Schroders

Economic and Strategy Viewpoint

The square root recovery continues

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Global update: the square root recovery continues (page 2)

- We have trimmed our forecast for global growth to 2.6% for 2016 from 2.9% as although global demand has held up, there is little momentum and still some signs of excess inventory to clear. The benefits from lower oil prices will continue to support consumer spending, but inflation is set to rise and the oil dividend fade in 2016.
- Meanwhile, monetary policy is set to diverge with the US and UK tightening whilst policy eases further or remains loose in the Eurozone, Japan and China. Scenario risks are tilted toward the downside raising questions about the ability of central banks to respond to adverse shocks.

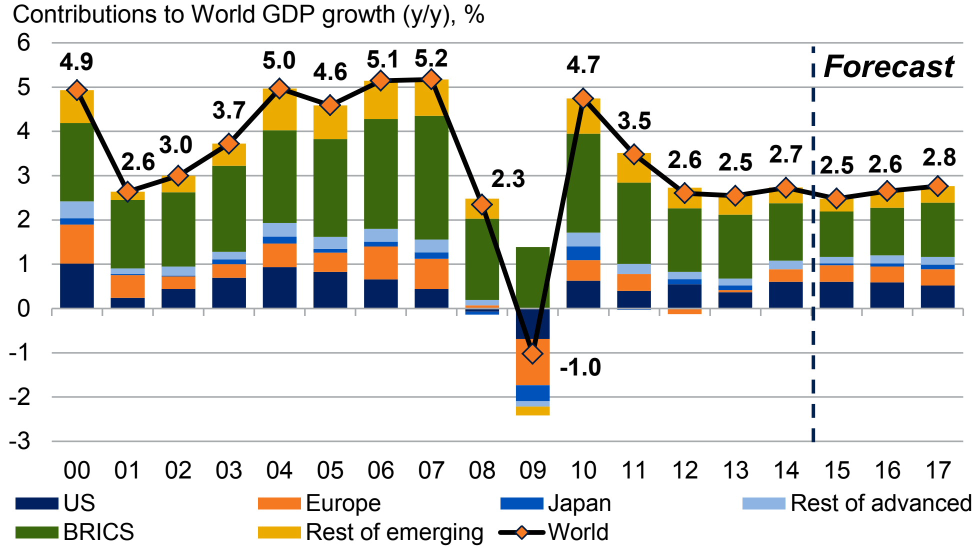
European forecast update: downgrades for 2016 (page 8)

- Growing external risks have prompted the European Central Bank (ECB) to consider adding further stimulus. Growth, while slightly weaker than expected, is still consistent with a reduction in excess capacity, and therefore an eventual recovery in inflation. Our growth forecast for 2016 has been downgraded to a similar performance to 2015, although we then see growth picking up in 2017. As for the ECB, we think QE will eventually be extended, albeit to have a limited impact on the economy.
- The UK is showing greater signs of spare capacity diminishing, highlighted by the recent surge in imports. Growth appears to be slowing faster than previously expected as austerity efforts are stepped up. We have downgraded our growth and inflation forecast for 2016, which should delay the first Bank of England rate rise, and also limit hikes as the economy slows further in 2017.

Views at a glance (page 14)

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

Chart: Global growth outlook



Source: Thomson Datastream, Schroders Economic Group. 20 November 2015. Please note the forecast warning at the back of the document

Global update: The square root recovery continues

Summary

Growth forecast trimmed for 2016

We have trimmed our forecast for global growth to 2.6% for 2016 (previously 2.9%) as a result of modest downgrades to the advanced economies and emerging markets (EM). Although global demand has held up in the second half of 2015, there is little momentum and still some signs of excess inventory to clear. The benefits from lower oil prices will continue to support consumer spending but inflation is set to rise and the oil dividend fade in 2016.

For the emerging economies, China continues to decelerate in 2016, but signs of stability in Russia and Brazil will result in a better year for the BRIC's. The global growth forecast for 2017 is 2.8%, with growth moderating in the advanced economies in response to monetary tightening in the US whilst EM growth is marginally higher.

Inflation is expected to pick up in 2016 as the base effects from lower commodity prices drop out of the index. Global inflation rises to 3.7% in 2016 from an estimated 3.1% in 2015, led by the advanced economies which see a pick-up of around 1 percentage point. For EM, inflation also picks up in China and India, but the aggregate moderates as currencies stabilise.

The US Federal Reserve (Fed) is expected to look through the current low headline CPI rate and focus on a firmer core rate of inflation and tightening labour market so as to raise rates in December 2015. We previously expected a March 2016 lift-off, but having shifted the goalposts by dropping their concerns about China at the last meeting, we now see little reason for the Federal Open Market Committee not to move in December. More important than the date of the first rate rise is the profile of rates and we expect the Fed funds rate to rise to 1.25% by end 2016 and 2% by end 2017, where it peaks.

We look for the European Central Bank (ECB) to extend quantitative easing beyond September 2016 and leave policy rates unchanged until the end of 2017 when we expect the first hike. For the UK, we expect the first rate increase in August 2016 (previously May) as inflation stays lower for longer. In Japan, the Bank of Japan will keep the threat of more quantitative and qualitative easing (QQE) on the table, but is now likely to let the weaker yen (JPY) support the economy and refrain from further loosening. China is expected to cut interest rates and the reserve requirement rate (RRR) further.

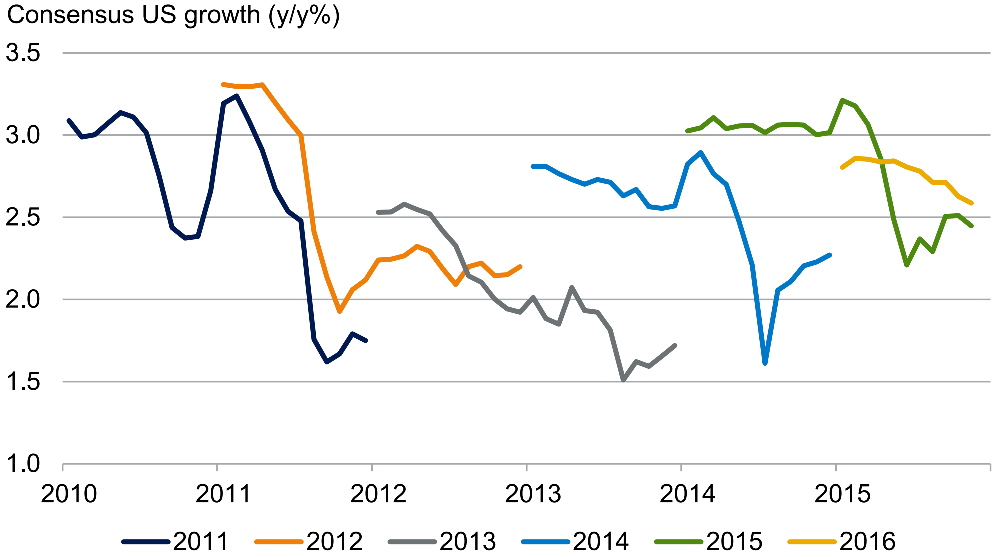
Overall global growth of 2.6% is little changed from the 2.5% estimated for 2015 and confirms that the "square root recovery" where growth has been around 2.5% since the rebound in 2011, continues as the new normal.

Looking back at 2015

For the fifth year running economists were too optimistic about global growth

Although the year is not over, it is clear that 2015 is set to be another where global growth has disappointed. The latest estimates suggest that the world economy is likely to have grown by 2.5% this year compared to forecasts of 3% a year ago. The figures for the US show that this will be the fifth year running that growth has undershot expectations (see chart 1). The pick-up in growth has not materialised and economists are in danger of meeting Albert Einstein's definition of insanity: doing the same thing over and over again and expecting different results.

Chart 1: US growth disappoints…again



Source: Thomson Datastream, Consensus Economics, Schroder Economics Group. 20 November 2015.

We are not wholly exempt as our forecast for global and US growth was 2.8% a year ago. Although we were aware of the risk of being persistently too optimistic, we believed that the world economy would be lifted in 2015 by the fall in oil prices. As it turned out, oil prices and inflation were even lower than expected a year ago, but growth still undershot.

