

THE WORLD ECONOMY

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World Overview

The world economy is estimated to have grown last year at its fastest pace since 2011. From 2011 global economic growth had been quite stable at or just below 3.5 per cent, but last year is estimated to have seen a pick-up to 3.7 per cent. With considerable momentum going into the New Year, we expect relatively strong growth to continue in 2018 and 2019. Importantly, the strengthening of growth has been widespread and the broad pattern of relatively strong growth is expected to

remain. A cumulative effect of monetary easing, together with the sustained growth over the previous years supporting confidence, may help to explain the stronger performance in 2017 and, in the absence of negative shocks, provide momentum during 2018, especially given the widespread strengthening of activity in 2017.

While forecasts inevitably focus on precise estimates (and on this basis our projection is for growth in 2018 at

Table I. Forecast summary

Percentage change

	Real GDP ^(a)												World trade ^(b)
	World	OECD	China	EU-28	Euro Area	USA	Japan	Germany	France	Italy	UK	Canada	
2014	3.6	2.2	7.3	1.8	1.4	2.6	0.3	1.9	1.0	0.2	3.1	2.9	3.9
2015	3.4	2.5	6.9	2.2	2.0	2.9	1.4	1.5	1.0	0.9	2.3	1.0	2.7
2016	3.2	1.8	6.7	1.9	1.8	1.5	0.9	1.9	1.1	1.1	1.9	1.4	2.6
2017	3.7	2.5	6.9	2.4	2.5	2.3	1.8	2.6	1.9	1.5	1.8	2.9	4.3
2018	3.9	2.5	6.6	2.1	2.2	2.6	1.3	2.4	1.9	1.4	1.9	2.7	5.4
2019	3.8	2.3	6.3	1.9	1.8	2.5	0.9	1.8	1.8	1.3	1.9	2.3	4.9
2008-13	3.3	0.8	9.1	0.0	-0.3	0.8	0.2	0.7	0.3	-1.5	0.3	1.4	3.2
2020-24	3.5	2.0	5.6	1.5	1.4	2.3	0.9	1.2	1.6	1.1	1.7	1.6	3.9

	Private consumption deflator									Interest rates ^(c)			Oil (\$ per barrel) ^(d)
	OECD	Euro Area	USA	Japan	Germany	France	Italy	UK	Canada	USA	Japan	Euro Area	
2014	1.6	0.5	1.5	2.0	0.9	0.1	0.3	1.9	1.9	0.3	0.1	0.2	99.6
2015	0.8	0.3	0.3	0.4	0.6	0.3	0.1	0.6	1.1	0.3	0.1	0.1	52.8
2016	1.1	0.3	1.2	-0.5	0.6	-0.1	0.0	1.4	0.9	0.5	-0.1	0.0	43.4
2017	2.1	1.4	1.7	0.0	1.7	0.9	1.1	2.1	1.3	1.1	-0.1	0.0	53.8
2018	2.4	1.6	2.4	0.8	1.8	1.4	1.1	2.4	2.0	1.8	-0.1	0.0	69.0
2019	2.3	1.6	2.2	1.1	1.7	1.4	1.6	2.3	1.7	2.4	-0.1	0.1	70.3
2008-13	1.8	1.5	1.7	-0.7	1.3	1.1	1.9	2.5	1.3	0.6	0.2	1.5	95.5
2020-24	2.3	1.7	2.3	1.4	1.9	1.5	1.6	2.3	2.0	3.4	0.3	1.2	72.6

Notes: Forecast produced using the NiGEM model. (a) GDP growth at market prices. Regional aggregates are based on PPP shares, 2011 reference year. (b) Trade in goods and services. (c) Central bank intervention rate, period average. (d) Average of Dubai and Brent spot prices.

*All questions and comments related to the forecast and its underlying assumptions should be addressed to Iana Liadze (i.liadze@niesr.ac.uk). We would like to thank Garry Young and Jagjit Chadha for helpful comments and Yanitsa Kazalova for compiling the database underlying the forecast. The forecast was completed on 26 January, 2018. Exchange rate, interest rates and equity price assumptions are based on information available to 16 January 2018. Unless otherwise specified, the source of all data reported in tables and figures is the NiGEM database and NIESR forecast baseline.

3.9 per cent to be a little stronger than in 2017), viewed on a longer time perspective the main headline is that global economy seems now to have shaken off much of the experience of the Great Recession. Average annual growth of 3.4 per cent per annum over the five years to 2016 was about 0.5 per cent per annum lower than that achieved in the ten years before 2007. The average rate of growth in the medium-term looks set to be lower than before the crisis. This is partly a consequence of the slower pace of growth in China as that economy makes its transition over the longer period. Into the medium term, anticipated trends in demographics, productivity and structural factors point to global growth running at around 3.5 per cent a year.

Despite stronger growth and the absorption of labour market slack, inflation remained muted in 2017. While we expect inflation to pick up a little in 2018 and 2019 in the advanced economies, the general picture remains one of 'lowflation' continuing. However, for the Advanced Economies the issue of whether continued growth and tighter labour markets (as reflected by lower unemployment) will lead to faster earnings growth and eventually higher inflationary pressure remains a key risk. In both the UK and US, where unemployment has fallen strongly, economists' expectations of rising wage pressures have so far proved incorrect. Aspects of this issue were examined in a previous *Review* article (Bell and Blanchflower, 2013) and are also discussed in the current *Review*. The next two years could see this issue tested.

However, even if growth and inflation rates are reasonably similar to those seen before the Great Recession, it is clear that other aspects of economic performance – government debt (and borrowing), central banks' balance sheets and interest rates – are not. While some major advanced economies (such as the USA, UK, and Canada) have reduced the extent of monetary policy accommodation or tightened monetary policy in 2017, in other economies policy has remained relatively unchanged (Euro Area and Japan). The forecast does not imply dramatic changes in policy interest rates in the next two years, rather the general path of interest rates is upward in a gradual manner. This provides some countervailing pressure to relatively strong near-term growth coming from momentum, confidence, US tax changes and the lagged effects of past supportive monetary policy. With little evidence that tighter labour markets are causing an inflationary boost, any interest rate adjustment is anticipated to be gradual, which helps to facilitate an overall economic environment of stable growth.

