Global and European setting

World economic activity

Global growth fairly muted in winter 2014

Following a strengthening of global activity in 2013, growth in world economic output in the quarter ended has been fairly muted. For instance, global industrial output in January-February was up by ¾% after seasonal adjustment from the fourth quarter, in which it had grown by 1¼%. The volume of global trade even contracted slightly in these first two months. Decelerating overall growth was to be seen among the advanced economies and emerging markets alike. Significant factors dragging on emerging market growth notably include the Chinese economy's bumpy start to the year and Russia's economic problems, which have been clearly aggravated by the Ukraine crisis. Aggregate real gross domestic product (GDP) across the United States, Japan, the United Kingdom and the euro area rose by ¼% after seasonal adjustment on the period following growth of just under ½% a period earlier. Their combined year-on-year growth remained at 2%. Developments in the industrial countries as a group were driven by a number of countervailing one-off factors. For instance, the exceptionally harsh winter in the United States hampered production in some places, whereas substantial frontloading effects ahead of the VAT hike on 1 April 2014 sent domestic demand, and thus real GDP, sharply higher in Japan. Euro-area growth remained subdued.

One-off factors likely to reverse in spring

These one-off factors are likely, in a sense, to switch directions during the current quarter. Monthly indicators at the current end are already suggesting that the US economy is picking up considerably. By contrast, in Japan household demand is likely to plummet in response to the frontloading effects and might even cause GDP to contract. However, economic developments in the major industrial countries are expected to be increasingly dictated by the underlying forces of economic growth in the second half of 2014. The cyclical recovery could gain strength in the euro area, in particular, as the year progresses. That would also benefit the global economy. In the short run, the Purchasing Managers' Indices (PMIs) for manufacturing and services available until April, with values well over the expansion threshold, are pointing to a continuation of the current growth path.

IMF global growth forecast reduced slightly

In its April World Economic Outlook (WEO), the IMF staff revised its global growth forecast down slightly from the January projection, to 3.6% in 2014 and 3.9% in 2015. The downward revision is due to a somewhat less favourable outlook for the group of emerging market economies (EMEs). The projection for the Russian economy, for instance, was corrected. In the light of the Ukraine crisis, at the end of April the IMF staff revised its forecast for Russia downward again by a considerable margin. The WEO kept its estimate for China at +7.5% despite the difficult start to the year; growth of +7.3% is expected for 2015. Among the industrialised countries, Japan's GDP growth rate for 2014 was subjected to a marked downward correction, whereas UK GDP growth was revised upwards considerably and, at 2.9%, now tops the G7 countries. The forecast for the euro area was also raised slightly, to +1.2%. Although real world trade will, according to the IMF, rise considerably more strongly in this year (+4.3%) and the next (+5.3%) than in 2013, its growth rates will still remain far below the (in some cases, double-digit) pre-crisis figures. The IMF continues to see several potentially growth-dampening factors as risks to its forecast. Given low rates of inflation in the advanced economies, especially the euro area, the Fund is emphasising the risk of sliding into deflation if economic performance falls short of expectations. One of the risks mentioned in connection with the EMEs is that of renewed turbulence in the financial markets. The Fund also noted that the Ukraine conflict had recently driven up geopolitical risks.

Indicators of global activity

Year-on-year percentage change, seasonally adjusted

1 Weighted average of 81 selected industrial countries and emerging market economies. Source: Centraal Planbureau. **2** Data from 48 industrial countries and emerging market economies aggregated by the Bundesbank on the basis of market exchange rates.

Deutsche Bundesbank

Mixed price tendencies in commodity markets

Prices in the international commodity markets moved in different directions during the reporting period. Averaged during the winter months, the HWWI commodity price index for industrial countries (excluding energy), which is measured in US dollars, trod water at around its previous quarter's level. However, the aggregate view obscures sharp rises in the prices of specific foodstuffs for which the harvest outlook has become gloomier under the impact of poor weather conditions. By contrast, however, industrial commodities became perceptibly cheaper, which is to be seen in connection with the fact that global manufacturing activity was not very buoyant at the start of the year. In April, commodity prices began to rise across the board. During the reporting period, the spot price of a barrel of Brent crude fluctuated mostly below the US$110 mark, largely continuing to move sideways. Concerns about a possible escalation of the geopolitical situation in eastern Europe had to be weighed against the prospect of expanded oil deliveries from Libya. As this report went to press, the spot price for a barrel of Brent was US$109½. In the light of the current geopolitical tensions, discounts on oil futures widened somewhat as this report went to press.

Consumer price inflation in industrial countries remains subdued

In the absence of any stimuli, specifically from the crude oil market, consumer prices in the industrial countries only inched upward in the winter months. The year-on-year change in a relevant index narrowed from +1.3% in December 2013 to +1.1% in March. If energy and food are removed from the underlying basket of goods, consumer prices are continuing to tend upward slowly; core inflation based on this definition held steady at +1.3%. In the spring months, inflation could rebound somewhat more strongly, not least owing to the VAT hike in Japan but also to the rather low energy prices over the 2013 reference period. As before, no deflationary tendencies are evident in the group of advanced economies overall.

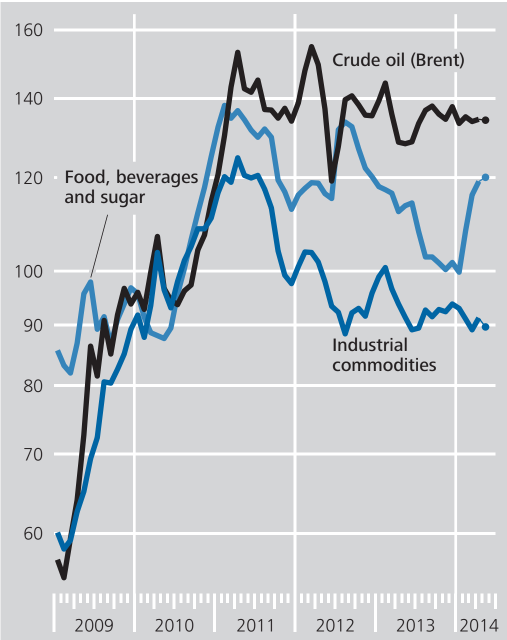
Selected emerging market economies

China's growth flagging

Economic activity in China flagged somewhat at the beginning of the year. According to an estimate presented by the National Bureau of Statistics of China, real year-on-year GDP growth was 7½% in the first quarter of the year, as against +7¾% in the final quarter of 2013. The seasonally adjusted quarterly growth rate likewise slowed down. Less buoyant export business and waning investment growth appear to be the main reasons for the more moderate aggregate growth. In the past few weeks, the Chinese government has announced several measures intended – in addition to their primary purposes – to stimulate economic growth. These include a programme to create and renovate residential space for those previously living in shabby housing. These additional orders are likely to be coming not a moment too soon for the construction industry, as the private housing market in China seems to be increasingly cooling markedly. The path of monetary policy has remained largely unchanged in the past few months; however, the central bank has permitted a moderate depreciation of the renminbi against the US dollar. Consumer price movements stayed calm at the beginning of the year. Inflation averaged 2.2% over the first four months of the year, slightly lower than for 2013 as a whole.

