BTMU Economic Brief

# UK – Import price effect to fade but inflation likely to stay above target

**HENRY COOK**
**ECONOMIC RESEARCH OFFICE | LONDON**
**T: +44-(0)20-7577-1591**
**E: henry.cook@uk.mufg.jp**

**19 FEBRUARY 2018**

**The Bank of Tokyo-Mitsubishi UFJ, Ltd.**
A member of MUFG, a global financial group

## 1. Introduction

Consumer prices index (CPI) inflation in the UK reached 3.1% YoY in November 2017. This is more than 1 percentage point above the 2% target rate of the Bank of England (BoE) which meant that Governor Carney was obliged to write an open letter to the chancellor explaining the reasons for the overshoot. With the output gap roughly zero, Carney put emphasis on the effect of Brexit, explaining that "sustained above-target inflation remains almost entirely due to the effects of higher import prices that resulted from the depreciation of sterling following the vote to leave the European Union." Indeed, the rise in UK inflation has been one of the most obvious effects of the vote to leave the EU on 23 June 2016. The subsequent fall in sterling meant that import prices rose sharply, which fed through to the Producer Price Index (PPI) and then the CPI.

It is quite possible that it may be the only time Carney has to write a letter, though. CPI inflation slipped back from 3.1% YoY in November 2017 to 3.0% in the following two months. The effect of the weaker exchange rate on consumer price inflation may have already peaked.

However, we suspect that the consequences will continue to be felt for some time. The complete pass-through from a currency shock to the price level typically takes up to three years. In this case, it may even be slower – firms had good reason to hedge ahead of the shock which would have delayed the response. There is also evidence that companies may have reduced their profit margins temporarily in response to higher import prices, but will probably seek to re-establish margins going forward.

Consumers may be better placed to absorb higher prices. Real wage growth has turned negative following the post-referendum uptick in inflation. We expect that this will change as nominal wage growth recovers to around 3% this year. Wage negotiations will be conducted against a tight labour market and on the back of 2.7% inflation in 2017, which should result in higher settlements. This will feed back into inflation and mean that prices will continue to feel the result of the Brexit devaluation through this channel, even as the currency effect wanes.

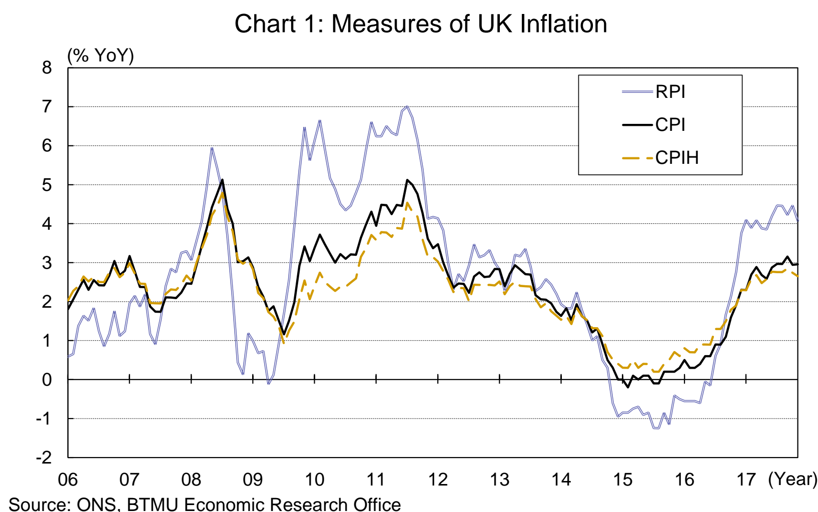


MUFG

## 2. Weaker sterling driving inflation

The most important driver of this higher UK inflation over the last 18 months has been the exchange rate. Since the EU referendum result there has been a sustained devaluation in sterling of over 10% in trade-weighted terms. As Chart 1 shows, UK inflation (in all three of the main measures – see Box 1) has surged since mid-2016 as a result. There has been a sharp uptick in CPI inflation from 0.3% YoY in May 2016 to 3.1% in November 2017. This slipped back in December 2017 to 3.0%, and held steady in January 2018. Nonetheless, CPI inflation averaged 2.7% in 2017 and remains above the BOE's target of 2%, despite the economy growing at more or less its potential rate.