Recent developments and the baseline forecast

Our revised baseline forecast

The economic news in the final quarter of last year was a little better than in our November 2017 forecast for the world as a whole and we have updated our view on the global outlook. The headline picture is one in which global growth runs at close to 4 per cent a year in the next two years after 3.7 per cent in 2017. This is a slightly faster pace of growth than in the preceding five years. Into the medium term a slightly weaker pace of growth is anticipated, reflecting a narrowing of output gaps and demographic effects in the major western industrialised economies and a slightly slower pace of growth in China than over the past decade.

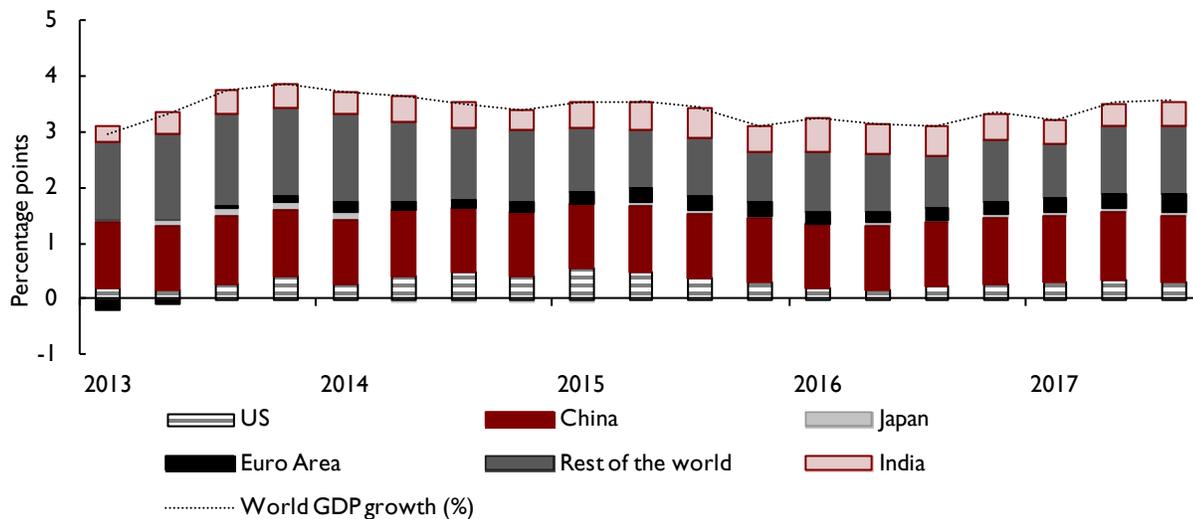
Our expectation is for inflation generally to be rising gradually, but in line with policy guidance. This, when combined with the narrowing of output gaps, is expected to lead to a gradual – but limited – upward drift in policy interest rates. It is possible that as part of any upward moves in rates, policymakers might adopt more of a risk-based approach and try to create some monetary policy space (in much the same way analysts talk of fiscal policy space) as a guard against possible negative economic shocks but this does not form part of the baseline forecast.

Recent economic developments

Recent data trends have broadly confirmed a picture of growth at a faster pace than anticipated a year ago. The IMF in its November *Outlook* raised its projection for global growth in 2017 and 2018 marginally, by 0.1 percentage point in each year to 3.6 per cent and 3.7 per cent respectively. In its January 2018 *Update* it raised each of these again, by 0.2 percentage points, and was then forecasting growth continuing at 3.9 per cent in 2019. These forecasts remain more positive than anticipated a year ago. Of equal importance is the character of growth, with the expansion being broad based if not exactly synchronised (figure 1).

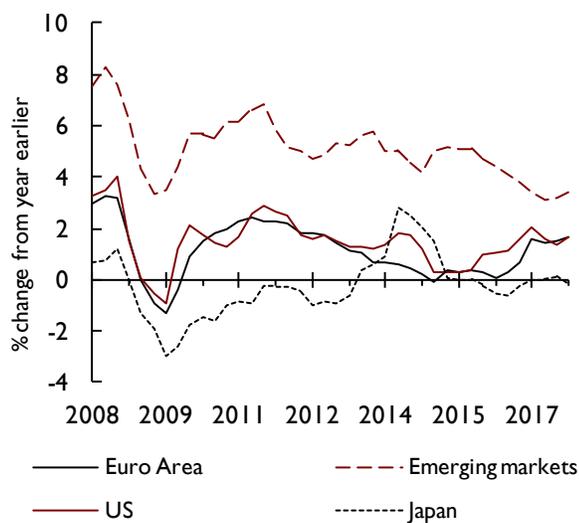
One notable feature of the outlook is the duration of the expansion of the US economy, which has now run for over eight years and is approaching the record 10-year expansion from March 1991 to March 2001. In the Euro Area the overall pace of growth (at 0.6 per cent quarter on quarter in 2017Q4 after 0.7 per cent in 2017Q3) is rapid compared to recent years but the divergence between countries within the Euro Area remains marked. Italy, for example, is growing by 1.5 per cent annually but Spain (3.1 per cent) and Germany

Figure 1. World GDP growth and its components



Source: NiGEM database and NIESR forecast.

Figure 2. Consumer price inflation



Source: NiGEM database and NIESR forecast.

Note: 2018 includes forecast. Consumer expenditure deflator is used for the US, Euro Area and Japan, CPI for emerging markets. Emerging markets – weighted average of Brazil, China, India, Indonesia, Mexico, Russia and Turkey.