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

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



Sources: Thomson Reuters and HWWI. • Average of 1 to 9 May or 1 to 14 May 2014 (crude oil).
Deutsche Bundesbank

India's economy still on flat growth path

India's economy does not appear to have picked up any steam at all in the reporting period. Real gross value added – India's preferred indicator of aggregate output – was up by 4¾% on the year in the fourth quarter of 2013, the last quarter for which quarterly national accounts data are available. India's economy has remained on this growth path, which is fairly flat by historical standards, since spring 2012. It is striking that investment has more or less stagnated since that quarter. One of the most pressing tasks facing the new government to be formed following the parliamentary elections in April and May will therefore probably be to improve the country's investment climate and initiate needed public investment projects, especially in infrastructure. Although inflation in India has come down somewhat since the end of 2013, it is still high, at 8.6% at last report.

Real GDP in Brazil pointing moderately upwards

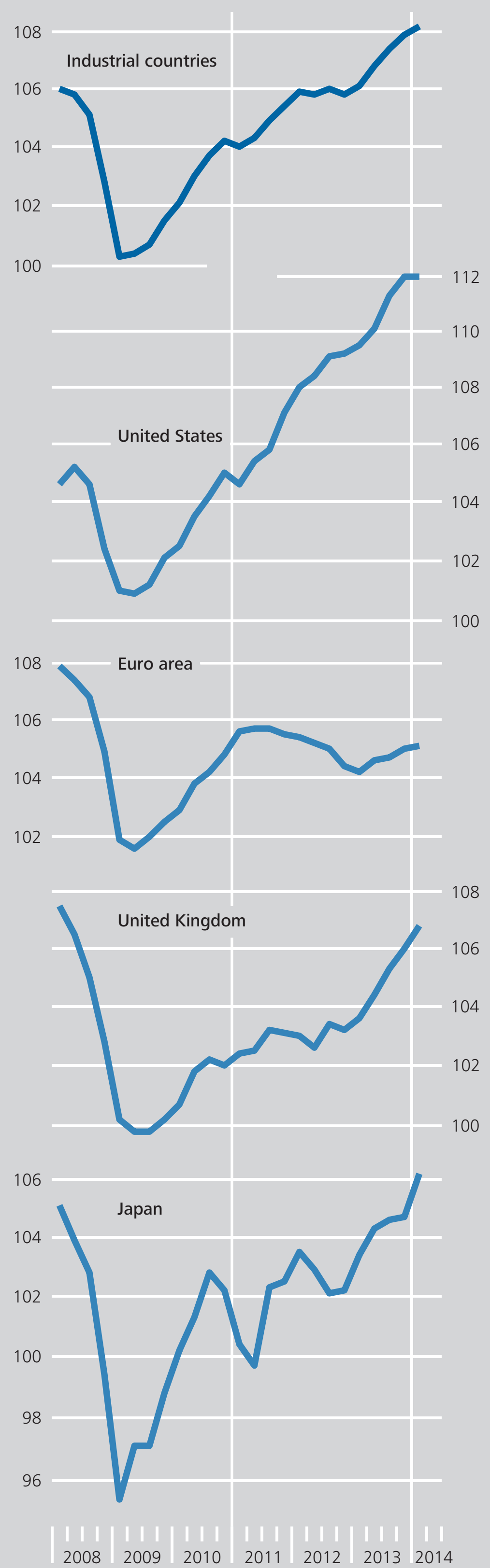
There are no GDP figures yet for the quarter ended for Brazil, either. However, indicators seem to be suggesting that economic output has remained on a moderate growth path. In this connection, it is, at first glance, astonishing that the favourable labour market development persisted throughout the reporting period, with urban unemployment down to an all-time low of 5.2% on average over the 12 months leading up to March 2014. However, this is partly because the number of workers available to the Brazilian labour market is no longer growing. Consumer price inflation remained at quite a high level at the beginning of the year. Average first-quarter inflation stood at 5.8%, well above the monetary policy target of 4.5%. The Brazilian central bank responded by incrementally increasing its policy rate to 11% at the end of the reporting period.

Ukraine conflict weighing heavily on Russian economy

Russia's economy is currently exposed to strong headwinds. According to an initial report by the Russian Federal Statistics Service, year-on-year real GDP growth slowed considerably to 1% in the winter quarter. Although these results are not in yet, seasonally adjusted economic output is even likely to have declined perceptibly from the last quarter of 2013; the current quarter seems to be showing a continuation of the recessionary tendencies. According to the indicators, the economy had already had a relatively weak start to the new year. The intensification of tensions in eastern Europe proved an important additional disruptive factor; it caused a considerable loss of confidence in Russia among domestic and international investors. In addition, the central bank was compelled to raise its policy rate sharply in order to ease the downward pressure on the rouble. Despite these strains, which are likely to be weighing particularly on private investment, Russia's imports have so far hardly gone down. Even a relatively sharp decline in domestic demand would probably have limited negative ripple effects on other economies, specifically the euro area (see page 20). Consumer price inflation increased markedly as of late, particularly owing to the weak rouble. The inflation rate stood at 7.3% in April, 0.8 percentage point above its level at the end of 2013.

Aggregate output in industrial countries*

2005 = 100, seasonally adjusted, quarterly, log scale



Sources: National statistics, Eurostat and Bundesbank calculations. * The United States, euro area, United Kingdom and Japan.

Deutsche Bundesbank

United States

One-off factors causing aggregate recovery to take a break

The US economic recovery began to sputter at the beginning of the year. The stagnation of seasonally and price-adjusted GDP is seen by many observers as being connected with the exceptionally cold weather over much of the United States. However, one-off factors which have helped boost activity have been observed, too. The winter weather, for instance, acted as a partial economic stimulus through higher real expenditure on heating. In addition, the healthcare reform had a perceptible impact on the national accounts by increasing household spending on the relevant services. Despite weak goods consumption, household consumption growth overall was therefore on a par with the appreciable growth of the previous quarter. However, private gross fixed capital formation was reduced perceptibly. The renewed reduction in residential housing construction investment is probably due not just to inclement weather; the preceding increases in long-term interest rates might also still have had after-effects. In addition, government demand was reduced slightly although the return of government activity to normal following the temporary federal government shutdown in the autumn probably had a marginally positive effect. In particular, though, foreign trade and inventory movements weighed heavily on aggregate growth. These components had provided a considerable boost to GDP growth in the two preceding quarters. The poor economic performance in the winter therefore also needs to be seen against the backdrop of the favourable developments in the second half of last year. Since mid-2013, economic output has grown by an annualised average of 2¼%, which is also the median growth rate since the beginning of the upswing in the summer of 2009. The continuing improvement in the labour market is another indication that the recovery is fundamentally intact. The unemployment rate dropped to 6.3% in April, after having been as high as 6.7% at end-2013. In the same month, CPI inflation climbed to 2.0%; excluding energy and food, it stood at 1.8%.

