



Economic and Strategy Viewpoint

October 2017

3

From QE to QT: Whither global liquidity?



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- The decision by the US Federal Reserve to start to reduce its balance sheet is welcome as it signals another step toward normality after the global financial crisis. US bond yields may rise, but should remain underpinned by the behaviour of inflation and declining estimates of long run equilibrium interest rates. Looking at the wider picture, even with quantitative tightening, global liquidity should continue to rise over the next 12 to 18 months largely supported by the BoJ.
- However, whilst reassuring for markets we would inject a note of caution. The pace of liquidity expansion will slow and ECB tapering may bring significant yield shifts and potential problems for the periphery. Furthermore, we question whether we can talk of global liquidity when international investors have to take account of currency and hedging costs in assessing returns.

8

UK: The unreliable boyfriend is back!



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- The Bank of England has strongly hinted that it could raise rates as soon as November, despite the fragile economy and lack of wage growth. As a result, markets have brought forward expectations of a hike, and pushed sterling higher.
- The Bank has form in backing away from a hike, but it may not be able to this time. We now see a rate rise in November, but doubt that this will be the start of a major hiking cycle given the vulnerability of the consumer and Brexit uncertainty.

13

EM disinflation: The end of a trend?



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- In some cases the fall in EM inflation has been astonishing, but even where it has been modest the trend has been undeniable. However, we think the disinflation trend may have run its course, with implications for policymakers and investors alike.

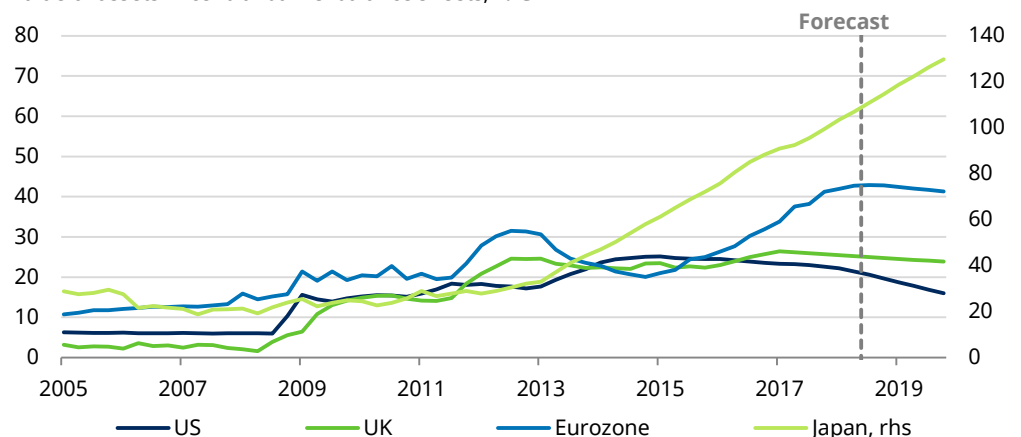
18

Views at a glance

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

Chart: QE compared

Value of assets in central banks' balance sheets, % GDP



Forecast begins Q3 2017.

Source: Thomson Datastream, Schroders Economics Group, 26 September 2017.

From QE to QT: Whither global liquidity?

Fed reaches milestone in recovery from the financial crisis

The Fed heads towards QT

The long road from financial crisis to recovery passed another milestone in September when the US Federal Reserve (Fed) announced that it would start to reduce its \$4.5 trillion balance sheet from October. The asset purchase programme, or Quantitative Easing (QE), is finally being unwound with the US central bank set to allow maturing bonds to run off its balance sheet rather than continuing to roll them over.

The process will start slowly with an initial \$10 billion of Treasuries and mortgage backed securities (MBS) being allowed to run off per month. However this will step up by \$10 bn every three months until it reaches a cap of \$50 bn per month. At this point the actual pace of balance sheet reduction will depend on the flow of maturing bonds, but it will mark a meaningful change in liquidity. The move toward quantitative tightening (QT) has begun.

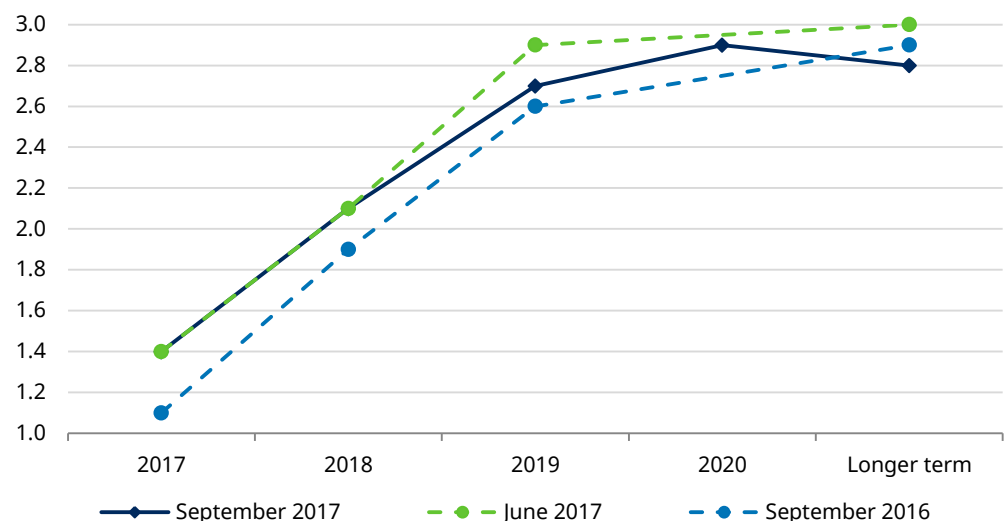
It is widely accepted that QE has played a role in boosting asset markets. By depressing government bond yields, central banks have driven investors out along the risk curve pushing up credit, equities and property along with a host of more esoteric assets such as wine, classic cars, etc. The question now is whether turning the process around and withdrawing liquidity will send asset prices into reverse.

In a world of efficient markets the shift from QE to QT would have minimal effect as it would be fully anticipated by markets and so already priced in. Mindful of this, the Fed has been fully transparent in their intentions by detailing the balance sheet reduction process back in June. No one should have been surprised by the announcement on 20 September. Although there was some re-pricing at the short end of the curve, US Treasury and MBS yields barely moved in response.

Of course alongside the announcement on QT, bond markets also had to digest the Fed's comments on activity, revised forecasts for the economy and the famous dot-plot where Federal Open Market Committee (FOMC) members give their best guess of the future path of interest rates. Although there was some excitement over the fact that a majority of members are still looking to raise rates in December, the near term outlook did not alter significantly compared with June (chart 1).

Chart 1: Dot plot June versus September Fed terminal rate evolution

Fed median forecast of base rate %



Source: Federal Reserve, 20 September 2017.

Fed lowered its forecast for interest rates in the long run

For long term rates, perhaps the most important part of the dot plot moved in a dovish direction with a reduction in the forecast for the terminal rate to 2.75%. The latter has declined considerably in recent years from 4.25% in 2012 and might be seen as an official view of the “new normal”, an important anchor for yields at the long end of the curve. As private investors decide whether to refinance the bonds which the Fed is no longer rolling over, these projections of equilibrium rates are critical.

More generally, studies suggest that QE in the US has depressed bond yields although estimates vary. The US Treasury Borrowing Advisory Committee reported that adjusting for the path of short rates to capture the extra yield investors require for holding longer term debt suggests that balance sheet normalisation would add 40 bps (basis points) to the 10-year term premium. However, recent research from the Fed suggests a somewhat higher figure of 100 bps.¹

This would imply some modest upward pressure on US yields: whilst the Fed may have distorted the curve, the outlook is still supportive of a low interest rate environment given the decline in equilibrium rates and the likelihood that inflation remains benign. Private investors such as banks, insurance companies and pension funds will continue to price bonds with reference to these factors as they replace Fed demand.

