Global and European setting

World economic activity

Global economic growth remains subdued

Global economic growth is likely to have remained subdued in the third quarter. There are no signs of a perceptible slowdown in economic growth, let alone a downturn in global economic activity, contrary to fears expressed in the public debate given the events in some emerging market economies (EMEs). There had been mounting concerns regarding, in particular, China's economy in connection with financial market turmoil. According to official figures, however, gross domestic product (GDP) in China expanded at largely the same rate as in the second quarter in real terms (although the economy contracted markedly in nominal terms). Although GDP growth in the United States was considerably weaker than in the previous quarter, this comparison is skewed by the exceptionally high spring figures. The dampening impact of changes in inventories has also masked a further fairly substantial increase in domestic final demand. In the euro area and the United Kingdom, too, real GDP growth in the third quarter was not quite as buoyant as it had been in the second quarter. No national accounts data were available for Japan at the time this report went to press. After the setback in spring, a perceptible pick-up in economic activity in Japan is unlikely to materialise until the present quarter. Altogether, the upturn in the advanced economies is proving resilient. Contrary to concerns voiced in some quarters, the situation in the EMEs does not appear to have deteriorated further.

Still no sustained improvement in global economic activity according to short-term indicators

Short-term economic indicators confirm that global economic activity still shows no signs of lasting improvement. According to data from the Dutch Centraal Planbureau, the monthly average volume of global goods trade rose markedly in July-August compared to its low level in spring. However, it remained subdued in relation to its level at the end of 2014. The rise in average global industrial output over the July-August period must also be placed in the context of the weak first half of 2015. The cyclical strains in the EMEs over the last few quarters have had a particularly severe impact on the car market (see box on pages 12 to 14). However, government purchase incentives have recently stimulated new car sales in China. The VW group's problems do not yet seem to have adversely affected the global market for new cars.

Further downward revision of IMF global growth projections

The content of the October World Economic Outlook (WEO) published by the International Monetary Fund (IMF) reflects the fact that global activity has remained moderate. In comparison to the July update, the IMF has lowered its (purchasing-power-parity-weighted) global economic growth projections for 2015 and 2016 by 0.2 percentage points each to +3.1% and +3.6% respectively. In particular, it has significantly pared back its projections for a number of commodity-extracting countries – specifically Brazil, the Commonwealth of Independent States (CIS), but also Canada. The IMF has left its growth projection for China for both years unchanged for the third time in succession.

Global economy's change of pace attributable to commodity-extracting economies

Since 2011 the IMF, like other observers, has consistently overestimated the global economic outlook. The latest downward revisions thus fit a pattern of previous revisions.[1] As recently as April 2015, a modest global upturn was anticipated this year. However, the IMF is now expecting a slight deceleration. According to a simple regional breakdown, this slackening is almost entirely attributable to Latin America and the CIS (see pages 16 and 17), whose economies are reeling from the impact of plummeting commodity prices. An easing of the severe recession in Russia and Brazil alone

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

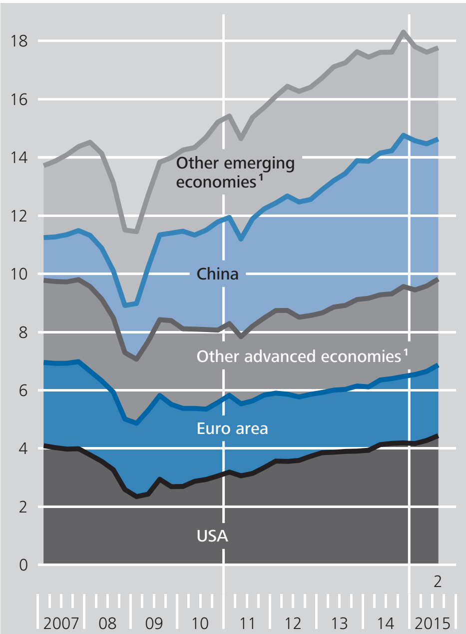
Developments in global car sales and implications for the world economy

Analysts looking to assess the state of the world economy in real time currently have no more than a handful of global indicators to work with. And aside from survey-based variables such as the purchasing managers' indices, the measures they can use, for instance the estimations published by the Dutch Centraal Planbureau (CPB) on world industrial production and global trade, are only published with a relatively long delay.[1] There is no such time lag in the availability of car sales data. Information on sales or new car registrations in almost all the major economies is released during the course of the following month, and in some cases just a few days after the end of the month.[2] Nor is aggregation an issue – car sales are normally measured in units sold, so aggregated numbers are simply the sum of national data.[3]

Thus calculated, these data reveal that global sales figures plotted a relatively stable upward trend through to the end of 2014, interrupted only when the global economic crisis sent sales figures sharply into reverse in 2008.[4] Patterns were more mixed among the individual groups of countries. The largely saturated markets in the advanced economies took quite some time to regain the ground they had lost in the crisis.[5] The group of emerging economies, by contrast, racked up robust gains across the board, outstripping their pre-crisis sales figures as early as the spring of 2009, fuelled in no small part by the very vibrant Chinese market. The combined effect of these two factors sent the proportion of global car sales attributable to the emerging economies soaring from a little over a quarter in 2006 on average to just shy of half in 2014.

Global car sales*

Millions of vehicles; seasonally adjusted quarterly data



Source: Bundesbank calculations based on national data. * Units (new car registrations or sales). Aggregate covers 93% of estimated global sales for 2014. 1 IMF definition. 2 Subsamples used to estimate last value.

