

## ■ Global and European setting

### ■ World economic activity

*Global economic growth in Q4 presumably sluggish*

In the final quarter of 2015, the global economy presumably failed to keep up with its pace of growth in the second and third quarters of the year, a period in which it had rebounded somewhat following a mixed start to the year. However, the recent deceleration did not reflect a regionally broad-based economic slowdown. Rather, it was due mainly to a marked weakening of economic growth in the United States. The disappointing performance in the fourth quarter of the year has to be seen against the relatively high quarterly volatility of seasonally adjusted changes in real gross domestic product (GDP) in the United States. Other indicators, such as labour market activity, do not show any signs of a flattening of the upward trend. Despite many fears to the contrary, China's growth rate remained virtually undented, according to information provided by its national statistics office. Similarly, economic activity also proved robust in the euro area and the United Kingdom. In both economic areas, aggregate economic output grew almost unabated. This could also be the case for Japan, according to short-term indicators. By contrast, the economic situation in the major commodity-exporting countries remained tense. The ongoing decline in the prices of many commodities is likely to further hurt these countries' economies.

*Overall results for 2015 dash hopes that lower oil prices will provide a boost to the global economy*

According to an estimate by the International Monetary Fund (IMF) in January 2016, global output, as based on purchasing power parity exchange rates, merely rose by an annual rate of just over 3% in full-year 2015, the lowest growth rate since the global financial and economic crisis of 2008-09. Expectations in many quarters that falling prices on the market for crude oil would lend the global economy greater traction were thus dashed. In January 2015, the IMF had expected GDP growth of 3½%. Although this most recent off-target

forecast is another in a series of overly optimistic projections,<sup>1</sup> what appears striking about the inaccurate assessment of the previous year is that the underlying assumption that crude oil prices would remain low turned out to be accurate.<sup>2</sup> There are thus many signs that the global economic stimulus effects of a (largely supply-side) decline in oil prices were overstated (see box on pages 13 to 15). In actual fact, at just under 2%, growth in the advanced economies strengthened only a little overall compared with 2014. Looking towards the United States, the massive cutback in investment by the oil industry was a particular drag on growth. Adjustment pressure on the less-diversified commodity-exporting emerging market economies (EMEs) was immensely more intense; they were constrained in their ability to smooth their expenditure over time. As a result of these developments, in conjunction with the gradual structural moderation of Chinese economic growth, the real GDP growth rate in the emerging and developing countries taken together was only 4%, a low rate by historical standards.

In its regular January update to the World Economic Outlook (WEO), the IMF, also taking into account experience of the previous year, revised its global growth forecast downwards slightly, yet it is still maintaining the baseline scenario of a gradual firming of economic activity. It expects global output (measured in purchasing power parity terms) to rise by only 3½% in both 2016 and 2017. The latest outlook for some commodity-producing countries, in particular, was considered to be less favourable than in October. In the case of Brazil, the downward revisions to annual average GDP

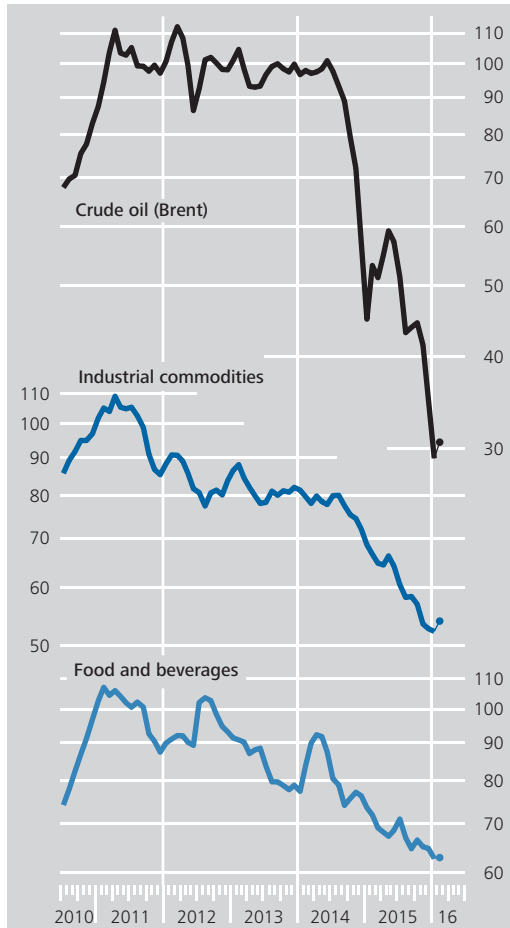
*IMF revises its global growth forecast downwards slightly*

<sup>1</sup> See Deutsche Bundesbank, The global growth forecast revisions in recent years, Monthly Report, November 2014, pp 12-15.

<sup>2</sup> Whereas in January 2015 the IMF had expected the oil price to average US\$56¼ for 2015 as a whole, average prices ended up even being some US\$6 below this assumption.