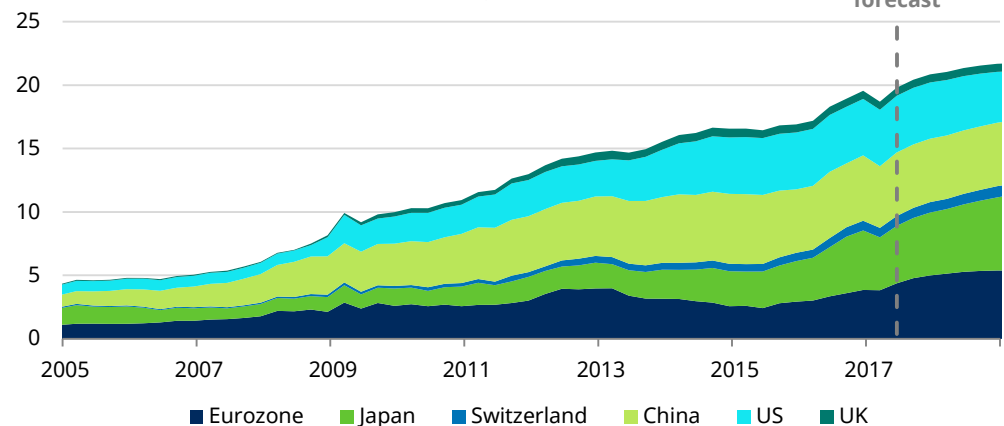
Will global liquidity continue to expand?

Global liquidity boosted by \$1.5 trillion led by BoJ and ECB

Whilst the Fed has reached an historic milestone, central banks elsewhere are lagging behind with the Bank of Japan (BoJ), European Central Bank (ECB) and Riksbank still fully engaged in QE. We estimate that central banks have injected \$1.5 trillion of liquidity through asset purchases over the past year led by the BoJ and ECB (chart 2).

Chart 2: Central bank liquidity

Value of assets in central banks' balance sheets, USD tn



Source: Thomson Datastream, Schroders Economics Group, 25 September 2017.

The chart shows our projections for central bank balance sheets going forward and indicates that global liquidity will continue to rise. This is a positive for financial markets. However we believe that investors should start to become more wary on the benefit this will provide to risk assets, for two reasons.

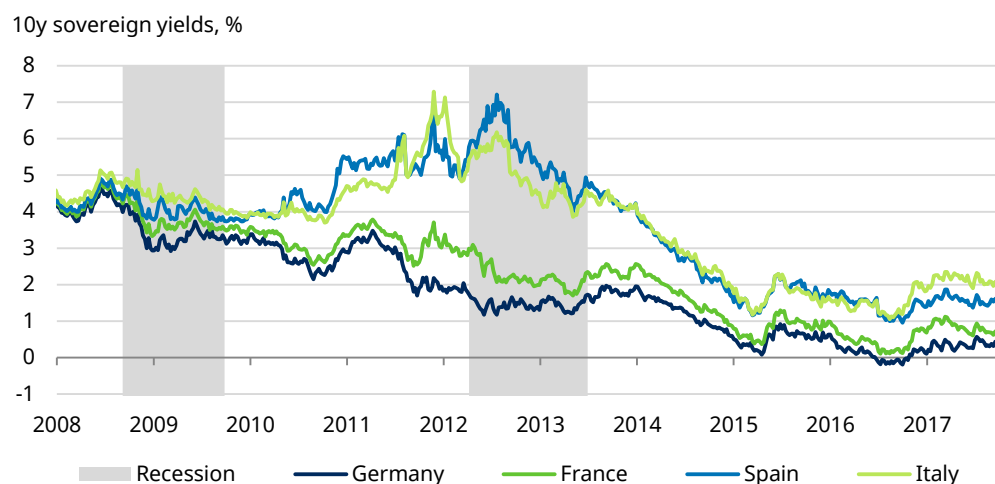
¹See US Treasury Borrowing Advisory Committee, 2 August 2017 [here](#) and Projected Evolution of the SOMA Portfolio and the 10-year Treasury Term Premium Effect, Federal Reserve, 22 September [here](#).

BoJ to continue with QE, but the ECB is preparing to taper

First, the pace of liquidity growth will decelerate such that by the end of next year it will be rising at half its current rate and will almost grind to a halt in 2019. Although the BoJ is expected to continue with asset purchases over this period as it tries to hit its inflation target, increasing QT from the Fed and tapering of QE by the ECB causes a slowing in global liquidity.

In many respects the ECB move may prove to be the more important development in 2018. The ECB's programme has been larger as a share of GDP and domestic markets than that of the Fed's (see front page chart). As a result we have seen a considerable squeeze on Eurozone sovereign bond markets where the ECB has bought a large proportion of available bonds. German bund yields, for example, have been driven down to eye watering levels. Rates have fallen across the single currency area such that bond markets in France, Italy and Spain have seen record lows (chart 3).

Chart 3: Eurozone yields at lows during ECB QE

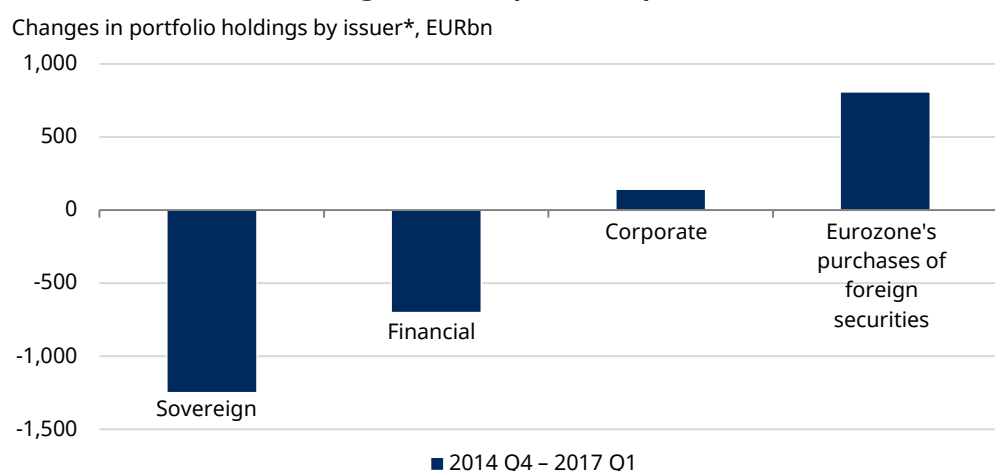


Source: Thomson Datastream, Schroders Economics Group, 25 September 2017.

ECB QE has had a significant impact on capital flows

Analysis of capital flows by Oxford Economics shows the significant impact this has had with private investors selling their holdings of sovereign bonds and shifting some €800 billion overseas (chart 4). In this way the ECB's action had an international impact. For example, one of the major beneficiaries has been the UK government which received £35.2 billion of funding in the year to July through Eurozone purchases of gilts.

Chart 4: ECB QE has had a significant impact on capital flows



*private holdings by Eurozone investors.

Source: Oxford Economics, Haver Analytics, Schroders Economics Group, 25 September 2017.

QE has played a wider role than in the Eurozone than elsewhere

The incentive for capital to flow from QE to QT countries is limited by hedging costs

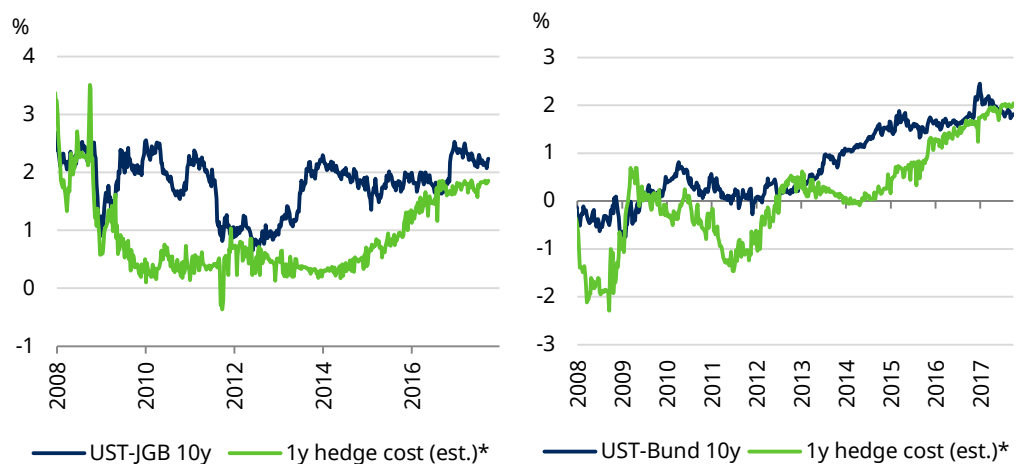
The ECB is expected to step down its asset purchases from €60 billion per month to €40 billion and then €20 billion, before ending QE in December next year. As the ECB tapers QE we might expect a rise in yields across the Eurozone, thus bringing investors back to their domestic bond markets and resulting in a reversal of previous flows.