Deutsche Bundesbank

1 The CPB's projections are published roughly seven weeks after the end of the month.
2 The analysis is based on figures for 34 advanced economies and 19 emerging economies according to the International Monetary Fund's classification of countries. The International Organization of Motor Vehicle Manufacturers (Organisation Internationale des Constructeurs d'Automobiles, or OICA) estimates that these countries were responsible for 93% of global car sales in 2014. In the same year, these same economies accounted for nine-tenths of global gross domestic product (GDP).
3 This comes at the expense of interpretational problems, however, if the data are lacking in structural constancy (if there is a shift in the share of higher-quality vehicles, say). The existence of conceptual inconsistencies can also hamper the interpretation of global car sales, with some countries such as the USA recording actual sales figures to the final customer, others such as those in the euro area using new car registrations and others again (China) the data on vehicle deliveries to dealers. Further inconsistencies can be found in the vehicle classes included in the data and the fact that some countries do not seasonally adjust their data. The time series in question were seasonally adjusted.
4 Sales figures also dipped briefly in the spring of 2011, when the Tōhoku earthquake in Japan disrupted automotive manufacturing and deliveries throughout the world.
5 It took the group of advanced economies until this summer to eclipse their sales figures for the final quarter of 2007.

Car sales in the emerging economies have been faltering since the beginning of 2015. The general slowdown in the pace of Chinese growth meant that demand for vehicles fell short of the strong showing in the fourth quarter of 2014, while sales figures slumped in Brazil and Russia, both of which are mired in recession. Households postponed purchases of consumer durables, which is a common response to a cyclical lull. This sent the seasonally adjusted emerging economy sales for the third quarter of 2015 down by 9% in total on what were admittedly particularly strong data for the fourth quarter of 2014. Although the recovery process continued in the advanced economies, global sales likewise decreased noticeably.[6]

Global car sales* and worldwide industrial production

Standardised quarter-on-quarter change;[1] seasonally adjusted data

Source: Bundesbank calculations based on national data and Centraal Planbureau. * Units (new car registrations or sales). Aggregate covers 93% of estimated global sales for 2014. **1** Adjusted for mean and standard deviation, calculated over the period 2007Q1 to 2015Q2; no unit. **2** Sub-samples used to estimate last value for car sales; for industrial production, mean of July-August 2015 versus 2015Q2.
Deutsche Bundesbank

All in all, then, developments in the car market are consistent with other indicators in that they point to weakness in global industrial activity. If the sales figures are standardised to account for the higher level of volatility, it becomes evident that automotive sales have been a reliable indicator of noteworthy movements in global industrial production such as the slump sparked by the 2008 crisis, the subsequent rally and the sluggish momentum observed in recent years. As global car sales figures become available sooner, they can therefore play an important role as an indicator for global industrial activity and also for economic output as a whole. However, the car market reflects more than just the ups and downs of the aggregate business cycle – it also mirrors developments specific to the automotive sector.[7]

Since automotive manufacturing – true to the principle of the international division of labour – shows a much stronger degree of regional concentration compared to demand, a pronounced movement in global sales can leave a noticeable mark on individual countries' industrial production. Germany is a prominent example, but the same also goes for Japan and South Korea as well as a number of central and eastern European economies where domestic manufacturing activity far outstrips national demand. Added to this, major automotive manufacturers are headquartered in just a handful of countries, including the three mentioned above as well as China, the USA and France.[8] The assertion can probably be made that automotive groups based in ad-

6 Global car sales in the third quarter of 2015 were just under 3% down, in seasonally adjusted terms, on the figures for the fourth quarter of the previous year, even though the sales figures in the advanced economies were up by 2¾%.
7 One such development was the scrappage schemes introduced by a number of advanced economies in 2009, the prime outcome of which was probably a shift in the timing of demand. See A Mian and A Sufi (2012), The Effects of Fiscal Stimulus: Evidence from the 2009 Cash for Clunkers Program, The Quarterly Journal of Economics 127 (3), pp 1107-1142.
8 OICA data show that manufacturers headquartered in these six countries accounted for more than 95% of global production in 2014.

vanced economies, in particular, will tend to keep stages of the value chain performed by highly qualified personnel, such as research and development, in their home countries, with the result that the segment's importance for the domestic economy is not properly reflected by the production statistics showing the number of vehicles manufactured. A steeper drop in global sales would therefore worsen the economic outlook for these countries.[9]

However, the most recent monthly data, for August and September, signalled that sales in the emerging economies might have already bottomed out. Tax breaks should also stimulate car sales in China over the next few months. But it is primarily the longer-term prospects which look rosy for automotive sales in the emerging economies, because these countries probably still have some catching up to do. As a case in point, data for 2013 indicate that just under 80 cars were registered per 1,000 inhabitants in the emerging economies, compared to a figure of 450 in the advanced economies.[10] In the advanced economies, by contrast, the already-high motorisation rates and the demographic outlook would suggest that automotive sales will follow a relatively flat growth path over a medium to long-term horizon.

9 Similarly, specific problems faced by individual manufacturers could also drag on macroeconomic developments in these countries. The extent to which the recent difficulties experienced by the Volkswagen Group will impact on economic activity in Germany or elsewhere still cannot be gauged at the current juncture, however.
10 The figures for the total stock of car registrations are based on OICA data, which are available up to 2013. Two-wheeled motor vehicles, which are a very important mode of transport in many emerging economies, are not captured. The demographic statistics reflect interpolated estimations by the United Nations.

would suffice to perceptibly raise the affected regions' contributions to global growth in 2016. As things currently stand, it therefore seems reasonable to expect global economic activity to strengthen.

Further falling prices, especially for crude oil, …

Given that the market supply remains generous, and in view of widespread concerns about the economy, commodity prices as measured in US dollars fell sharply in August. The spot price for barrel of Brent crude oil slipped back below US\$50 for the first time since January. As this report went to press, the spot price stood at US\$45, although futures were still trading at considerable premiums. According to the HWWI index, prices for industrial commodities have continued to sink. By contrast, there are signs that prices for food, beverages and tobacco have stabilised.

