ECONOMIC UPDATE
INVESTMENT CLOCK

Fending off recession

Issue #18, September 2019

Multi asset views from RLAM

Royal London Asset Management manages £129.5 billion in life insurance, pensions and third party funds*.

We have six Global Multi Asset Portfolios (GMAPs) across the risk return spectrum with a full tactical asset allocation overlay.

*As at 30/06/2019

This month's contributor:
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Senior Economist

US: Fed easing (of which we expect a bit more to come) clearly helps the outlook; enhanced trade uncertainty clearly doesn't. While some indicators look consistent with a 2020 recession, key will be whether the consumer turns.

China: Further slowing in the Chinese economy is likely given this year's escalation in trade tensions between the US and China. Stimulus has been forthcoming, but remains more modest than previous episodes.

Eurozone: Some aspects of the growth outlook have improved, but plenty of risks remain. Continued downside surprises in inflation mean that further ECB easing measures can't be ruled out.

UK: The path ahead remains very Brexit dependent. Uncertainty will linger and survey data look soft. We tentatively pencil in a rate cut assuming significant Brexit uncertainty stretches beyond 31st October.

Global growth has slowed, and is likely to slow further before bottoming out next year. Recession (US or global) still isn't central case, thanks to resilient consumers and looser monetary policy. But downside risks have grown in recent months with trade tensions ratcheting up. Uncertainty related to US trade relations or Brexit isn't likely to disappear any time soon. Uncertainty is likely to remain a partial drag on business sentiment and global growth in coming quarters and help to prompt a bit more policy stimulus yet.

Summary

Key areas of resilience and stabilisation…: Business surveys in aggregate look more consistent with a stable, though soft, aggregate global picture, rather than a global economy slipping into recession. Consumer data remain relatively robust in many major economies, including in the US where housing indicators are surprising on the upside too.

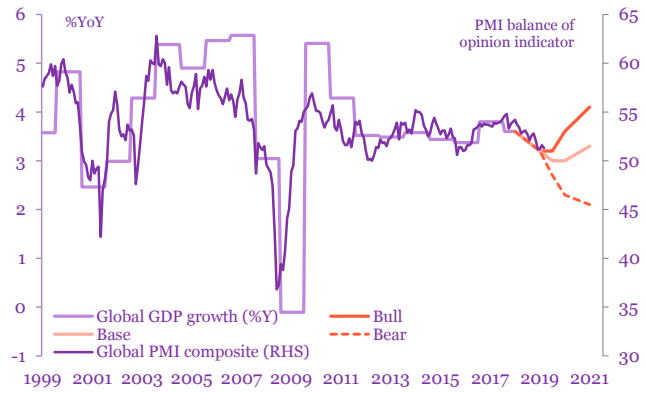
…but worry and uncertainty are widespread: Manufacturing survey data remain particularly weak, with the global PMI manufacturing gauge still below 50.0 in September. The further escalation in US-China trade tensions since the Spring and Brexit are among factors leaving businesses less optimistic about the outlook than they were. Uncertainty around the future policy environment appears elevated which tends to act as a drag on investment and GDP growth. We think it likely that global growth has a bit further to slow yet.

Stimulus welcome: Over the past three months, there has been significant and widespread easing of monetary policy and a smattering of fiscal stimulus announcements too. That's all welcome in the context of weak global growth and we expect more easing before the end of the year, including in the US.

Recession watch: A number of US data series are at levels seen in the four-to-six months ahead of previous recessions, but also at levels seen in past recession *scares*. Weak labour market and consumer data remains an important trigger for recession to move from risk to base case. For now the US consumer still looks relatively resilient. (Modest) technical recession looks more of an immediate risk in the UK and Germany where both economies experienced a contraction in Q2.

Primed to buy dips: Global growth is weak, but policymakers are easing and recession doesn't look imminent. The multi asset team is modestly overweight equities and looking to buy a dip in stock markets. See www.investmentclock.co.uk

Chart 1: Global growth central case: Rough patch rather than recession



Source: IMF, IHS Markit, RLAM forecasts

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Economic forecast summary

October 2019 Base Case

Region	2018 GDP growth	2018 CPI end Q4	2018 Policy Rate Q4	2019 GDP growth	2019 CPI end Q4	2019 Policy Rate Q4	2020 GDP growth	2020 CPI end Q4	2020 Policy Rate Q4	2021 GDP growth	2021 CPI end Q4	2021 Policy Rate Q4
US	2.9	2.2	2.5	2.2	2.0	1.75	1.6	2.2	1.75	2.1	2.1	2.00
				(2.4)	(2.1)	(2.25)	(1.7)	(2.4)	(2.25)	–	–	–
China	6.6	2.2	–	6.2	2.8	–	5.9	1.9	–	5.9	2.1	–
				(6.2)	(2.4)	–	(6.0)	(2.5)	–	–	–	–
UK	1.4	2.3	0.75	1	1.7	0.75	0.7	2.0	0.50	1.5	1.9	0.75
				(1.3)	(1.8)	(0.75)	(1.4)	(2.0)	(1.00)	–	–	–
Euro area	1.9	1.9	0	1.1	1.0	0.0	1.0	1.3	0.0	1.5	1.5	0.3
				(1.2)	(1.4)	(0.0)	(1.4)	(1.5)	(0.00)	–	–	–
Japan	0.8	0.8	-0.1	1.1	1.2	-0.1	0.7	0.6	-0.1	1.1	0.8	-0.1
				(0.9)	(1.5)	(-0.1)	(1.0)	(0.8)	(-0.1)	–	–	–
Global	3.6	–	–	3.1	–	–	3	–	–	3.3	–	–
				(3.2)	–	–	(3.3)	–	–		–	–

Jun 2019 estimates in brackets. US policy rate shows upper bound of Fed Funds target range. Euro area shows refi rate

Source: National Statistics offices, RLAM forecasts; Global GDP for 2018 is IMF calculation

Key central bank forecasts

- In general, central banks and policymakers have not quite done enough to stave off a slowing in the global economy. Global growth will likely slow a bit further from here and be accompanied by further monetary and fiscal easing.
- Fed cuts rates *at least* another 25bp this year.
- European Central Bank (ECB) continues QE programme through to end 2020.
- BoE leaves rates on hold until 2021 if the UK achieves Brexit *with a deal* on October 31st, but cuts 25bp in Q1 2020 if the UK remains in its current state of uncertainty related to Brexit.
- People's Bank of China ease further in coming months.
- Bank of Japan eases further, with some risk of a rate cut

Global economic scenarios 2020

Upside scenario (20% probability): Productivity powers ahead

- Global growth recovers towards 4%, helped by significant improvements in productivity and the impact of more fiscal stimulus than assumed in the base case (and which is also more effective than expected).
- Underlying inflation remains subdued as productivity growth dampens domestic inflationary pressure
- Uncertainty relating to Brexit is rapidly reduced, no deal is avoided and there is minimal disruption to the economy
- Central banks tighten policy gradually, though to only slightly higher levels than in the base case

Base case (60%): Global growth stabilises below post-crisis range, but recession avoided

- Global economic growth stabilises at around 3.0%, with some build in growth momentum from mid-2020
- UK growth remains below average amid continued uncertainty around the final Brexit outcome and domestic politics.
- Inflation pressures build modestly in some countries, as unemployment rates stay low, despite slower growth.
- Central banks ease policy further and more fiscal stimulus packages are announced.

Downside scenario (20%): Trade tensions and a disruptive Brexit

- Trade tensions re-escalate, damaging supply chains across the world and hitting business confidence. Brexit is highly disruptive to the UK economy
- Inflationary pressures are higher than expected in the short term given tariff increases. After some hesitation, central banks ease policy more markedly.
- Global growth moves below 2.5%

Probabilities are subjective and indicative such that we'd broadly see a 20% chance that the economy performs in line with/better than the upside case and a 20% probability that the economy performs in line with/worse than the downside scenario.

Economic outlook

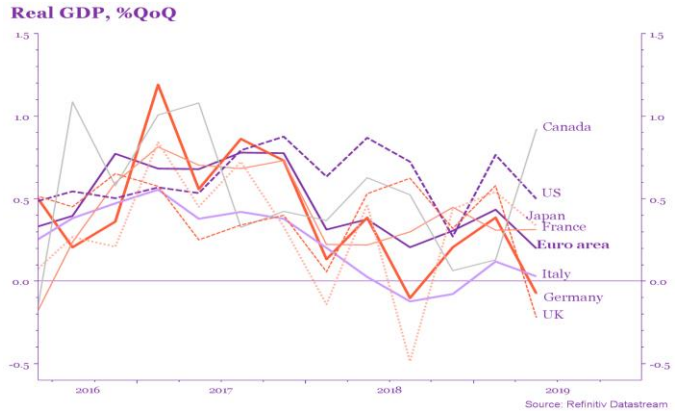
Global economy: Uncertainty premium

Our GDP growth forecasts are still a tug of war between trade tensions and stimulus. Since June, US-China tariffs are (again) higher and levels of economic uncertainty have risen. Expectations of further stimulus (both monetary and fiscal) help offset some of the impact. But, given the unusual nature of the threats currently facing the global economy, these efforts are unlikely to fully offset the damage this year and into 2020. Global GDP forecasts for 2019 and 2020 (page 2) are therefore lower than they were in June, but are not 'recessionary'.

Still modest positive growth: Global growth looks set to experience a significant recession scare, rather than plunge into one. The level of the global composite PMI, for example, looks consistent with real GDP growth above 2.5% (see chart on page 1). 2.5% is sometimes considered a threshold, below which the global economy is described as experiencing recessionary conditions (it is rare for global real GDP to *contract* given the high average levels of growth in many emerging economies). Q2 GDP growth in both the UK and German economy was negative (Chart 2), but Q2 out-turns were broadly in line with those built into our June forecasts. Survey indicators so far are consistent with weak, positive growth in the US, euro area and Japan in Q3 (Chart 3).

But businesses less optimistic: Summer business surveys showed business expectations deteriorating both globally and in most of the world's largest economies (Chart 4). Focussing on the global PMI 'future output' indicator of business optimism, the scale of deterioration since early 2018 is similar to the 2014-2016 global recession scare, but the current *level* of the indicator is around its lowest since at least mid-2012. Leading indicators, such as those compiled for the US by the Conference Board, the OECD (region aggregate) and Japan's Cabinet Office are not yet showing a convincing or sustained upturn either (Chart 5).

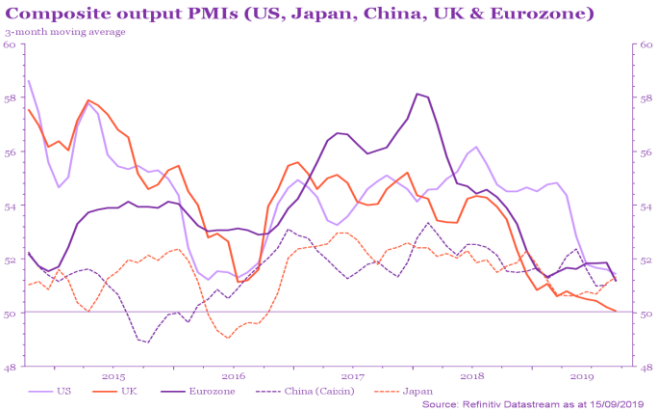
Chart 2: UK and German economies contract in Q2



Source: Refinitiv Datastream as at 15/06/2018

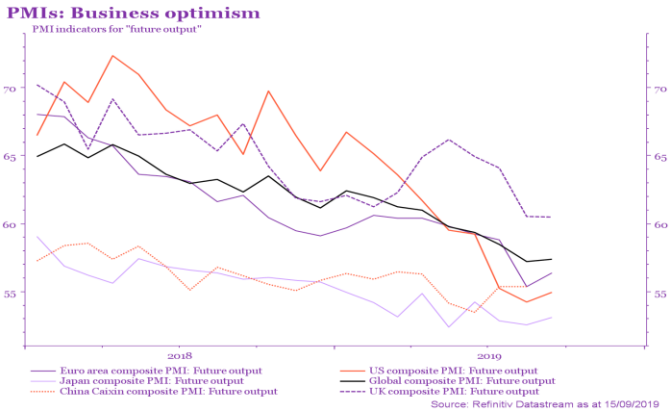
As for even more forward-looking market based indicators, US yield curve inversion recession signals have become stronger since June (10Y-3M more clearly inverting and 10Y-2Y dipping into negative territory at least briefly, see Chart 20), even if we have doubts about the reliability of the signal this time around.

