Words and action

111 – 8 November 2021

Key points

- The message from COP26 may be that we need to focus less on generic pledges and more on implementation.
- It has been a momentous week for central banks, with the Federal Reserve coming out with the least drama.
- Tapering is not necessarily consistent with an equity market correction. It's when central banks start reducing the size of their balance sheet, rather than merely stabilizing it, that things could get tougher.

Those who like to see their glass half full will want to focus on progress seen at COP26 last week, such as the announced conversion of India to "net zero" (albeit by 2070 only) or the ambitious deal on methane. However, it is disheartening that the world's top two greenhouse gas emitters, the US and China, as well as India, refused to join the agreement on phasing out coal. Politics are getting in the way in the US, while China's experiment last summer with a "coal-free diet" ultimately illustrated the country's dependence on this most harmful form of fossil fuel. This week there could be progress on the so far intractable negotiations on international carbon trading, but we feel the main conclusion of this COP is that focus may now be moving away from generic pledges – as important as they are – towards implementation monitoring. We reiterate our view from last week: trade policy could well become the main channel for "carbon geopolitics", potentially at a sizeable economic cost for all stakeholders.

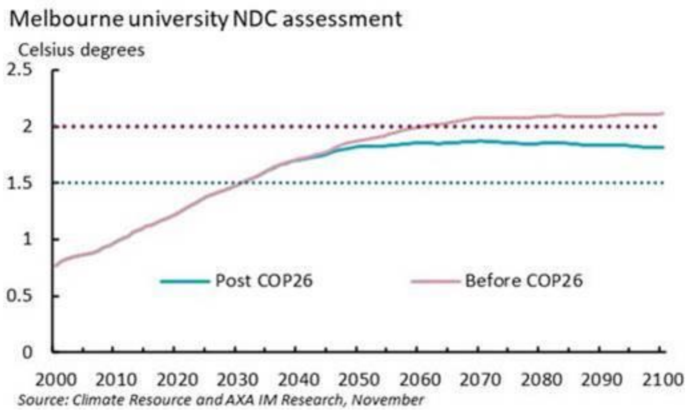
Meanwhile, central banks had another momentous week. Probably more than the European Central Bank's (ECB) Governing Council members who have lined up to push back against aggressive market pricings of the policy rate lift-off, it's the Bank of England's decision not to be proceed with the rate hike it had telegraphed to the market which may have pushed expectations for the first ECB hike back into 2023. As the Bank of England has "bottled it" despite more acute inflation risks in the UK than in the Euro area, this shows the bar for early monetary tightening is high. There is a price to pay in terms of credibility for the British central bank though. Conversely, the Federal Reserve (Fed) had an easy week with Jay Powell defying market expectations of an endorsement of a rate lift-off in 2022, thus cushioning the impact of the announcement of tapering. The Fed's willingness to retain maximum optionality is a double-edged sword though. While so far, the market has taken it on the dovish side, the central bank's explicit doubts on where full employment is in a post-Covid world could ultimately convince the Fed to hike quite quickly.

We are not surprised by the equity market's absence of reaction to tapering. In a recent paper we quantified the impact of quantitative easing on stocks. It's only when the Fed starts reducing its balance sheet – i.e. sells back the paper it has bought – that equity prices would fall. We have time to think about this.

Life after blah blah blah

We indicated last week that expectations had fallen so low ahead of COP26 that positive surprises were possible. To some extent this has been the case in the realm of the decarbonization pledges, with India in particular announcing a net zero objective for 2070 which, although later than in the other key regions, sets the country on a path which can have a visible impact on the global trajectory. The specific agreement on methane pushed by the EU and the US and supported by more than 100 countries is fairly ambitious, with a 30% reduction in emissions of this gas between 2020 and 2030. Scholars from the university of Melbourne, drawing on all the "new new Nationally Determined Contributions (NDCs)" – which could not have been considered in the computation from the UN Secretariat we presented last week – suggest that a global warming of 1.9 degrees can be in reach, from 2.2 degrees before COP26 (Exhibit 1). Uncertainty is wide around these simulations, especially coming out so fast after the NDCs were revised, but at least the mere possibility of exiting from the Glasgow conference with keeping the world within the global warming range targeted by the Paris agreement, albeit at the upper end, is comforting. However, crucial to this type of assessments is the implementation of the pledges, and on this a good measure of scepticism is probably warranted. **The "blah blah blah" – to borrow a word from Greta Thunberg - matters and is going in the right direction, but good deeds must follow good words.**

