Global and European setting

World economic activity

Global economy's pace of growth unchanged in summer 2014 …

In October 2014, against the backdrop of various data releases relating to the month of August in particular, concerns about the global economy were raised in many quarters. In reality, however, in the third quarter the global economy probably remained on the path of moderate growth it had begun to trace in the second quarter after overcoming the negative one-off factors from the start of the year. Although global industrial output stagnated at the second-quarter level in July-August owing to weak production worldwide in the middle of the quarter, a distinct countermovement is expected in September. Barring any major disruptions in the current quarter, the rate of growth in global gross domestic product (GDP) expected for full-year 2014 is unchanged against 2013 at 3¼% on the basis of purchasing power parities (PPPs) or 2½% at market exchange rates. The marked acceleration that had still been expected in the spring therefore failed to materialise, which is likely to have also added to the concerns about the economy mentioned at the beginning of this paragraph (see the box on pages 12 to 15). The moderate increase in global GDP in the summer was attributable to industrial countries as well as to emerging markets and developing countries. In the latter group, the Chinese economy again saw substantial growth. The growth trajectory in Russia, by contrast, remained flat in the light of the adverse consequences of the Ukraine conflict.

… with clear growth differentials between the major industrial countries

In the group of major industrial countries, the United States – as expected – was unable to maintain its rapid second-quarter growth rate, which was influenced by normalisation effects, but it did record comparatively high quarter-on-quarter growth, together with the United Kingdom. As this report went to press, no GDP data were yet available for Japan's third quarter; the economy probably rebounded, however, after having shrunk considerably in the spring owing to the drop in demand in connection with the consumption tax hike. The euro area saw merely muted growth, much like in the previous quarter. The main reason for this was that Italy and Germany, in particular, generated only minor or no growth stimuli. In addition to persistent low growth in parts of the euro area, sanctions and countermeasures in connection with the Ukraine conflict as well as the deterioration in sentiment caused by the crises in eastern Europe and other regions of the world are likely to have contributed to this very modest result.

Sustained upward trend in the current quarter

In the current quarter there are no signs of any departure from the moderate global upturn. The global Purchasing Managers' Indices (PMIs) for manufacturing and services, for instance, suggest continued distinct growth in October. In the group of industrial countries, the US and UK economies could continue their paths in the fourth quarter. Furthermore, the Japanese economy seems to have regained its footing, while in the euro area the period of low growth probably continued into the start of autumn. It is possible, however, that the steep drop in the price of oil will – if it proves permanent – contribute to improving cyclical development in the oil-consuming countries in general and in the euro area in particular over the course of the winter quarters by way of an increase in real purchasing power. A global economic view, however, also needs to factor in the retarding effects from oil-producing countries, which are for the most part experiencing falling revenues.

IMF autumn forecast revised downwards slightly

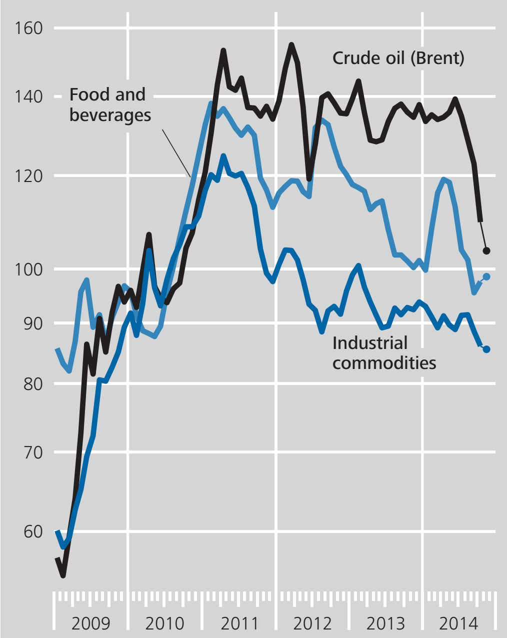
Against the background of moderate global growth, the International Monetary Fund (IMF) again revised its forecast for this year and the next downwards slightly in October, to 3.3% and 3.8% aggregated at PPPs, respectively. Somewhat larger reductions from the July estimates were made for the group of emerging markets and developing countries than for the industrial countries, which was not least related to the distinct downwards revision in the case of Russia and the other members of the Commonwealth of Independent States (CIS). The growth forecast for the advanced economies was confirmed for 2014 at 1.8% and scaled back marginally for 2015 to 2.3%. However, this conceals quite considerable adjustments for major industrial countries. For example, the estimate for the United States for 2014 was raised significantly, while the estimate for the euro area for both years was cut by a quarter of a percentage point in each case, to +0.8% and +1.3%, respectively. Given the persistent economic slowdown in the euro area, which looks set to weigh on the economy's start to the new year as well, this forecast is likely to be achieved only with difficulty, however, particularly with regard to 2015. This holds true even when positive growth stimuli from falling oil prices are taken into account, which is certainly appropriate as the prices of crude oil took a further steep dive after the IMF forecast was completed. All in all, the IMF's prediction that the pace of global growth will pick up next year is primarily based on the expectation that the US economy will gather significant pace and the emerging markets and developing countries in Latin America, the Middle East and Africa will again see brisker growth. In this setting, real growth in world trade could accelerate to 5.0% next year, according to the IMF. At the same time, this would be the largest increase in trade in goods since 2012.

Crude oil prices down across the board

Crude oil prices declined across the board in the reporting period owing to excellent market supply in many cases. While the prices of food and beverages continued their downward trend in the summer months and have only recently stabilised, industrial raw materials also became markedly cheaper in September and October. The crude oil price tumbled particularly steeply due to the generous supply. Concerns in connection with military conflicts, especially in the Middle East, seem to have vanished for now. A barrel of Brent crude oil cost US$88 in October, which was 18¾% cheaper than three months earlier; as this report went to press, the price per barrel stood at US$81¾. The sharp decrease in the spot price meant that distinct mark-ups had to be paid for forward deliveries.

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

US dollar basis, 2010 = 100, monthly averages, log scale



Sources: Thomson Reuters and HWWI. • Average of 1 to 7 November or 1 to 12 November 2014 (crude oil).
Deutsche Bundesbank

Consumer price inflation eased somewhat

Falling energy prices were a key reason for subsiding consumer price inflation in the industrial countries. The inflation rate based on the entire basket of consumer goods (headline inflation) declined from 1.7% in June to 1.4% in September. In the same period, core inflation – calculated from the underlying basket of goods excluding energy and food – decreased only marginally to 1.5%. From this narrower perspective, too, consumer prices adjusted for seasonal variations trended upwards only slightly in the summer months, after having risen quite substantially in the spring. However, this comparison is distorted by the consumption tax hike in Japan in April. If Japan is left out of the group of industrial countries, the core components of the consumer price index saw the same muted

The global growth forecast revisions in recent years

In its October 2014 World Economic Outlook (WEO), the International Monetary Fund (IMF) projects global real gross domestic product (GDP), aggregated on the basis of market exchange rates,[1] to grow by 2.6% this year. This means that the global economy was not able to improve perceptibly on its relatively subdued growth of the two preceding years (+2.4% and +2.5% respectively).[2] By contrast, in April the IMF had projected global growth for the year in progress to accelerate considerably to 3.1%. At last report, however, the Fund remained optimistic that global economic activity will pick up steam in 2015 (+3.2%).