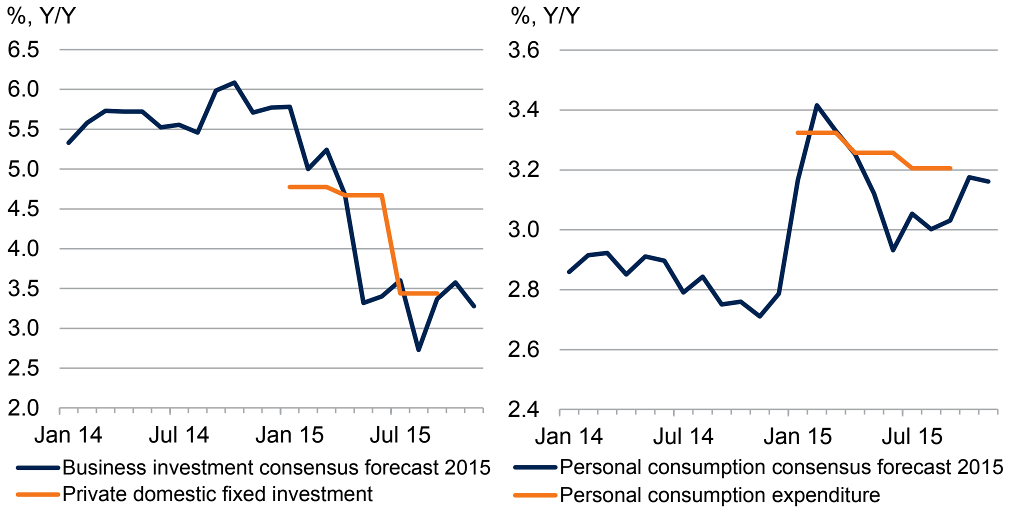
Overall benefit of lower oil price muted as losers cut back hard

Looking at the breakdown between the advanced and emerging economies, much of the miss on growth was in the latter, indicating that the losers from lower commodity prices reacted more aggressively than the winners in changing their expenditure patterns. Pressure on EM has also come from the expectation of higher US interest rates and a rise in the US dollar. Inflation has been higher in many emerging economies as a result of currency devaluation following capital flight, and this has added to the squeeze on their real incomes and growth. Emerging markets account for just under 38% of the world economy so their slowdown accounts for a significant portion of the undershoot in global growth.

From the US perspective the growth shortfall was not from the consumer side, where spending has accelerated to a 3% pace as expected. Lower energy prices have helped the consumer as they have elsewhere. Instead, the disappointment has come from capex which was expected to grow by 6%, but is now forecast to record just 3% growth in 2015. The breakdown shows that the weakness can largely be attributed to cutbacks in the energy sector which have dragged on fixed investment in structures and equipment.

So the explanation for the undershoot in the US is also a case of the losers cutting back and offsetting some of the higher spending by the winners. It marks a change in the US economy which reflects the increased importance of oil following the development of shale gas production.

Chart 2: US capex and consumption expectations and outturns for 2015

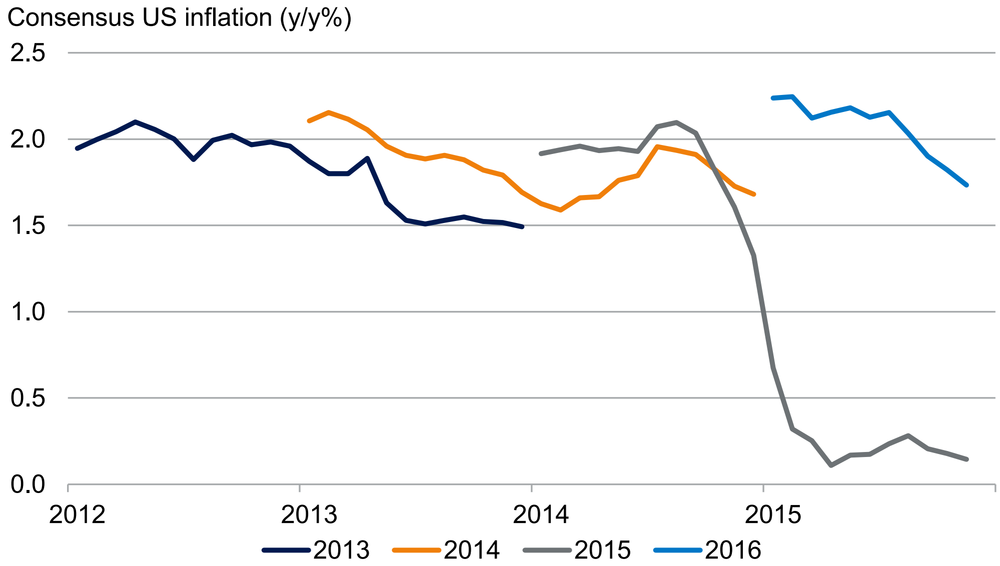


Source: Thomson Datastream, Consensus Economics, Schroder Economics Group. 20 November 2015.

In the developed world it was not just growth which came in below expectations, but also inflation. Chart 3 shows the downward evolution of US CPI forecasts for the past three years. For 2015, this largely reflected the weakness of the oil price which failed to recover in line with the path predicted by the futures market (our baseline assumption).

Inflation has also undershot

Chart 3: US inflation forecasts by year



Source: Thomson Datastream, Consensus Economics Schroder Economics Group, 20 November 2015.

Combining the growth and inflation forecasts it is clear that expectations for nominal GDP have fallen short in 2015 as they have done since 2012. The important point is that this is symptomatic of a world where there is a shortage of global demand. Combinations where both growth and inflation over or undershoot in the same direction tend to be demand driven, whilst those which move in opposite directions are supply related. For example, stronger growth and lower inflation reflects productivity led growth, whilst weaker growth and higher-than-expected inflation suggests the economy is hitting capacity constraints.

The direction of the errors suggests that a mix of demand deficiency and excess global supply characterise global activity. On the demand side, the weakness of investment spending accounts for part of this, but economists have also overestimated the gains from exports and trade by assuming that demand from overseas will be stronger. Unfortunately with many economies going through the same adjustment post the global financial crisis this has not been the case, as can be seen from the persistent weakness of global trade volumes (chart 4).

Undershoot on growth and inflation points to mix of demand deficiency and excess global supply

Chart 4: Global trade, still waiting for the upswing

Source: Thomson Datastream, Schroder Economics Group. 20 November 2015.

Outlook: headwinds and tailwinds for 2016

The persistent over-optimism about global growth raises deep questions about the state of the world economy and tempers enthusiasm for predicting an improvement in 2016. Given the above analysis, the key question is whether demand will strengthen in 2016?

Looking at three key areas, it is difficult to see much in the way of extra stimulus in 2016:

1. Commodity prices. Lower energy prices were meant to boost growth in 2016, but as we have seen this has been a mixed bag for overall global activity. Nonetheless, at current oil price levels it would seem that energy related capex is stabilising in the US and so will not be as big a drag as in 2015. However, the rise in CPI inflation will begin to cut into real income growth and slow consumer spending. Unless we see a desire to increase borrowing (and push the savings rate lower) consumer spending growth will slow in 2016.

Commodity prices will be less of a tailwind for the consumer

At a broader level we have seen how the decline in commodity prices has hit the emerging markets. There may be some stability in prices in 2016 allowing growth to recover. This is our baseline view; however, we may also see second round effects from the commodity price collapse as the cash flow problems created by the fall in metals and energy lead to restructuring and cut backs. Many producers may be hanging on for a recovery in prices which has not materialised, or have been hedged up to this point. Consequently, 2016 could be a year of reckoning for many commodity countries.

Of course those with strong balance sheets can endure the storm and we are seeing the likes of Saudi Arabia dip into their sovereign wealth fund and now issue bonds. Not everyone can do this though and the weaker countries may find life difficult in coming months, unless we see a bounce in energy and metals prices. We have included a scenario to capture this risk (EM default). On balance we see commodities as more of a neutral factor for the world economy in 2016, having been generally positive in 2015.

