Summary

Soft patch, but no recession expected

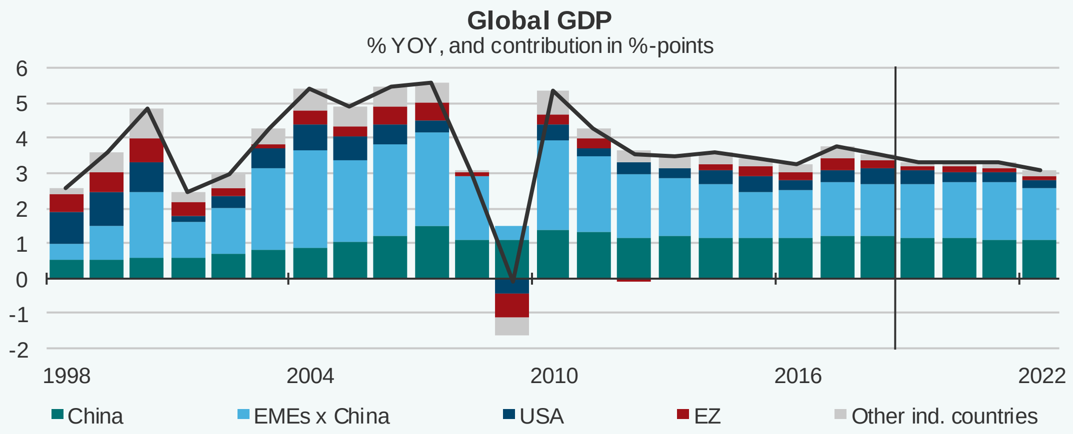
We now expect global GDP growth of 3.3% for each of 2019 and 2020, down from 3.5% and 3.4% from our January forecasts, respectively. We have raised our longer-term forecasts as a US recession is no longer our base-case scenario. Hence, we now assume 3.3% global GDP growth for 2021 and 3.1% for 2022. The main reason for taking out the US recession, is that we no longer expect the Fed to hike interest rates, which combined with lower forecasts for long-term rates dampens the outlook for firms' interest expenses.

Risks skewed to the downside. While a US recession is no longer our base-case scenario, we see a 30% probability of a US-led downturn medium-term. The main issue is high corporate leverage, and that an increasing number of firms are vulnerable to earnings setbacks owing to high interest costs. Should the US enter a downturn, other economies would be vulnerable – in particular the eurozone, where trend growth is already low (making it more prone to entering a recession) and the fiscal and monetary policy options are limited (reducing the ability to counter shocks).

We expect US GDP growth of 2.5% this year, unchanged from our forecast in January. We expect household consumption to remain strong, supported by further gains in employment, which should lower the unemployment rate to 3.5% and lift wage growth to 3.8% by end-2020. We expect business investments to continue to rise albeit moderately, and the recent weakness in housing investments to gradually subside. Still, with inflation remaining close to 2% we now expect the Fed to have reached its terminal rate, meaning the Fed funds looks set to remain at 2.25–2.50% in the coming years.

We have cut our eurozone forecasts sharply, on weaker data for the corporate sector. We now expect GDP growth of 0.8% this year, followed by about 1% for each of the following three years. Data for orders, capacity utilisation, and earnings indicate weak business investments in the coming quarters. This is likely to have some negative effects on the labour market, but we maintain that employment will edge upwards in the coming years. Still, with the labour force growing slowly, we now expect unemployment to be unchanged. All in all, we now assume somewhat weaker growth in household demand than we did in January. Still, we expect consumption growth to improve from 2018, when household demand was held back by rising energy prices. With growth hovering around trend, we see limited upside potential for core inflation, and hence expect ECB rates to be on hold until early 2021.

For China we expect a moderate cyclical rebound in the near/medium term, but that growth will remain slow in the long-run. We now expect underlying GDP growth of 5.0% this year (in January we expected 5.2%) and a pick-up to 5.3% for 2020 (in January we expected growth to slow). Our forecast changes are driven mainly by the US-China trade war, which now looks likely to be resolved in the coming months. However, the downward revision to this year's forecast is due to weaker than expected consumption data. All in all, we expect economic policies to be mildly supportive of economic growth, in that fiscal policy should limit the downside risks, while the government's attempt to minimise financial vulnerabilities (e.g. housing market speculation and credit from shadow finance institutions) should limit the upside potential.



Source: Thomson Datastream/DNB Markets

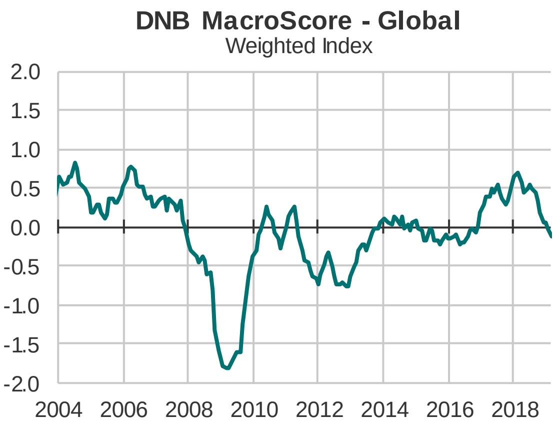
Global outlook

‘There is nothing either good or bad, but thinking makes it so’

Since our last update in January we have witnessed the highly unusual pattern of equity markets booming (Hang Seng index in Hong Kong entered a bull market last week) yet macro data weakening. It is not just stock markets that have gained from improving sentiment. High yield spreads are back at their 2017 lows in the US, underlining the notion that investors are again willing to take on more risk in their portfolios. Elsewhere, however, the signals from markets have been softer. Sovereign bond yields in Western economies have drifted down from already low levels. Germany can once again borrow 10-year money at negative rates, meaning investors are willing to pay Germany to increase its borrowing. In the US, central parts of the yield curve have temporarily inverted, notably the 10-year yield dropping below the 3-month yield in mid-March. Historically, the yield curve has been a reliable indicator of US recessions, and while there are several compelling reasons that ‘this time is different’ we find it hard to ignore the indicator due to its good track record. After all, a downward sloping yield curve is a signal that markets are preparing for slower economic growth, which in itself could lead to tighter financial conditions, a more cautious attitude among businesses, and hence be self-fulfilling. Simultaneously, markets are now pricing in an 80% probability of the Fed cutting interest rates by year-end, further illustrating the downside risks to economic growth in the near term.