What is notable is that global growth's recent failure to meet expectations is the latest in a series of disappointments. Since 2010, the IMF has always predicted global output growth of between 3.3% and 3.7% one year ahead in its spring forecasts. However, according to data from the current edition of the WEO, actual growth in the years from 2011 to 2014 only ranged between 2.4% and 2.9%. The actual values last reported fell short of the forecasts issued in April of the preceding year by an arithmetic average of 0.8 percentage point. The projections were generally gradually revised downwards in later rounds. It is important to emphasise that the IMF projections must by no means be regarded as overly optimistic in the context of when they were issued. Instead, they are likely to have reflected a consensus of sorts.

There are three possible sources of such a chain of parallel forecast errors: an overestimation of the longer-term supply-side growth forces, an underestimation of the stubbornness of demand weakness and a chain of unforeseeable events impacting adversely on economic activity. The oil price surge in the first half of 2011 or the severe earthquake which struck Japan that same year are examples of such shocks.[3] Some

Evolution of IMF projections of global real GDP growth* in the indicated year

Annual percentage growth

Sources: various issues of the IMF World Economic Outlook (WEO) and updates between January 2010 and October 2014. * Based on market exchange rates.

Deutsche Bundesbank

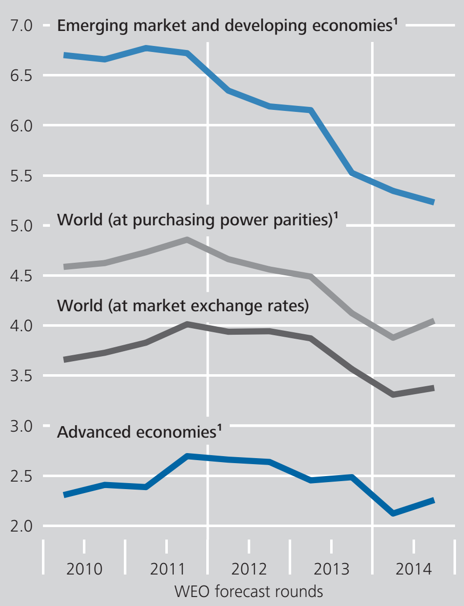
1 The IMF's preferred measure of global economic activity is real GDP as calculated by means of aggregation using exchange rates based on purchasing power parities (PPPs). However, the underlying PPPs are re-estimated at lengthy intervals. For example, since the July WEO update the IMF has been using a revised weighting system to calculate global GDP on the basis of PPPs. However, this means that its latest data and the projections based on this metric are no longer directly comparable with those contained in earlier publications. In order to ensure comparability, global real GDP based on market exchange rates will be used below instead.
2 By contrast, in the 1980-2007 period, which covers both booms and recessions, growth averaged 3.0%.
3 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.

also include in this category the debt crisis afflicting some European countries.[4]

Moreover, it is now widely acknowledged that the long-term growth outlook for key emerging market economies (EMEs) has deteriorated perceptibly and that the global economy's expansionary path has therefore flattened as well.[5] Since the IMF's medium-term forecast horizon is five years, data for the last year of its projections can be taken as a rough measure of the estimated potential growth. In the years 2010 and 2011, the IMF had assumed that five-years-ahead economic output in the group of emerging market and developing economies would grow at a rate of around 6¾%. However, its latest projection for the longer-term growth rate in that group of countries is now down to only 5¼%.[6] At the same time, it revised its estimate of global activity downward slightly, whereas its projection for the advanced economies remained largely the same.

Evolution of IMF forecasts of real GDP growth five years ahead

Annual percentage growth



Sources: various issues of the IMF World Economic Outlook (WEO) between April 2010 and October 2014. **1** Aggregated on the basis of purchasing power parities; purchasing power parities were revised in the October 2014 WEO.

Deutsche Bundesbank

However, the one-year-ahead growth forecasts will be affected not only by projections of potential growth but possibly also by estimates of the level of potential output and thus of the output gap.[7] Studies for the G7 show that the relevant estimates made by international organisations are subject to extensive revision.[8] In addition, the initial estimates of the output gap for the years just ended appear biased towards underutilisation; subsequent revisions tend to raise the level of utilisation. One possible reason is that the persistence of the dampening impact of recessions on the output level is initially underestimated.

What is more difficult is to attribute the repeatedly disappointing global economic growth rate to stubbornly weak demand. An explanation would be needed for why economies remain trapped in a situation of significant capacity underutilisation. Limited effectiveness of monetary and fiscal policy is one potential reason. However, in the past few years the particularly powerful impact of fiscal consolidation has been

4 Though the concrete outbreak of the crisis and its individual stages of escalation were quite unforeseen, this was less of an exogenous event and more the culmination of a long build-up of unsustainable developments. See Deutsche Bundesbank, On the problems of macroeconomic imbalances in the euro area, Monthly Report, July 2010, pp 17-38.
5 For a comparison of various influences on the global economy, particularly the weak euro-area demand and slower growth in the EMEs, see Deutsche Bundesbank, Impact of weak euro-area demand on the global economy, Monthly Report, November 2012, pp 11-14.
6 This is based on IMF data on aggregates for each group of countries. As they were calculated using PPP weighting, they are likewise subject to a statistical break caused by the re-estimation of PPPs.
7 The output gap is the difference between actual and potential output and should be closed in the long run. In a situation of underutilisation of aggregate economic capacity, therefore, growth above the trend rate is to be expected; this will ultimately return actual output to its potential path.
8 See Deutsche Bundesbank, On the reliability of international organisations' estimates of the output gap, Monthly Report, April 2014, pp 13-35.

Revision* of the International Monetary Fund's growth projections

Percentage points

Economic area	2011	2012	2013	2014	Average, 2011 to 2014	*Memo item* Average contribution,3 2011 to 2014
World1	– 0.5	– 1.3	– 0.8	– 0.8	– 0.8	–
United States	– 0.9	– 0.6	– 0.2	– 0.8	– 0.6	– 0.14
Euro area	0.1	– 2.4	– 1.3	– 0.2	– 1.0	– 0.17
Germany	1.7	– 1.2	– 0.9	– 0.1	– 0.1	– 0.01
France	0.3	– 1.5	– 0.7	– 0.5	– 0.6	– 0.02
Italy	– 0.7	– 3.7	– 1.6	– 0.7	– 1.7	– 0.05
Spain	– 0.9	– 3.3	– 1.3	0.6	– 1.2	– 0.02
Japan	– 2.4	– 0.6	– 0.2	– 0.5	– 0.9	– 0.08
United Kingdom	– 1.4	– 2.1	– 0.3	1.7	– 0.5	– 0.02
Canada	– 0.7	– 0.9	– 0.1	– 0.1	– 0.5	– 0.01
BRIC countries1	– 0.6	– 2.1	– 1.6	– 1.6	– 1.5	– 0.29
Brazil	– 1.4	– 3.1	– 1.7	– 3.7	– 2.5	– 0.08
Russia	1.0	– 1.1	– 2.6	– 3.6	– 1.6	– 0.04
India2	– 0.9	– 2.6	– 2.3	– 0.8	– 1.6	– 0.04
China	– 0.6	– 1.9	– 1.1	– 0.9	– 1.1	– 0.12

Source: Bundesbank calculations based on data from various issues of the IMF World Economic Outlook (WEO) between April 2010 and October 2014. * Difference between the data from the October 2014 WEO for the indicated years and the forecast published in the WEO in the spring of the previous year. 1 Aggregated on the basis of market exchange rates. 2 Data are transformed approximately from a fiscal year basis (October 2014 WEO) to a calendar year basis. 3 Contribution to revision of global growth projection.

