



# Economic and Strategy Viewpoint

December 2017

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## From goldilocks to reflation



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- We are upgrading our global growth forecast for 2018 to 3.3% from a previous estimate of 3.0%. This marks a modest acceleration from 2017, which is also upgraded to 3.2% from 3%. Improving global trade and looser fiscal policy in the US account for much of this and, if our forecast is correct, 2018 will be the strongest year for global growth since 2011.
- However, unlike 2017 when inflation surprised on the downside, we see inflation picking up as cost pressures build and prices catch up with the strength of activity. Tail risks are more skewed to reflation than deflation and we have a tighter path for monetary policy from the Federal Reserve, European Central Bank and Bank of Japan.

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## European forecast update: upside risks return



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- The eurozone is booming. Strong data for the third quarter coupled with upgrades to historic data have led us to revise up our GDP growth forecast. Leading indicators have also turned, and are once again suggesting a further acceleration in growth. Due to a spike in global oil prices, inflation has been revised up too. This could be a problem for monetary policy, which remains on a dovish path. How long can this last?
- The UK forecast is on track, however, extending projections into 2019 means exploring Brexit and its potential impact on near-term growth and inflation. We assume a transition deal, but not one that includes full access to the single market. At the same time, the Bank of England is likely to wait until after Brexit to raise interest rates again, and in the meantime, is likely to consider its long-term projections of productivity and equilibrium interest rates.

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## EM forecast update: A brighter outlook



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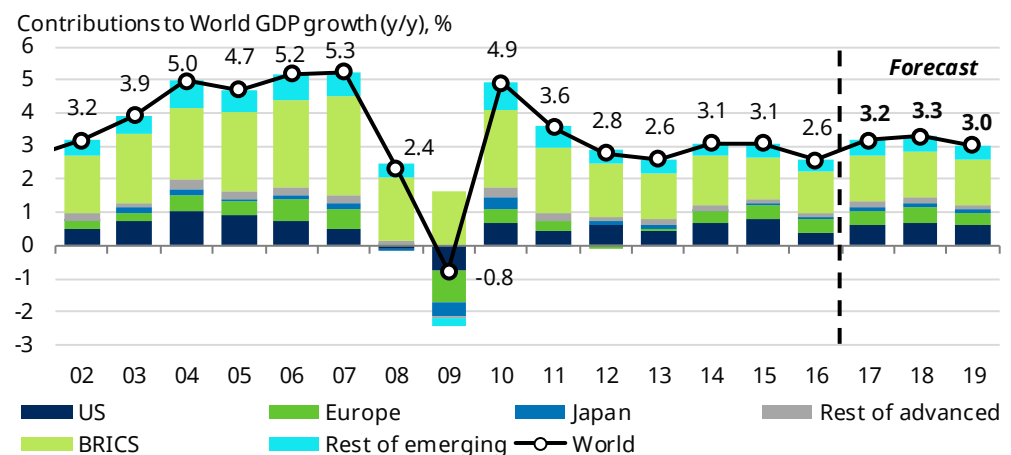
- A mostly strong performance in 2017 sees upgrades to our BRIC forecasts, with the exception of India. The other economies are seeing an improved growth-inflation trade off and, in the case of Brazil and Russia, accelerating growth as recoveries take hold.

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## Views at a glance

- A short summary of our main macro views and where we see the risks to the world economy.

**Chart: World GDP forecast**



Source: Schroders Economics Group. 27 November 2017. Please note the forecast warning at the back of the document.

# Forecast update: from goldilocks to reflation

“The global economy is now growing at its fastest pace since 2010, with the upturn becoming increasingly synchronised across countries.”

OECD Economic Outlook, November 2017.

**Global growth upgraded as synchronised upswing continues**

We are upgrading our global growth forecast for 2018 to 3.3% from a previous estimate of 3.0%. This marks a modest acceleration from 2017, which is also upgraded to 3.2% from 3%, and if correct would make 2018 the strongest year for global growth since 2011 when the world economy bounced back from the global financial crisis. Today the world economy is further advanced in its cycle and the prospect of another year of robust growth raises the question as to whether inflation will also accelerate and bring tighter monetary policy. So far the acceleration in activity has not triggered higher inflation, but the question is whether the goldilocks combination of strong growth and low inflation can persist in 2018.

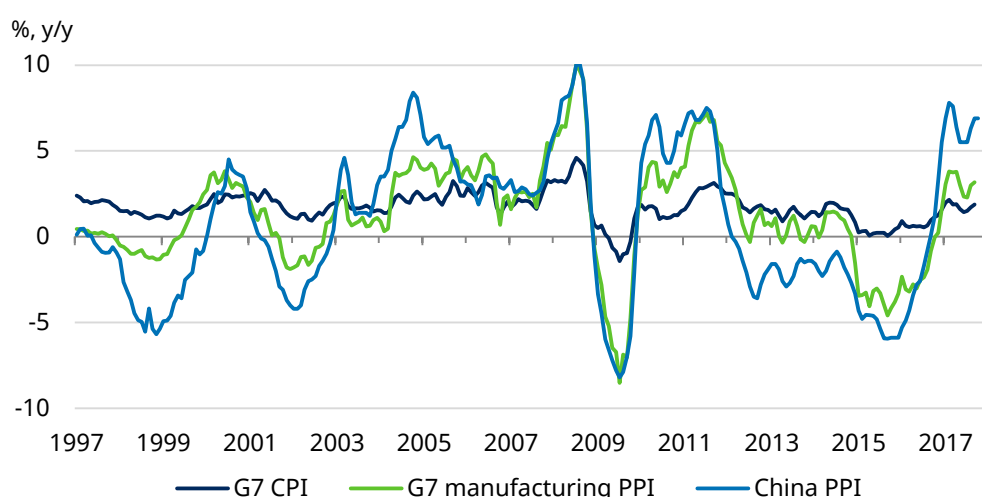
The global growth upgrade for 2018 is reflected across advanced and emerging economies. In the former we have increased our US forecast for 2018 from 2% to 2.5% and our eurozone projections from 2% to 2.3%. The US upgrade is driven by looser fiscal policy as we see a greater chance of tax cuts being passed by Congress. Japan is forecast at 1.8% (previously 1.5%) and in the emerging world we raise our growth forecast to 4.9% (previously 4.8%). The latter incorporates a slightly stronger figure for China in 2018 at 6.4%.

In terms of sectors, consumer spending continues to rise, but we see an increasing role being played by the capex cycle as business confidence strengthens and firms address the shortfall built up in this cycle (for more details see our [November Viewpoint](#)).

We forecast inflation at 2.3% in 2018 (revised up from 2.2%), an outcome reinforced by higher oil and commodity prices and reflected in the pick-up in producer price inflation around the world in recent months (chart 1).

**Inflation pressures are beginning to build**

**Chart 1: Pipeline inflation pressures are building**



Source: Thomson Datastream, Schrodgers Economics Group, 22 November 2017.

**Cyclical forces to push up core inflation in the US**

The forecast assumes a gradual pick-up in US core inflation back to 2% in 2018 after the surprising declines of earlier this year. We attribute this year's experience to the weakness of activity in 2016 which led to a phase of more competitive pricing by

firms. The lags from growth to inflation are long and the revival of economic activity in 2017 supports a faster pace of inflation in 2018.

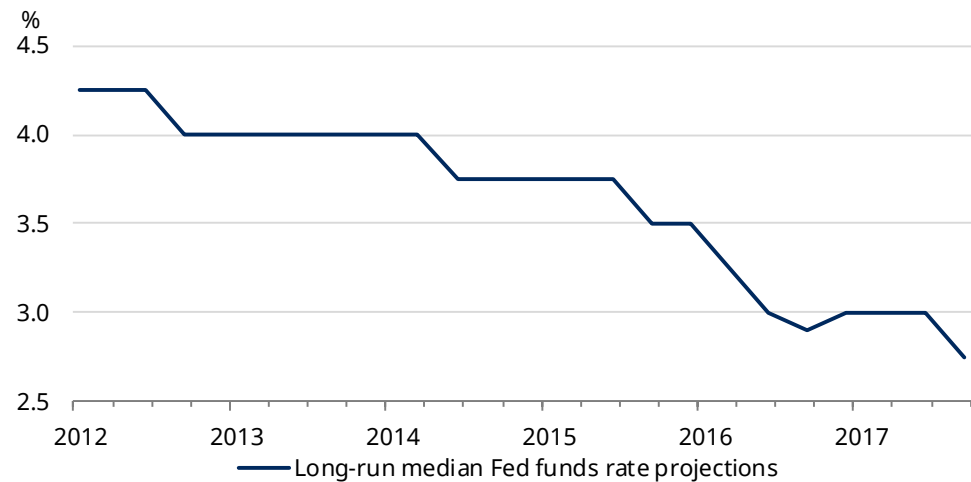
In this respect next year will see a fading of the goldilocks combination of better than expected growth and weaker than expected inflation. Structural factors such as the effect of technology remain important, but cyclical forces suggest that inflation will begin to catch-up with the strength of economic activity.

### Monetary policy: turning tighter (and not just in the US)

#### Fed to hike three times in 2018

Such an outlook supports a further tightening of monetary policy by the US Federal reserve (Fed) and with fiscal policy providing an extra boost to growth we now expect three rate hikes next year after an increase at the December 2017 meeting. The Fed funds rate is now forecast to end 2017 at 1.5% and 2018 at 2.25%. We would then expect one more rate rise in 2019 taking the policy rate to 2.5%. Given the reduced trend rate of growth in the US the rate peak in this cycle is expected to be well below that seen in previous cycles, something the Fed has been signalling through its “dot” forecasts for the long run policy rate (see chart 2).

Chart 2: The new normal? Decline in long run expected fed funds



Source: US Federal Reserve FOMC projections (as of 20 September 2017), Schroders Economics Group, 22 November 2017.

#### Turn in ECB and BoJ policy ahead

In terms of monetary policy elsewhere, we have a tighter projection for the European Central bank (ECB) in that we assume quantitative easing (QE) will end in September next year. Growth and inflation are expected to be robust enough for the central bank to call time on QE earlier than most would currently expect. The ECB then raises rates in 2019.

In Japan we assume that yield curve control (YCC) continues; however, there is a strong likelihood of a shift in policy, with the Bank of Japan (BoJ) likely to increase its target for 10 year JGB yields. As with the ECB, this will be driven by a robust economic performance and, although such moves may only be modest, they represent a turning point toward tighter policy, an event which will not be missed by the markets.