Monetary policy becomes restrictive in the UK and US, but remains loose elsewhere

2. Monetary policy. Divergence remains the key theme. For the US and UK monetary policy is set to become more restrictive as interest rates rise. We now expect the US Fed to raise rates in December given the recent change in tone from the FOMC. US rates are expected to rise slowly to 1.25% by year end 2016, with a pause in the run-up to the Presidential election next November.

Elsewhere though, there have been a series of monetary policy measures which will help growth such as rate and reserve requirement cuts by the PBoC. Continued, or increased, QE in the Euro-area and Japan will also provide some support, but primarily through the EUR and JPY, so will help their domestic economies rather than boost global activity. The USD and Chinese yuan (CNY) will remain strong and so should continue to exert a deflationary influence on the US and China as a result.

3. Fiscal policy. Canada has decided to use fiscal policy to boost growth following the election of Justin Trudeau as Prime Minister, a possible indication of a more general swing in the political mood after frustration with the growth in the economy. It is likely that we get some easing of US fiscal policy next year, led by higher defence spending and China is set to provide fiscal stimulus. Policy in the Eurozone may also be marginally supportive, largely driven by spending on migrants in Germany. By contrast the UK is tightening policy. Overall fiscal policy will be marginally expansionary.

Overall, this results in a reduction in stimulus as the boost from commodity prices fades. For the US, Fed tightening and the strong USD will act as headwinds on activity next year. The UK also faces headwinds from higher interest rates, but also from fiscal tightening. Easier monetary policy supports the Eurozone, Japan and China, whilst stability in commodity prices helps the EM exporters (see table 1).

Table 1: Growth scoreboard for 2016

	US	Eurozone	UK	Japan	China	EM commodity exporters
Monetary						
Interest rates/QE	–	+	–	+	+	–
Exchange rate	–	+	0	+	–	+
Fiscal	+		–	0	+	0
Commodity prices	0	0	0	0	0	0
Net	**-1 (+1)**	**+2 (+3)**	**-2 (0)**	**+2 (+3)**	**+1 (+2)**	**0 (-1)**

Source: Schroder Economics Group, 20 November 2015.

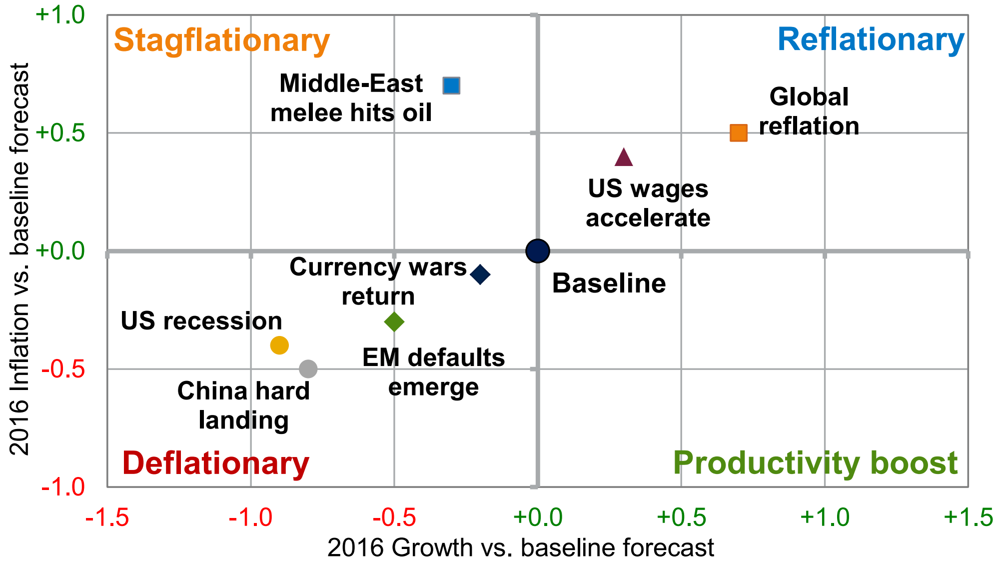
Scenarios now include a resumption of the FX wars

Scenarios: enter FX wars and EM default risks

We have made a few changes this quarter adding 'FX wars' (RMB devaluation triggers a series of devaluations), 'Middle-East melee' (higher oil price), 'US wages accelerate' and 'EM defaults emerge'. Out go 'bad Grexit', 'oil lower for longer', 'Fed behind the curve' and 'Tightening Tantrum'. Note that US wages accelerate is similar to Fed behind the curve and EM defaults compares to tightening tantrum. There is still a risk of a 'bad Grexit' but it has been considerably reduced as a result of the bailout agreed earlier in the year. Having said that, we could well see Greece return to the headlines in the New Year when the IMF has to decide whether to continue to support the programme.

Full descriptions of each scenario and their implications can be found on page 20. As can be seen from chart 5, the risks are still skewed toward deflationary outcomes i.e., weaker global growth and inflation.

Chart 5: Scenarios around the baseline



Source: Schroder Economics Group, 20 November 2015. Please note the forecast warning at the back of the document.

In terms of the balance of probabilities, the mix of scenarios has moved in a more deflationary direction with an increase in probability compared to last August. This largely reflects the relatively high probability (10%) attached to the EM default scenario. The productivity boost outcome has fallen to zero as a result of dropping the oil lower for longer scenario. Stagflation has increased as a result of the inclusion of the higher oil price scenario, Middle East melee.

Balance of risks remains tilted toward deflation

Table 2: Balance of probabilities by scenario outcome vs baseline

Scenario	Probability August 2015, %	Probability November 2015, %	Change, %
Deflationary	22	28	6
Reflationary	10	12	2
Productivity boost	7	0	-7
Stagflationary	0	2	2
Baseline	57	55	-2

Source: Schroder Economics Group, 20 November 2015. Previous forecast from August 2015. Please note the forecast warning at the back of the document.

The increase in risk of a deflationary outcome relative to the baseline is a concern given the low level of interest rates and perception that QE cannot deliver a durable boost to growth. Should we have a deflationary shock there will be doubts about the ability of the central banks to dig us out of the hole. This is why we have described the world economy as a “wobbly bike”: slow moving and vulnerable to shocks. From a market perspective this represents a concern as the ability of central banks to underwrite asset values becomes increasingly questioned.

European forecast update: downgrades for 2016

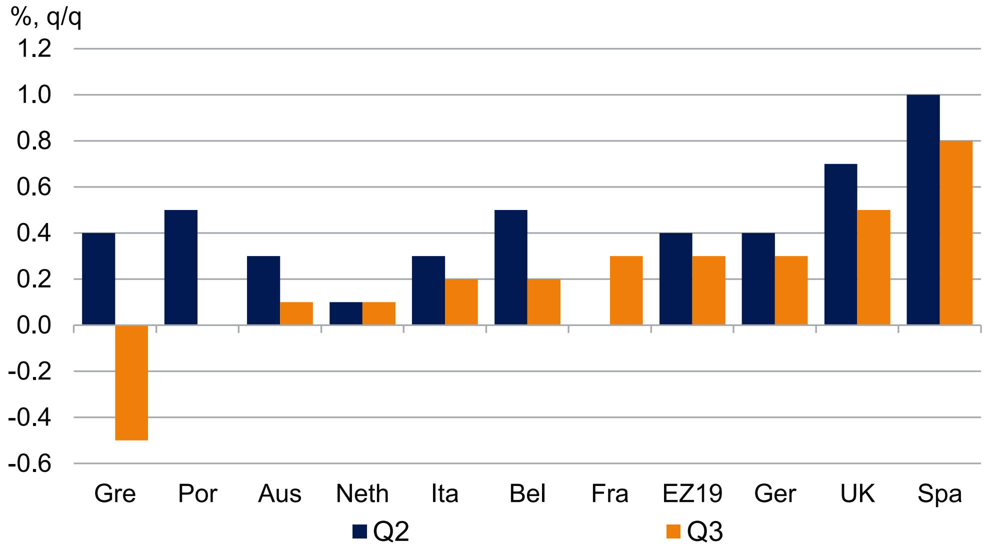
Communication from European Central Bank (ECB) President Mario Draghi has notably shifted from being relaxed about the state of Europe's recovery to being concerned enough to consider adding further monetary stimulus. Growth has been softer of late, but could have been far worse given the weakness in emerging markets. Meanwhile, the government in the UK has just confirmed substantial austerity to be implemented over the course of the next four years. Yet, the independent Office for Budgetary Responsibility (OBR) expects the economy to continue to grow at a similar pace to this year. It seems that the likelihood of a borrowing overshoot is high, which could force monetary policy to remain looser for longer.