Deutsche Bundesbank

stressed in many quarters. For instance, the IMF attributed its forecast errors for growth in the industrial countries in 2010 and 2011 to an underestimation of the GDP effects of fiscal policy (fiscal multipliers).[9] The slower pace of public budget consolidation was accordingly a major factor as to why economic activity in the advanced economies had been expected to improve significantly in 2014. The disappointing growth recorded this year could re-ignite the debate on the size of fiscal multipliers.

One hypothesis in this area, which steers the focus towards monetary policy, is known as "secular stagnation". This notion holds that, if the long-term equilibrium real interest rate is considerably negative, the central bank will no longer be able to perform its stabilising role. In connection with the zero bound on nominal interest rates, the central bank might be unable to cut the real interest rate far enough to rescue the economy from capacity underutilisation. However – leaving aside the debate on temporary liquidity traps – there is controversy as to whether the long-term equilibrium real interest rate can actually go as far into negative territory as is assumed in this hypothesis.[10]

A more precise breakdown of projections by country could possibly provide more information on the exact factors that actually explain growth forecast errors. According to the IMF's analysis, its overoptimistic projections of global economic growth in the past few years were due to the forecasts for a relatively small group of countries.[11] Chief among these are the BRIC nations (Brazil, Russia, India and China). In these catching-up economies, in particular, structural barriers to growth have increasingly come to the fore in the past few years. However, some industrial countries, mainly Japan and several euro-area economies,

9 See International Monetary Fund, Are We Underestimating Short-Term Fiscal Multipliers?, World Economic Outlook, October 2012, pp 41-43.
10 See Deutsche Bundesbank, Secular stagnation and economic growth, Monthly Report, April 2014, pp 16-19.
11 See International Monetary Fund, The Origins of IMF Growth Forecast Revisions since 2011, World Economic Outlook, October 2014, pp 39-43.

also need to be mentioned. By contrast, the average forecast error reported for the United States is near zero. On the whole, this analysis would suggest that the key factors in the global forecast errors are the overestimation of the long-run growth outlook in key EMEs and unforeseen events such as the severe earthquake in Japan or the debt crisis afflicting some European countries.

Nonetheless, the outcome of the IMF analysis has to be seen in terms of its specific construction. For instance, global growth was measured in terms of national data aggregated using PPP-weighted exchange rates. This gives the EMEs a relatively large weight in the global economy. Moreover, the analysis also included forecasts from the previous years' autumn rounds, thus omitting earlier revisions. However, if global growth is measured using market exchange rates and the projections from each previous year's April round, the growth forecast error is distributed much more broadly across countries. Even the arithmetic average of US economic growth was 0.6 percentage point lower than the forecasted figure. Tightly calculated, the average US contribution to the overstatement of the global growth rate was only marginally smaller than that of the euro area. In the same vein, the group of advanced economies as a whole made a slightly more significant contribution to the global forecast error than the emerging market and developing economies.

Plausible calculations show that, especially for the US economy, the growth and level of potential output could have been overestimated in the past.[12] In particular, demographic change and longer-term labour force participation trends among certain segments of the population have significantly restrained labour supply growth. This is consistent with the fact that the US unemployment rate has fallen considerably in the past few years despite only moderate real GDP growth. In actual fact, various institutions' projections often united overly optimistic aggregate growth forecasts with overly pessimistic forecasts regarding the decline in the unemployment rate.[13]

All in all, the overestimation of the global growth rate in the past few years is based on overly optimistic forecasts for a large number of countries. The forecast errors are likely to be due not only to unforeseeable events but also to excessively high expectations regarding key economies' longer-term outlook for growth. Resolving structural problems and averting a flattening of the potential growth path, however, are beyond the powers of monetary policy.

12 See Deutsche Bundesbank, The US economy in the current economic upturn, Monthly Report, April 2013, pp 15-37, and, in particular, Deutsche Bundesbank, Determining aggregate trend output in the USA, Monthly Report, April 2013, pp 31-35.
13 According to recently published data, the US unemployment rate fell in October 2014 to 5.8% – the average level for the year 2016 predicted by the IMF in its latest WEO (October 2014). The Fund projects the unemployment rate to average 5.9% in the coming year. See also Deutsche Bundesbank, Labour market developments in the United States and the United Kingdom in the context of their central banks' forward guidance strategy, Monthly Report, May 2014, pp 17-20.

increase over the summer as in the previous three-month period.

Selected emerging market economies

Sustained moderate growth in China

In the third quarter, the Chinese economy remained on a growth path which, by its standards, was moderate. According to the official estimate, real GDP went up by 2% in seasonally-adjusted terms, as in the second quarter; it was up by 7¼% year-on-year at the end of the period under review. For the first three quarters altogether, there was year-on-year GDP growth of 7½%. According to output-side calculations, in this period – separate data for the third quarter are not recorded – real value added rose by 8% in the services sector and by 7% in industry (excluding construction). The growth in industry was boosted by fairly lively foreign demand. For example, Chinese goods exports increased by 8½% in the first nine months of the year, on a US dollar basis and excluding trade with Hong Kong.[1] Industrial activity, by contrast, was adversely affected by subdued demand for intermediate goods for the construction sector as a result of the ongoing downturn in the real estate market. In this connection, the increase in housing prices also tailed off and hence weakened the general upward pressure on consumer prices. The average inflation rate for the third quarter amounted to 2.1%.

Probably only temporary recovery in activity in India

In India, the economy gained momentum in the second quarter, the latest for which national accounts data are available. Real gross value added – India's preferred indicator of aggregate output – grew by 5¾% year-on-year. This is the largest increase since the beginning of 2012. However, the sustainability of this stronger growth is debatable. For the quarter just ended, there are already indications of a slower pace again, for industry at least. Pressure on consumer prices has been continually easing since the end of 2013. The average inflation rate in the third quarter was 7.4%, compared with 10.4% in the final quarter of 2013. Weaker inflation in food prices, which constitute roughly half of the statistical basket of goods, played a particular role.