### World market prices for crude oil, industrial commodities and food and beverages

US dollar basis, 2011 = 100, monthly averages, log scale



Sources: Thomson Reuters and HWWI. • Latest figures: average of 1 to 5 February 2016, or 1 to 11 February 2016 for crude oil.

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growth rates were by more than two percentage points for each of the two years, which means that, even for 2017, aggregate economic growth is no longer expected. Unlike earlier editions of the WEO, the current projection does not envisage any material acceleration in growth for the US economy, either. On the other hand, the outlook for other economies, in the opinion of the IMF, has not changed significantly. Forecasts for Chinese GDP growth for this year were even left unchanged for the fourth consecutive round.

The indicators for the industrial sector are also reflective of the currently restrained pace of

global economic growth. For instance, the production sector's average global output for the October-November period, according to information provided by the Dutch Centraal Planbureau, only edged slightly above its level from the third quarter. One of the reasons for the recent drop-off was surely the weather-induced slump in energy production in key northern hemisphere economies. However, even after adjustment for such temporary factors, the upward trajectory of industrial output has been extremely flat. The same can be said of global trade, despite a slight revival in the second half of the year. Measured in November at a price-adjusted annual rate of 2%, the growth rate of goods trade remains very subdued compared to previous upswings.

*Global industrial sector and global trade on flat upward trajectory*

During the reporting period, the downward trend in the prices of important commodities over the past one-and-a-half years persisted, with non-energy commodity prices, measured on a US dollar basis in terms of the HWWI index, once again ceding perceptible ground in the quarter just ended. Industrial commodities and food and beverages became cheaper still in January. At the same time, on the spot market for crude oil, the prices for a barrel of Brent dropped below the US\$30 mark at times. Not even during the global financial and economic crisis had the price of oil been that low. In addition to resurging concerns about the economy in major emerging markets, supply-side factors such as discord within OPEC on production limits and the lifting of sanctions against Iran are likely to have put pressure on prices. Most recently, Brent crude oil was trading on the spot market at US\$31 per barrel.

*Renewed sharp drop in crude oil prices*

In the industrial countries, the renewed slide in crude oil market prices was reflected in falling consumer prices for refined petroleum products. Nonetheless, owing to a base effect, between September and December the negative annual growth rate of energy prices narrowed by around four percentage points to just over 9%. The considerable price reductions from the last quarter of 2014 gradually disappeared from

*Base effect key factor in slight rise in consumer price inflation*

## The drop in oil prices: its causes and its consequences

The massive drop in the price of crude oil since mid-2014 has caused enormous shifts in income from the main oil-producing countries to the oil-consuming countries. The economy in major export countries has consequently been hit, in some cases hard. Conversely, falling prices have acted as a positive catalyst for private consumption in several oil-importing countries. Hopes that this would perceptibly stimulate the global economy overall have not been fulfilled as of yet.<sup>1</sup>

Economic effects in connection with oil price changes depend not only on whether the latter are expected to last, but also on whether the oil price swings can be attributed mainly to supply-side or demand-side factors.<sup>2</sup> There is a broad consensus that oil prices should be seen as an endogenous variable, implying that both supply-side and demand-side determinants are to be taken into consideration.<sup>3</sup> It is, however, difficult to pin down the relative importance of these factors. Time series models based on structural vector autoregressions (SVAR) seek to explain oil price movements using the dynamics of oil production and general economic activity as an indicator of demand. Changes in expectations are also incorporated. In particular, changes in inventories of crude oil and crude oil products serve as an indicator of what is known as speculative demand.<sup>4</sup>

However, such models have not yet been able to uniquely identify, in particular, the causes of last year's price movements. First, it is not clear what variables are suitable as indicators of global real economic activity and can thus be used to identify demand shocks. The suitability of some frequently used measures, such as sea freight rates, is

doubtful, as these measures also reflect industry-specific developments and may themselves be strongly influenced by oil prices. Second, the speculative demand component cannot be clearly assigned to either final demand or supply. Inventory build-up in expectation of rising oil prices may reflect anticipated developments on the supply side, the demand side or a combination of both. This model framework is therefore of limited use when it comes to making a clear distinction between supply-side and demand-side drivers of oil price fluctuations. Moreover, the model does not explicitly account for possible structural changes to the price setting mechanism, say a changed role for the Organization of the Petroleum Exporting Countries (OPEC). General equilibrium models appear better suited to this end.<sup>5</sup>

With such a lot of model uncertainty, the current debate tends to be grounded more on anecdotal approaches based on an observation of production and consumption

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<sup>1</sup> See Deutsche Bundesbank, The slowdown in global economic growth and the decline in commodity prices, Monthly Report, November 2015, pp 16-17.

<sup>2</sup> See also Deutsche Bundesbank, Potential impacts of the fall in oil prices on the real economy, Monthly Report, February 2015, pp 12-14.

