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Economic and Strategy Viewpoint

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Recovery hopes and de-leveraging cycles

- Hopes of a trade deal between the US and China have helped risk assets of late, but there is little evidence of recovery in the survey data. There is evidence though that investors had became too gloomy in the US where data is now surprising on the upside.
- This US cycle has been long, but also weak as households have spent the decade de-leveraging. Key to the success of the Federal Reserve's monetary policy will be household willingness to reverse this trend. Otherwise stronger activity may have to wait for fiscal support after the presidential election.

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The Rocky Horror Brexit Show

- A hostile mood has descended in Westminster as we approach the 31 October Halloween Brexit deadline. The government has lost its majority, and every vote since Johnson became Prime Minister.
- The Benn Act should ensure a delay to the deadline unless a new deal is agreed, that is assuming Johnson does not attempt to circumvent the law. Betting markets show the probability of a no-deal Brexit in 2019 has fallen sharply, helping to lift sterling.
- We explore the most likely potential paths for the next few months, including what a general election could mean, and the economic impact of the different Brexit scenarios.

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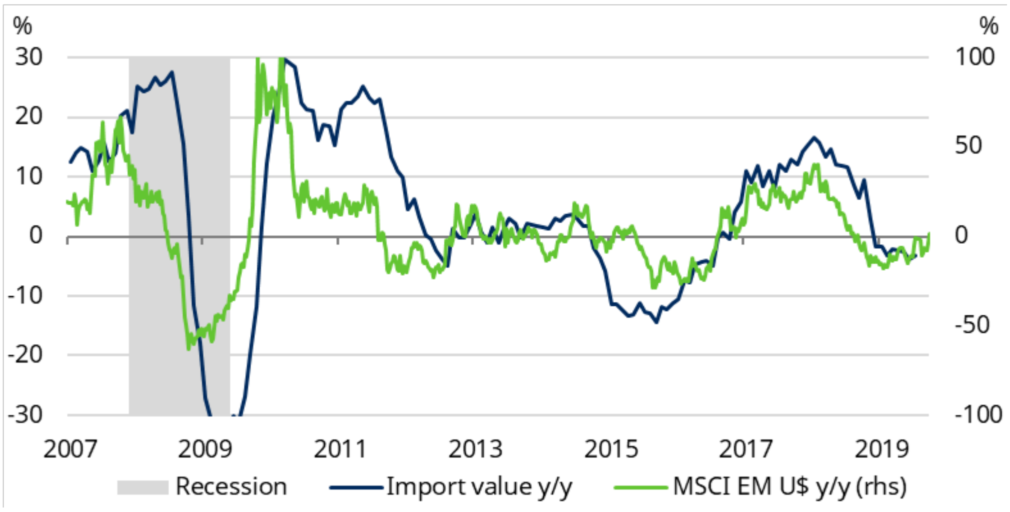
Should, would or could China aggressively devalue?

- While a devaluation of the renminbi might appear an obvious counter to rising tariffs from the US, China would face prohibitive costs in doing so and with no guarantee that it would prove a panacea.
- Equally, though its resources are limited, China's central bank is unlikely to be forced to abandon the defence of the currency altogether. However, commitment to even a floating peg will tie its hands in other ways.

Chart: Emerging markets brighten on hopes of trade recovery



Source: Refinitiv Datastream, Schroders Economics Group G00008. 26 September 2019.

Recovery hopes and de-leveraging cycles

"Neither a borrower nor lender be"

William Shakespeare, Hamlet Act 1

Signs of recovery?

A turning point?

Markets sense a turning point in global activity. Equities have rallied and sovereign bond yields have ticked up. Within equity markets the emerging markets are leading the way, an indication that growth expectations are improving given the link with global trade (see chart front page). Hopes of a trade deal between the US and China have helped, but there is little evidence of recovery in the survey data with the global purchasing managers index (PMI) falling further in August as the service sector weakened.

However, whilst these indicators do not bode well for global growth, there are signs that the worst may be behind us in the US where data is now surprising on the upside. Home sales, manufacturing output and retail sales have beaten expectations. The survey weakness is concentrated outside the US, particularly in Europe where the latest PMI's have been feeble. China has also seen soft data, although our activity indicator which adjusts for inflation ticked up in August.

Markets probably became too gloomy on the outlook earlier in the summer and we may see further improvement in the short run. The key will be whether the slowdown in manufacturing feeds into services with the link being a weaker labour market. If this doesn't happen then markets may strengthen further, however with profits under pressure lay-offs could accelerate further hitting households.

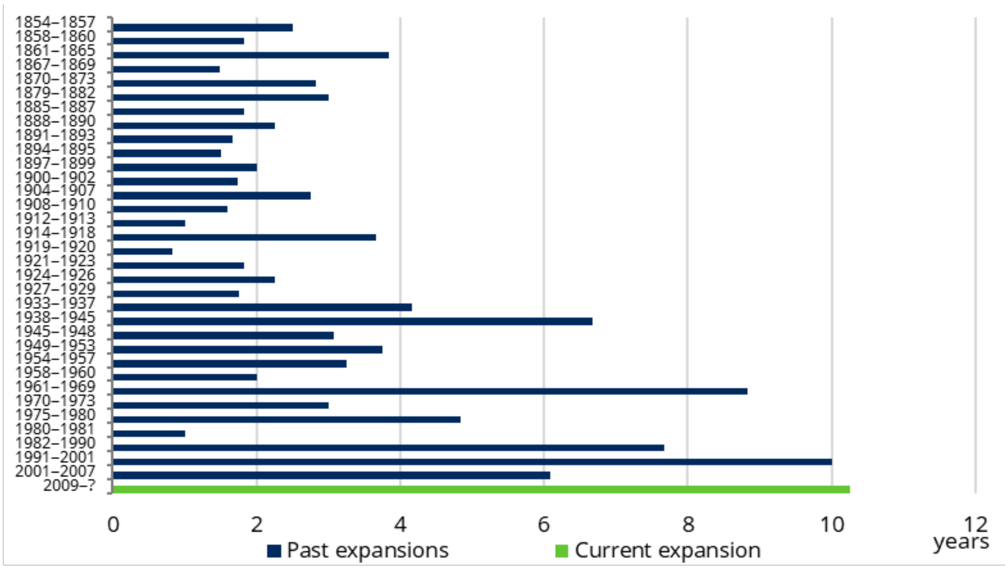
The longer run issue for the world economy remains the same though: a deficiency in demand with no obvious global locomotive. In this respect the current cycle has been very different from the past. In the next section we explore those differences from the perspective of the current US expansion with a focus on that previous driver of global growth, the consumer.

A cycle like no other

The US is enjoying its longest expansion on record…

Much has been made of the fact that the US is currently enjoying it's longest expansion since the National Bureau for Economic Research (NBER) records began in 1854. The current expansion, which emerged in the dark days of 2009, became the longest in June when it surpassed the previous record of 10 years (chart 1).

Chart 1: Longest on record: US expansions by length

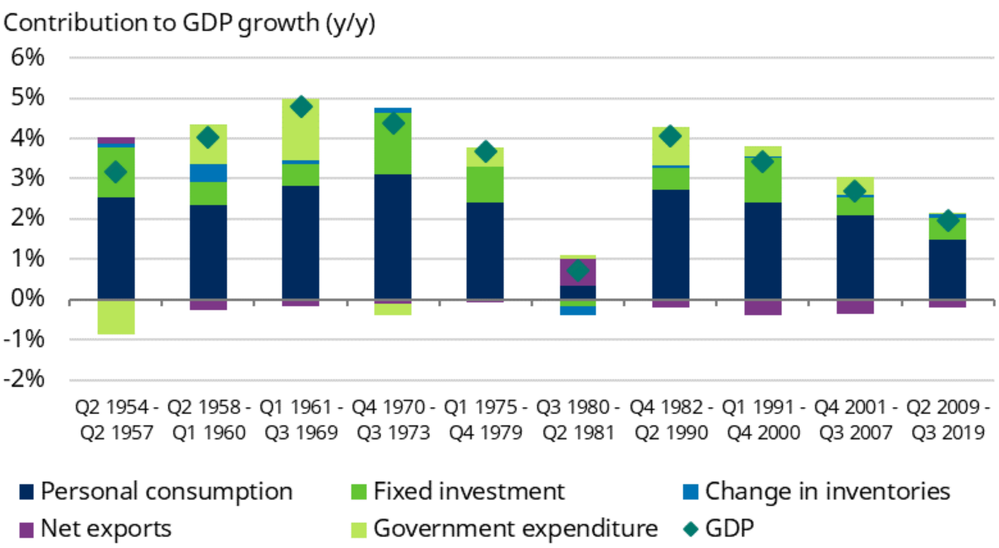


Source: National Bureau of Economic Research, Schroders Economics Group. 24 September 2019.