Brazil in recession in the first half of the year

In Brazil, the economy slid into recession according to the common interpretation in the first half of the year, as quarterly real GDP growth, seasonally adjusted, continued its slide in the second quarter. The fact that economic activity had been hampered in connection with the FIFA World Cup was also a factor in the contraction in the spring. Thus there may have been a certain countermovement once again in the quarter just ended. The underlying growth momentum in the overall economy is unlikely to have strengthened yet, however, owing to the unresolved structural problems. The country's president, who was re-elected in October, and the new government are therefore facing the task of carrying out massive reforms. Despite the recessionary tendencies, consumer price inflation again increased somewhat in the past few months, rising to 6.7% on the year in September. Against this backdrop, the central bank once again lifted its policy rate in October.

Economic situation and outlook for Russia deteriorated further

Aggregate output in Russia rose by ¾% year-on-year in the quarter just ended, according to an initial estimate issued by the Russian Federal State Statistics Service. This represents a continuation of the fairly sluggish growth. The adverse consequences of the Ukraine conflict, particularly increased uncertainty, are likely to have been key factors in this. The full economic braking effect of the sanctions imposed on Russia by the western states in August and intensified in September will probably only be felt after some time. An additional dampening factor is the sharp drop in oil prices from the middle of the year onwards. If this proves to be a long-term correction, the Russian economy is likely to lose export revenues on a large scale.

1 Exports to Hong Kong are excluded from the calculation as the data are not considered to be very reliable. There are indications that the figures are too high, especially for last year. This is apparently because exporters have submitted incorrect invoices to the customs authorities in order to channel money into China's strictly regulated capital market.

The inflation rate went up significantly in the past few months, amounting to 8.0% in September. Alongside the persistently weak rouble, this was also because food prices rose sharply as Russian authorities have blocked the import of a number of products from western countries in retaliation for the sanctions. Given the increased inflation and in order to stabilise the rouble, the Russian central bank again raised its policy rate substantially at the end of October.

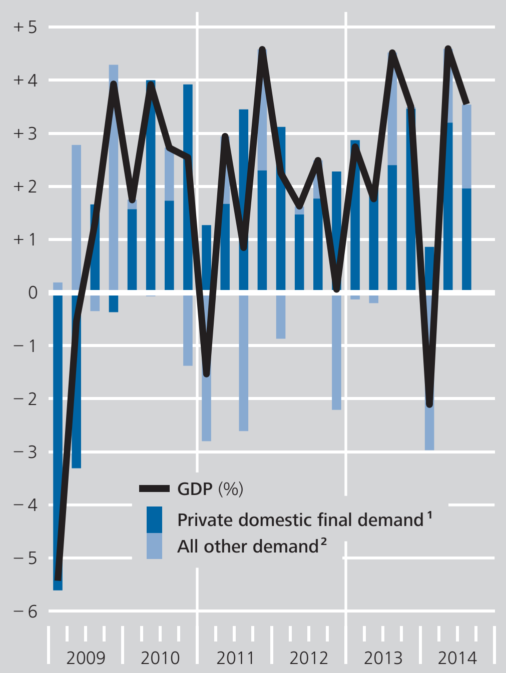
United States

Underlying pace of economic activity probably exaggerated by renewed strong growth

In the summer, the US economy was unable to fully maintain its high pace of growth from the spring. Adjusted for the usual seasonal effects, real GDP grew by just under 1% from the second quarter, in which it had expanded by a little over 1%. The renewed favourable performance in the third quarter is due to one-off factors, much like in the previous quarter; however, the driving forces on the expenditure side have shifted. Real foreign trade alone contributed ¼ percentage point to growth in aggregate output in the third quarter by way of a significant increase in exports on the back of falling imports. However, inventory movements did have a marginally dampening effect, but, at the same time, there was an unusually strong increase in public demand, especially for military purposes. By contrast, private real consumer spending and gross fixed capital formation saw only moderate growth in the summer. Their higher pace of growth in the spring was probably attributable to the normalisation of activity following the weather-induced shortfalls at the beginning of the year.[2] Despite the fluctuations in volatile demand components, the pattern of private domestic final demand shows that the underlying pace of the US economy is moderate, as before. This is also suggested by the fact that real GDP grew by 2¼% year-on-year in the summer. This annual rate of change is consistent with the average annualised growth rate since the beginning of the upswing in mid-2009. Within the context of demographic change, in particular, this moderate growth in aggregate output was sufficient, however, to push the unemployment rate down by 4.2 percentage points in the space of five years to 5.8% in October 2014.[3] Owing to the progress made in the labour market, the US central bank recently decided to taper its asset purchases. Inflation as measured by the consumer price index (CPI) fell over the course of the summer months. At 1.7% each in September, headline and core inflation were both down from June, by 0.4 percentage point and 0.2 percentage point respectively.

Contributions to quarter-on-quarter growth in US real GDP

Percentage points, seasonally adjusted, annualised



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

2 See Deutsche Bundesbank, Weather effects on real GDP growth in the USA in the first six months of 2014, Monthly Report, August 2014, pp 22-24.
3 See Deutsche Bundesbank, The US economy in the current economic upturn, Monthly Report, April 2013, pp 15-37, and Deutsche Bundesbank, The decline in labour force participation in the USA, Monthly Report, May 2012, pp 19-21.

Japan

Macroeconomic recovery probably resumed

After the slump in domestic final demand in the spring due to the consumption tax hike, the Japanese economy is likely to have grown again in the quarter just ended. Initial national accounts data had not yet been published as this report went to press, but the indicators available on a monthly basis suggest such an assessment is correct. Going by retail sales, private consumption probably broke away from its low second-quarter level. Furthermore, deliveries of capital goods suggest an increase in real spending on equipment by enterprises. In light of merely muted growth in the volume of goods imports, however, the recovery in domestic final demand may have been rather hesitant. Since, at the same time, real exports of goods rose more significantly, foreign trade once again probably gave a net boost to aggregate growth. Industrial output also sank substantially on the quarter in the summer. What must also be considered, however, is that inventory movements had initially delayed the adjustment of output. The labour market is reflecting a cyclical improvement. Following a temporary increase up to 3.8% in July, the unemployment rate slipped back to the March level – before the consumption tax hike had come into effect – of 3.6% in September. As before, CPI inflation is strongly influenced by the tax hike.[4] Headline inflation fell from 3.7% in May to 3.2% in September. In view of this subsiding inflation, the central bank decided to expand its unconventional monetary policy measures further.

United Kingdom

Upswing remains brisk

UK economic output continued to expand briskly in the summer. In seasonally adjusted terms, its quarter-on-quarter growth amounted to ¾% and was thus only slightly weaker than in the spring (+1%). The annual rate of change decreased accordingly, although the increase of 3% was still fairly high. As part of a comprehensive revision of national accounts, revised GDP figures had already been published, according to which the recession of 2008-09 was no longer as severe, and the subsequent recovery no longer as tentative, as in previous assessments. According to the data currently available, aggregate output in the quarter just ended exceeded its level from the winter of 2008, the last cyclical peak, by 3½%. Broken down by sector, significant quarter-on-quarter increases in real gross value added were achieved in the services, production and construction sectors in the summer. The slowdown in growth on the previous quarter owed solely to the tertiary sector. Looked at on a monthly basis, services output stalled in August. For September, however, the Office for National Statistics, in its initial GDP estimate for the third quarter, again expected a steep rise in activity in this area, meaning that the UK economy was likely to have ended the quarter buoyantly. The standardised unemployment rate fell by 0.3 percentage point on the previous quarter to 6.0% in the summer according to national data; this was its lowest level for six years. However, the central bank is still holding back from starting to normalise its interest rate policy given the considerably lower consumer price inflation. The inflation rate as measured by the Harmonised Index of Consumer Prices (HICP) decreased from 1.9% in June to 1.2% in September.