… reflected in consumer price levels

Lower oil prices have eased the pressure on consumers in the advanced economies. Overall, consumer prices recorded a slight year-on-year decrease of 0.2% – their first negative growth rate since October 2009. This was caused by a drop in seasonally adjusted energy prices of more than 6% over a three-month period. Excluding energy and food, consumer prices rose moderately by 1.3% year on year. Compared with June, this "core" inflation rate even increased slightly. There is still no evidence of a broad-based contraction in consumer prices.

Selected emerging market economies

China's economic growth unchanged, according to official estimates, …

During the reporting period, according to an official estimate, China's economic output grew by 7% on the year, as in the summer. At +1¾%, quarterly GDP growth also remained unchanged in seasonally adjusted terms. This seems to suggest that the slowdown in economic growth feared by many in the aftermath of the massive stock market crash this summer and on the basis of the unfavourable indicators has not taken place. In nominal terms, however, there was, in fact, a marked decrease in GDP growth; the year-on-year rate fell from 7% in the second quarter to 6¼% in the third quarter. The implicit GDP deflator has thus declined markedly of late. Nonetheless, it is also possible that the official data are overstating both the increase in real economic output and the fall in the domestic price components.[2] The fact that consumer price inflation rose to +1.8% in the third quarter would support this interpretation.

… but imports weak

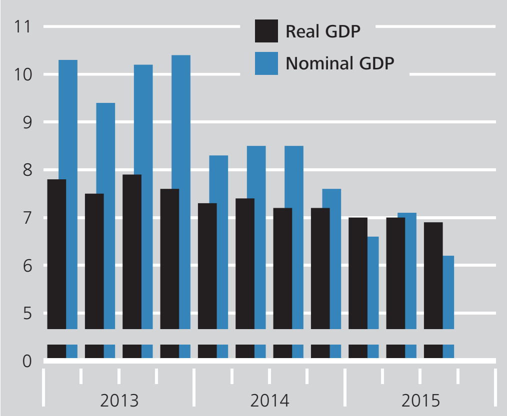
China's foreign trade remained sluggish over the last few months. In terms of value, goods exports were down by just under 2% (on a US dollar basis) on the year between January and September. Import expenditure sank by as much as 15%. Even factoring out the sharp fall in commodity prices, which account for a large share of China's imports, it is likely to have recorded a decrease. This led the IMF to lower its growth projection for real imports this year to 2½% in its current WEO. Import activity is expected to be significantly weaker in 2016 as well.

Growth in India's economy driven by private consumption

In the second quarter, the most recent for which national accounts data are available, real GDP in India grew by 7% on the year. The pace of aggregate growth was therefore only slightly slower than at the beginning of the year. Based on the expenditure-side data from the Central Statistical Office, private consumption was the main driver of growth. It was probably bolstered by an improvement in households' real purchasing power as a result of falling inflation. In the third quarter, the year-on-year change in the consumer price index (CPI) continued its downward movement; at 3.9%, it recorded its smallest increase since the beginning of the time series in 2011. The subdued price developments were largely due to the easing of the situation in the domestic food markets. Given these favourable conditions for private consumption, India's economy is likely to have continued to expand fairly briskly in the third quarter.

Economic growth in China

Year-on-year percentage change



Sources: National Bureau of Statistics of China and Haver Analytics.
Deutsche Bundesbank

GDP contraction likely to continue in Brazil

According to official estimates, real GDP in Brazil contracted by 1¾% in seasonally adjusted terms in the second quarter compared to the previous quarter, in which it had already shrunk by ¾%. In comparison to its peak in the first quarter of 2014, economic output is down by 3½% so far. This pronounced contraction was chiefly due to the decline in commodity prices. The recession is also likely to have persisted in the quarter just ended given the further drop in the price of important export commodities during the third quarter. The restrictive monetary policy pursued by the central bank in an attempt to combat strong inflation is an additional factor weighing on economic activity, especially gross fixed capital formation, which has fallen sharply since 2013. Consumer price inflation rose to 9.5% on average during the third quarter. Excluding the effects of adminis-

2 This is because China's National Bureau of Statistics uses a simplified method to deflate nominal value added for most sectors owing to a lack of proper price indices. See X Xu (2009), The establishment, reform, and development of China's System of National Accounts, Review of Income and Wealth, Vol 55, Issue Supplement s1, pp 442-465. As part of this process, it uses a producer price index for industry, which currently also reflects the impact of falling prices for imported inputs. This means that real economic growth at the current end tends to be overestimated, while the domestic price trend is underestimated.

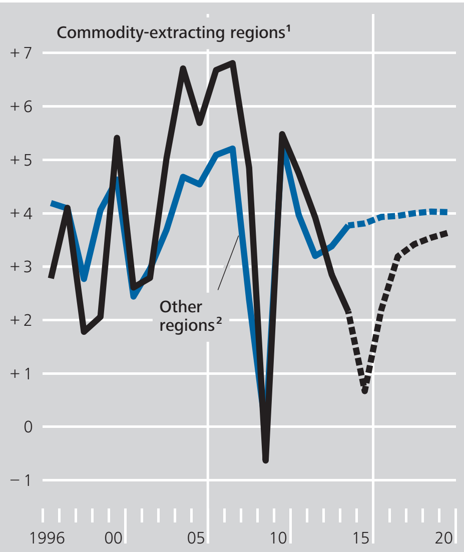
The slowdown in global economic growth and the decline in commodity prices

According to the most recent projections published in its October World Economic Outlook (WEO), the staff of the International Monetary Fund (IMF) is expecting global economic growth (based on purchasing power parity weights) to decline from 3.4% last year to 3.1% in the current year, before rising to 3.6% in 2016. As the IMF publishes both the national rates of change as well as the respective shares in nominal global economic output, it is possible to calculate individual countries' or regions' contributions to global growth. Furthermore, the rates can be consolidated to form new cross-border aggregates.