(2.6 per cent) are showing stronger performance. Within the Euro Area inflation remains subdued and so the ECB has been able to continue its supportive actions. Among

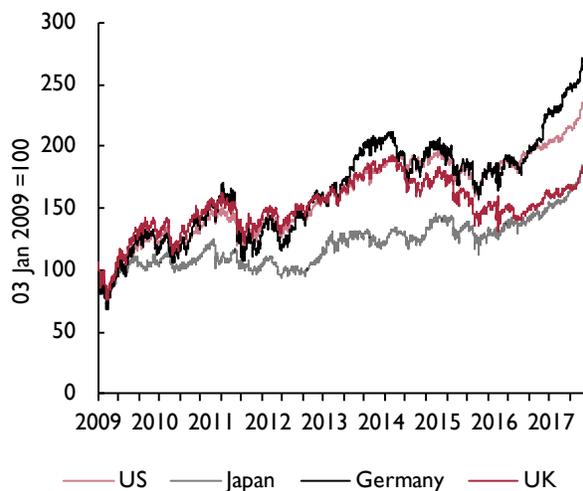
emerging economies, India and China are expected to continue to show growth well ahead of the global average.

The theme of continued subdued inflation is a widespread one, with a notable reduction in Brazil (from 8.7 per cent in 2016 to 3.5 per cent in 2017), although there are exceptions such as Mexico and Turkey (figure 2). The global outlook points in favour of continued relatively stable inflation but this outlook is not without risks. These come principally from the potential for tighter labour market conditions to raise domestic inflationary pressures and from the steady rise in oil prices that has been seen over the past two years. A commentary on the possible effects of oil price increases is provided in a separate section.

Monetary policy

In the advanced economies there is a clear divergence between the stance of monetary policy in the USA and the Euro Area. Last year the Federal Reserve raised policy rates three times, albeit to a still historically low level of 1.25–1.50 per cent. In contrast, the ECB has continued its policy of quantitative easing, with policy rates held at the lower bound. The Bank of England raised rates back to 0.50 per cent and the Bank of Canada raised rates twice, with a further increase (to 1.25 per cent) in January 2018. None of these moves was seen by markets as a major, unexpected change, although the US Federal Reserve may have sent some longer-term signals by

Figure 3. Stock prices in the US, Europe and Japan



Source: Datastream.

Note: US stocks refer to S&P 500, US stocks-banks refer to S&P 500 banks; European stocks refer to STOXX Europe 600, European stocks-banks refer to STOXX Europe 600 OPTIMISED Banks.

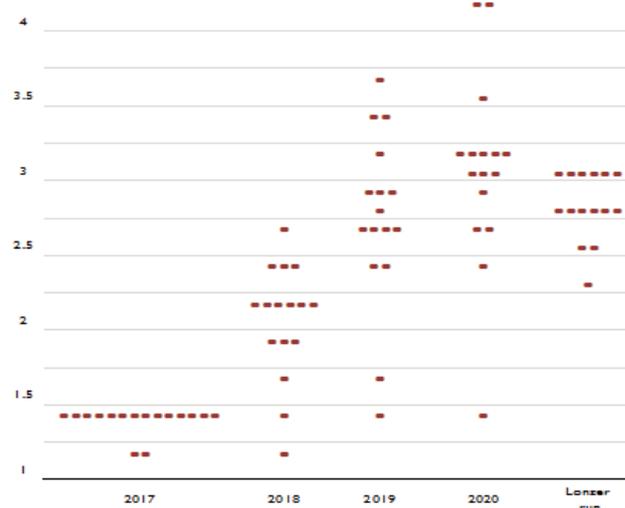
lowering the median assessment for policy interest rates in the 'longer run' in the FOMC 'dot plot' chart to 2.75 per cent from 3.50 per cent just two years' ago.

Financial and foreign exchange markets

Equity markets continued their sustained rise in 2017 (figure 3). The S&P index rose by 19 per cent through the year, the FTSE 100 by 7 per cent, the Nikkei by 19 per cent and the Dax by 12.5 per cent. With equity prices in the US at record levels, there has been increased press and market commentary about the possible overvaluation of stocks. The Shiller PE index ended 2017 at a 16-year high and this has given some support to the concerns about possible downside market risks.

The continued buoyancy of equity markets has tended to be linked to the low levels of long-term bond yields and, in the US at least, prospects of higher post-tax corporate profitability following corporate tax reforms. However the various economic and geopolitical uncertainties do not seem to have negatively affected stock markets. One example of this is the Vix index which is sometimes referred to as the 'fear index'. During the second half of 2017 the Vix index traded at around 10.6, one point lower than in the first half of the year and three points lower than a year earlier. Ending 2017 at 11, the implied volatility was back to similar levels last experienced before the Great Recession.

Figure 4. FOMC participants' assessments of appropriate monetary policy

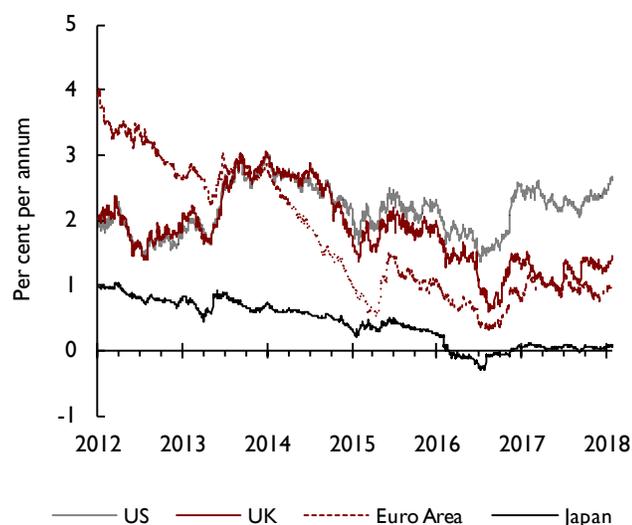


Source: US Federal Reserve.

One feature of the US bond markets in 2017 has been the relative constancy of longer-term bond yields at a time when short-term policy interest rates have increased. At the end of 2017 the US 10-year bond yield was virtually identical to that of a year earlier and still below the 3 per cent level reached in late 2013. While the US Federal Reserve policymakers have reduced their estimate of policy rates in the long term over the past two years the December 'dot plot' chart implies further prospective policy rate rises in both 2018 and 2019. Market expectations remain lower than this. As a consequence, the slope of the US yield curve has flattened, giving rise to some speculation about the possibility of an imminent end to the long period of US economic expansion. At the same time, the reduction in the extent of monetary policy accommodation seen in the US and, although much more limited, in the UK may point to some further steps that could raise long-term yields through the reversal of quantitative easing.