New EU member states

Moderate economic growth in Q2-Q3 period

In the new EU member states (EU-7),[5] aggregate economic output saw renewed stronger growth in the third quarter following a seasonally adjusted period-on-period increase of ½% in the second quarter. Over the period span-

4 Looking at the consumer price index excluding fresh food, the Japanese central bank has put the influence of the consumption tax hike on the inflation rate at 2 percentage points. See Bank of Japan, The Direct Effects of the Consumption Tax Hike on Price Indices, Monthly Report of Recent Economic and Financial Developments, March 2014, pp 21-22.
5 This group comprises the non-euro-area countries that have joined the EU since 2004.

ning the second and third quarters, economic momentum was somewhat weaker than in the past. Dwindling stimuli from the euro area and adverse impacts in connection with the Ukraine conflict were probably the primary reasons for this slowdown. The situation on the labour markets has continued to improve moderately. Unemployment in this group of countries as a whole stood at a seasonally adjusted 8.5% in the third quarter, as against 8.8% in spring and 9.3% in winter. Aggregate HICP inflation, which had already reached a multi-year low in the second quarter, fell further to 0.2% in the reporting period. Poland (-0.1%) and Bulgaria (-1.2%) saw negative annual growth rates.

Macroeconomic trends in the euro area

Aggregate output grew moderately in summer 2014

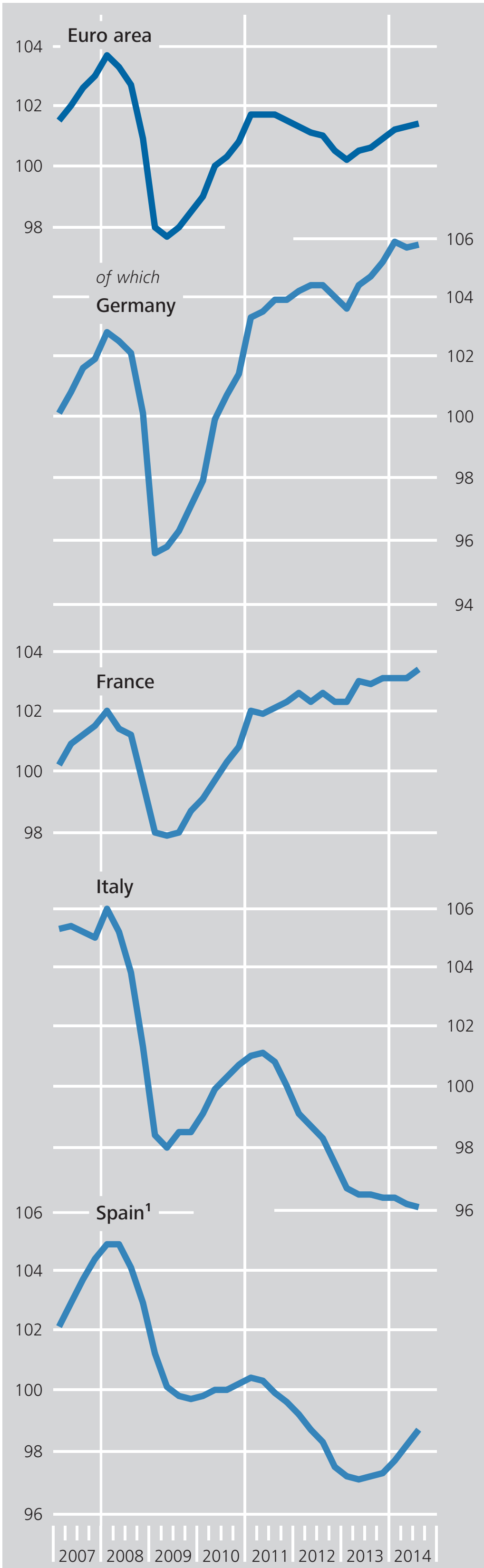
The euro-area economic slowdown, already clearly visible in spring 2014, persisted in the third quarter. Real GDP in the summer, at a seasonally adjusted ¼%, was only moderately higher than in the previous period, in which there was hardly any growth. Aggregate output rose by ¾% year-on-year. This means that the perceptible economic acceleration expected as late as mid-year virtually failed to materialise. Consequently, in addition to the IMF revising its autumn forecast for the euro area downwards, as mentioned earlier, the European Commission recently followed suit. It now expects growth of just 0.8% for 2014 and 1.1% for 2015, as against +1.2% and +1.7%, respectively, in May.

Level effect caused by changeover to ESA 2010 but only marginal influence on growth rates

In mid-October the Statistical Office of the European Communities (Eurostat) published initial estimates of the annual and quarterly main aggregates of GDP for the euro area as a whole and its individual member states based on the new European System of Accounts 2010 (ESA

Aggregate output in the euro area

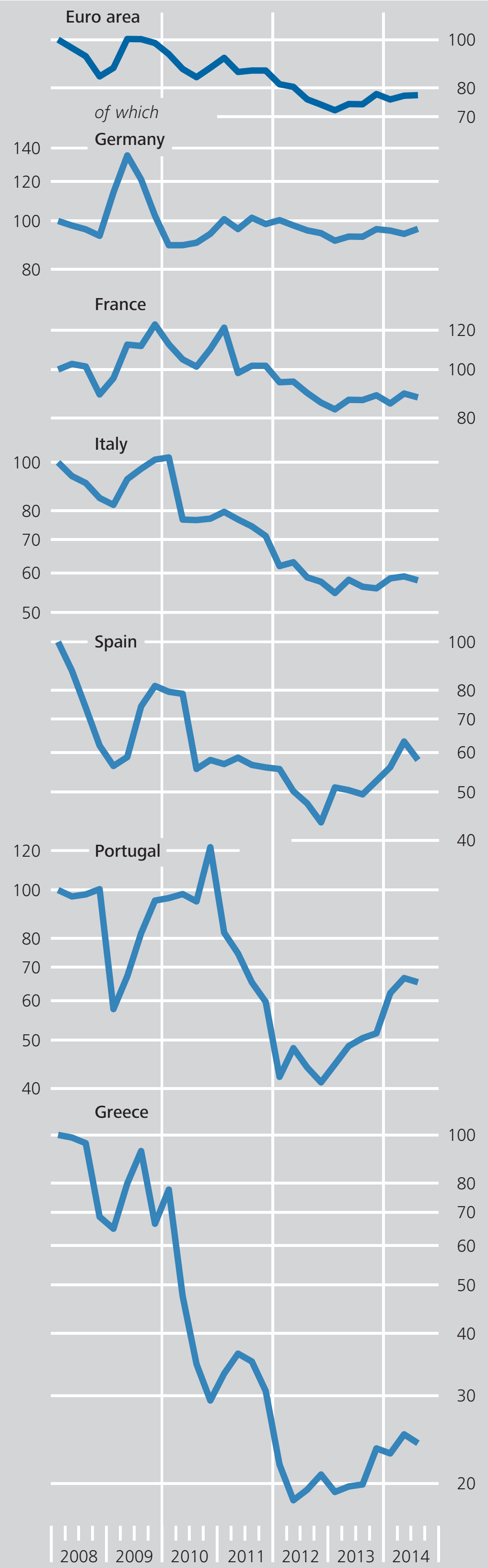
2010 = 100, seasonally adjusted, quarterly, log scale