**Increasing chance of a global trade boom, adding to upside reflation risks alongside fiscal reflation**

## Scenarios

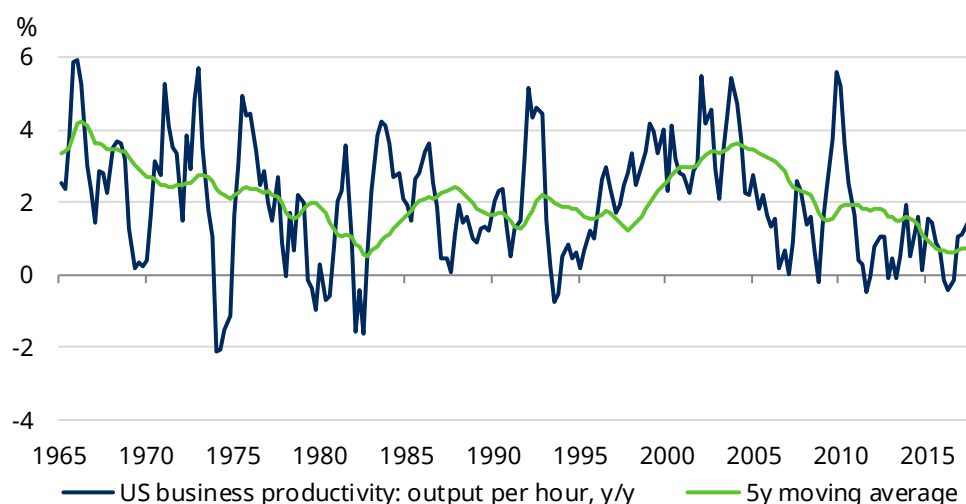
We have updated our scenario analysis to reflect the macro tail risks in the world economy. The recent strength of activity has raised the prospect of a “global trade boom” beyond that seen in the central case. This would be largely driven by an increase in the trade multiplier helping to drive exports with spill overs into higher employment and capex. The result is stronger growth and inflation as the upswing pushes commodity prices higher. Core inflation is also like to pick up as wages rise further as a result of tighter labour markets compared to the base.

Alongside this scenario is “fiscal reflation” where we see a greater fiscal boost than in the base. This would incorporate deeper tax cuts and increased infrastructure spending. The boost to GDP is close to 1.5% in 2018 compared to 0.5% in the base. Like the trade boom scenario this also results in higher inflation. However, in this scenario the gains are more concentrated in the US than shared globally.

Stronger economic activity is also a feature of our “productivity revival” scenario. In this case though the extra growth is met by increased output per worker such that capacity is not strained and inflation does not accelerate. There have been encouraging signs of late that productivity is improving in the US (see chart 3) and the scenario assumes this continues over the forecast period.

**Encouraging signs of better productivity in the US**

**Chart 3: US productivity ticks up**



Source: Thomson Datastream, Schroders Economics Group, 22 November 2017.

In terms of downside risks for activity, we continue to include a “secular stagnation” scenario, whereby the current cyclical upswing peters out and the world economy falls back into a weak deflationary trend. Whilst looking less likely at present, there are still significant structural headwinds such as the high level of debt and adverse demographics for global growth to contend with. More immediately the world economy could turn in a deflationary direction as a result of a sharp tightening in financial conditions. Our “bond yields surge” scenario captures this through a sharp rise in long yields as a result of an adverse market reaction to the unwinding of QE by the Fed and ECB.

**Stagflationary scenarios revolve around an adverse shift in the Phillips curve and protectionism**

On the stagflationary side we continue to include our “inflation accelerates” scenario, which captures the risk of a more upward sloping Phillips curve such that wages rise more rapidly as unemployment declines, thus pushing up prices. Although higher wages provide an initial boost to consumer spending, as inflation rises central banks are likely to tighten monetary policy more aggressively creating a period of economic weakness. The result is a spell of stagflation before inflation comes under control.

Finally we have broadened our “North Korea triggers trade war” variant to a more general “protectionism rises” scenario, which includes a breakdown of the North

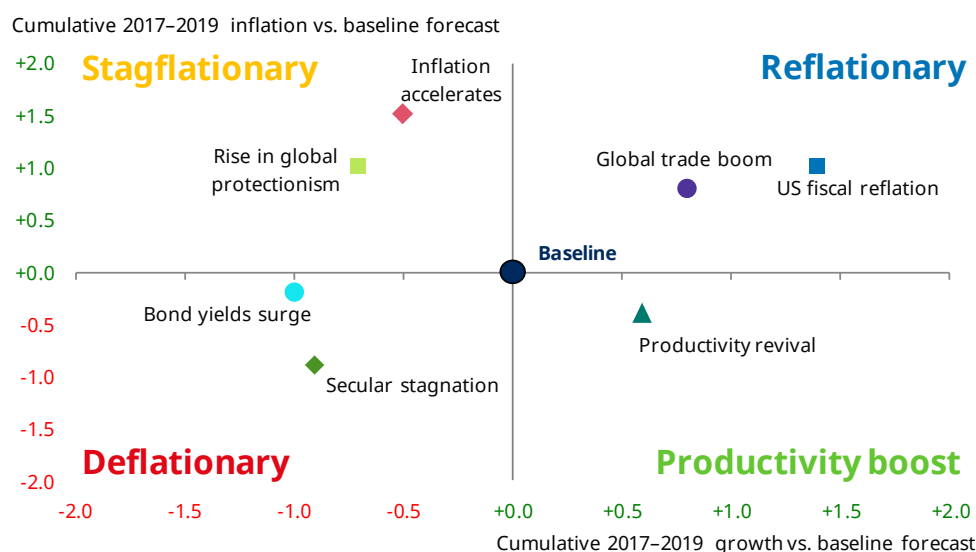
American free trade agreement (NAFTA). The increase in tariffs results in weaker activity and higher inflation as trade contracts and import prices rise.

The two scenarios which have been dropped are “OPEC deal breaks down” and “China credit crisis”. Greater production discipline by OPEC has supported oil prices recently and this looks set to continue in the near future.

Removing the “China credit crisis” is more controversial. Debt levels remain high and continue to rise in China, creating an ongoing risk of a future crisis. However the authorities have shored up the current account by restricting capital outflows making the immediate risk of a “Minsky” moment considerably less. Crisis is still possible, but has been pushed out beyond the forecast horizon.

The impact of each of our current scenarios on global growth and inflation is shown in our grid (see chart 4).

**Chart 4: Scenario grid: growth and inflation vs. base**



Source: Schroders Economics Group. 27 November 2017. Please note the forecast warning at the back of the document.

**Reflation risks now exceed deflation**

In terms of scenario probabilities we see a significant swing away from deflation towards more reflationary outcomes (see table 1). The increased likelihood of fiscal reflation and a global trade boom along with the removal of the China credit crisis scenario account for the shift.

**Table 1: Balance of probabilities by scenario outcome vs. baseline**

Scenario	Probability August 2017, %	Probability November 2017, %	Change, (November vs. August) percentage point
Stagflationary	9	10	+1
Deflationary	16	8	-8
Reflationary	4	11	+7
Productivity boost	7	3	-4
Baseline	62	65	+3

Source: Schroders Economics Group, 27 November 2017. Please note the forecast warning at the back of the document.

# European forecast update: upside risks return

“The economic recovery is continuing but inflation developments remain subdued. So, while we are confident in the recovery, we still need a patient and persistent approach to our monetary policy to ensure that medium-term price stability is achieved.”

Mario Draghi, European Central Bank President, Frankfurt, 17 November 2017

Europe is booming, and as Mario Draghi recently stated, is likely to enjoy a period of unabated growth. Our forecast update contains further upgrades to growth projections, while inflation has also been revised up due to higher energy prices. With the economy in better shape than previously thought, how long can the European Central Bank (ECB) maintain its huge stimulus programme?

Meanwhile, the UK continues to flounder. The UK forecast is largely on track, but as we extend into 2019, we consider how Brexit is likely to unfold, along with the economic outlook. Will the Bank of England (BoE) follow through with more interest rate rises soon? And what is the outlook for long-term interest rates?

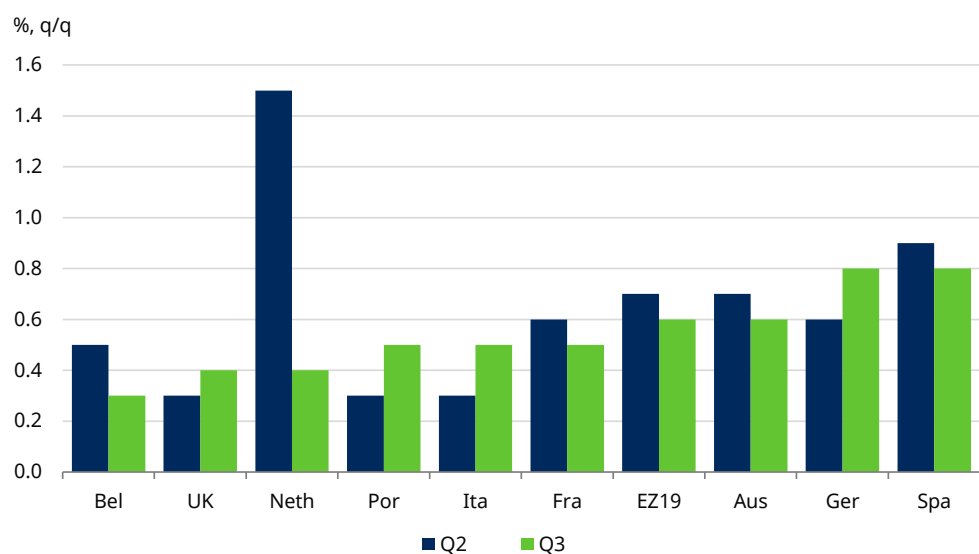
## Eurozone growth remains strong

The preliminary GDP report from Eurostat shows the eurozone grew by 0.6% in the third quarter. This is a little lower than the upwardly revised-estimate for the second quarter of 0.7%, but is still considered to be very strong. The year-on-year (y/y) rate of growth has risen to 2.5% – the fastest rate of growth since the first quarter of 2011.

Leading the pack was Spain which enjoyed growth of 0.8% (chart 5), followed by Germany (0.6%), Austria (0.6%) and France (0.5%). Even Italy and Portugal enjoyed strong growth, both recording 0.5% over the quarter. GDP growth in the Netherlands came back down to earth with 0.4% following the exceptional 1.5% growth recorded in the previous quarter. The unusually strong reading was a result of a distortion in data to do with the energy extraction.

Chart 5: Eurozone GDP growth remains strong

**Eurozone GDP growth continues to be very strong**



Source: Eurostat, ONS, Schroders Economics Group. 27 November 2017.

The latest set of figures confirms our view that the economic recovery is both gathering momentum and broadening out. 20 of the 28 EU member states have

**Revisions to past data paint a brighter picture of stronger momentum**

reported third quarter growth, with y/y growth ranging between 1.5% (UK) and 8.6% (Romania).

As with last quarter's update, historic data has been revised up yet again. This has prompted economists including ourselves to revise up forecasts of GDP growth, as shown by chart 6, the path of consensus forecasts for 2017 annual growth. The acceleration in global trade has been very helpful for the monetary union, boosting both net trade with the rest of the world and intra-eurozone trade. Domestic demand has also been very robust. When facing higher inflation earlier this year, households reduced the proportion of their incomes saved, rather than forgo consumption. Business investment moderated a little this year, though this is not a surprise given the political uncertainty that companies have faced.

