Outlook for the German economy – macroeconomic projections for 2015 and 2016

Following a brisk start to the year, which was not due solely to favourable weather conditions, the German economy moved onto a flatter growth path in the second and third quarters of 2014 and thus did not live up to the expectations of the Bundesbank's June outlook. Nor is a major improvement on the horizon for the final quarter of 2014 and first quarter of 2015. However, there is reason to hope that the current weak phase will prove to be temporary. The German economy remains in remarkably good shape, which is not only benefiting the domestic economy but also enabling German exporters to seize opportunities on foreign markets. Such opportunities should increase again over the course of 2015 provided that the economic recovery in the euro area strengthens and world trade gathers momentum.

Under these conditions, growth of 1.4% in Germany's real gross domestic product (GDP) this year could be followed by a rise of 1.0% in 2015 and of 1.6% in 2016. After working-day adjustment, real GDP growth would come to 1.4% in 2014, 0.8% in 2015, and 1.5% in 2016. On average, these increases are slightly above the potential growth rate of just over 1% per year, which means that aggregate capacity utilisation should rise somewhat but remain at a normal level over the entire forecast horizon. Growth in potential output will be supported by immigration but dampened by new rules enabling some workers to draw a full pension at 63 and by the forthcoming introduction of a general minimum wage in Germany. Unemployment, which, under the current institutional framework, is now largely reduced to its frictional and structural core, will probably see little change over the forecast horizon. A temporary deceleration in negotiated wage rises is likely to be offset by the new general minimum wage in terms of actual earnings. General government is set to post a slight budget deficit next year given the substantial growth in expenditure.

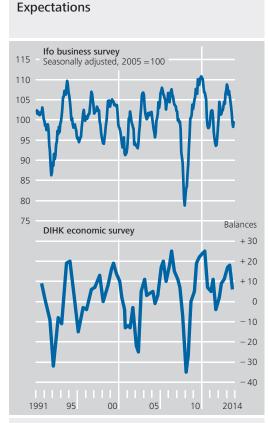
The rise of just under 3% per year in wages will increasingly be reflected in somewhat higher consumer price inflation. As measured by the Harmonised Index of Consumer Prices (HICP), inflation could rise from 0.9% this year to 1.1% in 2015 and 1.8% in 2016, based on the assumption of unchanged exchange rates and a slight rebound in crude oil prices. Excluding energy, HICP inflation would climb to 2.0% in 2016.

Since this forecast was finalised, Brent crude oil prices have fallen substantially. They are thus an average of just over 11% below the assumptions underlying the forecast. A fall of this size in crude oil prices points to the need for a downward revision of the inflation forecast and an upward revision of projected GDP growth. If the low crude oil prices were to endure, projected HICP inflation for 2015 would need to be lowered by 0.4 percentage point. The repercussions for the real economy are more difficult to quantify. However, economic growth could consequently be 0.1 to 0.2 percentage point higher in the two coming years.

Current situation

German economy on flatter growth path The German economy lost considerable momentum in the second and third guarters of 2014 and moved onto a flatter growth path. Following a brisk start to the year, which was partly fuelled by favourable weather conditions,¹ real GDP did not grow any further in the second and third quarters after seasonal and working-day adjustment and thus failed to live up to the hopes of the June outlook,² which had projected cumulated GDP growth of 0.6% over this period. On the supply side, it was mainly the production sector which underperformed expectations. On the expenditure side, investment was surprisingly weak, while private consumption increased perceptibly as expected.

Export growth strong despite stagnant industrial output The underlying trend in industrial activity has been stagnant since autumn last year and there is no sign of a pick-up so far. This lack of momentum was due, notably, to a deceleration of



Sources: Ifo business survey and DIHK economic survey. Deutsche Bundesbank

new orders received from non-euro-area countries, although orders from the euro area and Germany were also slack. This does not fit with the predictions in the June outlook. However, exports grew strongly, significantly exceeding expectations. They increased not only for consumer goods but also, above all, for intermediate goods.

The strong upturn in business investment which had begun in the final quarter of 2013 and first quarter of 2014 came to a halt thereafter. This was mainly because the very optimistic business expectations at the beginning of the year were not met and were gradually revised. Moreover, given the stagnation in new orders received, industrial capacity utilisation did not rise above normal levels, meaning that a key driver of investment was largely lacking. In addition, growing uncertainty, which was partly due to geopolitical tensions, encouraged investors to hold back and await further developments.