Chart 1: Measures of UK Inflation




Source: ONS, BTMU Economic Research Office

### Box 1: Measures of UK inflation

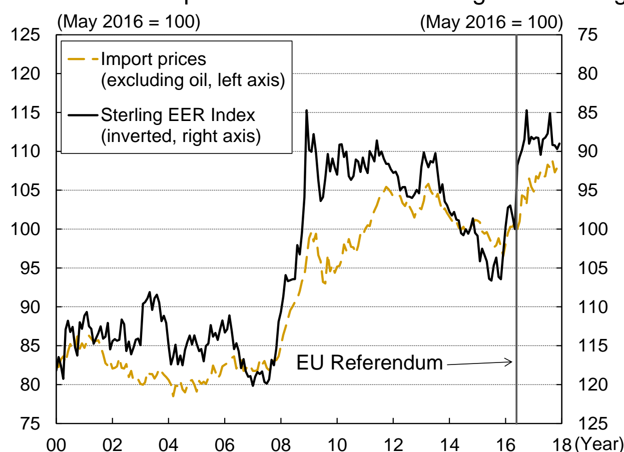
Chart 1 shows three UK measures of inflation from 2006. The retail prices index (RPI) was once the official measure of UK inflation. The UK Office for National Statistics (ONS) changed this to the consumer prices index (CPI) in 2003 due to flaws in the way the RPI is calculated. The ONS still publishes monthly figures as the RPI is still used in some index-linked gilts and for government spending commitments. In March 2017, the ONS changed its headline statistic again, from the CPI to the consumer prices index including owner occupiers' housing costs (CPIH). Otherwise identical, this new measure includes owner-occupier implicit expenditure (which takes a weight of around 17% in the overall index). It is accepted to be a more comprehensive measure of prices. However, for now, the BoE still uses CPI inflation as its target measure. For this reason, most commentators still focus on the CPI when discussing UK inflation. In this report we will take the same approach – all inflation figures refer to CPI inflation, unless stated otherwise.



MUFG

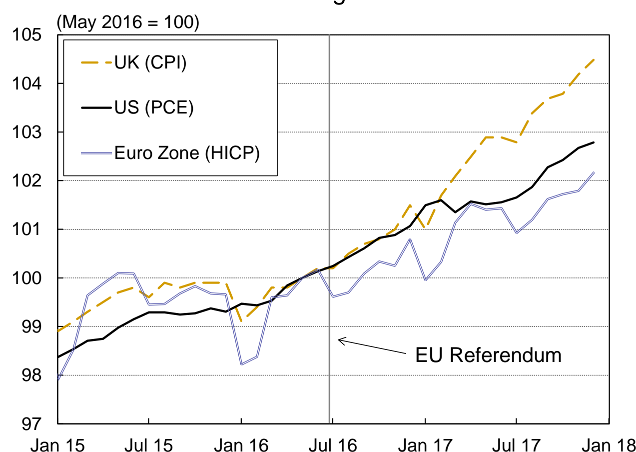
A weaker pound makes imported goods relatively more expensive for UK consumers (Chart 2). UK inflation is now less synchronised with its peers. Since the vote, the price level in the UK has clearly diverged with that in the US and the euro zone (Chart 3).

Chart 2: UK Import Prices and Trade-weighted Sterling




Source: ONS, BoE, BTMU Economic Research Office

Chart 3: Price Level Divergence Since Brexit Vote

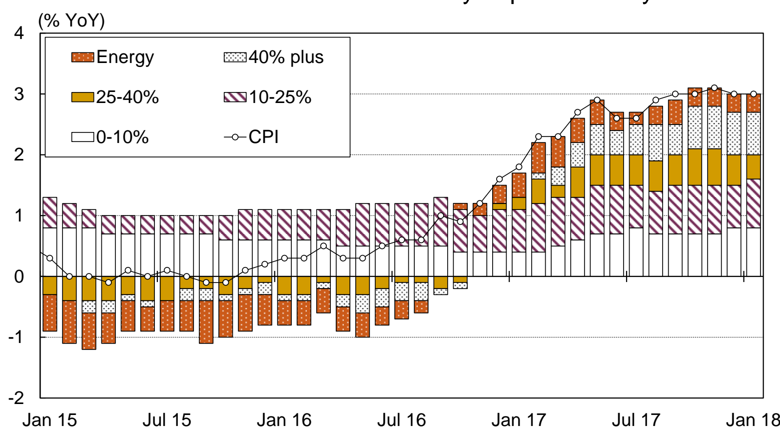



Source: ONS, Eurostat, BEA, BTMU Economic Research Office

Given that inflation has slipped back since November, does this mean that the peak has been passed? First, it is important to disentangle the effect of the weaker pound from other inflation drivers. Part of the higher inflation is due to higher oil prices. This has caused energy to contribute positively to CPI inflation since October 2016.

But from spring 2017 the effect of higher import prices on CPI inflation is apparent (Chart 4). By component, import intensive items such as new cars and clothing (which have relatively high weights in the CPI) are experiencing inflation above 3%.