Chart 3: PMIs signal weak positive GDP growth



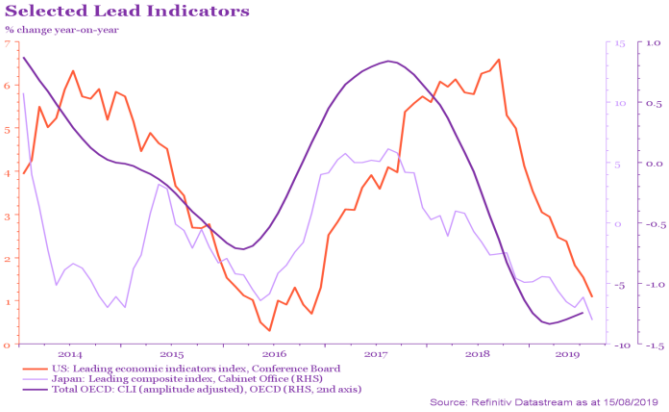
Source: Refinitiv Datastream as at 15/09/2019

Chart 4: But optimism has deteriorated this year



Source: Refinitiv Datastream as at 15/09/2019

Chart 5: Selected lead indicators –awaiting a convincing upturn



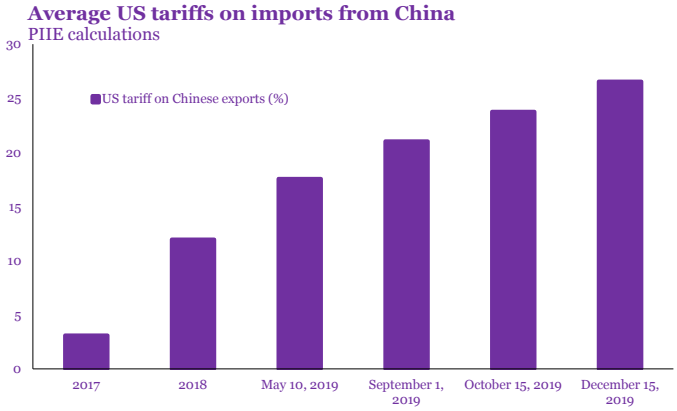
Source: Refinitiv Datastream as at 15/08/2019

Another batch of trade escalation: Trade tensions escalated over the last three months, with US President Trump announcing 10% tariffs on a large proportion of Chinese imports, followed by Chinese retaliation measures, followed by announcements of further US tariffs on Chinese imports (the previously announced 25% tariffs on ~$250bn of goods to rise to 30% and the planned 10% tariffs on another $300bn to 15% tariffs). The Peterson Institute for International Economics (PIIE) estimates that, in less than two years, the average tariff rate on US imports from China will have risen from only 3% to above 26% if all the planned tariffs are enacted (here), see Chart 6.

Going further, in August, in a tweet, President Trump also 'ordered' US companies to immediately start looking for alternatives to China and to bring their production home (reportedly asserting his right to declare a national emergency related to US-China trade matters, see for example WSJ). After the late August tariff announcements, the White House press secretary said that President Trump regretted not raising the tariffs higher.

More recently, there has been some apparent de-escalation, with goodwill gestures on both sides (delays in tariff increases/exemptions) and the two sides appear to be talking again. However, such 'ceasefires' have been seen before and then broken. The US will also begin applying *WTO-approved* tariffs on certain EU goods from mid-October.

Chart 6: Tariff rates rising



Source: PIIE (Chad P. Bown, 2019)

If it weren't for Trump, and Brexit, and…: There are always uncertainties, but the current uncertainties businesses face don't just relate to factors like end demand and currency volatility that exporters are used to navigating. Whether it is worries about Brexit or trade wars, for some, uncertainties extend, for example, to whether you'll even be permitted to deliver a particular product or service to an end customer at all.

Prospects for sizable tariff increases and higher non-tariff barriers will be relatively novel for many. For most of the past twenty years, the trend has been towards making it easier, rather than harder, to trade.

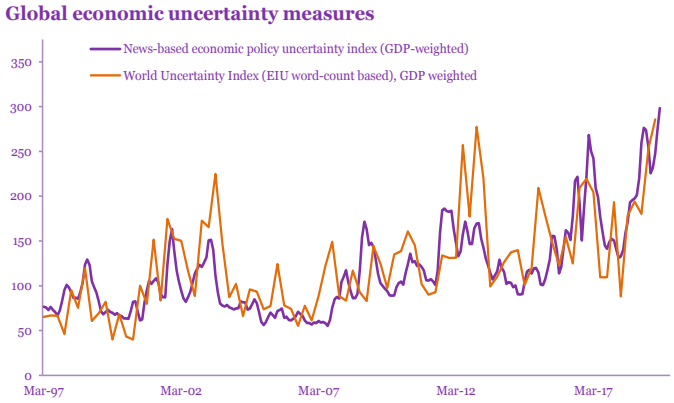
Earlier threats to close the US-Mexico border and, more recently, threats to use emergency powers to force US businesses to stop doing business with China, have pushed business visibility on the future policy agenda further into the realm of needing to factor in 'unknown unknowns'. In terms of tariffs themselves, the latest round of announcements raised earlier tariffs to 30%, leaving an open question as to what the upper bound is for US tariffs on Chinese imports.

Uncertainty is bad for growth: When businesses are less certain about the future, they will often feel less confident, and be more inclined to hold back on expensive decisions with long-term payoffs – namely investment.

Various attempts have been made to measure uncertainty levels and relate them to economic activity. Ahir, Bloom and Furceri have developed a 'World Uncertainty Index', using word counts in country reports from the Economist Intelligence Unit, complimenting earlier work on economic policy uncertainty using newspaper word counts (Chart 7). Their analysis of the World Uncertainty Index shows that it is negatively and significantly correlated with GDP growth and leads; higher uncertainty at least foreshadows weaker GDP growth. The sharp rise in their index in Q1 would alone be consistent with 0.5ppt weaker global GDP growth (see "The global economy hit by higher uncertainty" and IMF).

Federal Reserve economists looking at measures of trade policy uncertainty find that a rise in H1 2018 accounts for a global GDP decline of 0.8% by 1H 2019 and suggested that renewed uncertainty since May 2019 may push down further on GDP into 2020.

Chart 7: Economic uncertainty has risen



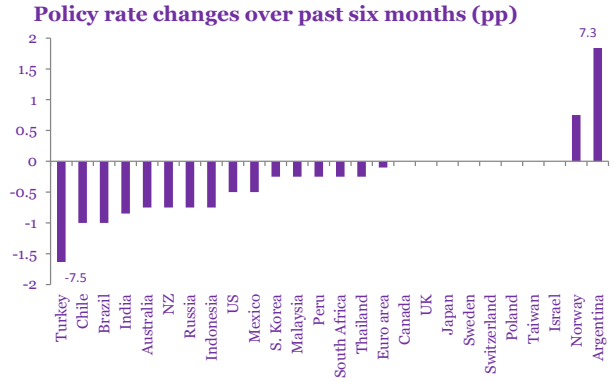
Source: www.policyuncertainty.com; WUI updated to Q2 2019, EPU to August 2019.

GDP impact of latest batch of tariff increases: The tariff escalations since the start of August (particularly the 15% on $300bn of Chinese imports into the US, of which the second tranche will be effective mid-December) are likely to detract perhaps at least another three tenths from global GDP (that was the IMF estimate of the impact of the previous batch of tariff increases from mid-2019). For more on the GDP impact of tariff increases, see 'Trade versus Stimulus'.

Recession avoidance…or why, with trade tension *de*-escalation, global growth can improve: Several factors keep recession from being a central case including stimulus so far (and prospects of more), financial conditions and still robust consumer fundamentals:

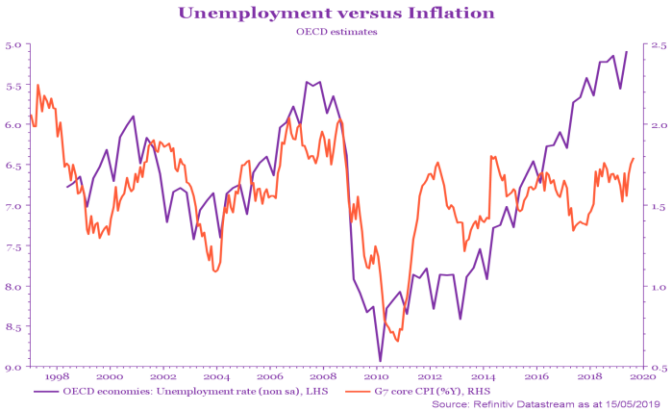
1. **It isn't just the Fed**: Although the depth of monetary policy easing hasn't been remarkable so far, there is significant breadth, see Chart 8 for a selection of central bank policy changes over just the past three months. Although unemployment rates are low in major economies, core inflation still hasn't risen much, keeping the door open for further easing (Chart 9)

Chart 8: Widespread interest rate cuts



Source: Refinitiv Datastream as at 6/10/2019

Chart 9: Core inflation hasn't risen much, despite very low unemployment:

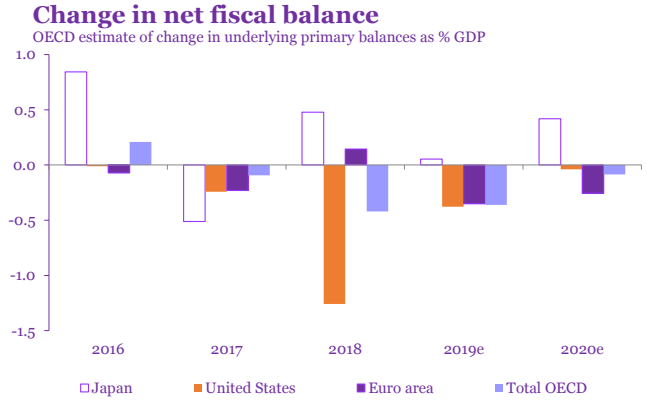


Source: Refinitiv Datastream as at 15/05/2019

2. **Stimulus hasn't just been about monetary policy**: Fiscal stances are shifting. The fiscal stance already looked modestly stimulative in the euro area (Chart 10). Since June, the Netherlands have announced further stimulus and German policymakers have indicated (some) willingness to stimulate (in recession). China have already delivered fiscal stimulus. The UK and French government have announced stimulus measures recently, as have South Korea and India among others.

   More welcome: It seems widely accepted that fiscal policy will have to play more of a role in managing the economy going forward. We aren't yet seeing a comprehensive round of pre-emptive stimulus in the major economies. However, even showing willingness to start down this path arguably improves the chance of stronger growth by improving risk sentiment. We expect additional fiscal spending (in aggregate) to be welcomed by markets, given widespread worries that monetary policy is close to a spent force. There is also evidence to suggest that fiscal stimulus is more effective than normal when interest rates are at the effective lower bound (which they effectively are, or are very close to, for a number of economies), see IMF.

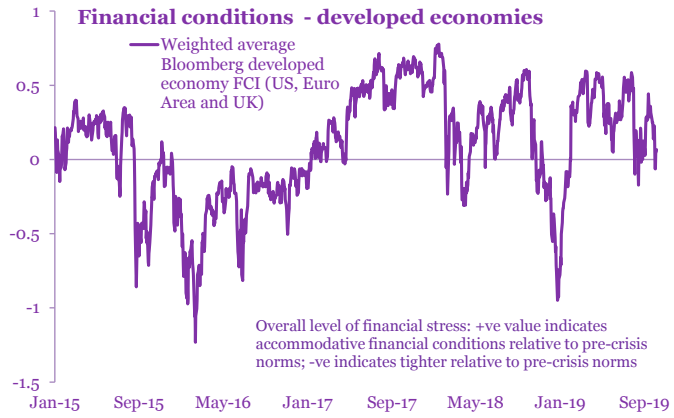
Chart 10: OECD were already calculating modest net planned fiscal stimulus in 2020 back in May



Source: OECD as at 21/05/2019

3. **US financial conditions exported**: The shift to a looser US monetary policy stance is particularly welcome for the global economic outlook. Financial conditions in the US are exported. The dollar denominates 50% of global trade invoices and one-third of countries *explicitly* peg to the US dollar according to work flagged by BoE Governor Carney in a recent speech. Developed economy financial conditions are around average (Chart 11).

Chart 11: Financial conditions close to average



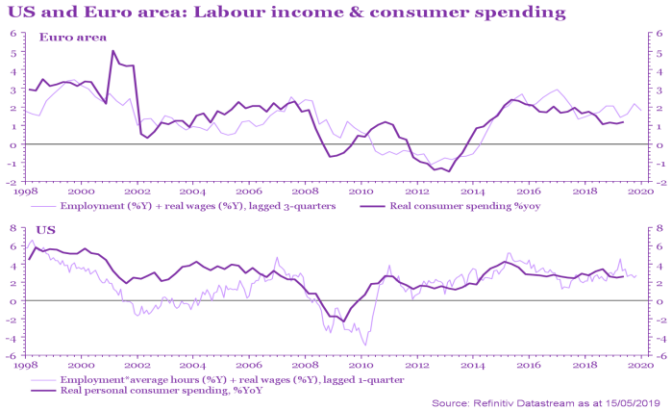
Source: Bloomberg, RLAM. Series uses Bloomberg FCI indices, with weights based on PPP share of world GDP

4. **Trade news elsewhere**: It is worth pointing out that from a global perspective at least, news on tariff and trade barriers hasn't all been one way. The US and Japan reached a partial trade deal; the EU completed its trade agreement with the South

American trade bloc Mercosur in late June; It is also worth pointing out that since July 2018, while mostly raising tariffs faced by the US, China has been reducing tariffs for other exporters.