To some extent, recent market changes reflect a change in views on monetary policy in the US, with the Fed having made a U-turn on its balance sheet and now signalling that interest rates have most likely reached their terminal level. Indeed, while Jerome Powell last December said the US’s balance sheet reduction was on auto-pilot, the Fed now says it will slow its balance sheet reduction and end it much sooner than it expected. While we believe we have seen an end to the ‘central bank put’ in this cycle (see this note for more), the recent shift has clearly fuelled optimism in financial markets.

Other factors have pulled in the same direction. The US-China trade war now looks likely to be resolved rather than intensify. In China, the government has made it clear it will use fiscal policy to limit downside risks to economic growth (more here). In other emerging markets, currencies have stabilised after last year’s turmoil, which has been positive for capital inflows (although the causality most likely goes both ways). Moreover, commodity prices have rebounded, which has supported growth in commodity-producing emerging markets. Still prices remain relatively moderate, which supports purchasing power in net importing countries.



Source: DNB Markets

Source: CPB/Thomson Datastream/DNB Markets

Cyclically the data for the global economy is still underperforming its historical averages. Our global MacroScore has fallen into negative territory, and is now consistent with global growth below 3.5%. Manufacturing indicators for the eurozone, China, Japan have weakened, while in the US the data has been somewhat more positive despite the strength of the dollar. Global trade volumes are down markedly in annual terms, with growth at its weakest since the collapse in energy prices in 2014–2015. As we explained in our most recent China Update, there are several factors behind the recent slowdown in global trade: 1) Chinese exports to the US are weakening as US firms frontloaded purchases in 2018 to avoid higher tariffs; and 2) the unusual strength in global trade in 2017–2018 was largely driven by higher exports of electronic goods such as semi-conductors and computers. That was partly due to sizeable investments in data centres worldwide, which have since fallen markedly. In addition, eurozone firms appear to have scaled back investments from 2018 to 2019, adding additional downward pressure to global trade volumes in recent months.

Looking ahead, we expect global growth of 3.3% for 2019–2020. We have lowered our 2019 forecast by 0.2%-points since January and our 2020 forecast by 0.1%-points. However, for 2021–2022 we no longer see the case for a US recession, as the Fed appears to be done with hiking interest rates. Hence, we expect global growth to remain at 3.3% in 2021, before slowing to 3.1% in 2020.

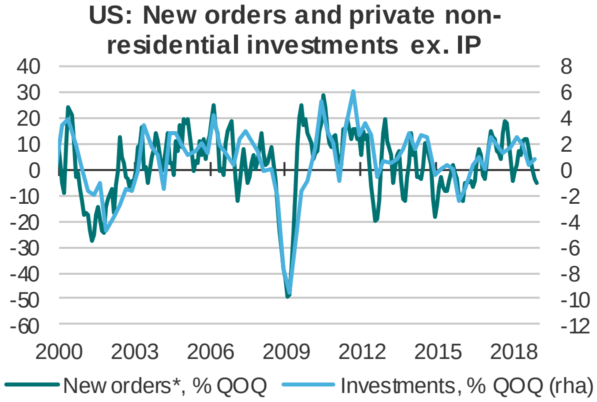
Risks to the outlook are skewed to the downside, in our view. While we have taken a US recession in 2021 out of our forecasts, we still see a 30% probability of a downturn in the US economy medium-term. With high corporate debt and the share of firms vulnerable to setbacks in earnings at its highest level since the financial crisis, the US economy is vulnerable to shocks – domestic and external. That could derail growth in other regions too, notably the eurozone, which (due to its already low growth and limited policy space) is highly vulnerable to economic shocks.

There is also upside potential in the US, at least in the short-run, we believe. Wage growth has accelerated sharply in the past 12 months on a wider gap between job openings and hires, reflecting that firms are struggling to find qualified labour. There is a risk that wage growth continues to increase, which could fuel higher consumer spending in the short-run. In the long-run, however, this is anything but fortunate. Ultimately, higher wages would either lead to higher inflation (and thus also higher short-term interest rates) or put further pressure on corporate margins (which are already showing signs of weakness). Regardless, the potential rise in wage costs would be a negative for the US economy, as it would increase the risk of a downturn further out in time triggered by the Fed or more defaults as firms would increasingly struggle to service their debt and meet demands for higher wages.