Since commodity prices have been, and in some cases are still, falling markedly, there are currently particular merits in breaking them down by producer and consumer countries. A calculation of this kind shows that the slowdown in global economic growth in the current year is attributable solely to the commodity-extracting regions.[1]

Economic growth by groups of countries*

Year-on-year percentage change in real GDP



Sources: IMF's October 2015 World Economic Outlook (WEO) and Bundesbank calculations. * Based on the respective prior-year purchasing power parity weights. From 2015, IMF projections. **1** Commonwealth of Independent States, Latin America and the Caribbean, Middle East and North Africa (including Pakistan and Afghanistan) as well as Sub-Saharan Africa. **2** Advanced economies, Asian and European EMEs.

Deutsche Bundesbank

Real gross domestic product (GDP) in this group of countries will probably rise by just 0.7% this year, compared with +2.2% in 2014. The considerable deterioration in the economic situation in the Commonwealth of Independent States and in Latin America alone will push down global growth by 0.3 percentage point compared with the previous year. This is due, in particular, to the severe recessions in Russia and Brazil. An easing of the economic downturn in these two countries would already be sufficient to bring about a marked increase in the contribution of the commodity-producing regions to global growth in 2016. As things currently stand, it therefore seems quite plausible to expect the global economic expansion to strengthen in the coming year.

For the rest of the world, however, ie the advanced economies and the Asian and European EMEs, the WEO expects growth in 2015 to be just as strong as in the previous year (+3.8%).[2] The IMF is expecting growth to pick up slightly in the coming years. The comparatively robust economic growth in the primarily commodity-consuming regions, which, purchasing-power-parity-weighted, make up three-quarters of the world economy, runs counter to the assumption that the decline in commodity prices since mid-2014 is due mainly to weak demand. Current figures show no discernible signs of a global economic downturn, which could result in strong demand-related price reductions, as was the case in 2008-09. In the past, quite strong co-movements were also regularly observed between the rates of expansion in commodity-producing regions and in the rest of the world. The current divergence in regional growth rates

1 In the following, the term "commodity-extracting regions" is defined as a group of regions comprising the Commonwealth of Independent States, Latin America and the Caribbean, the Middle East and North Africa (including Pakistan and Afghanistan) as well as Sub-Saharan Africa, as defined by the IMF. Accordingly, the term "Other regions" refers to the advanced economies as well as to the Asian and European EMEs.
2 The slight deceleration of GDP growth in China is being offset by a modest pick-up in economic growth in the industrial countries.

is therefore much more consistent with the hypothesis that the continuing decline in commodity prices, especially for crude oil, that has been observed for quite some time is due mainly to an oversupply.

Although there are no signs of the discernible pick-up in global economic activity which had been expected owing, above all, to lower oil prices, there were some early warnings about overestimating this stimulating effect.[3] There is much to suggest that a decline in the price of oil may not stimulate economic growth to the same extent that a rise in oil prices weighs on it.[4] The oil price collapse of 1986, which was also primarily due to supply-side factors yet still failed to stimulate US economic growth, might be seen as a precedent.[5] Furthermore, with respect to China, a rebalancing of the economy appears to be dampening growth at present.

All things considered, the unusual regional growth divide clearly shows that the slowdown in global economic growth this year is, if anything, a response to the decline in the prices of important commodities and not the cause. In the affected countries, the high prices in previous years led to a wave of extensive capacity expansion measures in the commodities sector, which are now proving to have been bad investments.[6] The resulting adjustment process in the commodity-extracting economies that has become necessary is certainly a painful one. This structural change cannot, however, be substituted by additional, temporary economic stimulus measures in other countries.

3 See Deutsche Bundesbank, Potential impacts of the fall in oil prices on the real economy, Monthly Report, February 2015, pp 12-14.
4 A sharp decline in crude oil prices could present an additional source of uncertainty surrounding, not least, corporate investment decisions. See also Deutsche Bundesbank, The price of crude oil and its impact on economic activity in the industrial countries, Monthly Report, June 2012, pp 27-49.
5 See Deutsche Bundesbank, Causes of the fall in oil prices, Monthly Report, February 2015, pp 16-17.
6 See Deutsche Bundesbank, Slowdown in growth in the emerging market economies, Monthly Report, July 2015, pp 15-31.

tered prices and food, this rate fell to 6.9%, a figure which is nonetheless far higher than the central bank's monetary policy target rate of 4.5%.

Signs of an end to the recession in Russia

There are signs that the severe recession in Russia may be coming to an end. After real GDP had fallen by 4½% year-on-year in the second quarter of 2015, this decline narrowed to 4% in the third quarter according to an official flash estimate. Viewed over the period, the contraction may even have stopped. This is consistent with the fact that imports of goods, which had slumped at the beginning of the year, have recently stabilised. However, export revenue (calculated in US dollars) has continued its decline as a result of the falling prices for oil and gas. Although there has been no further rise in consumer price inflation (CPI), it averaged a high 15.7% during the third quarter.