Japan

Economic output up very sharply in run-up to VAT hike

After rising only sluggishly in the second half of 2013, Japan's aggregate output in the first quarter of 2014 jumped strongly on the period (+1½%) after seasonal adjustment. This was due mainly to a considerable revival of domestic demand in the run-up to the VAT hike on 1 April 2014. Against this background, households in particular expanded their real consumer expenditure by a large margin. In addition, private residential investment, which had already benefited from anticipatory demand in the previous quarters, surged even further. The sharp increase in enterprises' expenditure on new machinery and equipment and construction could be a sign that the economy's underlying growth path is likely to remain intact despite the expected temporary drop in demand in the spring. By contrast, public investment dropped considerably in the winter months; the government's avowed intention is to help stabilise domestic demand by steering its expenditure. Imports soared in the face of extremely lively domestic activity. However, since exports rose nearly as quickly, net trade only minimally curbed aggregate growth. The fact that enterprises passed most of the tax increase on to consumers is shown by the acceleration of consumer price inflation in the Tokyo metropolitan area from 1.3% in March to 2.9% in April; no such national figures are available yet. Headline inflation in Japan stood at 1.6% in March, as it had in December 2013. In February and March the unemployment rate slid to 3.6%, matching the lowest level in the preceding business cycle.

United Kingdom

Cyclical upswing stabilised

The UK economic upswing continued unabated in the winter quarter. As in the preceding quarters, seasonally and price-adjusted GDP was up ¾% from the preceding three-month period, resulting in year-on-year growth of just over 3%. At the current rate of expansion, aggregate output should return in spring to its peak of the first quarter of 2008. Excluding oil and gas production, which are in the midst of a trend decline, aggregate output has already reached its pre-crisis level; services output, which accounts for nearly four-fifths of total nominal gross value added, has even exceeded its previous cyclical peak by 2%. However, industry output (excluding construction) also continued to climb considerably in the first quarter, whereas construction output grew comparatively weakly. Inclement weather at the beginning of the year may have been a negative factor here. Looking at real retail sales, on the expenditure side household consumption has probably remained a key engine of GDP growth. A role may have been played by the fact that price increases eroded consumers' purchasing power less than before, with inflation as measured by the Harmonised Index of Consumer Prices (HICP) dropping from 2.0% in December to 1.6% in March. The labour market continued to show a positive development, too. The average unemployment rate over the January-March period was down to 6.8% following 7.2% over the preceding three-month period. It therefore dropped below the previous threshold of 7.0% that the Bank of England had for some time stressed in its forward guidance on monetary policy. All in all, the experience gathered by the UK and US central banks demonstrates the difficulties inherent in forecasting the ups and downs of the unemployment rate (see box on pages 17 to 20).

New EU member states

Recovery making good progress

In the new EU countries (EU-7[1]) as a whole, the cyclical upturn continued apace in the first quarter of 2014. In four of the six EU-7 countries which have presented initial seasonally adjusted GDP growth figures to date, period-on-period aggregate output has risen markedly to considerably, stagnating only in the Czech

1 This group comprises the non-euro-area countries that have joined the EU since 2004.

Republic and Romania. Industrial output, which was likewise pointing distinctly upwards in many countries, is likely to have once again received positive stimulus from the euro area. The situation on the labour markets has tended to improve further. In this group of countries as a whole, the unemployment rate stood at 9.1% in the reporting period after seasonal adjustment, compared with 10.0% a year earlier. The latest decline in aggregate EU-7 unemployment is attributable in particular measure to a strong revival of the Hungarian labour market, a large portion of which, however, is due to a public work programme. Aggregate EU-7 HICP inflation, which had already reached an all-time low in the fourth quarter, fell further to 0.5% in the quarter ended. The figures for March ranged from -2.0% in Bulgaria and +0.6% in Poland to +1.3% in Romania.

Macroeconomic trends in the euro area

Growth still muted in first quarter of 2014

Euro-area growth remained muted in the winter months of 2014. According to initial estimates, seasonally adjusted real GDP was ¼% higher than a period earlier, in which it had grown by the same rate. Aggregate output was up by 1% on the year, compared with +½% in autumn 2013. The significant annual output growth is due at least in part to a positive weather effect since the last winter was relatively mild following an extraordinarily harsh winter in 2013, which had led to above-average output losses in some member states.

Very mixed picture among countries

In a region-by-region perspective, growth differentials opened up again in the first quarter, with one-off factors playing a key role. Of the 13 euro-area member states which have so far published initial seasonally adjusted GDP growth figures, six recorded an increase in GDP, one reported a stagnation of aggregate output, and six countries saw contraction. The fastest growth was recorded by Germany (+¾%), with the favourable weather playing a role. France's GDP growth held steady at its end-2013 level, with a considerable weather-related decline in energy production also having been a factor.[2] The Netherlands' poor performance (-1½%) is due in great measure to extremely weak domestic consumption and exports of natural gas as a result of the mild temperatures. Among the periphery countries, only Spain saw positive growth (+½% after seasonal adjustment). Portuguese GDP fell by ¾%, and Italy's economy contracted minimally. Cyprus remained in recession. Greece is not publishing any seasonally adjusted data until further notice; real GDP contracted by 1% on the year following -2¼% in autumn 2013.

Underlying cyclical tendency still pointing upwards in spring

The latest leading indicators suggest that the euro-area recovery will continue in the spring. In the January-February period, new orders received by industry, excluding large orders, were up by a seasonally adjusted 1% in nominal terms from the fourth quarter. Member states' domestic orders (+1½%) rose faster than orders from abroad (+½%), as in the fourth quarter already. The industrial confidence indicator has been hovering above its long-term average since back at end-2013. The composite PMI, which reflects manufacturing and services output, again rose strongly in April, indicating a good start to the second quarter of the year. In addition, consumer confidence has tended to improve perceptibly in the past few months, finally surpassing its multi-year average again for the first time in quite a while.

Cyclical risks owing to Ukraine crisis

The conflict in Ukraine and the sanctions imposed on Russia have not yet had any perceptible macroeconomic impact on the euro area. However, this could change if the conflict worsens significantly and further, tough sanc-

2 The impact of the weather on energy production in France is particularly prominent in the statistics because many households use electricity for heating, the production of which is easier to pinpoint in terms of time than the use of fossil fuels for heating which is prevalent in other countries. It is also noteworthy in this context that energy production in France has relatively high value added owing to the high percentage of nuclear power; a decline will therefore have a greater impact on aggregate output than in other countries which use a larger percentage of imported energy.