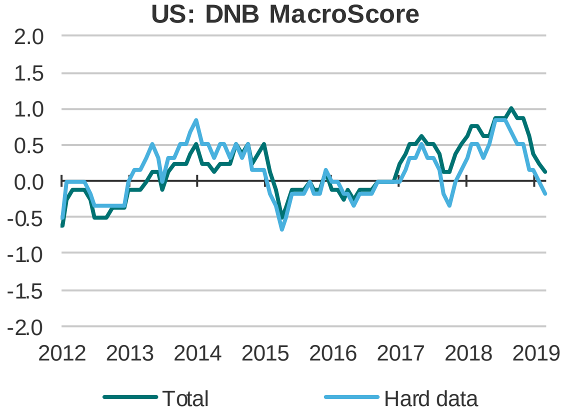
Other factors could also derail the upturn. We expect the UK and EU to avoid a 'hard Brexit', but should it happen it would have a material impact on growth in the UK. We expect effects elsewhere in Europe to be of lesser magnitude, but given the already low growth rates Brexit could be enough to trigger a short-term eurozone recession. Also, we expect the US and China to come an agreement to end the trade war, but talks are dragging on and several US representatives have said it has been challenging to make a breakthrough on key issues related to intellectual property rights, market access, and unfair trade policies. Should the two countries fail to come to an agreement, it would weigh on manufacturing investments in China, which would have negative ripple effects in economies that are highly reliant on raw materials and machinery goods. Such a scenario would also likely rattle financial markets, and could – via tighter financial conditions – have a negative impact on growth in economies that are not directly exposed to the Chinese economy. In the long term, we see a risk that China will fail to deal with its massive corporate debt burden. Chinese leaders have so far avoided systemic defaults, but with the current account deteriorating it would be increasingly difficult to do so as future increases in debt would have to be financed by international investors. This would make China more vulnerable to capital flows, which in the past have triggered economic shocks and crises in other emerging markets with similar unbalances that are visible in China today.

US economy set to remain strong, but vulnerable to shocks

While there is evidence that the risk of a near-term downturn in the US has risen somewhat since January, we still believe the markets have gone too far in pricing in a rate cut by the Fed by year-end. There are, however, some factors that support recent market changes. Housing investments have declined in the past 12 months, on the back of weak sales and local supply-side constraints. Business investments have been strong, but the recent trend in core durable goods orders paints a gloomy outlook for the near term. Moreover, household demand has been patchy since December, with retail sales and personal spending figures indicating consumption all but stagnated in Q1. All in all, there are clear signs that economic growth has slowed, which is also visible in our US MacroScore, which tracks growth relative to trend. Our MacroScore is still in positive territory, but it has fallen markedly since last summer. Moreover, a sub-index where soft indicators are excluded has become negative for the first time in two years.

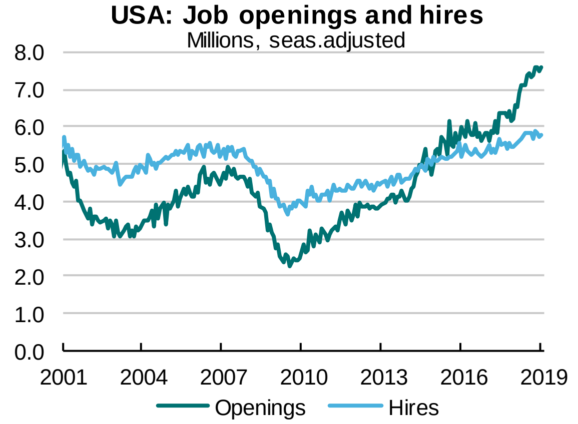


*New orders nondefence capital goods ex aircrafts
Source: Thomson Datastream/DNB Markets

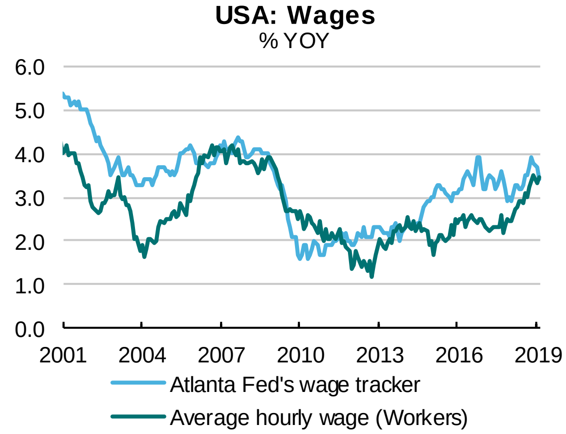


Source: DNB Markets

Despite the weakness in short-term indicators, we remain upbeat on the US economy and therefore believe the Fed will not change interest rates. While the housing market has been weak for nearly a year, mortgage applications have started creeping upwards as long-term yields have fallen, which could be a sign of better home sales going forward. More importantly, some of the weakness in recent consumption figures is due to the government shutdown, although we cannot rule out other factors being at play as well. After all, as we highlighted here, US households' direct equity holdings relative to savings deposits are at their highest since the dotcom bubble, and the stock market volatility late last year might have had a larger impact on household demand than we expected. Nevertheless, the foundation for growth in private consumption is still very much in place. The labour market appears strong and with increasing evidence that firms are struggling to find qualified labour, we expect employment to continue trending upwards. Hence, we expect the unemployment rate to decline towards 3.5% in 2020. If anything, we believe this would give rise to further gains in wages, which in early 2019 were up by 3.5% YOY, up 1%-points since the beginning of last year. At the same time, we expect the pass-through from wages to core PCE inflation to remain low, which implies solid gains in real average wages. All of this points to consumer demand remaining strong, and we assume a rise of 2.4% this year and 2.1% next year.