As figure 5 illustrates, movements in medium-term government bond yields in the Euro Area have also been limited over the past quarter (and year) but there the monetary policy background has been different, with the ECB holding the rate on the deposit facility at -0.4 per cent and continuing with its quantitative easing policy. This is expected to reduce in scale and then end in 2018. On the foreign exchanges, the continued depreciation

Figure 5. Selected economies: 10-year government bond yields



Source: Datastream.

of the US dollar has perhaps been the most prominent feature. The trade weighted index fell by around 10 per cent in 2017, with a slightly larger fall against the euro and smaller falls against sterling and the Yen. This fall occurred at the same time as higher US policy interest rates and the strengthening of US growth seen after the poor first quarter. The downward revision of the US Federal Reserve's long-term interest rate expectations may have played a part in contributing to the weaker US dollar performance.

Commodity markets

Over the course of 2017 the Brent oil price increased by 21 per cent and rose to its highest since late 2014. This marks an 82 per cent increase over a two-year period and perhaps indicates that the combination of stronger global growth and agreements between OPEC and non-OPEC producers has been effective in raising oil prices. North American shale oil production increased during 2017, with higher oil prices helping to boost production incentives. The forecast for oil prices broadly follows the path from futures prices, so a further, but limited, increase in oil prices is assumed. However, the risk of higher oil prices remains and a commentary on the possible effects of higher oil prices, from a simulation on our NiGEM model, is provided in Box A.

In US dollar terms, other commodity prices rose in the final quarter of 2017, with The Economist all-items

index at the end of 2017 6.9 per cent higher than three months earlier and 2.1 per cent up on the year.

Risks to the forecast and implications for policy

All forecasts are subject to risks and analysts frequently concentrate on the downside risks. However, in a global environment in which growth has tended to surprise on the upside in the past year and with global growth projections robust, there are also upside risks.

The generalised strengthening in activity in the major industrialised economies that has brought with it lower unemployment has not, as a general statement, been accompanied by more rapidly increasing wages and higher price inflation. But the outlook for how inflation will develop remains unclear, especially with a pick-up in output and generally sluggish investment spending pushing economies towards capacity. One upside risk for near-term growth would be that the continued underperforming (relative to expectations) inflation outlook continues and so if the traditional biting of capacity constraints from the labour market occurs it could be much later than anticipated.

Another possible upside risk might come from a generalised boost to confidence resulting from a prolonged period of steady global growth which has moved up a notch in pace. This has been aided by a prolonged period of supportive monetary policy and has led to rising equity market valuations across the advanced economies. So far, the flip side of the improved overall economic performance has been generally disappointing productivity growth. This, as Box B shows, has not just been a feature of the UK economy and it is the case that productivity growth has not just been disappointing relative to forecast expectations (as the Box demonstrates) but also relative to past productivity growth. The key issue for the future is whether this is a temporary or permanent effect, with our understanding of the causes of the slow growth still evolving.

However, it is possible that stronger growth and the more synchronised nature of it globally could lead to a stronger path of business investment and a boost to productivity growth. This would both add to future capacity and potentially further postpone any upward adjustment in inflation at the same time as also raising GDP growth relative to expectations. A 'virtuous circle' could result and the positive outcome would be that economic forecasters could see productivity paths outperforming forecasts.

Box A. Oil and the macroeconomy

Economists have long studied the link between oil prices and the macroeconomy, finding that oil price shocks have been important drivers of past recessions (Hamilton, 1983; Bjørnland, forthcoming). Figure A1 shows that the price of oil has more than doubled in recent years, rising by \$40 a barrel between January 2016 and January 2018 and is forecast to increase further. In this box, we ask how an exogenous increase in the price of oil might affect the economy.

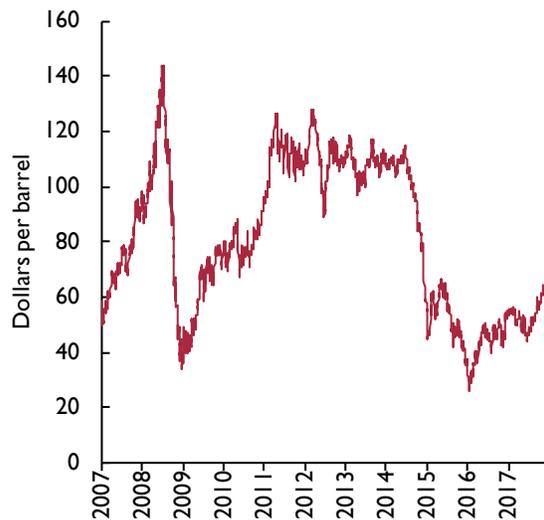
Oil price changes can affect the economy through a number of channels. One channel is simply through the valuation of oil for oil-producing economies. For those that produce oil, a rise in oil prices raises revenues. A second channel is through the terms of trade. A rise in oil prices is likely to improve the terms of trade for oil exporters, but worsen the terms of trade for importers. This tends to raise the demand for non-oil goods and services in oil-exporting economies, but reduce demand in oil-importing economies. A third channel is the role of energy as a factor of production. A rise in the price of oil might reduce usage, leading to a decline in potential output. A fourth channel is through prices. A rise in oil prices might not only increase import prices but also pass-through to consumer prices, depending on the response of monetary policy (Bernanke et al., 1997).

An important question is the source of the shock. If the increase in prices stems from rising oil demand, then there is evidence that economic activity might be less affected than if the spike arises from the supply side (Killian, 2009). Figure A2 plots a historical decomposition of the West Texas Intermediate (WTI) oil price index between the first quarter of 1988 and the third quarter of 2017. The decomposition is based on a Bayesian VAR model using sign and quantity restrictions to identify oil supply, oil demand and oil specific shocks (Killian and Murphy, 2012). The results show that the recent increase in prices has been driven by the rise of positive demand shocks and the fall of negative supply shocks.