Political risk has eased considerably since the start of the year, especially with the defeat of the National Front in the French presidential election. However, some uncertainty still lingers. Populist nationalists and regional separatists have gained a lot of ground this year. The Catalan fuse could be reignited with local elections to be held in December.

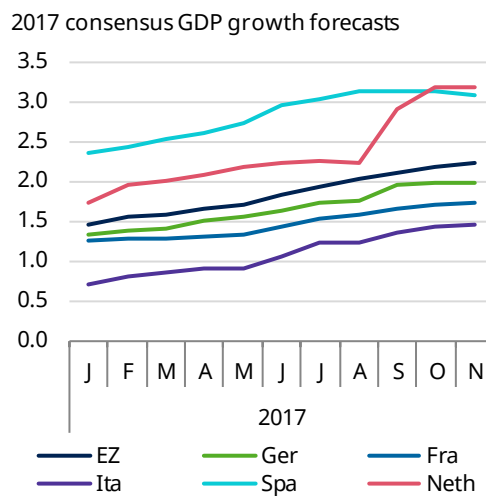
Meanwhile, the failure of party leaders to form a coalition in Germany over the past month has raised the possibility of a re-run election in 2018. Before this happens, Angela Merkel's CDU/CSU coalition is set for talks with the socialist SPD to try to reform the grand coalition again. A centre-left coalition would be the most representative coalition as the two parties won the most votes. It would also provide a more EU-friendly government, which would work well with France's president Emmanuel Macron in reforming the EU and eurozone.

**Political risk remains as highlighted by events in Spain and Germany**

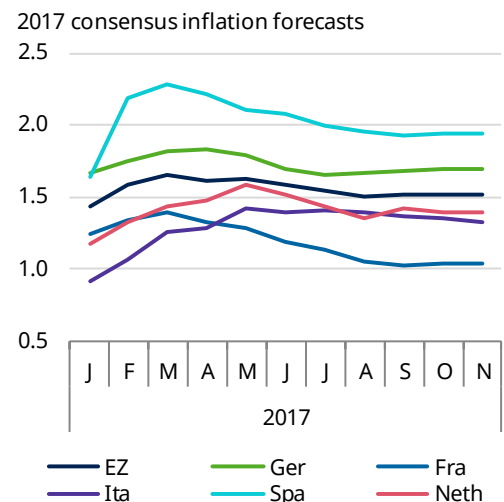
However, a centre-left coalition would go against the shift in political sentiment, with the three parties losing 14 percentage points of the vote in this election compared to the previous one. This could lead to further disenchantment with the political elite, and potentially more people voting for the far-right AfD party next time.

While growth forecasts have been revised up, inflation forecasts have gone the other way (chart 7). Core inflation (excluding volatile components like food and energy) has been lower than expected over 2017. In our view, this is because a significant amount of spare capacity or slack still exists in the monetary union overall.

**Chart 6: GDP forecasts revised up**



**Chart 7: Inflation forecasts lowered**



Source: Thomson Datastream, Consensus Economics, Schrodgers Economics Group. 27 November 2017.

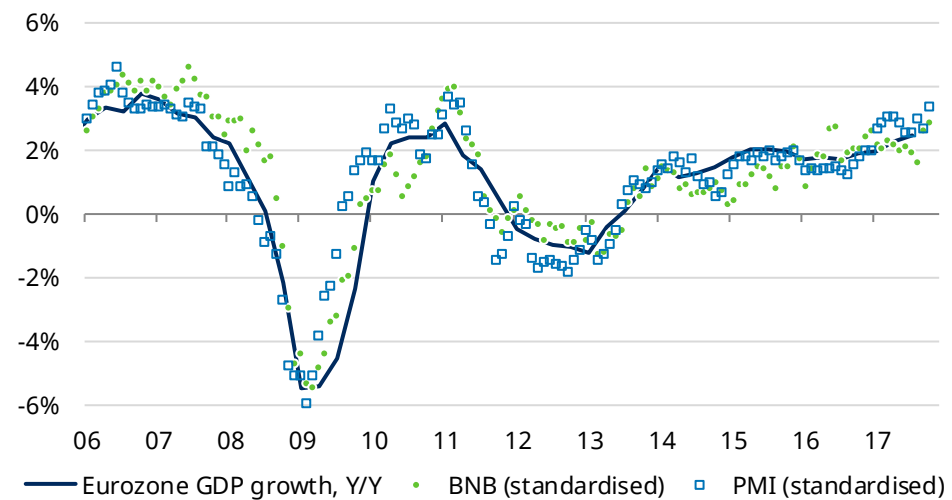


Looking ahead, compared to last quarter's forecast update, both of our favourite leading indicators have turned back up, suggesting upside risks have returned. The flash eurozone composite purchasing managers index (PMI) for November reached its highest level since April 2011. This is consistent with y/y GDP growth of 3.4%. Meanwhile, our other favourite survey conducted by the Belgian National Bank (BNB), has also risen sharply, and is currently suggesting growth of 2.9% y/y.

With both the PMI and BNB surveys now well above the current level of GDP growth (2.5% y/y), we must conclude that there is significant upside risk to our forecast. It is worth mentioning that when these surveys were at similar levels in 2010 and 2011, GDP growth did not rise above 3% (chart 8). As these surveys are largely measures of sentiment rather than precise measures of activity, they can both overshoot during times of exuberance and undershoot during times of panic.

**Chart 8: Upside risk to eurozone GDP growth has returned**

**Leading indicators are once again pointing to a further acceleration in growth**



Source: Thomson Datastream, Markit, BNB, Schroders Economics Group. 27 November 2017.

**Eurozone forecast update: even further upward revisions**

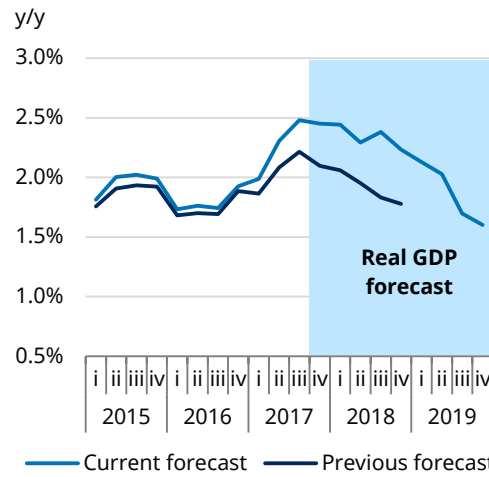
**Eurozone growth upgraded in 2017 and 2018, but some moderation expected in 2019**

Turning to the forecast, we find ourselves revising up growth for the eurozone yet again. Our forecast for GDP growth has been raised from 2.1% to 2.3% for 2017, and from 1.9% to 2.3% in 2018. As chart 9 shows, much of the upgrade is due to historic data revisions for the past year. However, given the pick up in leading indicators and upgrades to our forecast for other regions, we have upgraded the eurozone growth outlook too. It is worth mentioning, that compared to 28 other forecasters included in the Consensus Economics survey, our new GDP forecast would be the second highest in the latest survey (November 2017). Consensus forecasts range from 1.6% to 2.5% for 2018, with a mean of 1.9%. For 2019, we forecast growth to moderate to 1.9%, but staying above potential.

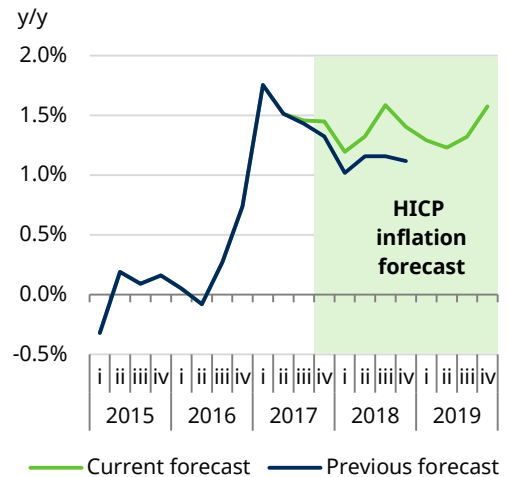
Inflation for 2017 is on track to end at 1.5%, but the inflation forecast for 2018 has been revised up from 1.1% to 1.4%. Higher global oil prices have lifted the profile shown in chart 10, although the stronger euro seen in recent months, and assumed over the forecast horizon, is likely to limit how high it can rise. For 2019, we forecast inflation to also average 1.4%.

**Eurozone inflation also revised up due to higher energy prices**

**Chart 9: Eurozone GDP forecast**



**Chart 10: Eurozone inflation forecast**



Source: Schroders Economics Group. 27 November 2017. Previous forecast from August 2017. Please note the forecast warning at the back of the document.

### Could the ECB end QE early?

Moving on to monetary policy, the ECB announced last month that it would extend its asset purchase programmes for a further nine months (between January and September), with a reduced monthly purchase rate of €30 billion. The promise to keep monetary policy ultra-loose, and even step up or extend purchases if needed was taken as a very dovish signal. The euro depreciated slightly in reaction to the announcement, while pricing of interest rate rises were pushed back in money markets.

Since the ECB's last monetary policy meeting, the data that has been released has been far stronger than expected. Not only was the latest outturn strong, but historic revisions should significantly change the ECB's outlook. Higher growth over the past three years should mean that there is less spare capacity than previously thought. Moreover, the turnaround in leading indicators discussed earlier suggest that risks are firmly skewed to the upside.

**Stronger eurozone data is likely to widen the split at the ECB as to the appropriateness of monetary policy**

In light of the stronger growth data, and the recent spike up in global energy prices, some governing council members may come to the conclusion that the extension of quantitative easing (QE) was excessive. We are likely to see the split in the governing council grow, with greater dissent in public speeches. Our previous forecast was for QE to see one further step down, before ending in December 2018. We now forecast QE to end in September as currently planned, but there is a risk that the monthly purchases could be reduced before September, and/or that the programme ends sooner. The ECB will have to balance the risks of an unwieldy unwind versus the risk of an inflation overshoot. We expect the ECB to lean on the side of caution, and simply end the current programme in September.

The next question is then when will the ECB raise interest rates? The first rate rise should follow soon after the end of QE. We forecast a 25 basis point rise in the first quarter of 2019, with a second in the third quarter, ending 2019 with the refinancing rate at 0.5%. This is a very slow pace of normalisation, but is consistent with our moderate inflation forecast (1.4% in 2019), and our assumption of an appreciating euro. The deposit rate is expected to rise from -0.4% to zero by the end of 2019.

## UK forecast update: on track, but considering Brexit in 2019

Our UK forecast update is less eventful than the eurozone update, but as we are now including 2019, we have to take a view on the most likely outcome of Brexit, and the macroeconomic impact.