Contrary to expectations, the dynamics on the German housing market have slackened. This is apparent not only in the flatter price trend but also in the horizontal movement of important demand indicators, such as construction permits. This waning momentum is likely to be one of the key reasons why, following the weather-induced high construction output in the first quarter, there were perceptible with-drawal effects in the two subsequent quarters – contrary to the predictions in the June outlook. It seems that the favourable weather conditions in the first quarter did not boost annual

Upturn in business investment interrupted

Less dynamic housing market

¹ An estimated 0.3 percentage point of the 0.8% growth in the first quarter can be explained by weather conditions. The GDP growth rate thus overstates the cyclical momentum in the first quarter and understates it in the second. See Deutsche Bundesbank, The impact of weather conditions on gross domestic product in the latter part of 2013 and early part of 2014, Monthly Report, May 2014, pp 54-55.

² See Deutsche Bundesbank, Outlook for the German economy – macroeconomic projections for 2014 and 2015 and an outlook for 2016, Monthly Report, June 2014, pp 11-29.

construction output but merely encouraged frontloading.

Strong growth in private consumption By contrast, private consumption rose in the second and third quarters as expected. Marked wage growth contrasted with a subdued inflation rate, leading to a distinct rise in real disposable income. With the saving ratio almost unchanged, private consumption rose sharply, partly because of the low rate of price increases.

Significant rise in employment, unemployment unchanged

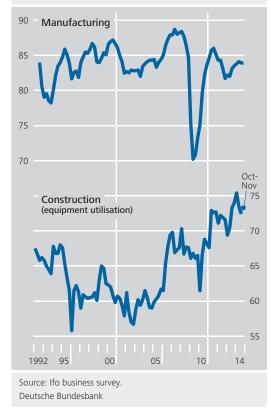
Despite weaker-than-forecast economic activity, employment rose by 170,000 persons in the second and third quarters and thus by around twice the amount assumed in the June outlook. Contrary to assumptions, however, the number of unemployed persons did not fall after seasonal adjustment. Both of these developments may be attributable to the further significant increase in immigration. At an estimated 560,000 persons, net immigration is likely to considerably outstrip expectations again this year. That said, it is important to bear in mind that asylum seekers and civil-war refugees - who are not immediately available to the labour market - account for a larger share of total immigration than in previous years.

Growth in wage costs somewhat weaker than expected In the second and third quarters, growth in wage costs fell somewhat short of expectations. This was mainly due to an unexpectedly strong negative wage drift, particularly in a number of service segments. This is related, in part, to a reduction in the number of firms covered by collective labour agreements.

Inflation also below expectations Consumer price inflation has levelled off distinctly, rather than rising somewhat as projected in June. While the June outlook foresaw HICP inflation of 1.2% in October, the Federal Statistical Office calculated an actual rate of only 0.7%. Just under half of the forecast error is attributable to the energy component, the remainder to other goods (excluding energy and food), services and housing rents. The error in the energy projection is due to the sudden drop in crude oil prices. In the other goods

Capacity utilisation

Quarterly, seasonally adjusted, as a percentage of firms' customary full capacity utilisation



category, particularly large price cuts on clothing and footwear during the mid-season sales came as a surprise. In the case of housing rents, inflation has been rising more slowly than expected. The same applies to services prices, partly as a result of influences from abroad (eg via prices for package holidays).

In hindsight, it is clear that the projections in the June outlook were overly optimistic not only for world trade but also for the euro area and parts of the domestic economy. Accordingly, various surveys and forecasts have reflected a less upbeat mood in recent months. While the risk assessment in the June projection highlighted the danger of duller external dynamics with knock-on effects on business investment, it did not anticipate the loss of momentum in the domestic housing market. Risk assessment in June outlook anticipated only some forecast errors

Major assumptions

euro-area countries.