Exhibit 1 – An inch better (if fully implemented)



The very form of some of the alliances created at COP26 lends itself to "implementation vagueness". For instance, to maximize support for the methane initiative, countries can join without making any disclosure on how they intend to reach the target. There are concrete measures in the pipeline – for instance in the US the Environment Protection Agency's new regulation mandating a 25% reduction from 2005 in methane emissions from the oil and gas industry – but this is not a general case.

More fundamentally, as negotiations continue in Glasgow, they also do in Washington DC. While the House of Representatives has finally – with help from a few Republicans – managed to pass the bi-partisan infrastructure investment deal, the social and environmental package which would have given substance to Biden's announcements is still in limbo. The latest reports from the US press mentioned "after Thanksgiving" as the new likely time for such vote. The left of the Democrats has lost a battle here: they had been threatening to torpedo the infrastructure deal if the social and green package was excessively shrunk to accommodate the fiscally (and environmentally) conservative Senators in the Democratic caucus. So, the "natural slope" is probably that of significantly reduced ambition on the US economy greening. A specific issue is that the US does not have much time to deliver on its intermediate targets, given the lack of political consensus around the fight against global warming. The heavy defeat of the Democrats in Virginia last week does not bode well for their chances in the mid-term elections in November of next year. If the Republicans win the presidency in 2024 again, the next legislative acceleration on net zero could be postponed until 2028 at least.

True, there can be progress on the carbon front in the US irrespective of who dominates the Washington agenda. Since greenhouse gas (GHG) emissions peaked in the US in 2004, the pace of decline has been quite steady, and was exactly the same under Donald Trump as in the 10 years before (Exhibit 2). Yet, there are limits to what states can do without federal impetus. If one prolongs the current pace of GHG decline, the US would still be very far from net zero at the end of the century, let alone 2050. A very significant acceleration is needed. **It is disheartening to see that the two biggest GHG emitters in the world, the US and China, chose to stay away from an agreement to phase out coal.** In the US case, once again the very specific political balance is probably to blame, given the capacity of Joe Manchin, hailing from a coal-producing state, to block the presidential agenda in the Senate.

China has been through a quite telling "natural experiment" over the last few months when it comes to coal, at the crossroads of geopolitical, environmental, and economic concerns. Australia supplied nearly 40% of total Chinese imports of coal before the pandemic. Beijing imposed a de facto ban on this supply after Canberra backed an international inquiry into the origins of Covid. This has contributed to a shortage of coal (see the low levels of inventories in power plant in Exhibit 3) which ultimately triggered electricity outages which added to the deterioration in economic activity in the third quarter. As a response, Beijing is trying to diversify its foreign suppliers, but a likely consequence of the current shortage will be a push towards more domestic production, which ultimately could make it more difficult to indefinitely move away from coal, given its higher share in local investment and employment. In any case, the "sudden stop" in coal with which Beijing experimented last summer has exposed the country's dependence on that source of energy.

Exhibit 2 – It's going to take quite an acceleration

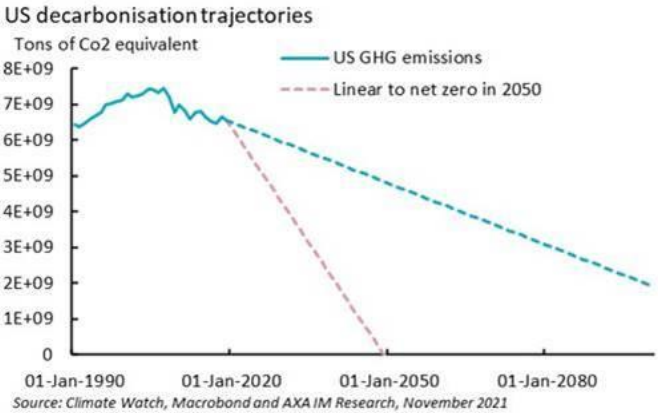
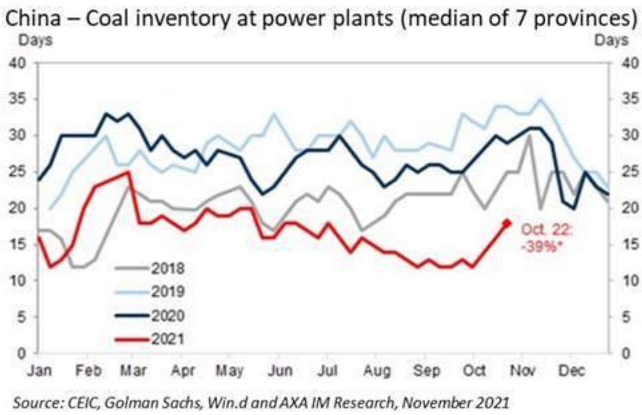