Chart 4: Contributions to CPI by Import Intensity

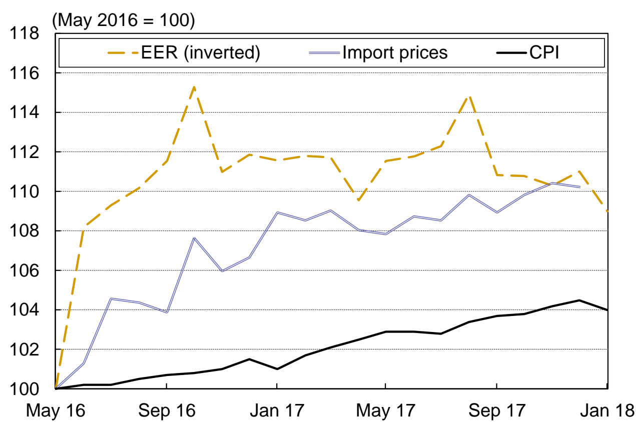



Note: The contribution figures are rounded to 1 d.p. and may not sum exactly to the % YoY rate.
Source: ONS, BTMU Economic Research Office

The currency effect on the YoY inflation numbers will start to unwind over the coming months. Nonetheless, the effect of the Brexit devaluation may still continue to affect inflation over the medium term. The BoE has published useful work on exchange rate pass-through in the November 2015 and 2017 Inflation Reports. It judges that 60% of a change in world export prices denominated in sterling is reflected in UK import prices – and “changes in import prices have tended to be passed on to consumer prices in aggregate broadly in line with the share of

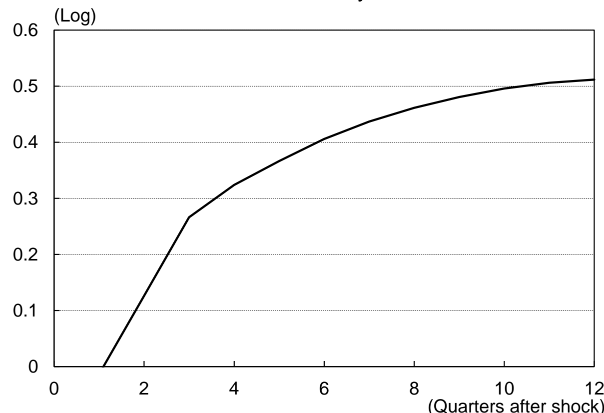
imported inputs in the CPI basket — around 30%." Using this rule of thumb, Chart 5 suggests that the depreciation may have already fully passed through to both the import price index and the CPI.

Chart 5: Effective Exchange Rate, Import and Consumer Price Indices




Source: BoE, ONS, BTMU Economic Research Office

Chart 6: Accumulated Impulse Response in Price Level to 1 S.D. Currency Shock



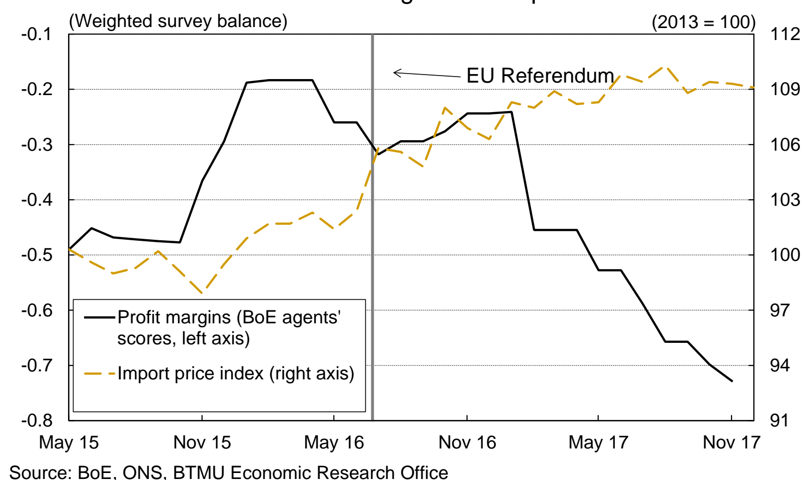

Source: ECB (Hahn 2003), BTMU Economic Research Office

The BoE also wrote, though, that "the effect of the past fall in sterling on non-energy imported cost growth is expected to diminish only gradually". We agree that higher import prices are likely to continue to contribute positively to the price level throughout 2018 and beyond, but to a diminishing extent. We use a simple VAR model (based on work by the ECB's Hahn in a 2003 working paper) to simulate an exchange rate shock in the UK.[1] The impulse responses in Chart 6 suggest that the price level increases fairly swiftly in the first year after an FX shock, and then continues to increase more gradually for two further years before the effect fades.