...but also one of the weakest

However, whilst this is a remarkable achievement which has helped underpin the long bull market in equities, there has been less focus on the fact that this has also been one of the weakest expansions on record. Looking at the annualised growth rate of GDP during each of the 10 expansions since 1954, the current is the second weakest since 1954. If we exclude the very brief 1980–81 episode, then it is the weakest with GDP rising at just under 2% annualised. This compares with average growth rates of 2.7% in the last expansion prior to the Global Financial Crisis (GFC) and 3.4% before that. Typically expansions have averaged between 3% and 4% GDP growth (chart 2).

Chart 2: US GDP growth: contributions by cycle expansions



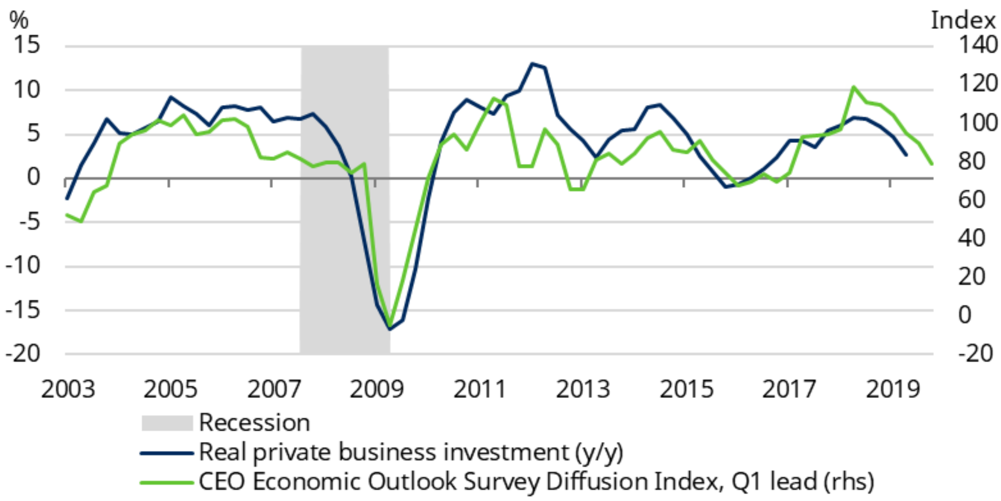
Source: NBER, Schroders Economics Group. 24 September 2019.

Consumer and government spending account for the slowdown

In terms of the components of GDP the weakness can be largely attributed to the consumer which contributed 1.5 percentage points (pp) of the rise in GDP compared with 2.1 pp in the previous cycle and 2.5 pp in the one before last. There was also a negligible contribution from government spending compared with positive contributions in all of the previous cycles bar two. This would largely reflect cuts in public investment, but also layoffs at the state and local level.

On the more positive side, trade has been less of a drag than before the crisis. Meanwhile, fixed investment has actually held up in the current cycle and whilst not as strong as in earlier periods such as the 1990s expansion, has made more of a contribution than in the last cycle. This though may change as geopolitical uncertainty (trade wars, etc.) takes its toll on business confidence and spending. The latest CEO survey in the US indicates that business investment is set to decelerate further (chart 3).

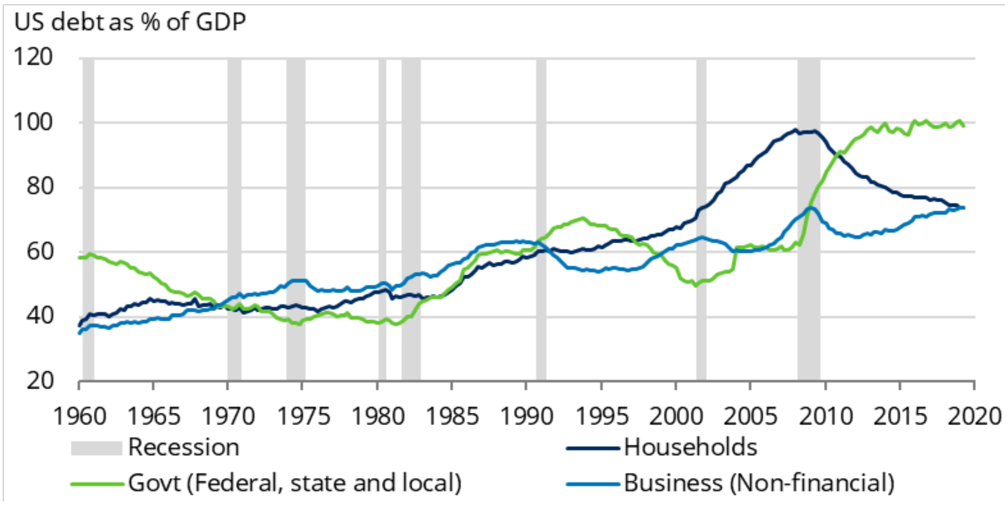
Chart 3: CEO survey signals further weakness in investment



Source: Refinitiv Datastream, Schroders Economics Group. 24 September 2019.

Coming back to the cycle as a whole, the pattern of consumer and corporate spending is reflected in the debt markets. Households in the US have been deleveraging since the GFC, whilst after a brief period of debt consolidation corporate gearing has been rising. Admittedly much of the latter has gone into share buy backs rather than capital spending, but nonetheless there is a contrast with the personal sector where debt to GDP has declined from 98% in Q1 2008 to 74% in Q2 this year (chart 4).

Chart 4: US debt by sector



Source: Refinitiv Datastream, Schroders Economics Group. 24 September 2019.

A decade of de-leveraging for US households

Overall the level of debt in the economy has risen as a share of GDP from 227% to 247% largely as a consequence of the increase in government debt to nearly 100%. For the household sector though the past decade marks a sea change in behaviour as we have never seen such a sustained period of debt reduction. There have been phases where household leverage has stabilised, or fallen slightly, such as from the mid-60s to early 1970s and in the early 1980s. However, with the exception of these periods the household debt to GDP ratio rose steadily from 1960 to the GFC with an acceleration after 1983. Much of this was encouraged by successive governments which de-regulated banks and promoted home ownership to the widest groups of the population with ultimately disastrous effect.

A period of balance sheet repair followed the crash as households worked to restore their finances as anticipated by Reinhart and Rogoff in their famous study of debt crises[1]. What is interesting though is how long the current period of household de-leveraging has gone on with little sign that it might be ending. Today the debt to GDP ratio is below levels seen at the start of the last expansion and still falling (chart 4).

Signs of scarring?

There were many excesses during the run-up to the crisis as the banking system forgot the concept of prudent lending, but it is hard to argue that the whole period was an aberration. Other measures such as buoyant household wealth and interest cover suggest the US consumer's financial position has now been restored. Perhaps we are seeing the “scarring” effects of the financial crisis; this can affect the willingness of households to borrow for a generation as occurred after the Great Depression.

If households have decided to eschew debt then the ability of the US Federal Reserve (Fed) to generate recovery through cutting interest rates is clearly limited. We have argued previously that the Fed will struggle to overcome the headwind from the trade war and this only adds to its difficulties by blocking one of the main monetary transmission mechanisms.

Measures to roll back some of the regulation on banks may help in this respect, but the most likely outcome is another bout of fiscal policy. This has become the policy prescription of the day.