Higher yields in core economies will bring some relief to bond investors particularly domestic insurance and pension funds. The risk though is that the more sensitive peripheral markets could sell off considerably more than in the core. This is an outcome which would be problematic for the Euro as markets re-focus on the structural flaws within the region. The ECB does have tools to counter such an event although in the absence of QE any support would become conditional on reform, making progress more difficult and crisis more likely. In this respect ECB QE differs from that in the US and elsewhere as it also indirectly serves the purpose of quashing political risk premia in the periphery.

The second issue is whether we can compare QE across countries? In chart 2 above we have converted each central banks QE into US dollars to calculate global liquidity. However, this assumes that investors view bonds across countries as perfect substitutes. In practice they are not as, along with regulatory restrictions, investors also have to take account of potential currency moves when investing overseas.

One way of overcoming this is to hedge currency exposure and we have used the differential between short rates (1-year) as an indicator of hedging costs to compare with the yield pick-up between bond markets (chart 5). When we account for hedging the incentive to move capital out of Japan and the Eurozone has clearly declined and now absorbs most of the yield gain from holding US bonds. This reflects the increases in US short rates as rates in the Eurozone and Japan have been stable.

Chart 5: Hedging costs reduce US yield pick up



*1y deposit rate (US-Japan)

*1y deposit rate (US-Eurozone)

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

So although capital can flow freely between countries and we might think of liquidity in different regions as part of a global pool, in practice it can remain contained domestically by factors such as currency. This would seem to be the case at present. Put another way, at present US Treasury yields would have to rise significantly for Japanese and Eurozone investors to shift into Treasuries given the hedging costs.

Global liquidity set to wither

The shift from QE to QT is a welcome development as it signals another step toward normality after the global financial crisis. The Fed has been transparent in its signalling and whilst bond yields in the US may experience some upward pressure they should remain underpinned by the good behaviour of inflation and declining estimates of long run equilibrium interest rates. Looking at the wider picture, even with QT, global liquidity should continue to rise over the next 12 to 18 months largely supported by the BoJ.

However, whilst all this is reassuring for markets and risk assets we would inject a note of caution. First, the pace of liquidity expansion will slow as the Fed implements QT and then as the ECB tapers QE. Moreover, ECB tapering may bring bigger swings in capital flows and yield shifts given the impact of its QE on portfolios. As core yields rise in the Eurozone there could be problems for peripheral economies which no longer have the central bank backstopping their sovereign bond markets.

Furthermore, we question whether we can talk of global liquidity when international investors have to take account of currency and hedging costs in assessing returns. The current configuration of interest rates may keep capital at home rather than flowing freely from areas of QE to those with QT. The bottom line is that not all QE is equal and although global liquidity will not dry up, it will start to wither as we head into 2018.

UK: The unreliable boyfriend is back!

“We’ve had a lot of different signals. I mean, it strikes me that the Bank is behaving a bit like sort of an unreliable boyfriend – one day hot, one day cold. And the people on the other side of the message are left not really knowing where they stand.”

Pat McFadden, Labour MP, 24 June 2014.

The BoE has suddenly turned hawkish, warning that it could raise interest rates soon...

Here we go again. The Bank of England’s (BoE) monetary policy committee (MPC) has strongly suggested that it is finally ready to raise interest rates after over a decade of cuts and inaction. However, many are puzzled by the sudden change in communication, especially as data suggests the economy is very fragile at present, and is facing enormous uncertainty as Brexit negotiations unfold. Of course, the Bank has previous form in raising expectations only to fail to deliver, which is how it earned its nickname of the “unreliable boyfriend”.

BoE hawkish rhetoric lifts sterling and bond yields

In the August edition of this publication, we predicted that the BoE would not only keep policy unchanged, but that it would also downgrade its over-optimistic GDP forecast when it published its August Inflation Report. Our prediction was correct, and with no change in MPC voting, investors read the latest Inflation Report as a dovish signal. This appears to have irked members of the MPC, who have consistently warned that not enough rate rises were priced in to markets over the medium term.

Before the August meeting, money markets had fully priced in a quarter point rise in the policy interest rate at the start of 2019. However, following the dovish Inflation Report, the first fully priced rate rise was pushed out to July 2019 – sufficiently after Brexit to allow time for any negative impact (see chart 6). This made sense as governor Mark Carney had emphasised that the Bank’s forecasts were conditioned on a “smooth path to Brexit”. Yet, he also warned that “It’s evident in our discussions across the country with businesses ...that uncertainties about the eventual relationship are weighing on the decisions of some businesses. There is an element of Brexit uncertainty which is affecting the wage bargaining. Some firms, potentially a material number of firms, are less willing to give bigger pay rises given that it is not as clear what their market access is going to be over the course of the next few years.”

...causing markets to bring forward rate rise expectations, and push sterling higher...

Chart 6: Preparing for a hike

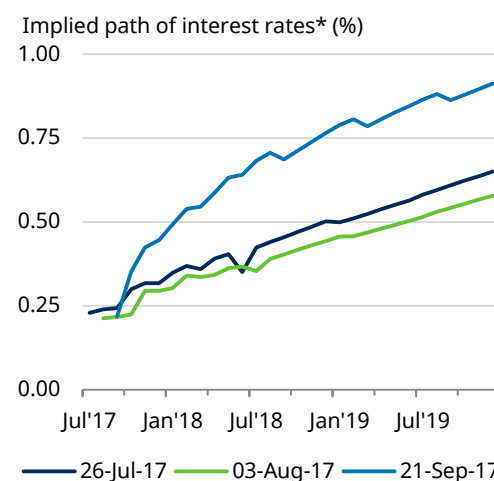
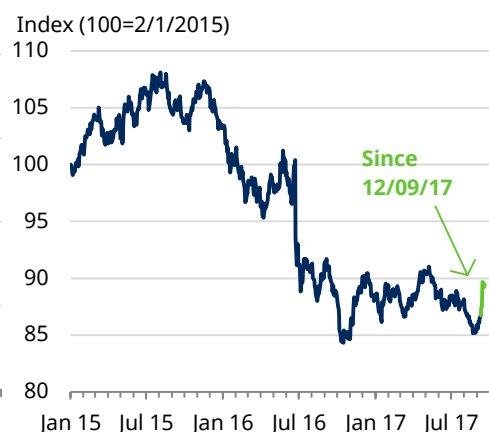


Chart 7: Trade weighted GBP



*Implied path of interest rates derived from GBP OIS forwards curves. Source: Bloomberg, Bank of England, Schroders Economics Group. 21 September 2017.

Meanwhile, Brexit negotiations have been somewhat colourful, as it emerged from a set of meeting minutes that Jean-Claude Juncker, president of the European Commission, had questioned the “stability and accountability” of the UK’s chief Brexit negotiator, David Davis.

With few signs of progress, investors are likely to have concluded that the risk to the BoE’s outlook, and therefore the path of interest rates, is to the downside.

More recently, the communication from the BoE has dramatically changed. The latest MPC meeting minutes showed a more hawkish committee, stating that:

“A majority of MPC members judge that, if the economy continues to follow a path consistent with the prospect of a continued erosion of slack and a gradual rise in underlying inflationary pressure then, with the further lessening in the trade-off that this would imply, some withdrawal of monetary stimulus is likely to be appropriate over the coming months in order to return inflation sustainably to target.”

The following day, Gertjan Vlieghe, one of the more dovish MPC members, gave a speech and said:

“Until recently, I thought the appropriate response of monetary policy was to be patient, given modest growth and subdued underlying inflationary pressure. But the evolution of the data is increasingly suggesting that we are approaching the moment when Bank Rate may need to rise.”