5. **Robust consumer fundamentals**: Consumers in the US and euro area still look well supported (Chart 12). Unemployment is low, employment is still growing, pay growth has risen and inflation remains below target. *So far*, the rise in uncertainty and slower global growth has not been met by significant aggregate layoffs. While that remains the case, robust consumer spending should ultimately require stronger manufacturing growth to meet that demand.

Chart 12: Decent consumer fundamentals



Source: Refinitiv Datastream

6. **Assuming away the worst**: No-deal, no-transition Brexit is not built into the forecast as central case. Neither is the application of 30% tariffs by Trump on all Chinese goods or 25% on autos more broadly.

Two caveats: Of all these offsets, stimulus is particularly welcome. However, it is worth considering that stimulus partly works through business confidence channels and that these may be less responsive than if businesses were facing more familiar threats. Stimulus is also not occurring in a vacuum, but is partly a response to slower global growth and trade uncertainty

Presentationally, stimulus responses have not been entirely reassuring for businesses either. The Fed has been clear that they are feeling their way "trade is unusual. …the thing is, there isn't a lot of experience in responding to global trade tensions. So… it's something that we haven't faced before and that we're learning by doing" (Chair Powell press conference, July 2019). The Bank of England has described any policy response to a particular Brexit outcome as 'not automatic' and could be in either direction.

Recent developments have been mixed for the outlook, but the increased US-China tariffs, planned additional tariffs and increase in business uncertainty lead to a downward revision in GDP growth (impacting calendar year GDP growth more in 2020 than in 2019).

What five things would make us more confident that global growth will pick up in 2020? We'll be looking out for: 1) more stimulus (especially fiscal); 2) an interim US-China trade deal; 3) the US *not* imposing higher tariff rates on autos (still under consideration); 4) the UK getting past the 31st October 2019 without a 'no deal' Brexit; 5) time passing with no sharp deterioration in labour market data.

Conversely, a further ramping up of trade tensions or 'no deal' Brexit would weaken the outlook relative to our central case. The recent spike in oil prices was also a reminder that supply-related oil market disruptions could knock the global economy off course too.

No deal no transition Brexit: A global risk

As the 31st October 2019 looms, prospects of a no deal-no transition Brexit have been getting attention globally and have presumably become an even more 'live' discussion point in global boardrooms. Institutions like the IMF and OECD continue to flag Brexit as a risk to the global outlook. The IMF named a no-deal Brexit in their July update as one of the adverse developments (alongside further US-China tariffs, US auto tariffs) that could "sap confidence, weaken investment, dislocate global supply chains, and severely slow global growth below the baseline". The OECD, noted in its mid-September interim global economic outlook that the possibility of 'no deal' Brexit "is a serious downside risk, and a major source of uncertainty".

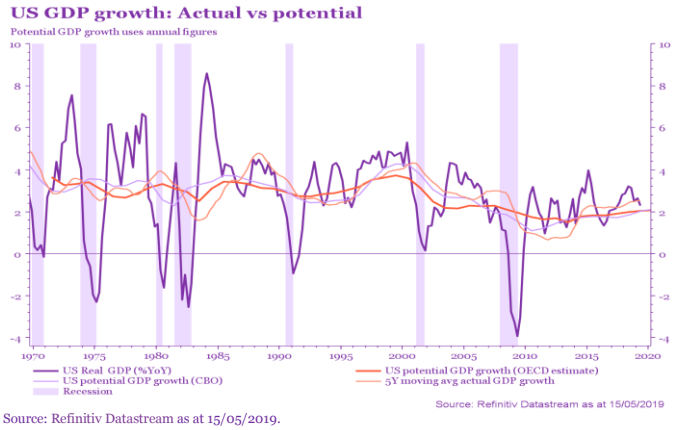
Needless to say, there are more desirable circumstances for the global economy to be facing a shock of this kind. A no-deal Brexit risks amplifying pre-existing global concerns that trading norms are being upended and that policymakers have become more willing to risk inflicting significant economic damage on their own and other economies than previously thought.

US: Slowed, not recessionary

The US economy has slowed, although in a patchy way. Manufacturing survey indicators are now weak, but housing data has a better tone and consumer spending looks robust for now. Fed easing (of which we expect a bit more to come) clearly helps the outlook; enhanced trade uncertainty clearly doesn't. While some indicators look consistent with a 2020 recession, key will be whether the consumer turns. While firms keep hiring at a reasonable pace, it is hard to have a recession as central case.

The US economy has slowed: GDP growth was 2.0% annualised in Q2. That marks a slowing from the pace of growth seen in 2018 (2.9%), but is roughly in line with estimates of US potential growth (Chart 13).

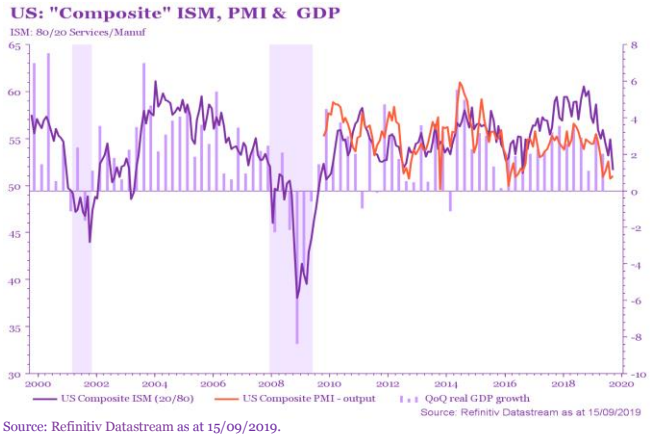
Chart 13: US growth has slowed towards potential



Source: Refinitiv Datastream as at 15/05/2019.

Soggy near-term outlook: Business surveys have weakened significantly over 2019 (Chart 14), although, on balance, headline indicators are still consistent with positive activity growth.

Chart 14: Business surveys indicate significant slowing since the start of the year

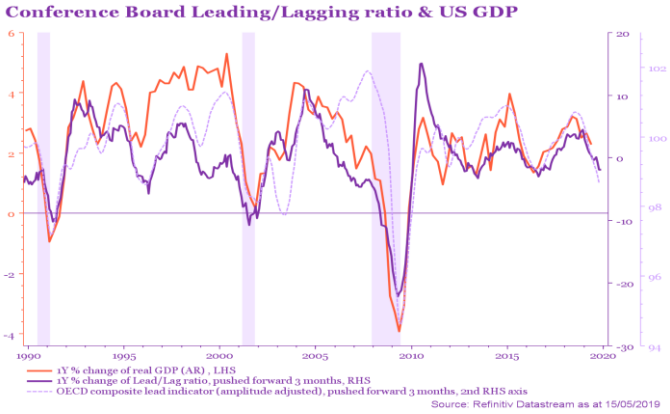


Source: Refinitiv Datastream as at 15/09/2019.

However, growth is likely to slow a bit further:

- The outlook for the remainder of the year already looked potentially more challenging as the previous **US fiscal boost** to growth eased (Chart 10).
- Business **expectations** have deteriorated in the PMI survey (Chart 4), ISM manufacturing orders are below 50 (i.e. indicating contraction) and, generally, respondents to surveys remain concerned about tariffs.
- **Lead indicators** from the likes of the Conference Board and OECD suggest that activity growth is likely to slow further – at least near term (Chart 15).

Chart 15: US growth has slowed towards potential

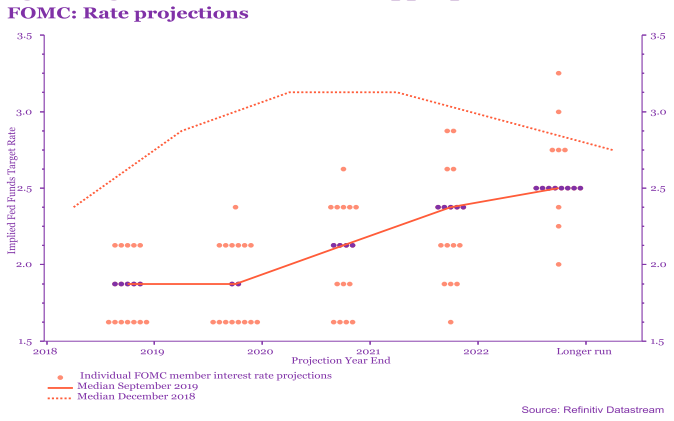


Source: Refinitiv Datastream as at 15/05/2019.

Trade weighs...: Changes to tariffs and non-tariff barriers are prompting reviews of and changes to supply chains, but such changes come at a cost for firms and, from a US perspective, may involve importing from higher cost locations. Redirecting supply chains away from China is made more difficult by tariff threats against other key US trading partners (from Mexico in May, to tweets criticising Vietnam, to continued criticism of the EU).Even if we see a partial 'deal' between China and the US or just an extended truce, trade uncertainty seems unlikely to repair fully given the scale of escalations seen in August and the US' apparent willingness to use tariffs and trade restrictions as a foreign policy tool.

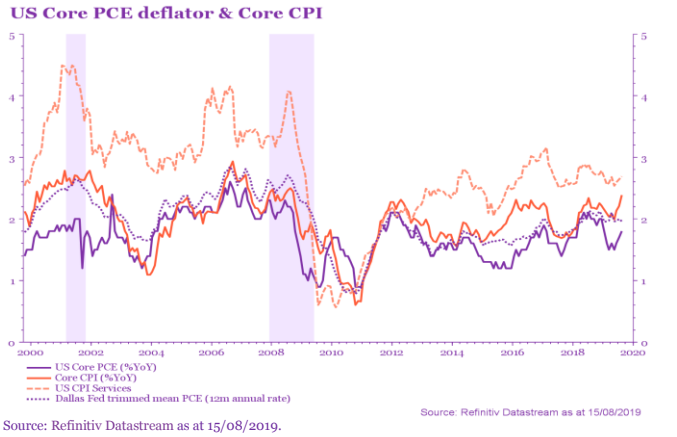
...But we assume more Fed cuts: The Fed has cut rates in recent months, partly as 'insurance' in an environment of significant uncertainty, partly against worries about low inflation and partly reflecting weaker global growth. The rate cuts have been modest, but the turnaround in the Fed's policy stance has been substantial since late last year (Chart 16). At least another 25bp rate cut looks likely: Eight FOMC members indicated in their *September* forecasts that another rate cut would be appropriate; US core PCE inflation (Chart 17) is still below 2.0%; trade uncertainty probably won't disappear enough in the next couple of months to see a big bounce in capex before year end; payroll growth is more likely to slow than pick up on average looking at survey indicators. We assume that this path for rates will be enough to continue to keep financial conditions from tightening significantly (Chart 17) and to continue supporting the housing market and thus will help contain some of the economic damage likely going into 2020 from any ongoing trade tensions.

Chart 16: Dot plots: Large number of US rate-setters signalling a further rate cut as appropriate



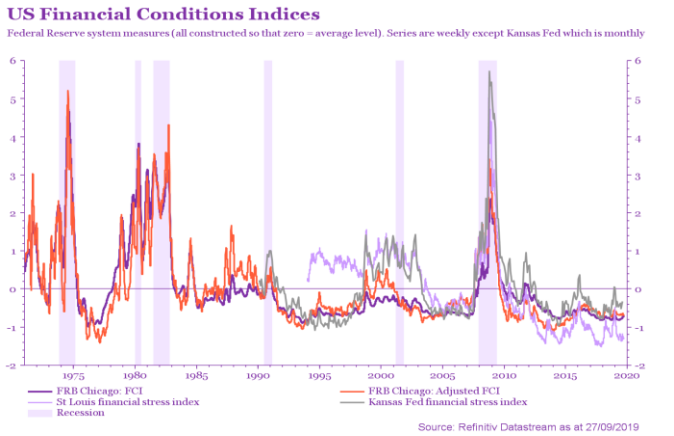
Source: Refinitiv Datastream as at 20/09/2019.

Chart 17: Still below target core-PCE inflation



Source: Refinitiv Datastream as at 15/08/2019.

Chart 18: US financial conditions accommodative

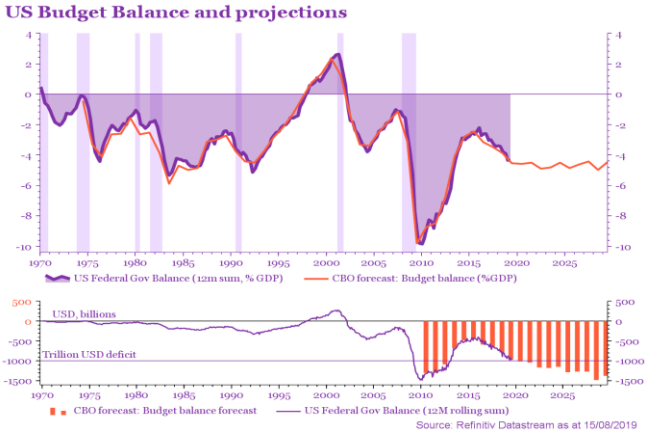


Source: Refinitiv Datastream as at 27/09/2019.