Exhibit 3 – Nice try….

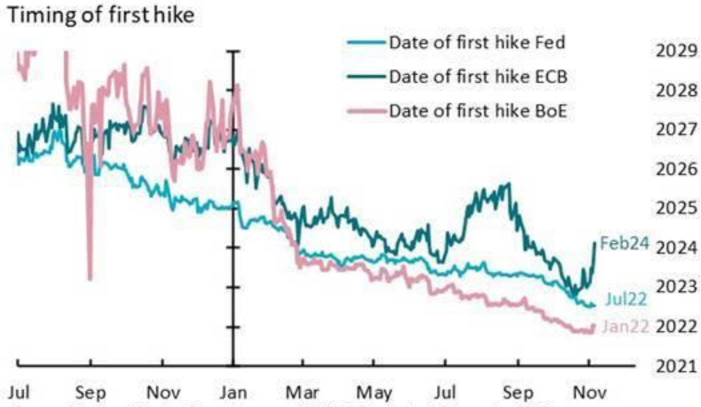


As the Glasgow conference is starting its second week, focus is squarely on international carbon trading. The Paris agreement in its article 6 has opened the door to three different frameworks allowing countries to trade their "over-achievements" in terms of GHG emission reduction, with safeguards to avoid double counting (a quantum of decarbonization sold by country A to country B would not count towards progress to net zero in country A). This would go some way to allow a global price of carbon to emerge, which would help the decarbonization process everywhere. However, this raises daunting technical issues, in particular in terms of independent verification, and the negotiations are made more complicated by the fact that some emerging countries want to be able to "grand-father" old credits created under a previous framework by the Kyoto protocol. This has been one of the trickiest issues to sort out since the Paris agreement, but negotiators were "cautiously optimistic" an agreement could be reached this week.

Good words and (absence of) bad moves

We expressed our concern last week over the difficulty for Christine Lagarde – despite the dovishness of her statements – to take some control of the market which, as she was speaking, was pricing rate hikes more and more aggressively – and pushing yields significantly higher in Italy. Fortunately, a concerted communication effort from other members of the Governing Council helped straighten things up. The latest utterance – as we write – came from the normally *ueber* hawkish Governor of the Austrian central bank who, upon siding with Lagarde on the point that a hike is unlikely in 2022 opined that *"it's important to raise rates when there's too much demand and inflation results from excessive wage demand… but the current bout of inflation is primarily a supply shock".* Indeed. It seems that the market-led tightening in financial conditions which we highlighted last week provided "food for thought" beyond the usual dovish and centrist circles.

Exhibit 4 – ECB-Fed lag reappearing (fortunately)



Source: Morgan Stanley, Bloomberg and AXA IM Research, 5 November 2021

Interestingly, **Holzmann used the same line as Bank of England Andrew Bailey in an interview to justify his inaction last week.** Possibly, this, more than any dovish comments from the Governing Council, was decisive in moving market pricing for the ECB's rate lift-off, now back into 2024, from the autumn of 2022 last Thursday, with now a very healthy – and euro-weakening – lag relative to the Fed (Exhibit 4). Indeed, since inflationary risks are much more acute in the UK than in the Euro area, that ultimately the Bank of England "bottled it" and chose not to hike despite Bailey's own "telegraphing" to the market in the previous weeks, provides a natural experiment in how difficult it is going to be everywhere to break from accommodative policy. Of course, this "last minute swerve" is not going to help the Bank of England's credibility, but we think Bailey and the Monetary Policy Committee (MPC) did the right thing in choosing the right decision from a fundamental point of view (not hiking, given the uncertainty still surrounding the British outlook) rather than deliver a half-hearted hike for the sole purpose of avoiding a "complicated moment" for their reputation.