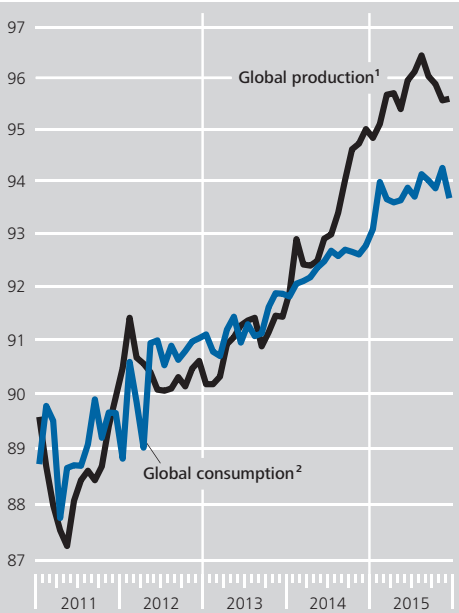
<sup>3</sup> See also L Kilian (2009), Not all oil price shocks are alike: disentangling demand and supply shocks in the crude oil market, Vol 99, American Economic Review, pp 1053-1069.

<sup>4</sup> Structural shocks are identified on the basis of assumptions that are largely theoretically substantiated. See L Kilian and D Murphy (2014), The role of inventories and speculative trading in the global market for crude oil, Journal of Applied Econometrics, Vol 29, pp 454-478.

<sup>5</sup> See, for instance, A Nakov and G Nuno (2013), Saudi Arabia and the oil market, Economic Journal, Vol 123, pp 1333-1362. An estimate using this model finds the reasons for the decline in crude oil prices that started back in mid-2014 mainly on the supply side. See C Manescu and G Nuno (2015), Quantitative effects of the shale oil revolution, ECB Working Paper Series No 1855.

### Crude oil production and consumption

Million barrels per day, seasonally adjusted, log scale



Source: EIA Short-Term Energy Outlook, January 2016, and Bundesbank seasonal adjustment. **1** Includes production of crude oil, condensates, liquid gas, biofuels, other liquid fuels and processing gains. **2** Estimated consumption based on deliveries of crude oil products.

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quantities as well as the global economic environment. Data from the US Energy Information Administration (EIA) suggest that the steep drop in the price of oil since mid-2014 was preceded by a sharp increase in global supply (emanating in particular from the United States, with OPEC failing to compensate by cutting production). The rapid technological progress made in oil production was an important factor. By contrast, the pace of demand growth has changed little. According to the EIA, global oil consumption has grown fairly steadily since 2011. After expanding by 1% in 2013, consumption probably rose by 1¼% in 2014. In its January 2016 Short-Term Energy Outlook, the EIA even expects a further slight acceleration of 1½% in both 2015 and 2016. The slight acceleration in growth rates for crude oil consumption could be the result of lower oil prices stimulating demand. It should be noted, however, that demand for oil has, on the whole, proved

inelastic to price changes in the past, at least in the short term.<sup>6</sup>

Attention needs to be paid not only to the price sensitivity of demand for oil but also to its income elasticity. According to calculations by the International Monetary Fund (IMF), annual growth in global real gross domestic product (GDP), measured at market exchange rates, has been between 2½% and 3% since 2011. The latest growth rates for oil consumption (according to EIA data) are in line with this steady moderate upward movement. If the log of global oil consumption and the log of global economic output are plotted against each other in a scatter chart, the recent observation points are unremarkable by historical standards. By contrast, consumption is seen to have declined sharply following the second oil crisis at the beginning of the 1980s. Later price surges caused the relationship between the economy and consumption to flatten. Conversely, however, falling prices cause no upward shifts, which suggests that the impact on oil demand changes depending on whether prices are rising or falling.

Given that oil price reductions probably have little effect on demand, the burden of balancing the market will fall overwhelmingly on oil supply. That is why attention is regularly focused on what the oil-producing countries are doing. Given this state of affairs, it is remarkable that global produc-

<sup>6</sup> Bundesbank studies found a short-term price elasticity of just -0.02 for a long observation period. These results are at the lower end of common estimates. However, account must be taken of empirical evidence suggesting that the price elasticity has probably declined over time and is potentially not symmetrical in terms of the direction of the price change. See Deutsche Bundesbank, Price elasticity of demand for crude oil in the short term, Monthly Report, June 2012, pp 34-36; and J Hamilton (2001), Nonlinearities and the macroeconomic effects of oil prices, *Macroeconomic Dynamics*, Vol 15, pp 364-378.