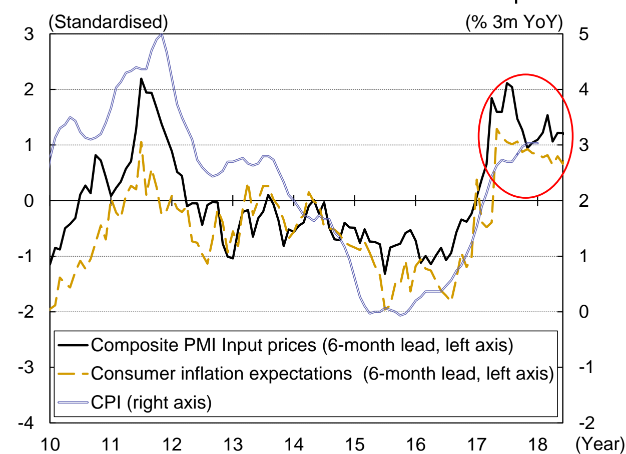
[1] The input variables are the oil price, interest rates, the output gap, the exchange rate, non-oil import prices, producer prices and the CPI. See 'Pass-through of external shocks to euro area inflation' https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp243.pdf?c6044208c4776b265f7c0ad5038de7e7

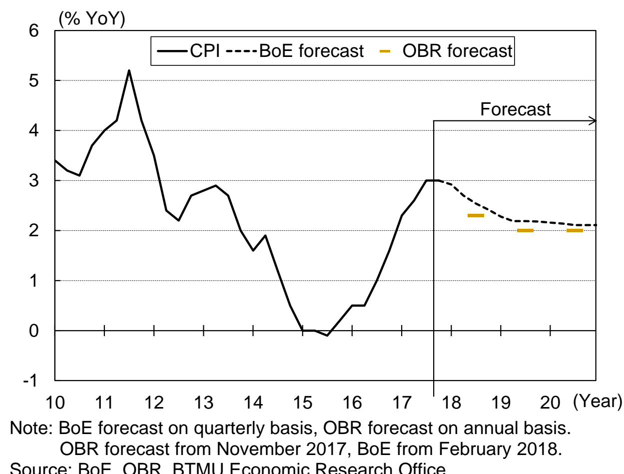
There are reasons to support the three-year time frame in this instance. The Brexit result took many by surprise, but the referendum did not come out of the blue. The BoE wrote in the November 2017 Inflation Report that firms may have hedged their sterling exposures ahead of the vote for longer periods than usual. After feeling the effect of weaker sterling following the result, more may have hedged against further changes as well. The result is that the pass-through to inflation may take longer than during other currency depreciations.

Furthermore, we note surveys suggest that many firms have responded to higher costs by reducing their profit margins rather than passing them on to consumers, perhaps to maintain market shares. Chart 7 shows the BoE's agents' scores for profit margins (both services and manufacturing, weighted by gross value added (GVA) shares). Participants have reported lower profit margins since the referendum as import prices have increased. This should change. Sellers will want to return margins to pre-referendum levels and will look to increase prices if possible. This suggests domestic inflationary pressures are likely to grow over the coming years.




In terms of the near term outlook, consumer inflation expectations and PMI input prices, which are reasonable leading indicators for inflation, point to stabilising price pressures over the next six months (Chart 8). This seems in line with the BoE and Office for Budget Responsibility (OBR)'s expectations for inflation to decline fairly swiftly from the peak of 3.1% in November as oil price effects fade and the currency effect is washed out of the YoY numbers. Then, their forecast (Chart 9) is for a gentler decline out to 2020 to the 2% target, or just above it.




This path looks appropriate to our minds (note our own forecast is shown at the end of this report). The output gap is likely to remain more or less closed over the next few years as the UK is both boosted by the global upswing but held back by Brexit uncertainty. However, as we detail in the next section, there may be additional domestic cost pressures which mean inflation may take longer to get back down to the BoE target of 2%.