However, it faces two challenges in the US. The first is that the government's debt to GDP ratio is already high at close to 100% (chart 4). In the past this might have been an issue as investors worried about government spending "crowding out" private sector activity, but the bond markets do not seem concerned at present. The second is the political cycle. There is little extra government spending in the pipeline for the rest of this year or next; we are probably looking at 2021 at the earliest after the presidential election. No doubt there will be promises of fiscal largesse from both sides in the election race, but 2020 looks like it will also lack growth unless households rediscover the joys of debt.

[1]This Time Is Different: Eight Centuries of Financial Folly. Carmen M. Reinhart & Kenneth S. Rogoff, Princeton 2009.

The Rocky Horror Brexit Show

"I would rather be dead in a ditch [than ask for a delay to Brexit]."

UK Prime Minister Boris Johnson, 5 September 2019

The mood in Westminster is nothing short of hostile as we approach the 31 October Halloween Brexit deadline, with no real signs of a smooth exit. Delay seems inevitable, followed by a general election, but concerns remain that the government is willing to subvert the will of Parliament.

Boris loses his majority, and every vote so far

It has been a difficult start to Johnson's tenure as prime minister...

Since its return from summer recesses, the government, under the newly elected Prime Minister (PM) Boris Johnson, has lost every vote in the House of Commons – an unprecedented run of defeats. Opposition parties (dubbed the Rebel Alliance) have successfully voted in to law the Benn Act, which compels the government to seek a delay to the 31 October Brexit deadline if a deal cannot be reached and passed in the House of Commons by 19 October. This was rushed through the legislative process in a week, after it was announced that Johnson was to prorogue (or shutdown) Parliament ahead of a Queen's speech, which sets out the government's legislative programme.

Johnson's "do or die" approach to negotiations with Brussels has triggered a rebellion within his own party, contributing to 21 fellow Conservative MPs voting with the opposition. Those rebels have since been kicked out of the party, with several others following suit in protest (including the Prime Minister's own brother).

In response to the prorogation, legal challenges were brought to both the English and Scottish High Courts, alleging that the prorogation was illegal as it was designed to stop Parliament from scrutinising the government's Brexit plans. In the end, the UK's Supreme Court heard the case, and in the absence of an explanation from the government as to the reason behind the shutdown, prorogation was ruled as unlawful and void, allowing Parliamentarians to return to work.

...having lost his majority, every vote in the Commons and even an unimaginable court case

Without a working majority, a general election is now inevitable, even though the PM was recently defeated when we called for a vote on an early general election. Opposition leaders have said that they will support a call for an early general election once a delay to Brexit is guaranteed. The opposition simply do not trust Johnson to extend Article 50 and have voiced concerns that the PM might use his powers to delay an election after the end of October, which could pave the way for a no-deal Brexit. There have been several other suggestions of how the PM might seek to circumvent the Benn Act, including by former Conservative Prime Minister John Major, who has been scathing over Johnson's behaviour and tactics.

What happens next?

The next few weeks will see an escalation in rhetoric and uncertainty, both between the UK and Brussels, and within the UK's Parliament. The UK government appears to be re-negotiating the Withdrawal Agreement so that Great Britain is excluded from the Northern Ireland backstop – a failsafe that ensures a hard border between the Republic and Northern Ireland does not return in the event that a workaround cannot be found during the transition period.

The UK government is attempting to reshape the Withdrawal Agreement

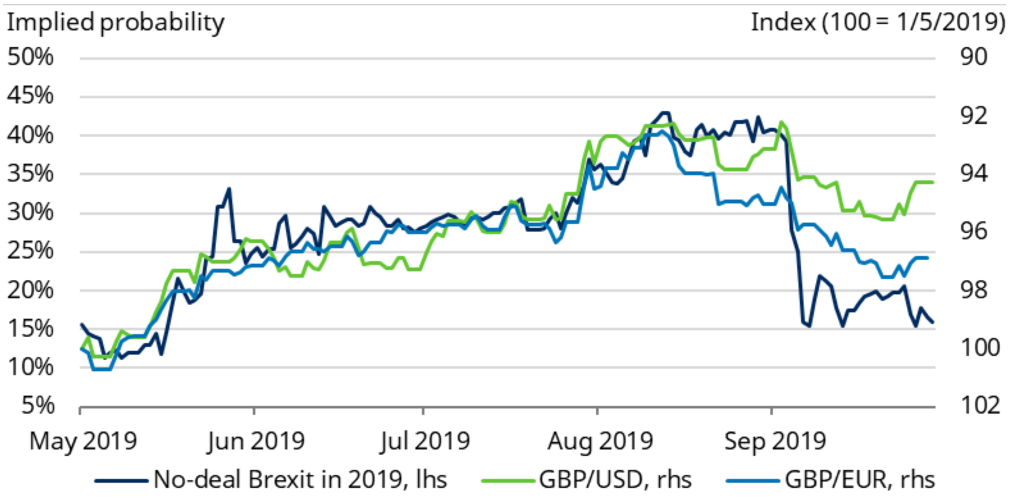
If such an arrangement can be agreed with Brussels, then it will be put to a vote by 19 October. If Parliament backs the solution, then the UK will exit the EU on 31 October and enter a transition period for an unspecified period of time. During this period, the future relationship including trade, customs arrangements and so on, will be negotiated.

However, if Parliament rejects the deal, then according to the Benn Act, Johnson must seek an extension to the Brexit deadline to 31 January 2020. This is the point in which there is great uncertainty, as highlighted before. Could Johnson find a way to circumvent the law? Could he simply refuse and risk going to prison? Could he resign, leaving the task to someone else? After all, his comment quoted at the top of this note suggests he is willing to do whatever it takes, and his actions so far support this. As a result, the risk of a no-deal Brexit in 2019 continues to linger and weigh on the performance of sterling.

Chart 5 shows the implied probability of a no-deal Brexit occurring in 2019 from the Betfair Exchange – a peer-to-peer betting platform. The probability climbed from around 30% to just over 40% after Boris Johnson became Prime Minister, and announced the prorogation of Parliament. However, as Parliament passed the Benn Act, the probability collapsed to under 20%, with the latest reading at 16%. Sterling has been buffeted by Brexit news ever since 2015.

Betting markets suggest the risk of a no-deal Brexit in 2019 has fallen sharply, but some risk remains

Chart 5: Sterling rebounds as risk of no-deal Brexit recedes



Source: Refinitiv Datastream, Betfair Exchange, Schroders Economics Group. 29 September 2019.

The chart above also shows the performance against the US dollar and the euro, as both exchange rates are indexed and inverted on the right hand side axis. Other factors are of course contributing, such as the threat of another Italian election over the summer, or the escalation of the US-China trade war. But on the whole, sterling still has substantial downside risk in the event of a no-deal, and some upside risk if a deal can be agreed.

Returning to the Brexit outlook, our baseline assumption remains that the Brexit deadline will be delayed into 2020, and that a deal will eventually be found to allow the UK to leave with a transition period. Should the Prime Minister refuse to request the extension, then we assume that a senior civil servant or Parliamentarian will do so instead, referring to the Benn Act as the legal mandate to do so. We fully expect the European Union to accept the request, but it may decide to force a longer extension.

General election looms

A delay to the Brexit deadline seems most likely, followed by a general election

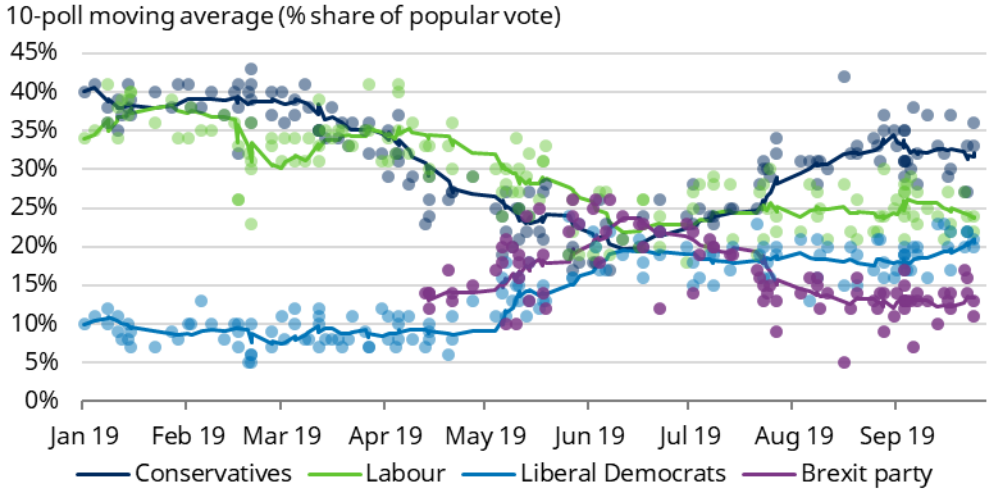
Once the Brexit deadline is extended, opposition parties would have no further excuses to refuse an early general election. The government has accused opposition parties of avoiding an election due to the lead the government still has in voting intention polls.