Labour market developments in the United States and the United Kingdom in the context of their central banks' forward guidance strategy

With nominal short-term interest rates approaching the zero lower bound, both the US Federal Reserve and the Bank of England sought last year to steer investors' short-term interest rate expectations, and thus also longer-term interest rates, by outlining the circumstances under which they would maintain their policy rates. As part of this state-contingent forward guidance strategy, both central banks stated that the normalisation of their interest rate policies would be conditional mainly on unemployment rate developments as an indicator of labour market slack. Both central banks announced specific thresholds to which the unemployment rate would have to fall before they would raise their policy rates again.[1] At the time, according to projections carried out by both central banks, unemployment was only supposed to reach these benchmarks over the medium term, keeping interest rate expectations low.

In December 2012, the Federal Open Market Committee (FOMC) announced a specific threshold of 6.5% which, according to the committee members' projections, would be reached in the course of 2015.[2] However, the unemployment rate slipped to 6.3% in April 2014, earlier than expected. The Bank of England announced a similar threshold of 7.0% in August 2013. At that time, its Monetary Policy Committee thought it unlikely that unemployment would fall to this level before 2016.[3] However, the unemployment rate actually already dropped below the 7% mark in the first quarter of 2014.

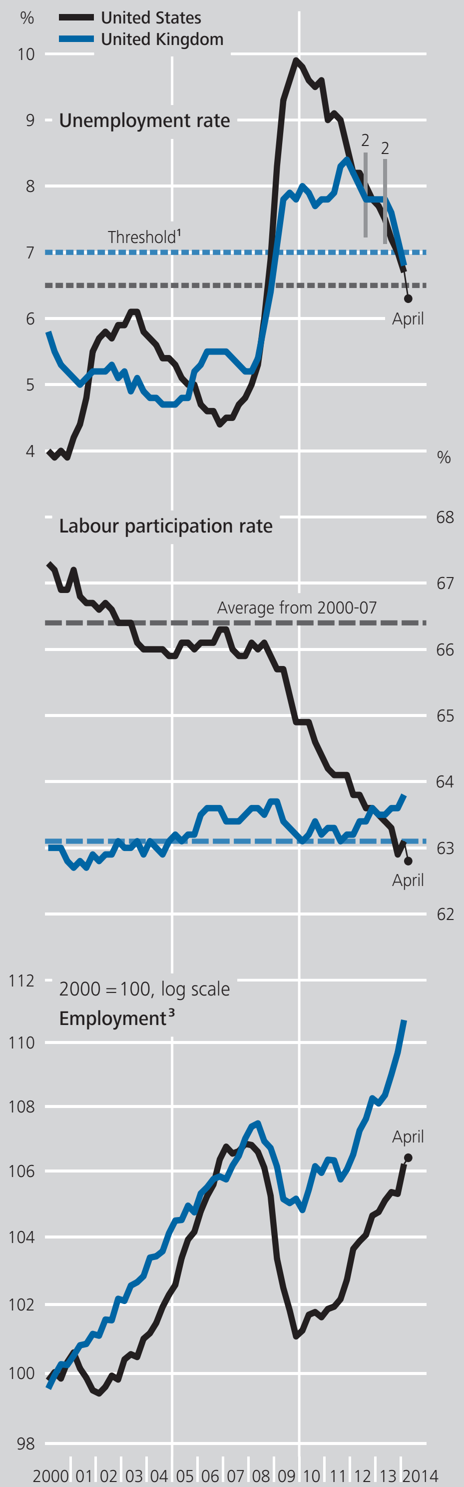
This highlights how difficult it can be to accurately predict the unemployment rate owing to various factors. Real gross domestic product (GDP) growth is just one of the variables that affect the unemployment rate, and real GDP projections are themselves subject to a high degree of uncertainty. In combination with anticipated productivity gains, defined as output per employee, expectations of changes in employment can be derived from the economic growth projection. However, this does not provide sufficient information either, because even if employment levels remain the same, the unemployment rate falls if the number of unemployed people decreases. This can happen, for instance, if people looking for work withdraw from the labour market as employment prospects are generally gloomy – the "discouraged worker effect". It is also possible that a larger number of employees retire and the positions that become vacant are taken by unemployed persons. While the fall in unemployment in the first scenario reflects unfavourable cyclical factors, the second scenario may be the result of a longer-term trend, specifically the ageing of the population. In both cases, the drop in the number of unemployed persons is accompanied by a decrease in the labour force, which is the sum of unemployed and employed people, and which is used as the reference variable when calculating the unemployment rate. However, the participation rate, which is the labour force in relation to the working-age population, also falls as a result.

In addition to economic growth projections, the unemployment rate is therefore also predicted using estimated future developments in productivity, the labour force participation rate and population figures. Unlike population figures, the other two factors are subject to both long-term and cyclical effects. Although it is difficult to dis-

1 It was explicitly stated that this threshold was not an automatic trigger for a change in rates. The banks also specified additional factors which could lead to different monetary policy decisions, placing particular emphasis on inflation and inflation expectations.
2 See also the statement released by the Federal Open Market Committee on 12 December 2012.
3 See also Bank of England, Inflation Report, August 2013.

Labour market indicators in the United States and the United Kingdom

Seasonally adjusted, quarterly



Sources: Haver Analytics, Bureau of Labor Statistics and Office for National Statistics. **1** As part of the forward guidance strategy. **2** Announcement of the forward guidance strategy. **3** According to the Current Population Survey in the USA and the Labour Force Survey in the UK.
Deutsche Bundesbank

tinguish between these effects, particularly at the current end, it is nonetheless important to do so for making the projections. Some of the developments which may have contributed to the surprisingly rapid decline in unemployment in the United States and the United Kingdom are identified below. It turns out that the potential factors influencing the unemployment rate affected the national labour markets to varying degrees.

Between 2010 and 2012, the US economy generated moderate real GDP growth based on subdued increases in both productivity and employment. In statistical terms, combined with an ongoing increase in the number of people of working age, the quite distinct decline in unemployment during this period was therefore more the result of a perceptible decrease in labour force participation.[4] In December 2012, the FOMC then expected real GDP growth to accelerate significantly over the following three years, but also anticipated a slowdown in the fall in the unemployment rate. Leaving aside a change of pace in productivity gains, this implies that the FOMC may have expected discouraged workers to return to the labour market and the participation rate to experience a slight cyclical recovery.[5] However, in reality, the unemployment rate dropped considerably more sharply in the course of 2013 than the FOMC had expected, while real GDP growth

4 According to US statistics, persons over the age of 16 are classified as working-age. There is no upper age limit. The growth of the working-age population in this period is based largely on groups in higher age brackets.
5 The July 2013 Monetary Policy Report suggested that the decline in labour force participation was likely to be due in part to discouraged workers withdrawing from the labour market. The Chairman of the Federal Open Market Committee also voiced this opinion at the press conference after the December 2012 monetary policy meeting. At the time, Daly et al estimated that the decline in the unemployment rate could even stagnate temporarily if people who wished to work but had not yet looked for jobs joined the labour market. See Board of Governors of the Federal Reserve System, Monetary Policy Report, July 2013, pp 4-5; M Daly, E Elias, B Hobijn and Ò Jordà (2012), Will the Jobless Rate Drop Take a Break?, Federal Reserve Bank of San Francisco, Economic Letter, No 2012-37.

was in line with expectations and the participation rate continued to fall.