Using the National Institute Global Econometric Model (NiGEM), we simulate the effects of an exogenous \$10 increase in oil prices. Figure A3 shows the response of the world oil price, US real GDP, US inflation and the US policy rate to the shock to world oil prices. The top-left panel shows that, by construction, the shock raises oil prices by \$10 in each quarter of 2018. Thereafter, the shock dissipates. The top-right panel shows that this shock reduces US economic activity on impact, peaking at roughly -0.15 per cent. The bottom-left panel shows that inflation gradually increases to a peak of approximately 0.3 percentage points and fades away thereafter. The bottom-right panel shows that the Federal Reserve would respond to this inflationary pressure by raising the policy rate. The response of the UK economy to the same shock is qualitatively similar as economic activity falls, while inflation and the policy rate rise.

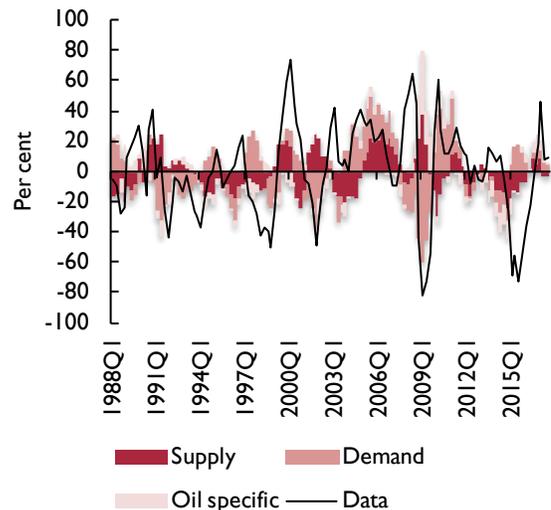
In summary, the simulation shows that a further increase in oil prices would raise inflation and mildly depress output in the UK and US economies. In general, the economic impact would be conditional on a number of factors, such as domestic oil reserves, the oil intensity of output, the response of monetary policy and the source of the shock.

Figure A1. Europe Brent spot price FOB (dollars per barrel), 2007–17

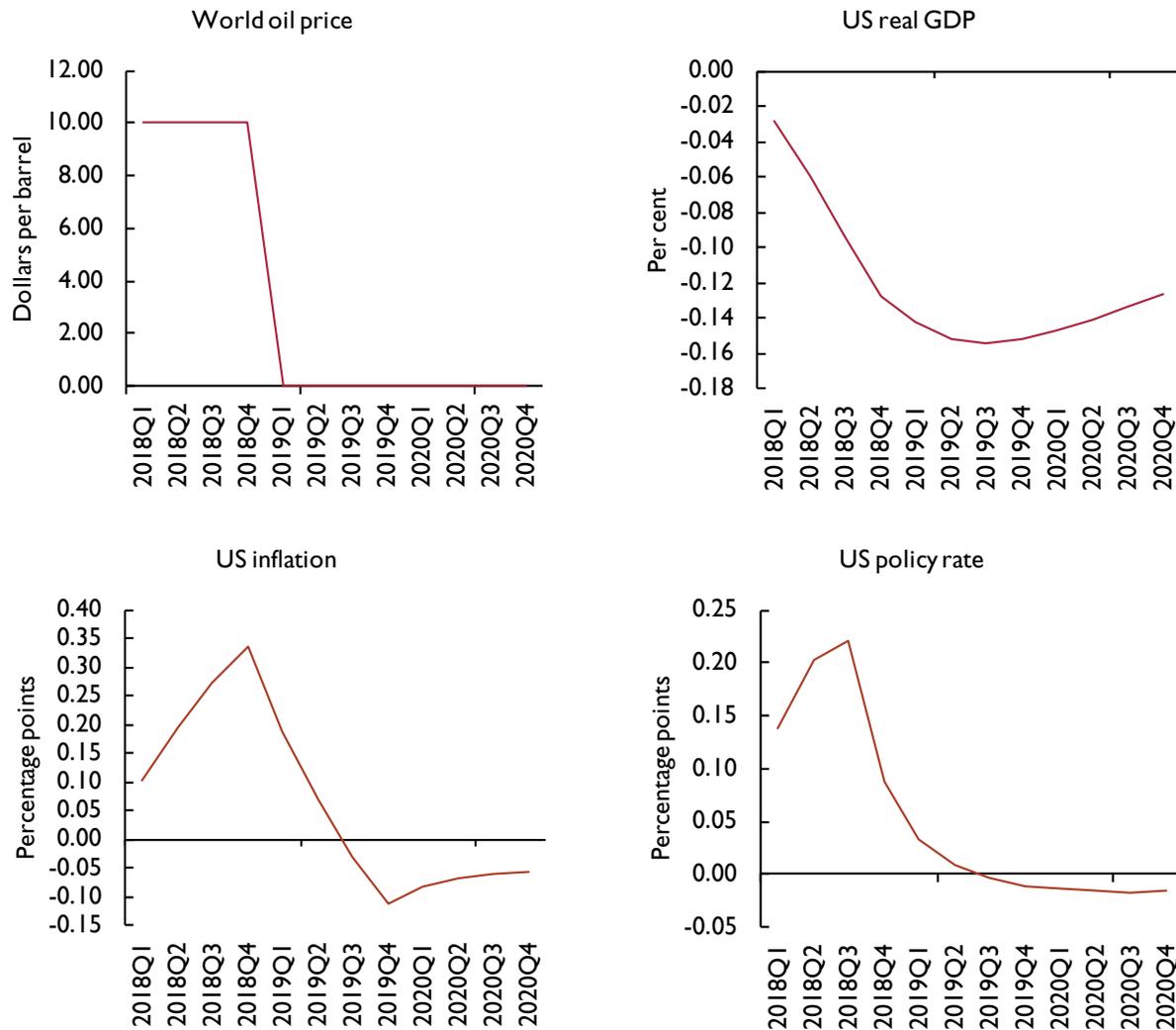


Source: US Energy Information Administration.

Figure A2. Historical decomposition of WTI oil price index, 1988Q1–2017Q3



Source: Federal Reserve Bank of St Louis.

Box A. (continued)**Figure A3. Response of world oil price, US real GDP, US inflation and US policy rate to a temporary \$10 world oil price shock**

Source: NiGEM.