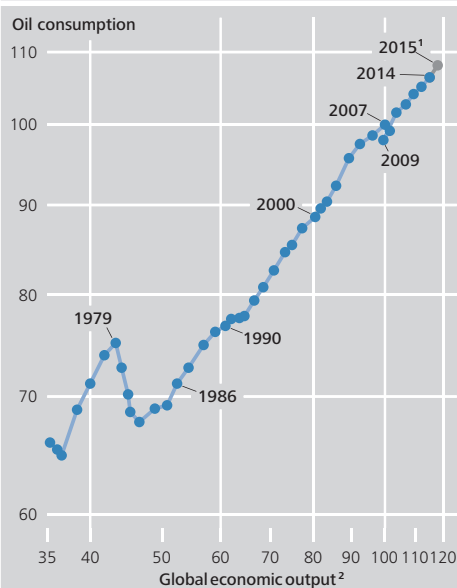
tion has so far been cut back only very little. Though crude oil production in the United States has declined somewhat and investment in the oil industry has even more than halved in real terms since the spring of 2014, this has done very little to reverse the steep rise in production over the last four years. Russia, too, is still pumping large quantities of crude oil. Production has recently been perceptibly curbed only in the North Sea and in Nigeria and Mexico.

The oversupply that has characterised the oil market since mid-2014 has resulted in a continued build-up of inventories. In the United States alone, inventories of crude oil and petrol mounted by more than one-quarter between the beginning of 2014 and the end of 2015, and were still growing steadily at the beginning of this year. Meanwhile, storage capacity appears to be getting tight worldwide. This is contributing to instability on the oil market. In addition, production is likely to be expanded in Iran now that the embargo has been lifted.

Given the oil glut and the fairly restrained yet steady growth of the global economy and oil consumption, the sharp drop in the price of crude oil since mid-2014 can probably be attributed largely to supply-side factors. The effects that this will have on the global economy, however, are less clear. Current developments appear to suggest an asymmetry in the effects of oil price changes. Thus, a decline in the price of crude oil does not stimulate the global economy to the same degree as rising prices hurt it.<sup>7</sup> Heightened uncertainty, lower investment and enforced structural change could be factors. Nonetheless, cheaper crude oil considerably boosts real income for households in commodity-importing countries and could potentially stimulate the economy in those countries.

### Global oil consumption and economic output, 1973-2015

2007 = 100, log scale



Sources: EIA, IMF and Bundesbank calculations. **1** IMF WEO Update, January 2016, and EIA Short-Term Energy Outlook, January 2016. **2** Aggregated on the basis of market exchange rates; data linked from the October 2015 WEO (from 1980 onwards) and the September 2002 WEO (prior to 1980).  
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<sup>7</sup> See Deutsche Bundesbank, The slowdown in global economic growth and the decline in commodity prices, Monthly Report, November 2015, pp 16-17; Deutsche Bundesbank, Potential impacts of the fall in oil prices on the real economy, Monthly Report, February 2015, pp 12-14; Deutsche Bundesbank, The price of crude oil and its impact on economic activity in the industrial countries, Monthly Report, June 2012, pp 27-49.

### Economic growth by groups of countries

Year-on-year percentage change in real GDP



Source: IMF.  
 Deutsche Bundesbank

the comparison with the previous year. That was also a factor behind the rise in the headline inflation rate from -0.2% in September to +0.5% at the end of the period under review. At the same time, core inflation, which excludes food and energy products, picked up slightly, reaching +1.4% by December.

### Selected emerging market economies

*Gradual moderation of growth continuing in China*

In China, real gross domestic product (GDP), according to official estimates, picked up by 6¾% on the year in the final quarter of 2015. A similar increase was recorded for 2015 as a whole, indicating that the pace of growth of the Chinese economy has slackened very little compared with 2014. Although investment, a major component of aggregate activity, seems to have lost steam, this was largely offset by a surge in consumption.<sup>3</sup> This would indicate that the government has made progress in its efforts to reduce the lopsidedness of the country's economic structure (rebalancing). In the past year, Chinese foreign trade figures showed a decline; after adjustment for price variations, goods exports are likely to have recorded a small increase, if at all, and goods imports will have probably even contracted perceptibly. Imports of machinery and transport equip-

ment, in particular, were down. However, imports stabilised over the course of the year. All in all, the Chinese economy does not appear to be heading towards a slump, although considerable medium-term downside risks still exist, specifically regarding the high and, at last report, increasing corporate sector debt. Consumer price movements remained quite calm in the past year. Headline inflation stood at +1.4%; excluding food and energy, inflation was barely any higher.

India's economic growth was able to maintain the torrid pace of the previous year. Real GDP was up by 7½% in 2015. On the expenditure side, private consumption lent an even greater boost to growth than previously. Gains in households' real purchasing power owing to subsiding inflation were a major support. Measured in terms of the consumer price index (CPI), inflation shrank from 6.6% in 2014 to 4.9%. The main factors behind this development were the easing of price pressures in the local food markets and lower fuel prices.

