9 to 3.0	4.4	3.3 to 5.7

Source: IPCC, Climate Change 2021, The Physical Science Basis, August 2021

Uncertain impact of higher temperatures



Source: NGFS and IPCC, September 21

Macro outlook

Prolonged, transitory inflation

US

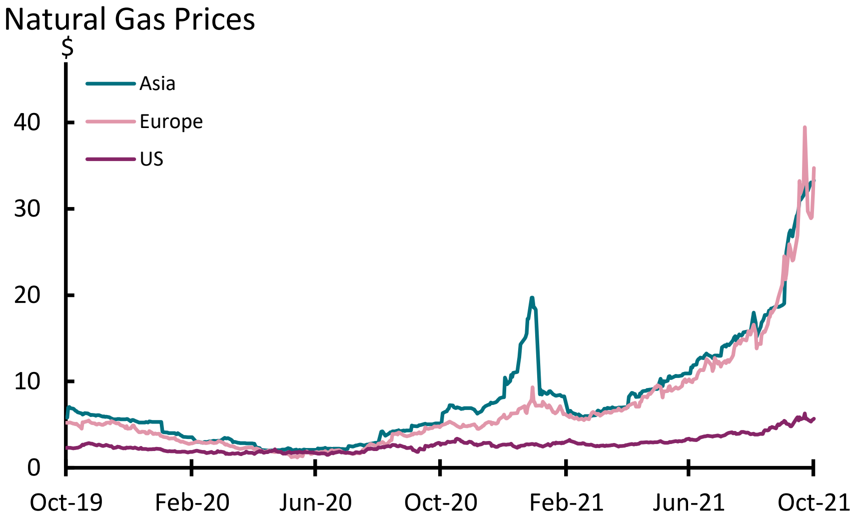
Successive supply shocks prolong transitory inflation boost

- The US is less exposed to the global gas shortage effecting energy prices in some regions. However, the knock-on effect on oil is feeding through to US inflation via gasoline prices and represents another supply shock that will keep the transitory lift to inflation elevated for longer. Headline inflation will remain high into 2022 and we now expect a sharp drop in inflation only in Q2. More recently rent prices have started to rise. We lift our CPI outlook to 4.3% and 3.2% for this year and next (consensus 4.3% and 3.0%).

The labour market threatens more persistent inflation

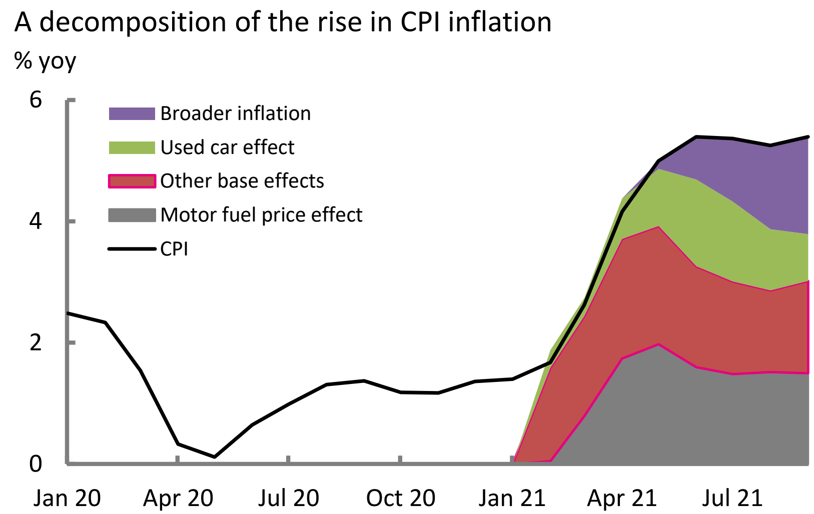
- September's payrolls fell short of expectations again, below 200k. The JOLTS survey also posted a sharp drop in August (albeit remaining at elevated levels). Yet the labour market remains tight: vacancies are high as labour supply and participation both fell in September. We expect labour participation to rise over the coming months as COVID related disruptions fade. However, if this fails to materialise, labour shortages and more elevated pay growth will persist, which would leave inflation permanently higher.

US natural gas prices rise less than elsewhere



Source: Bloomberg, AXA IM Research, Oct 2021

Further gasoline price gains add to elevated inflation



Source: BLS, AXA IM Research, Oct 2021

Impressive rebound sees rising headwinds

US

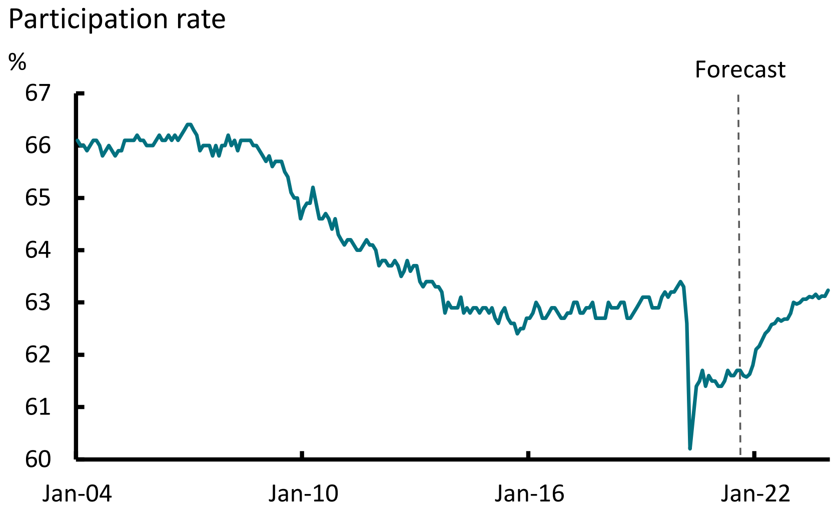
Consumer weakens in Q3

- A renewed COVID outbreak, supply shortages and rising inflation pressures have all impacted consumers in Q3 with sentiment and spending having slipped. Retail sales fell by 0.7% in Q3 with supply-constrained car sales weighing heavily (sales rose 1.7% ex-car sales). Consumption looks set to rise by around 1% (ann) for Q3 as a whole and we forecast GDP growth at 3%. Nevertheless our forecast remains at 5.7% for 2021 as a whole, although we lower our outlook for 2022 to 3.9% (consensus 5.8% and 4.0%)

Difficult environment for monetary policy setting

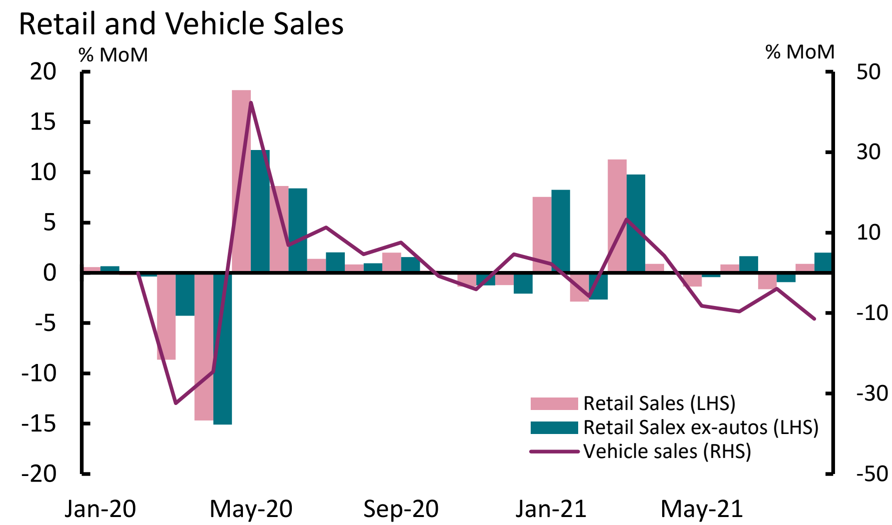
- September's FOMC meeting signalled a November taper announcement and recent minutes suggested a $10bn UST and $5bn MBS/month reduction to complete by mid-2022. Attention has shifted to the timing of a Fed rate hike as markets now consider a 2022 hike. The Fed's forward guidance for inflation looks set to be met next year. However, its conditions on full employment do not. We forecast a 2023 first hike, but bring our forecast in to March 2023 and now consider three hikes more likely than two.