Assumptionsbased forecast

strengthening

This projection is based on assumptions made by the Eurosystem's experts concerning the global economy, exchange rates, commodity prices and interest rates. The assumptions are based on information available up to 14 November 2014. The assumptions regarding economic activity in the euro area are derived from projections by the national central banks of the

As predicted in the June outlook, global eco-Global growth nomic growth appears to have strengthened over the course of the year so far. Contrary to expectations, however, this has not been reflected in world trade. This projection assumes that the world economy (excluding the euro area) can maintain the pace of growth achieved in the third guarter of 2014. This would mean that global growth (weighted by purchasing power parities) would rise from 31/2% this year to 4% in 2015 and 4¼% in 2016. Global economic growth would thus remain significantly below the pace seen prior to the crisis. In the industrial countries, the monetary policy stance is generally accommodative, while fiscal consolidation needs persist. In addition, potential growth has fallen. In the emerging market economies, structural bottlenecks and financial

Major assumptions of the projection

Item	2013	2014	2015	2016
Exchange rates of the euro US dollar/euro Effective ¹	1.33 101.7	1.33 102.2	1.25 99.3	1.25 99.3
Interest rates Three-month EURIBOR Yield on government bonds outstanding ²	0.2 1.6	0.2 1.2	0.1 1.0	0.1 1.2
Commodity prices Crude oil ³ Other commodities ^{4, 5}	108.8 - 5.0	101.2 - 6.3	85.6 - 4.8	88.5 3.8
German exporters' sales markets ^{5, 6}	2.0	2.6	3.4	4.8

1 Compared with the 20 most important trading partners of the euro area (EER20 group of currencies), 1999 Q1 = 100. 2 Yield on German government bonds outstanding with a residual maturity of over nine and up to ten years. 3 US dollars per barrel of Brent crude oil. **4** In US dollars. **5** Year-on-year percentage change. **6** Working-day-adjusted.

Deutsche Bundesbank

and macroeconomic imbalances are holding back economic expansion.

Unlike global output, in the second and third quarters of 2014 world trade (excluding the euro area) fell significantly short of expectations, which is connected with still-subdued industrial activity. This year world trade will probably increase by only 23/4%, whereas the June projection assumed growth of just over 41/4%. The forecast for 2015 has consequently been lowered to +4%. Distinctly stronger growth is not expected until 2016, when it is projected to be somewhat over 5%.

In the euro area, the process of economic recovery lost momentum in the second and third quarters of 2014. Excluding Germany, too, economic growth was much lower than assumed in June, and the outlook has deteriorated. The negative reports were centred on the core euro-area countries, while the periphery countries hit hardest by the crisis outperformed expectations. While contractionary factors have predominated until now in the adjustment process in these countries, expansionary forces now appear to be gaining the upper hand. By contrast, the growth process in the core euroarea countries is being hampered by continuing structural problems. However, the comparatively weak growth in world trade, the increased geopolitical tensions, and sanctions and countermeasures in connection with the conflict in Ukraine are also likely to have played a role in the slowdown in growth. A strengthening of the economic upturn in the euro area is assumed in the forecast period, supported by the accommodative monetary policy stance, improved funding conditions and, above all, the more favourable outlook for global trade and lower crude oil prices. Even so, the disappointments of the past half-year and the more subdued outlook for the coming months have led to a significant reduction of growth expectations over the forecast horizon compared with the June projection. Despite the pick-up in economic growth, aggregate capacity utilisation will still not reach a normal level in 2016, and

World trade initially short of earlier expectations

Euro-area recovery continuina after temporary lull unemployment will probably fall only slightly. Euro-area GDP (excluding Germany) is expected to grow by just over ½% in 2014. Growth of just above 1% is projected for 2015 and of 1½% for 2016.

Sales markets growing more slowly than world trade In the euro area, the stronger economic growth will go hand in hand with an intensification of foreign trade. Nonetheless, intra-euro-area trade is likely to grow more slowly than world trade. In view of the major importance of the euro area, the same applies to the expansion in German enterprises' sales markets, although it will probably strengthen markedly in the forecast period, from 2½% in 2014 to 4¾% in 2016.

Lower euro exchange rate Prompted by the deterioration in the economic outlook for the euro area and the ECB's announcement of additional expansionary monetary policy measures, the euro has depreciated since the spring, thus largely cancelling out the appreciation which began in mid-2012. In the period underlying the exchange rate assumptions, the euro stood at US\$1.25 and was thus 9% below the projection in the June outlook. The euro likewise depreciated against the renminbi, the pound sterling and the Swiss franc. In effective terms, the euro lost an average of 5% in value against the 20 most important currencies in terms of foreign trade.