Fiscal: from stimulus to neutral (with risk of disruption): The President and Congressional leaders agreed spending limits in July which imply a relatively neutral fiscal stance and some spending increases going into the next fiscal year (rather than a contraction which would otherwise have followed). However, at the time or writing, this plan had not been approved by the House and there is still a risk of another shutdown later in the year.

Significant fiscal stimulus looks unlikely for now, outside of recession, given congressional divisions and the upcoming election in November 2020 (we don't see why a Democrat-controlled House would want to 'help out' President Trump via a fiscal boost to the economy). Support for stimulus in some quarters is also likely to be limited given that the deficit is already at quite elevated levels by US standards and projected (by the CBO) to worsen from here (Chart 19).

Chart 19: Already large deficit is likely to limit enthusiasm for more US stimulus in some quarters

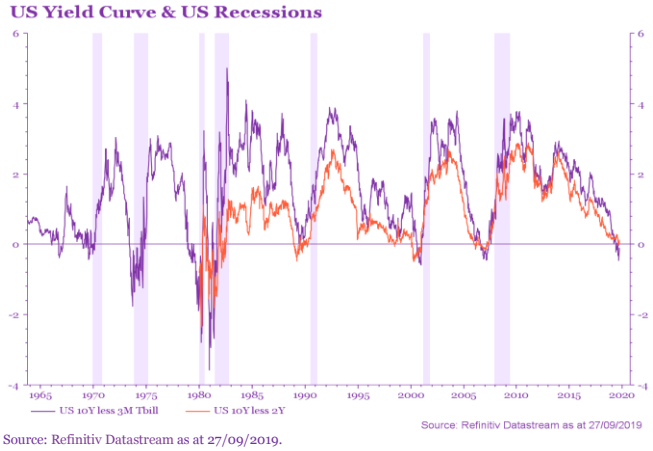


Source: Refinitiv Datastream as at 30/06/2019.

US recession watch: A recession in the US is still not our central case but, on balance, the probability is higher than it was in June following the increase in trade uncertainty. Looking across recession indicators the message remains mixed. Enough of the data are consistent with a coming recession that, when combined with signals from the yield curve (albeit, while seeing this as a less reliable indicator than in the past) and the worsening in the trade policy backdrop, it makes sense to regard a 2020 recession as sizeable probability (very subjectively, ~30%):

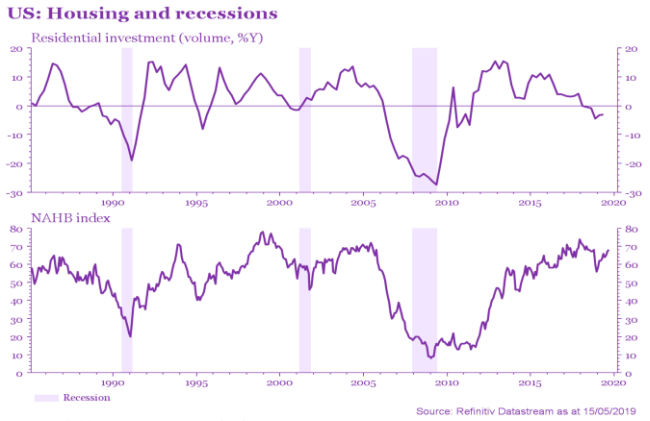
- The recession signal from the **yield curve** has strengthened (the 3M-10Y curve is inverted; 2Y-10Y has dipped in and out of inversion) (Chart 20).
- Although **housing indicators** have responded positively to the lower rate environment, actual real residential investment growth remains at levels associated with recessions (Chart 21).
- Some **key US indicators**, e.g.US ISM manufacturing and changes in non-farm payrolls, are at levels seen four to six months before previous recessions. However, some of these indicators are also consistent with levels seen in recession *scares*, rather than recessions (e.g. 2015/2016) (Chart 22).
- Further, real **money growth** has improved significantly in recent months and is *above* levels seen before previous recessions (Chart 23).
- **Financial conditions**, bank lending and credit conditions indicators are not sending recession warning signals (Charts 18 and 24).

Chart 20: Recession signals strong from the yield curve



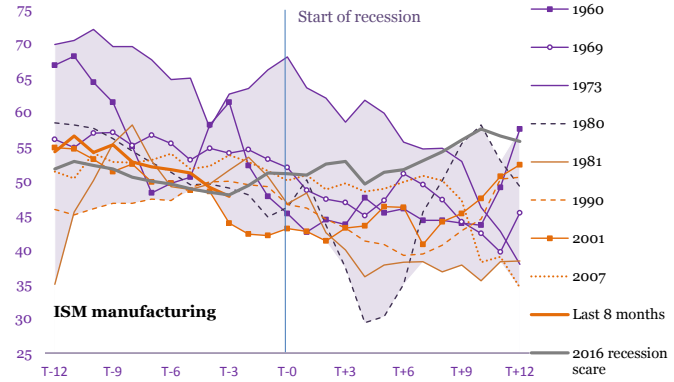
Source: Refinitiv Datastream as at 27/09/2019.

Chart 21: Residential investment is contracting; NAHB housing measure is still off its highs



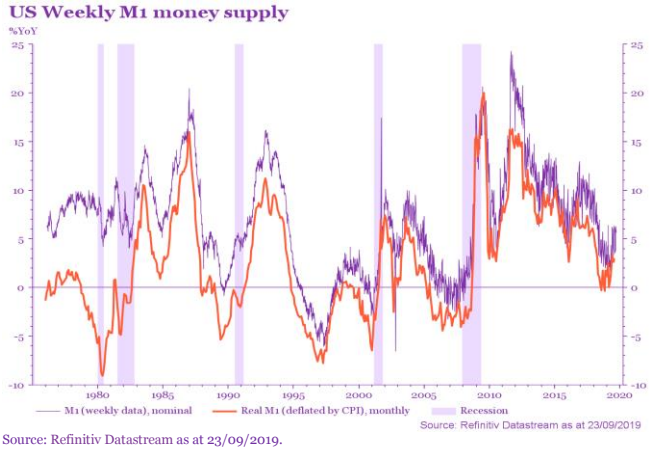
Source: Refinitiv Datastream as at 15/05/2019.

Chart 22: US non-manufacturing ISM is at levels seen before previous recessions



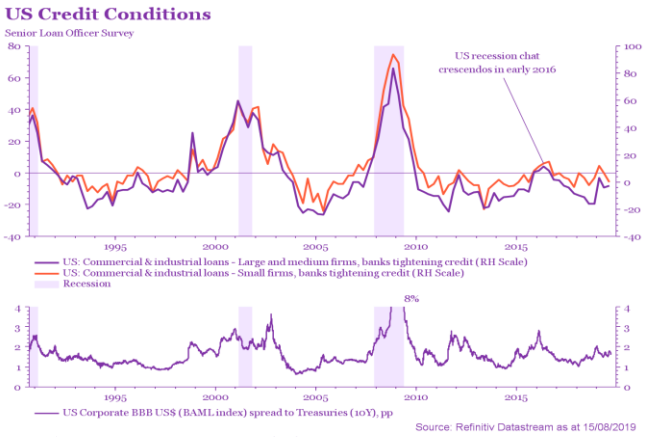
Source: Refinitiv Datastream, RLAM as at 15/09/2019.

Chart 23: Real M1 growth stronger. Contraction in real money growth has been a recession signal.



Source: Refinitiv Datastream as at 23/09/2019.

Chart 24: Credit conditions (bank lending to firms) not sending recession warnings

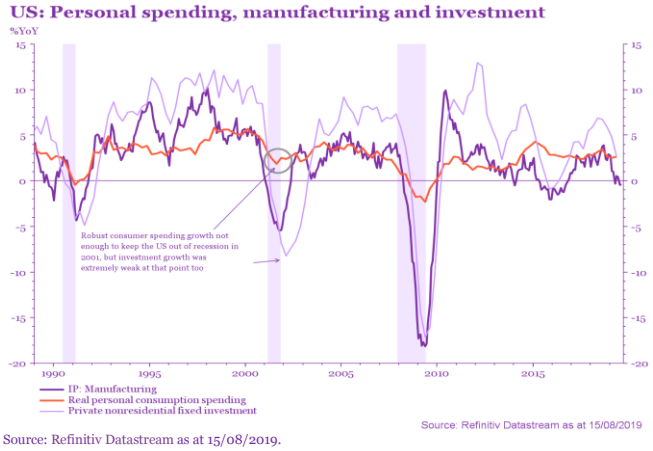


Source: Thomson Reuters Datastream as at 15/08/2019.

Labour market as a recession game-changer: Over 2015/16, manufacturing indicators looked consistent with recession, but consumer spending growth held up and helped to keep the aggregate economy out of recession (Chart 25). So far, the consumer looks robust, supported by remarkably low unemployment. Although aggregate wage growth may have slowed, pay growth has been faster for those on lower wages (who, in theory, are more likely to spend incremental income than those at the upper end of the pay distribution), see Chart 26.

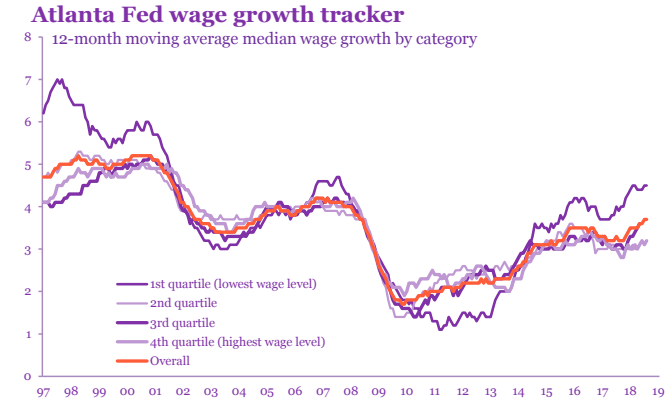
However, employment growth has slowed and some survey indicators look consistent with sharply weaker payroll gains (Chart 27) and enough to mean that job growth could fall below the 'break-even' rate necessary (given population growth) to keep the unemployment rate from rising. But, for now, indications of labour market deterioration are patchy. A significant deterioration would likely prompt a critical mass of economists to predict a US recession as central case.

Chart 25: Without a collapse in investment, recession can be avoided while consumer spending holds up



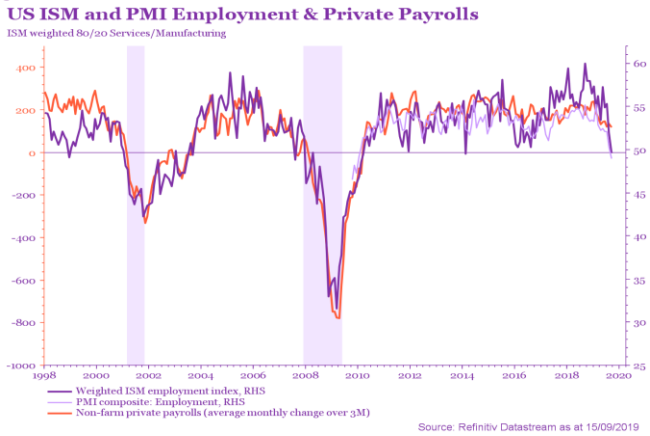
Source: Refinitiv Datastream as at 15/08/2019.

Chart 26: Wage growth fastest for the lower paid



Source: Atlanta Fed as at 15/07/2019.

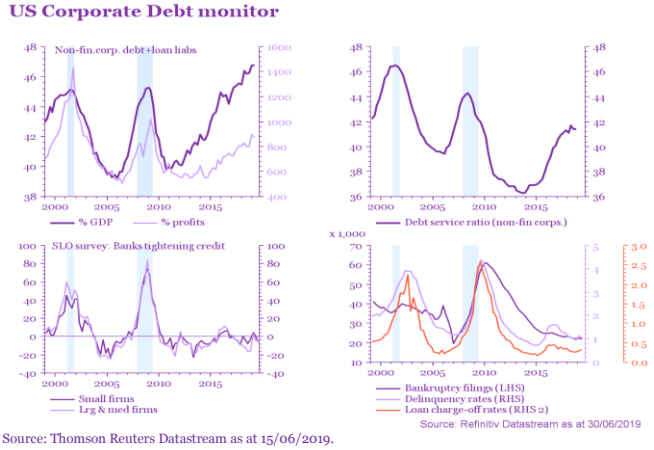
Chart 27: Surveys consistent with very weak payroll gains



Source: Refinitiv Datastream as at 15/08/2019.

Recession accelerants: After recent national accounts revisions, the corporate debt picture (Chart 28) looks a bit worse than previously; corporate profits were revised down, leaving debt to profits ratios higher. In general, high levels of lower quality US corporate debt remain a concern and could act as an 'accelerant' in a downturn should we see wider credit spreads and a loss of liquidity in markets mean more firms struggle to rollover their funding.

Chart 28: US company balance sheets a potential recession accelerant?