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This box was prepared by Jason Lennard, Senior Economist at NIESR, and Konstantinos Theodoridis, Professor of Macroeconomics at Cardiff Business School.

Box B. Disappointing productivity growth: an international dimension

In our November forecast the outlook for UK annual productivity growth from 2016 was downgraded by around 0.3 per cent a year to be lower than 1 per cent a year. NIESR was not alone in making such a downgrade. The Office for Budget Responsibility (OBR) also downgraded the outlook for productivity growth in the November Budget. The principal reason for the reductions was that productivity growth had not only been slow but had been slower than expected – in effect, there have been repeatedly disappointing productivity growth expectations. Such changes in outlook, in particular with their implications for living standards and fiscal positions, raise the issue of whether the UK has been alone in seeing disappointing productivity growth or whether this may be a more general international experience.

It is clear that productivity since the Great Recession has grown more rapidly in the other major western economies than in the UK, although Italy is the exception to this (see figure B1). But the issue examined here is different – despite the faster productivity growth elsewhere, the question is whether productivity growth in the other major western economies has also disappointed expectations.

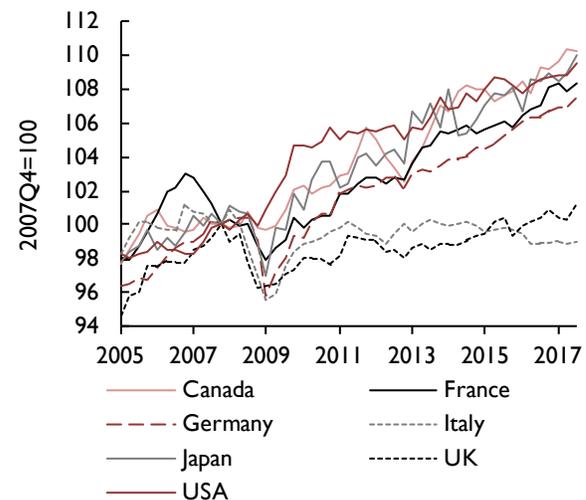
In order to examine this on a consistent basis, published Institute forecasts over a run of years were used and the labour productivity path forecasts made at different times were compared with the subsequent outturn of productivity. The results are presented in a series of charts below. Productivity in the context of NIESR's forecast is calculated from the separate forecasts for GDP, the number of employees and hours worked per employee per quarter. The clear visual message from the charts is that the UK is far from alone in seeing productivity failing to pick up after the recession to the extent that was anticipated. The charts, with the exception of Italy, display the same general pattern as that for the UK.

Since forecasters' expectations of productivity trends will have been based on both (then) current information and previous experience of productivity behaviour after recessions, one immediate conclusion is that the disappointing behaviour on productivity growth has been a more general feature of the major industrial economies in the post-recession period – it is not confined to the UK. The various arguments made about the nature of the recession, in particular the dislocations that resulted in the financial system, seem to have some force, even though the precise mechanism by which this feeds through into overall productivity trends remains unclear. In addition, in so far as this is a cause of the slow productivity performance, the issue remains as to how much longer any effect will last.

Perhaps of more concern in a medium-term context is the hypothesis that this period of disappointment may be due to some deeper structural process such as, for example, argued by Robert Gordon (2016) and Marc Levinson (2016). Others have also expressed concern about the methods of measuring economic activity (and hence productivity) connected to the growth of the Digital Economy (Nakamura *et al.*, 2017). Clearly more evidence and time will be needed to analyse these issues.

In the November *Review Crafts and Mills* (2017) undertook an econometric analysis of US productivity growth (using total factor productivity (TFP) rather than labour productivity as shown in the charts here) and concluded somewhat more positively that “the case for assuming that slow TFP growth is the ‘new normal’ is ‘not proven’.” This gives hope that the patterns of lower than anticipated industrial economy productivity growth revealed by the charts may not be a permanent feature of economic forecasts, especially if the global outlook continues to strengthen.