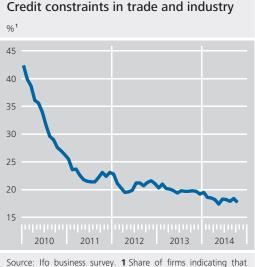
Following sharp fall, slight rebound in price of crude oil and non-oil commodities assumed After rising in June, crude oil prices moderated distinctly in the months that followed. The prospect of abundant supply, which appears less affected by the geopolitical tensions than previously feared, coincided with slower growth in global demand. The futures prices from which the assumptions for crude oil prices are derived point to a slight increase from the beginning of 2015, however. Non-oil commodity prices have also fallen since the June forecast, meaning that – much like crude oil prices – they will probably decline year on year in 2015 before rising again in line with world economic growth.

In view of the weak growth momentum and the very subdued outlook for inflation, the Governing Council of the ECB agreed on additional monetary policy measures at its meetings in June and September 2014. They are intended to help anchor inflation expectations over the medium to long term and steer HICP inflation back up closer to 2%. As well as further lowering the ECB's key interest rates, the Governing Council took decisions on purchases of asset-backed securities (ABS) and covered bonds, and on targeted longer-term refinancing operations. The possible macroeconomic repercussions of the non-standard monetary policy measures enter into the projections primarily via the market expectations which form the basis for the derived technical interest rate assumptions. This applies in much the same way to the ECB's comprehensive assessment of bank balance sheets, which was completed in October. All in all, expectations regarding shortterm interest rates and yields on nine to tenyear government bonds have been lowered distinctly over the entire forecast horizon vis-àvis the June outlook. Bank interest rates in Germany are thus likewise projected to rise only marginally over the forecast horizon from their current very low level. According to a survey of firms' funding conditions published by the Association of German Chambers of Industry and Commerce (DIHK) this summer and the Ifo Credit Constraint Indicator, access to loans in Germany still appears very good. It is not expected to deteriorate significantly over the forecast horizon.

The macroeconomic projection incorporates government measures that have either already been approved by parliament or have at least been defined in sufficient detail and are likely to be implemented. With respect to the labour market in Germany, these measures include the introduction of a general statutory minimum wage and of an early retirement option at the age of 63 on a full pension for long-term contributors to the statutory pension insurance

Interest rate assumptions much lower, funding conditions still very favourable

Economic policy measures



credit access is restrictive. Deutsche Bundesbank

scheme.³ The option to retire at 63 on a full pension is expected to reduce the potential labour force by around 165,000 persons, or 0.4%, by 2016.⁴ The general minimum wage of €8.50 per hour, which will be introduced on 1 January 2015, could raise the aggregate wage bill by just over 1/2%, with the bulk of the rise occurring in 2015. Although the minimum wage will increase pay mainly for part-time casual work ("mini-jobs"), it will also affect lowskilled regular jobs subject to social security contributions. Given that wage costs will rise fairly noticeably in some cases, employment prospects for the low-skilled are likely to worsen, which could raise the structural unemployment rate in the medium term.

Expansionary fiscal policy measures in 2015 as well The fiscal policy measures included in the projection cause a deterioration in the general government fiscal balance for 2015 of just under ½% of GDP, and have a largely neutral fiscal impact in 2016. Changes to taxes and public levies will have just a slight effect overall on government revenue over the projection period. Although the contribution rate to the public long-term care insurance scheme will be raised in the coming year by an appreciable 0.3 percentage point to 2.35% (2.6% for childless insurees),⁵ the contribution rate to the statutory pension insurance scheme will be cut by 0.2 percentage point to 18.7%. In addition,

each health insurance institution will, from 2015, determine their members' incomerelated additional contributions on an individual basis. Some of the health insurers have high reserves, and it is to be expected that the average contribution rate will initially be lower than in 2014. From 2016, contribution rates are likely to be increased again. Growth in spending will be reinforced in the coming year by expanded benefits in the statutory pension insurance scheme⁶ and the public long-term care insurance scheme. There will also be additional expenditure in the areas of transport infrastructure, education and research over the entire projection period, though this will have a significantly lower fiscal impact than the increases in social security spending.