Source: Thomson Reuters Datastream as at 15/06/2019.

The US GDP growth forecasts are lowered given the assumed impact of higher tariffs and elevated trade uncertainty. We continue to expect US GDP growth to trough between 1-2%. Recession is still not our central case. In line with that outlook, we add modestly more Fed stimulus to our base case assumption, but expect a rise in core PCE inflation to somewhat lessen the case for more monetary policy easing in 2020.

China: What stimulus driven bounce?

Further slowing in China's economy is likely given this year's escalation in trade tensions with the US. Survey indicators generally show some indications of stabilising, although the response of hard data to stimulus efforts has so far been disappointing. Stimulus efforts from Chinese policymakers clearly help the outlook, but remain restrained compared to previous episodes.

Stabilisation? Business survey data hint at stabilisation. The composite Caixin and NBS PMIs are roughly at their average level since August 2018 (Chart 29). Manufacturing indices are weaker, but have stabilised at headline level. However, the picture isn't entirely convincing. Measures based on more 'traditional industry' measures like electricity consumption and rail freight growth (for example, Bloomberg's LKQ index), are still trending weaker. Hard data looks weak, with retail sales and industrial production disappointing lately (Chart 30). Overall, there are signs of stabilisation in the data, but these are not wholly convincing.

Trade tensions worsen the outlook: No matter the recent ups and downs of sentiment relating to US-China trade talks, since June tariffs have risen against China and more tariffs have been threatened than were threatened previously. Goods exports to the US remain a very sizeable proportion of total goods exports (~20%) and therefore a reasonable proportion of GDP. By December, on the current schedule, the average tariff on Chinese exports into the US will be around 26%, from around 3% at the start of 2018 (see chart 6 from the Peterson Institute for International Economics).

Stimulus and counter-measures: Working against this worsening of the outlook are offsets in the form of stimulus and other measures (evidence of which can be seen in Charts 32 and especially 33). We are still far from 'do whatever it takes' stimulus in China and efforts generally remain targeted. However, recently, we have seen, for example:

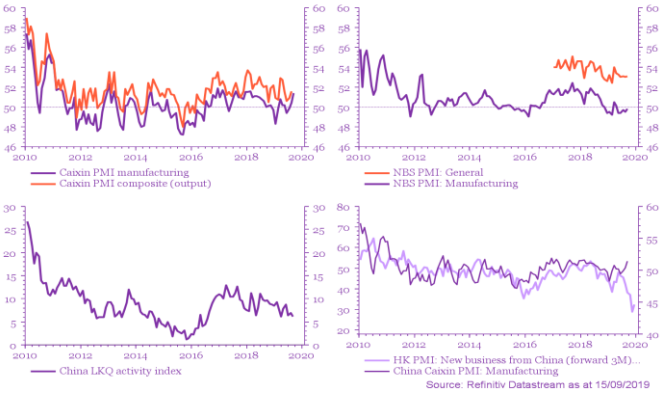
- Further RRR (reserve ratio requirement) cuts (both targeted and general)
- Proposals to front-load usage of local government special bond issuance quotas (likely to encourage a pick-up in infrastructure spending).
- Contained currency depreciation.

We continue to expect more easing in light of still relatively soft China economic data and increases in tariffs. So far, the scale of stimulus may be enough to stabilise growth, and there are signs that even the steep slowdown in car sales has started to ease. However, as yet, there are few signs that stimulus will be enough to generate a growth rebound.

We cannot see the great power rivalry between the US and China disappearing anytime soon or the trade relationship returning to what it was prior to 2018. However, some easing in tensions and, particularly, some roll-back of already implemented tariffs would improve the near-term outlook.

Charts 29: Surveys mostly indicate stabilisation

China surveys: Caixin PMI, NBS PMI, LKQ



Source: Refinitiv Datastream as at 15/09/2019.

Charts 30: Growth has slowed

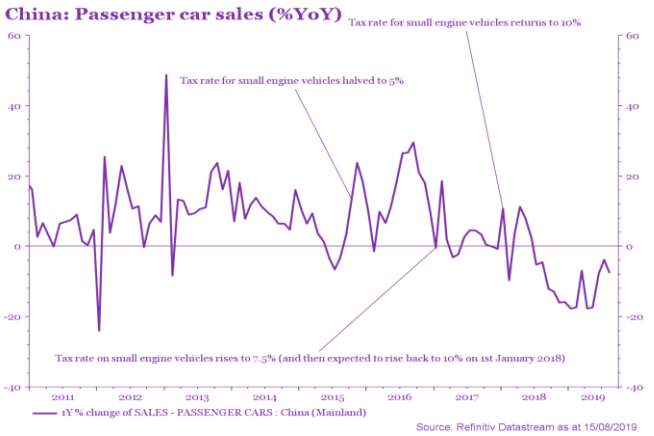
China: IP, Investment, Retail sales, Industrial profits & GDP

% YoY, mix of real and nominal, series made to be continuous where there are gaps

Source: Refinitiv Datastream as at 15/08/2019.

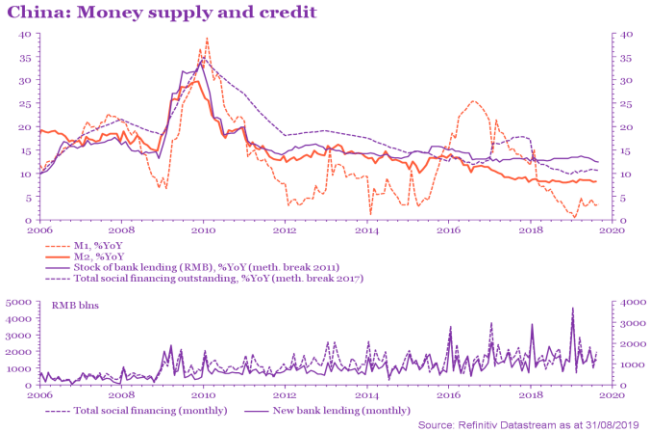
Chart 31: Car sales decline eases

China: Passenger car sales (%YoY)



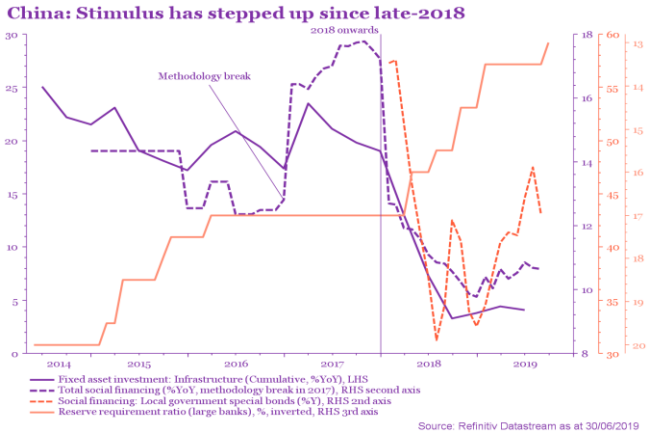
Source: Refinitiv Datastream as at 15/08/2019.

Chart 32: Money and lending data stabilising



Source: Refinitiv Datastream as at 31/08/2019.

Chart 33: Stimulus steps up



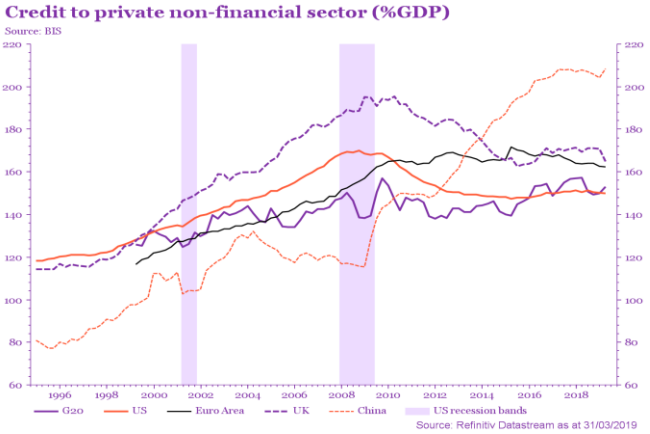
Source: Refinitiv Datastream as at 30/06/2019.

Lower growth acceptance: Annual GDP growth seems likely to slow below the lower range of the government target (6.0-6.5%) in light of trade tensions and uncertainties, with China at the heart of the current globalised trade system and in light of the reluctance of China to embrace a larger scale stimulus given the perceived need to de-lever (Chart 34) and de-risk the financial system.

Longer-term, *declines* in 'working age' population (Chart 35) suggest growth is likely to slow, but likely exaggerate downside risks to potential growth. There are still opportunities to boost productivity and to engage in reforms. Reform efforts around financial market opening and capital markets should bear fruit eventually. Nevertheless, Chinese GDP growth is likely to trend lower over the medium to longer-run.

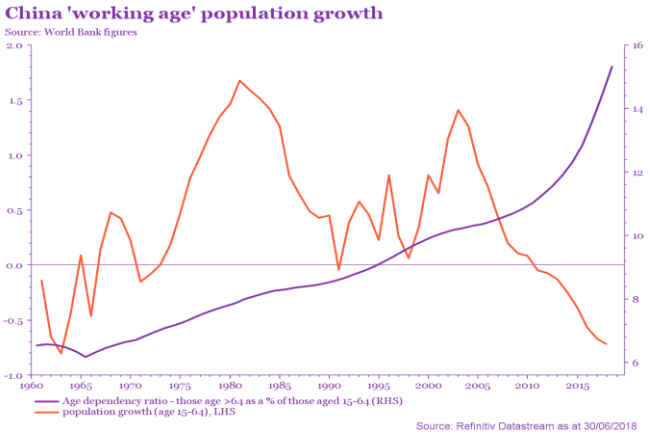
We revise down the China growth forecasts in light of the worsening in the global trade picture since our last set of forecasts were published in June. More stimulus from China's policymakers is likely, which will help to support the economy into and through 2020.

Chart 34: High levels of private debt remain an underlying risk factor



Source: Refinitiv Datastream as at 31/03/2019.

Chart 35: China's demographics becoming more of a drag on growth as 'working age' population slows



Source: Refinitiv Datastream as at 30/06/2018.

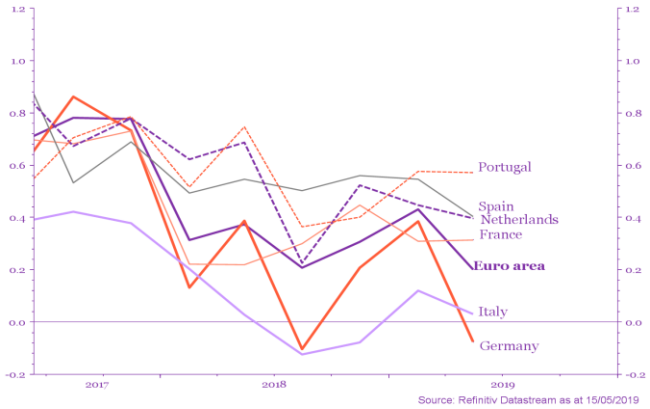
Eurozone: Vulnerable to shocks

In aggregate, euro area data looks consistent with positive, but weak, GDP growth. Some aspects of the growth outlook have improved (the ECB has eased and worries around Italian politics have abated), but plenty of risks remain (not least, 'no deal' Brexit and the threat of US auto tariffs). Focusing on domestic factors, so long as consumer fundamentals remain supportive, the euro area economy will likely continue to eke out weak positive output growth. Continued downside surprises in inflation mean that further ECB easing measures and bigger reforms to the ECB's remit and strategy have a high probability.

Signs of stalling: Manufacturing and Germany remain clear weak spots (Chart 36), but most headline aggregate survey indicators look consistent with weak if just about positive growth (Chart 37). The composite PMI is above 50.0, but not by much and it deteriorated in September. The European Commission's economic sentiment indicator, built up from business and consumer surveys) looks soft too. Beyond the business surveys, the picture is mixed. Business loan growth looks surprisingly robust (Chart 38), but (business) investment indicators weak (Chart 39). Retail sales look robust (Chart 40), as does consumer confidence, but production data still look set to drag on economic growth

Chart 36: German economy particularly weak

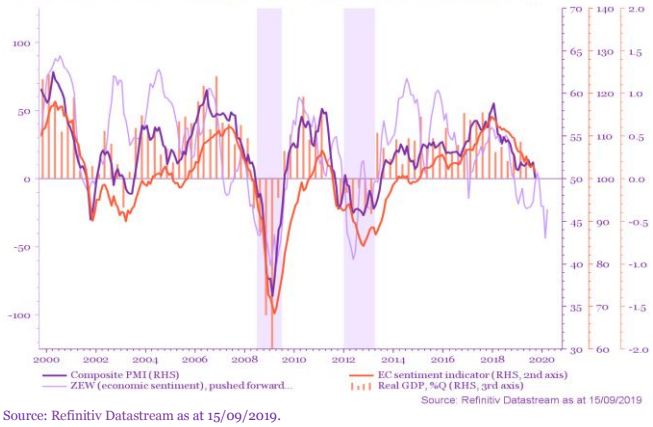
Euro area real GDP, %QoQ



Source: Refinitiv Datastream as at 15/05/2019.