Figure B1. Labour productivity growth since the Great Recession

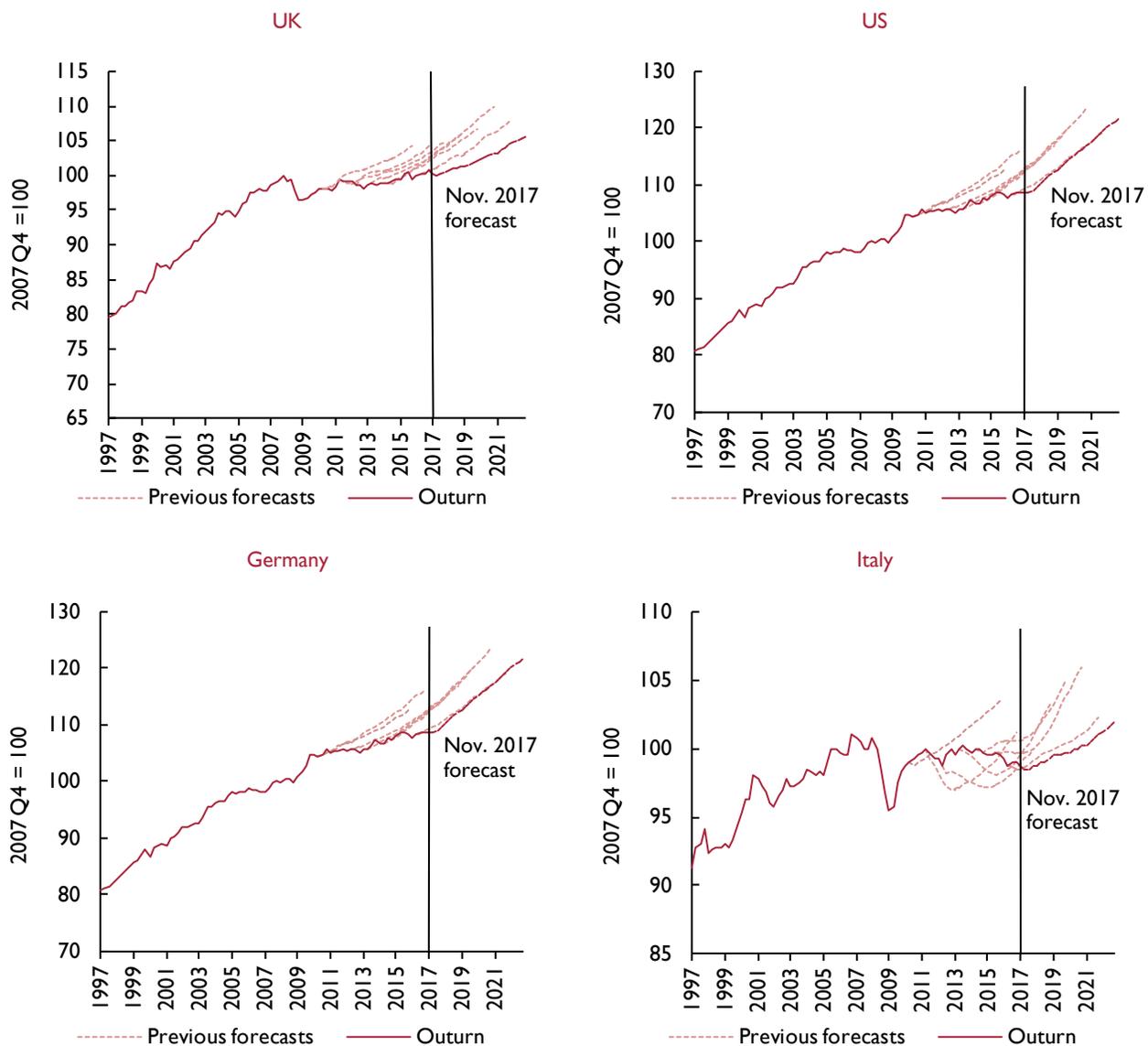


Source: NiGEM database and forecast.

Notes: GDP at market prices, per person hour.

Box B. (continued)

Figure B2. Labour productivity forecasts in the UK, US, Germany and Italy



Source: NiGEM database and forecast. Note: GDP at market prices, per person per hour.

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This box was prepared by Yanitsa Kazalova and Barry Naisbitt.

Figure 6. Shiller cyclically adjusted price–earnings ratio for the S&P 500



Source: Datastream.

With monetary policy still remaining supportive and what might be termed ‘the era of fiscal austerity’ appearing to be waning, it is possible that policies, especially in the US, Japan and the Euro Area, could provide a greater boost to activity than is inherent in the baseline outlook. The momentum from last year could build further more strongly and more persistently than we are anticipating. As long as growth momentum, which closes output gaps, does not create a potentially inflationary impulse that policymakers have to react to, this could give stronger output growth (and lower unemployment) without endangering inflation targets.

The downside risks to the outlook identified in previous issues of this *Review* remain and can be thought of in some cases as being somewhat heightened. This, in the context of the possible upside risks, illustrates the uncertainties that exist for the global outlook. Stock markets continue to appear to be richly valued relative to what might be regarded as fundamentals. The most widely quoted example is the Shiller CAPE index for the US which remains elevated at its highest level since the run-up to the internet bubble, although there remains a debate about the precise inferences that can be drawn from this (figure 6). At the least, it can be interpreted as a potential indicator of vulnerability to a negative shock, with the concern that such a shock to equity prices would be expected to have direct effects on consumer spending in the US, and possibly also indirect effects from a reduction in confidence or

increase in uncertainty and ‘knock-on’ effects to other equity markets and economies.

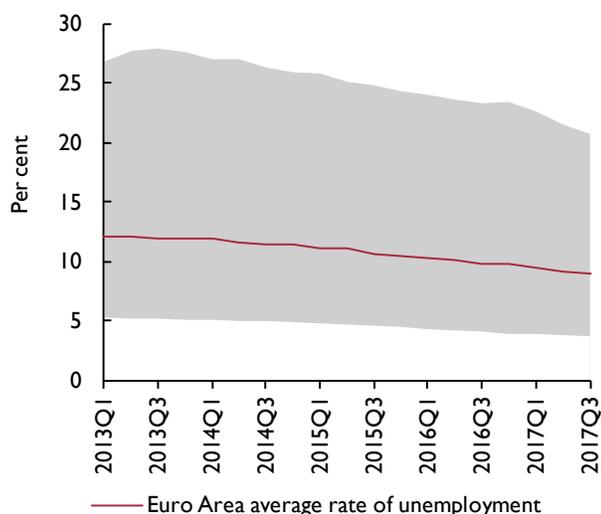
One potential downside risk that is frequently cited in central banks’ financial stability reviews is that arising from private sector indebtedness. In countries such as the UK, Canada, Netherlands and Australia, the risks are seen to arise predominantly from the household side with mortgage and consumer credit debt rising and, in some instances, reaching new highs relative to incomes. The key risk here comes in two forms; first, the increase in debt and rising debt to income ratios are coming at a time of historically low interest rates and if interest rates rise more rapidly than anticipated (or households and companies have only planned on the basis of rates staying ultra-low) this could cause adverse effects for more heavily indebted households; second, that high levels of indebtedness may act as a constraint on monetary policymakers if they consider that they need to normalise policy at a faster pace than anticipated. In some economies corporate sector indebtedness also poses a downside risk to continued economic growth should interest rates rise faster than anticipated.

In uncertain economic times any changes in sentiment can be difficult to gauge and so these circumstances themselves pose a risk in terms of possible policy mistakes. The judgement here has not changed over the past quarter. In the US the very gradual tightening of monetary policy seen in 2016 and 2017 has been at a time when the unemployment rate has fallen to, or even below, the so-called natural rate. But at the same time, GDP growth has not been over-rapid and inflation has been persistently below its target, leading some economists to argue that there was not a need to increase rates as much as has occurred. With the US economy now approaching its second longest postwar expansion, there is perhaps a natural focus on the possibility of a recession in the coming years, a focus heightened by the fact that the yield curve spread has narrowed.

The likely policy thrust of the Fed is subject to uncertainty, in part because of the economic circumstances and in part because of the changes in the personnel, with US Federal Reserve Board Chair Janet Yellen leaving and being replaced by Jerome Powell. With other vacant Reserve Board chairs to be filled in 2018 and a government budget that looks to be expansionary in terms of domestic demand in the process of agreement, the outlook for monetary policy remains subject to uncertainty.