Economic outlook⁷

Economic growth in Germany is likely to strengthen again only slowly. As yet, there is no indication of a radical cyclical improvement in the fourth quarter of 2014 and first quarter of 2015. However, there is no evidence of recessionary tendencies either. In the industrial sector, the sideways movement in new orders reProbably only weak economic growth in 2014 Q4/ 2015 Q1

³ From July 2014, workers who have contributed to the statutory pension insurance system for 45 years are able to draw a full state pension from the age of 63.

⁴ For details of the impact on potential output, see the box on pp 12-14.

⁵ The increase is part of a legislative package. Two-thirds of the additional receipts will be used to finance expanded benefits, and one-third will be allocated to a special reserve.

⁶ Since the expanded benefits (pension credits for childrearing mothers, early retirement option at 63 on a full pension, higher pensions for reduced earning capacity) only became effective from mid-2014, there will be a significant year-on-year rise in expenditure in 2015, too.

⁷ This projection for Germany was completed on 20 November 2014. It was incorporated into the projection for the euro area published by the ECB on 4 December 2014. This is the first projection compiled on the basis of ESA 2010. For more information on the methodological changes in the national accounts and their implications, see Deutsche Bundesbank, Impact on GDP of the 2014 major revision of national accounts, Monthly Report, August 2014, pp 58-59, and 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 the literature cited there.

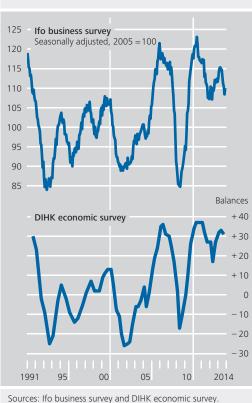
ceived and capacity utilisation coupled with neutral production expectations suggest a largely unchanged level of output. The picture for the construction industry is similar. In the services sector, however, the signs continue to point to expansion. In macroeconomic terms, this means that, given normal weather conditions, GDP growth rates of 0.1% and 0.2% can probably be expected in the two quarters. For 2014, this would nevertheless imply an annualised growth rate of just over 1.4% due to the strong economic performance in the final quarter of 2013 and the first guarter of 2014. The weak pace of growth over the rest of the year, however, would generate only a small statistical carry-over.

Prerequisites for stronger growth

Whether the German economy can grow more dynamically over the course of 2015 primarily depends on the international setting. If the economic recovery in the euro area picks up as expected and world trade gains renewed momentum, additional expansion will be possible. Since German enterprises are predominantly well positioned, with low debt and balanced price-cost ratios, and are present in all key markets with an attractive product offering, they should be able to take advantage of the opportunities that may arise. Given the extremely favourable funding conditions, this is likely to extend to investment as well. The domestic economy, too, is in good shape. Unemployment is low, average household debt is not excessive, and real wages are increasing distinctly. Considering the fairly favourable situation of public finances, steeper rises in public spending are to be expected. However, the unfavourable demographic outlook will weigh on the German economy in the medium term, while policy measures such as early retirement at 63 on a full pension are already constraining the labour supply.

Stronger economic growth after cyclical dip Under these conditions, growth in the German economy could pick up to 1.2% in the course of 2015 and then accelerate to 1.5% in 2016.⁸ Such a fourth-quarter rate would correspond to an annual average GDP growth rate of 1.0%

Business situation

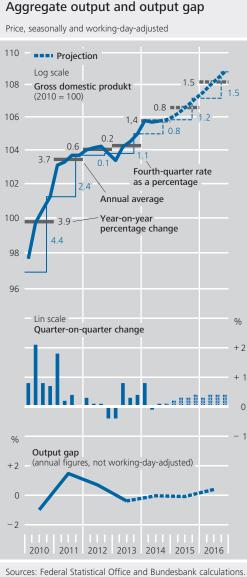


Deutsche Bundesbank

in 2015 and 1.6% in 2016. In calendar-adjusted terms, this would mean increases of 0.8% and 1.5% respectively. As a result, the German economy would be within the range of normal utilisation of aggregate capacity over the entire projection horizon, with estimated potential growth assumed to be 1.1% per year. This estimate is based on a recalculation of potential output, which is discussed in more detail on pages 12 to 14.

Growth expectations for 2014 and 2015 have been clearly revised downwards compared with the June projection. While the downward revision of 0.5 percentage point for the 2014 annual growth rate can be explained in very large part by already realised projection errors in the course of the year, the key factor for the 2015 annual growth rate (-1.0 percentage *Clear downward revision of GDP projections for 2014/2015.*

⁸ The fourth-quarter rate focuses on the economic profile over the course of a year, while the average rate incorporates the positive and negative carry-overs from the previous year.