Source: Eurostat. **1** According to ESA 1995, rebased so that 2010 = 100, 2014 Q3 according to ESA 2010.
Deutsche Bundesbank

New passenger car registrations in the euro area

2008 Q1 = 100, seasonally adjusted, quarterly, log scale



Source: ECB.
Deutsche Bundesbank

2010).[6] The changes raised nominal euro-area GDP by an average of 3.4% per annum for the years 1997 to 2013. The adjustments in the member states ranged from -0.1% in Latvia to +9.5% in Cyprus. The primary reason for the GDP corrections is that expenditure on research and development, which used to be classified as intermediate goods, is now allocated to gross fixed capital formation, and thus to final demand. Reported investment is also higher because it now includes that part of military procurement which used to be classified as government consumption. A result of the perceptible upward revision of investment is that the aggregate investment rate has risen as well; for instance, for 2010 it was up by 1.7 percentage points to 20.7%. The impact of the changeover to the new system on the rates of change of euro-area GDP was very limited, however, despite the fact that, at the current juncture, seasonally adjusted real GDP growth rates for the first and second quarters of 2014 were increased slightly to +0.3% and +0.1% respectively.

Sustained economic slowdown in larger member states is main factor in weak euro-area result

The persistent sluggishness of growth in Italy and the cyclical downturn in Germany which began over the course of the year are the primary reasons why euro-area economic activity remained unsatisfactory in the third quarter of the year. Real GDP in Italy contracted further, whereas in Germany aggregate output rebounded slightly following a marginal contraction. After shrinking slightly in the previous quarter, France's economic output grew moderately in summer; however, the underlying cyclical trend has probably remained weak here, too. Besides Italy, only Cyprus recorded negative quarterly growth. By contrast, the economies of Spain and Slovakia maintained their rather strong growth. Greece's economy continued to recover, picking up where it had

6 For more on the changes to the methodology, see Deutsche Bundesbank, Key ratios for macroeconomic and government activity in Germany following the 2014 major revision of national accounts, Monthly Report, September 2014, pp 7-12, and Eurostat news release 157/2014, 17 October 2014.

left off in the winter, with annual real GDP growth amounting to 1½%. The highly successful tourist season was probably the primary reason for this.

Weak industrial output

On the outputside, the industrial sector was the main culprit behind the slow aggregate growth in the summer quarter. Seasonally adjusted third-quarter industrial output was down by just under ½% from the second quarter, in which it had treaded water. This was due to a decline in the manufacture of consumer goods (-1½%) and intermediate goods (-½%). By contrast, energy production (+½%) and the production of capital goods (+¼%) grew moderately. An additional expression of the lack of momentum in the industrial sector following mid-year is that capacity utilisation in the manufacturing sector remained below its long-run average in October. By contrast, construction output in July-August was up by a seasonally adjusted ½% from the depressed level of the second quarter, thus giving some support to economic activity. The Purchasing Managers' Index for services is indicating a slight uptick in activity in this sector for the third quarter.

Domestic and foreign demand still subdued in summer

In the summer quarter, the stimulus for euro-area growth provided by foreign demand was probably non-existent and that provided by domestic demand only moderate. In the July-August period, seasonally adjusted nominal exports of goods just about held steady at their level of the second quarter, in which they had fallen slightly. At the same time, imports picked up by 1% in terms of value. However, while euro-denominated prices of energy sources were falling, the euro's depreciation made other imported goods more expensive. The moderate uptick in household consumption was one factor which benefited domestic demand. Measured in terms of real retail sales (excluding motor vehicles and fuels), household spending in the summer was up by a seasonally adjusted ¼% on the quarter and 1% on the year. New car registrations rose at the same pace period-on-period; over the reporting period, they were even up by 4% on the year. Another factor was that investment probably trended upwards slightly in the summer, with construction activity, as mentioned above, perceptibly higher in July-August than its depressed second-quarter level, and the somewhat elevated output of capital goods seeming to suggest that expenditure on new machinery and equipment has likewise risen, if only marginally.

Leading indicators signalling continuation of sluggish economic activity

The sluggish economic activity in the euro area is looking set to continue in the fourth quarter of the year. In October, the composite PMI remained above the expansion threshold. In addition, the industrial confidence indicator improved slightly in October after falling four months in succession, due chiefly to improved output expectations and a more favourable assessment of order books; however, the pressure from high inventories is likely to have mounted. At first glance, the fact that, on average across the July-August period, new orders received by order-based industry were down by ¼% from their second-quarter level after seasonal adjustment is not consistent with the slightly improved economic picture painted by the survey-based indicators. Excluding the manufacture of other transport equipment, a considerable share of which is accounted for by large orders, which experience has shown tend to be processed over a relatively long period of time, such new orders were also down slightly on the second quarter. However, it must be noted that the September figures – as was the case for industrial output – were probably a countermovement to the weak August figures and will pull the quarterly result up slightly. On a positive note with respect to household consumption in the last quarter of the year, the consumer confidence indicator regained strength in October following a continuous slide since June.

Continuation of slight improvement in labour market

In the period spanning the second and third quarters of the year, the labour market situation continued its slight improvement, which is quite notable considering the sluggishness of euro-area growth. Employment has been

Labour market developments in Spain, Portugal and Ireland since the beginning of the cyclical recovery

The economic situation in Spain, Portugal and Ireland has become markedly brighter over the past few quarters. Real gross domestic product (GDP) was latterly up on the cyclical low reached in these three countries between the final quarter of 2009 and the second quarter of 2013; the relevant figures were +1.7% in Spain, +1.4% in Portugal and as much as +9.8% in Ireland. At the same time, the unemployment rate in Spain was down on its most recent peak by 1.9 percentage points to 24.0%, with a comparable fall of 3.4 percentage points to 13.6% in Portugal and an equivalent decline of 3.6 percentage points to 11.2% in Ireland.[1] Against this backdrop, the question arises as to how far the fall in unemployment in these three countries is due to the cyclical improvement and to what extent non-cyclical factors have played a part in this.