Now, it there's one central bank boss who had a good week, that's Jay Powell, who managed to contain drama. The form of tapering he announced was roughly in line with expectations: starting with 15bn a month in Nov and Dec, a pace which the Fed sees as "*likely to be appropriate"* after that, which would get them to zero by June 2022. Yet, there was a twist in their point on reserving the right to alter this pace should the macro-outlook change (presumably in any direction). There was some mild hawkish change of rhetoric on inflation, since the Fed no longer see it as "transitory" pure and simple, but "reflecting *factors which are expected to be transitory"*) but on substance Powell still sees no major second round risks via the Labour market.

But since market have been focusing on the likely trajectory for conventional monetary policy rather than on quantitative easing (QE), the real issue at stake for Powell last week was to navigate the questions on rates. He simply refused to get cornered into a discussion of current market pricing – from this point of view it was not as dovish (albeit inefficient) as Lagarde the previous week – sticking to the line that the discussion on rates is independent to the one on QE. They want to be "*in position to hike if need be*" but they also want to be patient. Where Powell's job was easier than Lagarde is that the market was expecting some indirect endorsement of the possibility of a rate hike in 2022, while Lagarde was expected to push back. So, his silence alone was a dovish signal relative to pre-conference positioning.

In a nutshell, the Fed has managed to retain considerable optionality for next year. For now, the market has taken it on the dovish side, but it's a double-edged sword. A key – and perfectly sound – reason for such optionality is the Fed's own hesitations on the interpretation of the recent macro developments. We note that Powell was happy to state the Fed's difficulty to assess what's the new level for full employment in the post-pandemic environment *"there's room for a whole lot of humility here as we try to think about what maximum employment would be"*. So, as much as for now the Fed believes there is still some slack on the labour market, it could actually be smaller than commonly expected, forcing the central bank to react even without much additional job creation.

From this point of view, last week's payroll data is interesting. What we find particularly interesting – rather than the pace of monthly job gains which is profoundly volatile – is the stubbornly low level of labour market participation (61.6%, hovering around this level for a year now). If this significant drop in the labor capacity persists, then full employment would be reached quickly. Now, it may be that Covid-related disruptions have kept a lot of people out of the labor market given difficulties with childcare, or that the strong performance of the equity market has convinced some people to take early retirement, but for how long these factors will affect participation is an open question. **We expect the Fed to hike in December 2022, but while our baseline is that by the end of 2023 the tightening would reach "only" 75 basis points, the balance of risk is tilted to more action by the Fed.**

Tapering is not necessarily bad for equity

Powell's relatively dovish message – in so far as he chose not to endorse market pricing of a rate lift-off in 2022 – has coincided with more gains on the equity market. At first glance it may be a bizarre reaction, as if the market wasn't paying any attention to the fairly quick termination of quantitative easing in the US. QE is, by construction, a bubble-making machine. By pushing asset prices above their fundamental level, it generates positive wealth effects and reduces the cost of capital. Symmetrically, one would expect a reversion to fundamentals when QE stops, eliminating the 'central bank froth' component of the market. Still, we would contend that **there is no reason why the equity market should enter in correction mode upon tapering, even though the potential for more progress would be diminishing. It is when the central banks start reducing the size of their balance sheet, instead of merely stabilizing it, that times could get much tougher.**

We have explored this in a technical note last week with Hugo Le Damany, a young promising economist in our team, by estimating models identifying the respective impact of fundamentals, conventional and unconventional monetary policy on US equity prices over the last 15 years. For the sad souls who, like your humble servant, like to check the soundness of the data and scrutinize the details of the econometric methods, the full paper is available here.