2014 to 2016 Bundesbank projections. Deutsche Bundesbank

Technical components of the GDP growth projection

As a percentage or in percentage points

Item	2013	2014	2015	2016
Statistical carry-over at the end of the previous year ¹	- 0.2	0.7	0.1	0.5
Fourth-quarter rate ²	1.1	0.8	1.2	1.5
Average annual GDP growth rate, working-day-adjusted	0.2	1.4	0.8	1.5
Calendar effect ³	- 0.1	0.0	0.2	0.1
Average annual GDP growth rate ⁴	0.1	1.4	1.0	1.6

Sources: Federal Statistical Office; 2014 to 2016 Bundesbank projections. **1** Seasonally and working-day-adjusted index level in the fourth quarter of the previous year in relation to the working-day-adjusted quarterly average of the previous year. **2** Annual rate of change in the fourth quarter, seasonally and working-day-adjusted. **3** As a percentage of GDP. **4** Discrepancies in the totals are due to rounding. Deutsche Bundesbank point) is a much more cautious assessment of the macroeconomic outlook. The projection errors and the reduced expectations should also be seen in connection with the downward revisions of official GDP growth figures in 2012 and 2013 by 0.3 percentage point in each case. Furthermore, the external setting is less favourable, which is reflected in significant cutbacks in the projection to the previously assumed sales market growth. Finally, the domestic housing market dynamics were overestimated, which likewise suggests a flatter rate of expansion.

A key prerequisite for the GDP path described above is that export growth accelerates. For the moment, however, survey results from Ifo and DIHK are pointing to a deceleration. While the EU's sanctions against Russia and the Russian government's countermeasures play a role in this, it is likely that disappointment at the muted cyclical momentum in the euro area is a more significant factor. Moreover, geopolitical crises are holding back investment, with direct consequences for German enterprises specialising in the manufacture of capital goods. The assumed pick-up in world trade and the strengthening economic recovery in the euro area should mean that exports expand more strongly, however. In view of what will probably turn out to be a weak fourth quarter of 2014 and first quarter of 2015, export growth (as defined in the national accounts) may decrease from 33/4% in the current year to 3% in the coming year, before rising markedly to 41⁄2% in 2016.

Given the subdued short-term outlook for industrial activity, business investment is likely to pick up significantly in 2015 only after a timelag. Barring any further disruptions that could impede the propensity to invest, the brightening sales outlook and associated increase in capacity utilisation should generate more investment in machinery, equipment and commercial properties. Funding conditions are still very advantageous and support a normalisation of investment activity. However, it is improbable that the low interest rates alone will Exports set to pick up in the course of 2015

Recovery in business investment set to resume following lull trigger a strong expansion of production capacity in Germany. Obstacles to such a scenario are firms' heightened risk awareness following repeated disappointments in recent years and the contraction of the labour supply expected in the medium term as well as the already perceptible shortage in skilled labour.

Housing construction less dynamic but still pointing upwards

The basic conditions for expanded investment in housing construction are essentially still good. The higher demand for housing fuelled by positive employment and wage prospects will potentially be reinforced by the exceptionally favourable funding conditions and the strong influx of immigrants. However, the recent loss of momentum in the housing market indicates that the stimulus provided by the low interest rates seems to be subsiding. Added to this is the fact that the structure of immigration has changed, which makes it more difficult to gauge the impetus it provides to housing construction. In addition, the revised national accounts show a slightly larger construction volume for the recent past, meaning that the adjustment of the housing stock may well be more advanced than was thought in the spring. At any rate, the rise in building permits, which was still very steep a year ago, has clearly flattened out. Nevertheless, the current correction phase should soon be completed and construction activity should return to a growth path.