Pick-up in participation key to avoiding persistent inflation



Source: BLS, AXA IM Research, Oct 2021

US consumer spending softens in recent quarters



Source: BLS, AXA IM Research, Oct 2021

Recovery struggles in the final stretch

Euro area

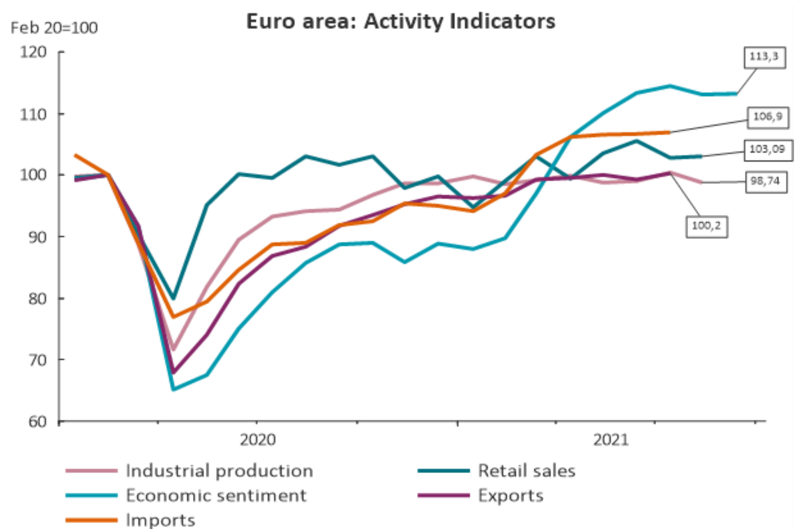
Pace of activity slows after buoyant Q2/early Q3

- A natural unwinding from a faster pace of growth alongside important headwinds from supply shortages and energy prices is driving a softening in Eurozone activity. German IP fell 4% mom (-17.5% in car production), while the broader Eurozone fell by ‘only’ 1.6% on better prints from France, Italy and Spain.
- Recent surges in prices for transportation, energy and some components as well as China slowdown are complicating the outlook

But the services sector is recovering well

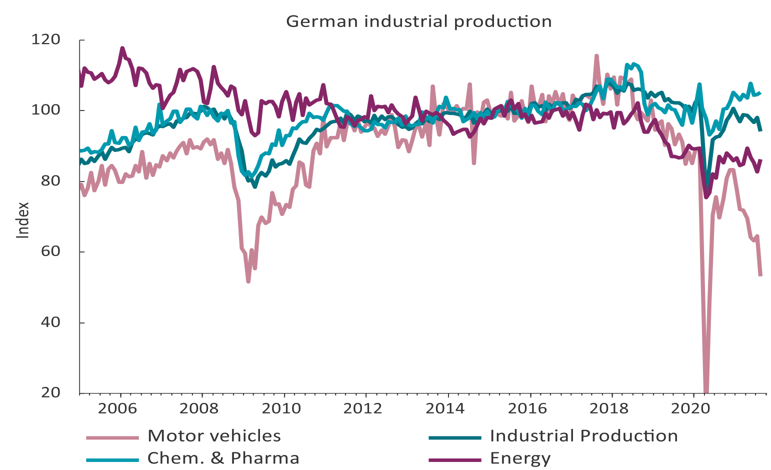
- It is benefiting from a reallocation of consumer spending while confidence stays at record level. More broadly, the labour market continues to recover faster than expected, which will further boost domestic demand. Overall, Eurozone Q3 GDP growth should be robust, but remains biased by a catch-up phenomenon. We believe industrial weakness will persist into Q4 and probably Q1. We slightly lower our outlook accordingly to 4.7% in 2021 and 3.9% in 2022 (consensus 5.0% and 4.3%).

Headwinds threaten short term outlook



Source: EC, Eurostat, AXA IM Research, as of October 2021.

Strong sectoral variation in German industrial recovery



Source: Destatis, AXA IM Research, as of October 2021.

"Transitory" may be more persistent

Euro area

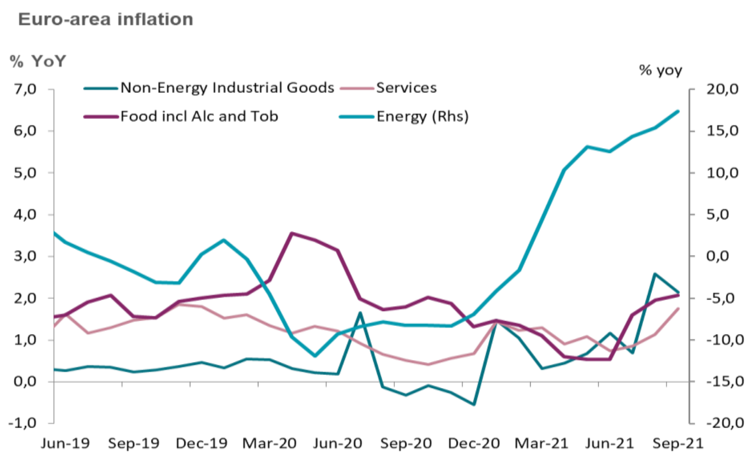
Eurozone CPI inflation rose to 3.4% yoy in September

- Energy prices increased again and wholesale oil, gas and electricity prices have recently broken records. As a large share of this will be transmitted into retail prices, we believe higher CPI inflation will persist over the coming months. Core inflation stood at 1.9% in September and the resumption of German VAT will continue to distort readings until December. We have raised our Q4 CPI forecast to reach 3.7% yoy across the region and 2.4% on average over 2021 (from 2%) (consensus 2.3% for 2021 and 1.8% for 2022).

Mixed impact on households

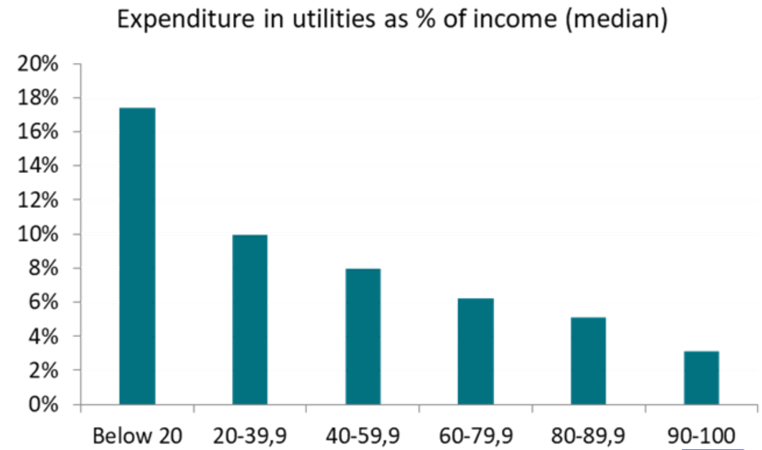
- The large rise in energy prices is also impacting household purchasing power despite recent government efforts to mitigate it's impact. On a macro level, households could absorb this increase by reducing their post-pandemic excess savings. However, these are not equally distributed, while the energy burden will fall hardest on the poorest.

Another strong CPI print in September !



Source: ECB, AXA IM Research, as of October 2021

Rising energy prices weigh more heavily on the poorest



Source: ECB Household Finance and Consumption Survey- 2017, AXA IM Research

Gas prices put further pressure on inflation

UK

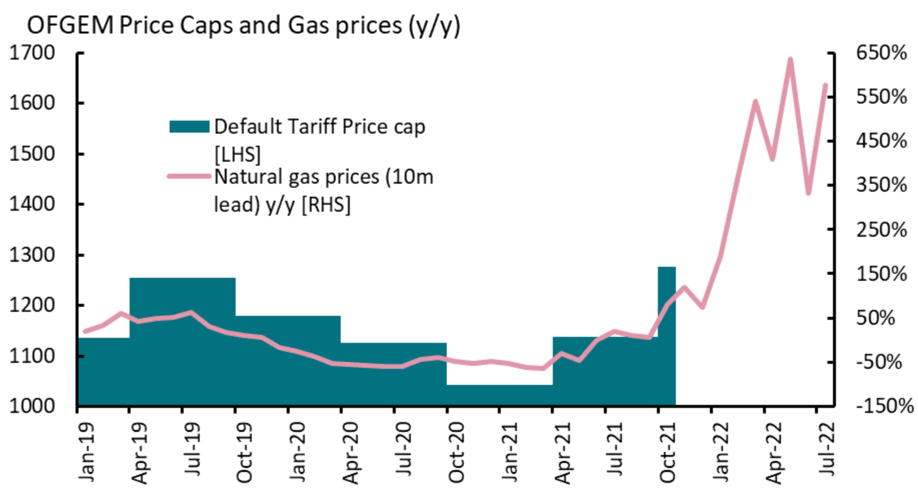
Wholesale gas price spike puts further pressure on inflation

- Wholesale gas prices have risen sharply internationally reaching all-time highs in early October. UK inflation reached 3.2% in August but is set to further in the coming months as elevated gas prices are passed through to consumers – particularly households in October and April. We now expect CPI inflation peak around 5% in Q2 2022, before falling towards the BoE's target in Q4 2022. We expect inflation to average 2.4% and 3.7% in 2021 and 2022, respectively (consensus 2.3% and 3.1%).