Chart 37: Surveys signal weak (just) positive growth

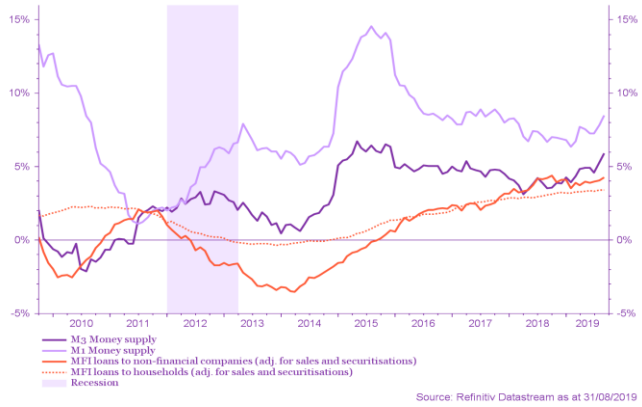
Euro area: GDP, Composite PMI, EC Sentiment & ZEW



Source: Refinitiv Datastream as at 15/09/2019.

Chart 38: Loan growth robust

Eurozone money supply and lending %yoy

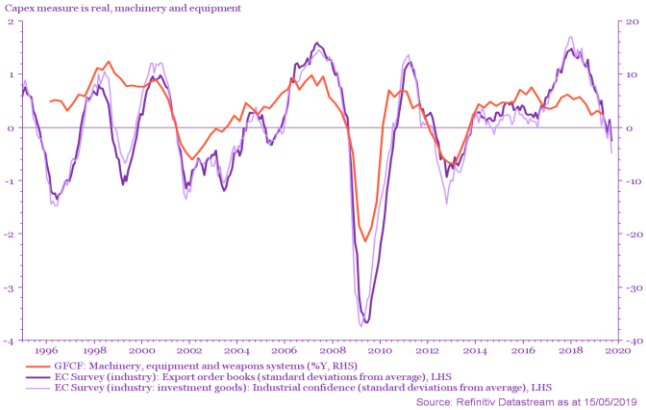


Source: Refinitiv Datastream as at 31/08/2019.

Chart 39: Investment indicators weak

Euro area: Capex and survey indicators

Capex measure is real, machinery and equipment



Source: Refinitiv Datastream as at 15/05/2019.

Chart 40: Retail sales robust

Eurozone Retail Sales %yoy

Source: Refinitiv Datastream as at 15/07/2019.

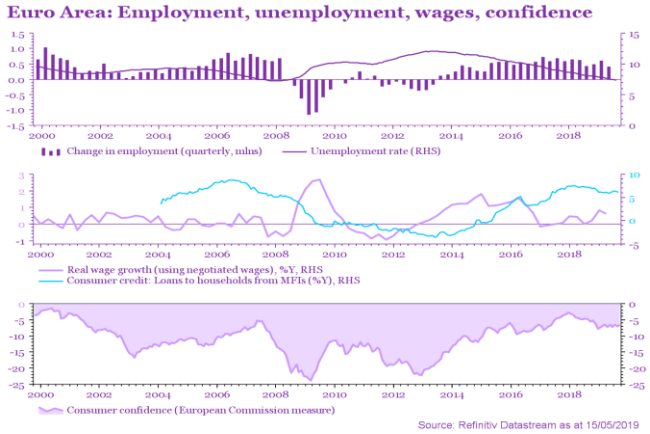
Subdued growth to persist into 2020: Sentiment and expectations have yet to convincingly settle and stabilise. With trade uncertainty high and 'no deal' Brexit still a threat, fixed investment looks more likely to weaken than strengthen. Global trade indicators are not yet uniformly stabilising either

and the expectations/future output components of the Global PMI have deteriorated this year.

Staving off a recession: A resilient consumer and policy stimulus are helpful for keeping the euro area out of recession:

- The **consumer still looks resilient** in the euro area (Charts 12 and 40). As in the US and more broadly, this is important for recession avoidance (and ultimately a recovery in manufacturing production to meet that still robust consumer demand). Fundamentals look relatively healthy (Chart 41). Consumer confidence remains surprisingly elevated (by euro area standards at least), employment continues to grow and real pay growth is positive (with slower nominal pay growth offset by lower inflation). Consumer credit growth is also strong.

Chart 41: Consumer fundamentals healthy



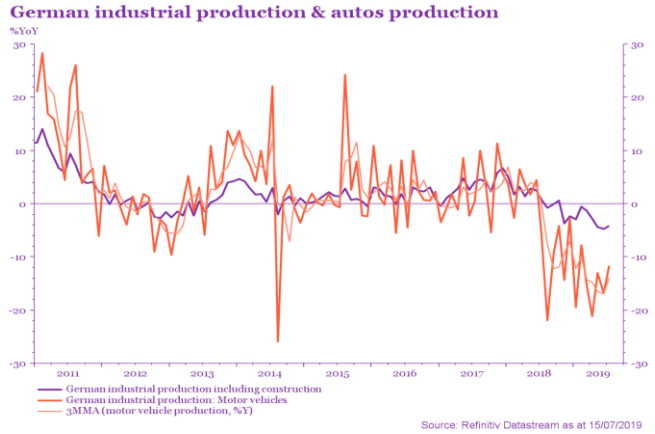
Source: Refinitiv Datastream as at 15/05/2019.

- The euro area **fiscal stance** remains stimulative – albeit mildly (Chart 10). The ECB continues to ask fiscal policy to take more of the strain of stimulus. Arguably, Germany, Luxembourg, the Netherlands, Malta and Austria all have 'fiscal space' to ease policy, exceeding their medium-term budgetary objectives and all with government-debt-to-GDP at or below 70% (see ECB Bulletin, August 2019). The Netherlands, often considered one of the most fiscally conservative euro area countries, recently *did* announce stimulus. Germany has so far disappointed by not following suit.
- Meanwhile, **monetary policy stimulus** has stepped up: At its meeting in September, the ECB agreed to a package of further stimulus measures including a deposit rate cut, altering forward guidance – tying a future rate rise to the state of inflation (rather than a date), and re-starting QE (again open-ended, or rather, tied to the outlook for and state of inflation rather than a particular calendar date). That the ECB eased in an open ended fashion and in the form of a package helps, through communication and signalling, to ensure a better chance of a positive impact on growth and inflation outcomes.

Looming threats unhelpful for businesses confidence: US trade relations and Brexit are our bigger external worries about the euro area outlook as 2020 approaches.

- **Auto tariffs** still a threat: The US President is still considering applying higher auto tariffs (which would be particularly impactful in the Europe, especially on Germany where auto production remains weak – Chart 42). A decision is due in November. Talks between Jean-Claude Juncker and President Trump seemed to help stabilise trade relations in July 2018, since when the EU has increased its imports (year-on-year) of US LNG and soybeans. However, it is not clear that talks have progressed very far, the US will impose Airbus-related tariffs on the EU shortly and with Juncker leaving the Commission, if personal chemistry between the two leaders played a role in progress thus far, there may be a risk of relations worsening.

Chart 42: German auto sector still suffering



Source: Refinitiv Datastream as at 15/07/2019.

- **'No deal' Brexit**: Prospects of a 'no deal' Brexit are a worry for the global outlook, but especially for the economic outlook in the UK and euro area. Given the complexity of supply chains, a 'no deal' Brexit could quickly bring disruption to multiple parts of Europe as hold ups at the border may delay and hinder production and sales in other parts of Europe. The UK is the euro area's second largest export destination (after the US). The threat of a no-deal, no-transition Brexit remains substantial. Modelling by think-tank 'UK in a Changing Europe' points to substantial short-run impacts of 'hard Brexit', for example on industrial production in parts of the euro area, notably Germany – already one of the euro area's most marked soft spots (-4.2% over a 20 month horizon). Recent OECD estimates, put the impact of 'no deal' at -0.5% of euro

area GDP in the near term. Work by the European Commission from 2017 pulled together a number of studies finding *long-run* impacts on 'no deal' type scenarios anywhere between 0.3% and 0.8% on the EU-27, but with much larger impacts on Ireland, Belgium and the Netherlands for example than elsewhere, in line with 2018 work from the IMF.

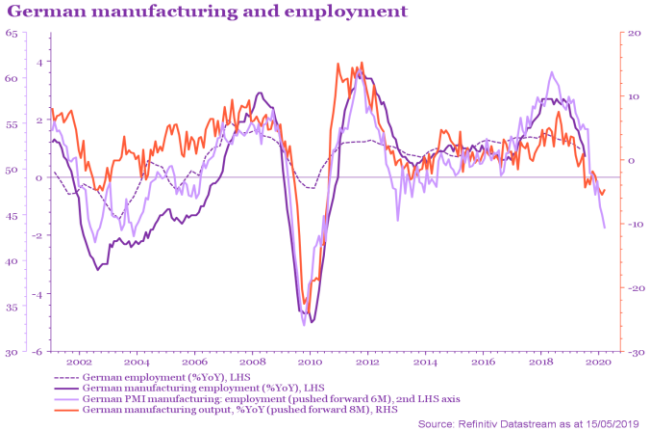
Chart 43: Brexit and China demand are problematic

Source: Refinitiv Datastream as at 15/07/2019.

Resistance (especially in Germany) to using fiscal stimulus, monetary policy already deep into unconventional measures and a banking sector still not in rude health, leave us nervous about the euro area outlook when the next big external shock hits.

Recession watch: A sharp deterioration in consumer fundamentals would leave us much more nervous about a euro area recession. It is natural to focus concern on Germany which already looks recessionary and which is the largest economy in the euro area. It is worth noting that German GDP growth has been relatively more volatile than several other euro area economies lately (Chart 36). It is also reasonable to point out that the German economy has contracted in four quarters since the 2011/2012 recession, while euro area aggregate GDP has consistently grown over that period. Nevertheless, what we haven't seen since the 2011/12 recession are falls in German employment which could clearly worsen the aggregate picture for the German economy. Significant net job losses look more of a risk now than at any point since the 2011/12 recession (Chart 44).

Chart 44: Worries for the German labour market



Source: Refinitiv Datastream as at 15/05/2019.

Our euro area GDP forecasts are lower than in June, with stimulus helping offset only a modest part of the impact of a weaker global trade outlook. However, absent a new trade relations/Brexit shock and without a significant labour market deterioration, we still expect the euro area (in aggregate) to avoid recession.

Japan: Heading for a rough patch?

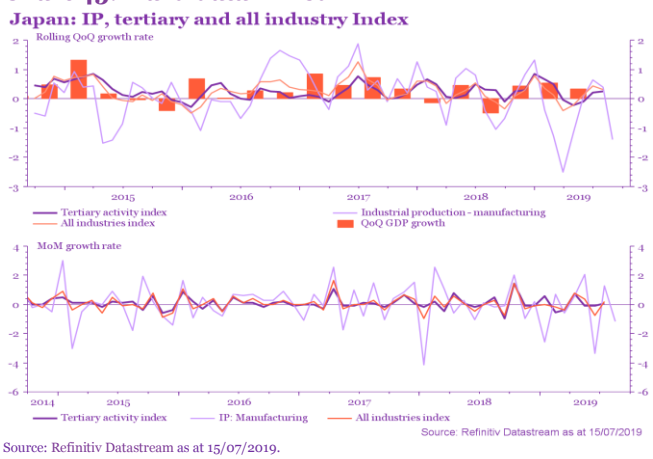
Japan may struggle to record positive GDP growth in Q3 despite some front-loaded spending ahead of October's sales tax rise. The tax rise itself shouldn't be enough to knock the economy too far off course given mitigations put in place by the government, but Japan is facing other challenges too.

Mixed messages from the activity data: GDP growth looks vulnerable to dipping into contraction. Non-manufacturing hard data suggest overall activity growth is positive (Chart 45 and 47). However, signals are mixed as to whether activity is stabilising or worsening and recent production data was disappointingly weak. The Q3 Tankan survey showed deterioration and the expectations components of the PMI surveys weakened again in September, even while the headline composite improved (Charts 3, 4 and 46).

Tax hike vulnerability: Consumer spending has been playing an important role in supporting GDP growth. Although various mitigants have been put in place to limit the effect of the upcoming consumption tax hike on Japan's economy, with employment growth and pay growth weaker, and consumer confidence at its lowest since 2011 (Chart 47), we worry that aggregate real consumer spending growth, alongside GDP growth, will at least go through a temporary, but significant weak spell over the turn of the year.

Trade tensions vulnerability: Japan appears to have done a good job in limiting trade tensions between itself and the US, signing limited trade agreement in September. However, Japan has a close trading relationship with both China and the US. Export growth has been positive to the US and has picked up since mid-2018 (Chart 48), but the likes of Vietnam and Mexico have been more obvious beneficiaries of US-China tension. Export growth to Korea has also slowed, with the rise of Japan-Korea trade tensions unhelpful. With indicators of global growth still weak and trade indicators at best bottoming, real export growth seems unlikely to experience a significant bounce soon.