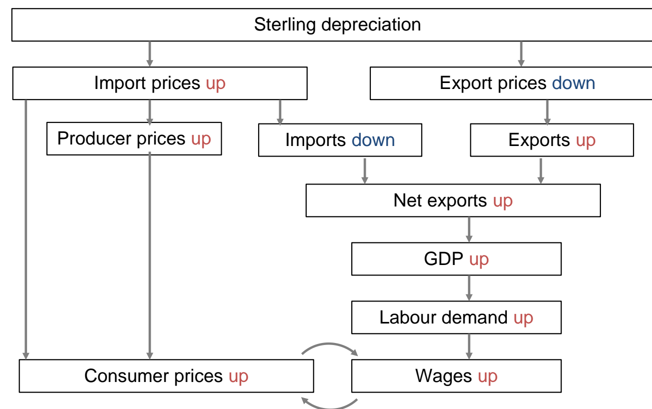
## 3. Wages may rise in real terms

On top of the direct feed through to CPI inflation from higher import prices, a depreciation in sterling may have indirect effects. Diagram 1 shows how higher inflation in the recent past can prompt higher wage settlements, which in turn feed back into consumer prices. This is a plausible channel – the UK's labour market is tight. The unemployment rate was 4.3% in


MUFG

November 2017, the lowest rate since 1975, and down from a peak of 8.5% in 2011. This is more or less in line with the BoE's long-run NAIRU (non-accelerating inflation rate of unemployment) estimate (4.25%, revised down from 5% a year ago).

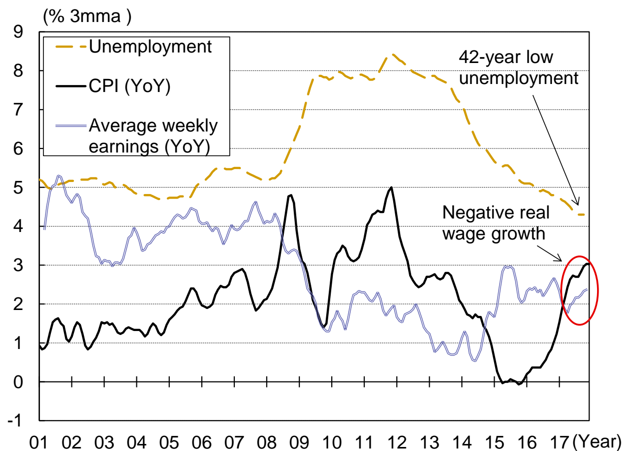
Diagram 1: Direct and Indirect Effects of a Depreciation in Sterling




Source: ECB, BTMU Economic Research Office

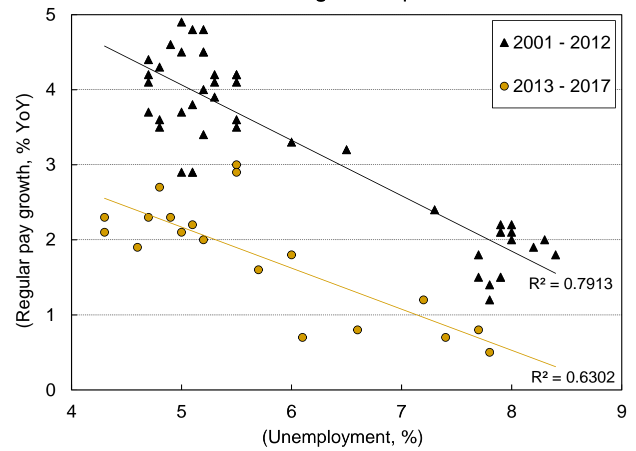
Pay growth has not been reflecting this buoyant labour market. Incomes Data Research, a research organisation, report that private sector pay settlements averaged just 2.2% in 2017. There may be some momentum into the new year; the most recent official data show that nominal wages for the whole economy grew by 2.4% in November. But, in real terms, wage growth has been negative since February 2017 (Chart 10).

Chart 10: UK Labour Market Indicators and Inflation




Source: ONS, BTMU Economic Research Office

Chart 11: UK Wage Phillips Curves




Source: ONS, BTMU Economic Research Office

Sluggish pay growth is probably a hangover from the Global Financial Crisis (GFC), and there are reasons to believe we may see stronger figures in 2018. Workers have been hesitant to ask for pay rises, and even more cautious to change firm (which can be the best way to secure higher pay increases). This is one reason why the traditional Phillips curve relationship between wage growth and unemployment is flatter and has shifted downwards over the last four years (Chart 11).