Eurozone growth losing momentum

Growth in the Eurozone fell back in Q3…

Eurozone GDP growth slowed to 0.3% quarter-on-quarter in the third quarter compared to 0.4% in the second quarter and 0.5% in the first. The slowdown in growth comes as a slight disappointment for markets where consensus expectations were for 0.4% growth. The majority of member states saw a small drop in their quarterly growth rates, with the exceptions of Greece and France, with the former seeing a larger drop caused by bailout shenanigans earlier this year, while France saw a slight acceleration (see chart 6).

Chart 6: Eurozone growth softens in Q3



Source: Eurostat, Schroders Economics Group, 26 November 2015.

…as most member states saw a slight slowdown in activity

Within the member states, Germany disappointed with growth also slowing from 0.4% to 0.3% quarter-on-quarter. The expenditure breakdown shows continued growth in household and government consumption, but a slowdown in investment. Net trade made a negative contribution, but mainly due to a rise in imports, rather than a fall in exports. Imports are rising in line with the pick up in household consumption and total investment, which should help other countries benefit from Germany's large external surplus.

The slowdown in investment may be related to uncertainty caused by concerns over the state of the Chinese economy. Exports from Germany to China have certainly been affected, falling 8.4% in the third quarter compared to the same period a year earlier. However, exports to the US and UK have been much more healthy, at 16.6% and 12.5% respectively, easily offsetting weakness from China.

Growth in France picked up from a flat second quarter to 0.3% growth quarter-on-quarter in the third. However, details within the data show that final demand was much weaker than implied by the headline GDP figure. When inventories are excluded, France's GDP would have contracted by 0.5%.

Elsewhere, Italy continues to struggle, recording just 0.2% growth and appears to have lost the momentum it had built up at the start of the year. Otherwise, Spain posted strong growth of 0.8%, which is a slight moderation compared to 1% quarter-on-quarter growth in the previous quarter. Negative inflation has continued to boost the spending power of Spanish households. Household consumption rose by 4% annualised in the third quarter – the fastest pace of growth since the fourth quarter of 2007. Investment growth eased following very strong growth in the previous quarter, and while exports have also been growing strongly, imports accelerated sharply, reflecting stronger domestic demand, but also acting as a slight drag on GDP growth.

Eurozone forecast: small downgrades

Despite growth figures being weaker than consensus estimates, our forecast was for an even weaker outcome. As a result of this and in combination with upward revisions to historical data, our Eurozone GDP forecast has been revised up from 1.3% to 1.5% for 2015. However, the loss in momentum over the last 3 – 6 months, partly as a result of a weaker external environment, but also as some of the domestic tailwinds start to recede, suggest growth will struggle to accelerate much further from here. Therefore, we forecast the pace of growth to be maintained at 1.5% for 2016, as opposed to the acceleration we had expected previously. We then see a slight pick-up in growth heading into 2017 as the external environment improves, specifically in the emerging markets.

Our Eurozone GDP has been downgraded for 2016…

Table 3: Eurozone GDP forecast

	2015	*Prev.*	2016	*Prev.*	2017
Germany	1.5	*1.3*	1.7	*2.1*	2.1
France	1.1	*1.1*	0.9	*1.1*	1.2
Italy	0.7	*0.6*	0.9	*1.1*	0.7
Spain	3.1	*3.2*	2.9	*2.9*	2.5
Eurozone	1.5	*1.3*	1.5	*1.7*	1.6

Source: Schroders Economics Group, 20 November 2015. Previous forecast from August 2015. Please note the forecast warning at the back of the document.

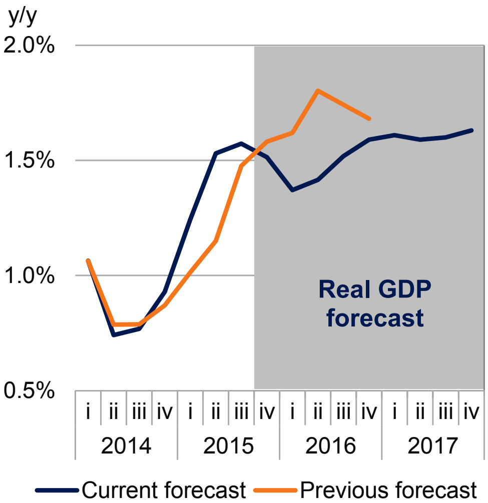
The weakness in emerging markets is likely to hit Germany the hardest of the big four member states. For this reason, our forecast for German growth in 2016 saw the biggest downgrade. The 2016 forecasts for France and Italy have also been revised down, but not to the same extent. Only Spain's forecast is left unchanged thanks to continued positive surprises, especially the recent improvements within the labour market (lower unemployment and higher pay growth).

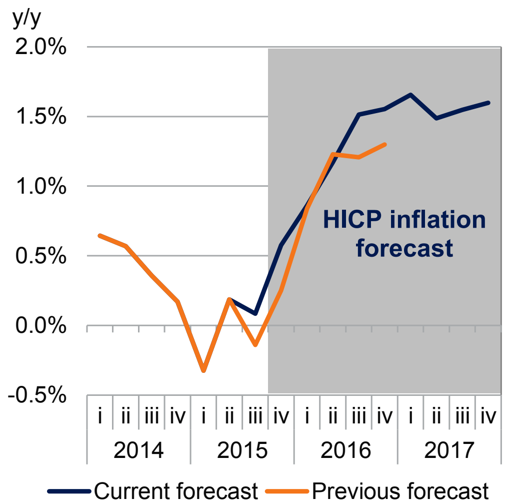
…however, the forecast for inflation has been revised up

The Eurozone inflation forecast has been updated to take into account the recent upside surprise in core inflation (which excludes food and energy), but also the fall in global oil and gas prices (chart 7 on next page). The end result is a slight upward revision to this year's forecast and the 2016 forecast (from 1.1% to 1.3%). Extending out into 2017, we continue to see subdued domestically-generated inflation, but with the drag from food and energy dropping out of the annual comparison (we forecast inflation to rise to 1.6%).

The outlook for monetary policy has been muddied by the ECB's reaction to recent concerns over China, volatility in financial markets, and the Fed's decision not to hike interest rates in September. These factors helped push the euro higher against the US dollar, undoing the depreciation since the start of quantitative easing (QE). ECB President Mario Draghi has strongly hinted that additional monetary easing could follow as soon as December, but he was careful to caveat that this would be dependent on the new forecast from ECB staff.

Chart 7: Eurozone GDP forecast **Chart 8: Eurozone inflation forecast**





Source: Thomson Datastream, Schroders Economics Group, 20 November 2015. Previous forecast from August 2015. Please note the forecast warning at the back of the document.

There is a high chance of further monetary easing from the ECB…

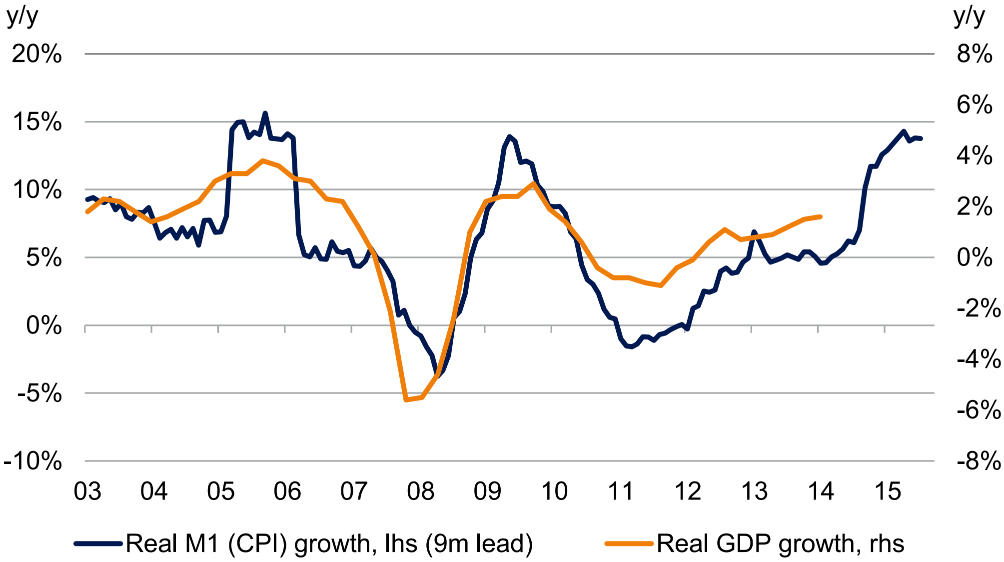
We think there is a high chance that additional stimulus is added in December. This could come in the form of expanding asset purchases beyond the €60 billion per month, or it could come through an extension to QE beyond September 2016. It could also come through a further cut in interest rates, taking the deposit rate further into negative territory. Draghi had in the past stated that interest rates were at the lower bound, but more recent comments suggest that they could fall further, especially as banks have not passed on the cost of holding deposits on to household customers. Corporates on the other hand have started to be charged for their deposits.