Against this backdrop, it is important to take a closer look at the driving forces behind the persistent decline in the participation rate in the United States. There is no disputing the fact that, particularly as the baby boomer generation ages, cohorts with comparatively low participation rates have become more important, which partly explains the decline in the aggregate labour force participation rate.[6] However, the extent to which the decline in the participation rate of individual age and population groups reflects cyclical factors or longer-term trends has become a contentious issue.[7] The aggregate participation rate had already peaked at the turn of the millennium, leading to a discussion of the causes of its decline even prior to the recent recession.[8] Aaronson et al (2006) predicted that the trend labour force participation rate would decrease to 64.0% in 2011 and to 63.7% and 63.3% in the following two years respectively by modelling the participation rate for specific years. These turned out to be the exact figures for the actual participation rate in 2012 and 2013, while the projection for 2011 was off by just one-tenth of a percentage point.[9] Another argument against strong cyclical effects is that, over the last few years, broader measures of underemployment, which also include people who are only loosely associated with the labour force – including discouraged workers – or who work part-time for financial reasons, have fallen to a similar extent as the official unemployment rate.

The surprisingly sharp decline in unemployment in the United Kingdom after the announcement of the forward guidance strategy is likely to have been primarily due to the persistent weakness of productivity growth. The Bank of England's projection had rested on the key assumption that productivity growth would gradually pick up and soon resume its long-term, pre-crisis pace. However, aggregate output per employed person in the United Kingdom has only increased slightly since the end of the 2008-09 recession, and still remains far below its pre-crisis level. The extent to which temporary factors play a role or the relevant trend path has flattened is a key element of what is known as the British productivity puzzle.[10] Although the UK economy expanded fairly strongly in the last three quarters, causing aggregate output in the first quarter of 2014 to exceed its level in the second quarter of 2013 by 2¼%, at the same time, employment increased at almost the same pace. There has therefore also hardly been any growth in aggregate output per person employed since mid-2013.

A striking feature of the UK labour market – especially in comparison to the US labour market – is the persistently strong growth in employment, which is the macroeconomic flip side to the weak productivity performance. Employment reached a historical peak at the end of 2013, although aggregate output remained 1½% below its pre-crisis level. However, it should also be remembered that a large part of the growth is attributable to a rise in the number of self-employed persons, who recently accounted for around 15% of the total employment figure, 2½ percentage points higher than on aver-

6 See Deutsche Bundesbank, The decline in labour force participation in the USA, Monthly Report, May 2012, pp 19-21.
7 Based on observations across the individual US states, Erceg and Levin, for example, argue that the decline in the participation rate of middle-aged men is largely due to cyclical factors. On the other hand, participation among this group of the population also shows a downward long-term trend. See Erceg, C J and Levin, A T, Labor Force Participation and Monetary Policy in the Wake of the Great Recession, IMF Working Paper WP/13/245.
8 For further information, see also J Bullard, The Rise and Fall of Labor Force Participation in the United States, Federal Reserve Bank of St. Louis, Review, First Quarter 2014, pp 1-12.
9 Based on a similar empirical model, Kudlyak also concluded that the actual participation rate deviates very little from its trend path. See S Aaronson, B Fallick, A Figura, J Pingle and W Wascher (2006), The Recent Decline in the Labor Force Participation Rate and Its Implications for Potential Labor Supply, Brookings Papers on Economic Activity, Vol 37, No 1, pp 69-139; M Kudlyak, A Cohort Model of Labor Force Participation, Federal Reserve Bank of Richmond, Economic Quarterly, First Quarter 2013, Vol 99, No 1, pp 25-43.
10 See Deutsche Bundesbank, Weak productivity performance in the United Kingdom in comparison with the United States, Monthly Report, April 2013, pp 28-30.

age between 2000 and 2007. The ratio of part-time work also expanded by 1½ percentage points compared to its long-term average, reaching 27%. The proportion of people searching unsuccessfully for full-time work has almost doubled. In light of these employment gains, labour market participation has largely remained stable over the last few years and has recently even marginally exceeded its average pre-crisis level. Although demographic trends are increasingly playing a role in the pattern of the participation rate, the generation of baby boomers is younger than in the United States, such that the importance of ageing effects is increasing only gradually.[11] Increased participation by those aged 35-64, in particular, has recently made a major contribution to the expansion of the aggregate participation rate. These developments may be institutionally driven to a certain extent. A number of labour market policy measures over the past few years (eg social benefit reforms) may have created incentives for increased labour force participation in the United Kingdom.

As the fairly different situations in the United States and the United Kingdom show, the unemployment rate is influenced by a variety of factors and is not necessarily easy to forecast. Moreover, there does not appear to be a clear consensus on the extent to which the unemployment rate successfully captures the conditions on the labour market. As the unemployment rates approached the threshold values, both the Federal Reserve and the Bank of England adjusted their monetary policy communication and now attach less importance to this indicator.[12]

11 See V Madouros (2006), Projections of the UK labour force: 2006 to 2020, Office for National Statistics Feature, pp 13-27.
12 See also Bank of England, Inflation Report, February 2014 and the Federal Open Market Committee's statement of 19 March 2014.

tions are imposed. For one thing, the euro area is heavily dependent on energy imports from Russia: in 2013, the country supplied one-quarter of total imports of gas and crude oil from outside the euro area. However, Russia is much less important as a sales market: last year it accounted for just under 5% of the euro area's exports to the rest of the world.

Assuming, in a risk scenario, that the cyclical downturn currently in evidence in Russia leads to a crisis-like slump in domestic demand equivalent roughly to the 1998 Russian crisis, NiGEM simulations indicate that the impact on the real economy of the euro area as a whole would be extremely limited. This is predicated on the assumption of an uninterrupted energy supply, however. Should such a crisis escalate further and the energy supply be interrupted in whole or in part, the macroeconomic impact in the euro area would, however, most likely be much greater (the severity varying greatly from one country to another). Owing to a lack of alternative transportation capacity, amongst other reasons, the euro area would not be able to compensate for a stoppage of gas imports from Russia in the short run; were it to last for some time, the economic impact would be considerably more difficult to deal with than if Russian oil exports were to plummet. Although the latter would cause prices to swing wildly in the crude oil markets, which would entail purchasing power losses not only in the euro area but also in non-European oil-consuming countries, a supply crisis could probably be averted thanks to considerable unused production capacity in other oil-exporting countries and to the existence of, in some cases, considerable strategic reserves in the major industrial countries.