MUFG

As the UK economy records its 20th successive quarter of positive QoQ GDP growth (an above-expectations 0.5% in Q4 2017), we are optimistic about wages in 2018-2019:

- Wage settlements will be conducted on the back of 2.7% annual average inflation in 2017. CPI inflation averaged just 0.6% YoY in 2016, and 0.1% in 2015, which almost certainly contributed to low settlements and wage growth in the subsequent years

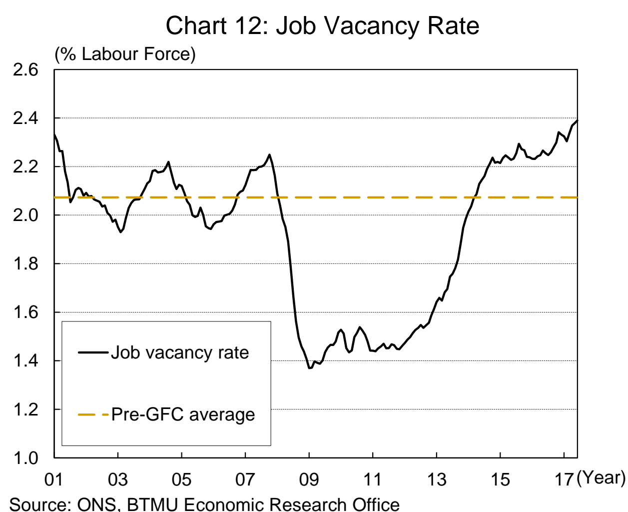
- The UK minimum wage is set to increase by 4.4% in April 2018 for those aged over 25 (and an average of 5% for those between 18 and 24). This will directly affect around 1.3% of all workers – but there will be indirect effects as the wedge between minimum wage earners and those earning slightly more is usually maintained after changes to the floor. The government's longer-term aim is for the minimum wage to continue to rise until it reaches 60% of median earnings by 2020.

For these reasons, 3% growth in nominal wages in 2018 (with risks tilted slightly upwards) seems likely to our minds. This is in line with the expectations in the BoE's Q1 2018 Agents' survey. We note, though, that gains may be fragmented by sector. Recently, there have been very high increases in construction pay, in particular, but public sector pay awards will remain low (despite the government scrapping the 1% cap on increases).

The unemployment rate may well have reached its low (the Consensus expectation is for it to move slightly higher to 4.4% in 2018, and 4.5% in 2019). A move towards 4% cannot be ruled out, however.

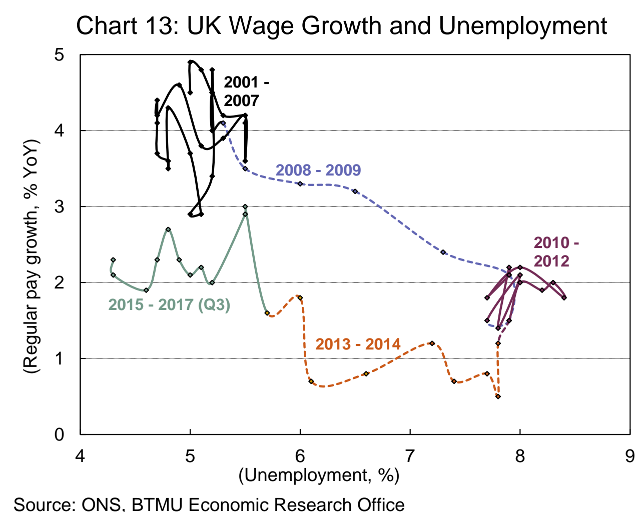
Lastly, Chart 12 shows how the vacancy rate (vacancies as a percentage of the labour force) has shifted further above the pre-GFC average. We expect that companies are also responding to uncertainty over the UK's Brexit negotiations by leaving vacancies open for longer. This may suggest that the UK's unemployment rate may even improve further once the future relationship with the EU becomes clear. Chart 13 shows the path of wage growth and unemployment, using the same numbers from the Phillips curve in Chart 11, and highlights how low unemployment is at the moment. An even lower rate would pose another upside risk to inflation.

Chart 12: Job Vacancy Rate




Source: ONS, BTMU Economic Research Office

Chart 13: UK Wage Growth and Unemployment




Source: ONS, BTMU Economic Research Office



MUFG

## 4. Other factors affecting the inflation outlook

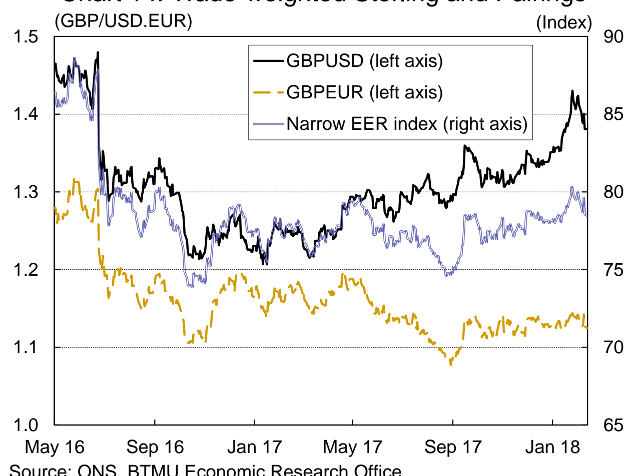
### (1) Future FX developments

Of course, the main driver of higher prices in the first place – the exchange rate – could easily work the other way. The pound has made something of a comeback. It has appreciated by 12% against the dollar since the start of 2017, to 1.38, as more information about the future relationship with the EU is combined with a weaker US dollar.