As with the UK and the EU, trade policy is also a particularly ‘hot topic’ of economic discourse. Elements

Figure 7. Euro Area unemployment dispersion



Source: NiGEM database.

Note: Shaded area shows the dispersion between the highest and lowest rates.

of the North America Free Trade Agreement (NAFTA) remain under threat and the US withdrawal from the Trans Pacific Partnership (TPP) has signalled a policy change. Protectionist rhetoric turning into action therefore still remains a risk to the outlook for global trade growth.

For the Euro Area the theme of imbalances has featured in recent issues of this *Review*. Imbalances are arguably most evident in unemployment rates and in how far unemployment rates have fallen in the different member countries (figure 7). Germany, for example, has its lowest unemployment rate since 1980 and the average rate in the Euro Area at 8.7 per cent is close to estimates of the natural rate. Yet some countries still

have unemployment rates that indicate considerable economic slack exists. This divergence, when combined with the persistent undershoot of the inflation target, suggests that the debate on appropriate monetary policy actions remains active. As a consequence, ECB tapering of QE activity could have a mixed reception across the Euro Area.

In global terms the growth in the Chinese economy continues to be a key driving force behind global growth. With about one third of the increase in global GDP in 2016 and 2017 estimated to have been due to growth in China and the forecast anticipating a gradual slowing in annual growth in the Chinese economy as the economic transition continues, this creates one source of bias to slower global growth in the medium-term. For emerging economies generally, the continued growth of public and non-financial private debt does provide a potential risk exposure to an adverse shock, such as a faster pace of increase in US interest rates, which might raise capital outflows. As with some other economies, the Chinese authorities have acted to moderate the pace of credit growth and some housing market concerns. If further measures are considered necessary, one consequence could be slightly slower growth than anticipated for both the Chinese and global economies in a transition to a strengthened domestic financial situation.

As central banks in the advanced industrial economies have now started to reduce the extent of monetary policy stimulus (by raising interest rates or reducing the extent of quantitative easing), other monetary indicators can provide guidance on near-term risks and prospects. Box C discusses one key aspect of this, arguing that while global growth is likely to remain robust in the near-term there may be some slight weakening into 2019. This discussion provides an independent cross-check on the overall shape of the forecast here and is broadly consistent with the central case.

Box. C. Using global monetary trends to forecast economic swings

We use monetary trends to forecast economic activity 6–12 months ahead, globally and for individual countries. This monetary approach has proved relatively successful in signalling future turning points in economic momentum – a weakness of conventional forecasting approaches. Such turning points are often associated with changes in financial market conditions. The monetary approach predicted that global growth would strengthen in 2017 but now suggests a loss of momentum later in 2018.

Friedman and Schwartz found that: “Short-run changes in the growth rate of money tend to be followed by changes in the same direction in real output after a lag of six to nine months.”¹ We analysed the relationship between major turning points² in detrended money measures and detrended industrial output in aggregate G7 monthly data for 1964–2015. Turning points in real narrow money, defined as M1 deflated by consumer prices, preceded those in industrial output by nine months on average, with a standard deviation of four months. Real narrow money signalled 73 per cent of the identified output turning points.

The mean lead was also nine months for real broad money (M3) but the success rate was lower. Real broad money performed poorly around the 2008–9 recession, peaking after industrial output and lagging the subsequent recovery. Real bank lending led by three months on average and was often coincident or lagging.

For comparison, the OECD’s G7 composite leading indicator, the components of which were selected on the basis of their historical performance over part of our sample period, led industrial output by six months on average, and signalled 86 per cent of the identified output turning points. Real narrow money, therefore, provided earlier signals at the cost of a modestly lower success rate. The OECD leading indicator is released up to a month later than monetary data and is often revised significantly.

The G7 evidence is supported by ECB research on Eurozone data, which concluded that “peaks and troughs in the annual growth rate of real M1 lead corresponding turning points in the annual growth of real GDP by three to four quarters”.³ Bank loans to households were found to “lead slightly, or follow a coincident pattern”, while loans to non-financial corporations “tend to lag the business cycle”.

We construct a ‘global’ real narrow money measure covering the G7 and seven large emerging economies.⁴ The chart shows six-month rates of change of this measure and industrial output. The markers highlight peaks in the two series. The average interval between peaks since 2005 was nine months, consistent with the long-run G7 evidence. The average interval between troughs (not marked) was eight months.

Real narrow money growth rose strongly between August 2015 and August 2016, reaching its highest level since 2009. This pick-up suggested that global economic growth would increase significantly in 2017, exceeding the consensus forecast.⁵ The majority view was somewhat gloomy in late 2016. The forecast for world GDP growth in 2017 in this *Review*, for example, was lowered from 3.5 per cent in May 2016 to 3.1 per cent in February 2017.

Real narrow money growth declined between August 2016 and February 2017 but rebounded to another peak in June 2017. It has since fallen sharply, reaching its lowest level since 2014. Assuming a 6–12 month lead, this suggests that global economic momentum will reach a peak in the first half of 2018 and decline in the second half.

The monetary slowdown has been broadly based across countries. Real narrow money growth has fallen since June 2017 in the US, China, the Eurozone, Japan, Canada and Australia. UK real narrow money growth weakened markedly in late 2016/early 2017 but has recovered slightly, suggesting that UK relative economic performance will improve in 2018.

NOTES

- 1 Schwartz, A.J. (1992), *Monetarism and Monetary Policy*, IEA.
- 2 The Bry-Boschan (NBER) business cycle dating algorithm was used to identify turning points.
- 3 Stylised facts of money and credit over the business cycle, *ECB Monthly Bulletin*, October 2013, pp.18–22.
- 4 BRIC plus Korea, Mexico and Taiwan.
- 5 *Will the global economy boom in 2017?*, Janus Henderson Investors, September 2016.

This box was prepared by Simon Ward of NS Partners and Janus Henderson Investors.

Figure C1. G7+E7 industrial output and real narrow money (%6m) (average lead time at highlighted peaks = 9 months)