Accelerated government investment Government investment is likely to rise significantly in the current year, and the increase may accelerate in 2015. A higher level of public investment is expected in 2016, too. For example, there are plans for catch-up and top-up investment, particularly in transport infrastructure but also, for example, in childcare facilities.⁹

Key figures of the macroeconomic projection

Year-on-year percentage change

real-on-year percentage change				
Item	2013	2014	2015	2016
GDP (real) GDP	0.1	1.4	1.0	1.6
(real, working-day-adjusted)	0.2	1.4	0.8	1.5
Components of real GDP				
Private consumption	0.8	0.9	1.3	1.3
Memo item Saving ratio	9.1	9.2	9.2	9.2
Government consumption	0.7	1.1	1.5	1.4
Gross fixed capital				
formation	- 0.7	3.4	2.5	3.6
Business investment ¹ Private investment in	- 1.3	3.7	2.2	3.8
residential construction	0.6	3.1	2.4	2.8
Exports	1.6	3.7	3.0	4.6
Imports	3.1	3.5	4.4	5.7
Memo item Current				
account balance ²	6.7	7.4	7.3	7.1
Contributions to GDP growth ³				
Domestic final demand	0.5	1.4	1.5	1.7
Changes in inventories	0.2	- 0.2	- 0.1	0.0
Exports	0.7	1.7	1.4	2.1
Imports	- 1.3	- 1.4	- 1.7	- 2.3
Labour market				
Total number of hours				
worked ⁴	- 0.3	1.5	0.3	0.2
Persons employed ⁴	0.6	0.8	0.3	0.2
Unemployed persons ⁵	3.0	2.9	2.9	2.9
Unemployment rate ⁶	6.9	6.7	6.7	6.7
Wages and wage costs				
Negotiated pay rates ⁷	2.4	3.1	2.4	2.9
Gross wages and salaries				
per employee	2.1	2.7	2.7	3.0
Compensation per				
employee	1.9	2.6	2.8	3.0
Real GDP per person				
employed	- 0.5	0.6	0.7	1.3
Unit labour costs ⁸	2.4	2.0	2.1	1.7
Memo item GDP deflator	2.1	1.9	1.8	2.0
Consumer prices ⁹	1.6	0.9	1.1	1.8
Excluding energy	1.6	1.2	1.6	2.0
Energy component	1.8	- 1.8	- 3.0	0.5
55 1				

Sources: Federal Statistical Office; Federal Employment Agency; 2014 to 2016 Bundesbank projections. **1** Private non-residential fixed capital formation. **2** As a percentage of nominal GDP. **3** In arithmetical terms, in percentage points. Discrepancies in the totals are due to rounding. **4** Domestic concept. **5** In millions of persons (Federal Employment Agency definition). **6** As a percentage of the civilian labour force. **7** Monthly basis (pursuant to the Bundesbank's negotiated wage index). **8** Ratio of domestic compensation per employee to real GDP per person employed. **9** Harmonised Index of Consumer Prices (HICP). Deutsche Bundesbank

⁹ Pursuant to ESA 2010, spending on research and development as well as the procurement of military weapon systems are now also classified as investment. While the former is likely to increase relatively continuously, the latter may fluctuate considerably from quarter to quarter and from year to year. This is because such expenditure is recognised at the date of delivery, which means that there may be major swings in individual quarters with substantial deliveries.



Source of the unadjusted figures: Federal Statistical Office. Deutsche Bundesbank

Gross fixed capital formation to make distinct contribution to economic growth

Following growth of almost 3½% this year, gross fixed capital formation is likely to climb by a total of 2½% in the coming year and by just over 3½% in 2016. Fixed capital formation should thus make a renewed distinct contribution to economic growth.

Private consumption reliable mainstay of domestic demand Private consumption will likely continue to prove a reliable mainstay of domestic demand. At any rate, consumer sentiment has so far shown itself to be resilient to the growing gloominess in the corporate sector. Although, according to the GfK surveys, consumers have also revised their economic expectations downwards, they do not see their income prospects being adversely affected. This is due to the stable labour market situation. In line with this, the propensity to purchase has declined only a little, remaining at a high level. According to the present projection, households' real disposable income is likely to grow by 11/4% in the coming year, following an increase of 1% this year. It is benefiting not only from a higher pay trend due to the introduction of the statutory minimum wage and from ongoing employment growth but also from the subdued consumer price inflation. Disposable income is being additionally supported by changes in government levies and transfers, such as notably the expansion of pension benefits. In 2016, households' real income should rise on a similar scale on the back of stronger wage growth and the continuing favourable labour market trend, even without fiscal support and despite rising inflation. Given a virtually unchanged saving ratio, growth rates in real private consumption will thus amount to 11/4% in 2015 and 2016, after an increase of 1% this year.