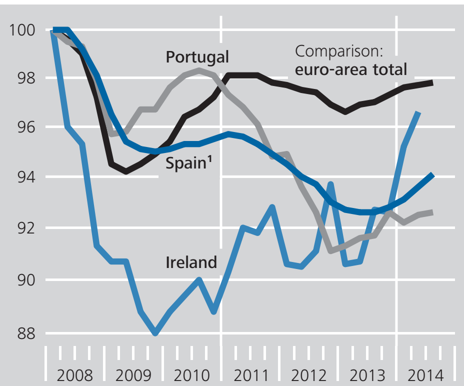
The unemployment rate (UR) gives the number of unemployed persons (UP) as a percentage of the labour force. The labour force consists of the working-age population (WAP) that is available to the labour market.[2] The number of persons in the labour force is given by the size of the working-age population and its participation rate (PR), ie the number of persons employed (EP) plus the unemployed.[3]

$$UR = \frac{UP}{PR * WAP} = \frac{UP}{UP + EP}$$

A change in the unemployment rate may thus be caused by the number of unemployed persons in the numerator and by the economically active population as the denominator. The latter is determined firstly by longer-term factors. These include demographic developments, which have an impact, for example, on the size of the cohorts entering the labour market compared with those reaching retirement age. Furthermore, trend changes in labour force participation – such as the steady increase in participation by females over the past few decades – play a major role in this context. Secondly, participation may fluctuate over the short term, say, if previously inactive persons take up a job when the labour market situation is favourable or if unemployed persons withdraw from the labour market when the economy is performing poorly as a result of them being discouraged and giving up looking for work. The participation rate often

Real GDP in Spain, Portugal and Ireland

2008 Q1 = 100, seasonally adjusted, quarterly, log scale



Sources: Eurostat, INE and Bundesbank calculations. **1** According to ESA 1995, 2014 Q3 according to ESA 2010.
Deutsche Bundesbank

1 The unemployment figures published by the statistical offices relate to the group of persons aged between 15 and 74 years. Working persons of pensionable age are counted as part of the labour force, but retired persons are not counted as unemployed. The unemployment rate is therefore marginally below that of the 15 to 64-years age group, which is the category referred to below.
2 There is no clear definition for the term "working age population". It is generally understood here as persons aged between 15 and 64 years.
3 Persons in the labour force are also called the "economically active population". The participation rate, which gives the percentage of employed persons of working age, is also referred to as "labour force participation".

Major labour market indicators

in thousands of persons or as a percentage; Q2 in each case

Period	Working-age population[1]	Economically active population[2]	Participation rate[3]	Employed persons	Unemployed persons	Unemployment rate[4]
	Spain					
2007	30,972	22,219	71.7	20,448	1,771	8.0
2013	31,083	23,059	74.2	17,018	6,040	26.2
2014	30,778	22,839	74.2	17,223	5,616	24.6
	Portugal					
2007	7,034	5,175	73.6	4,743	432	8.3
2013	6,870	5,010	72.9	4,147	862	17.2
2014	6,804	4,985	73.3	4,260	725	14.5
	Ireland					
2007	2,985	2,158	72.3	2,058	99	4.6
2013	3,018	2,117	70.2	1,818	299	14.1
2014	3,007	2,097	69.7	1,844	254	12.1

Sources: Labour Force Survey and Bundesbank calculations. **1** Aged between 15 and 64 years. **2** Sum of employed and unemployed persons. **3** Labour force as a percentage of the working-age population. **4** Percentage of unemployed persons in the economically active population.

Deutsche Bundesbank

decreases especially in prolonged periods of high unemployment. In such cases, the unemployment figure declines more sharply in percentage terms than the economically active population, resulting in a fall in the unemployment rate, even though no increase in employment has taken place.

In all three countries under consideration, in the second quarter of 2014 the number of unemployed persons showed a marked fall on the year (-7.0% in Spain; -15.9% in Portugal; -15.3% in Ireland).[4] In Portugal this was accompanied by a comparatively sharp increase in employment (+2.7%), along with a marked rise in employment in Spain and Ireland (+1.2% and +1.4% respectively). At the same time, the working-age population shrank in all three countries. The key factors behind this were low-birth-rate cohorts entering working life, increased emigration and declining immigration since the outbreak of the crisis. As an outcome of this, aggregate labour force participation in Ireland has also declined, while contrasting factors have led to it remaining stable in Spain and rising in Portugal. The trend decline in the labour force participation of younger persons continued in all three countries (especially among the 15 to 25-years age group); participation in Portugal is now 7 percentage points below its pre-crisis level in 2007, with corresponding figures of -12 percentage points in Spain and -16 percentage points in Ireland.[5] With regard to the economy as a whole, this effect in the case of younger persons was more than offset in Spain and Portugal by growing labour force participation among older persons, which was due, in turn, to a rise in female employment. In purely mathematical terms, the decline in the unemployment rate over the past four quarters amounting to 55% (0.9 percentage point) in Spain, 84% (2.2 percentage points) in Portugal and 58% (1.2 percentage points) in Ireland was due to higher employment.

4 The data used come from the Labour Force Survey (LFS). These are collected on a quarterly basis and are not officially seasonally adjusted. As the latest available data relate to the second quarter of 2014, the data for the second quarter of each given year were used for the analysis.
5 In this age category, the already no more than minor decline in the unemployment rates of all three countries under consideration is a consequence of both a declining population of this age and the fall in their participation in the labour force. The number of employed persons aged between 15 and 24 years was showing an annual fall in all cases up to the end of the period under review.

Change in the employment structure

Percentage of employed persons overall (15 to 64 years); difference from 100: households, extraterritorial organisations and bodies as well as "no responses"

Sector	Spain		Portugal		Ireland		Comparison: EMU total	
	2008	2013	2008	2013	2008	2013	2008	2013
Agriculture	4.2	4.4	7.6	6.9	5.1	5.1	3.5	3.3
Industry	15.6	13.6	19.1	17.9	13.3	12.6	18.6	17.2
Construction	12.1	6.0	11.2	6.8	11.5	5.5	8.4	6.8
Services	42.5	45.5	35.7	37.7	42.7	45.2	39.4	40.7
Public sector	22.0	26.5	22.9	27.7	26.7	30.9	28.0	29.7

Sources: Labour Force Survey and Bundesbank calculations.
Deutsche Bundesbank

Movements in the labour markets of these three countries are also due to a sectoral reallocation focused on the construction sector. Spain and Portugal saw an ongoing decline in employment in this sector up to the end of the period under review; as a result, construction employment in the second quarter of this year showed a fall of 62% in Spain and 51% in Portugal on the second quarter of 2007. In Ireland, a slight increase in employment was recorded for the first time since 2007. Even so, more than half of jobs have been lost there, too. In the periphery countries, many jobs were also cut in the manufacturing sector. In Spain and Ireland, annual employment losses continued in the second quarter of 2014, while there has been growth in employment again in Portugal since the first quarter of 2014.[6] Compared with levels before the crisis, employment losses in manufacturing range between 15% (Portugal) and 30% (Spain).

During the crisis years, employment losses in the services sector were mostly less severe and more jobs were created in this sector again during the period of recovery. Specifically, all three countries saw a marked rise in employment in the information and communication sector, in restaurants and hotels, as well as in business-related services. Furthermore, the number of persons employed in the health sector – as in other industrial countries – is showing a positive trend. Altogether, the last seven years have witnessed a large-scale shift in employment away from industry and construction towards the services sector. As a result, the combined share of industry and construction during this period shrank by between 6 percentage points (Portugal) and 8 percentage points (Spain).