Tracking the average of the last ten polls, the Conservative Party appears to be comfortably in the lead (chart 6). Following the delays to Brexit last March and May, both the Conservatives and Labour started losing ground to the Brexit Party and the

Liberal Democrats. Though the Brexit Party was only formed a few months ago, it is led by the former leader of the UK Independence Party, Nigel Farage, and therefore has credibility when it promises to leave the EU without a deal at the earliest opportunity. Meanwhile, the Liberal Democrats have clearly become the remain party, and did well to win over support. Indeed, the results of the European Parliamentary elections in May shocked most observers and politicians. The Brexit Party came first, winning 30.5% of votes, while the Liberal Democrats finished second with 19.6% of votes. Labour came in third (13.6% of votes) while the ruling Conservatives finished in fifth (8.8% of votes) and behind the Green Party).

Chart 6: Opinion polls put the Conservatives in the lead

Opinion polls put the Conservatives in the lead, but it may not be enough for a majority



Source: Wikipedia, Schroders Economics Group. 29 September 2019.

Even after the European elections, the polls continued to narrow, until the Brexit Party was in the lead by the middle of the summer. This partly prompted the change in leadership of the Conservatives and certainly the change in strategy. Boris Johnson won the leadership contest by pledging to deliver Brexit, deal or no deal.

Since Johnson became Prime Minister, the Conservatives have seen a significant recovery in the polls, appearing to take voters away from the Brexit Party. Meanwhile, the Labour Party has seen a little bounce, but the Liberal Democrats continue to make gains, with one poll recently putting it ahead of the Labour Party.

Based on the latest polling data, the Conservatives would once again be the largest party in Parliament; however, they may fall short of an absolute majority. Implied probabilities from the Betfair Exchange[2] show that there is a 60% probability of the election resulting in no overall majority, compared to a 32% probability of the Conservatives winning a majority.

With a minority Conservative government, or even a slim majority if once again in coalition with the Democratic Unionist Party (DUP), we should see the government attempt to compromise and push a deal through Parliament.

If the Conservatives were to win a majority, this could make voting through a deal even easier, although some believe that the hard-line Brexiteers within the party would push the UK to a no-deal Brexit. With a large enough majority, and with remain rebels booted out of the party, there would be little to stop such a outcome.

[2]Betfair Exchange implied probabilities taken on 27 September 2019.

If a 'remain coalition' was to be formed, then a second referendum would be likely, raising the possibility of the UK remaining in the EU

Of course, opinion polls are not always correct, and they can move aggressively during an election campaign. The 2017 general election saw a 10 point swing from the Conservatives to Labour in the five weeks of campaigning. If such a swing was repeated, and the Labour Party ended up being the largest group in Parliament, then they might be able to form a 'remain coalition' with the Liberal Democrats and the Scottish Nationalist Party (SNP – by far the largest party in Scotland). In this scenario, we expect the Labour strategy on Brexit to win out. The coalition government would seek to renegotiate the deal, then put the deal to a confirmatory (or second) referendum. However, Labour, the Liberal Democrats and SNP have all suggested they would then campaign to remain in the EU. This is not the clearest of strategies, which is why Labour is losing ground to the Liberal Democrats' simple 'revoke Article 50' campaign. But, the distribution of seats suggests that as the Liberal Democrats gain momentum, they will be mainly taking seats from the Conservatives rather than from Labour.

If a second referendum was held, then polling suggests remaining in the EU would win, although probably only by a small margin. This will itself garner strong opposition to the result, even if logic suggests that more information is now available three years on after the first referendum.

Possible scenarios and the economic impact

We have attempted to describe the most likely scenarios for the coming months above, but there is clearly a high degree of uncertainty going forward. This makes the next part – considering the economic impact of various outcomes – even more uncertain.

A no-deal Brexit would lead to a recession both in the UK and EU as sterling falls sharply

If the UK leaves the EU without a deal, then it would do so without a transition period, and all current EU trade deals would cease. Customs borders would be erected, which could cause significant blockages and delays to the delivery of goods. In this scenario, we expect sterling to fall to around 1.10 against the US dollar and 1.02 against the euro[3]. Inflation would rise significantly, reducing the purchasing power of households and encourage a reduction in real consumption. As household spending is the biggest driver of GDP growth, the economy would suffer a technical recession, which may last up to a year. Business investment would also contract amidst the uncertainty, though government spending would most likely increase to limit the downturn. Interest rates would probably be lowered to near zero, and quantitative easing may also be restarted.

It is worth mentioning that in a no-deal scenario, the EU could also slip into a technical recession. The negative impact, combined with the current low growth environment, could be enough to cause a short and small contraction in activity.

A Brexit deal would help lift growth and sterling, along with interest rates

If the UK was to leave with a deal (this year or next), then we would expect sterling to rise to around 1.35 against the US dollar and 1.19 versus the euro. Inflation would temporarily dip, helping households by boosting real income growth. Business investment would rebound after contracting in recent quarters, while government spending would probably increase in any case due to government policy of late. The recent build-up of inventories would have to be worked through, but within a year, the economy should see a marked pick-up in growth compared to its current lacklustre performance. Interest rates would probably rise as growth accelerated, though increases would be limited. Uncertainty would remain as the future relationship with the EU would still need to be negotiated, but the immediate risk of disruption would be removed.

Finally, if the UK was to revoke Article 50 and remain in the EU, we would expect sterling to rise to 1.50 against the US dollar, and 1.29 against the euro. This would be

[3]Currency assumptions are based on Schroders polling of other financial institutions.

the most positive scenario for economic growth. In the near term, it would resemble the 'leave with a deal' scenario, but over the medium and long term, we would assume ongoing free movement of labour, which secures greater growth in the working-age population. Though investment could take years to recover, research and co-operation will benefit productivity growth.

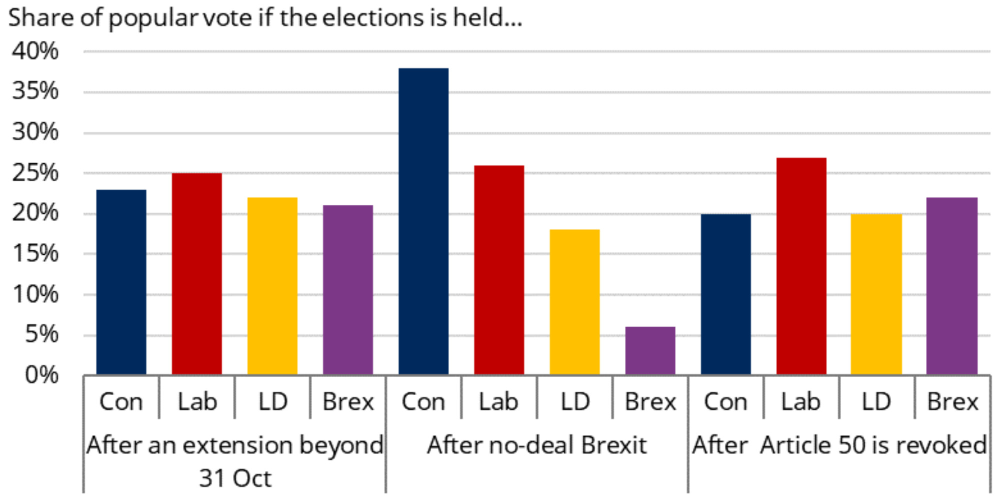
Political uncertainty to remain high

The biggest economic and political risk facing the UK is Brexit. Everything else pales into insignificance, making forecasting the economic outlook especially hazardous. We have attempted to outline the most likely potential paths for Brexit, but there is a very good chance that events find a way to surprise us. We leave you with one final chart which we thought best explains the motivation for many of the political actors we are watching.