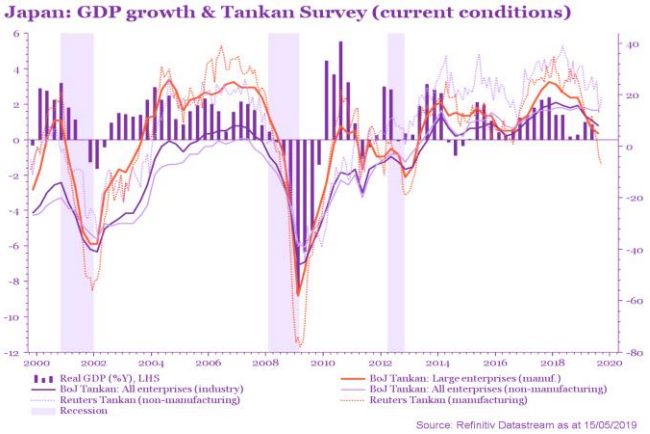
Chart 45: Hard data mixed



Source: Refinitiv Datastream as at 15/07/2019.

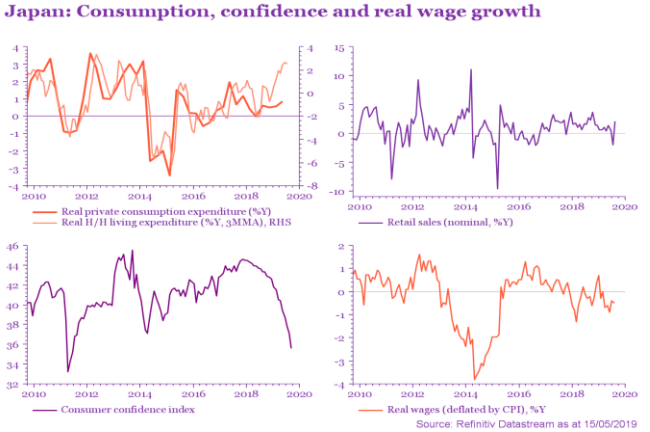
BoJ to join in the easing? Given recent BoJ commentary, the global backdrop, soft domestic picture, still weak inflation and rate cuts elsewhere, the likelihood of more monetary policy easing from the BoJ has risen. That easing might include a cut in short-term interest rates further into negative territory. However, with rates/yields in Japan arguably at, or close to, 'reversal rates' (when *lower* rates *dampen* activity rather than boost it), the scope for easing looks limited.

Chart 46: Surveys soft



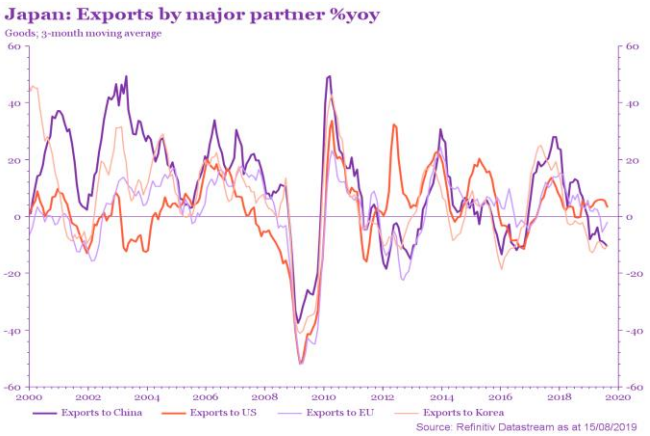
Source: Refinitiv Datastream as at 15/05/2019.

Chart 47: Worrying collapse in consumer confidence



Source: Refinitiv Datastream as at 15/05/2019.

Chart 48: Gaining from supply chain shifts?



Source: Refinitiv Datastream as at 15/08/2019.

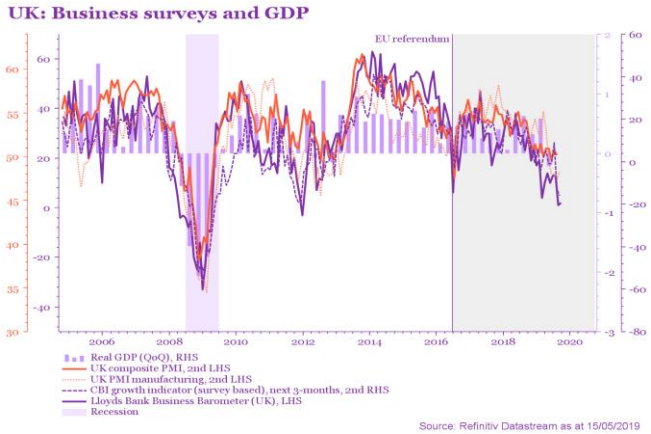
UK: Still under a cloud

Survey data suggest that the UK economy has weakened significantly. Brexit and the UK political backdrop are *still* generating significant uncertainty for UK businesses at a time when the global backdrop is lacklustre at best. 'Brexit clarity' is unlikely to be achieved quickly. 'No deal' Brexit is still a substantial threat to the outlook. The upscaling of 'no deal' Brexit preparations is welcome, but won't eliminate short-term disruption or the medium/longer-term hit to potential growth that would likely result.

Sluggish; subdued: The survey data looks consistent with flat to negative GDP growth (Chart 49), with Brexit and the global backdrop playing a role in subdued business sentiment. The hard data paint a somewhat more positive picture. July monthly GDP was strong enough to make a technical recession look mechanically less likely for Q3 (Chart 50). Retail sales remain surprisingly resilient; business investment still looks weak (Chart 51).

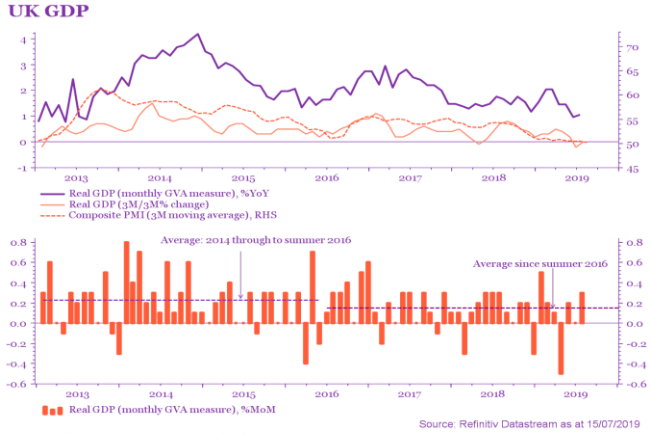
Government and consumers keeping the UK out of a slump: With business investment weak and net exports and inventories volatile, consumer and government spending are important in determining whether or not the UK sees a technical recession (Chart 52). Both look supportive for now.

Chart 49: Weak UK business surveys



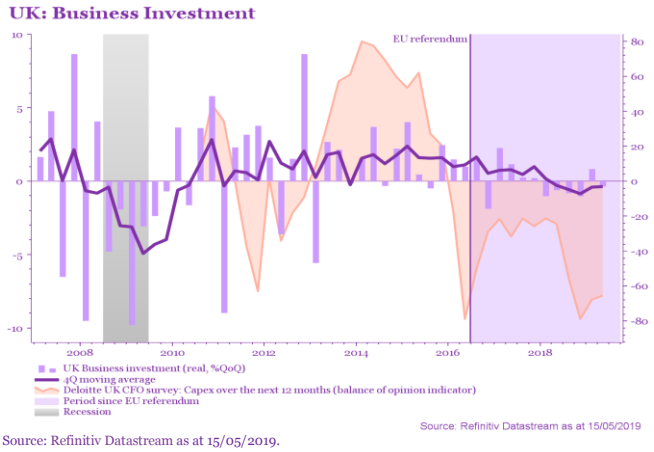
Source: Refinitiv Datastream as at 15/05/2019.

Chart 50: Weak GDP trend



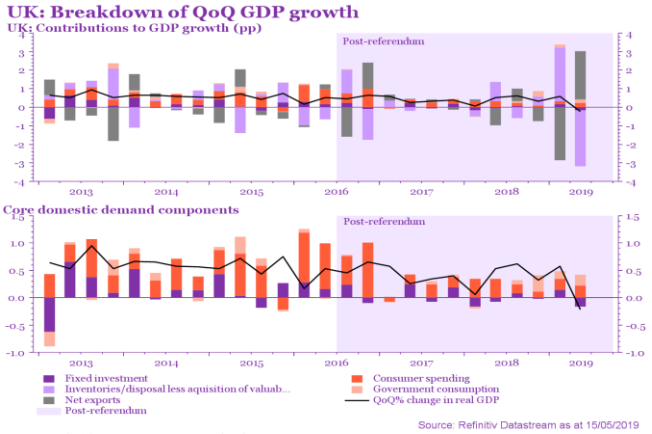
Source: Refinitiv Datastream as at 15/07/2019.

Chart 51: Business investment weak



Source: Refinitiv Datastream as at 15/05/2019.

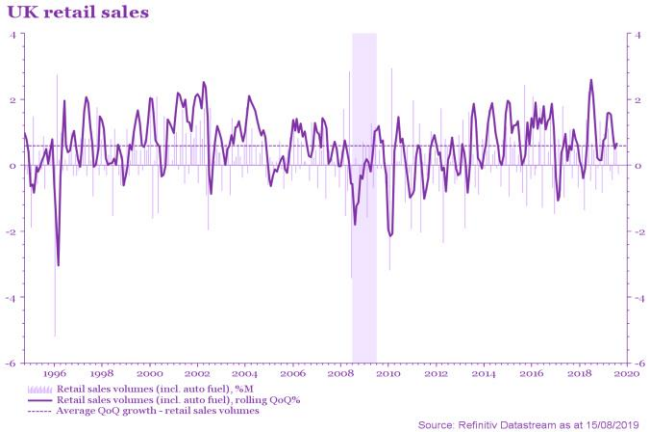
Chart 52: Consumer and Government holding GDP growth above zero



Source: Refinitiv Datastream as at 15/05/2019.

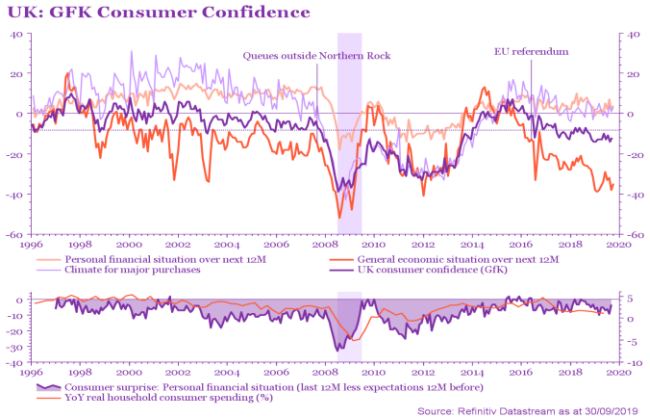
- **More government spending**: The government has been loosening the fiscal stance, most recently announcing a substantial boost to government spending for the coming fiscal year and additional spending on Brexit preparations. Taken at face value and applying a standard multiplier, the £14.3bn of extra departmental spending announced in September 2019 by Chancellor Javid should add around 0.2-0.3% to GDP (assuming no offsetting measures).
- **Resilient consumer spending**: Over the last six quarters, consumer spending has added an average 0.2pp to GDP growth (which itself has averaged only 0.3% a quarter. The latest official retail sales data suggests a continued robust pace of spending growth in the UK, albeit down from recent peaks (Chart 53). Consumer confidence is still not far below average levels (Chart 54). Meanwhile, the labour market remains surprisingly robust. Redundancy rates are low, employment is still growing and unemployment levels are still falling. Pay growth has been rising too (Chart 55), with real pay growth still around 2%YoY. The ASDA income tracker (a measure of nominal discretionary income) has been rising at around 6% year-on-year in recent months.

Chart 53: Retail sales still look resilient



Source: Refinitiv Datastream as at 15/08/2019.

Chart 54: Consumer confidence has weakened, but headline indicator not *far* below average



Source: Refinitiv Datastream as at 30/09/2019.

Chart 55: Real pay supporting consumer spending

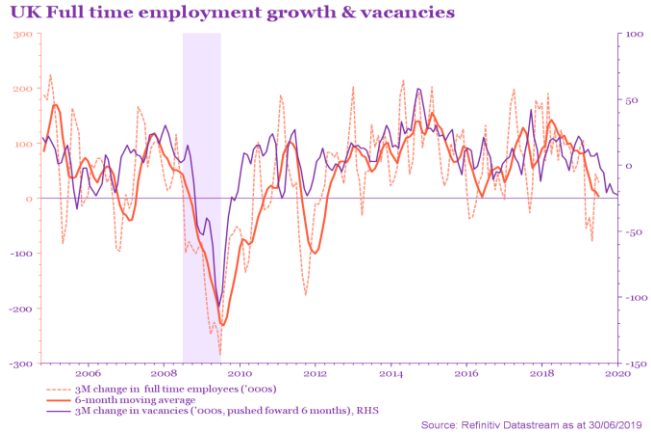
Source: Refinitiv Datastream as at 15/05/2019.