Source: Thomson Datastream/DNB Markets



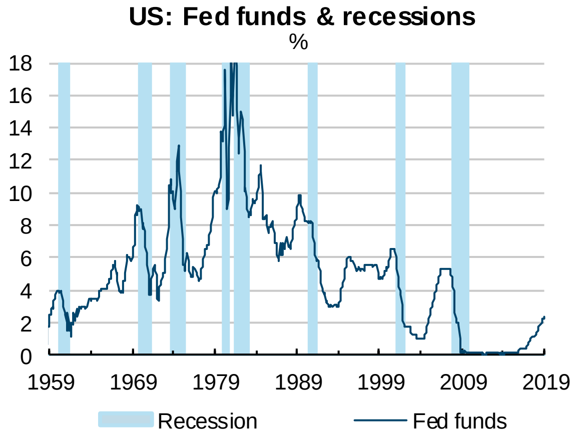
Source: Thomson Datastream/DNB Markets

The downside risks are also contained by the Fed, which has said it will be "especially data dependant" (vice-chair Richard Clarida, 28 February 2019) and it wishes to see inflation moving higher before hiking interest rates again. Apparently, the Fed has changed its reaction function, in that it will tolerate inflation moving above the 2% target, in part as a consequence of core PCE inflation having averaged 1.5% in the 10 years since the financial crisis. On this, New York Fed's John Williams has said that average inflation targeting will help to meet the target over time, and that "during downturns when policy is constrained inflation will be a little low. During times of economic expansion and booms, like today, inflation would be expected to be above 2 percent".

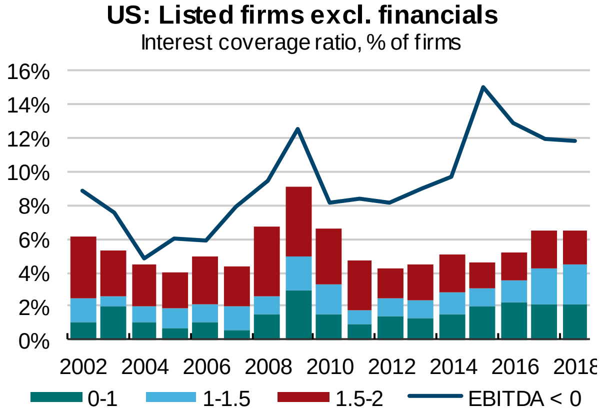
The timing of the change in the Fed's reaction function should hardly be seen as a coincidence. It occurred at the same time as markets were rattled by the dual tightening incurred by the Fed raising rates and tightening liquidity. While markets have since recovered, the Fed has kept a dovish tone, signalling it will be much more careful in raising interest rates than it had previously expected. One way to look at this shift is that the Fed has for some time contemplated changing its reaction function. When market volatility spiked last year, the Fed interpreted it as a sign that rates were already at – or close to – their neutral level. Hence, with a new attitude towards inflation, in that it will allow it to drift above target in upturns, and the notion that monetary policy was now seen as neutral rather than slightly expansionary, it saw a case for rates being on hold for the foreseeable future.

Reflecting this, we now expect the Fed to have reached its terminal rate, and hence the Fed funds rate to remain at 2.25–2.50% in our forecast period, while in January we expected the Fed to hike three more times. This change should be positive for economic growth in two main ways: 1) lower interest rates stimulate growth in domestic demand directly, in particular the housing market, which can create positive second-round effects should housing prices accelerate; and 2) rates staying at current levels reduces the risk of corporate defaults because interest costs are unchanged (for an unchanged stock of debt) and lower rates stimulate demand and hence corporate earnings. This is an important reason we no longer expect the US economy to enter a recession in 2021.

Still, we expect the economy to be more vulnerable to shocks and prolonged uncertainty than usual, due to high corporate leverage. After all, the share of highly leveraged firms has risen markedly in recent years and we believe nearly 7% of US listed firms, based on data from Bloomberg, are highly vulnerable to a shortfall in earnings, comparable to the level before the financial crisis 10 year ago. Indeed, we see a 30% probability that the economy will enter a downturn in the medium term, reflecting the high stock of debt and the vulnerability that would be created in the economy in the event of external or domestic shocks. Should this downside scenario play out, we expect the Fed to cut rates 2–3 times by end-2020, which should help to stabilise the economy. That would still leave the Fed with plenty of ammunition, in our opinion.



Source: FOMC/DNB Markets



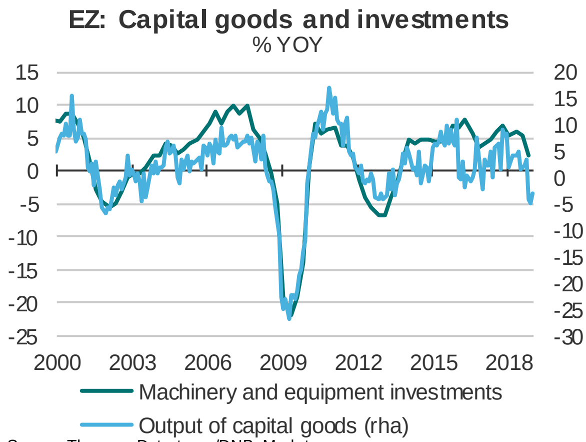
12m trailing EBITDA divided by 12m trailing gross interest expenses.
Source: Bloomberg/DNB Markets

Eurozone soft-patch, but no recession expected

As for the eurozone, the outlook is mixed. On one hand, recent short-term indicators reveal that several of the transitory factors that have suppressed growth since last summer are beginning to reverse. First, the car industry in Germany has seen a material rebound in orders since last autumn, indicating that production will pick up. There has been some uncertainty as to whether the decline in car production was driven by weaker demand or supply-side constraints, but a recent study by the Bundesbank revealed that it was largely driven by one firm, which combined with other data supports our view that weakness in car production has largely been temporary. Granted, since early 2019 non-eurozone orders for German cars have been in negative territory, but that should limit the rebound in production, not stall it. Second, economic growth was also held back by weaker household demand, as rising energy prices led to a slowdown in real wages. Since October, however, growth in energy prices has subsided, pushing real wage growth higher. Consequently, we have seen a material rebound in retail sales (particularly in Germany), which is now indicating a sizeable boost from household demand to economic growth in Q1.