We try to explain the changes in the S&P500 index with four different variables. First, we use corporate profits, as measured by the US national accounts, as a proxy for fundamentals. Second, to capture the Fed's unconventional policy we use the change in the size of its balance sheet. It is a synthetic indicator which looks through the changes over time in the Fed's specifications of its QE programmes. Third, we introduce the Fed Funds Rate, as both a proxy of the discount rate to apply to equities and of the level of support the Fed is providing to the economy in normal conditions – i.e. when the lower bound has not been hit and conventional policy suffices. Fourth, the model also takes into account the VIX volatility index as an indicator of market stress. We distinguish in our estimations two sectors: Information technology (IT) and 'everything else'. Their sensitivity to fundamentals and monetary policy are likely to differ.

Let's start with the impact of the "fundamentals". A 1% change in profits lifts non-IT equity valuations by 0.27%. To get a better sense of the magnitude of the relationship, the annual standard deviation of US corporate profits – outside the IT sector – stands at 16%. Hence, the normal variability of profits would trigger changes in equity prices to the tune of 4.5%. Conversely, and in line with our expectations, the impact of the corporate profits variable in IT is counter-intuitive. For this sector, the coefficient is negative (higher earnings would depress equity prices), but actually statistically different from zero only at the 10% confidence threshold. We think this reflects the fact that **in IT, the epitome of growth equity, investors do not derive their expectations for future profits – theoretically the driver of valuations – from current or recent realized profits.** They are ready to tolerate very low or even falling levels of realized profits as they anticipate potentially disruptive results in the future. Conversely, investors visibly use realized profits as a good proxy for future earnings in the rest of the economy.

Another of our assumptions is confirmed by our estimations**: high tech is much more sensitive to variations in the size of the Fed's balance sheet than the rest of the index.** This difference in sensitivity across sectors is true for the entire estimation period, even though the breaks we identify in the relationship points to an increase in the role of the balance sheet over time. Over the last five years, a 1% rise in the Fed's balance sheet would boost valuations by 0.8% in IT, against 0.5% in the rest of the economy. The sensitivity of equity prices to QE has tripled in both sectors. Note that the introduction of non-conventional policy in our equations still left a role for the Fed's policy rate, with a similar impact across sectors (elasticity of 0.1).

This reflects to some extent the fact that **IT stocks are "long duration" and should thus be more sensitive to changes in long-term interest rates, which of course are affected by QE**. So, the relationship we find may only be indirect. But when we introduced the US 10Y yield in our equations, they only marginally reduced the explanatory power of the Fed's balance sheet. There seems to be a "quantity effect" which goes far beyond the mechanical impact on long-term rates. We would suggest that investing in IT companies entails a higher level of risk-taking, which is more readily envisaged when liquidity is particularly ample – a side-effect of QE – and when interest rates have hit record low levels.

Exhibits 5 et 6 suggest our equations do a good job of predicting the inflexions in equity prices across the two sectors over the last 15 years, with fairly small residuals. They also illustrate how dependent the equity market has become on QE in the last two years – this variable alone explains the near-entirety of the valuation gains.

In our equations, what matters is the *change* in the size of the Fed's balance sheet. Since tapering is a gradual reduction in the pace of purchasing, and since the Fed would continue reinvesting the maturing bonds it already holds, its balance sheet would actually continue rising, to stabilize only in the middle of 2022. This would be consistent with a still positive – albeit shrinking – contribution from the Fed's balance sheet to equity prices in year-on-year (yoy) terms.