The sudden shift in language caught investors by surprise, and has prompted many economists to revise up their interest rate forecasts. Indeed, as shown in chart 6 earlier, the market now has almost 70% of a quarter-point hike priced in for the 2 November MPC meeting, which happens to coincide with the next Inflation Report. The rising probability of an earlier rate rise in markets has not only caused bond yields to rise, but also the pound to strengthen against most currencies. On a trade weighted basis, sterling has risen 4.8% since the end of August (chart 7), but against the US dollar, it is at its highest level since the aftermath of the Brexit referendum.

With markets primed, will the Bank of England follow through and finally raise interest rates, or will it return to being the “unreliable boyfriend?”

Recent economic weakness

There are enough caveats in the BoE’s recent hawkish statements to provide it with an escape from a hike in November. The economy has seen a dramatic slowdown since the end of 2016, and when stripping out inventories, final demand has been even weaker – stagnating in the latest quarter (chart 8).

**...despite the
UK economy
struggling**

Chart 8: Final demand lags GDP

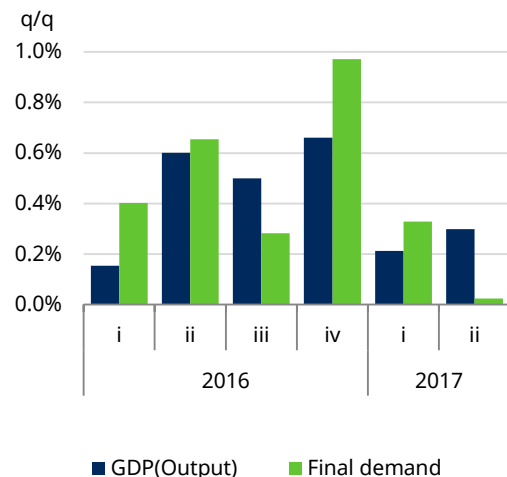
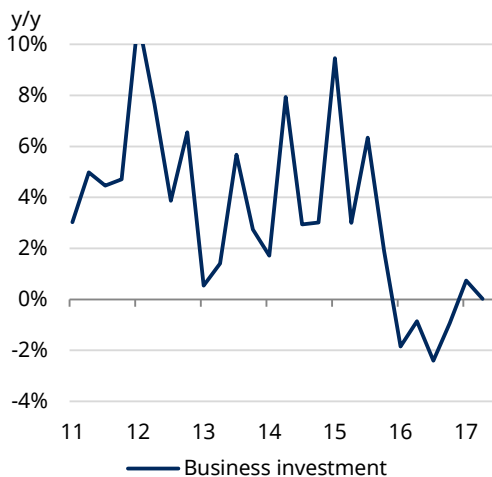


Chart 9: Weak business investment



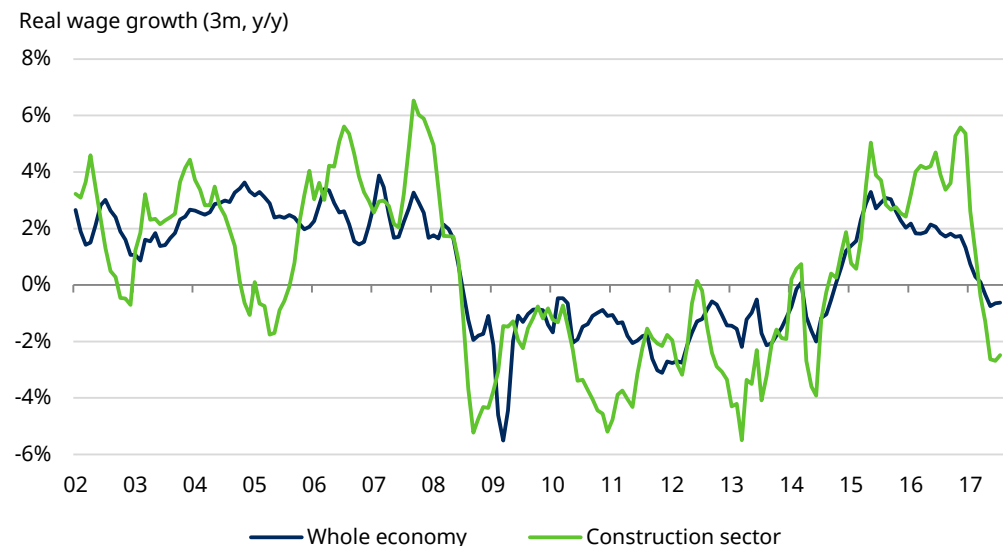
Source: Thomson Datastream, Schroders Economics Group. 21 September 2017.

Greater uncertainty over the UK's relationship with Europe has clearly affected the decision-making of corporates. Business investment started to slow in the run-up to the Brexit referendum but since the result it has collapsed and even contracted through most of 2016 (chart 9). Corporate investment has since stabilised, but is unlikely to rebound anytime soon.

Meanwhile, households are struggling. The rise in inflation, caused by the depreciation in sterling, has outpaced the growth in earnings, squeezing the purchasing power of the average household (chart 10). Employment growth has continued to be robust, helping cushion the hit from inflation. But even taking into account the new jobs being added to the economy, the household sector in aggregate is poorer than a year ago. This is important as ultimately this dynamic is deflationary in the sense that it hurts demand. Yet, the BoE is worried about inflation getting out of hand.

A weak construction sector is a sign that the economy is cooling

Chart 10: Wages failing to keep up with inflation



Source: Thomson Datastream, Schroders Economics Group. 21 September 2017.

Chart 10 above also shows real wage growth for the construction sector. The comparison with whole economy is interesting, as the construction sector is one of the most cyclical segments of the labour market. When the economy is running hot, investment projects follow and construction workers end up being in short supply, pushing wage growth above the growth seen in the wider economy. In a sense, the

comparison behaves like a speedometer for the economy, and as the chart shows, the signs from the construction sector suggest the economy is cooling quickly.

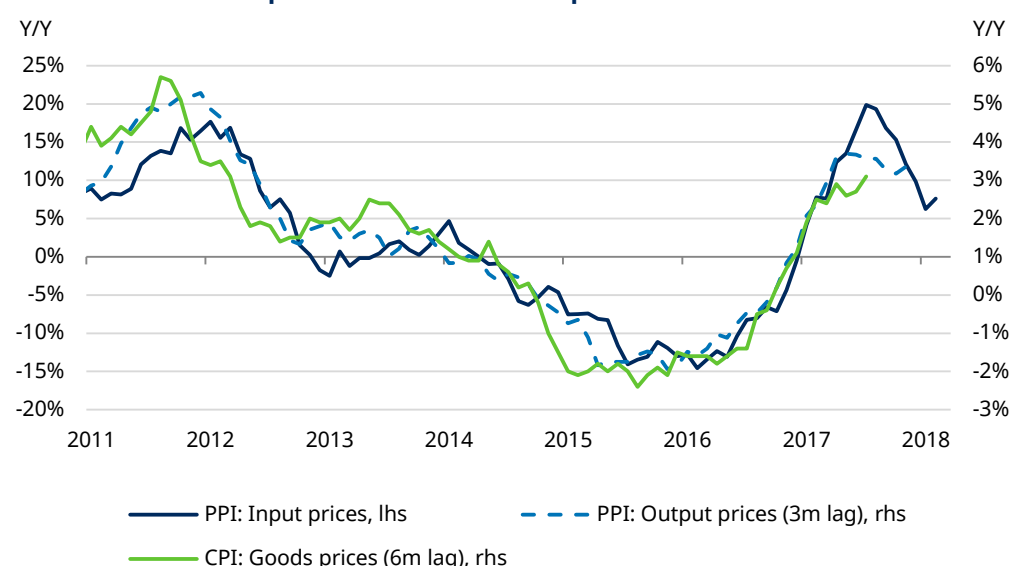
Inflation is close to its peak

The peak in the pound and producers' prices suggest consumer prices may soon peak too

As we discussed in our forecast update in last month's publication, the worst of the rise in inflation has passed. We forecast inflation based on the consumer price index (CPI) to fall from the 4% annualised in the first quarter (seasonally adjusted), to 2% in the third quarter. This should provide some relief for households in the second half of the year.