On the other hand, corporates are reporting much weaker data than we expected back in January. In Germany, the Ifo index has fallen, and is now a hair's breadth from signalling that the economy is in a downturn. Likewise, the German manufacturing PMI plunged to 44.1 in February, its lowest level since 2012. The fall was broad-based, but the decline in the index for new orders was particularly alarming. Historically, the index has correlated well with investments in machinery and equipment, which account for a third of German investments. The level signals that investments could slow by 5–10% YOY in the next couple of quarters, which, if it materialises, would be the worst development since the euro area crisis in 2011–2012.

Source: Thomson Datastream/DNB Markets



Source: Thomson Datastream/DNB Markets

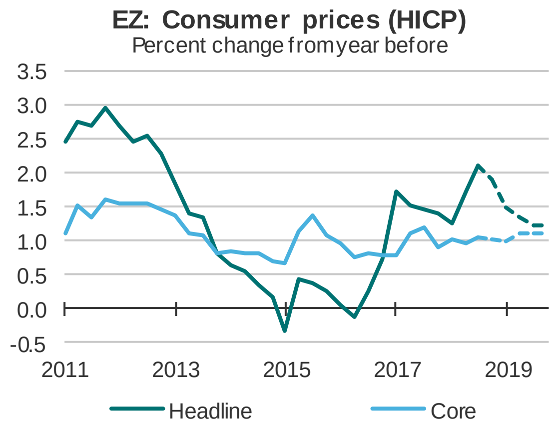
Also for the rest of the eurozone the corporate sector has weakened. The production of capital goods, historically a good gauge of business investments, has been at its weakest since the financial crisis in 2008–2009. The picture is somewhat distorted by car production, but that does not explain the sudden collapse in the annual growth rate in late Q4. Elsewhere, capacity utilisation in the manufacturing sector has fallen markedly in recent months, albeit from high levels. Moreover, profits in non-financial firms have expanded at their slowest rate since the euro area crisis in 2011–2012, on the back of higher costs and faltering top-line growth.

As we explained in our recent eurozone update, the surprisingly weak trend for euro area firms is most likely driven by lasting uncertainty related to Brexit, the US-China trade war, and the risk of the US imposing tariffs on European cars, in addition to general uncertainty about global economic growth. Normally, the negative impact of uncertainty is stronger when economic growth is weak and the uncertainty is protracted, both of which are present for euro area firms at the moment.

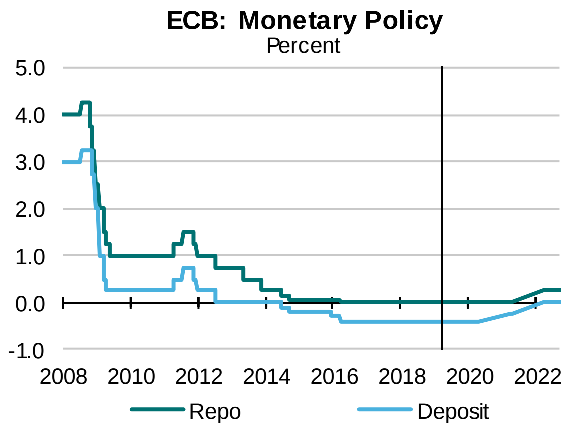
We see several reasons the eurozone is more vulnerable to external shocks than other large economies. One is the structure of the economy, with exports accounting for nearly a third of GDP, compared to 12% in the US and 20% in China. In addition, the euro area is already suffering from lacklustre economic growth, making it more vulnerable to setbacks. The logic is simple. When growth is high you can afford to make mistakes in some areas, because success in other areas more than offsets it. However, when growth is low and the outlook more uncertain than usual, the cost of making mistakes is higher because it takes longer to grow out of those mistakes. Hence, uncertainty and weak growth reduce the incentive to build new factories or invest in better technologies. The bicycle analogy is a good one: when cycling slowly you are more vulnerable to small bumps in the road or losing your balance than you are when cycling at a moderate to high pace. This has been the case for Italy and Japan for several decades. A slow pace has increased the probability of recession in both economies, because they have been more vulnerable to economic shocks, or ‘bumps in the road’. This now seems to be part of the ‘new normal’ for the eurozone too.

Finally, there are clear signs the policy space in Europe is greatly reduced, which in itself could make firms more cautious. Fiscal policy cannot in our view become much more expansionary, as several eurozone countries are already struggling with high public debt and budget deficits close to – or higher than – their targets. While the growth and stability pact allows countries to spend more in downturns, the impact of higher spending could be offset by higher borrowing costs, as is the case for Italy now. Germany is an exception to this, but we have doubts whether Germany would be willing to use its fiscal policy space to counter shocks in other eurozone countries. Moreover, several studies show that the multiplier effect of higher public spending is low when debt is high. More importantly, there is a limit to how much the ECB can do to counter shocks and economic downturns. Key ECB interest rates (which we expect to be unchanged until early-2021) have in our view reached their effective lower bound, and the central bank is now debating how to mitigate the negative effects of keeping short-term rates in negative territory. Other than that, the ECB could increase its balance sheet, but purchases of government bonds are limited by self-imposed rules to not own more than 33% of each bond. Hence, if the ECB wants to support the economy by increasing liquidity, it would have to do so by other means, such as cheap loans to banks (which it already does) or by increasing purchases of stocks and corporate bonds.