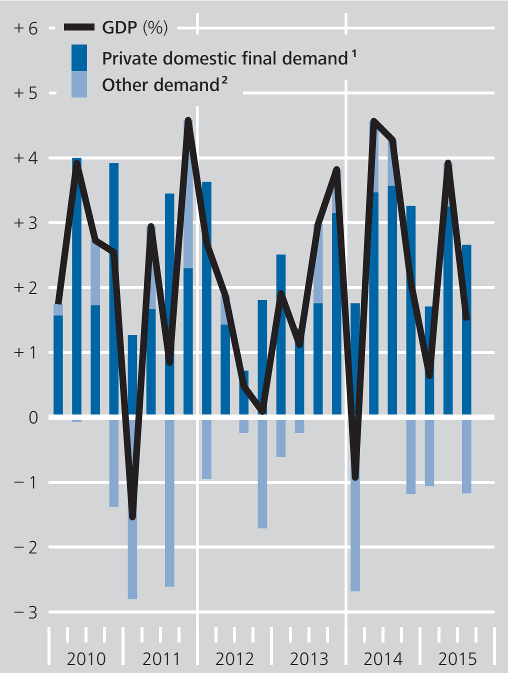
United States

Private domestic final demand maintains momentum

According to an initial estimate by the statistical office, third-quarter seasonally and price-adjusted GDP in the United States was up slightly on the second quarter (just under +½%), in which it had recorded strong growth (+1%). The main cause of the deceleration in GDP growth was a significant slowdown in the buildup of inventories, which had been relatively brisk in the preceding periods, meaning that a correction was due. In this regard, the GDP result for the third quarter should not be viewed in isolation from the good spring figure. Private final domestic demand, which heavily influences the underlying cyclical trend, lost only a little momentum; it even grew slightly faster than its average during the current upswing, which began in the summer of 2009. Private consumption, in particular, went up again fairly sharply. By contrast, the upturn in corporate capital formation was restrained by a further reduction in investment expenditure in

Contributions to US quarterly real GDP growth

Percentage points, seasonally adjusted, annualised rate



Source: Bureau of Economic Analysis. **1** Private consumption and private gross fixed capital formation. **2** Government demand, inventory changes and net exports.
Deutsche Bundesbank

the oil industry.[3] All in all, the US economy continued to expand at a moderate underlying pace. Employment growth over the last few months pushed the unemployment rate down to a new cyclical low of 5.0% in October. On the whole, consumer prices in September did not exceed their level in the previous year owing to a marked decline in fuel prices. By contrast, excluding energy and food, (core) inflation stood at 1.9%. The US Federal Reserve continued to leave its extremely expansionary monetary policy stance unchanged.

Japan

Economic activity unlikely to have picked up noticeably in the third quarter

Although an initial official estimate of aggregate output in Japan for the third quarter was not yet available at the time this Monthly Report went to press, the standard indicators do not suggest any noticeable improvement in economic activity in the third quarter following the second-quarter setback. Industrial output, in particular, which had tracked real GDP growth fairly closely in the preceding periods, contracted again significantly in the third quarter. Although there was a certain pick-up in private consumption on the demand side, real goods imports surged considerably, and, hence, GDP might not have increased. There were also doubts as to whether inventory changes stimulated growth, as they had in the preceding quarters. Nonetheless, the Japanese economy is likely to remain on its underlying recovery path, which is, however, rather flat by international standards. Enterprises were expecting a steep upturn in industrial output at the beginning of autumn, according to the latest survey. The unemployment rate also held steady in the third quarter, close to its cyclical low. The inflation rate for the basket of consumer goods excluding energy and food rose from 0.6% in June to 0.9% in September.

United Kingdom

Strong growth continues in the services sector

The UK economy is continuing along a solid expansionary path. After elimination of the usual seasonal effects, real GDP in the third quarter went up by ½% compared to the second quarter, in which it had risen by ¾%. The slower pace of growth was mainly due to the production of oil and gas, which had expanded rapidly in the spring months in connection with the introduction of tax relief measures. Although construction output dropped off sharply in the third quarter according to provisional figures, and manufacturing output was once again somewhat constrained, real gross value added in the services sector, the backbone of the UK economy, expanded slightly more strongly than in the previous quarter. This is consistent with a

3 According to a Bundesbank calculation, the decrease in gross fixed capital formation in the oil industry dampened US real GDP growth over the last three quarters by just under ½ percentage point cumulatively. This is equivalent to the braking effect of this component over the first nine months of 2009, a period which also followed a sharp drop in oil prices. See also Deutsche Bundesbank, The effect of one-off factors on real GDP growth in the USA in the first quarter of 2015, Monthly Report, May 2015, pp 15-18.

drop in the unemployment rate to a quarterly average of 5.3%, representing a new cyclical low. At the same time, annual Harmonised Index of Consumer Prices (HICP) inflation excluding energy and unprocessed food also remained muted in September (+0.7%). Against this background, the Bank of England has not raised its policy rates to date.

New EU member states

Sustained upswing in the third quarter

Economic activity remained lively during the third quarter in the new EU member states (EU-6)[4] as a whole. In the five countries which have so far published initial seasonally adjusted national accounts data, real GDP grew, in some cases strongly, on the period. Figures for Croatia's economy, which has recently recovered slightly from a lengthy recession, are not yet available. On the demand side, private consumption is likely to have been an important driving force behind aggregate expansion in the region. One factor here is the improving labour market situation. The unemployment rate for this group of countries fell in the third quarter by one percentage point on the year to 7.3%, and salaries showed a robust increase. Another is the easing of prices. Consumer prices for this group of countries (EU-6) fell 0.6% on the year as a result of energy prices, in particular (although the figures ranged from -1.5% in Romania to +0.3% in the Czech Republic). Excluding energy and food, consumer price inflation was +0.4%.