The consumer spending outlook could sour, however, if there were a significant turn in the labour market, which has shown some signs of cooling:

- Growth in full-time employment and vacancies has slowed (Chart 56).
- BoE employment intentions and PMI employment indicators have softened over the last 18 months.
- The August IHS Markit/REC report on jobs indicated declining permanent hires "as many employers chose to postpone staff hiring amid heightened political and economic uncertainty".
- Survey data suggest pay growth may be about to turn down (Chart 57).

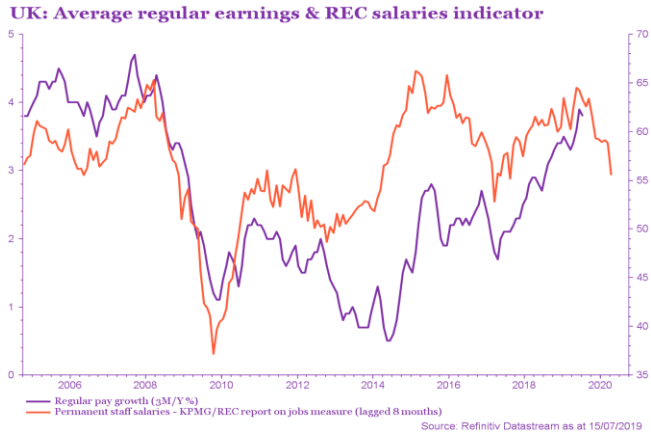
UK households look somewhat vulnerable to a labour market downturn. Consumer credit conditions have tightened. However, savings rates are now some way above the lows (Chart 58).

Chart 56: Signs of labour market softening



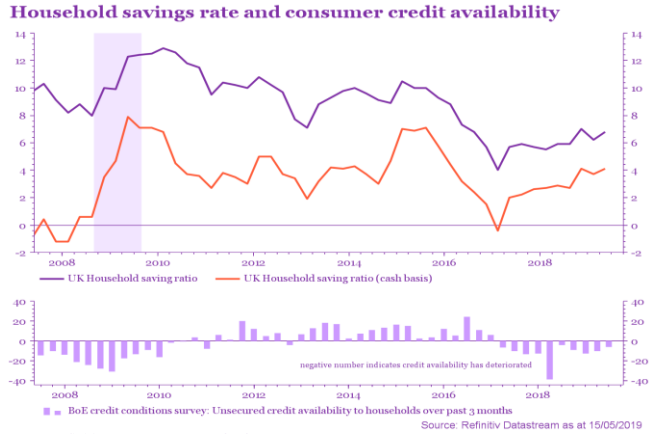
Source: Refinitiv Datastream as at 30/06/2019.

Chart 57: Pay growth about to turn down?



Source: Refinitiv Datastream as at 15/07/2019.

Chart 58: Household saving rates above the lows but consumer credit conditions tighter



Source: Refinitiv Datastream as at 15/05/2019.

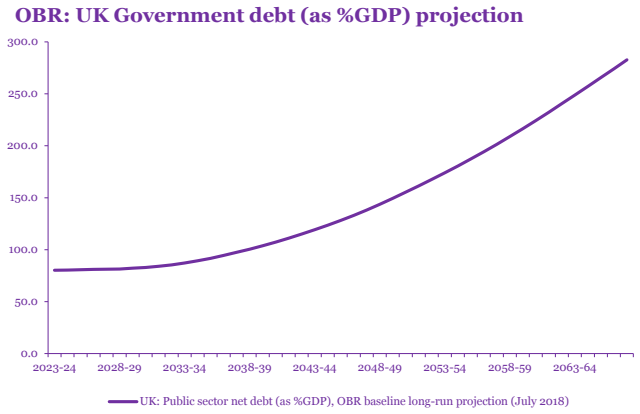
Political uncertainty a growing problem? UK companies have to navigate a particularly challenging political environment, which, beyond just Brexit alone, may be hindering business investment. The UK is not a stranger to bouts of political uncertainty, but until the financial crisis, the UK's first-past-the-post electoral system had tended to produce majority governments. The UK's 2010 coalition government lasted a full five-year term. In the subsequent five-year period, the country may yet see three general elections and at least three prime ministers (despite government being led by the same party). The current government is a minority government and, of the two biggest parties, one promises 'do or die' Brexit by 31st October, while the other's policies include sharply higher corporation tax and nationalisation of certain industries.

Fiscal stimulus welcome…: Given the weak economic backdrop (global and domestic) and with monetary policy already accommodative, recent fiscal stimulus is welcome. Almost no matter who wins any upcoming election it seems fair to assume that *more* fiscal stimulus is likely rather than less.

In the UK, the temptation is surely there to make an even bigger shift in approach and allow significantly more flexibility into the fiscal rules: 1) so that the government can make Brexit (when/if it happens) look and feel more of a success economically; 2) the average duration of government debt in the UK is very long compared to its peers. That means that overall government interest payments would respond *relatively* more slowly if there were a sharp rise in current bond yields; 3) the fiscal rules need an overhaul anyway (the current fiscal guidance is written in terms of outcomes for 2020/21); 4) polls show austerity is unpopular with the public.

…within limits: However, analysis by the OBR shows that the UK was already on an unsustainable fiscal path before the last batch of stimulus (Chart 59). Assuming unchanged government policies, demographic pressures suggest that public spending pressures will rise significantly over the next few decades (with a similar picture for other economies too of course).

Chart 59: Stimulus welcome…but the UK is already on an unsustainable fiscal path



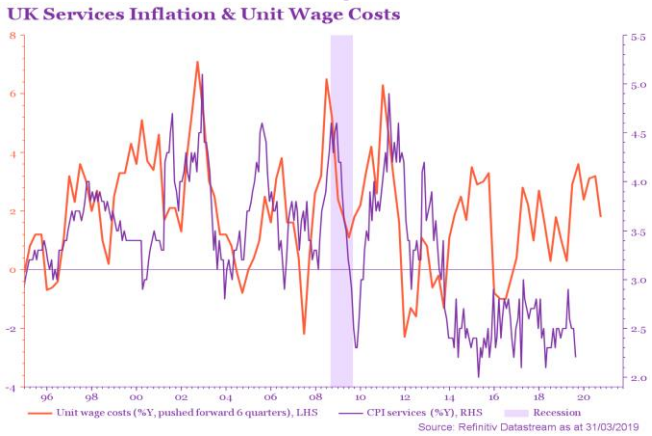
Source: OBR as at 17/07/2018.

BoE: Pencilling in further adjustment: With the global backdrop relatively weak, with central banks all over the world cutting rates, we push out the likely date of a rate hike even further (late 2021) and think a rate cut in the next six months is now a greater than 50% probability:

1. Not all of the current weakness in the UK economy is Brexit related and thus temporary;
2. Temporary Brexit uncertainty is beginning to feel semi-permanent;
3. Signs of a pick-up in domestically driven inflation remain elusive, despite higher pay growth and unit labour cost inflation (Chart 60). Core CPI remains close to 2.0%, but our measure of core services inflation remains weak and inflation in the most 'domestic/least-import-intensive components is *decreasing* rather than rising (Chart 61).

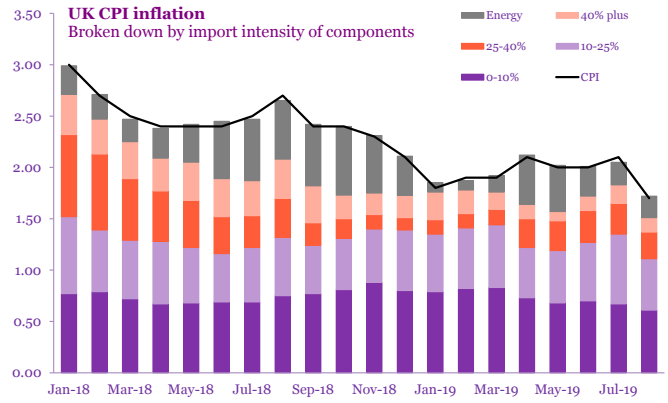
Assuming 'no deal' is avoided, with robust pay growth, record low unemployment and no low *headline* inflation problem it makes sense to have nothing more than a small rate cut pencilled in and to still assume a rate rise once we have considerably more Brexit clarity and the assuming the UK avoids a 'no deal' scenario.

Chart 60: Unit labour costs suggest (services) inflation should be much higher



Source: Refinitiv Datastream as at 15/02/2019.

Chart 61: Most 'domestic' components of inflation are contributing *less* to overall inflation, not more



Source: ONS as at 15/08/2019.

Brexit: Assuming that there is an endorsed and ratified withdrawal deal, but not necessarily this year and with limited confidence. Both 'no deal' and 'remain' are substantial probabilities over a two-year timeframe. Despite PM Boris Johnson's 'do or die' pledge over leaving the EU with or without a deal on 31st October, MPs have acted to block 'no deal'. It matters too that the prime minister no longer governs with anything close to a majority – even after including the support of Northern Ireland's DUP – after the defection and expulsion of more than 20 Conservative MPs. Rather than leave the EU with 'no deal' on 31st October, arguably it makes more sense to assume one of the following happens:

1. He returns to parliament with a deal before the 31st October, with alterations to the backstop. That is brought back to parliament and supported by a (thin) majority of MPs.
2. No new deal is bought before parliament or MPs reject the deal on the table. As now demanded by parliament, the PM – either the current PM, or an alternative if the current PM resigns or is replaced by a temporary 'national unity government' – requests a Brexit extension from the EU which is granted.

After 31st October, in the latter case, potentially all of the following happen:

1. A general election is held, either forced on the PM or proposed by the PM and supported by the opposition.
2. The existing deal is put to the vote of a new set of MPs or a new deal negotiated.
3. Either before or after a general election, a referendum is called.

High 'no deal' risk: There is still a significant risk that the UK exits the EU between 31st October and the end of 2020 with no deal. A general election could return a new parliament with a balance of MPs more willing to let the government go down that path; or 'no deal' could be an option on offer in a referendum. 'No deal' Brexit remains the default option unless an extension has been proposed to and agreed unanimously between EU member states. Although the expected path for the economy in a 'no deal' scenario is not as weak in the immediate aftermath as it was previously (given more extensive 'no deal' Brexit preparations), it is still significantly weaker than the central case. For more, see 'Dark Clouds but no Storm'.

Significant risk of 'Remain': The most likely Remain route is still through a referendum, likely via a general election (where the majority of seats then went to pro-referendum and/or pro-revoke parties). With parliament's repeated rejection of the May deal, increasingly fractious politics (executive vs parliament) and internal divisions within both major parties, the need for a new political process (election or, probably more decisively, referendum) looks needed.

If the UK avoids 'no deal', UK growth stays mediocre, but recession avoided: In the central forecast for the UK economy there is no clarity on whether the UK will be leaving the EU or not in the near term. In either a 'deal' or 'no deal' outcome, uncertainty around the UK's ultimate relationship with the EU will linger over (likely years) of negotiations. The political fallout of Brexit has already increased economic policy uncertainty in the UK. Business investment is likely to remain relatively lacklustre for a more prolonged period.

2019/20 Brexit scenarios

Upside scenario (25% probability) – Remain

- There is a very high probability that 'Brexit Day' is pushed out beyond the end of the year ('temporary Remain') given legislation recently passed by the House of Commons.
- There is still a subset of outcomes where the UK stays in the EU longer-term, e.g. there is a referendum on the withdrawal deal, where 'Remain' is both an option and selected by a majority
- Economic implications in the near term vary, depending partly on how much political uncertainty or change precedes the outcome and whether Article 50 is revoked entirely or just extended for a lengthy period. Sterling likely appreciates significantly if this outcome is seen as having a shelf-life.

Base case (40%) – Entering transition

- Uncertainty drags on until a deal is ratified, sometime before the middle of the year, after the Article 50 deadline is extended for a short period, potentially after a general election and/or 'confirmatory ballot', with the effects of uncertainty on the economy becoming more visible in the meantime.
- A transition period ensues, but negotiations around the future relationship start in earnest, maintaining an ongoing level of uncertainty including around the UK domestic political outlook.
- BoE eventually resumes a (very) gradual tightening path, but cuts rates modestly in the meantime.

Downside scenario (35%) – Disruptive 'No Deal'

- Process breaks down and there is no fully implemented transition period. This could happen through several routes including election of a pro-no-deal majority in parliament, and a second referendum which includes a 'no deal' option where that option gets a majority. 'No deal' is still the default if Article 50 is not revoked or a deal agreed.
- On/off negotiations resume throughout the period, but direction of travel remains unclear
- Brexit impact more severe –Disruption to the economy is significant in the near term, although 'no deal' preparations and a degree of political will on both sides help prevent some of the worst repercussions. Sterling falls sharply and higher inflation squeezes real incomes. Growth slows and unemployment rises. It takes time to re-orientate the economy. 2020 GDP growth is negative.

Scenarios are not exhaustive and probabilities are subjective and author's own