Despite the vulnerability to external shocks, we do not believe the eurozone is heading for a new recession. We expect several of the uncertainties that have hurt corporates in recent months to be resolved. In particular, we do not expect the US to impose tariffs on European cars, nor do we expect the US-China trade war to escalate. Moreover, we do not expect a ‘hard Brexit’, but instead expect the UK to be given another extension, this time until the end of the year. The lack of a resolution on Brexit should continue to weigh on business investments in the UK and the eurozone, but more clarity on the trade war towards the summer would be a positive that could lead to a rebound in investments towards year-end. Hence, we expect the economy to remain weak for most of 2019, before improving somewhat in 2020.



Source: Thomson Datastream/DNB Markets



Source: Thomson Datastream/DNB Markets

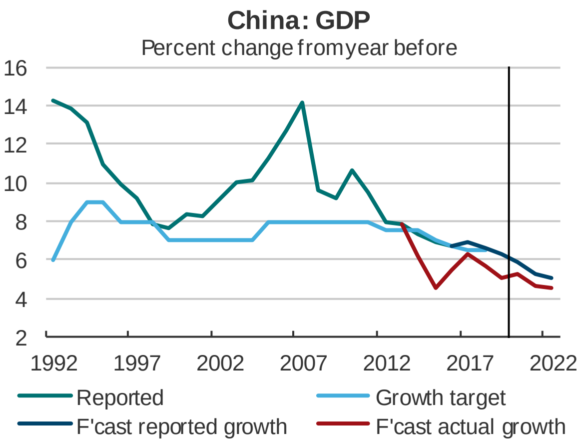
The biggest uncertainty and risk (besides Brexit and the upcoming European parliamentary election) is the extent to which weak investments in the short-run might spread to the household sector. Should firms react by lowering employment, the soft-patch might turn into a downturn that is both deeper and more protracted than we have in our base-case scenario. We have already assumed in some negative ripple effects, mostly via weaker employment growth, but we expect the employment rate to level off in the short term, rather than increase. After all, service PMIs have remained relatively robust YTD, indicating few ripple effects from manufacturing or the uncertainties that have led to the downturn in manufacturing.

With growth somewhat below or close to its long-term trend, we see limited upside potential for core inflation, which we expect to remain around 1.1% this year, followed by 1.3–1.4% in the following years. The combination of weak economic growth, high vulnerability to shocks, and limited inflation pressure means the ECB is likely to leave interest rates on hold early 2021. Due to the costs for banks of keeping short-term rates negative, we see a high probability that the ECB will eventually introduce a tiered interest rate system, in which banks pay are charged a less negative interest rate on parts of their excess reserves.

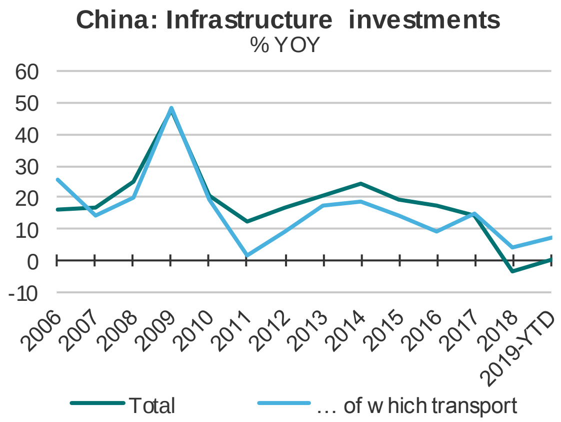
Fiscal policy set to support growth in China

As we now expect the trade war to be resolved, in that the US will agree to not increase tariffs on Chinese goods, but that other underlying issues will remain, the outlook for Chinese exports and manufacturing investments is somewhat better than we previously assumed. Despite this, we have revised down our forecast for Chinese GDP growth for 2019, now expecting 5.0% (we expected 5.2% in January). For next year, however, we have raised our forecast to 5.2%.

The revision for 2019 is due to several factors. Most importantly, household demand has remained weak, with little if any improvement in retail sales while the decline in car sales has accelerated. Overall, growth in household demand has hovered around 4% YOY, but with recent tax changes we expect growth in consumer demand to rise towards 5% in the coming quarters.



Source: Xinhua/DNB Markets



Source: Thomson Datastream/DNB Markets

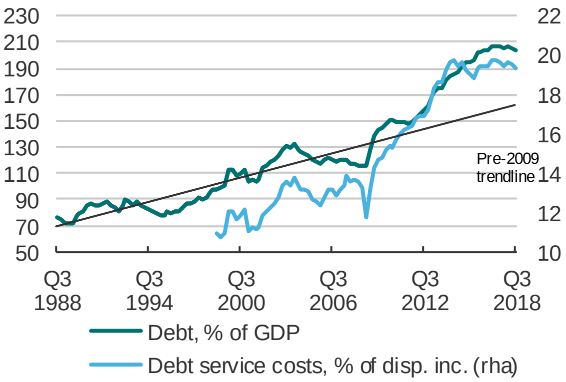
Also, the impact of the trade war has largely been as expected. We did not expect the conflict to have a material effect on business investments in 2018, which was correct, but we did expect the effects to play out this year and in 2020. Preliminary data for Q1 indicates that growth in manufacturing investments has slowed markedly from 2018, largely due to a decline in investment by producers of electrical and machinery equipment, which is one of the sectors most vulnerable to US tariffs. However, it is clear that the slowdown in investments is caused not only by the trade war. Instead, firms are also adjusting to higher Chinese wage and land costs, in addition to growing environmental concerns. Hence, even though the trade war might be resolved, manufacturing investments are likely to underperform their historical averages.

In terms of economic policies, things have also played out as we expected. Fiscal policy is turning more expansionary, with local governments pushing for higher infrastructure investments. The process has been a bit slower than we expected, largely owing to funding constraints in November and December that have since been resolved. We expect infrastructure investments to continue to pick up.