Perceptible impetus from construction but only marginal contribution by industrial sector in winter quarter

In the quarter ended, euro-area GDP growth received a positive boost from construction; owing to the aforementioned mild winter weather, construction output in January-February was up by no less than 2¾%, after seasonal adjustment, from the preceding three-month period. However, industrial output (excluding construction) grew more slowly in the first quarter than previously, at ¼% quarter-on-quarter. The weather-related 4% drop in energy production needs to be taken into account here. Seen in isolation, manufacturing output grew by ¾%. Broken down by sector, manufacturers of durables saw the strongest quarterly output growth (+2½%), followed by producers of intermediate goods (+1%) and those of capital goods and non-durable consumer goods (each +¾%).

Domestic demand more buoyant

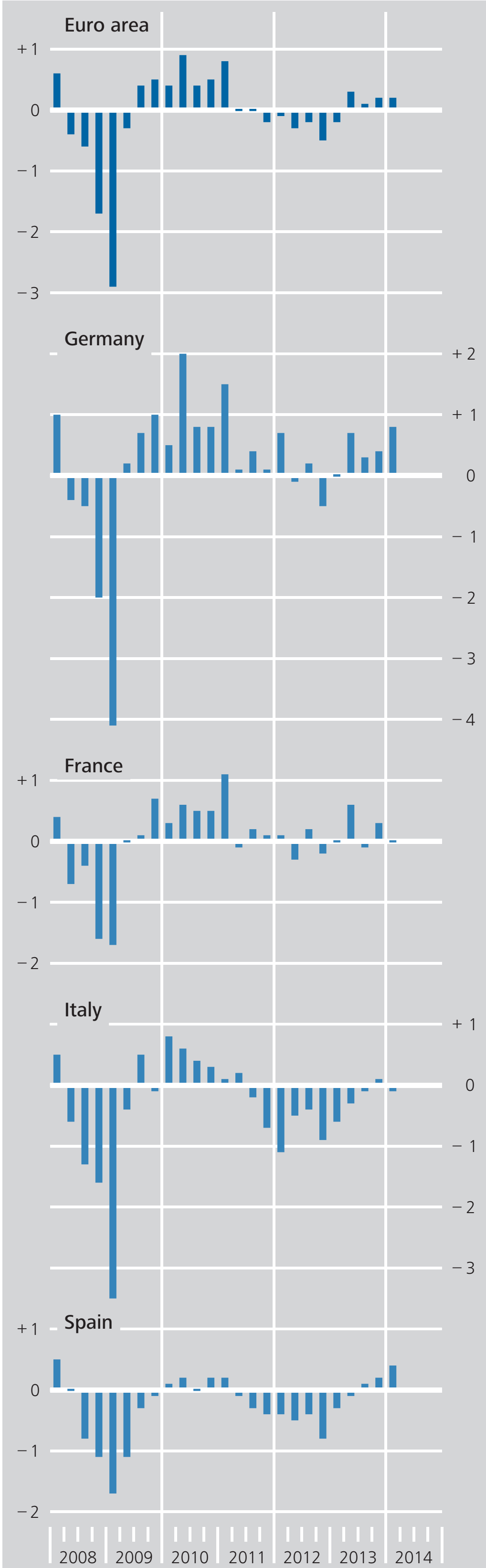
On the expenditure side, gross fixed capital formation appears to have once again generated a positive contribution to growth. This is indicated not only by the distinct increase in construction output but also by rapid growth in the manufacture of machinery and equipment. It is fitting that, according to the March-April 2014 survey on behalf of the European Commission, industrial firms are planning to expand their investment by 5% in real terms this year, after cutting their investment budgets by 2% last year. Household consumption growth appears to have been pointing at least slightly upwards during the reporting period, with real retail sales (excluding motor vehicles and fuels) up in the first quarter by ¾%, after seasonal adjustment, on the quarter and 1% on the year. However, by contrast, new car registrations were down by 2½% on the quarter, yet still up by 5% on the year. At the beginning of the year, foreign trade, in purely arithmetical terms, seems to have provided virtually no impetus for growth. At all events, growth in nominal exports of goods to non-euro-area countries in the January-February period compared to the autumn quarter (+¼% after seasonal adjustment) was similarly muted as that of the value of imports.

Slight improvement in the labour market

In the labour market, which experience shows generally perceptibly lags the production cycle, initial tendencies towards an improvement were visible in the fourth quarter of 2013 and first quarter of 2014. In the fourth quarter of 2013 – the most recent quarter for which data are available – the number of persons in work

Growth tendencies in the euro area

Real GDP, seasonally adjusted, quarter-on-quarter percentage change



Sources: national statistics, Eurostat and the ECB.
Deutsche Bundesbank

Changes in nominal wages in the euro area in the light of macroeconomic adjustment processes

Given the sharp year-on-year deceleration in euro-area consumer price inflation in recent months (down to 0.7% as this report went to press) and the generally somewhat sluggish economic recovery, public debate lately has been dominated by fears of a gradual drift into deflationary territory. Such discussion is fuelled by concerns that negative rates of price change, if not singular in nature but instead continuous and spread across several successive months, might lead to a self-reinforcing downward spiral that would be hard to counteract using economic stabilising measures.

While there is currently little evidence to suggest that the inflation rate might drop to less than zero, the question still arises as to the exact circumstances – be they a currency appreciation or adjustment processes aimed at correcting macroeconomic imbalances – under which falling prices could, if at all, give rise to a protracted and potentially self-reinforcing downward spiral. Much like inflation, which, at the end of the day, can only be kept alive through a combination of climbing prices and wages, deflation, too, is only made possible by the simultaneous interplay of falling prices and wages. Nominal wages need to decline sharply and on a long-term basis if a broad-based fall in prices is to be sustained for a prolonged period of time, otherwise it will soon grind to a halt.