*Economic growth in India has maintained its rapid pace*

The severe recession kept Brazil in its grip in the third quarter of 2015. Output has now fallen by nearly 6% since the latest cyclical peak in early 2014. The economy has been suffering under the effects of the sharp drop in prices on international commodity markets and the pronounced political uncertainty. In the quarter ended, for which no national accounts data are yet available, the contraction could have decelerated somewhat, however, as indicated by a certain tendency for real retail sales to have stabilised. Irrespective of the weak economy, inflation has picked up once again; consumer price inflation rose in the final quarter of the year to 10.4%. This means that, in the year ended, the

*Brazil still mired in recession*

<sup>3</sup> China's National Bureau of Statistics does not report any figures on the individual expenditure components of GDP, but only publishes a breakdown of GDP growth into contributions by consumption (including government consumption), gross investment (including stockpiling) and net exports. According to these statistics, in 2015 around two-thirds of economic growth was attributable to consumption, and one-third to investment.



central bank clearly missed its target of keeping inflation between 2.5% and 6.5%.

*Russian economy continuing to contract*

According to the official flash estimate, Russia's economy contracted last year by 3¾%. Although no separate data for the fourth quarter are available yet, judging by the cyclical indicators, the contraction appears to have continued. The falling oil prices are the main factor weighing on the economy. Oil companies themselves have proven extremely robust thus far, with oil production last year climbing to a new all-time high. However, owing to shrinking revenues from taxes on energy exports, general government has been forced to cut back its spending considerably. In addition, households have been suffering under the effects of the rouble's depreciation owing to falling oil prices. Consumer price inflation consequently jumped to nearly 16% in 2015. Food prices were up by as much as one-fifth; the ban on food imports from western countries imposed by the Russian government was an additional factor.

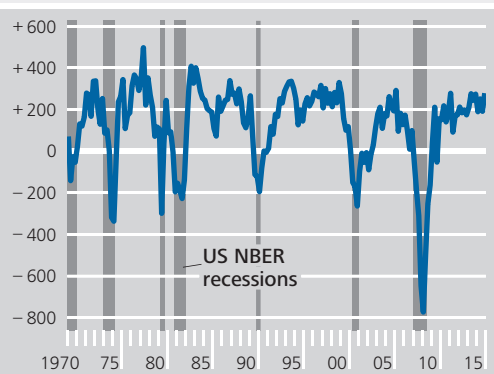
## United States

*Weak finish to the year*

The economic upswing in the United States lost steam in autumn 2015. Seasonally adjusted real GDP, according to the initial estimate, was up by only just under ¼% from the third quarter, in which – in line with its average over the unsteady first half of the year – it had risen by a measured ½% on the quarter. The weak finish to the year is attributable in part to retarding factors in inventory movements, which had already constrained GDP growth in the summer months. A correction to that effect had been expected given the preceding strong accumulation of inventory stocks. Since price-adjusted goods and services exports failed to match their level from the previous quarter, moreover, net exports once again held back the economy. In addition, private final domestic demand was not able to maintain the lively pace of growth from the second and third quarters of 2015. This was chiefly because private consumption grew at only a moderate rate while, at the

### Employment growth and business cycles in the United States

Monthly employment growth in thousands, seasonally adjusted, quarterly averages



Sources: Bureau of Labor Statistics, National Bureau of Economic Research and Bundesbank calculations.  
 Deutsche Bundesbank

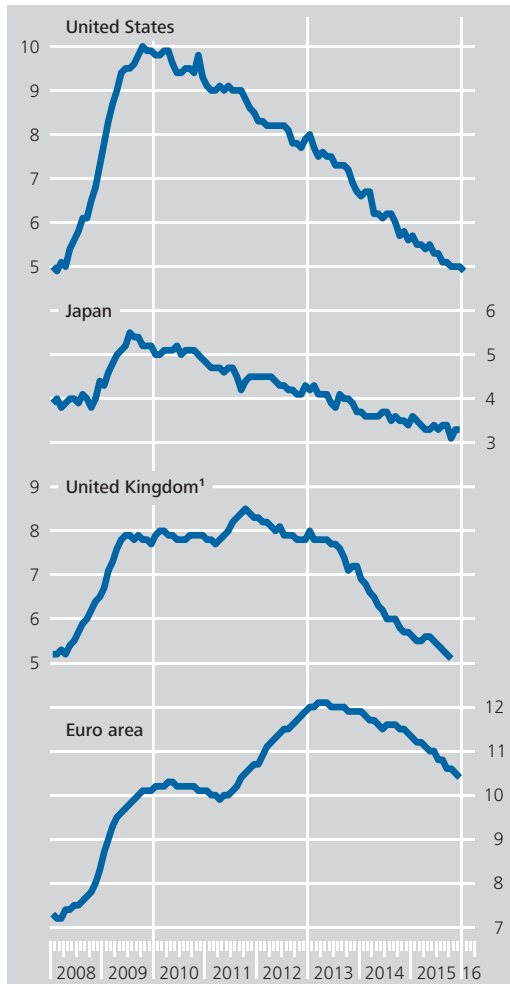
same time, corporate investment was down on the previous quarter. In this context, further cutbacks in investment by the oil and gas industries were a major factor. By contrast, private housing construction continued its recovery.