Starting with the near-term, our forecast was again spot-on with the latest GDP release. UK growth picked up slightly from 0.3% in the second quarter to 0.4%, largely thanks to an increase in household spending, though it is worth mentioning that half of the GDP growth recorded came from a slowdown in destocking. As data has largely been as we had forecast, we have not revised our projections for 2017 or 2018 (chart 11). Historic revisions have raised the overall level of GDP, but the profile of recent growth has been downgraded. This has caused a mechanical downgrade of our 2017 GDP forecast from 1.6% to 1.5%. Otherwise, our forecast for 2018 remains at 1.6%.

The UK inflation forecast has been revised up for the end of 2017 and the first half of 2018, but then revised lower for the rest of 2018 (chart 12). This is solely due to the recent rise in global oil prices. The price of the December 2018 Brent crude oil future is 16.6% higher than when we last updated the forecast. However, the oil futures curve, which is how we condition our forecast for energy prices, is now in backwardation, meaning that markets expect the price of oil to fall over the medium term. This causes a disinflationary impulse, which explains our forecast for the second half of 2018.

The UK GDP forecast is largely unchanged, but inflation revised up due to energy prices

Chart 11: UK GDP forecast

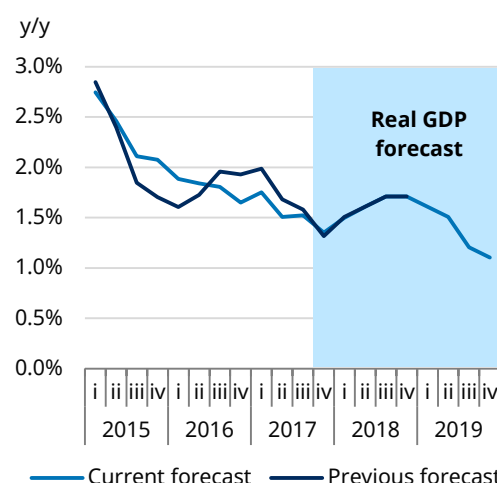
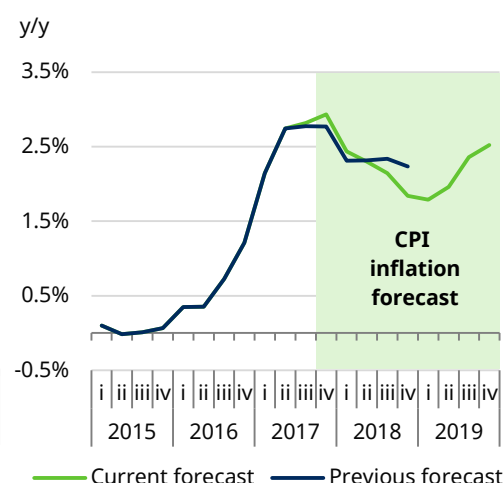


Chart 12: UK inflation forecast



Source: Schroders Economics Group. 27 November 2017. Previous forecast from August 2017. Please note the forecast warning at the back of the document.

The UK's economic outlook for 2019 is highly uncertain due to Brexit. Growth and inflation could be significantly impacted by how the UK leaves the European Union: whether or not a transition period is agreed, and what is included during this transition period. The more access the UK demands, the greater the financial cost for the exchequer, and political cost for the UK government.

Given the political constraints, the best scenario for growth and inflation is for a transition period which offers uninterrupted access to the single market. However, the EU would not only demand a greater budgetary contribution, but also oversight by the European Court of Justice (ECJ), and free movement of labour. While the government is willing to negotiate on the budget, and perhaps limited and temporary oversight from the ECJ, free movement of labour is out of the question. Many Brexit supporters believe that the UK should leave the EU as soon as possible,

and would be willing to walk away from all negotiations rather than accept free movement of labour.

This brings up the scenario which captures the other extremity – a no-deal Brexit. If negotiations were to break down, then the UK would eventually move to trading on a “most-favoured nation” status under the rules of the World Trade Organization (WTO). This would mean significant tariffs being applied on a range of goods, with the largest hitting the agricultural sectors. Services are not included in WTO rules, which would put the UK’s large surplus in services trade at risk.

**For 2019, we assume Brexit will include a transition period, though not one that offers full access to the single market**

In recent weeks, it appears that both sides have made some progress in negotiations. The formal process to begin trade talks could begin from December 2017, though the Irish border issue must be resolved first. Assuming that negotiations proceed, we struggle to see the UK and EU agreeing on a free trade agreement (FTA), where the UK would not have the involvement of the ECJ, and no free movement of labour. Instead, we expect the UK to push for FTAs on a number of key sectors, such as financial services. Large agricultural exporting member states are likely to push for restrictions on food exports, which could mean tariffs being applied by both sides. We therefore assume a transition period to be agreed, but not one that includes all sectors of trade. The UK would need to continue to make some budgetary contributions, but the costs of building the infrastructure required to implement Brexit will outweigh any savings gained from the UK’s annual budgetary contribution.

Returning to the forecast, our assumed transition period means higher inflation, due to tariffs, but also due to an assumed depreciation in sterling. This is likely to squeeze the finances of households, which are likely to cut back spending in response, causing growth to slow. We therefore forecast growth to slow from 1.6% in 2018 to 1.4% in 2019. Inflation, which would have otherwise fallen, will instead remain at 2.2% in 2019. It is worth remembering that the uncertainty around our 2019 forecast is exceptionally high, and that we freely admit that the error could be very large if our assumptions on Brexit are wrong.

### **BoE likely to remain on hold until after Brexit**

As for the Bank of England, we forecast interest rates to remain on hold until after Brexit. The BoE is then expected to raise the base rate from 0.50% to 0.75% in May 2019, then again in November 2019 to 1%. This profile would still be consistent with the Bank’s forward guidance of two rate rises over the next three years, and the post-Brexit rate rises will help to slow the depreciation in sterling – though we still assume the pound ends up reaching parity against the euro by the end of 2019.

**The BoE is forecast to keep interest rates on hold until after Brexit...**

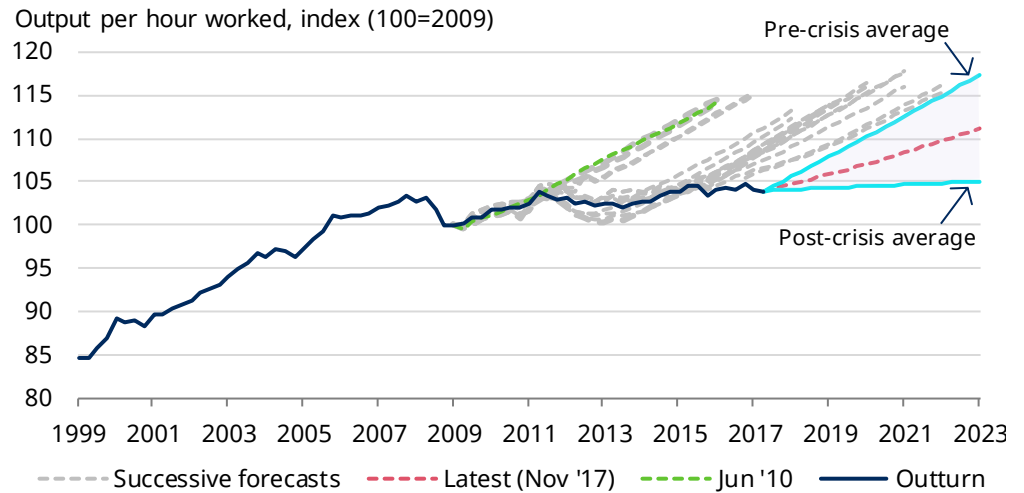
In the near-term, we expect the BoE to initiate a debate over long-term growth prospects, and the level of the Bank’s terminal or equilibrium rate of interest. The BoE usually conducts an annual assessment of the UK economy’s supply side potential at the start of every year, with the results published and debated in the February Inflation Report. We suspect that the upcoming assessment is likely to conclude that the equilibrium rate interest rate is probably lower than previously estimated. This is because an updated assessment of the UK’s recent productivity performance is likely to conclude that the probability that productivity returns to pre-financial crisis growth rates is low. This was the conclusion from the Office for Budgetary Responsibility (OBR) forecast update, which was the key takeaway from the Budget in November.

Chart 13 shows the OBR’s record of forecasting UK productivity as measured by output per hour worked. After year’s of being too optimistic on the recovery in productivity, it has finally changed its methodology and lowered its forecast. The change has had a profound impact on the outlook for public finances. Nominal GDP

is now assumed to be 2.5% lower by 2022, reducing the Chancellor's capacity to loosen fiscal policy.

...though lower productivity growth forecasts should lead to the BoE lowering its equilibrium interest rate assumption

**Chart 13: Successive OBR productivity forecasts**



Source: OBR "Economic and fiscal outlook" (Nov 2017), Schroders Economics Group. 27 November 2017.

We expect the Bank to lower its estimate of potential growth to around 1.5%, which would lower its estimate of the equilibrium interest rate to between 1.5% and 2% – about 50 basis points lower. Obviously, this is an ever-evolving estimate of an intangible variable, and so carries significant risk. However, the key message is that as the BoE continues to tighten monetary policy, it is likely to continue to signal a gradual and limited interest rate cycle, but with new emphasis on the latter.

# EM forecast update: A brighter outlook

“If we are too optimistic when things go smoothly, tensions build up, which could lead to a sharp correction, what we call a ‘Minsky Moment’. That’s what we should particularly defend against”

Zhou Xiaochuan, PBoC governor, Beijing, 19 October 2017

## A better mix of growth and inflation in EM

A largely positive set of revisions to our BRIC forecasts this quarter, with growth higher and inflation lower everywhere but India. To some extent these changes reflect better-than-expected data on both fronts in each market, with India the exception in disappointing significantly on the growth front. However, upward revisions to developed market (DM) forecasts also prompt upgrades for 2018 on better trade growth expectations. Higher oil prices do exert some additional inflationary pressure, but in most cases not enough to overwhelm the gains emerging markets (EM) have made in tackling structural inflation this year.

**Table 2: BRIC forecast summary**

% per annum	GDP			Inflation		
	2017f	2018f	2019f	2017f	2018f	2019f
<b>China</b>	6.8 <span style="color: green;">↑</span> (6.7)	6.4 <span style="color: green;">↑</span> (6.3)	6.3	1.7 <span style="color: red;">↓</span> (1.8)	2.3 <span style="color: grey;">→</span> (2.3)	2.2
<b>Brazil</b>	0.6 <span style="color: green;">↑</span> (0.4)	2.5 <span style="color: green;">↑</span> (1.6)	2.1	3.5 <span style="color: red;">↓</span> (3.9)	4.0 <span style="color: red;">↓</span> (4.6)	4.4
<b>India</b>	6.2 <span style="color: red;">↓</span> (6.9)	7.5 <span style="color: red;">↓</span> (7.7)	7.6	3.2 <span style="color: grey;">→</span> (3.2)	4.4 <span style="color: green;">↑</span> (4.3)	4.3
<b>Russia</b>	1.7 <span style="color: green;">↑</span> (1.3)	2.3 <span style="color: green;">↑</span> (1.8)	1.9	3.7 <span style="color: red;">↓</span> (4.5)	4.4 <span style="color: red;">↓</span> (4.7)	4.8

Source: Thomson Datastream, Schroders Economics Group. 21 November 2017. Numbers in parentheses refer to previous forecast.