Macroeconomic trends in the euro area

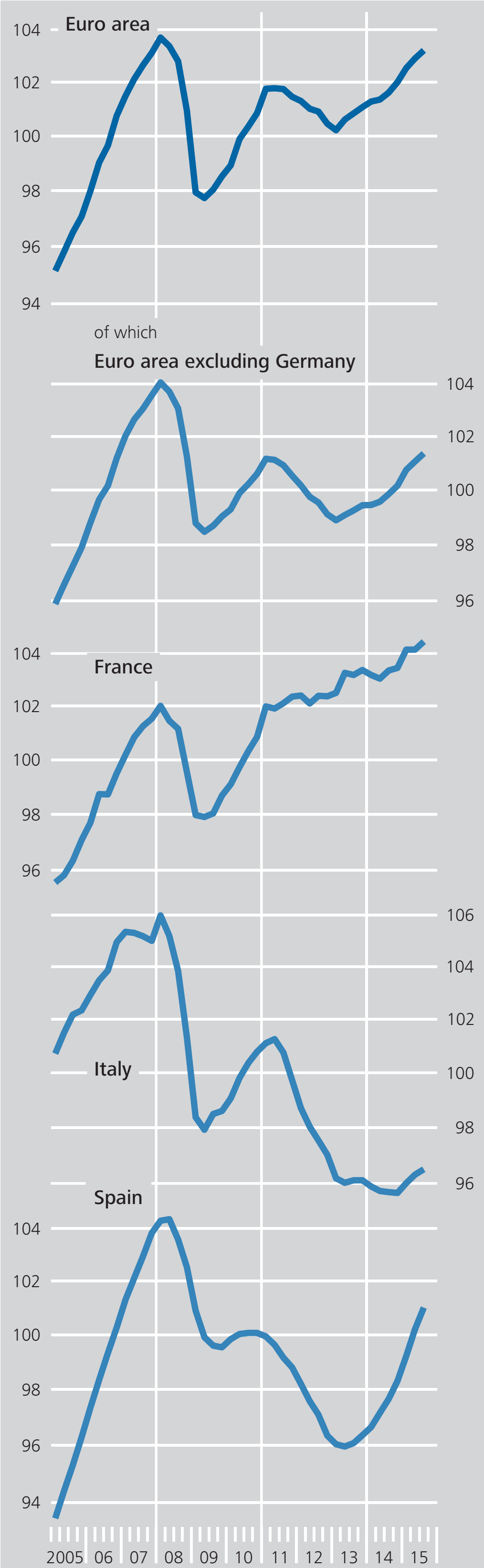
Recovery in the euro area remains moderate

The economic recovery in the euro area continued at a slightly slower pace during the third quarter. According to initial data from Eurostat, real GDP rose by ¼% in seasonally adjusted

4 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.

Aggregate output in the euro area

Real GDP, 2010 = 100, seasonally adjusted, quarterly, log scale



Source: Eurostat.
Deutsche Bundesbank

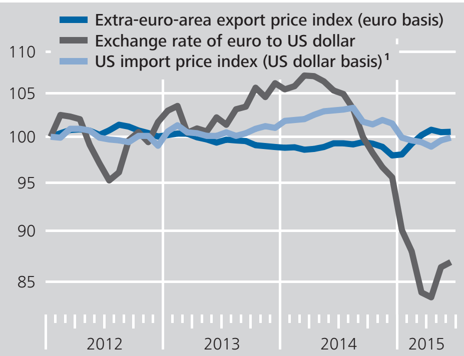
Recent developments in the exports of euro-area countries

Foreign trade has thus far constituted an important pillar of the euro area's economic recovery. Export growth has been strengthening almost continually since the second quarter of 2013. In the first half of 2015, real exports of goods and services as defined in the national accounts even exceeded the previous year's figure by 5%, while world trade saw distinctly weaker growth. It would seem obvious to ascribe at least some of this export success to the depreciation of the euro. After all, the effective euro exchange rate had decreased by a little more than one-tenth within a year. However, it must be borne in mind that the national accounts data for the euro area not only include trade with third countries (extra-euro-area trade), but also trade among euro-area countries (intra-euro-area trade). It is therefore worth taking a look at the more detailed data contained in the foreign trade statistics.

According to the foreign trade statistics, total revenue from goods exports rose in the euro-area countries by 5% year-on-year in the first half of 2015. At 6½%, growth in trade with third countries was roughly twice as high as that of trade among euro-area countries (3%). The upswing accelerated against the second half of 2014 for both extra-euro-area and intra-euro-area trade; this pick-up was even slightly stronger for extra-trade than intra-trade. However, this picture is somewhat altered when nominal variables are translated into real variables using export price indices[1] as price trends in foreign trade have diverged more strongly since the depreciation of the euro began in the second quarter of 2014. Whereas export prices in extra-euro-area trade saw a year-on-year increase of slightly more than 1% in the first half of 2015, they decreased by 2¼% in intra-euro-area trade. In real terms, then, the growth in intra-euro-area trade of 5¼% was practically as robust as that of extra-euro-area trade (+5½%).

Foreign trade price indices and euro-US dollar exchange rate

January 2012 = 100, log scale



Sources: ECB, Eurostat and Bureau of Labor Statistics. **1** For imports of goods from EU countries.
Deutsche Bundesbank

The astonishingly clear expansion in trade within the euro area partly reflects strengthened exports to third countries owing to the European production network. Above all, however, the improved underlying economic trend within the euro area is likely to have been a key factor, as can be seen in the substantially higher (+6¼% year-on-year) intra-euro-area trade revenue from goods for private consumption (consumer goods and motor vehicles).

In trade with third countries, there were notable increases in revenue from goods exports to the United States (up by one-fifth year-on-year), to India, South Africa and Turkey (up by more than one-tenth each), to central and east European EU countries (outside the euro area) and to the United Kingdom (up by just under one-tenth). Marked increases were also seen in trade with Switzerland and the Scandinavian countries. Growth in export revenue from trade with China was weak by comparison, and earnings from exports to Brazil even dropped significantly, while earnings from

1 Export prices are approximated here using producer prices for non-domestic sales.

deliveries to Russia fell very sharply (by one-third).