Chart 7 shows voting intentions if the election was held after an extension to the Brexit deadline, if the election was held after a no-deal Brexit, and finally, if the election was held after Article 50 is revoked. It quickly becomes clear why the Conservative Party is happy to pursue a no-deal Brexit. Moreover, a question on voting intentions if the UK left on time but with a deal was almost identical to the results from a no-deal Brexit.

Why would the Conservative party back a no-deal Brexit? Because voters would reward it in an election

Chart 7: Opinion polls under different election scenarios



Source: ComRes polling conducted 18–19 September.

Lastly, the ambiguous position of the Labour Party starts to make sense. There is no scenario where it can win a majority based on this poll. With two-thirds of its seats voting to leave in the 2016 referendum, Labour is in a catch-22 scenario. Unless it can move the debate away from Brexit, though there is little chance of that.

Should, would or could China aggressively devalue?

"It was all very well to say "Drink me," but the wise little Alice was not going to do that in a hurry. "No, I'll look first," she said, "and see whether it's marked 'poison' or not."

Lewis Carroll, 'Alice in Wonderland'

The renminbi takes the strain as trade tensions escalate

Notwithstanding the recent cooling of tensions, the trade war has clearly escalated, as we wrote last month, and the Chinese currency has been taking the strain. The People's Bank of China (PBoC) had clearly spent large parts of this year propping up the renminbi (contrary to US accusations of currency manipulation in the opposite direction) as a sop to the US during trade negotiations. This policy was abandoned on two occasions following tweets from President Trump announcing new or increased tariffs, as visible in chart 8.

Chart 8: Trump's tweets saw authorities step away from supporting currency

Source: Refinitiv Datastream, Schroders Economics Group. 24 September 2019.

This is not the same, however, as pursuing a path of aggressive devaluation to offset tariffs. Some currency weakness is a natural, and rational, market response to the trade war. Still, that does not mean China could not take it further. The question is whether it would make sense to do so.

Might the PBoC choose to devalue?

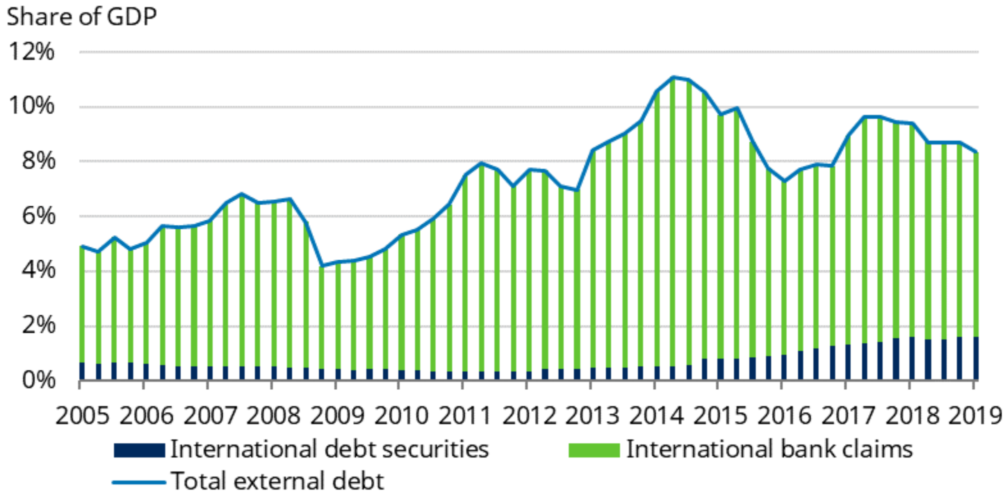
Devaluation could counter tariffs, but would entail significant costs

Superficially, a devaluation seems the obvious counter to tariffs from the US. With President Trump now proposing an average tariff rate of close to 25% on all Chinese goods by the end of this year, China could opt to devalue the renminbi to match. For US importers, Chinese goods would be no more expensive than before.

Yet this would impose certain costs on China. We know from crises in other emerging markets that a large devaluation can impose significant strain on the financial system. This comes through two main channels; the increased value, in local currency terms, of any foreign currency debt, and the risk that such a move prompts capital flight from the domestic banking system.

In China's case, external exposures are limited. Based on data from the Bank for International Settlements, hard currency liabilities are just a little over 8% of GDP (chart 9). In the simplistic case where this is all US dollar exposure, a 25% devaluation would therefore 'cost' China 2% of GDP in increased debt repayments, spread out over a number of years depending on the maturity profile of the debt stock, along with higher interest payments. This should be manageable, with the overall impact somewhat mitigated by any foreign currency earnings of impacted borrowers.

Chart 9: Foreign currency debt



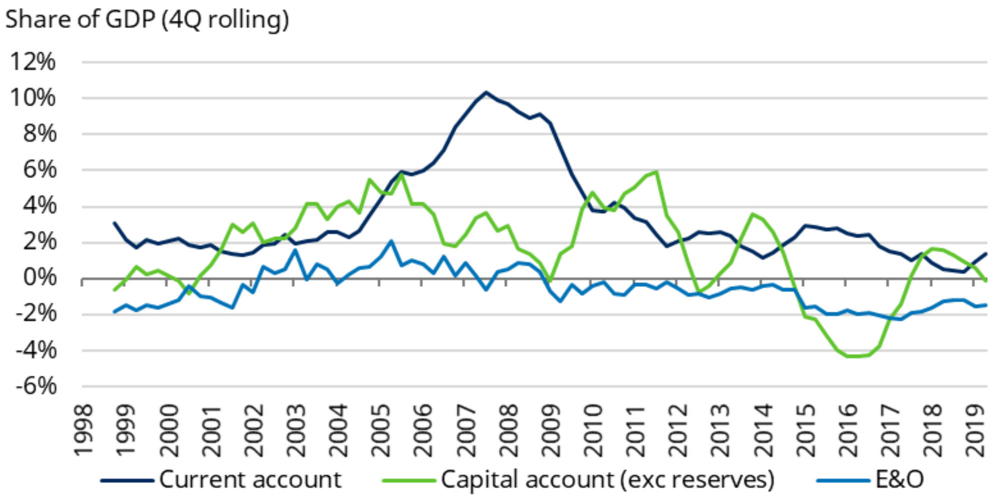
Source: Refinitiv Datastream, Schroders Economics Group. 26 September 2019.

The key, recurring risk is capital flight

Capital flight is a more serious concern. The last time China engineered a surprise devaluation, of just 3% in 2015, it triggered a period of sustained capital outflows that seriously depleted China's substantial foreign currency reserves. Large scale capital flight would prove ruinous for the financial system. However, there are reasons to think that the reaction would be more muted this time; in 2015 a lot of corporates were reportedly engaged in the carry trade, exploiting the apparent stability of the currency to make 'free' money. The devaluation left them exposed and took them entirely by surprise. Today, by contrast, corporates take greater advantage of hedging against currency moves, and the incentive to play the carry trade is reduced by the compression of local rates.

In addition, capital controls have also been tightened considerably since 2015. This is visible in the balance of payments data with the capital account deficit and errors and omissions (E&O) both shrinking (chart 10) and in the reduced volatility of China's foreign currency reserves.

Chart 10: Capital control effectiveness visible in balance of payments data



Source: Refinitiv Datastream, Schroders Economics Group. 26 September 2019.

Against this though we must consider that a 25% devaluation is much more severe than a 3% move, and that however stringent capital controls are, channels can normally be found to bypass them if the incentive is strong enough. The authorities would likely be concerned that by signalling their willingness to engage in large, surprise devaluations, they would provide such an incentive.