We are making favourable revisions, for the most part, to the inflation outlook. However, we still think it is the case that the disinflation evident in EM this year has largely run its course. Consequently we see limited room for additional easing in 2018, though we revise rates lower in Brazil and Russia to reflect action and comments from their central banks since our last forecast update.

**Table 3: BRIC monetary policy**

% (year end)	2017(f)		2018(f)		2019(f)
<b>China RRR</b>	17.00	(17.00)	16.00	(16.00)	15.00
<b>China lending rate</b>	4.35	(4.35)	4.35	(4.35)	3.50
<b>Brazil</b>	7.00	(7.75)	6.75	(7.75)	8.00
<b>India</b>	6.00	(5.75)	6.00	(5.75)	6.00
<b>Russia</b>	8.00	(8.00)	7.00	(7.25)	7.75

Source: Thomson Datastream, Schroders Economics Group. 21 November 2017. Numbers in parentheses refer to previous forecast.

## Still some room for monetary easing in the BRICs next year

### China: business as usual

## Party Congress delivers little on economics, lots on politics

When we last updated our forecast, there was a small degree of uncertainty about the future of Chinese policy on many fronts. The 19<sup>th</sup> Party Congress, held in October, had the potential to deliver any number of changes to economic policy. Might the Party choose to finally address the many imbalances threatening

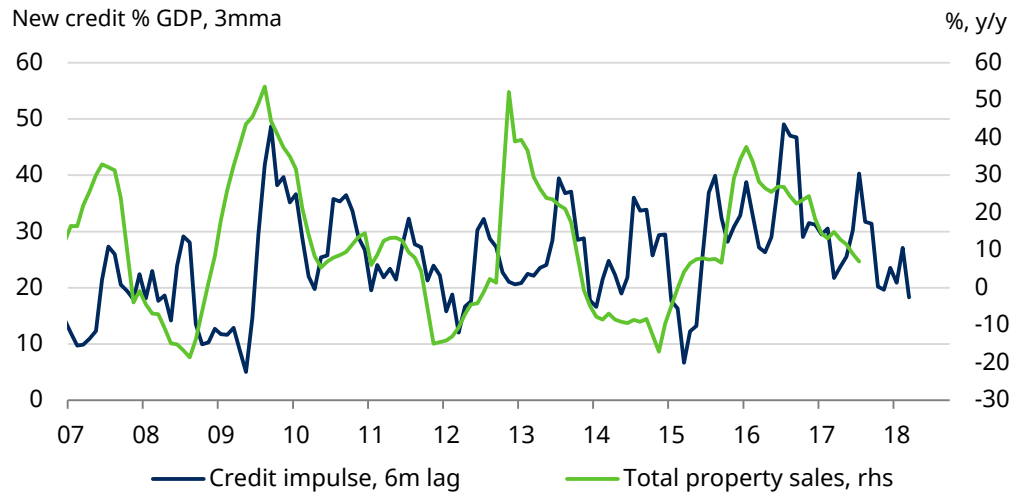
economic and financial stability, aggressively tackling excessive leverage, the distorting role of state owned enterprises and the problem of excess capacity?

The short answer, it turned out, was no. While the Congress delivered in terms of political intrigue, reform seems to have been deferred once more. Consequently, we are able to nudge our growth expectations higher for 2018, to 6.4%, while also raising this year's forecast after a stronger than expected third quarter. For 2019, we pencil in a 6.3% projection. China remains committed to its 2020 target for doubling incomes from their 2010 levels, and as a minimum this requires GDP growth of 6.3% per annum from here. Growth should also receive some support from upgrades to DM growth expectations, leading to stronger global trade.

**Tighter credit is beginning to impact growth and will continue to do so...**

Still, despite a lack of serious reform so far (though the December Economic Work Conference will spell out economic policy in more detail), a slowdown from current levels still seems likely. While a serious effort to bring leverage down has not been announced, the regulatory authorities are still tightening their stance and at least limiting further credit growth. This has finally begun to impact on the property sector and looks set to continue (chart 14). The government will likely continue to provide fiscal support for the economy but further acceleration from here will prove difficult given the strong pace of growth this year.

**Chart 14: Credit tightening is having an effect on property**



Source: Thomson Datastream, Schroders Economics Group. 27 November 2017.

**...while anti-pollution measures will also be disruptive**

We also expect a short term hit to growth in the final quarter of this year and the first quarter of 2018, stemming from measures aimed at curbing pollution. Over the heating season (November to March), many provinces are targeting significant (15% or higher) reductions in particulate counts. Production curbs will reportedly apply to large swathes of steel and aluminium manufacturing, and will likely impact cement, coal, mining and other polluting sectors. This should be reflected in somewhat softer industrial production and investment in manufacturing, and we believe led to some frontloading of production ahead of the cuts.

Perhaps as an offset to these measures, the central bank has pre-emptively announced some policy easing to be implemented in January 2018. A targeted required reserve ratio (RRR) cut of 50bps will be applied to all banks who meet "inclusive financing" criteria; lending to small businesses, farmers, start ups and the impoverished must account for over 1.5% of total loans. Should such lending amount to over 10% of the total, an additional 100 bps cut will be available. This should help boost credit provision to underserved sectors, at the margin, and will help offset tighter liquidity conditions from additional regulations also commencing in 2018. However, we do not think that this alone will be enough to create a significantly easier monetary policy environment. A modestly tight stance is

**Dollar weakness likely to mean modest renminbi strength**

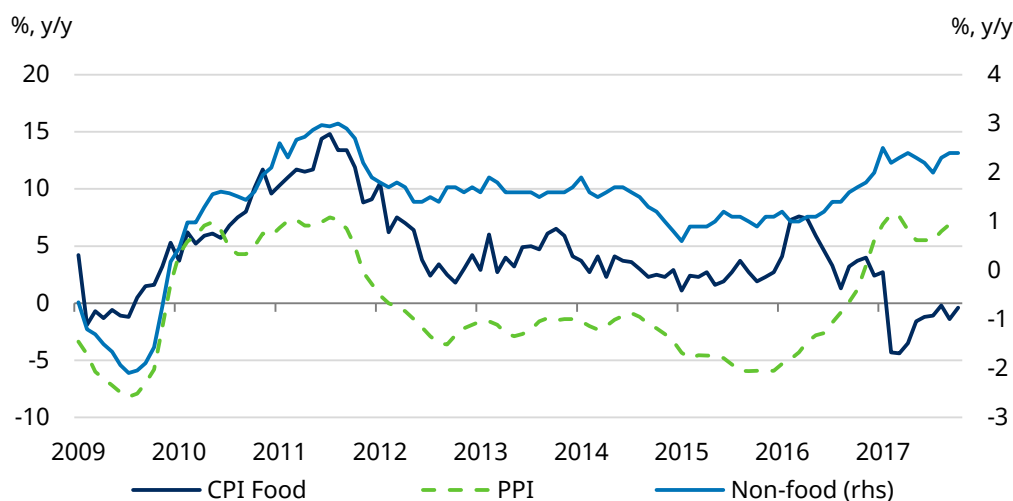
expected to prevail until growth slows noticeably; we expect a turning point to come following second quarter GDP.

The other change we have made to the Chinese outlook is on our expectations for the RMB. Where previously we had expected ongoing weakness of the currency, we now expect the People's Bank of China (PBOC) to follow a loose trade weighted peg. As a result the dollar weakness in 2018 and 2019 sees the RMB appreciate very modestly, ending 2019 at around 6.4 to the dollar.

Finally, a recurring question has been when we might see high PPI inflation feed through to consumer prices, with headline PPI and CPI seemingly uncorrelated at present. However, if we consider non-food CPI inflation, it does look to have moved in response to the changes in PPI (chart 15). The relationship varies, but it is hard to argue that we are due a sudden massive acceleration in consumer prices on this basis. Instead, the weakness in food price inflation looks responsible for the headline disconnect, and a reversal here (likely given rising energy costs) would see inflation move higher. For our forecast, weaker inflation than expected this year, the recent announcement of import tariff reductions, and modest currency appreciation, offset the inflationary impact of higher oil prices for next year; so we leave our forecast unchanged for now.

**Rampant PPI inflation reflected in core, not headline, CPI**

**Chart 15: Producer price inflation is already feeding through into core CPI**



Source: Thomson Datastream, Schroders Economics Group. 27 November 2017.

**India: growth stalled but not derailed**

We again find ourselves revising Indian growth numbers lower after a disappointing second quarter print. Some recovery had been expected following a shockingly bad first quarter, with the view being that the weakness then was a one-off result of demonetisation. Unfortunately, it was not to be. Gross value added (GVA), the government's preferred measure of economic activity, grew 5.6% in the second quarter, an unchanged pace of growth. The culprit this time, supposedly, is the Goods and Services Tax (GST), the looming imposition of which in the summer is thought to have reduced business confidence and willingness to build inventories. With that out of the way, can Indian growth gather momentum again?

**The bank recap plan raises hopes for growth after a disappointing first half**

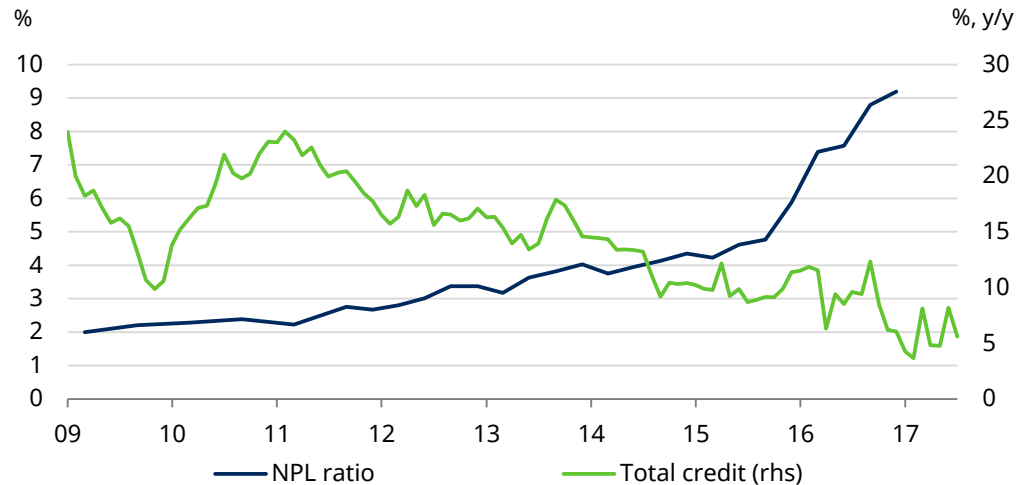
One positive development since our last forecast update has been the announcement of a plan to fix the public banking sector. Taking a leaf from the Eurozone's book, finance minister Jaitley has put forward a clean up which would be largely funded by banks buying bonds from the government, which would then use the monies generated to recapitalise the banks. There will also be some fiscal support and equity issuance. In total, the amount to be raised falls short of a full recapitalisation; \$32 billion versus the \$40-62 billion estimates a complete fix would



cost. Still, this should mark a significant improvement for public sector banks that may become more willing to boost lending; credit growth has recovered slightly this year but is only running at a 7% pace at present.