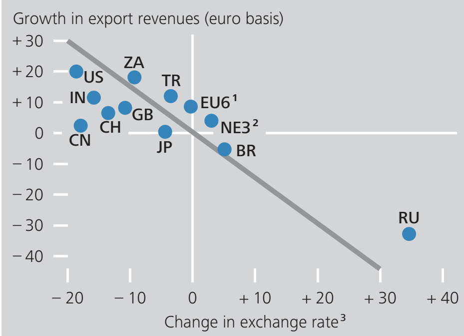
These differences largely reflect cyclical disparities at the international level. While many advanced economies are constantly expanding, growth in a host of emerging market economies has tailed off considerably. This primarily relates to commodity-exporting countries, some of which have even slid into recession (see the box on pages 16 and 17).

In addition, marked changes in exchange rate patterns are likely to have played an important role in these diverging developments. The euro depreciated very steeply against the US dollar, by almost one-fifth. This is consistent with the especially strong increase in export revenue (in euro terms) from the United States. The depreciation of the euro was comparatively steep against the pound sterling and Swiss franc, as well. However, growth in exports was disproportionately low here.

The picture among the major emerging market economies was very mixed. While the euro made heavy losses against the currencies of China, India and South Africa, only the latter two countries saw high export growth rates. The euro appreciated against the Brazilian and, in particular, the Russian currencies, and export revenue declined more or less proportionally to this appreciation. It is also striking that export revenue grew significantly from some countries in which, in the first half of 2015, the currency barely appreciated against the euro or even lost value in some cases. This applies to the central and east European EU countries outside the euro area as well as to the neighbouring Scandinavian countries of Denmark, Norway and Sweden. These two groups of countries accounted for one-fifth of extra-euro-area trade in the first half of 2015. The major increase in exports to Turkey was also accompanied by comparatively weak euro depreciation.

Growth in export revenues by country and exchange rate changes

%, 2015 H1 vs 2014 H1



Source: Eurostat. **1** BG, CZ, HR, HU, PL, RO. **2** DK, NO, SE. **3** A decline in the exchange rate implies a depreciation of the euro against the foreign currency.
Deutsche Bundesbank

One question that remains to be answered is how strong the export increases in individual countries were in real terms. The export price indices actually needed to determine this are only available for the third countries as an aggregate. For the individual countries, there are only unit values which, however, suffer from methodological weaknesses.[2] Import prices by country of origin collected in the United States suggest that the price reaction to the depreciation of the euro has so far been small. In the first half of 2015, import prices for goods from the EU slipped only slightly (by around 2¾%) on a US dollar basis, despite the substantial depreciation of the euro.[3] These prices should therefore have risen considerably when translated into euro. In fact, the unit values of exports from the euro area to the United States increased by no less than 11% in this period. This suggests that the real rise in exports to the United States was probably significantly smaller than the increase in current prices

2 See M Silver, The rights and wrongs of unit value indices, Review of Income and Wealth, 56, pp 206-223, June 2010.
3 To date, the United States has not had an import price index for goods from the euro area. However, the price index for imports of goods from the EU largely moves in lockstep with the index for Germany, though the price drops in Germany and France in the first half of 2015 were even somewhat weaker than in the EU as an aggregate.

and that exporters' margins (in euro terms) could thus have widened. This also prompts certain doubts regarding the weak price increase shown by the export price index for the euro area. However, the example of the United States is likely to be an isolated case, as transactions are predominantly settled there in US dollars.[4] In trade with other countries, the euro probably plays a greater role as an invoicing currency. For the central, east and north European countries with relatively stable exchange rates against the euro, real exports (given only a low increase in unit values) are also likely to have seen distinct growth.

Overall, it can be seen that the substantial rise in real exports in the euro area can probably only be partly explained by the depreciation of the euro. This depreciation is certainly likely to have aided euro-area enterprises in the first half of 2015 to offset declining demand, especially from a number of emerging market economies, and financial leeway was probably also gained through a widening of margins. Above all, however, exporters in the euro area profited from the favourable economic setting in key sales countries, and a significant portion of the growth in exports was accounted for by trade within the euro area.

4 Gopinath (2015) shows that the United States invoices the bulk of its trade (93% of imports) in US dollars and that international prices, in their invoicing currency, do not react particularly sensitively to exchange rate changes over a period of up to two years. See G Gopinath, The International Price System, NBER Working Paper 21646, October 2015.

terms between the second and third quarter of 2015 and was thus up by 1½% on the year. Weaker export activity is likely to have played a large part in the slight slowdown in economic growth. While exports in the first half of 2015 benefited from lively demand in some industrial countries and possibly from depreciation effects (see box on pages 20 to 22), the cyclical weakness in key EMEs has now probably become more noticeable.

Private consumption making substantial contribution to growth

Private consumption continued to be an important mainstay of the euro-area upswing. Real disposable income is likely to have continued to rise considerably, bolstered by rising employment figures, a slightly stronger rise in wages and a consumer-friendly price trend. The fairly steep rise in retail turnover (which was up by a seasonally adjusted ½% on the quarter in real terms) and the strong increase in new passenger car registrations of 2½% (a figure which, however, also includes registrations for commercial vehicles) show that the relevant leeway is being used.

Restrained investment activity

Enterprises' investment activity is likely to have boosted economic growth very little, if at all. Although capital goods production rose markedly during the third quarter, a large proportion of the additional output was destined for export. Construction investment would appear to have remained weak.

Lively import activity

Imports are likely to have continued to rise considerably in the third quarter after spiking in the first quarter and moving sideways at a high level in the second. In any case, imports of goods in July and August were up by 1½% on the second quarter in seasonally and price-adjusted terms. To date, the demand effects emanating from the euro area's good domestic activity are therefore likely to have prevailed over the potential trade diversion effects caused by the depreciation of the euro.

Industrial sector activity still weak

On the output side, activity in the industrial sector has remained weak. Seasonally adjusted industrial output rose only slightly from the second to the third quarter. There was a marked decline in the production of intermediate goods. By contrast, output of capital and consumer goods was stepped up perceptibly. The significant rise in energy production is likely to be the result of a temporary weather effect. Enterprises reported a slight increase in capacity utilisation between July and October. There are still no signs of improvement for the construction sector; average output in July and August was down by ¼% on the second quarter in seasonally adjusted terms and down by 3% on the year.