However, we also think there is a high probability that the ECB decides not to add stimulus in December, but instead decides to extend asset purchases at a later point (the forecast assumes an extension until the end of 2016 – adding an extra €180 billion). This would be consistent with the recent pick up in leading indicators such as the purchasing managers indices, along with the higher than expected recorded inflation for October. Moreover, stronger data in recent weeks in the US has increased the probability of the Fed hiking its main policy rate at its meeting in mid-December. This has helped the euro depreciate once again close to some of the lows we have seen this year. Taken together, it appears that many of the factors that had warranted concerns have now eased if not reversed. There is still a concern over the outlook for China, but with Eurozone trade remaining robust in total due to strength in other markets, this should be less of a concern.

…although, we do not expect it to have much of an impact.

If the ECB does, however, decide to add further stimulus, then we would expect it to have some additional impact on the currency, but we doubt that it will help with regards to the real economy or the financial sector. The Eurozone is awash with liquidity, both in financial markets and in the real economy. For example, growth in the real narrow supply of money (M1) is up 14% – close to the highs seen in in 2009 and in 2005. Real M1 growth is a measure of physical currency in circulation, plus overnight deposits, which are then deflated using the harmonised index of consumer prices (HICP) inflation. As illustrated in chart 9, it has historically provided a useful nine-month lead on real GDP growth. It currently suggests that growth could accelerate to between 3-5% year-on-year – an upside risk to our more cautious forecast.

Chart 9: Boost from monetary stimulus provides upside risks



Source: Thomson Datastream, Schroders Economics Group, 26 November 2015.

Finally on the Eurozone, we have pencilled in the first interest rate rise at the end of 2017. This would be consistent with inflation returning close to but below 2%, with growth continuing to run above trend. Clearly the risk to this forecast is for no hike, and possibly even further cuts during our forecast horizon.

UK forecast: Downside growth surprises to delay rate hikes

The UK growth forecast has been downgraded…

The UK's macro themes are largely unchanged, however, they appear to be playing out a little sooner than we had expected. Our forecast assumes a slowdown heading into 2016 and 2017 caused by the resumption of austerity efforts, a pick up in inflation caused by diminishing spare capacity, and an appreciation of sterling against the euro – the UK's most important trading partner. None of these themes have changed, but downward revisions to 2014 growth data, along with more recent downside GDP surprises have led us to conclude that the economy is further ahead on our expected path that we had forecast in August (chart 10).

…as the expected slowdown appears to be playing out sooner than previously forecast

Chart 10: UK GDP forecast

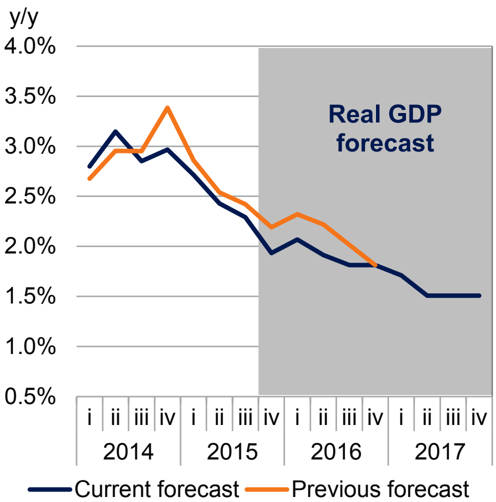
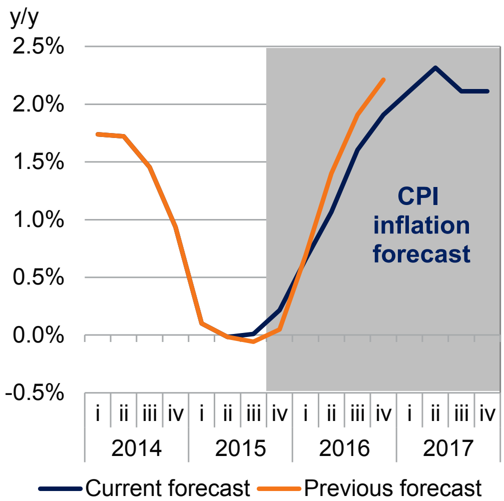


Chart 11: UK inflation forecast



Source: Thomson Datastream, Schroders Economics Group, 20 November 2015. Previous forecast from August 2015. Please note the forecast warning at the back of the document.

Real quarterly GDP growth fell from 0.7% in the second quarter to 0.5% in the third quarter. The breakdown of expenditure shows robust domestic demand – consumption up 0.8% quarter-on-quarter, both government consumption and investment accelerating to 1.3% quarter-on-quarter – going against recent trends across Europe. Total domestic demand alone contributed two percentage points to GDP, however, strong demand was met with a lack of supply, forcing imports sharply higher, and thus detracting from overall GDP. Imports grew by 5.5% on the quarter against 0.9% growth in exports, causing a negative contribution of 1.5 percentage points to GDP.

In terms of our forecast, we have downgraded growth for 2015 from 2.5% to 2.3%, and also revised down 2016 growth from 2.1% to 1.9%. Looking further ahead at 2017, we expect the economy to slow to 1.6%, but this should be the trough for GDP growth over the medium-term. The negative impact from fiscal tightening should then begin to ease, although our forecast is based on the projected path of austerity by the government and OBR. The latest update from the Chancellor showed a slight delay in austerity, which could easily happen again given what we think are optimistic growth and tax revenue forecasts. For more on the UK 2015 Autumn Statement, see '*Schroders Quickview: UK Chancellor remains defiant in implementing austerity*'.

The UK inflation forecast has also been downgraded…

The forecast for UK inflation in 2016 has also been revised down despite inflation running a littler higher than we had forecast in the last quarter. CPI inflation should average 1.3% over 2016, revised down from 1.6% due to a lower profile from international wholesale energy costs, but also greater disinflationary pressure from emerging markets. Due to the UK's reliance on imports, it has a reasonably high pass-through of import price shocks to domestic inflation. The build-up of overcapacity in global manufacturing, but in particular of finished consumer goods from emerging markets, should keep UK inflation low.

The risks to our UK growth and inflation forecasts are skewed towards a more deflationary outcome. The risk scenarios discussed earlier and detailed on page 20 suggest that a number of external risks could keep corporates and investors cautious. We have not included 'Brexit' risks in our scenarios as this would not have a substantial impact on global growth and inflation, however, the uncertainty that the EU referendum raises for investors is bound to negatively impact UK growth.