This all in all disappointing performance should be seen against the fact that quarterly GDP data in the USA fluctuate relatively sharply. Periods of stagnation such as most recently and in the first quarter of 2015, or even setbacks such as in the first quarter of 2014 must consequently not be equated with an economic slump. The strong employment growth in the final quarter of 2015 is another indication that the US economic upswing is still intact. At the beginning of 2016, employment continued to grow, albeit at a diminished pace, and the standardised unemployment rate fell to a new cyclical low of 4.9%. In the past few months, CPI inflation has also picked up somewhat. Headline inflation climbed to 0.7% in December, while core inflation rose to 2.1%. These developments were among the main reasons why the US Federal Reserve, in December 2015, raised the target range for its federal funds rate by 25 basis points for the first time since mid-2006.

*Further improvement in labour market situation*

### An international comparison of standardised unemployment rates\*

%, seasonally adjusted



Source: national data. \* Number of unemployed as a percentage of the labour force. 1 Centred three-month moving average.

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## Japan

*Economic activity unlikely to have picked up noticeably by the turn of the year*

The Japanese economy did not appear to be heading for a change of pace towards the end of the year, following a third quarter in which, according to revised data, it showed tepid growth, thus managing to avoid a technical recession.<sup>4</sup> Although industrial output recovered somewhat in the past quarter, on the demand side, private consumption appeared to be heading for a renewed slump, which was reflected in, among other things, a perceptible decline in goods imports. As, at the same time, goods exports rose considerably, net exports

could have given a boost to GDP growth by way of calculation. However, looking at the national accounts, the foreign trade statistics data should not necessarily be taken at face value. It is also questionable whether, as in the preceding quarter, inventory changes will have had dampening effects on GDP growth. Irrespective of the volatility of quite a few economic indicators, the fact that, even in Japan, the labour market is continuing to recover is a sign of continued GDP growth. On average over the autumn months, the unemployment rate hit a new cyclical low (3.2%). The inflation rate for the basket of consumer goods excluding energy and food, at 0.8% in December, was accordingly slightly lower than three months earlier. The persistently sluggish price movements encouraged the Bank of Japan to loosen its monetary policy reins even further at the end of January.

## United Kingdom

In the United Kingdom, economic growth remained solid. After adjustment for the usual seasonal variations, real GDP picked up in autumn by ½% on the period, according to a provisional estimate, and thus even grew slightly more strongly than in the third quarter. This was due mainly to the persistently robust growth in the real gross value added of the services sector, which forms the backbone of the UK economy. Manufacturing and construction output stagnated towards the end of the year, following a drop in the preceding quarter. Each of the three aforementioned economic areas contributed individually to the deceleration of GDP growth from 3% in 2014 to 2¼% in 2015. Fittingly, the labour market lost steam. Nonetheless, the unemployment rate fell to a new cyclical low of 5.1% by November. At the same time, annual Harmonised Index of Consumer Prices (HICP) inflation excluding energy and unprocessed food picked up in the past few

*Continuation of solid growth*

<sup>4</sup> As this issue of the Monthly Report went to press, no official estimate for Japanese GDP for the fourth quarter of 2015 was available yet.



months, though it, too, remained subdued in December (+1.0%). Against this background, the Bank of England has not raised its policy rates to date.

## New EU member states

*Acceleration of growth in the past year*

In the new EU member states (EU-6),<sup>5</sup> the economic upswing persisted in autumn. In the four countries which have so far published initial seasonally adjusted national accounts data, real GDP even grew strongly on the period. According to the available indicators, the Czech and Croatian economies, too, appear to have continued their expansion. On average for 2015, this country group's aggregate GDP was expanded by 3½%, as against +2¾% a year earlier. The primary reason for accelerated growth was that private consumption continued its resurgence against the background of solid wage growth and an increase in employment. The average unemployment rate for 2015 as a whole dropped to 7.5%. In addition, households' purchasing power benefited from the flat price trajectory. Owing to energy prices, in particular, consumer prices fell by 0.5% in the past year. In the fourth quarter, too, average annual HICP inflation among this group of countries stood at -0.5%. However, even excluding energy and unprocessed food, prices in 2015, despite robust wage and demand growth, rose by a paltry 0.5%.