The likely reduction in consumer inflation can already be seen in supply chains. The producer price index (PPI) shows the inflation manufacturers are facing (input), along with the prices they are charging for their output. As chart 11 shows, there is a very good leading relationship between PPI input and output price inflation, and the CPI goods inflation index. CPI goods inflation makes up 56% of the overall index and has been the main driver higher through imported goods. As the goods index turns down and follows the PPI data, overall inflation in the UK will also fall back to more manageable levels.

Chart 11: Consumer price inflation to follow producers' inflation lower



Source: Thomson Datastream, Schroders Economics Group. 21 September 2017.

Ultimately, the MPC's main focus is the outlook for inflation over the medium-term. With the annual rate at 2.9% in August, CPI inflation could be about to breach the BoE's upper limit of 3%. This would compel the governor to write a letter to the Chancellor of the Exchequer to explain the reason for the overshoot. Such a letter is likely to follow previous examples and explain that the main reason for the overshoot in inflation is the depreciation in sterling. However, where in the past the governor would have gone on to explain that these factors should be temporary, this time could be different.

The BoE may have to follow through with a rate rise this time...

The concern for the BoE is that unemployment is very low. At 4.3%, it is the lowest rate of unemployment since 1975. At the same time, the employment rate is at a record high. By any measure, the UK does not have much slack remaining in the labour market. Therefore, a significant inflationary shock, like the current impact from sterling, could prompt households to push for higher wages.

At this point it is worth remembering that wage inflation is very low, and has been much lower than normal given where unemployment is. Indeed, as several MPC members' speeches in recent months have stated, the wage conundrum may be due to structural factors that cannot be solved with monetary policy.

Another development in recent weeks which may have prompted the change in the MPC's tone is the acknowledgement by the chancellor that it may be time to end the public sector pay cap (1%). The government in its weak state is likely to be looking for ways to win back support. Trade unions are demanding 4%+, with the opposition Labour Party supporting a lifting of the cap. The next Budget will be in November.

Rate rises may expose vulnerabilities

The BoE is not pre-committed to raising interest rates in November, but it may be forced to follow through. It has very little credibility left with markets, and a dovish turn would cause sterling to fall sharply. Activity data between now and then is likely to improve, but not be particularly strong, which makes it more likely than not that a rate rise is imminent.

Raising the policy rate back up to 0.5% is unlikely to have a significant direct impact. Even if there was another rise or two, the impact on the economy is likely to be minimal when considering households have deleveraged aggressively since the financial crisis. Lending practices have been tightened up, and banks have shored up their balance sheets. However, what if rate rises cause a confidence shock?

Households have managed to maintain spending despite falling real disposable income largely thanks to a fall in household savings. For many households, this has meant taking out loans to make ends meet. But what if confidence was hit and households decided to raise precautionary savings? This could easily tip the fragile economy into recession. With Brexit providing additional uncertainty, we forecast the BoE to only hike once, but then be forced to wait until the economy returns on a stronger footing, which is unlikely before Brexit is complete in 2019.

Ideally, rate rises need to be gradual, limited and timed with an upswing in the economy, or at least confidence. The last part seems to be the bit that the Bank of England is missing.

...whether the economy can withstand it will depend on consumer confidence

EM disinflation: The end of a trend?

“My colleagues and I may have misjudged... the fundamental forces driving inflation.”

Janet Yellen, September 2017.

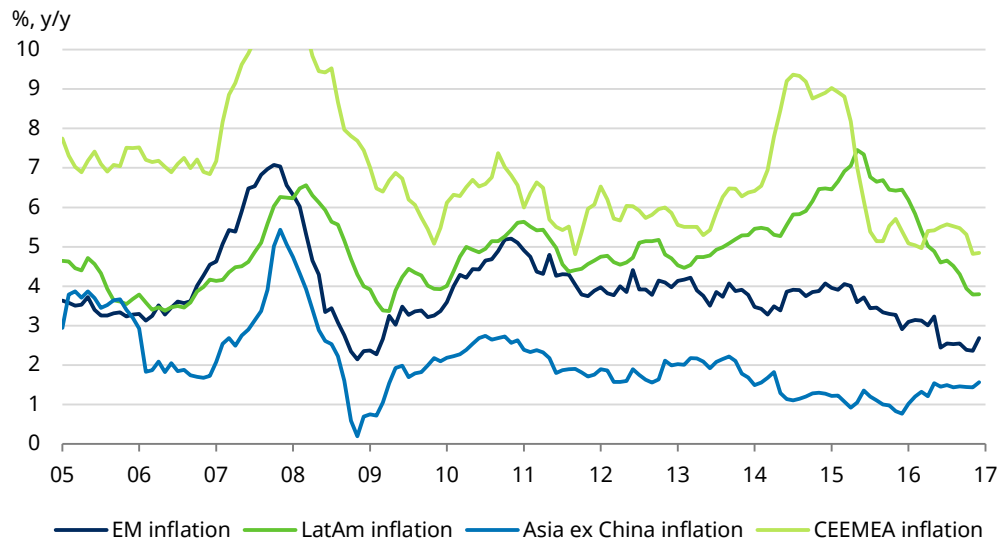
Disinflation has been a common trend in EM...

Beyond being members of the BRICs, Russia, India and Brazil have superficially very little in common. However, something which has united all three recently has been a dramatic decline in inflation. Both Brazil and Russia suffered double digit inflation as recently as 2015, and we need go back only as far as 2013 for the same to be true of India. Yet this year, in the last three months, all three have hit record lows: 2.5% inflation in Brazil (August), 1.5% in India (June), 3.3% in Russia (August).

Furthermore, while these three economies are extreme examples, the disinflationary process has been marked throughout much of the emerging market (EM) universe. Chart 12 shows inflation within each EM region, weighted by GDP. Post crisis disinflation trends are visible, at different periods, for each region (though Asia has seen some reversal from 2016).

This overall trend has prompted considerable inflows to EM debt, on the expectation of easing cycles by EM central banks. Now, after such large and sustained falls in price growth, the question increasingly being raised is how much further this process can run.

Chart 12: Disinflationary trends in emerging markets



Source: Thomson Datastream, Schroders Economics Group. 20 September 2017. CEEMEA stands for Central Eastern Europe, Middle East and Africa.

...but has it run its course as key drivers fade?

Casting an eye over the chart, it does appear that in some areas the downwards momentum has been halted. Asia, even with China removed, has not seen disinflation for some time. Even India, with the record low in June, is now seeing a resurgence of inflationary pressures, though at 3.4% inflation is still far below historic averages. In CEEMEA, inflation seems to have found a floor for the time being, fluctuating around the 5% mark since mid 2015. Only in Latin America, where the disinflation trend began more recently, does momentum seem relatively unchecked.

Of course, there is more to forecasting than talking about patterns in a chart. We should consider the drivers of EM disinflation, and the prospects for their persistence from here.

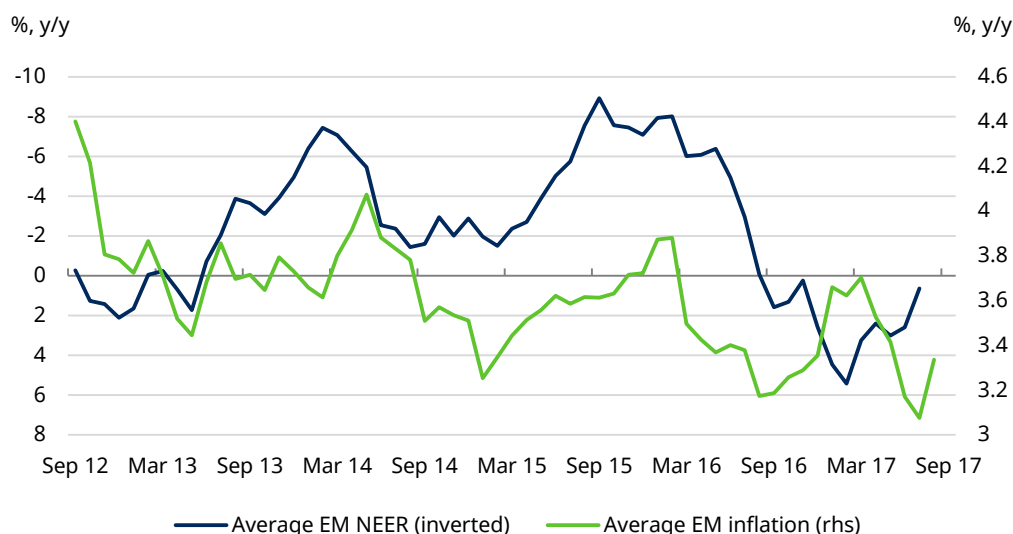
Currency strength has held down imported inflation...