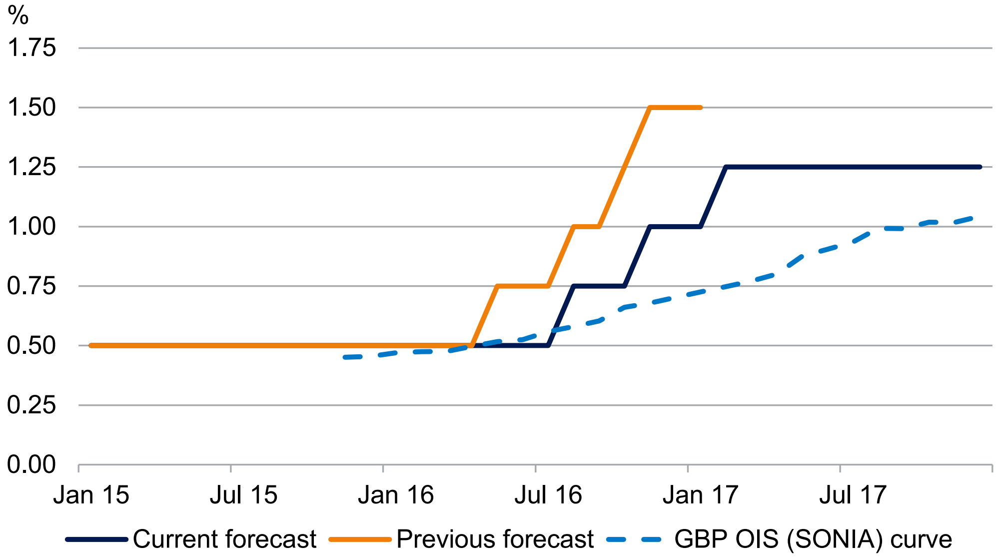
With regards to monetary policy, we have previously linked the first Bank of England (BoE) rate rise to headline CPI inflation rising above 1% – the BoE's lower threshold of its central 2% target. Based on the latest inflation forecast, this would suggest a delay in the first hike from May (our previous forecast) to August. We then expect the Bank to hike at a pace of 25 basis points per quarter as before.

However, our growth forecast for 2017 presents a challenge in that should growth slow to sub-2%, the Bank may consider this to be adding to spare capacity, and therefore deflationary pressures. As a result, we only forecast the Bank to raise interest rates to 1.25% by February 2017, at which point it will recognise the slowdown and be forced to pause. The Bank may then decide to restart hikes in 2018 or 2019, but that would be contingent on growth re-accelerating. Forecasting that far out is always hazardous, but we are puzzled by the OBR and BoE's forecasts, neither of which factor in any slowdown from fiscal tightening or interest rate rises. The experience of fiscal tightening in 2011 and the subsequent slump in growth in 2012 will surely be repeated to some extent in 2016 and 2017.

… which should delay and limit BoE rate rises…

Our cautious forecast on BoE interest rates is still higher than what is priced into money markets. Based on futures on overnight interest rate swaps, investors are not fully pricing in a rate rise of 25 basis points until March 2017, with only one more rate rise priced in for the rest of that year (chart 12). It may be that markets on average have an even more negative view on the UK economy than we do, or it could be that money markets are being influenced by the huge liquidity being injected by the ECB and Bank of Japan. In any case, there is little pressure from markets for interest rates to rise.

Chart 12: UK Policy interest rate forecast vs. market expectations



Source: Thomson Datastream, Schroders Economics Group, 26 November 2015. Previous forecast from August 2015. Please note the forecast warning at the back of the document.

…and may also put sterling under pressure

In terms of the risks to our UK interest rate forecast, they have shifted from rates rising sooner than forecast to even later. Governor Mark Carney has recently shed his hawkish feathers for more dovish colours. Not the first time of course.

From 2017 onwards, we believe there is a greater risk that the Bank of England is forced to cut rates again rather than raise them further. The softer outlook for interest rates along with the uncertainty and concerns that will emerge in 2016 as the UK's referendum on its membership of the European Union approaches could put sterling pressure.

Schroder Economics Group: Views at a glance

Macro summary – December 2015

Key points

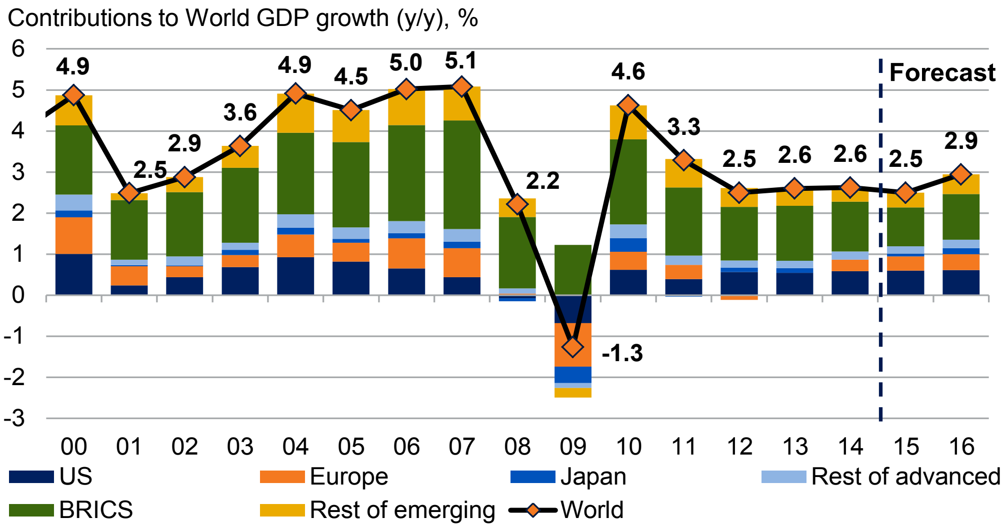
Baseline

- 2016 global growth is now forecast at 2.6%, with expectations revised down across all markets. As 2015 growth is projected to reach 2.5%, this marks a slight acceleration, but essentially reflects the lack of momentum we are seeing in global demand and the problem of excess inventories. 2017 offers a slight acceleration to 2.8% as EM and Europe improves, but ultimately, the square-root recovery continues.
- The US Fed is expected to look through the low headline CPI inflation rate and focus on a firmer core inflation and tightening labour market, hiking in December 2015. We had expected a March 2016 lift-off, but having shifted the goalposts by dropping concerns about China at the last meeting, we now see little reason for the FOMC to delay. We expect the Fed funds rate to rise to 1.25% by end 2016 and 2% by end 2017, where it peaks.
- UK recovery to continue, but to moderate in 2016 with the resumption of austerity. Interest rate normalisation to begin with first rate rise in August 2016 after the trough in CPI inflation. BoE to move cautiously, hiking 25 bps per quarter, peaking at around 1.25% in February 2017 when weaker activity will force a pause.
- Eurozone recovery continues in 2016 but does not accelerate as tailwinds fade and the external environment drags on growth, before picking up in 2017. Inflation to turn positive again in 2016 and rise modestly into 2017. ECB to keep rates on hold and continue sovereign QE through to September 2016.
- Despite the weak yen, low oil prices and the absence of fiscal tightening in 2015, Japanese growth has disappointed. A limited pick-up is expected in 2016 as wages rise, but Abenomics faces a considerable challenge over the medium-term to balance recovery with fiscal consolidation. The external environment does not help either. Despite this, we do not expect the Bank of Japan to increase QQE.
- Emerging economies benefit from modest advanced economy growth, but tighter US monetary policy weighs on activity, while commodity weakness will continue to hinder big producers. Concerns over China's growth to persist, further fiscal support and easing from the PBoC is likely.

Risks

- Risks skewed towards deflation on fears of China hard landing, currency wars and a US recession. The risk that Fed rate hikes lead to widespread EM defaults would also push the world economy in a deflationary direction. Inflationary risks stem from a significant wage acceleration in the US, or a global push toward reflation by policymakers. Finally, conflict in the Middle East could hit oil supply, leading to a jump in inflation and a hit to growth.

Chart: World GDP forecast



Source: Thomson Datastream, Schroders Economics Group, August 2015 forecast. Please note the forecast warning at the back of the document.