Exhibit 5 – Model does a good job at explaining equity prices…

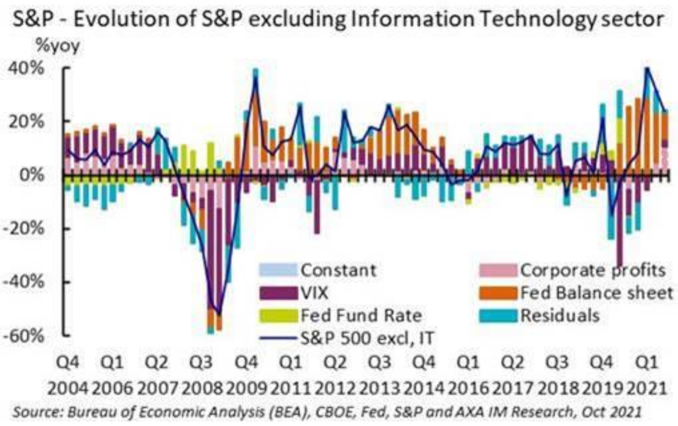
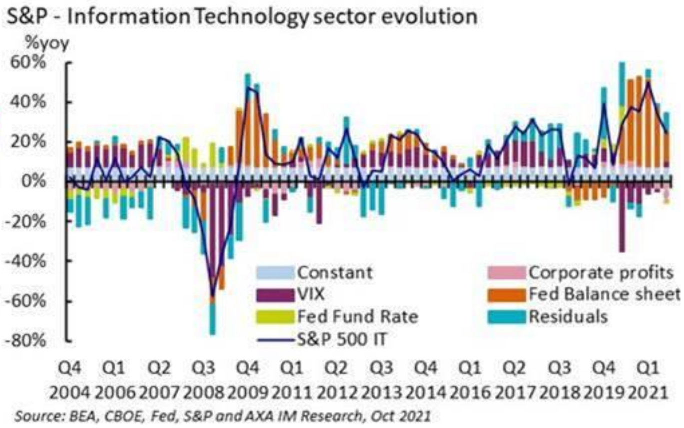


Exhibit 6 - …across the two sectors



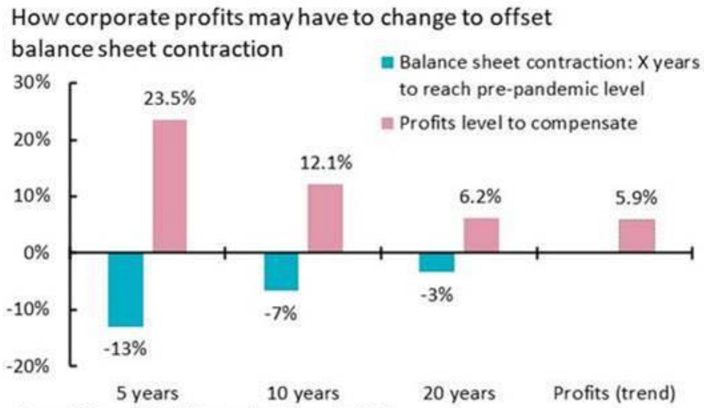
We have at least one example to verify the conclusion from our model. **After the 'taper tantrum' of mid-2013, the Fed terminated its QE programme in 2014, thus stabilizing its balance sheet. Equity prices stalled but did not decline in yoy terms**. Of course, we cannot discard the possibility that this time, tapering would trigger generic stress in the market. What appears to have saved equities after 2013 was several years of peace and quiet, encapsulated in the decline of the VIX index, triggering a positive contribution to equity prices (visible in Exhibits 5 and 6). However, over the last 15 years, there has been zero correlation between VIX and the change in the Fed's balance sheet. We don't see why a link would appear now.

Since unconventional policies were deployed massively during the global financial crisis of 2008-2009 the market has rarely seen the central bank offload its balance sheet in large quantities, i.e. selling back into the market the bonds acquired through QE. However, **the Fed's balance sheet declined from the end of 2017 to 2019, which is reflected in the negative contribution of this variable to equity prices at the time which can be seen in Exhibits 5 and 6. The market did not tank but its performance was overall mediocre**.

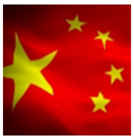
To show how sensitive the market could be to this in the future, we have computed what annual rate of decline in the Fed's balance sheet would be needed to bring it back to its pre-pandemic level in 5, 10 and 20 years. Using the relative elasticity of non-IT equity to profits and changes in the Fed's balance sheet, we have also computed what growth rate in profits would be needed to offset the impact on equity prices of such offloading (Exhibit 7). Only the slowest pace (20 years) would protect against a decline in equity prices if profits remained on their past trend.

From an equity market point of view, it would thus be that decision – the speed of the balance sheet normalization – rather than the pace of tapering which will be key for the Fed. We have time to think about this though.