Elsewhere, support for economic growth is more limited. Granted, the government has cut taxes on a broad basis, which should support revenues for corporates and households. Historically, however, the impact of tax cuts on economic growth has been low in most economies, as tax cuts also induce savings. On monetary policy, the government has said it will ensure ample liquidity for banks, and banks are also ordered to increase lending to the private sector, in particular small and medium sized enterprises. More importantly, the government is targeting growth in total social financing close to nominal GDP growth, so as not to let private sector credit rise further as a share of GDP. In particular, the government has stressed it will continue to crack down on risky lending, e.g. shadow finance loans that banks hold off their balance sheets. Historically, cyclical rebounds in the Chinese economy have been driven by a rise in shadow finance, and hence the effort to rein in risky loans should limit upside risks to economic growth. On top of this, the government has reiterated its stance that 'housing is for living in, not for speculation', meaning it will continue its efforts to curb housing market speculation. Growth in housing sales has been negative for some time now, and recent indicators for newly started projects are pointing downwards. If anything, this implies that real estate investments (historically an important driver of economic growth) will level out.

Cyclically, we therefore see the Chinese economy being range-bound in the next 1–2 years, where fiscal policy limits downside risks while the government's attempt at controlling shadow finance and the housing sector limit the upside potential. The largest downside risk near-term is that the US and China fail to come to an agreement on the trade war, which would hurt manufacturing investments. Likewise, should consumer demand fail to improve it would also have a material negative impact on economic growth relative to our base-case scenario. On the other hand, with wages continuing to rise quickly (we estimate wages rose by 8% in 2018), there is also a risk that consumption growth improves more than expected, which could spark a virtuous cycle, in which better data for household demand ignites corporate investments.

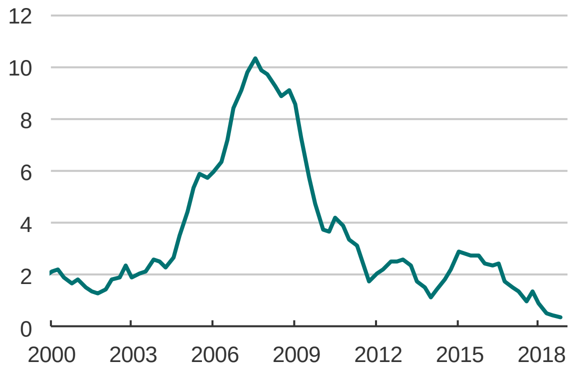
China: Private sector credit



Source: Thomson Datastream/DNB Markets

China: Current account

% of GDP



Source: Thomson Datastream/DNB Markets

In the long term, the main challenge for China is still the high corporate debt, which at 165% of GDP is higher than in any other large or comparable economy. With economic growth slowing, the ability for China to service its debt is reduced. So far, China has handled its debt issues remarkably well, but that largely owes to a closed capital account (which has prevented international investors from entering the economy) and a large current account surplus. However, the current account surplus last year fell to just 0.5% of GDP, the lowest so far this century. Population ageing, liberalisation of the financial industry and the government's goal to make it easier for private firms to borrow money has already weighed on savings, and looks set to continue to do so in the coming years. If China then wants to maintain or increase investments, it would have to finance that via international investors. That might not be a problem short-term, but long-term it could be a source of instability, as it would increase the liquidity risks and make the currency more prone to large fluctuations.

Ole A. Kjennerud, DNB Markets

Appendix

GDP. % YOY	April					Change from January, % points					Consensus	
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2019	2020
World	3.5	3.3	3.3	3.3	3.1	0.0	-0.1	-0.1	0.9	0.7	3.4	3.3
Advanced economies	2.0	1.5	1.5	1.4	1.3	0.0	-0.2	-0.2	1.4	1.1	1.8	1.7
USA	2.9	2.5	2.0	1.8	1.7	0.0	0.0	0.0	2.3	1.9	2.4	1.9
Eurozone	1.8	0.8	1.1	1.1	1.0	0.0	-0.5	-0.5	0.9	0.7	1.2	1.4
Sweden	2.4	1.6	1.6	1.8	1.7	0.1	-0.2	-0.1	0.5	0.4	1.7	1.8
Mainland Norway	2.2	2.4	2.1	1.9	1.8	-0.2	0.4	-0.1	0.4	0.3	2.3	1.9
UK	1.4	1.4	1.6	1.7	1.5	0.0	-0.1	0.1	1.1	0.8	1.3	1.5
Japan	0.9	0.8	0.6	0.5	0.8	-0.3	0.0	-0.1	0.3	0.5	0.7	0.5
Emerging economies	4.6	4.6	4.6	4.5	4.3	0.0	-0.1	0.0	0.7	0.4	4.5	4.3
China (reported)	6.6	6.3	5.9	5.7	5.4	0.0	0.0	0.0	0.5	0.4	6.2	6.0
China (estimated)	5.7	5.0	5.3	4.7	4.5	0.0	-0.2	0.2	1.2	1.0		
India	7.3	7.3	7.4	7.5	7.5	0.0	0.0	0.3	1.3	0.6	7.0	7.3
Brazil	1.1	2.0	2.3	2.2	2.0	-0.2	0.0	0.3	0.5	0.0	2.1	2.5
Russia	1.7	1.6	1.8	1.5	1.5	0.0	-0.1	-0.1	0.8	0.5	1.5	1.7

Source: DNB Markets and Bloomberg

DNB Markets Macro Analysis

Kjersti Haugland
Chief Economist
+47 24 16 90 01 / +47 917 23 756
kjersti.haugland@dnb.no

Jeanette Strøm Fjære
Economist (Norway, Sweden)
+47 24 16 90 03 / +47 920 37 011
jeanette.strom.fjare@dnb.no