Schroders Forecast Scenarios

Scenario	Summary	Macro impact	Probability*	Growth (Global vs. 2016 baseline)	Inflation (Global vs. 2016 baseline)
Baseline	We have trimmed our forecast for global growth to 2.6% for 2016 (previously 2.9%) as a result of modest downgrades to the Advanced and Emerging markets. Although global demand has held up in 2015H2, there is little momentum and still some signs of excess inventory to clear. The benefits from lower oil prices will continue to support consumer spending but inflation is set to rise and the oil dividend fade in 2016. For the emerging economies, China continues to decelerate in 2016, but signs of stability in Russia and Brazil result in a better year for the BRIC's. The global growth forecast for 2017 is 2.8%, with growth moderating in the advanced economies in response to monetary tightening in the US whilst EM growth is marginally higher.	Inflation is expected to pick-up in 2016 as the base effects from lower commodity prices drop out of the index. Global inflation rises to 3.7% in 2016 from an estimated 3.1% in 2015 led by the advanced economies which see a pick-up of around 1 percentage point. For the EM, inflation moderates as CPI indices are less commodity sensitive (due to greater regulation of fuel prices) and currencies stabilise. The US Fed is expected to look through the current low headline CPI rate and focus on a firmer core rate of inflation and tightening labour market so as to raise rates in December 2015. We expect the Fed funds rate to rise to 0.5% by end 2015, 1.25% by end 2016 and 2% by end 2017 where it peaks. We look for the ECB to extend QE beyond September 2016 and leave policy rates unchanged until the end of 2017 when we expect the first hike. For the UK, we expect the first rate hike in August 2016. In Japan, the BoJ will keep the threat of more QQE on the table, but is now likely to let the weaker JPY support the economy and refrain from further loosening. China is expected to cut interest rates and the RRR further.	55%	-	-
1. Currency wars return	After a period of truce, the currency wars return as China devalues the CNY by 20% in January 2016. The Chinese authorities choose to go for a large one-off move rather than a series of smaller moves so as to quash speculation about further devaluation. Japan, which counts China as its largest trading partner, responds by devaluing the JPY three months later by 8%. This is likely to be achieved through an increase in QQE. Finally, the ECB responds by stepping up its own QE programme and pushing the EUR down by 10%. The round of currency devaluations unnerves financial markets who see it as a symptom of a chronically weak world economy. Weaker equity markets then have a further knock on effect to activity through slower consumption through negative wealth effects and weaker investment as growth expectations decline.	Mild deflation: The impact on the world economy is modestly deflationary with mixed results between EM and DM. Inflation is pushed up in China and the EM, whilst the advanced economies experience weaker growth and lower inflation. Overall the global effects are not great as much of the moves in exchange rates cancel each other out. However, the USD does strengthen as a result of each of devaluation thus putting deflationary pressure on the US. There is also a general deflationary effect on activity from heightened financial market volatility.	6%	-0.2%	-0.1%
2. Global reflation	Frustration with the weakness of global activity leads policy makers to increase fiscal stimulus in the world economy. This then triggers an increase in animal spirits which further boosts demand through stronger capex. Global growth exceeds 3% in 2016 and 2017. However, higher commodity prices (oil heading toward $70/ b) and tighter labour markets push inflation up by 0.5% in 2016.	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 and UK which are more advanced in the cycle compared with the Eurozone where there is considerable slack. The US Fed raises rates to 3.5% by end-2016 and starts to actively unwind QE by reducing its balance sheet. Although there is little slack in Japan, higher wage and price inflation is welcomed as the economy approaches its 2% inflation target. This is likely to lead the BoJ to signal a tapering of QQE, but no increase in interest rates. Inflation concerns result in tighter monetary policy in the emerging markets with all the BRIC economies raising rates.	5%	+0.7%	+0.5%
3. Middle-East melee hits oil	Tensions in Syria spill over in the Middle East with the result that oil supplies are disrupted in Iraq. With demand continuing to recover, this results in a surge in the oil price toward $90/ barrel by end 2017.	Stagflationary: although cuts in energy capex are cancelled and the outlook for the sector brightens, higher inflation weakens consumer spending and growth worldwide. The EM economies fare slightly better due to the greater number of producers, but growth losses in China and India weigh on the group as a whole. On the policy front, higher inflation results in a slightly faster tightening of policy by the Fed although rates are still expected to peak at 2% as the central bank balances the increase in inflation against the slowdown in growth.	2%	-0.3%	+0.7%
4. US recession	Slower profits growth causes a retrenchment in the corporate sector which cuts capex and jobs. Consequently, the US economy tips into recession in the first half of 2016. Corporate confidence and the equity market are badly hit, resulting in widespread retrenchment. Weaker demand from the US hits global activity.	Deflationary: weaker global growth and inflation compared to baseline as the fall in US demand hits activity around the world. The fall in inflation is given added impetus by a drop in commodity prices, which then adds to pressure on energy and mining companies and producers. The Fed makes one rate hike in December this year, but has to reverse course in March 2016 when rates are cut back again and the QE programme restarted. Interest rates are generally lower around the world.	4%	-0.9%	-0.4%
5. China hard landing	The equity market collapses despite government support efforts, inflicting losses and a crisis of confidence across the financial sector. With government credibility crushed, bank guarantees are called into question and bank runs begin. Lending activity halts and the housing market slumps, impacting consumption and investment. Growth in China slows to 3.5% in 2016 and remains under 4% in 2017.	Deflationary: Global growth slows as China demand weakens with commodity producers hit hardest. However, the fall in commodity prices will push down inflation to the benefit of consumers. Monetary policy is likely to ease/ stay on hold while the deflationary shock works through the world economy.	8%	-0.8%	-0.5%
6. US wages accelerate	Tight labour markets and rising headline inflation cause wages to accelerate faster than in the base in the US, parts of Europe and Japan. Consumer spending initially accelerates compared to the base, but inflation also picks up further out.	Reflationary in 2016: stronger growth and higher inflation compared to the baseline. Note that this scenario will turn stagflationary in 2017 as growth slows whilst inflation remains elevated. Better growth in the US provides a modest stimulus to activity elsewhere, however this is likely to be tempered by a more volatile financial environment with long yields rising as inflation expectations rise and the Fed tightens more aggressively.	7%	+0.3%	+0.4%
7. EM defaults emerge	With little prospect of a recovery in commodity prices the banks take a more restrictive approach to energy and metal producers with the result that we see a series of defaults in 2016 as hedges roll off and cash flows deteriorate. Problems are concentrated amongst the commodity producers with weaker balance sheets such as Brazil, although there is a knock-on effect to the region. The deterioration in EM credit conditions is exacerbated by Fed tightening which reduces capital flows/ prompts capital flight from EM.	Deflationary: weaker growth and inflation vs. baseline. Global trade takes another hit as commodity producers are forced to retrench with knock on effects across the EM complex. Advanced economies experience weaker demand from EM, stronger currencies and more volatile financial markets as bank defaults increase risk aversion. Fed continues to tighten but more slowly with rates peaking at a lower level than in the baseline.	10%	-0.5%	-0.3%
8. Other			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 (%)	2014	2015		Prev.	Consensus	2016		Prev.	Consensus	2017
World	100	2.7	2.5	↑	(2.4)	2.5	2.6	↓	(2.9)	2.9	2.8
Advanced*	62.4	1.7	1.9	↑	(1.8)	1.9	1.9	↓	(2.2)	2.1	1.9
US	24.7	2.4	2.4	↑	(2.3)	2.5	2.4	↓	(2.7)	2.6	2.1
Eurozone	19.0	0.9	1.5	↑	(1.3)	1.5	1.5	↓	(1.7)	1.7	1.6
Germany	5.5	1.6	1.5	↑	(1.3)	1.8	1.7	↓	(2.1)	1.9	2.1
UK	4.2	2.9	2.3	↓	(2.5)	2.5	1.9	↓	(2.1)	2.4	1.6
Japan	6.5	-0.1	0.6	↓	(0.7)	0.6	1.1	↓	(1.8)	1.3	1.5
Total Emerging**	37.6	4.4	3.5	↑	(3.4)	3.5	3.9	↓	(4.1)	4.0	4.2
BRICs	23.6	5.5	4.4	↑	(4.1)	4.3	4.6	↓	(4.7)	4.8	5.2
China	14.7	7.3	6.9	↑	(6.8)	6.8	6.3	↓	(6.4)	6.5	6.2