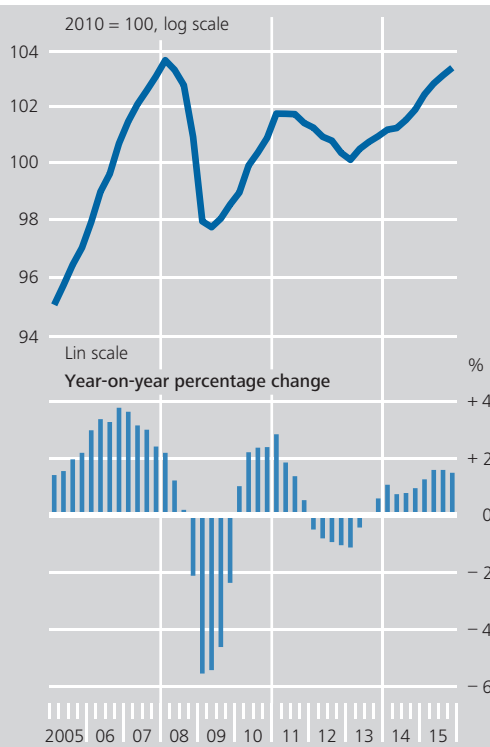
## Macroeconomic trends in the euro area

*Growth supported by domestic and foreign demand*

Towards the end of 2015, the steady but still only muted economic upswing continued in the euro area. According to initial data provided by Eurostat, real GDP went up by a seasonally adjusted ¼% between the third and fourth quarters, thus maintaining the previous quarter's growth rate. Aggregate output was up by 1½% on the year. In the fourth quarter, economic growth is likely to have been supported mainly by domestic demand, but also

### Real GDP in the euro area

Seasonally adjusted



Source: Eurostat.  
 Deutsche Bundesbank

by foreign demand. Although the growth rate of private consumption presumably dropped off slightly compared with the previous quarter, at the same time exports may well have again shown somewhat stronger growth in the quarter ended.

Real GDP grew at a rate of 1½% for full-year 2015, its fastest growth rate since 2011. Since economic output grew faster last year than estimated potential output, aggregate capacity underutilisation has presumably continued to decline. This is also indicated by survey-based data on capacity utilisation in key sectors of the economy. In the manufacturing sector, in January it was again up perceptibly from its October level; it outperformed its long-run average for two consecutive quarters for the first time since the crisis broke out in 2008.

*GDP growth for 2015 as a whole at highest mark since 2011*

<sup>5</sup> This group comprises the non-euro-area countries that have joined the EU since 2004, ie Poland, the Czech Republic, Hungary, Bulgaria, Romania and Croatia.

### Economic indicators for the euro area

Seasonally adjusted, quarterly averages, log scale



Sources: Eurostat, ECB and Bundesbank calculations. <sup>1</sup> Nominal export and import data according to foreign trade statistics (intra and extra trade). Price-adjusted using the producer price index (exports) or the import price index.  
 Deutsche Bundesbank

*Dynamics of private consumption have subsided somewhat*

The positive underlying trend dynamics of private consumption presumably continued unabated in the final quarter of 2015. Although, due to a decline in consumer confidence in the meantime, price-adjusted retail sales virtually remained stuck at the previous quarter's levels, seasonally-adjusted new passenger car registrations jumped. All in all, the growth rate of private consumption may have tailed off slightly.

*Perceptible rise in real disposable income*

The perceptible rise in real disposable income has presumably continued to impact positively on private consumption. On average over the first three quarters of 2015, real disposable in-

come was up by 2¼% on the year, not least on the back of improved employment figures and extremely consumer-friendly price trends. Over that period, the saving ratio barely budged; real income gains were thus converted more or less proportionally into increased consumption.

Indicators of euro-area investment activity display a mixed picture towards the end of the year. Construction investment presumably picked up perceptibly. One sign of this is that average construction output (both general construction and civil engineering) was up over the October-November period by a seasonally adjusted ¾% from the previous quarter, possibly attributable in part to the weather conditions. On the other hand, capital goods production was down markedly in the fourth quarter, which could point to a fall in investment in machinery and equipment.

*Rise in construction investment*

Following a subpar performance a quarter earlier, exports appear to have rebounded somewhat in the fourth quarter, though they failed to recover the strong growth rate of the first half of 2015. The available data show that, on average over October-November, exports were up by a seasonally and price-adjusted 1¼% from the previous quarter. It was not only intra-euro-area trade which showed a marked increase (+1¾%). Exports of goods to non-euro-area countries, especially to EU countries outside the euro area, picked up as well. Over the same period, imports were up by 1¾% after price adjustment. External trade prices are still being influenced to a great degree by sharply falling commodity prices. Export and import values were each therefore up by a mere ½%; the trade balance remained virtually unchanged.

*Exports probably back up somewhat*

Industrial activity remained restrained in the last quarter of 2015, too. Although output of intermediate goods picked up slightly on the period after seasonal adjustment, at the same time, consumer goods output declined slightly, while capital goods output fell markedly. Owing, amongst other factors, to the mild weather

*Industrial activity still restrained*

conditions, energy production dropped sharply. At last report, industrial output was up by  $\frac{3}{4}\%$  on the year.