Currency strength: The EM appreciation society

To begin, the experience of EM currencies is hard to overlook as a contributory factor. Currency weakness adds to inflation chiefly by driving up the cost of imported goods. The degree of pass-through depends on the economy: the share of imports in GDP, the type of goods imported, the ability or willingness of firms to absorb costs rather than pass them to the consumer, and so on. Ultimately, however, a large move in the currency will have inflationary consequences.

Chart 13 demonstrates the correlation between exchange rates and inflation. Taking an unweighted average of nominal effective exchange rates (NEERs) over time, it would seem that exchange rates do exert a lagged pressure on inflation, but evidently (and unsurprisingly) there are other forces at work which occasionally allow the two to deviate.

Chart 13: EM exchange rates and consumer price inflation



Source: Thomson Datastream, Schroders Economics Group. 20 September 2017. Both averages are unweighted.

...but the main gains are behind us

Setting aside any endogeneity in the relationship and taking at face value that the relationship suggested by the chart is genuine, what can we say about currency led inflation from here? The peak of depreciation in late 2015 seems to have led, around three months later, to a peaking of EM inflation. The subsequent strengthening of EM currencies (even though year-on-year appreciation would not occur until a year later) looks to have helped drive EM inflation lower. However, since March this year, this trend has been reversing. Trade weighted EM currencies have been losing momentum, and this may already be transmitting to inflation for the bloc as a whole. Unless we see a renewed trade weighted strengthening of EM currencies, this particular tailwind looks to have passed.

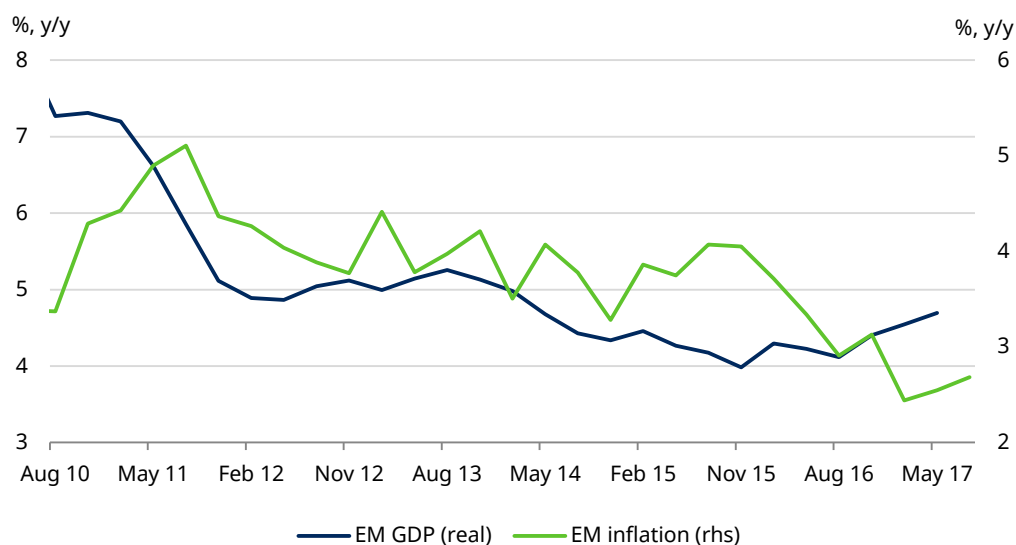
The silver lining of weak growth

Soft growth has meant “demand pull” inflation has been limited

We mentioned Brazil and Russia at the start of this note, remarking on the scale of the fall in their inflation. Of course, both economies have also undergone recessions – particularly long and painful in Brazil’s case – which help contain inflation through their effect on demand. More broadly, we do not need a recession to keep a lid on prices; weak growth should generally mean weaker inflation, while very strong growth can lead to overheating and surging prices. For emerging markets (chart 14), the years since the global financial crisis have seen a steady downward trend in real growth rates, which (with a lag) has also meant a downward trend in inflation. However, there are signs now that EM growth may have bottomed, and

consensus forecasts are for stable growth at least next year. So again, the disinflationary pressures for broad EM from this driver are likely spent.

Chart 14: Weaker GDP growth has exerted downward pressure on inflation



Source: Thomson Datastream, Schroders Economics Group. 20 September 2017. EM averages are GDP weighted.

Connected to the growth-inflation story is labour market tightness. Unfortunately a Phillips Curve analysis (linking inflation and unemployment) proves difficult in EM. The explanatory power of a Phillips Curve relationship since the financial crisis for a given EM economy is generally very weak, in part because EM economies tend to be small and open, such that headline inflation can be dominated by international effects. Even attempts to correct for this by focusing on core inflation make only modest improvements to the fit; we found correlations between unemployment and core inflation in excess of 20% in only four of seventeen economies. Often the relationship will run opposite to the direction implied by theory, with higher unemployment associated with higher inflation. This suggests structural problems with the economy or the presence of supply side shocks. Finally, data limitations prevent us from simply looking at the relationship between unemployment and wage growth; there typically is no wage data available for EM. We will simply note, therefore, that in most EM economies, unemployment has been falling as growth has strengthened (though there is typically a lag). Therefore, it is hard to imagine that the labour market will be exerting greater disinflationary pressure in the next 12 months than it has already, with the possible exceptions of Turkey, South Africa and Brazil.

Seas of wheat, oceans of oil: The impact of commodity prices

Above we touched briefly on the fact that many EM economies are small and open in nature, and so more readily buffeted by international winds, in contrast to somewhere like the US. Two prominent international inflation drivers are oil and agricultural commodity prices, which between them (and their impact on food and energy prices) can easily impact over half the basket of goods used to calculate inflation in emerging markets. To take an extreme example, food is about two thirds of the Indian CPI basket. On the international stage, agricultural commodities experienced a deflation trend from late 2012 to early 2016, with the Goldman Sachs index for agricultural commodities falling 47% from September 2012 to February 2016. Oil's collapse was more rapid, with Brent crude prices dropping from over \$100 per barrel in August 2014 to \$50 per barrel in January 2015 and bottoming at around \$30 a year later. During 2015, this meant oil prices were falling between 30% and 50% year-on-year, with falls of around 10–20% year-on-year for

Growth is now accelerating and labour markets tightening

The impact of dramatic moves in commodity prices can not be ignored

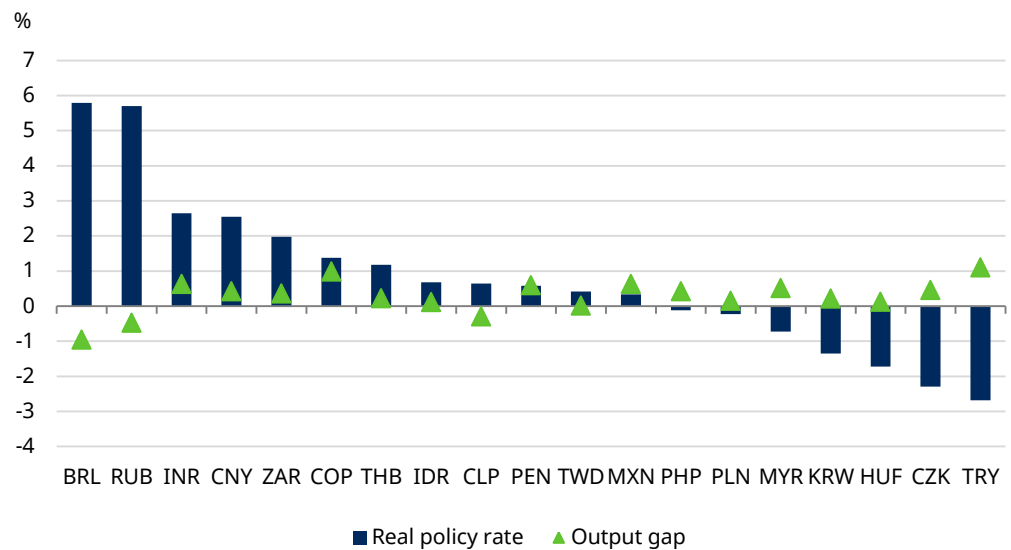
much of the year in agricultural commodities. The pass-through to EM economies varies thanks to differing reliance on imports, the use of price controls and subsidies, and so on, but this was undoubtedly a positive overall in containing domestic price inflation. Again, as with our other tailwinds, the effect looks to be fading, if not already exhausted. Oil prices have been climbing in year-on-year terms this year, and agricultural prices look fairly trendless, though posting some declines in the second half of 2017. We are not commodity experts, and hold no particular view on the outlook for commodities from here, but it does seem likely that the biggest windfalls have been reaped.