Weaker than expected August growth follows a surprise upwards revision to Q2 GDP

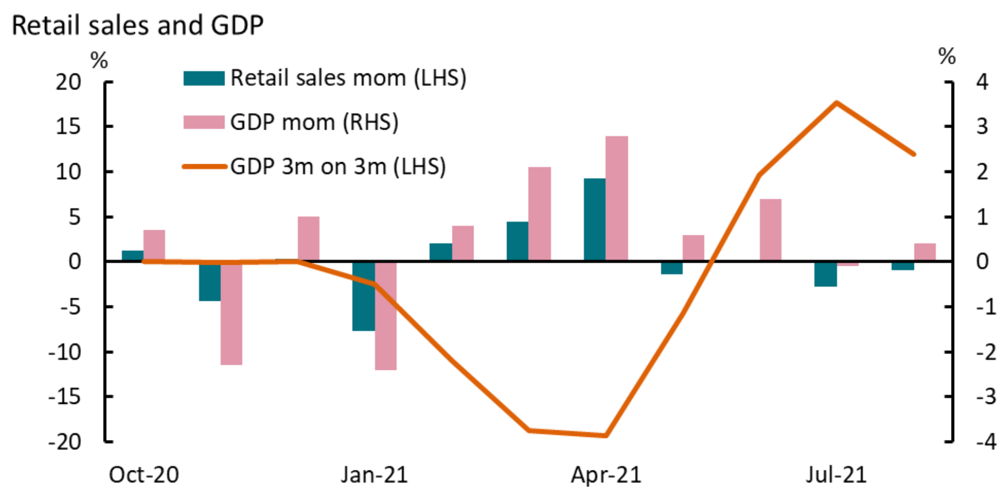
- UK growth has been weaker than expected in recent months, up by 0.4% in August with July revised lower to -0.1% from 0%. Yet there was a sizeable upward revision to Q2 GDP to 5.5% from 4.8% leaving our forecast for 2021 moderately firmer at 6.9%. Retail sales have begun to lose steam marking the start of a challenging period for UK households facing elevated COVID concerns, rising utility bills and the prospect of a tax increase next Spring. We lower our outlook for 2022 to 5.2% (consensus 7.0% and 5.1%).

High gas prices increase prospect of a further rise in price caps



Source: OFGEM, Bloomberg, AXA IM Research, Oct 2021

Retail sales declines coincides with a more sustained recovery



Source: National Statistics, AXA IM Research, Oct 2021

More signs of earlier rate hikes

UK

Recent labour market trends risk more persistent inflationary pressures

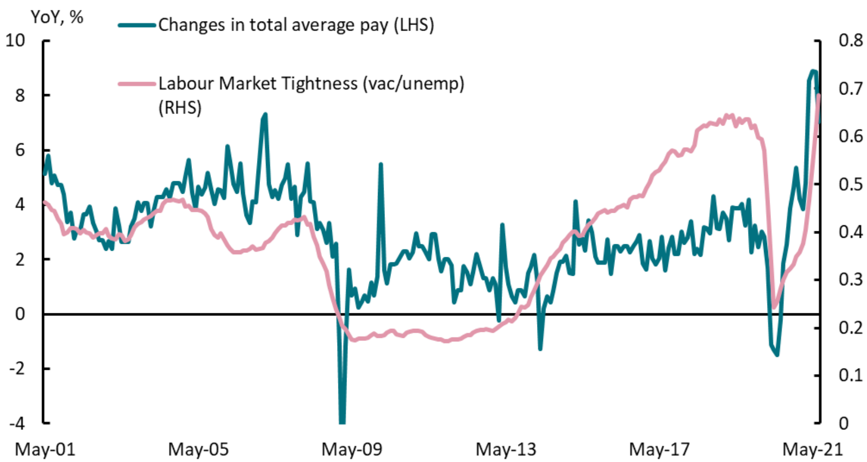
- The latest jobs report saw a continued rebound in employment and signs of increased labour market tightness. Payrolls reached pre-Covid levels in September and job vacancies reached a record high of almost 1.2m. However, questions remain about the tightness of the labour market. Increases in employment were driven by part-time workers. Moreover, 1.3m – close to the 1.5m total unemployed – remained on the furlough scheme at the end of August, a month before the scheme's closure.

Rate rises on the horizon…

- Recent comments from Governor Bailey and greater upside inflationary pressures in the UK have led us to bring forward our rate hike expectations. We now see a 0.15% hike in February and a second 0.25% hike in August, which would trigger a passive unwind of the BoE's balance sheet. We then forecast a rise to 0.75% in May 2023. Markets currently consider Bank Rate rising next month up to 1% by September 2022. We see this as too sharp a tightening given other looming income shocks over the coming quarters.

Changes to pay and labour market tightness

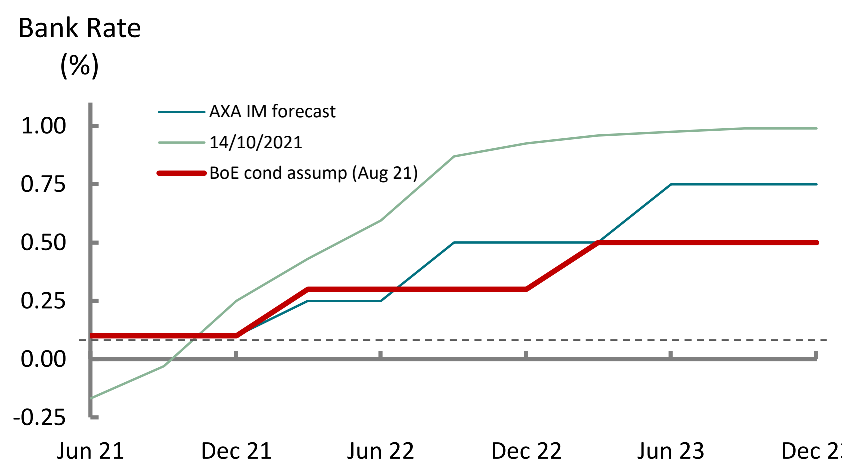
Vacancies-to-unemployment and changes in total average pay



Source: National Statistics, AXA IM Research, Oct 2021

Market pricing of BoE rate outlook looks too aggressive

AXA IM rate outlook vs Short-Sterling implied



Source: Bloomberg, AXA IM Research, Oct 2021

Growth forecast downgraded to 7.9%

China

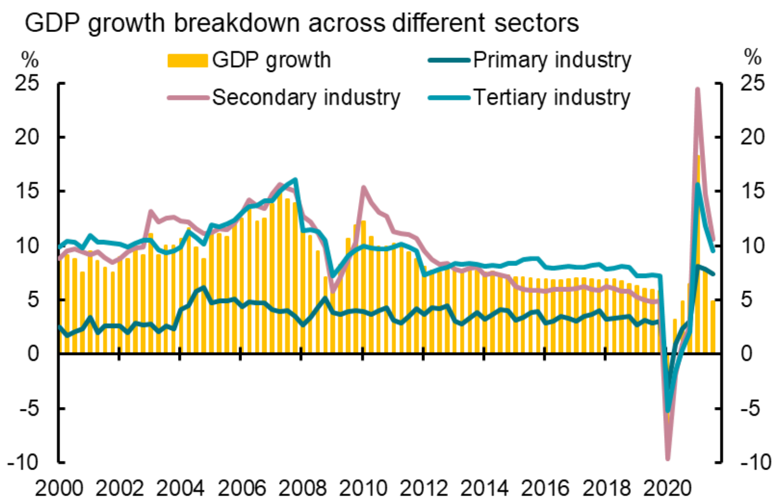
Growth stalls in Q3 as the economy hits multiple speed-bumps