Ongoing economic recovery in the large euro-area member states

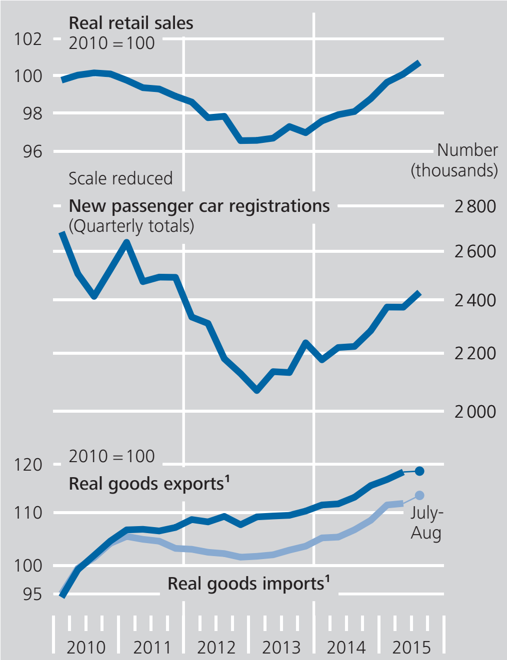
Economic activity in the large euro-area countries followed a clear upward trajectory in the third quarter. The lively expansion in Spain continued. The economic recovery also gained ground in France and Italy, albeit on a distinctly smaller scale. The German economy expanded along the path of potential growth. The picture for the smaller euro-area countries is more heterogeneous. Austria, Belgium and the Netherlands recorded comparatively low growth. Economic output stagnated in Portugal, chiefly owing to a cutback in investment, while aggregate output in Estonia, Finland and Greece actually contracted in comparison to the second quarter. In the case of the two northern European countries, exceptionally weak exports are the likely cause.

Economic output down in Greece

At ½% in seasonally adjusted terms, the quarter-on-quarter contraction in Greek GDP was far smaller than widely expected. Extremely lively activity in the tourism sector appears to have more or less recouped the losses resulting from the closure of the banks and the imposition of capital controls. It remains to be seen whether this comparatively favourable development continues into the final quarter of 2015 and the first quarter of 2016, in which tourism is less relevant.

Economic indicators for the euro area

Seasonally and calendar-adjusted, quarterly averages, log scale



Sources: Eurostat, ECB and Bundesbank calculations. **1** Nominal export and import data according to foreign trade statistics, price adjusted using producer price index (exports) or import price index.

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Growth likely to remain moderate in the fourth quarter

According to the available leading indicators, neither a fundamental cyclical improvement nor a marked deterioration is expected in the euro area in the fourth quarter. Industrial activity and exports could lose further momentum in the light of the problems in key EMEs. In seasonally adjusted terms, industrial orders in the July-August period were down by ¾% on the second quarter (although there had been strong growth during this period). The decline affected export orders, in particular. However, according to the purchasing managers' indices, the positive trend in the services sector is also set to continue in October. The European Commission surveys indicate a high degree of optimism, especially in the retail trade sector.

Continuation of slight improvement in labour market

The labour market situation improved again slightly in the third quarter. In comparison to the second quarter, the seasonally adjusted unemployment rate fell by 0.2 percentage point to 10.8%, leaving it 1.2 percentage points lower than its record high in the second quarter of 2013. Among the large euro-area countries, only France recorded a marked rise of 0.3 percentage point in the unemployment rate in the third quarter. The number of employees in the euro area rose by 0.3% between the first and second quarter and by 0.8% on the year. Although the increase in hourly labour costs slowed its pace again somewhat in the second quarter (to +1.6% year-on-year), on the whole it was noticeably greater in the first half of 2015 than in the two previous years.

Further decline in energy prices masking underlying upward trend in consumer prices

Euro-area consumer price inflation did not increase further in the third quarter following a fairly strong seasonally adjusted quarterly increase of 0.5% in the second quarter. This was due in large part to the significant fall in oil prices over the last few months. Excluding energy, consumer prices, by contrast, climbed by 0.3%, as in the previous quarter. The increase in the price of services even accelerated slightly, a development in which the VAT hike in Greece at the end of July is likely to have had a hand. Food and industrial goods prices excluding energy recorded a further modest increase. All in all, the underlying price trend is therefore clearly pointing upwards. This is borne out by the further rise in annual HICP inflation excluding energy to 1% (a further increase of 0.2 percentage point in comparison to the previous quarter). Including energy, headline HICP inflation fell slightly to 0.1%.

Fairly sharp rise in services prices in almost all euro-area countries

This underlying upward trend in consumer prices is also reflected by the HICP data for the euro-area countries. HICP excluding energy remained lower than 1% in just nine countries and was in negative territory only in Cyprus. Non-energy prices in Austria, Luxembourg and Malta went up by as much as almost 2% in the third quarter. The gap between Germany and the average of the rest of the euro area has recently all but closed; one year ago, it still stood at ¾ percentage point. This applies to the services sector, in particular, for which the average inflation rate in the rest of the euro area is now higher than in Germany. In terms of industrial goods prices, however, the gap has widened again somewhat.

Slight further rise in HICP excluding energy in October

A flash estimate by Eurostat showed that euro-area consumer prices as a whole compared to the previous month hardly budged in seasonally adjusted terms in October 2015, too. Once again, falling energy prices almost fully offset a slight increase in the price of food, services and industrial goods. That said, annual inflation increased from -0.1% in September to 0.0%, since energy prices had fallen even more sharply in the previous year. Excluding energy, it rose further from 1.0% to 1.1%.