Ultimately, devaluation seems an unlikely policy choice

Another concern for policymakers would be the inflationary consequences of any devaluation. The BIS, for instance, estimates that the rate at which currency moves pass-through to inflation is around 0.2 to 0.3 times for EM economies. A 25% drop in the renminbi would therefore imply additional inflation of around 5 to 7.5%, which even if short lived would inflict considerable pain on households.

Finally, none of this would occur in a vacuum. The move would likely draw a response from not just the US, which could simply hike tariffs again by another 25%, but also from current trade war bystanders. The EU and Japan would likely object to the competitive advantage bestowed by such a large devaluation and could respond with tariffs of their own. Global markets, China's included, would also see a significant negative reaction. It is hard to conclude that devaluation is a particularly attractive tool.

Could the PBoC be forced to devalue?

PBoC resources are significant but not limitless

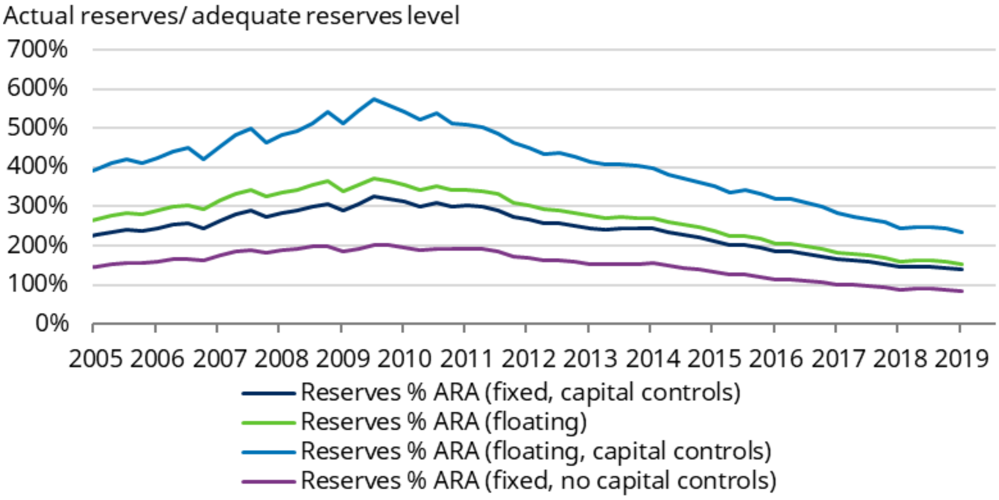
Even if the PBoC will not jump, the possibility remains that it could be pushed. Events may conspire to force a devaluation of the currency against the central bank's wishes. Given the three trillion dollars in reserves the bank holds, this might seem unlikely. Yet, as we mentioned above, we saw sizeable drawdown of those reserves in 2015 as corporates and households scrambled to respond to unexpected currency weakness. From $3.6 trillion in July 2015, reserves fell to $3.2 trillion by January 2016. A reduction of $400 billion in just six months shows how quickly even a large war chest can be depleted.

The question then is whether the PBoC has sufficient resources to defend the currency, and broader economy, in a crisis. There are a number of metrics one can use to assess reserve adequacy, all driven by historic experience. Some observers favour a ratio of reserves to imports, to assess how long the economy can finance its trade bill. Others focus on the ratio of reserves to the money supply, to gauge how long a currency peg could withstand capital flight. Alternatively we could focus on the external liabilities of the economy relative to reserves, to judge whether the economy could survive a prolonged period cut off from international capital markets.

Luckily, faced with so many individual measures, the IMF has created its own composite measure, which attaches some weight to each proposed metric. The weights vary depending on whether the country is running a fixed or floating exchange rate, and whether capital controls are in place[4]. An assessment of China's reserve adequacy against this metric, subject to different assumptions, is shown in chart 11.

[4]A fixed exchange rate requires greater firepower to defend, as it provides speculators with a clear target and gives the central bank little flexibility about when to intervene. Capital controls reduce the reserves needed by reducing the likelihood and magnitude of outflows.

Chart 11: The PBoC is running out of wiggle room



Source: Refinitiv Datastream, Schroders Economics Group. 26 September 2019.

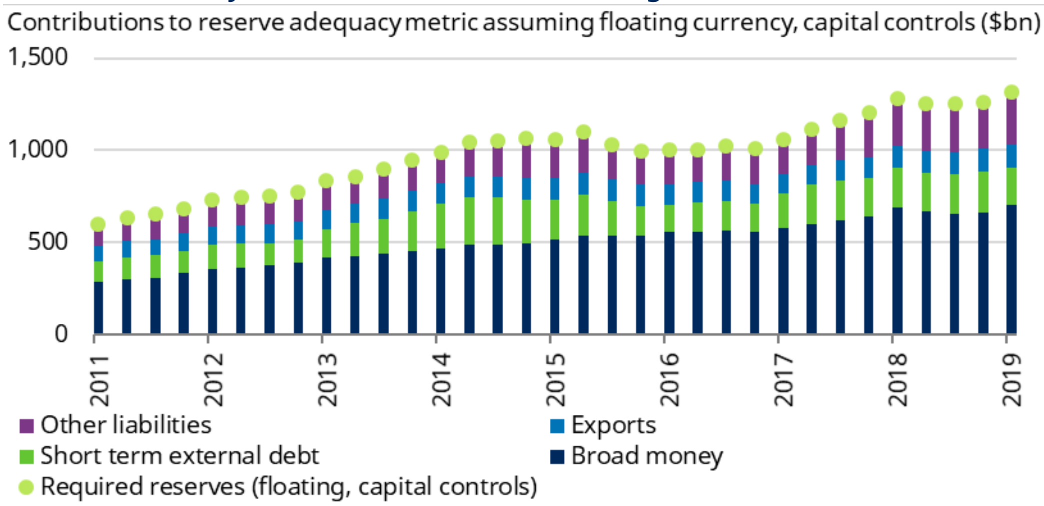
Capital controls are not a choice but a necessity for China

What becomes clear, looking at this chart, is that China is already in a position where a hard peg of its currency is impossible without capital controls. Reserves today are less than the level the IMF would deem adequate in this scenario. Even with capital controls in place, a fixed exchange rate puts China in a tricky position; reserve adequacy then is only a little over 150%. China enjoys the greatest buffer if it combines capital controls with a floating exchange rate, which is something like the position today. The currency is perhaps not entirely freely floating, but there is clearly a higher degree of volatility then we would expect in the case of a fixed exchange rate (chart 8).

Provided it maintains this institutional arrangement, the PBoC should not be forced, in the immediate future, to devalue. Even a repeat of 2015's outflows would leave its reserve adequacy around 200%. A collapse of the currency seems extremely unlikely within the next 12 months.

Looking further out, this assessment can help to inform our view on the direction of monetary and regulatory policy in China. It is clear that capital controls will have to remain in place for some time, for example. Further, if we look at what drives China's need for reserves (chart 12), the key vulnerability arises from the broad money component. This underscores the need for China to get a handle on its debt problem; continued credit growth will serve to exacerbate this vulnerability. Expect the PBoC to prove resistant to demands for stimulus and, much like the ECB, do its best to shift the burden on to fiscal policy.

Chart 12: Currency fears will constrain credit easing



Source: Refinitiv Datastream, Schroders Economics Group. 26 September 2019.

Not with a bang, but a whimper

A large devaluation is a low probability event, but the risk constrains PBoC policy

It is neither in China's interests to allow, nor beyond its means to prevent, a sudden dislocation of its exchange rate. The benefits the economy could reap from a large devaluation are modest at best and more than offset by the costs in terms of inflation, geopolitics and the risk of capital flight. As to whether events might overwhelm the PBoC, while its resources are finite, we struggle to envisage a scenario whereby it would have to surrender to market pressure. It will however be constrained in its policy choices by the need to protect the currency, with implications for the openness of the capital account and the outlook for domestic policy stimulus.

The PBoC must hope that it is instead able to gradually guide the currency lower, until it reaches a level at which even were the protective levees of the central bank to be removed it would not be washed away by the tides of the market. At the same time, it will need to be careful not to allow the expectation of one way depreciation to become entrenched, or else risk short selling and capital flight. This implies a prolonged period of gradual depreciation for the renminbi, with the occasional bout of strength and tightening of liquidity to ensure short selling remains unattractive. Not terribly exciting, but there is perhaps enough drama in markets already.