- Natural disasters (COVID and flooding) and policy headwinds drove the Chinese economy into a second growth dip in Q3. Service-sector growth weakened notably due to tightened containment measures against the Delta variant. Industrial growth also fell sharply as production was hit by severe floods and power shortages. A continued decline in credit growth weighed on investment and household spending on bigger ticket items. Q3's slowdown was a result of broad-based weakness in domestic demand

Worst of the power crunch may be over, but impact could linger

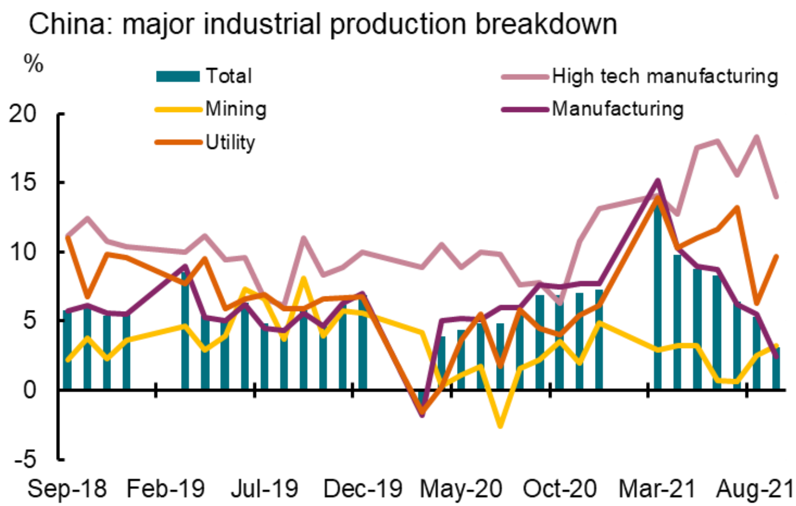
- September data shows industrial production growth fell sharply to 3.1%, making it the second worst reading after Mar-2020. An unexpected power crunch forced many provinces into power rationing that hit the production of energy-intensive sectors. While the government has responded by increasing electricity output, it will likely take time for conditions to fully normalize. For many heavy energy users, some power rationing will likely remain for some time

Q3 growth depressed by multiple headwinds



Source: CEIC, AXA IM Research, Oct 21

Industrial production hit by power crunch



Source: NBS, AXA IM Research, Oct 21

Faltering growth calls for more policy support

China

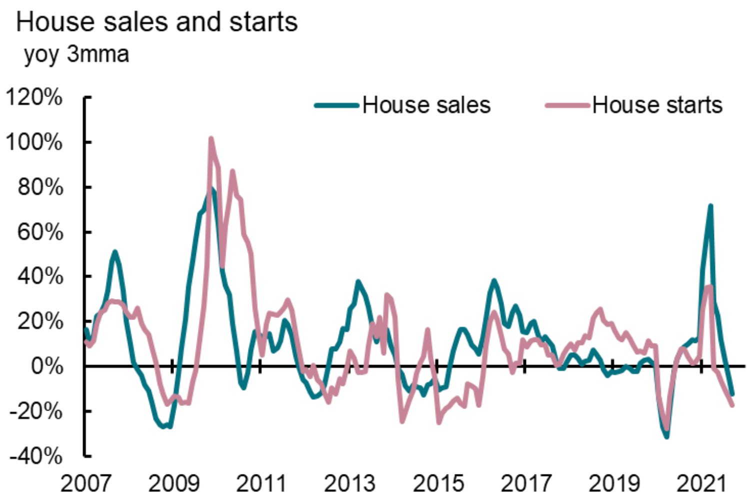
Fine-tuning housing market policies, but no reversal

- Beijing's punitive property policies have finally weighed on housing construction. Deepening concerns about property developers' financial health have forced some developers out of bond markets, giving rise to default fears. Recent official communication suggests that Beijing is taking action to ringfence this problem, reducing chances of a systemic financial reaction. We expect some fine-tuning of housing market policies to contain broader risks, but do not envisage a reversal to the overall tightening stance

Weak data calls for more policy support

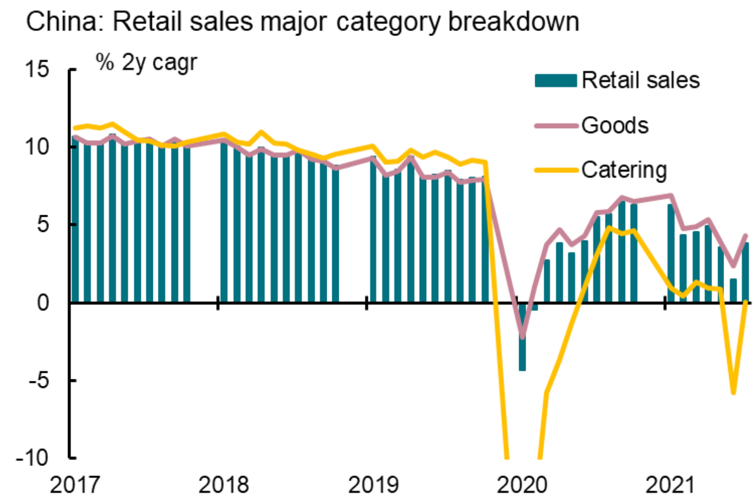
- The weak Q3 data will likely prompt Beijing to further reduce growth-restraining policies. In addition to fine-tuning property market curbs and mitigating the energy crisis, standard monetary and fiscal policies will do more heavy-lifting too. However, the overall stimulus effect will be limited by Beijing's steadfast control on the housing market and shadow banking, which are the traditional channels of policy transmission. We have downgraded our 2021 growth forecast to 7.9% and see some downside risks to our 2022 forecast at 5.5%

Punitive policies weigh on property market



Source: CEIC, AXA IM Research, Oct 21

Retail sales rebounds on pent-up demand



Source: CEIC, AXA IM Research, Oct 21

Japan sees light at the end of the tunnel

Japan

State of emergency comes to an end

- The recent end of the persistent State of Emergency likely marks the end of the “stop-and-go” policies that have weighed heavily on activity and confidence, especially in the services sector. This is not yet reflected in surveys, with September’s services PMI remaining in contractionary territory at 47.8 – albeit improved from a month earlier - while August services spending was still 20% below the end-2019 level

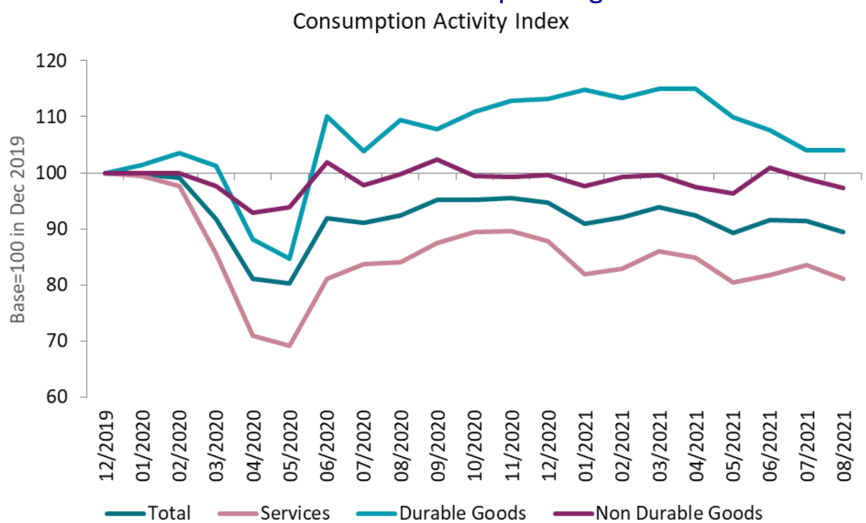
Auto sector weighs on industrial production

- Industrial production fell by 3.6% mom with strong heterogeneity between sectors.
- August passenger cars stood 25% below end of 2019 level