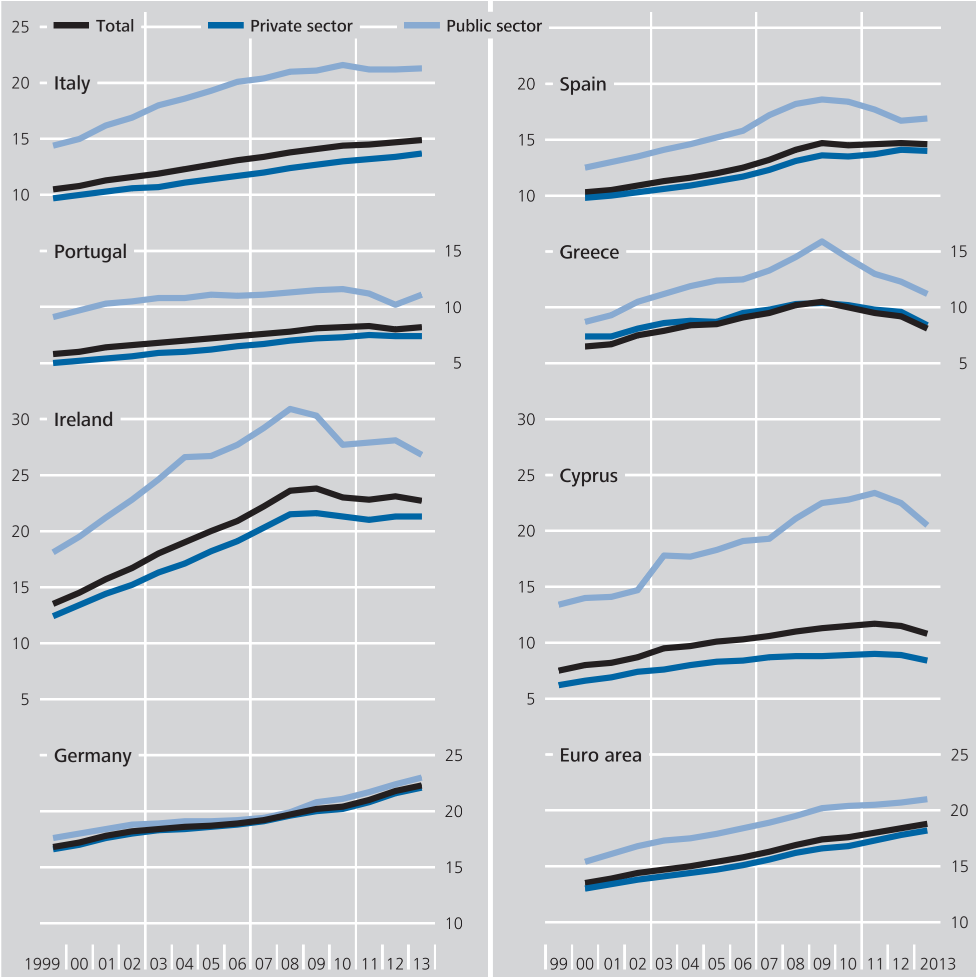
In the euro area as a whole, hourly wage growth has slowed distinctly since the onset of the global financial and economic crisis. This is demonstrated by the 2013 growth figure which, at 1.9%, was down from an average level of 2.9% over the 2006-2008 period.[1] Overall, aggregate hourly wages in the euro area climbed by 11.5% between 2008 and 2013. The strongest increases were recorded in Austria, Finland, Slovakia and Estonia, although Germany also saw pay rises that came in above the euro-area average. Particularly in those countries hit hardest by the crisis, wage setting in recent years has responded to the adjustment process originally triggered by the global financial and economic crisis and subsequently intensified by the sovereign debt crisis, a process which was accompanied by a marked rise in unemployment. In these crisis-stricken countries, wage growth diminished substantially or dipped at least briefly into negative territory in some instances.

One of the points raised in the current debate surrounding deflationary risks in the euro area is the strong possibility of adjustment processes in euro-area periphery countries generating deflationary pressure which, given the rather low inflation rates prevailing in most of the other member states, might send the entire currency area down a deflationary path.[2] Such contagion would, however, presuppose a very pronounced decline in prices in the crisis countries, not least because the six countries in question (Italy, Spain, Portugal, Ireland, Greece and Cyprus) only produce one third of euro-area GDP, and at the same time make up just 37% of the currency area's consumer basket. At present, persistently falling price levels as measured by the Harmonised Index of Consumer Prices (HICP) can, however, only be observed in Greece and Cyprus. In March, Spain and Portugal saw a year-on-year decline in consumer prices of 0.2% and 0.4% respectively, but in the following month this figure had already narrowed in the case of Portugal and, in the case of Spain, reverted to a small uptick. In

1 2008 counts as a crisis year if measured in terms of its output growth path; however, wage growth, which usually only exhibits a lagged response to cyclical changes, was still relatively high for this period.
2 See IMF, World Economic Outlook, April 2014.

Gross hourly wages

in €



Sources: ECB and Bundesbank calculations.
Deutsche Bundesbank

April, Italy and Ireland had inflation rates of 0.5% and 0.4% respectively. The low inflation rates observed in the periphery countries is not only attributable to country-specific factors but also to lower commodity prices and the appreciation of the euro.

Moreover, contractionary stimuli affecting prices in these countries would have to be sustained by shrinking wages. But here, too, there is divergence. In Greece, hourly wages and salaries across all sectors of the economy have contracted since 2010 by an annual average of 4.9% (18.2% in cumulative terms), far outstripping the concomitant fall in prices. As regards Cyprus, which was only drawn into the crisis at a relatively late stage, this process of wage contraction did not set in until 2012. Ireland also experienced declines; these were instrumental in driving hourly wages in 2013 down 5.1% from where they had stood in 2009. In Spain, hourly wages and salaries have been static since 2009, lingering at the high level they had previously attained; in Portugal, they were 0.6% lower in 2013 than in 2009. By contrast, wage growth in Italy continued apace, chalking up a solid 6.0% in the five years up to 2013. That said, individual annual growth figures since 2011 have all been smaller than those achieved in the three preceding years.

In this context, it should be borne in mind that aggregate wage developments in the periphery countries in recent years have been greatly influenced by administrative measures and agreements concluded between public sector wage bargainers (ie pay cuts, in particular reductions to Christmas bonuses, wage freezes or extended working hours without additional pay).[3] The largest decline in hourly wages paid to public sector employees has occurred in Greece, where pay has fallen by 27.0% since peaking in 2009. Sharp reductions from their respective peaks were also seen in Ireland (-12.0%), Cyprus (-9.8%) and Spain (-10.0%). In Portugal, the strong public sector wage cuts that came into force in 2012 had to be thrown overboard almost in their entirety after being rejected by the Constitutional Court. Even so, Portuguese public sector wages have still dropped by 6.3% since 2010. In Italy, gross public sector wages have stagnated since 2010. As seen elsewhere, this stands in marked contrast to developments in the private sector. Governments in the crisis countries felt compelled to take these measures, partly on account of the pressure emanating from the adjustment programmes agreed with the IMF, the European Commission and the ECB, and partly of their own accord, the aim being to reduce what were, in most cases, ballooning public deficits and to regain market confidence in the soundness of their public finances.