Schroders Economics Group: Views at a glance
Macro summary – October 2019

Key points

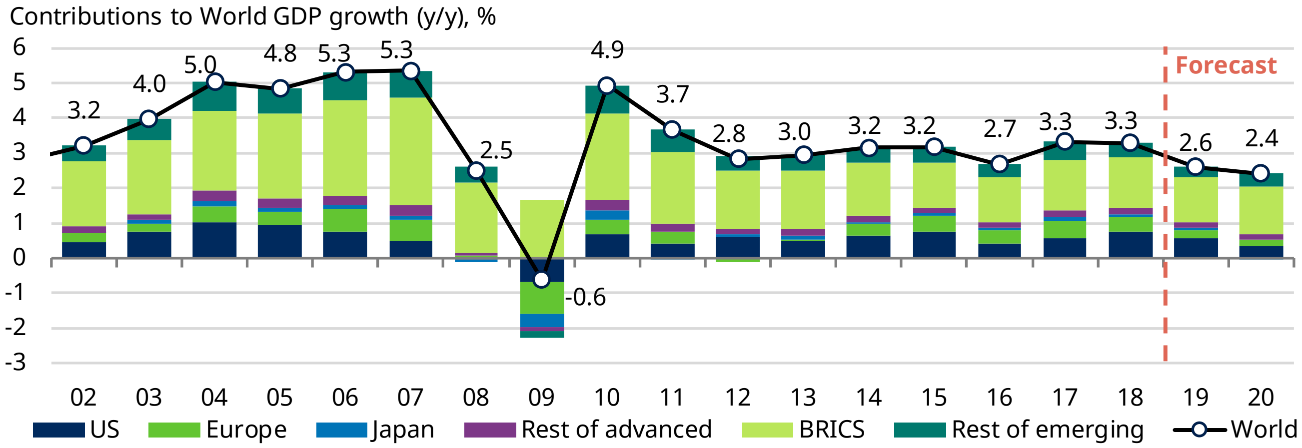
Baseline

- After expanding by 3.3% in 2018, global growth is expected to moderate to 2.6% in 2019 and 2.4% in 2020 – the slowest rate of growth since the Global Financial Crisis. Inflation is forecast to decline to 2.5% this year after 2.7% in 2018 and then rise to 2.6% in 2020. Following the latest escalation in the US-China trade war, we no longer expect a resolution but a further escalation where the US increases the soon to be applied 10% tariff to 25% by the end of the year. The impact of actions so far will still be felt in 2019 and 2020.
- US growth is forecast to slow to 2.1% in 2019 and 1.3% in 2020. Following recent action from the Fed, we expect one more rate cut this year in December. As the economy slows from fading fiscal stimulus and the impact of the trade war, the Fed is forecast to cut rates twice more in the first half of 2020.
- Eurozone growth is forecast to moderate from 2% in 2018 to 1.1% in 2019 as the full effects from the US-China trade war and Brexit hit European exporters. Inflation is expected to disappoint, remaining well below target as lower oil prices contribute to lower energy inflation, while core inflation fails to rise due to weaker GDP growth. The ECB is forecast to cut the deposit rate to -0.6% by the end of 2019, and continue QE for the foreseeable future.
- UK growth is likely to fall to 1.1% this year from 1.4% in 2018. Following a small delay, we assume that a Brexit deal with the EU passes Parliament in Q1 2020 ahead of a transition period that preserves the status quo of single market and customs union membership. Growth is then expected to slow to 1% in 2020. Inflation is expected to fall to 1.8% in 2019 due to lower energy prices, but weaker growth and a recovery in sterling after Brexit will keep inflation subdued at 1.9% in 2020. Meanwhile the BoE is forecast to hike rates to 1% in Q3 2020.
- Growth in Japan should rise to 1.2% in 2019 from 1.1% in 2018, however the path of activity should be volatile owing to the consumption tax hike in October this year. A slow recovery should follow resulting in -0.1% growth in 2020. Although inflation remains well under 2% in our forecast horizon, we expect the BoJ to cut rates by 30bps in December following an appreciation in the yen and escalation in trade war.
- Emerging market economies should slow to 4.2% in 2019 after 4.8% in 2018, led by China, but pick-up slightly to 4.5% in 2020 as other BRIC economies see a recovery. China suffers from continued trade tensions with the US and allows the currency to fall further alongside an easing from the PBoC, while dovish developed market central banks provide cover for more easing from their other emerging market counterparts.

Risks

- Risks are tilted toward deflation with the highest individual risk going on the global recession scenario where the economy proves more fragile than expected. We also see a risk of an escalation in the US-China dispute with the US extending the trade war to Europe.

Chart: World GDP forecast



Source: Schroders Economics Group, August 2019. Please note the forecast warning at the back of the document.

Schroders Baseline Forecast

Real GDP

y/y%	Wt (%)	2018	2019		Prev.	Consensus	2020		Prev.	Consensus
World	100	3.3	2.6	↓	*(2.8)*	2.6	2.4	↓	*(2.6)*	2.5
Advanced*	61.4	2.3	1.6	↓	*(1.8)*	1.7	1.1	↓	*(1.4)*	1.4
US	26.5	2.9	2.1	↓	*(2.6)*	2.3	1.3	↓	*(1.5)*	1.8
Eurozone	17.2	2.0	1.1	↓	*(1.2)*	1.1	0.9	↓	*(1.4)*	1.1
Germany	5.0	1.9	0.5	↓	*(0.9)*	0.5	0.8	↓	*(1.2)*	1.0
UK	3.6	1.4	1.1	↓	*(1.4)*	1.2	1.0	↓	*(1.4)*	1.1
Japan	6.7	1.1	1.2	↑	*(0.9)*	1.0	-0.1	↓	*(0.2)*	0.2
Total Emerging**	38.6	4.8	4.2	↓	*(4.4)*	4.1	4.5	↓	*(4.6)*	4.3
BRICs	25.3	5.7	5.2	↓	*(5.5)*	5.1	5.4	↓	*(5.5)*	5.2
China	16.7	6.6	6.2	↓	*(6.3)*	6.2	6.0		*(6.0)*	5.9

Inflation CPI

y/y%	Wt (%)	2018	2019		Prev.	Consensus	2020		Prev.	Consensus
World	100	2.7	2.5	↓	*(2.6)*	2.6	2.6	↓	*(2.7)*	2.6
Advanced*	61.4	2.0	1.5	↓	*(1.8)*	1.5	1.7	↓	*(2.0)*	1.7
US	26.5	2.4	1.9	↓	*(2.3)*	1.8	2.2	↓	*(2.4)*	2.1
Eurozone	17.2	1.7	1.3	↓	*(1.7)*	1.3	1.3	↓	*(1.6)*	1.3
Germany	5.0	1.8	1.4	↓	*(1.8)*	1.4	1.5	↓	*(1.7)*	1.5
UK	3.6	2.5	1.8	↓	*(2.0)*	2.0	1.9	↓	*(2.3)*	2.1
Japan	6.7	1.2	0.7	↑	*(0.3)*	0.6	1.0	↓	*(1.2)*	0.8
Total Emerging**	38.6	3.8	4.1	↑	*(3.9)*	4.3	3.9	↑	*(3.8)*	4.0
BRICs	25.3	2.8	3.1	↑	*(2.8)*	2.9	3.3	↑	*(3.1)*	2.9
China	16.7	2.2	2.7	↑	*(2.4)*	2.4	2.8	↑	*(2.7)*	2.3

Interest rates

% (Month of Dec)	Current	2018	2019		Prev.	Market	2020		Prev.	Market
US	2.00	2.50	1.75	↓	*(2.50)*	1.96	1.25	↓	*(2.00)*	1.46
UK	0.75	0.75	0.75	↓	*(1.00)*	0.74	1.00	↓	*(1.50)*	0.56
Eurozone (Refi)	0.00	0.00	0.00		*(0.00)*	-0.45	0.00	↓	*(0.50)*	-0.56
Eurozone (Depo)	-0.50	-0.40	-0.60	↓	*(-0.40)*		-0.60	↓	*(0.00)*	
Japan	-0.10	-0.10	-0.30	↓	*(-0.10)*	-0.05	-0.30	↓	*(-0.10)*	-0.08
China	4.35	4.35	4.00		*(4.00)*	-	3.50		*(3.50)*	-