Fortunately, public and business investments are better oriented

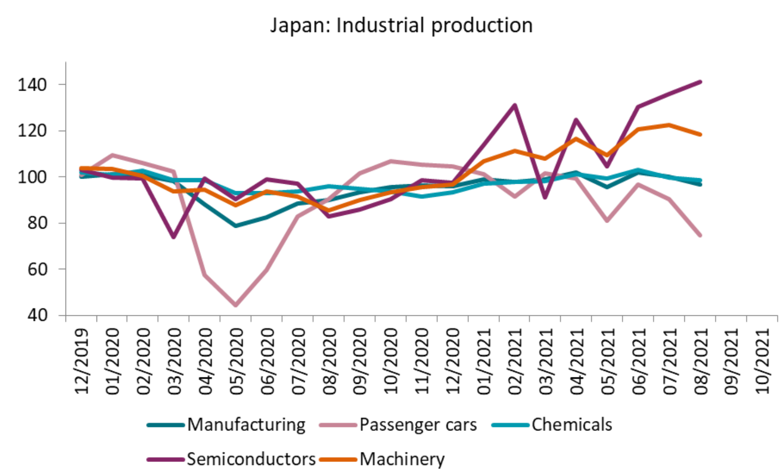
- We anticipate a strong +1.5% quarterly increase from investment thanks to better expectations but only a small +0.3% QoQ for Q3 GDP growth

Restrictions removal should reallocate spending toward services



Source: BoJ, AXA IM Research as October 2021

Turmoil in auto sector



Source: METI, AXA IM Research, October 2021

A new Prime Minister and a coming election

Japan

Fumio Kishida was appointed Prime Minister and will lead the LDP into legislative elections on 31 October

- In an introductory statement, Kishida has focused on three policies: Response to COVID-19, “New” capitalism, and diplomacy and security

Economic agenda shift minimal and doubts on implementation

- Despite supporting the basic policy of Abenomics, Kishida stressed that this has widened the wealth gap. He aims for a “new capitalism” that balances economic growth with a reduction of inequality through a favourable cycle of growth and redistribution.
- On fiscal policy, he ruled out any immediate fiscal consolidation and proposed a new stimulus to cope with persistent weaknesses derived from the pandemic.

Kishida’s propositions in its introductory statement

Growth Strategy	Distribution Strategy
Realization of a Science and Technology Nation: • a 10tr yen university Fund • Tax system reshuffling that supports R&D • Clean energy policies with both renewables and nuclear	Strengthening the redistribution to workers: • Tax benefits for companies that raise wages • Supervision system for subcontracting transactions • Enhancement of non-financial information disclosure
Developing digital infrastructure in rural areas	Raise the income of workers in the welfare sector (nursing, care and childcare workers)
Promotion of economic security: • Securing strategic materials and avoiding technology leakage • Building a robust supply chain	Middle-income expansion and social measures against declining birthrate: • Strengthen the redistribution toward low-income earners • Strenghten support for education and housing cost • Expansion of the childcare system
Development of social security, compatible with ageing: • Establishing social security and taxation systems taking into account diverse and flexible work styles • Better social security system for all generations	Correction of the negative effects of the single-year policy in fiscal management

Source: AXA IM Research, October 2021

Diverging recovery, converging higher inflation, diverging monetary policies

Emerging Markets

Recovery paths remain Covid-19 dependent, but inflation acceleration is broad-based

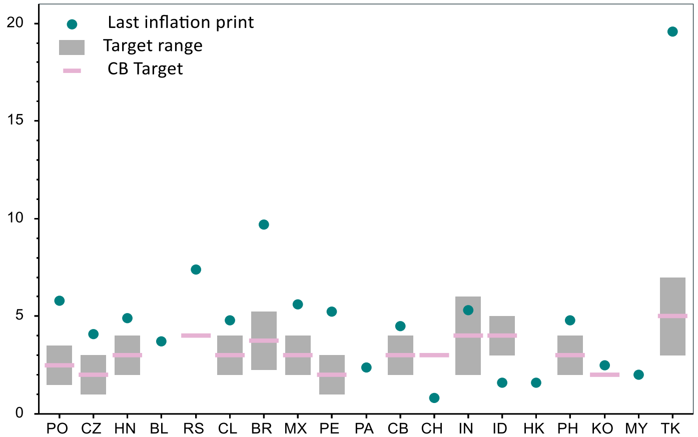
- Differences in the timing of coronavirus infection waves and the type of containment policies implemented locally impact the recovery path. Vaccination rates drive uneven timetables for economic reopening.
- Romania is currently seeing a dramatic Delta variant infection wave.

Inflation accelerates, increasingly beyond targets. Normalization in monetary policies on diverging trends.

- Inflation has been accelerating globally on the back of strong basis effects, strong commodity prices and supply-demand disruptions caused by the reopening. EM CB have started hiking rates as inflation slipped beyond their targets (even the higher-ends of the bands) threatening medium-term expectations.
- A recent cut in rates in Turkey (another cut is expected to be deliver this week) come at odds with the general hiking mode.

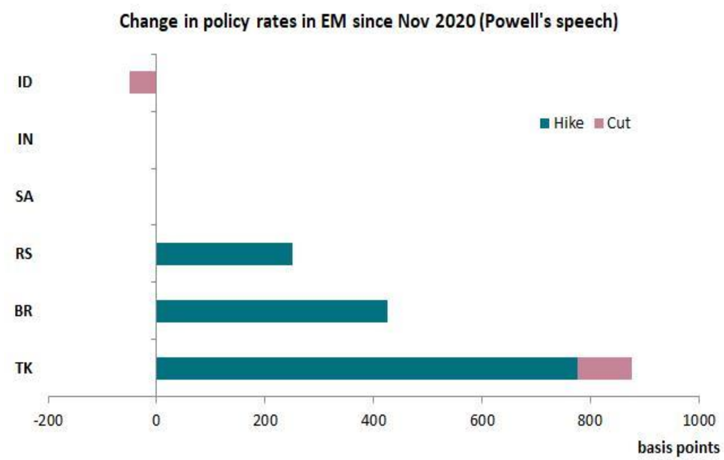
Inflation above targets…

EM inflation rates and CB targets



Source: Datastream, AXA IM Research, Oct 2021

… props monetary tightening (almost) everywhere



Source: National sources, AXA IM Research, Oct 2021

Turkey vs. Brazil: an illustration

Emerging Markets

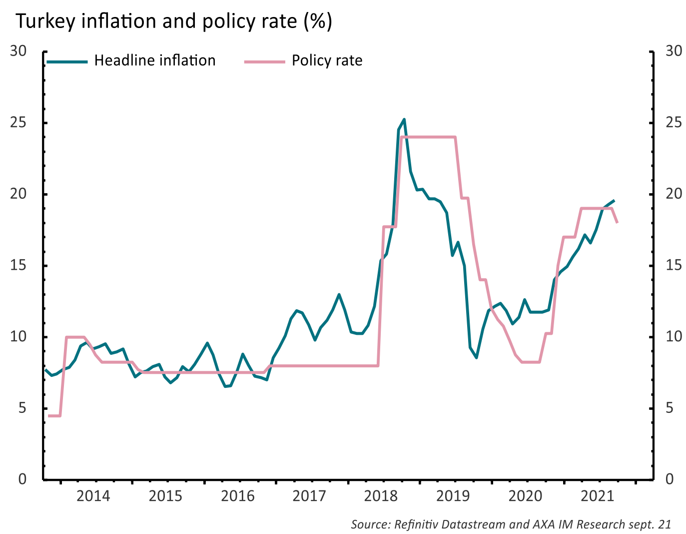
An easing cycle in the making in Turkey

- Turkey's central bank surprised markets and economists' consensus with its decision to cut rates last month ahead of any easing in the inflation trend. The inflation rate still runs at a rate 5x the CB's target. Another cut is likely to be delivered this week. The TRY has depreciated, now beyond 9 to the USD. While external financing needs are not pressing at the moment, such a monetary policy experiment could well fail and once again result in higher macro/financial volatility.