We note, though, that what the pound does against the euro is more important for the trade-weighted index (the euro area has a weight of 47.6% in the BoE's narrow measure, while the US is just 19.4%). This explains why sterling has not really budged in trade-weighted terms (Chart 14). The euro is also stronger against the dollar as economic activity remains buoyant across the channel and the ECB steps away from ultra-easy monetary policy.

Table 1 shows our FX analysis team's forecasts for sterling over 2018. While we expect the pound to approach 1.48 against the dollar by Q4, we see only slight appreciation against the euro. This would mean that sterling remains steady in trade-weighted terms, and import prices look unlikely to fall meaningfully and drag on inflation. Also, as we noted earlier, many firms have hedged their sterling exposures after seeing the large fall and volatility since the vote. This could mean that any effect of a stronger pound would take longer to filter through to prices.

Chart 14: Trade-weighted Sterling and Pairings



Source: ONS, BTMU Economic Research Office

Table 1: Pound Sterling Forecasts

| | Spot close 31.01.2018 | Q1 2018 | Q2 2018 | Q3 2018 | Q4 2018 |
|---|---|---|---|---|---|
| EUR/GBP | 0.8761 | 0.870 | 0.870 | 0.865 | 0.860 |
| GBP/USD | 1.4201 | 1.402 | 1.425 | 1.445 | 1.477 |
| GBP/JPY | 155.17 | 151.4 | 152.5 | 153.2 | 156.5 |

Source: Bloomberg, BTMU Global Markets Research

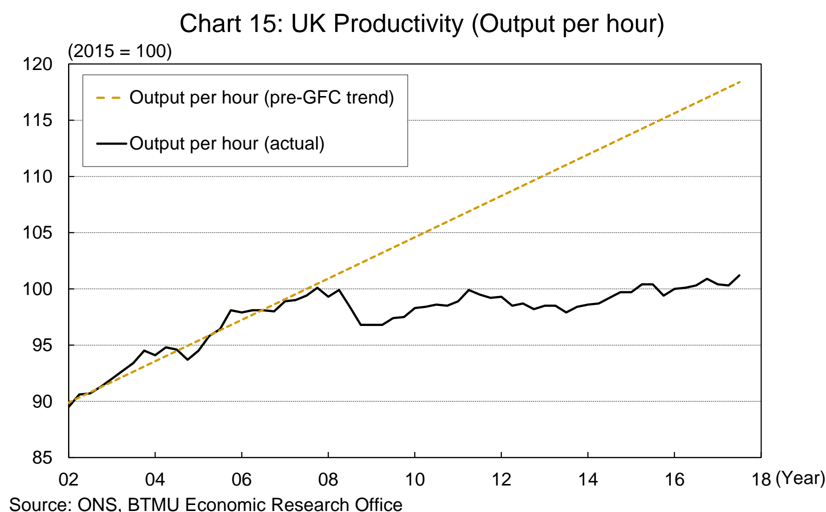
### (2) Productivity

High productivity growth gives the economy more scope to match demand without generating inflation. Since the GFC, the UK has had anaemic figures (Chart 15). However, as we wrote in our November report on the Autumn Budget, we suspect that the UK productivity crisis may be exaggerated. [2] Since then, we have had a solid increase in output per hour in Q3 2017 (+0.9% YoY). Furthermore, the ONS has admitted it failed to properly measure efficiency improvements in the telecoms sector (which accounts for around 2% of GDP). We also highlight a recent speech by Silvana Tenreyro, BoE external member, which was bullish on the outlook for UK productivity, predicting that global growth should lead to improvements in the manufacturing and finance sectors.[3] If she is right, and the Q3 2017 improvement marks a



MUFG

turning point, then the UK economy will have more slack – and perhaps experience lower inflation.