Inflation CPI

y/y%	Wt (%)	2014	2015		Prev.	Consensus	2016		Prev.	Consensus	2017
World	100	2.7	3.1	↑	(2.9)	3.0	3.7	↑	(3.3)	3.7	3.9
Advanced*	62.4	1.3	0.4	↓	(0.5)	0.3	1.4	↓	(1.7)	1.4	1.9
US	24.7	1.6	0.3	↓	(0.6)	0.2	1.6	↓	(2.3)	1.8	2.1
Eurozone	19.0	0.4	0.1	↑	(0.0)	0.1	1.3	↑	(1.1)	1.1	1.6
Germany	5.5	0.8	0.2		(0.2)	0.3	1.5		(1.5)	1.4	1.6
UK	4.2	1.5	0.1	↑	(0.0)	0.1	1.3	↓	(1.6)	1.4	2.2
Japan	6.5	2.7	0.9	↓	(1.1)	0.8	1.0	↓	(1.1)	0.8	1.8
Total Emerging**	37.6	5.0	7.6	↑	(7.0)	7.6	7.4	↑	(6.1)	7.4	7.3
BRICs	23.6	3.8	4.6	↓	(4.8)	4.4	3.6	↓	(3.8)	3.6	3.4
China	14.7	2.0	1.6	↑	(1.4)	1.6	1.9	↓	(2.0)	2.1	2.1

Interest rates

% (Month of Dec)	Current	2014	2015		Prev.	Market	2016		Prev.	Market	2017	Market
US***	0.25	0.25	0.50	↑	(0.25)	0.44	1.25		(1.25)	1.09	2.00	1.68
UK	0.50	0.50	0.50		(0.50)	0.58	1.00	↓	(1.50)	0.94	1.25	1.41
Eurozone	0.05	0.05	0.05		(0.05)	-0.14	0.05		(0.05)	-0.20	0.25	1.41
Japan	0.10	0.10	0.10		(0.10)	0.18	0.10		(0.10)	0.16	0.10	0.72
China	4.35	5.60	4.35	↓	(4.60)	-	3.50	↓	(4.00)	-	3.00	-

Other monetary policy

(Over year or by Dec)	Current	2014	2015		Prev.		2016		Prev.		2017
US QE ($Bn)	4484	4498	4489	↓	(4504)		4507	↓	(4522)		4525
EZ QE (€Bn)	133	31	649		(649)		1369	↑	(1189)		1369
UK QE (£Bn)	371	375	375		(375)		375		(375)		375
JP QE (¥Tn)	365.4	300	387	↓	(389)		404	↓	(406)		404
China RRR (%)	18.00	20.00	17.00	↓	17.50		15.00	↓	16.00		13.00

Key variables

FX (Month of Dec)	Current	2014	2015		Prev.	Y/Y(%)	2016		Prev.	Y/Y(%)	2017	Y/Y(%)
USD/GBP	1.52	1.56	1.53		(1.53)	-1.9	1.50		(1.50)	-2.0	1.50	0.0
USD/EUR	1.07	1.21	1.08		(1.08)	-10.7	1.02		(1.02)	-5.6	1.02	0.0
JPY/USD	122.8	119.9	120.0		(120.0)	0.1	120.0		(120.0)	0.0	115.0	-4.2
GBP/EUR	0.71	0.78	0.71		(0.71)	-9.0	0.68		(0.68)	-3.7	0.68	0.0
RMB/USD	6.37	6.20	6.40	↑	(6.30)	3.2	6.60	↑	(6.40)	3.1	6.80	3.0
Commodities (over year)												
Brent Crude	43.4	56	53.5	↓	(55)	-4.2	48.5	↓	(55)	-9.4	54.6	12.6

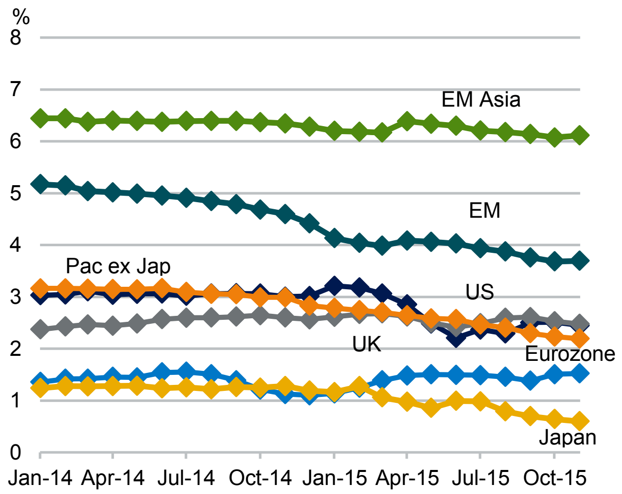
Source: Schroders, Thomson Datastream, Consensus Economics, November 2015
Consensus inflation numbers for Emerging Markets is for end of period, and is not directly comparable.
Market data as at 13/11/2015
Previous forecast refers to August 2015
* **Advanced markets:** Australia, Canada, Denmark, Euro area, Israel, Japan, New Zealand, Singapore, Sweden, Switzerland, United Kingdom United States.
** **Emerging markets**: Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela, China, India, Indonesia, Malaysia, Philippines, South Korea, Taiwan, Thailand, South Africa, Russia, Czech Rep., Hungary, Poland, Romania, Turkey, Ukraine, Bulgaria, Croatia, Latvia, Lithuania.
*** The forecast for US policy interest rates was updated this month, with the previous forecast refering to the August update.

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

2015



2016

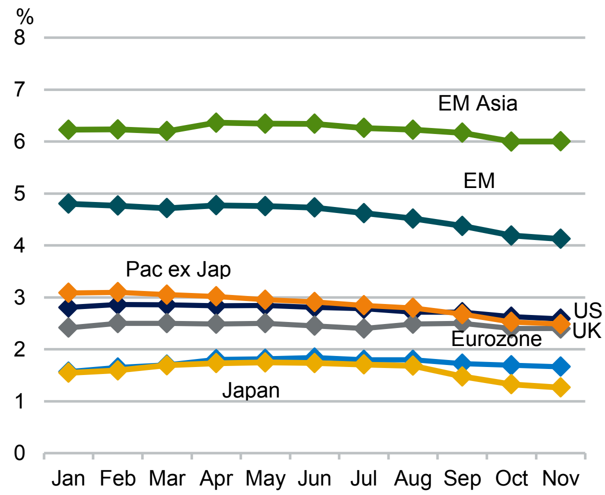
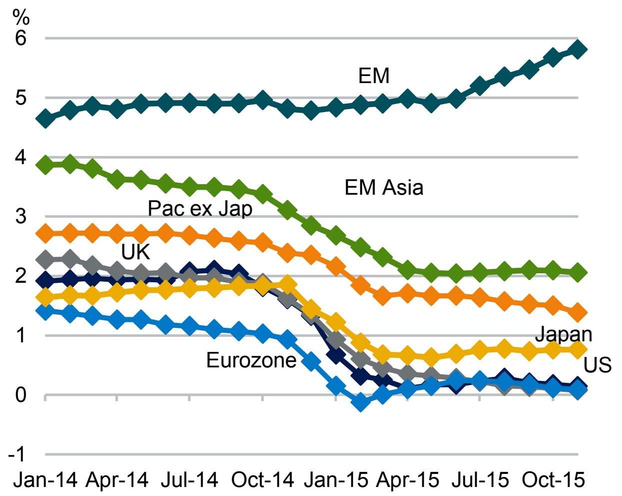
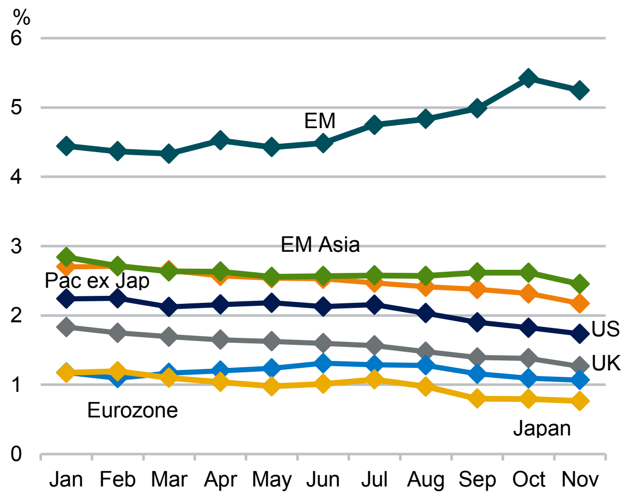


Chart B: Inflation consensus forecasts

2015



2016



Source: Consensus Economics (November 2015), 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.