Brazil's central bank fights inflation and potential fiscal slippage

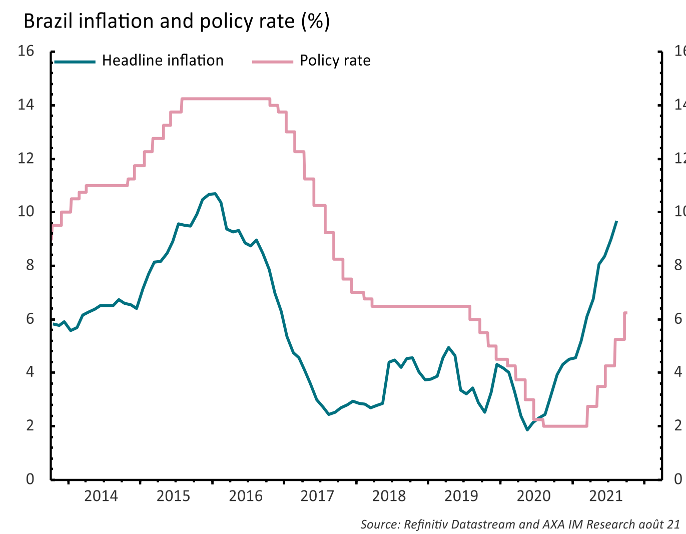
- Inflation is now in double-digit territory in Brazil (last print at 10.25%) with some unpleasant second round effects already visible. The BCB is hiking rates and we expect them to do more. Potential fiscal slippage ahead of elections in a year's time remains a concern. Meanwhile, monetary tightening and a less buoyant external sector may weigh on growth prospects.

A dissonant first cut in Turkey



Source: Datastream, AXA IM Research, Oct 2021

The fight to anchor inflation in Brazil



Source: Datastream, AXA IM Research, Oct 2021


AXA Investment Managers
Investment Strategy

Multi-Asset Investment views

Our key messages and convictions

Positive on equites

#1
Economic and earnings rebound remains on track, even if decelerating

Neutral on Investment Grade Credit

#2
Despite support from fiscal initiatives, valuations are no longer attractive due to tight spreads

Negative Sovereign Bonds

#3
The Fed's monetary policy shift pushes government Bond yields higher

Long Volatility

#4
Concerns over Fed monetary policy transition, China slowdown and COVID-19 variants generate higher volatility

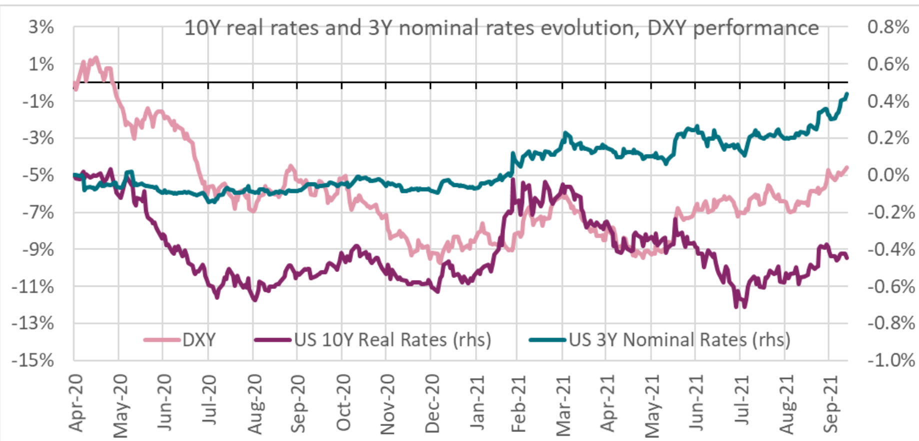
Source: AXA IM as at 18/10/2021

FX Strategy

US dollar buoyed by prospects of Fed lift-off

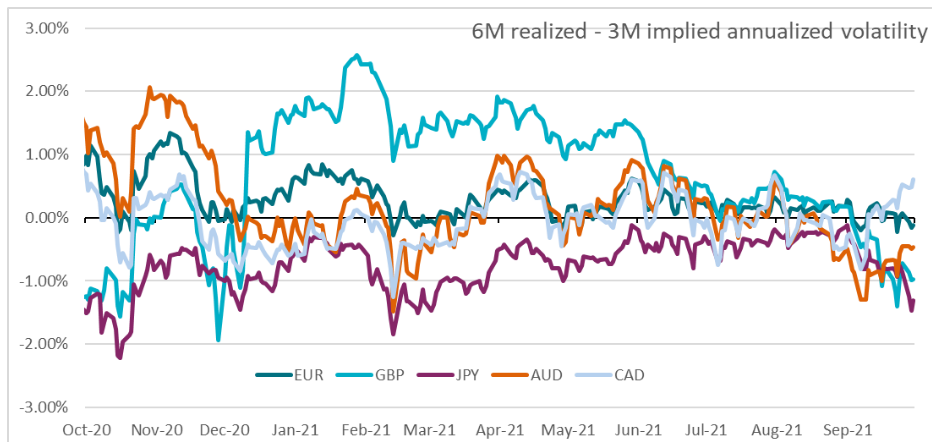
- Inflation pressures are set to last longer than expected and markets are repricing for earlier and further central bank rate hikes. The Fed falls into this category and USD support has switched from tapering expectations, via the real rate differential, to the more direct and powerful driver of rising interest rate differential.
- Rising energy prices are now adding to already significant inflation pressures in Canada. This helps CAD appreciation beyond what the repricing of BoC normalization implies. This dynamic has supported other commodity currencies too, but the NOK has some catching up to do.
- Rising energy prices are also a challenge for the UK as well as for the EU. Yet by comparison, GBP has performed well recently as BoE expectations have risen sharply hawkish side. But the horizon seems more uncertain in the UK than other G10 countries, as sources of inflation pressures are amplified by Brexit supply shocks and are potentially more damaging to growth.

USD drivers switching from QE tapering to rate hikes expectations



Source: Bloomberg and AXA IM Research, October 2021

Rising concerns on GBP and JPY vs rising confidence in CAD



Source: Bloomberg and AXA IM Research, October 2021

Rates Strategy

US Treasuries facing the combined scenario of tapering and 'higher for longer' inflation

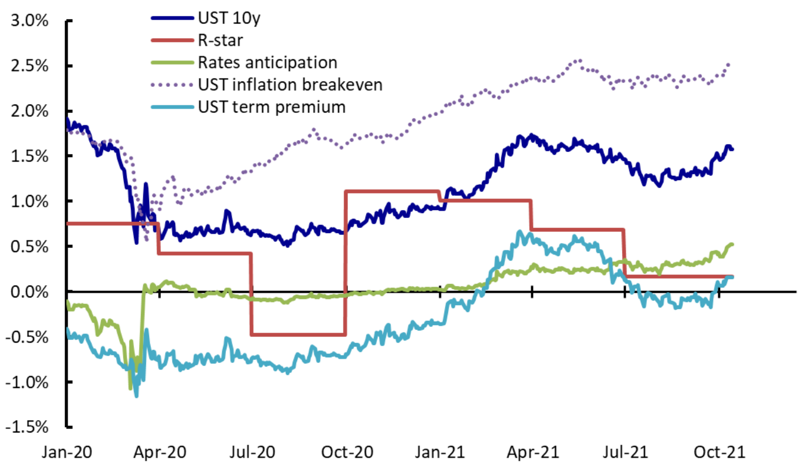
- US Treasuries continue to have a challenging year in terms of performance: Total return stands at -2.6% year-to-date, with a rather heavy -1.5% during the past month. By contrast, TIPS are enjoying the ride at +4% ytd, especially the duration hedged TIPS index at +7.5% ytd (proxy of breakevens' performance).

- Common yield factors have accelerated recently: Breakeven inflation is up 15bp, rates expectations are 22bp higher and the term premium has jumped by almost 30bp. Supply-side bottlenecks, commodity prices as well as various exogenous factors (e.g. drought & freeze in Brazil) have charged the inflation theme, spilling over in tapering expectations and ultimately in rising term premia.

- Rising inflation expectations merit a deeper look. Both market participants and policy makers focus on transitory components – mainly related to commodity markets. But there is a risk of a more persistent effect.