[2] http://www.bk.mufg.jp/report/ecoeu2017e/BTMU-Economic-Brief-UK20171214.pdf

[3] https://www.bankofengland.co.uk/-/media/boe/files/speech/2018/the-fall-in-productivity-growth-causes-and-implications.pdf ?la=en&hash=FC604765727E702F0DEB4DE5EE779F87DD7E9EAD

**(3) Oil prices**

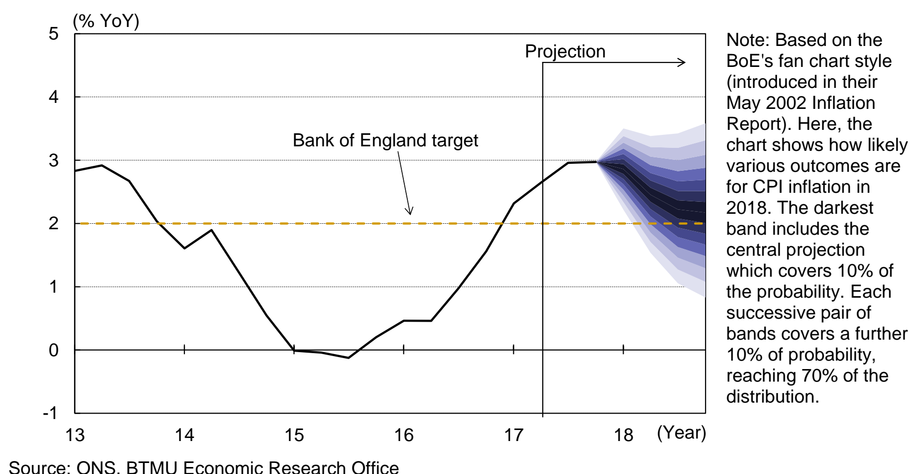
Oil prices have steadily increased over the past seven months. WTI crude traded at around $46 in June 2017, but is now around $60. This is feeding through to pump prices with petrol rising 0.7% MoM in December and then 0.9% MoM in January. We think this is transitory. Our current forecast, from December last year, is for WTI to average between US$51-US$55 per barrel in 2018 as US shale oil production is expected to expand at a faster pace than in 2017. However, this would still be above the prices seen in most of 2017 and, if oil prices decline as we expect in 2018, then energy will first become a drag on inflation in Q4 2018.

## 5. Inflation forecast and conclusion

Our forecast for UK inflation, based on an expanded version of the model used in Chart 6, is shown in the style of a BoE fan chart (Chart 16). Our assumptions for 2018 are: nominal wage growth to average 3%, unemployment to average 4.3%, sterling to appreciate only slightly in trade-weighted terms, WTI to average between US$51-US$55, and productivity to improve by 0.9% YoY.While we expect inflation to decline in Q2 2018 (once the effects of higher fuel prices fade), it is likely to remain stubbornly above target until the end of the year. We judge that risks are tilted upwards.

The development of consumer prices over 2018 will have clear implications for the BoE. It raised rates by 25bp in November last year. Future hikes are likely to be gradual, but we expect inflation will remain above target over the medium term which could add pressure for a speedier withdrawal of stimulus. And, after years of stubbornly low inflation in most developed economies, other major central banks will be watching closely to see how the Brexit-induced boost to CPI inflation affects UK inflation expectations and wage settlements.

Chart 16: UK CPI Inflation Forecast




Source: ONS, BTMU Economic Research Office

The Bank of Tokyo-Mitsubishi UFJ, Ltd. ("BTMU") is a limited liability stock company incorporated in Japan and registered in the Tokyo Legal Affairs Bureau (company no. 0100-01-008846). BTMU's head office is at 7-1 Marunouchi 2-Chome, Chiyoda-Ku, Tokyo 100-8388, Japan. BTMU's London branch is registered as a UK establishment in the UK register of companies (registered no. BR002013). BTMU is authorised and regulated by the Japanese Financial Services Agency. BTMU's London branch is authorised by the Prudential Regulation Authority (FCA/PRA no. 139189) and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of BTMU London branch's regulation by the Prudential Regulation Authority are available from us on request.

This report shall not be construed as solicitation to take any action such as purchasing/selling/investing in financial market products. In taking any action, each reader is requested to act on the basis of his or her own judgment. This report is based on information believed to be reliable, but we do not guarantee, and do not accept any liability whatsoever for, its accuracy and we accept no liability whatsoever for any loss or damage of any kind arising out of the use of all or any part of this report. The contents of the report may be revised without advance notice. Also, this report is a literary work protected by copyright. No part of this report may be reproduced in any form without express statement of its source.

The Bank of Tokyo-Mitsubishi UFJ, Ltd. retains copyright to this report and no part of this report may be reproduced or re-distributed without the written permission of The Bank of Tokyo-Mitsubishi UFJ, Ltd. The Bank of Tokyo-Mitsubishi UFJ, Ltd. expressly prohibits the re-distribution of this report to Retail Customers, via the internet or otherwise and The Bank of Tokyo-Mitsubishi UFJ, Ltd., its subsidiaries or affiliates accept no liability whatsoever o any third parties resulting from such re-distribution.