*Positive economic trend in most euro-area countries*

The moderate upward underlying macroeconomic trend is visible in most of the euro area. In France, real GDP was up in the fourth quarter by  $\frac{1}{4}\%$  after seasonal adjustment, although private consumption dropped off from the previous quarter. Factors could have included not only a weather-induced decline in expenditure on energy but also the November 2015 attacks in Paris. By contrast, corporate investment was up sharply, presumably due also to tax incentives. In addition, according to provisional national accounts data, there was a perceptible build-up of inventories. On the whole, in 2015 economic activity picked up the pace markedly; GDP was up by 1% following an increase of only  $\frac{1}{4}\%$  in 2014. Aggregate output in Italy expanded only minimally in the last quarter of the year. Following three years of GDP contraction, the Italian economy stabilised, reporting average GDP growth of  $\frac{1}{2}\%$  for the year. Spain saw a continuation of the dynamic upward economic trend, supported by domestic and foreign demand alike. Real GDP in the fourth quarter was up by  $\frac{3}{4}\%$  after seasonal adjustment, and by  $3\frac{1}{4}\%$  over the entire year ended. In the rest of the euro area, the quarterly change in the pace of economic growth was minimal; only in Greece and Finland did GDP continue to contract.

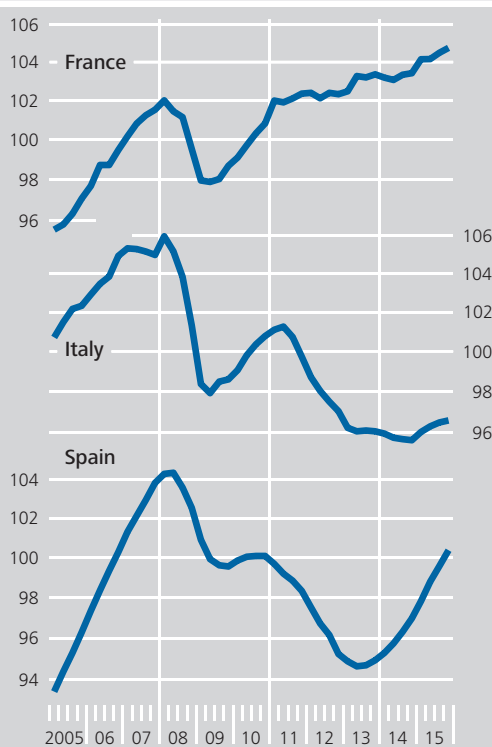
*Pace of growth tailing off slightly at the current end*

The upward trajectory of euro-area economic activity will presumably persist in the first quarter of 2016. As before, domestic demand is continuing to benefit from favourable financing terms, higher employment, rising disposable incomes and favourable price trends. However, foreign trade, particularly exports to non-euro-area countries, could lose steam. At last report, survey indicators were showing a certain dampening of economic agents' expectations, though these still remained positive.

The gradual improvement in the labour market continued in the fourth quarter. In December,

### Real GDP in selected euro-area countries

2010 = 100, seasonally adjusted, log scale



Source: Eurostat.  
 Deutsche Bundesbank

the standardised unemployment rate fell to 10.4%, one percentage point below its level one year earlier. Third-quarter employment was up by a seasonally adjusted 0.3% on the quarter and by 1.1% on the year. Even so, the annual percentage increase in hourly labour costs contracted further during the third quarter to 1.1%.

*Slowly declining unemployment rate*

In the final quarter of 2015, euro-area consumer prices fell slightly after seasonal adjustment compared to the third quarter, in which they had moved sideways. The main reason was that crude oil prices continued to drop, leading to a sharp reduction in energy prices. By contrast, the prices of the other components of the basket of goods went up, albeit, on the whole, less strongly than in the two previous quarters. This was especially the case for services, for which the upward trajectory of prices flattened markedly, but also for non-energy industrial goods. Food prices went up quite sharply. Annual headline HICP inflation

*Consumer prices down slightly*

rose slightly to 0.2%; excluding energy, it climbed to 1.1%.

*Consumer prices unchanged in 2015 owing to decline in energy prices*

For 2015 as a whole, the lower crude oil prices were the dominant element in consumer price developments. Owing to plummeting energy prices, HICP inflation dropped down to zero, following a very low rate of 0.4% a year earlier. The average increase in the prices of the other components, at 0.9% for 2015, was somewhat stronger on the year, yet at the same time perceptibly lower than the annual average since 1999.

According to Eurostat's flash estimate, in January 2016 seasonally adjusted euro-area con-

sumer prices were down only slightly on the month (-0.1%), even though consumers once again paid significantly less for energy. In fact, industrial goods prices rose quite sharply, and even the prices of services rose slightly. On the other hand, food prices remained virtually unchanged. Annual HICP inflation excluding energy rose to +1.1% from December, and headline HICP inflation was up quite considerably to +0.4%, since energy prices had dropped even further a year earlier. Should crude oil prices move along the current forward path in the coming months, headline HICP inflation could nonetheless temporarily return to negative territory.

*Non-energy industrial goods prices up quite sharply in January*