Common yield factors have all moved higher

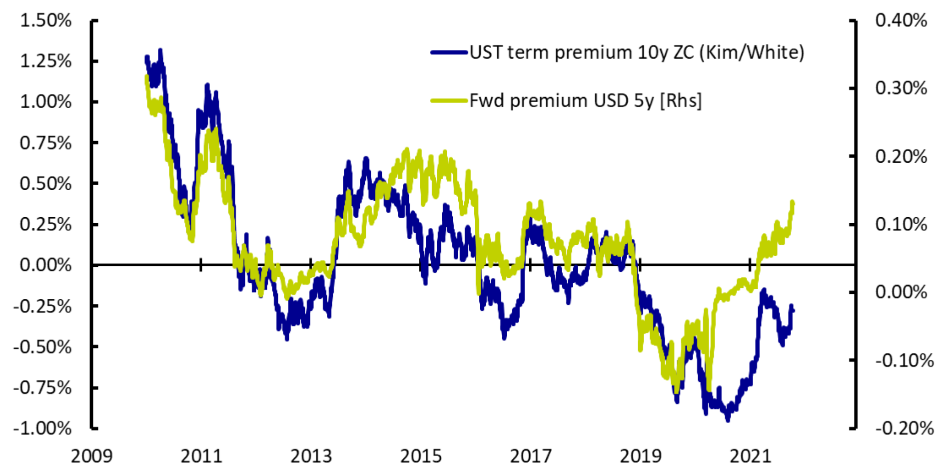
US Treasury factor decomposition



Source: Bloomberg and AXA IM Research, October 2021

Tapering implies a higher term premium

US term premium proxies



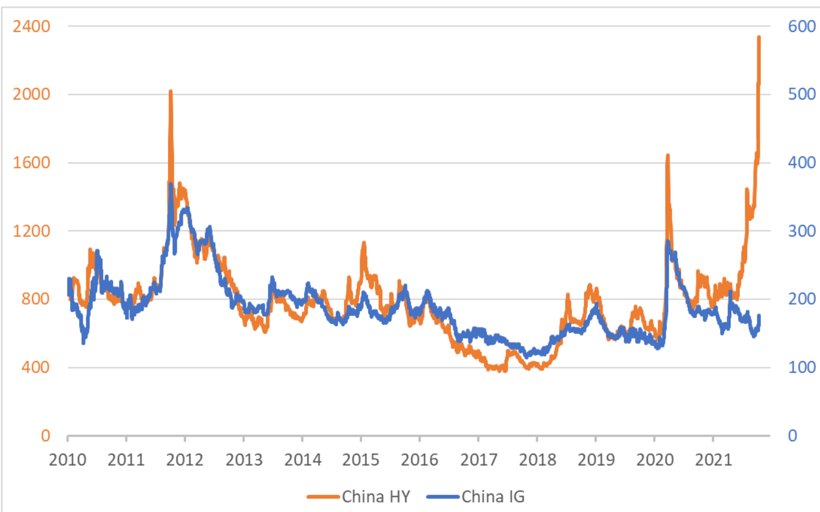
Source: Bloomberg and AXA IM Research, October 2021

Credit Strategy

Evergrande contagion appears ringfenced at many levels and rising rates not a major threat either

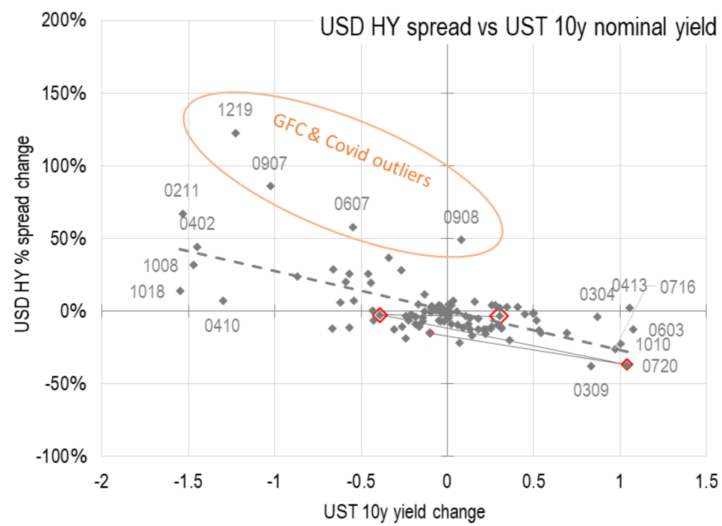
- The Evergrande conglomerate woes have spread to a few other Chinese property companies, driving (offshore) China high yield (HY) spreads to historically record wides. The China property sector crisis, however, appears ringfenced on multiple levels; within HY sectors, in HY vs IG index spreads, and in Chinese vs Global risk premia.
- The notable rise in global interest rates since mid-September has reignited investor concerns about the potentially adverse impact of higher yields on credit spreads. By and large, such concerns are misplaced.
- Historical data do confirm the mechanical relationship between yields and spreads, whereby spreads tend to absorb the rise in yields, shielding credit yields in the process. This negative correlation applies not only to nominal yields but real yields and inflation breakevens as well.

6-sigma HY-IG decompression event in China credit as IG resists contagion



Source: ICE and AXA IM Research, October 2021

USD HY spread change during UST yield cycles



Source: ICE, Bloomberg and AXA IM Research, October 2021

AXA Investment Managers

Equity strategy

All eyes on the earnings season

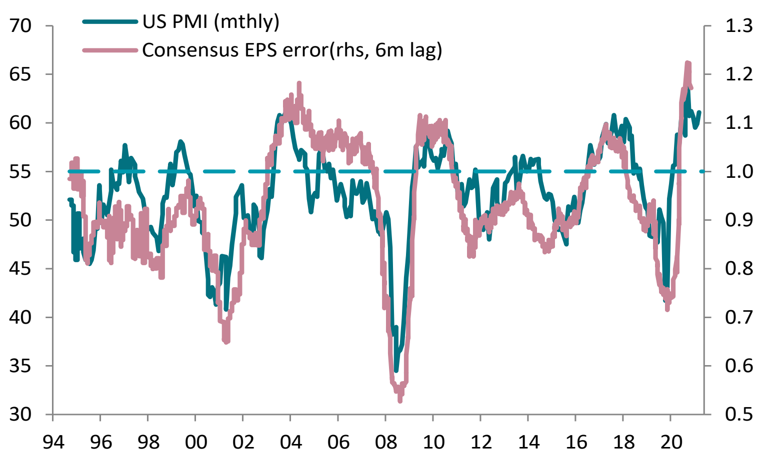
- September stands out as the first month of the year where global equities posted losses, with the UK being the only positive contributor across regions (+2%). Rising bond yields in major markets underpinned Value (0.1%) versus Growth (-4.6%). On the sector front, Energy (+16.2%) and Financials (+2.2%) led the pack, while Communications (-5.2%) and Tech (-4.9%) lagged.

- The third quarter earnings season has just begun and will be an important driver of year-end performance. In addition, companies' guidance will give an insight into their ability to manage supply chain disruptions and passing costs to consumers. Earnings growth consensus estimates remain strong on a YoY basis, but the current backdrop of elevated but declining PMIs implies that there is downside risk.

- The VIX, as a key proxy for market risk, does not currently seem to question the 'transitory inflation' narrative. We have considered the VIX's reaction function to inflation dynamics, looking at both inflation levels (state) and momentum (change). The VIX is currently trading within the 1st and 3rd quartile of its historical distribution when the inflation state is at its highest quintile - its current position.