In the aggregate then, we are led to conclude that the disinflationary tide is receding. This is not to say that every single EM economy will see inflation rise from here. As should be evident from chart 12, there are great differences between regions. As an example, the ongoing strength in oil prices may mean inflationary pressures for many economies, but for Russia and other oil exporters, the associated currency strength will actually see further disinflationary effects. To take another differentiating factor, food prices may be influenced by international drivers but they can also be greatly dictated by domestic weather conditions; the strength of the Indian monsoon is often a deciding factor for food and hence headline inflation in the second half of the year. The message to investors then is one of differentiation; we must look at domestic factors for hints on inflation, rather than being able to rely on broader aggregate drivers, as for the past two years.

Policy and investment implications

On the topic of investment, we should discuss briefly why inflation matters. After all, as foreign investors we are not impacted by the cost of living in another economy. However, inflation matters in part because it is a key determinant of the real interest rate, and so affects how easy or tight monetary conditions are, and the scope for central bank action. This in turn can move both the equity and bond markets. Chart 15 shows the real policy rate across EM as of August 2017. It is evident that policy is much tighter in some economies than others, with Brazil and Russia heading the list, and Turkey running the loosest policy of any major EM economy.

Chart 15: Real policy rates and room for manoeuvre in EM



Source: Thomson Datastream, Schroders Economics Group. 27 September 2017. Real policy rate calculated as policy rate less CPI.

Greater differentiation will be needed by market and asset class as the trend comes to an end

Given our view that the disinflationary trend has largely run its course, the expectation must be that from here real policy rates will hold steady or fall, absent central bank action. In some cases, this may not be such a problem. Based on the output gap, the central banks of Brazil and Russia in particular might be quite happy for the policy stance to ease further. In Turkey, meanwhile, the economy is already above trend and the policy stance is very loose. Admittedly this has not always stopped Turkey easing in the past, but investors should be alert to the risks posed by an overheating economy.

Overall then, the disinflationary trend in EM and the rate cutting cycles which accompanied it seem to have largely come to an end. With inflation stabilising and likely accelerating from here, most central banks will find themselves unable to ease further. There will be some exceptions; countries with high real yields could still cut, and in some cases inflation could fall further on idiosyncratic domestic drivers. Equities should still benefit, for the most part, from the stronger growth environment that lower real yields facilitate, while stronger inflation can be of some benefit to earnings. EM debt, on the other hand, will become more of a carry story as the prospect of further yield reductions recedes.

Schroder Economics Group: Views at a glance

Macro summary – October 2017

Key points

Baseline

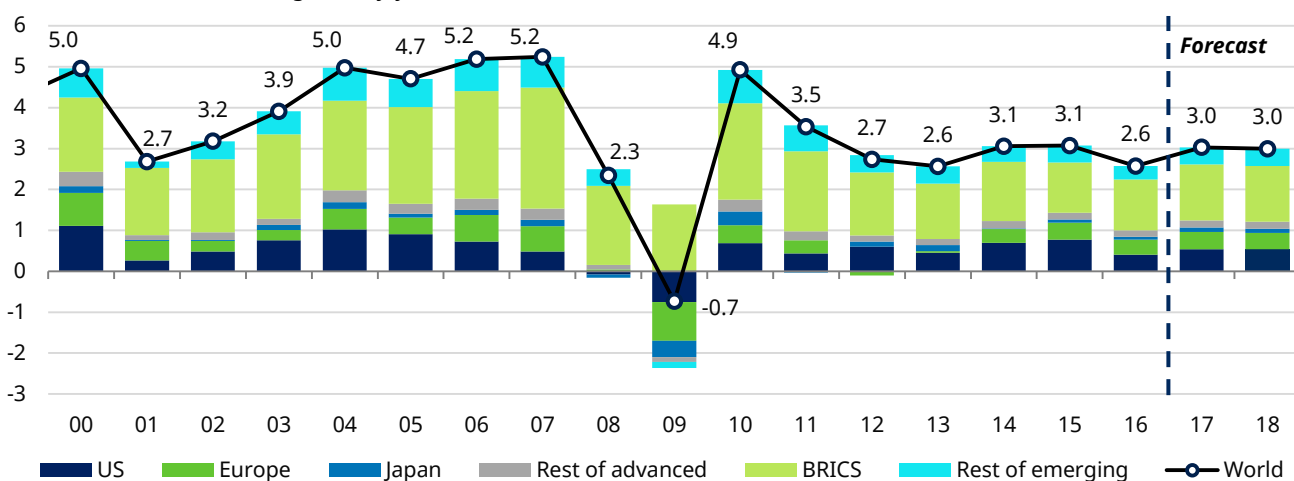
- We continue to forecast global growth at 3.0% this year after 2.6% in 2016, but have trimmed our inflation forecast to 2.3% from 2.4%. The combination of steady growth and low inflation means we remain in a goldilocks environment where activity is neither too hot nor too cold to cause a significant acceleration in inflation.
- US growth is forecast at 2% this year and next with small downgrade to 2018 to reflect reduced fiscal stimulus. Having raised rates to 1.25%, we expect the Fed to begin to trim its balance sheet in Q4 this year. Alongside subdued inflation this results in a pause in the tightening cycle until mid- 2018. Steady growth and a modest rise in core inflation then allow the Fed to raise rates to 2% by end 2018.
- UK to slow in 2017 to 1.6%. Inflation is set to rise sharply due to the fall in the pound, which will reduce disposable income of households and encourage cuts in spending. Investment is already weak, and has started to impact employment. The BoE is expected to raise rates in November, but this will be a one-off rather than a start of a tightening cycle. Growth remains below trend in 2018 causing unemployment to rise.
- Eurozone growth to pick up in 2017 to 2.1% following robust surveys and an easing in political uncertainty. The ECB should keep interest rates on hold, but will taper QE in 2018.
- Japanese growth forecast at 1.6% in 2017 and inflation at 0.5% supported by looser fiscal policy and a weaker yen. No further rate cuts from the BoJ, but with inflation below target more QE is expected as the central bank targets zero yield for the 10 year government bond.
- Emerging economies upgraded to 4.8% 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 skewed towards deflation on fears of secular stagnation, China credit crisis (hard landing) or a spike in bond yields. Stagflationary risks increase with introduction of US-China trade war. Reflationary risks stem from more aggressive Trump policy on fiscal expansion.