A willingness to lend of course is of no help unless there is also a willingness to borrow. With GDP growth slowing so far this year, the immediate prospects for this do not seem that hopeful. Perhaps with this in mind, the finance minister also announced a \$48 billion infrastructure plan to be financed partially through bank borrowing. This could be interpreted (given the nature of the recapitalisation plan) as the government lending to itself, so the hope must be that it kick-starts a recovery in private sector demand if it is to be sustainable.

**Chart 16: Stressed balance sheets weigh on lending in India**



Source: Thomson Datastream, Schroders Economics Group. 27 November 2017.

**Combined with the bankruptcy code we could see credit growth recover**

The final piece of the banking system jigsaw is dealing with non performing loans, which now stand at around 9% of gross lending. A new bankruptcy code seeks to bypass the usual court system and reduce insolvency case times to 270 days, which compares favourably to the current average of around five years. To prod reluctant banks into action, the central bank has the power to compel bankruptcy proceedings, and the first batch of bad loans should be processed by March. At one quarter of the total NPLs, this is a good start.

We therefore have some confidence that the credit cycle can be rebooted before too long, helping to drive a rebound in growth from 2017's disappointing levels, with stronger growth to then persist into 2019 given the degree of spare capacity in the economy.

Inflation remains well below the double digits of recent years, at 3.6%, but has risen sharply since a June low of 1.5%. Further increases are expected by the central bank, with the possibility of fiscal slippages highlighted by governor Patel. The commitment of the central bank to an inflation target of around 4% has been reiterated, which leaves limited space for further cuts at present. There are also concerns around the inflationary effects of higher oil prices, government policies on public sector pay, and the recent implementation of the Goods and Services Tax (GST). As a positive, the RBI has said that household inflation expectations are becoming anchored, which is key to long-term inflation targeting. Our reading of the bank's stance for now is that it would prefer to remain on hold. As growth recovers and inflation continues to climb, we think it will have little reason to ease further, but should at least not feel pressured to hike, with inflation expected to remain within their tolerance range.

**Brazilian politics is as volatile a scene as ever**

**Brazil: pension tension**

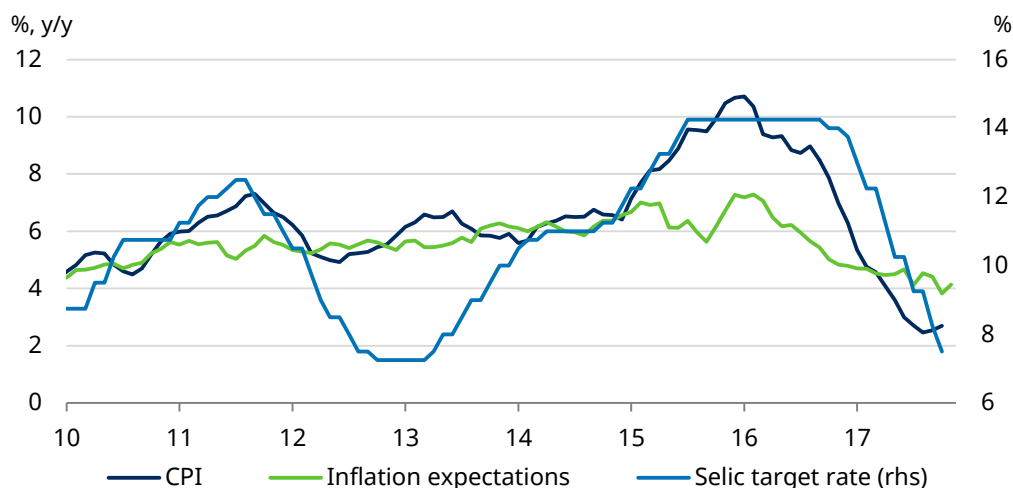
We hope one day to be able to write about Brazil without having to discuss politics, but that day does not seem to be any nearer now than it was two years ago. The odds of pension reform have dwindled over time as Temer’s position has weakened, and whatever legislation we get now looks to be a vastly diluted version of the original proposals. Meanwhile, attention will increasingly turn to the 2018 presidential elections, with an extremely uncertain outcome at this stage. It certainly promises to be a colourful affair, with the perhaps inevitable “Brazilian Trump” candidate, right-wing Congressman Jair Bolsonaro, in the running alongside former president Lula, and a raft of political outsiders also throwing their hats into the ring. At present, neither Bolsonaro (economic nationalist) nor Lula (left wing populist) seem likely to be welcomed by markets given their preferred economic policies.

For now, our growth outlook takes an agnostic stance on the election, which in any case should not have too great an impact on 2018 performance as it takes place in October. 2019 is when policies may be felt but at present it is too uncertain who will win, and even what each candidate’s policies will be – Bolsonaro and Lula may ultimately find themselves constrained by circumstance, for example.

Happily, the economy seems determined to grow despite political uncertainty. The recovery continues to pick up pace and we think that after a deep recession we should be due a relatively rapid return to at least trend growth. More common in such situations is a degree of overshooting, so we forecast growth of 2.5% for 2018, a sharp upgrade which reflects a resolution of uncertainty around the direction of economy this year, as data has improved. Also helping this recovery has been the action of the central bank, which has cut more aggressively than we anticipated after larger than expected falls in headline inflation.

**A collapse in inflation has allowed for aggressive easing**

**Chart 17: Has Brazil finally conquered inflation?**



Source: Thomson Datastream, Schroders Economics Group. 27 November 2017.

Brazil’s inflation story has been fairly remarkable, even in an environment of disinflation for the broader EM universe. From inflation of 10.7% at the start of 2016, price growth is now running at around 2.7%, year on year (chart 17). The depth of the recession, and orthodox monetary policy, have been helpful, but we should not overlook some of the structural reforms made to the economy. A temporary surge of inflation was driven by allowing regulated prices to correct, after years of artificial suppression. Correction complete, inflationary pressures here are now more muted. A one-off cut to electricity rates has also benefitted inflation pressures this year. Finally, currency strength (now abated) has also been helpful. With growth picking up and spare capacity slowly being eroded, and one-off measures dropping out of the calculation, we expect a modest pick up in inflation in

2018 and 2019. However, we think the central bank should not be overly stretched in its task of targeting 4.5% inflation. Some hikes in 2019 may be warranted as three years of positive growth begins to eat into spare capacity, particularly given the reduction of the inflation target that year to 4.25%, and 4% in 2020.

### Russia: surging oil buoys the economy

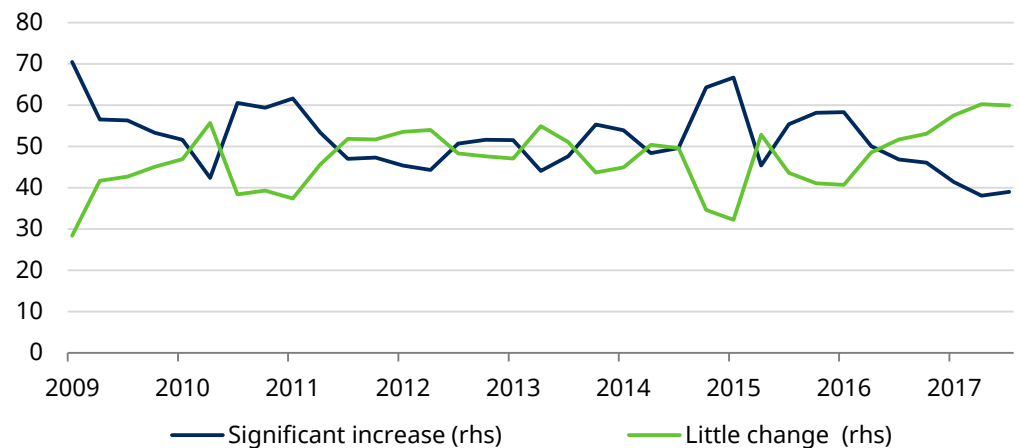
Although Russian activity slowed more than expected by the market in the third quarter, expanding 1.8% y/y, down from 2.5% the previous quarter, we still think the economic recovery is on track. The recent strength in oil prices should lend further momentum to both industrial production and consumer spending, and bolster the government's balance sheet.

That said, yearly industrial production growth in the months of July to September averaged 1.2%, while retail sales saw a stronger 2.1% average print. Amid ongoing strength of oil prices, it perhaps seems odd that industrial production is not performing more strongly, given the structure of the Russian economy. However, Russian oil production faces a physical constraint in the form of the Opec production quota. While the quota makes financial sense for Russia, it is going to weigh on real activity (which is concerned with volumes rather than values), and we expect this to persist in fourth quarter data.

We suspect that agricultural output, which grew at an average 3.6% growth rate in the third quarter from a small contraction in the previous quarter, explains the difference between our model and the actual GDP print. The GDP breakdown to be revealed in December, will confirm whether this is the case. We expect an acceleration of growth in Q4 and further gains in 2018 as the economy sees some benefits from higher oil prices filtering through to expenditure, and as rate cuts continue to feed through.

**Chart 18: Russian inflation expectations are gradually falling**

Price expectations (% of respondents)



Source: Thomson Datastream, Schroders Economics Group. 27 November 2017.

Even as growth recovers, the deceleration of inflation continues. Russia is perhaps the only recent disinflation story more impressive than Brazil, with inflation averaging 15.5% in 2015 now running at just 2.7% today, and still slowing. This provides further scope for rate cuts from a still cautious central bank, albeit one which has flagged likely cuts for the first quarter of 2018. We see room to ease to 7% by the end of 2018, though expect the bank's caution to lead to hikes the following year as inflation starts to pick up. We think inflation can remain within a tolerable range of the target, particularly now that inflation expectations seem to have been anchored (chart 18).