Less surprising upward earnings surprises to come

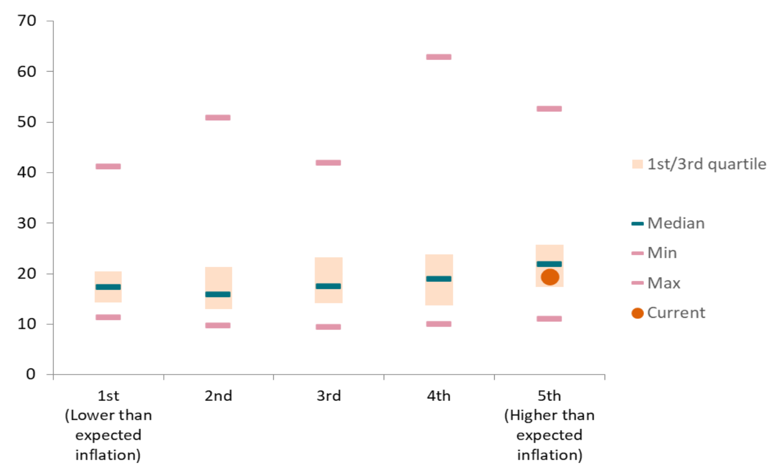
United States: PMI & consensus earnings error



Source: ISM, IBES and AXA IM Research, October 2021

Inflation surprises not unsettling the VIX yet

Inflation surprise state regime and VIX level distribution



Source: CBOE and AXA IM Research, October 2021

Asset allocation stance

Positioning across and within asset classes

Asset Allocation			
Key asset classes			
Equities			
Bonds			
Commodities			
Cash			

Equities			
Developed			
Euro area			
UK		▼	
Switzerland			
US			
Japan			
Emerging & Equity Sectors			
Emerging Markets			
Europe Cyclical/Value			
Euro Opening basket			
Euro Financials			
US Financials			
US Russell 2000			

Fixed Income			
Govies			
Euro core			
Euro peripheral			
UK			
US			
Inflation Break-even			
US			
Euro			
Credit			
Euro IG			
US IG			
Euro HY			
US HY			
EM Debt			
EM Bonds HC			

Legend Negative | Neutral | Positive **Change** ▲ Upgrade | ▼ Downgrade

Source: AXA IM as at 18/10/2021

Investment Managers

Forecasts & Calendar

Macro forecast summary

Forecasts

Real GDP growth (%)	2020	2021*		2022*	
		AXA IM	*Consensus*	AXA IM	*Consensus*
World	**-3.6**	**5.6**		**4.3**	
Advanced economies	**-5.2**	**5.0**		**4.0**	
US	**-3.4**	**5.7**	5.9	**3.9**	4.3
Euro area	**-6.7**	**4.7**	5.0	**3.9**	4.4
Germany	**-4.9**	**2.3**	3.1	**4.0**	4.4
France	**-8.0**	**5.9**	6.1	**3.5**	3.8
Italy	**-8.9**	**5.2**	5.7	**3.7**	4.3
Spain	**-10.8**	**4.8**	6.1	**5.4**	6.0
Japan	**-4.9**	**2.5**	2.3	**3.2**	3.0
UK	**-10.0**	**6.9**	6.7	**5.2**	5.4
Switzerland	**-3.0**	**3.6**	3.5	**3.3**	3.0
Emerging economies	**-2.6**	**5.9**		**4.6**	
Asia	**-1.3**	**6.9**		**5.3**	
China	**2.3**	**7.9**	8.4	**5.5**	5.6
South Korea	**-0.9**	**4.0**	4.1	**3.0**	3.2
Rest of EM Asia	**-5.6**	**5.9**		**5.4**	
LatAm	**-7.3**	**5.6**		**2.4**	
Brazil	**-4.1**	**5.2**	5.0	**1.6**	2.2
Mexico	**-8.5**	**6.5**	6.1	**2.3**	3.0
EM Europe	**-2.3**	**5.5**		**3.6**	
Russia	**-2.8**	**4.5**	3.5	**3.3**	2.7
Poland	**-2.7**	**5.3**	4.8	**5.2**	5.1
Turkey	**1.6**	**8.0**	6.2	**3.0**	3.5
Other EMs	**-3.7**	**3.3**		**4.1**	

Source: Datastream, IMF and AXA IM Macro Research – As of 18 October 2021   * Forecast

Expectations on inflation and central banks

Forecasts

Inflation Forecasts

CPI Inflation (%)	2020	2021*		2022*	
		AXA IM	*Consensus*	AXA IM	*Consensus*
Advanced economies	**0.8**	**2.8**		**2.2**	
US	**1.2**	**4.3**	4.3	**3.3**	3.1
Euro area	**0.3**	**2.4**	2.2	**1.7**	1.7
Japan	**0.0**	**-0.1**	-0.2	**0.4**	0.5
UK	**0.9**	**2.4**	2.2	**3.7**	2.8
Switzerland	**-0.7**	**0.5**	0.5	**0.6**	0.6

Source: Datastream, IMF and AXA IM Macro Research – As of 18 October 2021

* Forecast

Central banks' policy: meeting dates and expected changes

Central bank policy
Meeting dates and expected changes (Rates in bp / QE in bn)

		Current	Q4-21	Q1-22	Q2-22	Q3-22
United States - Fed	Dates	0-0.25	2-3 Nov 14-15 Dec	25-26 Jan 15-16 Mar	3-4 May 14-15 June	26-27 July 20-21 Sep
	Rates		unch (0-0.25)	unch (0-0.25)	unch (0-0.25)	unch (0-0.25)
Euro area - ECB	Dates	-0.50	28 Oct 16 Dec	20 Jan 10 Mar	14 April 9 June	21 July 8 Sep
	Rates		unch (-0.50)	unch (-0.50)	unch (-0.50)	unch (-0.50)
Japan - BoJ	Dates	-0.10	27-28 Oct 16-17 Dec	17-18 Jan 17-18 Mar	27-28 April 16-17 June	20-21 July 21-22 Sep
	Rates		unch (-0.10)	unch (-0.10)	unch (-0.10)	unch (-0.10)
UK - BoE	Dates	0.10	4 Nov 16 Dec	3 Feb 17 Mar	5 May 16 June	4 Aug 15 Sep
	Rates		unch (0.10)	+0.15 (0.25)	unch (0.25)	+0.25 (0.50)

Source: AXA IM Macro Research - As of 18 October 2021

Calendar of 2021-2022 events

2021	Date	Event	Comments
October	Q4	US expected to pass bipartisan infrastructure bill and reconciliation package	
	Oct	Jay Powell reappointment as Fed chair (expected)	
	21 Oct	Japan's House of Representatives term ends (likely postponed to Nov)	
	27 Oct	UK Budget	
	28 Oct	ECB Meeting	Unchanged (-0.5)
November	2-3 Nov	FOMC Meeting	Unchanged (0-0.25)
	4 Nov	BoE Meeting	Unchanged (0.1)
	1-12 Nov	UN Climate Conference COP (held in UK)	
	27-28 Nov	BoJ Meeting	Unchanged (-0.1)
December	Early Dec	US debt ceiling	
	Dec	China Central Economic Work Conference	
	3 Dec	US government shutdown	
	14-15 Dec	FOMC Meeting (expected taper announcement)	Unchanged (0-0.25)
	16 Dec	ECB Meeting	Unchanged (-0.5)
	16 Dec	BoE Meeting	Unchanged (0.1)
	16-17 Dec	BoJ Meeting	Unchanged (-0.1)
2022	**Date**	**Event**	**Comments**
January	Jan	Italian Presidential Elections (TBD)	
	Jan	FOMC to commence taper (expected)	
	20 Jan	ECB Meeting	Unchanged (-0.5)
	25-26 Jan	FOMC Meeting	Unchanged (0-0.25)
February	Feb	Fed Chair Jay Powell's term expires	
	Feb	BoE Meeting	Unchanged (0.1)
March	March	FOMC Meeting	Unchanged (0-0.25)
	March	China National People's Congress	
	March	South Korea Elections	
April	10 & 24 April	French Presidential Elections	
May	May	Philippines Elections	
June	12 & 19 Jun	French Legislative Elections	
October	Oct	Brazil General Elections	
November	8 Nov	US Mid Term Elections	

AXA Investment Managers

Latest publications

[The cost of climate change: Action versus inaction]

30 September 2021

[Decoding China's regulatory paradigm shift- Understanding the implications of pursuing 'common prosperity]

30 September 2021

[September Global Macro Monthly –Supply constraints add to inflation angst]

22 September 2021

[Asia: "Made in Vietnam"- Understanding the rise of Vietnam as an export powerhouse]

14 September 2021

[Fit for 55: A carbon pricing upheaval]

27 July 2021

[July global Macro Monthly - Clouds darken Summer re-opening]

29 April 2021

[Unpacking Made in China]

15 July 2021

[June Global Macro Monthly- The European green deal]

24 June 2021

Issued in the UK by AXA Investment Managers UK Limited, which is authorised and regulated by the Financial Conduct Authority in the UK. Registered in England and Wales No: 01431068. Registered Office: 22 Bishopsgate London EC2N 4BQ

In other jurisdictions, this document is issued by AXA Investment Managers SA's affiliates in those countries.