Chart: World GDP forecast

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



Source: Schroders Economics Group, 10 August 2017. 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
World	100	2.6	3.0	(3.0)	3.1	3.0	(3.0)	3.1
Advanced*	62.8	1.6	2.0	↑ (1.9)	2.1	1.9	↓ (2.0)	2.0
US	27.1	1.5	2.0	(2.0)	2.2	2.0	↓ (2.2)	2.4
Eurozone	17.4	1.7	2.1	↑ (1.8)	2.1	1.9	↑ (1.8)	1.8
Germany	5.1	1.8	2.1	↑ (1.8)	2.0	2.0	↑ (1.9)	1.9
UK	3.8	1.8	1.6	(1.6)	1.6	1.6	(1.6)	1.4
Japan	7.2	1.0	1.6	(1.6)	1.6	1.5	↑ (1.3)	1.2
Total Emerging**	37.2	4.2	4.8	↑ (4.7)	4.9	4.8	↑ (4.7)	4.9
BRICs	24.2	5.2	5.6	↑ (5.5)	5.7	5.6	↑ (5.5)	5.7
China	16.4	6.7	6.7	↑ (6.6)	6.8	6.3	↑ (6.2)	6.4

Inflation CPI

y/y%	Wt (%)	2016	2017	Prev.	Consensus	2018	Prev.	Consensus
World	100	2.0	2.3	↓ (2.4)	2.2	2.2	↓ (2.3)	2.2
Advanced*	62.8	0.7	1.6	↓ (1.8)	1.7	1.4	(1.4)	1.6
US	27.1	1.3	1.9	↓ (2.0)	2.0	1.9	(1.9)	1.9
Eurozone	17.4	0.2	1.5	↓ (1.6)	1.5	1.1	(1.1)	1.3
Germany	5.1	0.4	1.7	↓ (1.9)	1.7	1.5	↑ (1.3)	1.6
UK	3.8	0.7	2.6	↓ (2.8)	2.7	2.3	↑ (2.2)	2.6
Japan	7.2	-0.1	0.5	↓ (0.7)	0.5	1.0	↓ (1.1)	0.8
Total Emerging**	37.2	4.1	3.3	↓ (3.5)	3.2	3.7	↓ (3.8)	3.2
BRICs	24.2	3.5	2.4	↓ (2.7)	2.2	3.0	↓ (3.1)	2.7
China	16.4	2.0	1.8	↓ (2.0)	1.6	2.3	(2.3)	1.9

Interest rates

% (Month of Dec)	Current	2016	2017	Prev.	Market	2018	Prev.	Market
US	1.25	0.75	1.25	↓ (1.50)	1.49	2.00	(2.00)	1.81
UK	0.25	0.25	0.50	↑ (0.25)	0.53	0.50	↑ (0.25)	0.86
Eurozone (Refi)	0.00	0.00	0.00	(0.00)	-0.33	0.00	(0.00)	-0.22
Eurozone (Depo)	-0.40	-0.40	-0.40	(-0.40)	-0.33	-0.40	(-0.40)	-0.22
Japan	-0.10	-0.10	-0.10	(-0.10)	0.06	-0.10	(-0.10)	0.06
China	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.
US QE (\$Bn)	4463	4451	4433	↓ (4450)	4013	↓ (4050)
EZ QE (€Bn)	1856	1481	2216	↓ (2236)	2546	↓ (2566)
UK QE (£Bn)	435	423	444	(444)	445	(445)
JP QE (¥Tn)	502	476	545	↓ (553)	645	↓ (653)
China RRR (%)	17.00	17.00	17.00	↑ 16.50	16.00	16.00

Key variables

FX (Month of Dec)	Current	2016	2017	Prev.	Y/Y(%)	2018	Prev.	Y/Y(%)
USD/GBP	1.35	1.24	1.32	(1.32)	6.8	1.28	↓ (1.30)	-3.0
USD/EUR	1.19	1.05	1.19	↑ (1.15)	12.8	1.15	↑ (1.12)	-3.4
JPY/USD	111.8	116.6	110	↑ (108)	-5.7	112	↑ (110)	1.8
GBP/EUR	0.88	0.85	0.90	↑ (0.87)	5.6	0.90	↑ (0.86)	-0.3
RMB/USD	6.62	6.95	6.90	↓ (7.05)	-0.7	7.05	↓ (7.40)	2.2
Commodities (over year)								
Brent Crude	58.5	45.9	51.6	↓ (52.1)	12.5	52.5	↑ (51.8)	1.7

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

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

Market data as at 25/09/2017

Previous forecast refers to May 2017, except for BoE forecast, which was updated in September.

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

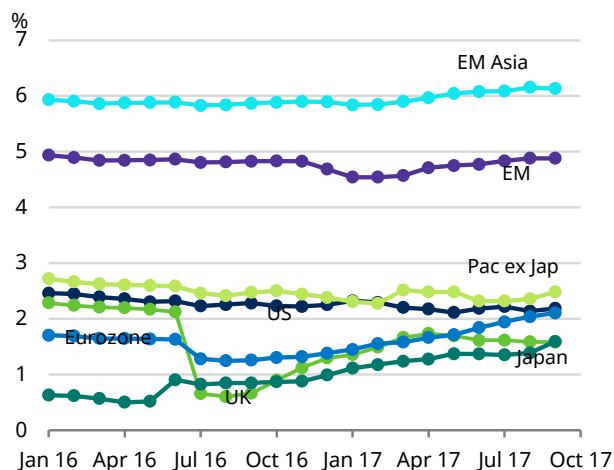
** **Emerging markets:** Argentina, Brazil, Chile, Colombia, Mexico, Peru, China, India, Indonesia, Malaysia, Philippines, South Korea, Taiwan, Thailand, South Africa, Russia, Czech Rep., Hungary, Poland, Romania, Turkey, Ukraine, Bulgaria, Croatia, Latvia, Lithuania.

Updated forecast charts – Consensus Economics

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

Chart A: GDP consensus forecasts

2017



2018

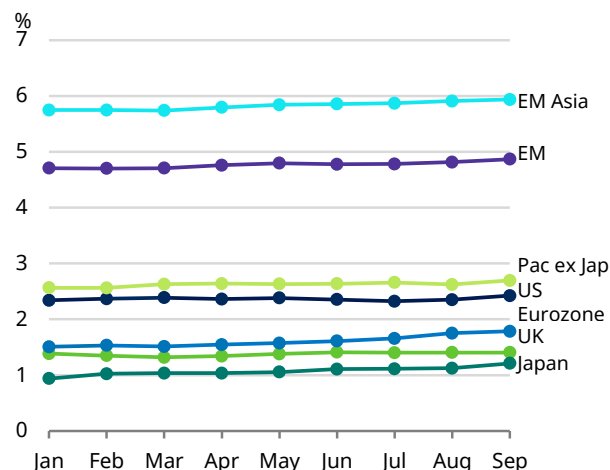
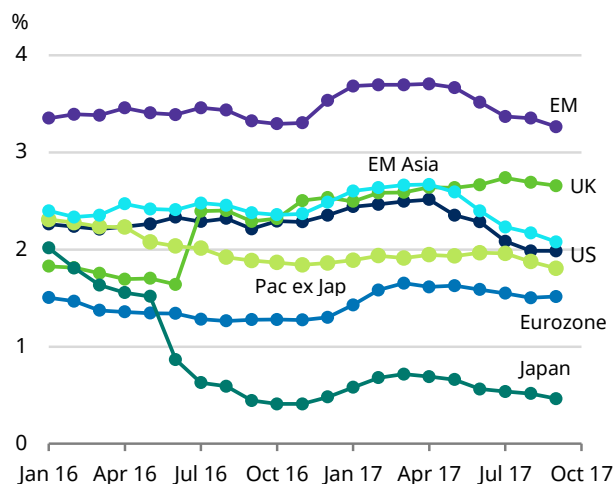
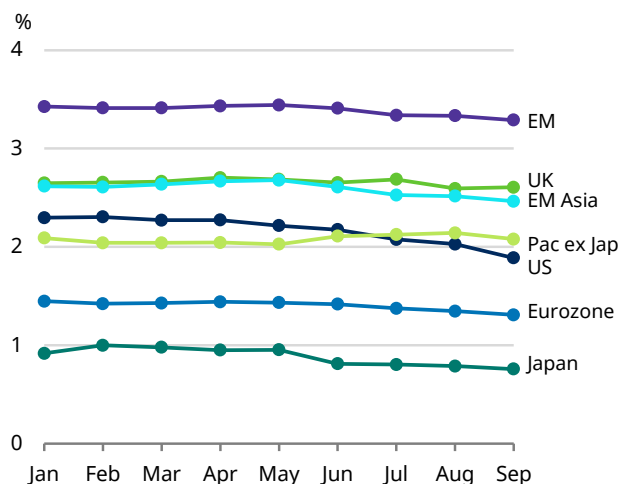


Chart B: Inflation consensus forecasts

2017



2018



Source: Consensus Economics (September 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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