**Strong oil still benefits Russia, but production quotas will muffle their impact**

**More anchored inflation expectations will give the central bank courage to cut further**

# Schroder Economics Group: Views at a glance

## Macro summary – December 2017

### Key points

#### Baseline

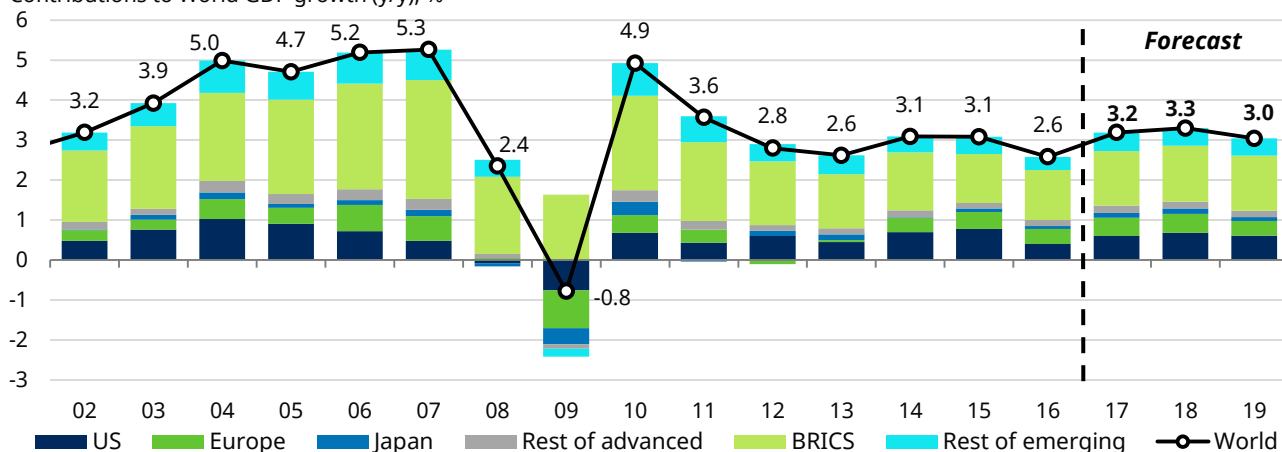
- Our global growth forecast has been revised up to 3.2% this year after 2.6% in 2016. GDP growth is forecast to accelerate to 3.3% in 2018, before moderating to 3% in 2019. Inflation is forecast to remain at 2.3% in 2017 and 2018, before picking up to 2.5% in 2019. The combination of steady growth and low inflation means we remain in a goldilocks environment where activity is neither too hot, to cause concerns around inflation, nor too cold which might prompt worries of recession.
- US growth is forecast at 2.2% this year and 2.5% next, incorporating notable upward revisions to reflect higher fiscal stimulus. The Fed has now started balance sheet reduction (quantitative tightening) and we forecast one more rate rise by the end of the year – to 1.5%. With core inflation likely to pick up, we expect three more rate hikes in 2018, and a final increase in 2019, ending the forecast at 2.5%.
- UK to slow in 2017 to 1.5%, then remain broadly unchanged in 2018. Inflation has risen sharply this year, and is forecast to moderate to 2.2% in 2018. 2019 is very uncertain given Brexit, but we assume a transition period to be agreed with partial access to the single market. This means some disruption to trade, and higher inflation due to tariffs being introduced. The BoE is expected to hike two more times in 2019 (to 1%).
- Eurozone growth to pick-up in 2017 to 2.3% following robust surveys and an easing in political risk. Growth is likely to remain strong in 2018 and 2019, with enough spare capacity remaining to keep inflation subdued. The ECB should keep interest rates on hold, but will taper QE in 2018, making way for rate rises in 2019.
- Japanese growth forecast at 1.7% in 2017 and inflation at 0.4% supported by looser fiscal policy and a weaker yen. No further rate cuts from the BoJ, but with inflation below target more QQE is expected as the central bank targets zero yield for the 10 year government bond.
- Emerging economies upgraded to 4.9% this year and next on lower inflation and interest rate cuts. Concerns over China's growth to persist, and the government is expected to lower its growth target next year.

#### Risks

- Risks are more balanced with fears of “secular stagnation” and “bond yields surge” providing deflationary scenarios, while “inflation accelerates” and “rise in global protectionism” would be stagflationary. Reflation risks have risen with the “US fiscal reflation” scenario and the introduction of the “global trade boom” scenario. Finally, there is a productivity revival scenario too.

#### Chart: World GDP forecast

Contributions to World GDP growth (y/y), %



Source: Schroders Economics Group, 27 November 2017. Please note the forecast warning at the back of the document.

## Schroders Forecast Scenarios

Scenario	Summary	Macro impact	Cumulative 2017-2019 global vs. baseline		
			Probability*	Growth	Inflation
<b>Baseline</b>	The recovery in global activity appears have to found new impetus thanks in part to a revival in global trade. We have revised up global growth from 3% to 3.2% for this year, after 2.6% in 2016, though inflation has remained unchanged at 2.3%. On the growth side, the US forecast for 2018 has been revised up to 2.5%, as we have increased the size and impact of fiscal stimulus for next year. In the eurozone, historic upward revisions and strong momentum has led to growth being revised up for this year and next. Japan, China and the wider emerging markets are all also revised up. The UK is the only exception, where Brexit and poor productivity weigh on activity. On inflation, we make small upward revisions to the global aggregate, partly owing to the recent rise in energy prices, but also stronger growth in regions with little spare capacity remaining. We also introduce our 2019 forecast, where we see global growth moderating to 3%, but inflation rising a little to 2.5%.	We expect the Fed funds rate to rise this December to end 2017 at 1.5%, then three more times in 2018 to 2.25%, finally reaching the terminal rate of 2.5% in 2019. Meanwhile, the Fed continues to implement quantitative tightening as previously announced. Elsewhere, stronger than expected growth should prompt the ECB to end QE in September 2018, paving the way for rate rises in 2019. The UK is likely to wait until after Brexit in 2019 before lifting rates further, while the BoJ is likely to main its current policy of yield targeting and QE. In EM, Russia and China are likely to loosen policy further, though a turn in inflation in Brazil should prompt hikes in 2019. The US dollar is expected to remain firm at the start of 2018, but then depreciate further over the rest of the forecast horizon.	65%	-	-
<b>1. Secular stagnation</b>	Weak demand weighs on global growth as households and corporates are reluctant to spend. Animal spirits remain subdued and capex and innovation depressed. Households prefer to de-lever rather than borrow. Adjustment is slow with over capacity persisting around the world, particularly in China, with the result that commodity prices and inflation are also depressed.	Deflationary: weaker growth and inflation vs. baseline. The world economy experiences a slow grind lower in activity. As the effect from secular stagnation is more of a chronic than acute condition it takes policy makers time to identify the trend. However, as economic activity fails to accelerate, more stimulus is added. The US reverses its interest rate hikes, while the ECB and BoJ prolong their QE	3%	-0.9%	-0.9%
<b>2. US fiscal reflation</b>	President Trump is true to his word and succeeds in pushing a massive stimulus package through Congress (1.5% GDP versus 0.5% in the baseline). Global growth accelerates to 3.9% by 2019 with the US growing at 4%. Demand spills over and boosts growth in the rest of the world whilst an increase in animal spirits further boosts activity through stronger capex. However, higher commodity prices (oil heading toward \$76/ b) and tighter labour markets push global inflation up to nearly 2.5% in 2018. US Fed funds reaches 4% by the end of 2019, 150 basis points higher than in the baseline.	Reflationary: stronger growth and higher inflation compared to the baseline. Central banks respond to the increase in inflationary pressure with the fastest response coming from the US, which is more advanced in the cycle compared with the Eurozone where there is considerable slack. Although there is little slack in Japan, higher wage and price inflation is welcomed as the economy exceeds its 2% inflation target in 2018. This is likely to lead the BoJ to signal a tapering of QQE. Fed action and inflation concerns result in tighter monetary policy in EM compared to the baseline. The ECB halts QE sooner, and raises the main interest rate to 1.5%.	6%	+1.4%	+1.0%
<b>3. Rise in global protectionism</b>	NAFTA talks breakdown, and the US loses patience with Chinese protectionism policy. The US applies 40% tariffs on all Chinese goods in 2018 Q1. China retaliates, but starts to divert and dump its now uncompetitive goods in Europe. By the middle of 2018, Europe applies selective anti-dumping tariffs of 20%, which China reciprocates.	Stagflationary: it takes time for US and Chinese consumers to substitute away from the traded goods facing tariffs. Existing supply chains also take time to break-down, which means both profitability is hit, and prices rise at the same time. In Europe, dumping initially causes lower inflation, but the new tariffs cause inflation to quickly rise. Monetary policy is tightened faster to halt second round effects, causing the USD to rise against most currencies. However, the RMB falls 10%, while JPY also appreciates as growth is hit. World trade growth starts to contract and productivity weakens.	5%	-0.7%	+1.0%
<b>4. Bond yields surge</b>	Bond markets react badly as the Fed starts to reduce its balance sheet with yields rising significantly in response to the arrival of a major seller of duration. US 10 year yields spike to 4.5% with a knock-on effect to global bond markets. Yields then settle back to 4%, but have the effect of tightening monetary conditions as mortgage rates and the cost of credit increase and equity markets weaken.	Deflationary: the tightening of monetary conditions results in a sharp slowdown in consumer and corporate borrowing. Demand is also hit by an adverse wealth effect as equity markets fall thus further slowing consumption. Weaker demand results in lower commodity prices and inflation.	5%	-1.0%	-0.2%
<b>5. Global trade boom</b>	After years where global trade lagged behind global GDP, renewed global confidence and a desire to rebuild inventories leads to a global trade boom, which re-enforces momentum in activity. Stronger domestic demand in big importing countries like the US drive this scenario, helping to disproportionately lift growth in economies running trade surpluses.	Reflationary: the additional activity due to global trade boosts productivity and income, but with spare capacity in short supply, the extra demand generates inflation too. Global growth rises to 3.6% in both 2018 and 2019, with global inflation rising to 2.9% by 2019. Global monetary policy is tightened by more than in the baseline, but not by enough to slow growth.	5%	+0.8%	+0.8%
<b>6. Productivity revival</b>	Facing rising demand but limited spare capacity and a dwindling supply of skilled workers, companies begin to increase investment in productivity boosting machinery/technology. This helps reduce unit labour costs, boosting profitability. As capital helps fill the gap in the shortage of labour, demand for labour is lower in this scenario than the baseline, assuming similar levels of aggregate demand. Increased productivity leads to higher output growth, with competition reducing price inflation.	Productivity boost: Higher growth but lower inflation frustrates central banks that have already started to tighten policy. As productivity rises, policy makers conclude that output gaps may be larger than previously thought, and move to cut interest rates to help stimulate inflation, which remains below target for many.	3%	+0.6%	-0.4%
<b>7. Inflation accelerates</b>	After a considerable period where wages have been unresponsive to tightening labour markets, pay begins to accelerate in response to skill shortages. Wages accelerate around the world and economists revise their estimates of spare capacity considerably lower. Some economies such as Japan welcome the move as they seek to raise inflation expectations, others find they are facing stagflation as they effectively run out of capacity forcing the central bank to tighten policy.	Stagflationary: US inflation rises to 3% by the end of 2018 on both headline and core measures. The Fed responds by tightening more aggressively taking its target rate to 3.5% by end 2019. Interest rates also rise more rapidly in the Eurozone and UK whilst Japan returns rates into positive territory. Currency changes provide some cushion to the emerging markets which see a modest boost to growth alongside higher inflation in this scenario. Overall, global growth is slightly weaker and inflation considerably higher.	5%	-0.5%	+1.5%
<b>8. Other</b>			3%	-	-

\*Scenario probabilities are based on mutually exclusive scenarios. Please note the forecast warning at the back of the document.