Ingvild Borgen Gjerde
FX/FI Analyst
+47 24 16 90 08 / +47 481 15 200
ingvild.borgen.gjerde@dnb.no

Ole A. Kjennerud
Economist (China, Eurozone)
+47 24 16 90 07 / +47 477 57 482
ole.kjennerud@dnb.no

Knut A. Magnussen
Senior Economist (USA, UK)
+47 24 16 90 04 / +47 476 04 046
knut.magnussen@dnb.no

Magne Østnor
FX Strategist
+47 24 16 90 06 / +47 907 47 902
magne.ostnor@dnb.no

Kyrre Aamdal
Senior Economist (Norway, Sweden, interest rates)
+47 24 16 90 02 / +47 906 61 112
kyrre.aamdal@dnb.no

IMPORTANT/DISCLAIMER

This note (the "Note") must be seen as marketing material and not as an investment recommendation within the meaning of the Norwegian Securities Trading Act of 2007 paragraph 3-10 and the Norwegian Securities Trading Regulation 2007/06/29 no. 876. The Note has been prepared by DNB Markets, a division of DNB Bank ASA, a Norwegian bank organized under the laws of the Kingdom of Norway (the "Bank"), for information purposes only. The Note shall not be used for any unlawful or unauthorized purposes. The Bank, its affiliates, and any third-party providers, as well as their directors, officers, shareholders, employees or agents (individually, each a "DNB Party"; collectively, "DNB Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Note. DNB Parties are not responsible for any errors or omissions, regardless of the cause, nor for the results obtained from the use of the Note, nor for the security or maintenance of any data input by the user. The Note is provided on an "as is" basis. DNB PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE NOTE'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE NOTE WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall DNB Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Note, even if advised of the possibility of such damages. Any opinions expressed herein reflect the Bank's judgment at the time the Note was prepared and DNB Parties assume no obligation to update the Note in any form or format. The Note should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. No DNB Party is acting as fiduciary or investment advisor in connection with the dissemination of the Note. While the Note is based on information obtained from public sources that the Bank believes to be reliable, no DNB Party has performed an audit of, nor accepts any duty of due diligence or independent verification of, any information it receives. Confidentiality rules and internal rules restrict the exchange of information between different parts of the Bank and this may prevent employees of DNB Markets who are preparing the Note from utilizing or being aware of information available in DNB Markets/the Bank that may be relevant to the recipients of the Note.

The Note is not an offer to buy or sell any security or other financial instrument or to participate in any investment strategy. Distribution of material like the Note is in certain jurisdictions restricted by law. Persons in possession of the Note should seek further guidance regarding such restrictions before distributing the Note.

The Note is for clients only, and not for publication, and has been prepared for information purposes only by DNB Markets - a division of DNB Bank ASA registered in Norway with registration number NO 984 851 006 (the Register of Business Enterprises) under supervision of the Financial Supervisory Authority of Norway (Finanstilsynet), the Monetary Authority of Singapore, and on a limited basis by the Financial Conduct Authority and the Prudential Regulation Authority of the UK, and the Financial Supervisory Authority of Sweden. Details about the extent of our regulation by local authorities outside Norway are available from us on request. Information about DNB Markets can be found at www.dnb.no/markets.

Additional information for clients in Singapore

The Note has been distributed by the Singapore Branch of DNB Bank ASA. It is intended for general circulation and does not take into account the specific investment objectives, financial situation or particular needs of any particular person. You should seek advice from a financial adviser regarding the suitability of any product referred to in the Note, taking into account your specific financial objectives, financial situation or particular needs before making a commitment to purchase any such product.

You have received a copy of the Note because you have been classified either as an accredited investor, an expert investor or as an institutional investor, as these terms have been defined under Singapore's Financial Advisers Act (Cap. 110) ("FAA") and/or the Financial Advisers Regulations ("FAR"). The Singapore Branch of DNB Bank ASA is a financial adviser exempt from licensing under the FAA but is otherwise subject to the legal requirements of the FAA and of the FAR. By virtue of your status as an accredited investor or as an expert investor, the Singapore Branch of DNB Bank ASA is, in respect of certain of its dealings with you or services rendered to you, exempt from having to comply with certain regulatory requirements of the FAA and FAR, including without limitation, sections 25, 27 and 36 of the FAA. Section 25 of the FAA requires a financial adviser to disclose material information concerning designated investment products which are recommended by the financial adviser to you as the client. Section 27 of the FAA requires a financial adviser to have a reasonable basis for making investment recommendations to you as the client. Section 36 of the FAA requires a financial adviser to include, within any circular or written communications in which he makes recommendations concerning securities, a statement of the nature of any interest which the financial adviser (and any person connected or associated with the financial adviser) might have in the securities.

Please contact the Singapore Branch of DNB Bank ASA at +65 6212 6144 in respect of any matters arising from, or in connection with, the Note.

The Note is intended for and is to be circulated only to persons who are classified as an accredited investor, an expert investor or an institutional investor. If you are not an accredited investor, an expert investor or an institutional investor, please contact the Singapore Branch of DNB Bank ASA at +65 6212 6144.

We, the DNB group, our associates, officers and/or employees may have interests in any products referred to in the Note by acting in various roles including as distributor, holder of principal positions, adviser or lender. We, the DNB group, our associates, officers and/or employees may receive fees, brokerage or commissions for acting in those capacities. In addition, we, the DNB group, our associates, officers and/or employees may buy or sell products as principal or agent and may effect transactions which are not consistent with the information set out in the Note.

Additional Information, including for Recipients in the United States:

The Note does not constitute an offer to sell or buy a security and does not include information, opinions, or recommendations with respect to securities of an issuer or an analysis of a security or an issuer.