Indications of a labour market recovery are also provided by an analysis of labour market turnover, ie flows into and outflows from unemployment. If the inflow rate declines or the outflow rate goes up, the unemployment rate should stabilise over time at a lower level. Movements on the labour market usually follow a marked cyclical pattern. In an upturn, more jobs are generally started than are terminated; in a downturn, more jobs are shed than created. The scale of outflows and inflows also depends on structural factors. These include, in particular, redundancy costs, which are determined by employment protection regulations, as well as the quality of job placement services along with the mobility and the skills profile of the labour force.

Below, reference is made to the transition rates into and from unemployment for Spain, Portugal and Ireland, calculated

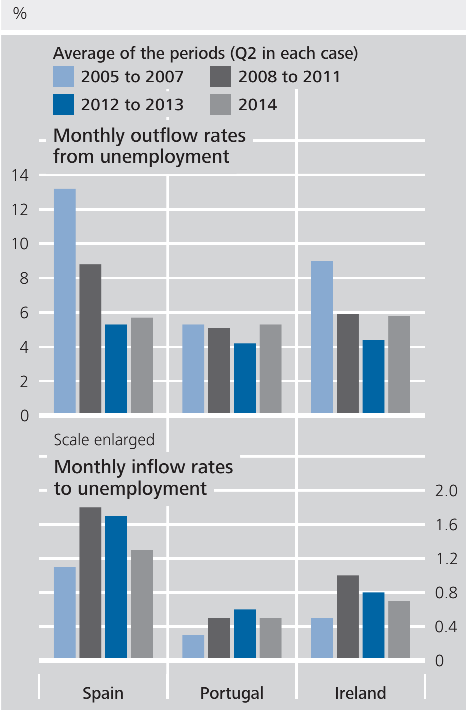
6 Comparisons refer to the quarter in the previous year unless stated otherwise.

using the method of Elsby et al (2013).[7] The outflow rate from unemployment may be interpreted in this context as the probability that an unemployed person is no longer unemployed in the following month. It should be noted, however, that transitions between inactivity and labour force participation are not taken into account when determining the inflow rate into unemployment. For that reason, the calculations may be regarded only as an approximation of the transition rates between unemployment and employment.

In the period from 2008 to 2011, the unemployment rate in these three countries increased owing to both a higher inflow rate into unemployment and a lower outflow rate from unemployment. In Spain and Ireland, a period of stabilisation has since set in with a decline in inflow rates, suggesting smaller employment losses. In the meantime, inflow rates have fallen in Portugal, too. In all three countries, the rates are still well above their pre-crisis levels, however. It is only since the second quarter of 2014 that a moderate increase in the outflow rates from unemployment can be observed. This means that the average duration of unemployment is also tending to go back down again somewhat. In Spain and Ireland this period is still considerably longer than before the crisis, however. It is only in Portugal that the average duration has now reached the mean level of the 2005-07 period again.

Even if the economy goes on recovering at the current pace, unemployment in the three countries is set to decline only slowly and will still be considerably higher than before the onset of the global recession for some time to come. One key factor behind this is that unemployment in these three countries has become entrenched over the past few years, as is shown by the marked rise in structural unemployment as measured by the European Commission's non-accelerating wage rate of unemployment (NAWRU). The NAWRU in Spain went up from 13.0% in 2007 to 19.8% in 2014, and, during the same period, from 9.0% to 12.1% in Portugal and from 7.2% to 10.9% in Ireland.[8] The initiated structural reforms will help to counter the rise in structural unemployment and to accelerate its reduction. Given the difficult situation in the three countries, it is therefore vital to persevere with the reform process.

Turnover in the labour market



Source: Eurostat and Bundesbank calculations based on the Labour Force Survey.
Deutsche Bundesbank

7 See M W L Elsby, B Hobijn and A Sahin (2013), Unemployment Dynamics in the OECD, The Review of Economics and Statistics, 95(2), pp 530-548. Elsby et al extend the method of R Shimer (2012), Reassessing the Ins and Outs of Unemployment, Review of Economic Dynamics, 15(2), pp 127-148, for calculating the transition rates given the availability of discrete macrodata. This is based on the unemployment rate over time $\frac{du_t}{dt} = x_t(1-u_t) - f_t u_t,$
where u_t denotes the unemployment rate, x_t the inflow rate and f_t the outflow rate in month t.
8 Owing to Ireland's comparatively strong growth over the past few years, its structural unemployment rate at the end of the period under review was back below its 2012 peak of 12.1%.

trending upwards slightly since mid-2013, and exceeded the prior-year level by ½% in the spring quarter, the last for which data are available. This was due largely to the creation of new jobs in services, especially in trade, transport and communications. Employment in the industrial sector, by contrast, remained virtually unchanged. The number of unemployed continued to fall slightly after mid-year. At 11.5% after seasonal adjustment, the third-quarter standardised unemployment rate was somewhat lower than a period earlier and 0.5 percentage point below its cyclical peak in spring 2013. By now, unemployment rates are on the decline in virtually all euro-area member states, exceptions being France and Italy, which in summer posted new highs of 10.5% and 12.6% respectively. Last year and in the current year, the unemployment rate in Ireland, Spain and Portugal, on the euro-area periphery, even fell quite considerably, starting from a very high level. One contributing factor was that, in those countries, the cyclical recovery has begun to pick up speed, while productivity has been inching upwards. Other factors include the shrinking working-age population and the decline, due for instance to discouragement, in labour force participation (see the box on pages 22 to 25).

Inflation still merely muted

After a spring in which euro-area consumer price inflation had largely ground to a halt, in the third quarter prices rose by a slight 0.2%, after seasonal adjustment, on the quarter. Prices of unprocessed food rose for the first time since summer 2013, while even prices for processed food went up somewhat. The effect of the depreciating euro was felt particularly in industrial goods. Moreover, services price inflation, which had already been quite perceptible in the two preceding quarters, accelerated. By contrast, energy prices once again contracted. As in spring already, gas prices were slashed, whereas prices for refined petroleum products fell only marginally despite the distinct decline in crude oil prices; this was due to efforts to improve depressed profit margins. In spite of the slight rise in prices over time, annual HICP inflation shrank further in the third quarter to +0.4%, following +0.6% in spring. The fairly sharp rise in the prices of energy and food in summer 2013 was a factor. Excluding these two volatile components, which are affected strongly by weather conditions or global factors such as crude oil prices, the annual inflation rate remained unchanged at +0.8%.

Consumer prices in October down somewhat on the month

Seasonally adjusted consumer prices were down slightly in October month-on-month. This was due not only to the sharp drop in crude oil prices but also to a distinct decline in industrial goods price inflation, attributable chiefly to seasonal sales in Germany. Annual consumer price inflation stood at +0.4%. However, since energy prices did not fall that steeply relative to the decline in crude oil prices, there is likely to be room for further price reduction. Against this background, low headline HICP inflation rates may be expected to continue in the months to come.