Other monetary policy

(Over year or by Dec)	Current	2018	2019		Prev.	Y/Y(%)	2020		Prev.	Y/Y(%)
US QE ($Tn)	4.0	4.1	3.8	↑	*(3.7)*	-7.3%	3.8	↑	*(3.7)*	0.0%
EZ QE (€Tn)	2.4	2.4	2.4		*(2.4)*	0.0%	2.6	↑	*(2.4)*	8.3%
UK QE (£Bn)	422	435	445		*(445)*	2.3%	445		*(445)*	0.0%
JP QE (¥Tn)	557	552	583	↑	*(573)*	5.6%	623	↑	*(593)*	6.9%
China RRR (%)	13.50	14.50	12.00		*12.00*	-	9.00	↓	*10.00*	-

Key variables

FX (Month of Dec)	Current	2018	2019		Prev.	Y/Y(%)	2020		Prev.	Y/Y(%)
GBP/USD	1.23	1.27	1.24	↓	*(1.34)*	-2.6	1.32	↓	*(1.38)*	6.5
EUR/USD	1.09	1.14	1.08	↓	*(1.14)*	-5.5	1.14	↓	*(1.18)*	5.6
USD/JPY	108.2	109.7	103	↓	*(110)*	-6.1	105	↓	*(108)*	1.9
EUR/GBP	0.89	0.90	0.87	↑	*(0.85)*	-3.0	0.86	↑	*(0.86)*	-0.8
USD/RMB	7.12	6.87	7.20	↑	*(6.85)*	4.9	7.30	↑	*(7.00)*	1.4
Commodities (over year)										
Brent Crude	62.4	71.6	64.2	↓	*(70.2)*	-10.3	59.5	↓	*(69.1)*	-7.3

Source: Schroders, Thomson Datastream, Consensus Economics, August 2019
Consensus inflation numbers for Emerging Markets is for end of period, and is not directly comparable.
Market data as at 27/09/2019
Previous forecast refers to May 2019
* **Advanced markets:** Australia, Canada, Denmark, Euro area, Israel, Japan, New Zealand, Singapore, Sweden, Switzerland, United Kingdom, United States.
** **Emerging markets**: Argentina, Brazil, Chile, Colombia, Mexico, Peru, China, India, Indonesia, Malaysia, Philippines, South Korea, Taiwan SAR, Thailand, South Africa, Russia, Czech Rep., Hungary, Poland, Romania, Turkey, Ukraine, Bulgaria, Croatia, Latvia, Lithuania.

Updated forecast charts – Consensus Economics

For the EM, EM Asia and Pacific ex Japan, growth and inflation forecasts are GDP weighted and calculated using Consensus Economics forecasts of individual countries.

Chart A: GDP consensus forecasts

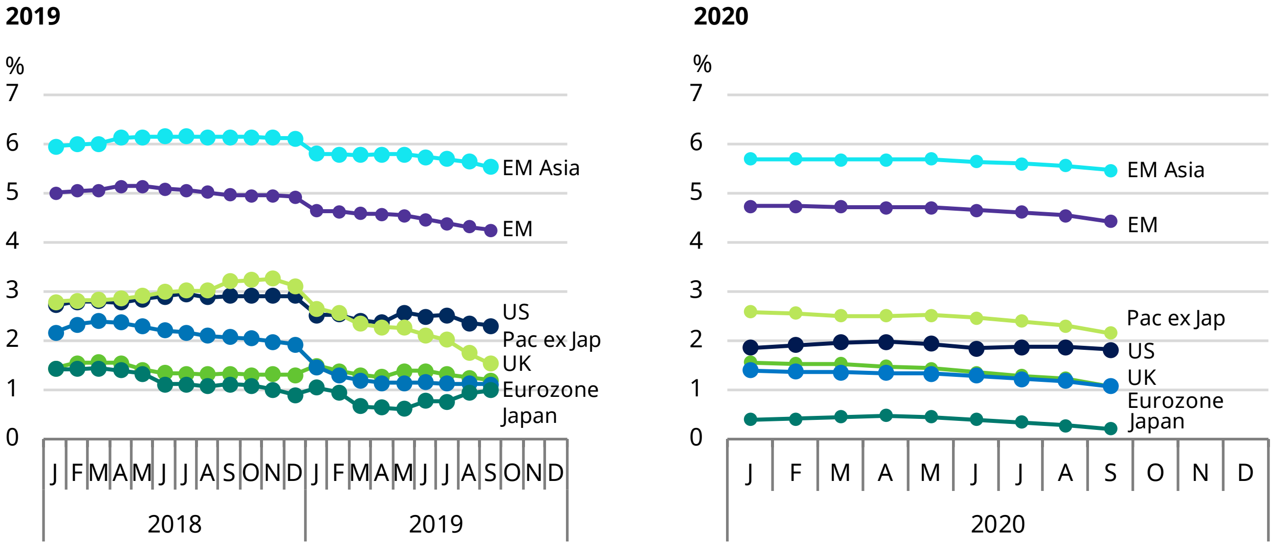
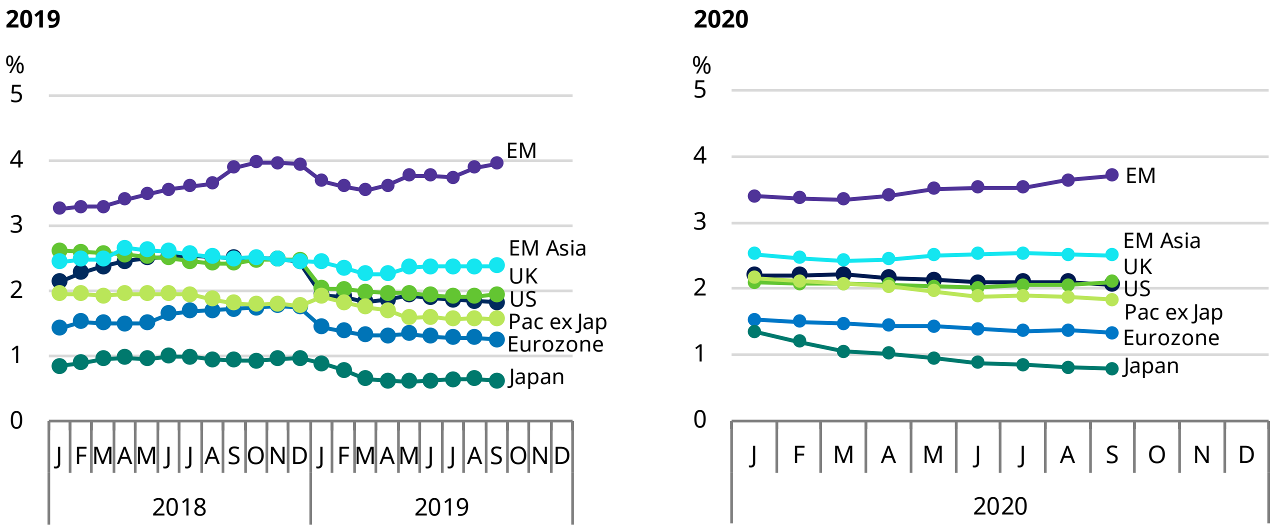


Chart B: Inflation consensus forecasts



Source: Consensus Economics (29 October 2018), Schroders.
Pacific ex. Japan: Australia, Hong Kong, New Zealand, Singapore.
Emerging Asia: China, India, Indonesia, Malaysia, Philippines, South Korea, Taiwan, Thailand.
Emerging markets: China, India, Indonesia, Malaysia, Philippines, South Korea, Taiwan, Thailand, Argentina, Brazil, Colombia, Chile, Mexico, Peru, South Africa, Czech Republic, Hungary, Poland, Romania, Russia, Turkey, Ukraine, Bulgaria, Croatia, Estonia, Latvia, Lithuania.

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