## Schroders Baseline Forecast

### Real GDP

y/y%	Wt (%)	2016	2017	Prev.	Consensus	2018	Prev.	Consensus	2019
<b>World</b>	100	2.6	3.2	↑ (3.0)	3.2	3.3	↑ (3.0)	3.2	3.0
<b>Advanced*</b>	62.8	1.6	2.2	↑ (2.0)	2.1	2.3	↑ (1.9)	2.1	2.0
<b>US</b>	27.1	1.5	2.2	↑ (2.0)	2.2	2.5	↑ (2.0)	2.5	2.2
<b>Eurozone</b>	17.4	1.8	2.3	↑ (2.1)	2.2	2.3	↑ (1.9)	1.9	1.9
<b>Germany</b>	5.1	1.9	2.6	↑ (2.1)	2.0	2.6	↑ (2.0)	2.0	2.0
<b>UK</b>	3.8	1.8	1.5	↓ (1.6)	1.6	1.6	(1.6)	1.4	1.4
<b>Japan</b>	7.2	1.0	1.7	↑ (1.6)	1.6	1.8	↑ (1.5)	1.3	1.3
<b>Total Emerging**</b>	37.2	4.2	4.9	↑ (4.8)	5.0	4.9	↑ (4.8)	4.9	4.8
<b>BRICs</b>	24.2	5.2	5.6	(5.6)	5.7	5.8	↑ (5.6)	5.8	5.7
<b>China</b>	16.4	6.7	6.8	↑ (6.7)	6.8	6.4	↑ (6.3)	6.4	6.3

### Inflation CPI

y/y%	Wt (%)	2016	2017	Prev.	Consensus	2018	Prev.	Consensus	2019
<b>World</b>	100	2.0	2.3	(2.3)	2.2	2.3	↑ (2.2)	2.3	2.5
<b>Advanced*</b>	62.8	0.7	1.7	↑ (1.6)	1.7	1.7	↑ (1.6)	1.7	1.9
<b>US</b>	27.1	1.3	2.1	↑ (1.9)	2.1	2.1	↑ (1.9)	2.1	2.4
<b>Eurozone</b>	17.4	0.2	1.5	(1.5)	1.5	1.4	↑ (1.1)	1.3	1.4
<b>Germany</b>	5.1	0.4	1.7	(1.7)	1.7	1.7	↑ (1.5)	1.6	1.8
<b>UK</b>	3.8	0.7	2.7	↑ (2.6)	2.7	2.2	↓ (2.3)	2.6	2.2
<b>Japan</b>	7.2	-0.1	0.4	↓ (0.5)	0.4	0.9	↓ (1.0)	0.7	1.6
<b>Total Emerging**</b>	37.2	4.1	3.2	↓ (3.3)	3.2	3.4	(3.4)	3.3	3.4
<b>BRICs</b>	24.2	3.5	2.2	↓ (2.4)	2.1	3.0	(3.0)	2.8	2.9
<b>China</b>	16.4	2.0	1.7	↓ (1.8)	1.6	2.3	(2.3)	2.1	2.2

### Interest rates

% (Month of Dec)	Current	2016	2017	Prev.	Market	2018	Prev.	Market	2019	Market
<b>US</b>	1.25	0.75	1.50	(1.50)	1.53	2.25	↑ (2.00)	1.99	2.50	2.18
<b>UK</b>	0.50	0.25	0.50	(0.50)	0.53	0.50	(0.50)	0.84	1.00	1.04
<b>Eurozone (Refi)</b>	0.00	0.00	0.00	(0.00)		0.00	(0.00)		0.50	
<b>Eurozone (Depo)</b>	-0.10	-0.40	-0.40	(-0.40)	-0.33	-0.40	(-0.40)	-0.28	0.00	-0.01
<b>Japan</b>	4.35	-0.10	-0.10	(-0.10)	0.06	-0.10	(-0.10)	0.07	-0.10	0.09
<b>China</b>	4.35	4.35	4.35	(4.35)	-	4.35	(4.35)	-	3.50	-

### Other monetary policy

(Over year or by Dec)	Current	2016	2017	Prev.	2018	Prev.	2019
<b>US QE (\$Bn)</b>	4456	4451	4426	↓ (4433)	4006	↓ (4013)	3406
<b>EZ QE (€Bn)</b>	2003	1481	2183	↓ (2216)	2453	↓ (2546)	2453
<b>UK QE (£Bn)</b>	435	423	444	(444)	445	(445)	445
<b>JP QE (¥Tn)</b>	513.4	476	523	↓ (545)	563	↓ (645)	583
<b>China RRR (%)</b>	17.00	17.00	17.00	17.00	16.00	16.00	15.00

### Key variables

FX (Month of Dec)	Current	2016	2017	Prev.	Y/Y(%)	2018	Prev.	Y/Y(%)	2019	Y/Y(%)
<b>USD/GBP</b>	1.31	1.24	1.30	↓ (1.32)	5.2	1.28	(1.28)	-1.5	1.25	-2.3
<b>USD/EUR</b>	1.18	1.05	1.15	↓ (1.19)	9.0	1.20	↑ (1.15)	4.3	1.25	4.2
<b>JPY/USD</b>	113.5	116.6	115	↑ (110)	-1.4	112	(112)	-2.6	110	-1.8
<b>GBP/EUR</b>	0.90	0.85	0.88	↓ (0.90)	3.6	0.94	↑ (0.90)	6.0	1.00	6.7
<b>RMB/USD</b>	6.64	6.95	6.60	↓ (6.90)	-5.0	6.50	↓ (7.05)	-1.5	6.40	-1.5
<b>Commodities (over year)</b>										
<b>Brent Crude</b>	61.7	46	55.0	↑ (52)	19.9	61.2	↑ (52)	11.2	58.7	-4.0

Source: Schroders, Thomson Datastream, Consensus Economics, November 2017

Consensus inflation numbers for Emerging Markets is for end of period, and is not directly comparable.

Market data as at 14/11/2017

Previous forecast refers to August 2017, except for the Fed and BoE rates forecasts which were updated mid-quarter.

\* Advanced markets: Australia, Canada, Denmark, Euro area, Israel, Japan, New Zealand, Singapore, Sweden, Switzerland, United Kingdom, United States.

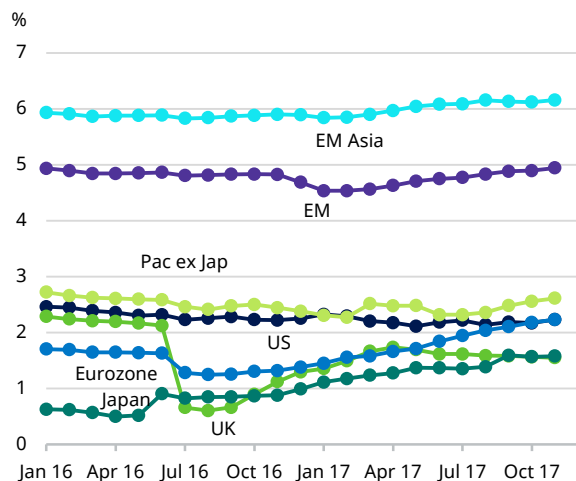
\*\* Emerging markets: Argentina, Brazil, Chile, Colombia, Mexico, Peru, China, India, Indonesia, Malaysia, Philippines, South Taiwan, Thailand, South Africa, Russia, Czech Rep., Hungary, Poland, Romania, Turkey, Ukraine, Bulgaria, Croatia, Latvia,

## Updated forecast charts – Consensus Economics

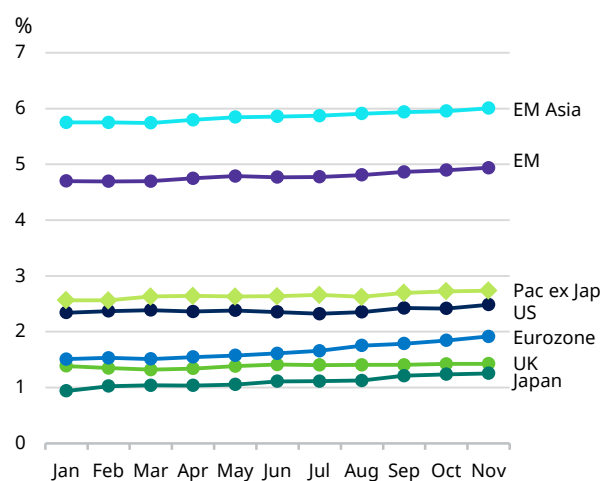
For the EM, EM Asia and Pacific ex Japan, growth and inflation forecasts are GDP weighted and calculated using Consensus Economics forecasts of individual countries.

**Chart A: GDP consensus forecasts**

**2017**

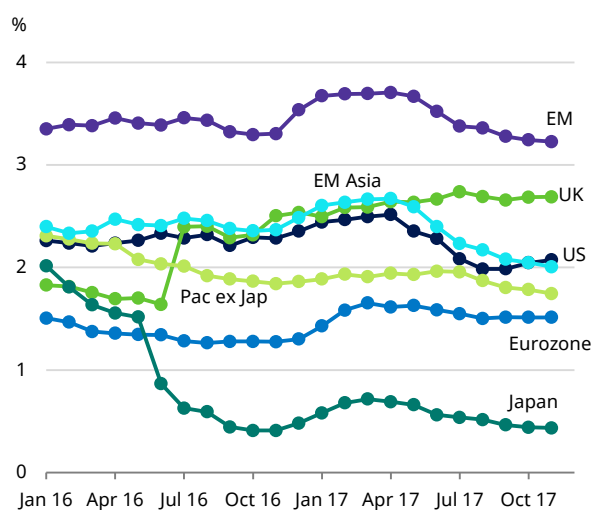


**2018**

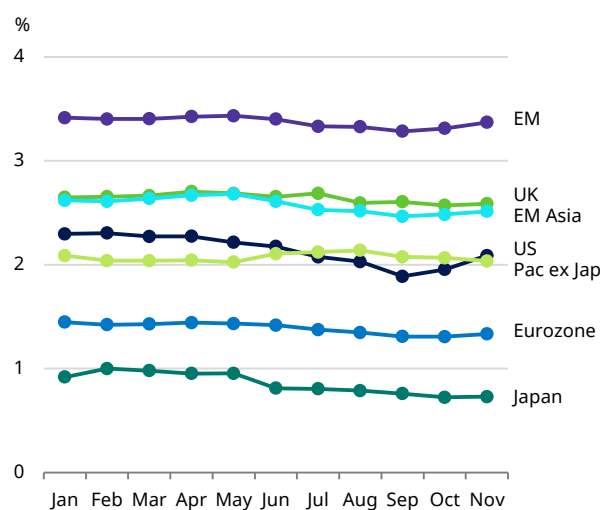


**Chart B: Inflation consensus forecasts**

**2017**



**2018**



Source: Consensus Economics (October 2017), 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, Venezuela, South Africa, Czech Republic, Hungary, Poland, Romania, Russia, Turkey, Ukraine, Bulgaria, Croatia, Estonia, Latvia, Lithuania.

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