Yet the sometimes substantial corrections made to public sector wages and salaries were opportune not just because of the strong need to consolidate public finances but also because – with the exception of Portugal – remuneration in this sector in the years prior to the crisis had outpaced salaries in the private sector. In addition, the wage advantage enjoyed by the public sector over the private sector prior to the onset of the crisis was much more pronounced in all the crisis countries than across the euro area on average. Hourly wages in the public sector in Cyprus in 2008 were 82% higher than the average rate paid in that country's economy as a whole (including the public sector). The difference was also very pronounced in Italy, Portugal and Greece, at 40%, 45% and 42% respectively. Ireland and Spain told a similar story, with public sector workers being paid well above the mean amount for the country as a whole.[4] At the current end, the difference in remuneration between the two sectors is no longer as pronounced as it was before the crisis, but it is still much higher than in Germany, say. Government sector wage reductions have not just contributed to consolidating public finances. They are also important from a macroeconomic perspective inasmuch as a relative fall in public sector wage levels increases the incentive to seek employment in the private sector, and public sector wage developments are likely to act as a signal for wage settlements in other sectors.

In the private realm, meaning the economy as a whole excluding the public sector, average hourly wages have only decreased markedly in Greece and Cyprus in recent years, albeit to a much smaller degree than in the public sector. In the other periphery countries, hourly remuneration in the private sector has either virtually stagnated (Ireland, Portugal) or increased slightly in the period since 2009 (Italy, Spain). Here, however, we are talking about aggregated data which also comprise composition effects.

3 Here, the public sector consists of the following sectors: public administration, defence and compulsory social security; education; human health and social work activities in accordance with the NACE 2 Classification.
4 In this context, it is frequently remarked that the higher average remuneration of public sector employees has to do with their level of education and training. However, a recent study by the European Commission found that throughout the public sector there are many positions where wages are supplemented by substantial premiums, even if other relevant factors are taken into account. See European Commission, Directorate-General for Economic and Financial Affairs (2014), Government wages and labour market outcomes, Occasional Paper No 190.

Specifically, a disproportionately high number of employees with a low level of education and a correspondingly low wage were laid off during the crisis.[5] The increased proportion of employees earning a higher hourly wage generated a slight hike in the average wage level. Furthermore, microdata-based studies indicate that any pay cuts outside the government sector were mainly implemented in the form of lower additional payments (such as *ad hoc* bonuses, Christmas bonuses or holiday pay). The research also found that any lowering of the hourly pay rate mostly only affected new staff, while existing employees were able to at least maintain their wage levels.[6] So although no full rigidity is discernible with respect to wage cuts, in most of the countries concerned the necessary corrections to cost competitiveness tend to be implemented by way of wage freezes.

However, since the bulk of the public sector pay cuts have now come to an end, in future hourly wage patterns in the broader economies of these countries are likely to move more in step with developments in the private sector once again. The majority of the periphery countries are now on a moderate recovery path and their labour markets have stabilised since mid-2013. Nevertheless, the persistent high level of unemployment prevailing in these countries means that wage momentum is likely to remain muted for the time being. Of the six aforementioned periphery countries, the European Commission's latest forecast expects Greece and Cyprus to register contractions in labour income per employee[7] in the order of 3% in the course of this year. In Portugal, it will probably decrease by less than 1%, while Italy, Spain and Ireland are expected to see further moderate increases. Looking at next year, the Commission expects labour income in Greece to stabilise at a low level and anticipates growth of between ¼% (Spain) and 1¼% (Italy) in the remaining five countries. Parallel to this, Germany and a number of other euro-area countries with a relatively buoyant economy show signs of a continued strengthening in wage growth. Assessing the euro area as a whole, the Commission's forecast predicts that labour income per employee could rise by 1½% this year and by a further 2% in 2015.

Overall, it may be concluded that most of the periphery countries have achieved cost competitiveness improvements over the past few years, with some economies taking substantial steps forward. These corrections have been instrumented first and foremost through wage freezes in the trade and industry sectors and only in a few exceptional cases by means of private sector pay cuts; hence, this group of countries was spared a deflationary wage-price spiral which could have spilled over to the rest of the euro area. And, as things stand currently, it is highly unlikely to happen. Nevertheless, given the prevailing very high level of underemployment, the current course of wage restraint evident in the crisis countries needs to be of a lasting nature so as to lower the employment threshold and to help reduce the high rate of unemployment through more employment-intensive growth.

---

5 See Banco de Espana, Analysis of composition effects on wage behaviour, Economic Bulletin, February 2014.
6 See D Dias, C Robalo Marques and F Martins (2013), Wage rigidity and employment adjustment at the firm level: evidence from survey data, Labour Economics, Vol 23, pp 40-49; as well as A Doris, D O'Neill and O Sweetman (2013), Wage Flexibility and the Great Recession: The Response of the Irish Labour Market, NUI, Maynooth, Working Paper WP N244-13.
7 As the international institutions do not publish any forecasts regarding hourly wages and salaries, it seems reasonable to use projections of labour income per employee as a substitute reference, taking into account not just pay but also employer social insurance contributions. This approach also seems justified given that experience has shown that the number of working hours provided by an individual employee on a year-to-year basis does not change much, save for phases of strong economic turnarounds.

in the euro area increased marginally. Whereas Italy and the Netherlands each saw job losses of ½%, employment grew at rates of between ½% and ¾% in Spain, Ireland and Portugal. France saw (minimal) net creation of new jobs for the first time in two years, and the positive employment trend continued in Germany. Seasonally adjusted unemployment in the euro area continued to decline slightly in the first quarter and was 360,000 lower than a year earlier. The unemployment rate, at 11.8%, was 0.2 percentage point below its cyclical peak of 2013.

Still only moderate increase in consumer prices

In the first three months of 2014, euro-area consumer prices went back up slightly, yet annual HICP inflation continued its decline, to +0.7%. Consumer prices were up by a slight 0.2% on the quarter after seasonal adjustment following a minimal decline of 0.1% in the fourth quarter of 2013. One major factor in the sign change was that prices for unprocessed food and energy did not fall any further. Another was that services prices picked up perceptibly. On the other hand, the prices of industrial goods (excluding energy) continued to rise at a subdued pace. The price data for April are also showing a flat overall tendency. Annual HICP inflation, at +0.7%, was no higher than the average of the first quarter, and given the pattern exhibited over the past few months, low HICP inflation rates may be expected to continue in the near future.

Common and country-specific factors

The low inflation rates in the euro area are attributable to common factors such as the euro's appreciation, which has made itself felt particularly in the prices of industrial goods and energy, and the favourable food price tendencies, which can be regarded as a return to normal following the sharp rises in the past few years. In addition, there are country-specific factors in connection with efforts to overcome the debt and structural crises and which put pressure on wages and prices. The significance and extent of wage adjustment in the crisis countries and its implications for price tendencies are explained in the box on pages 22 to 25.