Exhibit 7 - Offloading will need to be slow not to be disruptive



Source: BEA and AXA IM Research, 2 November 2021

Country/Region	What we focused on last week	What we will focus on in next weeks
	• FOMC announced taper to start mid-November. Maintains 'transitory' assessment of inflation, but "full employment" definition appears to slip. We forecast 0.25% hike in Dec 22, and 3 in 2023. • Payrolls (Oct) posted a strong rebound of 531k (with Sep upgraded +118k). Unemp dipped to 4.6% from 4.8%, and earnings rose by 0.4%mom • ISM services reach record high of 66.7 • House to vote on $1.75tn & bipartisan packages • Special elections suggest sig Republican gains	• US inflation (Oct), both CPI (Weds) and PPI (Tues). CPI expected to reach new high on energy developments, but PPI expected stable. • Following progress on passing spending bills last week, expect focus to shift to Senate. • President Biden promised a "fairly quick" decision on whether to reappoint Fed Chair Powell, which might come this week.
	• Oct EMU final PMI confirmed the slowdown in the pace of activity but remained comfortably in expansion territory: Mfg (58.3)/svcs (54.6) • IP corrected by 1.1%mom in Ge and 1.3% in France while Sept EMU retail sales fell by 0.3% mom as Ge dropped by 2.5%, threatening downside revisions for Q3 GDP growth	• Nov ZEW economic sentiment may slightly soften on the back of surging input prices, supply shortages and inflation eroding purchasing power • Sept IP for It and aggregated euro area • Ge and Fr trade data • Oct final inflation figure for Ge and Sp.
	• MPC defied market expectations voting 7-2 to keep rate at 0.1%. We now forecast +0.15% hike in Dec following key post-furlough labour market data releases and +0.25% in May. • UK services PMI (Oct), revised higher to 59.1 (from 58.0), Mfg remains solid at 57.8.	• UK GDP (Sep) m/m we estimate 0.3% (consensus 0.3%). Q3 GDP, we estimate 1.3% (consensus 1.5%). • UK industrial and manufacturing output (Sep) • UK trade balance (Sep)
	• Legislative elections results are mixed. The LDP captured fewer seats but still retained 56% of the lower house (63% with its partner). • Oct svcs PMI crossed the 50 threshold for the 1st time since Jan 20, Mfg unch. at 53.2	• A draft of an additional supp budget should be unveiled in Nov, focusing on income for the most vulnerable households and SMEs. • Nov Reuters Tankan Mfg and non-Mfg indices • Oct Economy Watchers Poll
	• Mixed picture in the manufacturing sector, as power shortage hits large, domestic-oriented firms harder than small companies in export industries	• Inflation pressure continues to rise, with the PPI supported by higher oil prices and rise CPI inflation due to PPI pass through
	• CB: There were rate hikes in Poland (+75bps to 1.25%), Czech Rep. (+125bps to 2.75%) and Colombia (+50bps to 2.5%) • Inflation (Oct) picked up pace in Korea (3.2%), Indonesia (1.7%), Thailand (2.4%), Turkey (19.9%), Russia (8.1%) and Peru (5.8%) • Q3 GDP slowed in Korea(3.8%yoy)	• Q3 GDP figures for Malaysia, Indonesia, Philippines, Russia and Poland • Inflation (Oct) numbers for India, Philippines, Taiwan, Hungary, Chile, Mexico and Brazil • CB: Romania should raise its policy rate +50bps to 2.0%, Mexico +50bps to 5.25% and Peru +25bps to 1.75%

Upcoming events	US:	Tue: NFIB small business survey (Oct), PPI (Oct); Wed: CPI inflation (Oct); Thu: Weekly jobless claims (6 Nov); Fri: JOLTS job openings (Sep), Michigan consumer sentiment (Nov,p)
	Euro Area:	Tue: Ge current account/trade (Sep), Ge ZEW survey (Nov); Wed: Ge Inflation (Oct,f), It Ind prod (Sep); Fri: EU19 Ind prod (Sep), Sp HICP (Oct,f)
	UK:	Tue: BRC retail sales monitor (Oct); Thu: RICS housing survey (Oct), GDP (Q3,p), Business investment (Q3,p),), Services indx (Sep), Ind prod (Sep), Manufacturing & construction output (Sep), Trade balance (Sep)
	Japan:	Mon: Leading indx (Sep,p), Trade balance (Sep), Current account balance (Sep); Tue: Economy watchers survey (Oct)
	China	Sun: Exports & Imports (Oct), Trade balance (Oct); Wed: CPI (Oct); Expected during the week: Total social financing (Oct), New yuan loans (Oct), M2 (Oct)

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