Government consumption is likely to increase clearly over the projection horizon, with all key sub-segments – social transfers in kind, personnel expenditure and intermediate consumption – playing a role.

Clear growth in government consumption

Stronaer arowth

in imports

Continued reliance on

external sector.

robust domestic economv

Growth in imports is expected to increase distinctly in the next two years, initially driven by the growth in private consumption and subsequently by the pick-up in investment on the back of reviving exports. It is assumed that the import content of key expenditure components will tend to increase further. This is an effect of the growing international division of labour. Overall, imports may rise by 41/2% in 2015 and by 53/4% in 2016 (after 31/2% in 2014). Thanks to their improving competitive position, European manufacturers are likely to reap greater benefits from this than firms from outside Europe.

All in all, the projection depicts an economic development that is still heavily dependent on external economic stimuli, but which is finding significant support from robust domestic demand. The traditional growth decomposition ascribes the cyclical stimulus in the projection period solely to domestic final demand (in arithmetical terms, its expected contribution to growth exceeds economic growth in 2015 and 2016). If the negative growth contribution of imports is allocated to the various expenditure components in line with the respective import shares, the arithmetical contribution to growth made by domestic demand decreases to approximately two-thirds.¹⁰ After factoring in the

¹⁰ See H C Kranendonk and J P Verbruggen (2008), Decomposition of GDP growth in some European countries and the United States, De Economist 156(3), pp 295-306.

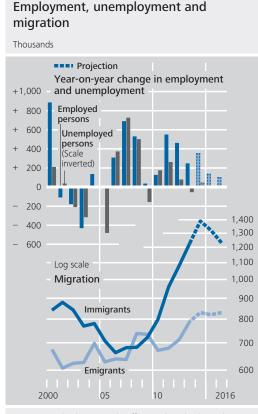
economic causal relationships beyond the statistical decomposition, the influence of external demand explains both the temporary deceleration and the subsequent acceleration of GDP growth.

Current account surplus still high

Germany's trade surplus may rise to 6½% of GDP this year, primarily because of sharply falling import prices. In the two subsequent years, it should then ease to 6% owing to accelerated import growth on the back of improved investment. The increase in the terms of trade is likely to diminish markedly, but will prevent a deeper decline in the trade surplus. Since further increasing inflows are expected to primary income given the tendency towards growing net external assets, the underlying macroeconomic scenario implies little likelihood that the current account surplus will fall significantly below 7% of GDP.

Labour market

Employment still rising clearly at first, unemployment stagnating In spite of the unexpectedly weak economic growth in the second and third guarters of 2014 and the gloomier outlook, the leading indicators are pointing to a continuation of the positive overall development in the labour market. Although, according to the DIHK and Ifo, firms have reduced their recruitment plans as against spring 2014, they wish to further expand their workforce on balance. By contrast, unemployment is trending sideways according to the Institute for Employment Research (IAB) labour market barometer. In this setting, the fairly steep rise in the Federal Employment Agency's job index is signalling increasing difficulties in filling vacant positions. This is presumably attributable to a shortage of skilled labour; according to the DIHK survey carried out in autumn 2014, two-fifths of firms view this as a risk to their business development. The mismatch between firms' specific employment needs and the labour supply profile is likely to be one reason why unemployment has not decreased further for a long time now and why the robust employment growth, largely fed by



Sources: Federal Statistical Office and Federal Employment Agency. 2014 to 2016 Bundesbank projections. Deutsche Bundesbank

immigration, has been accompanied by a slowdown in productivity growth, at least temporarily.¹¹

Employment growth is likely to be more moderate in the medium term. Unemployment in Germany has already largely been reduced to a frictional and - under the current institutional framework - a structural core. Moreover no further major increases are to be expected in the labour market participation rate given the level already achieved and the recently implemented policy measures, such as the option of retiring at 63 on a full pension. Hence significant net immigration will be required to achieve even moderate growth in employment. According to updated estimates, the net influx of immigrants is likely to rise much more significantly over the next two years than was previously assumed, with an immigration surplus of 500,000 and 400,000 persons, respectively.

Slower employment growth in the medium term

¹¹ See also the box on pp 12-14.

Revised estimate of the German economy's potential output

The German economy's potential output is currently increasing by just over 1% per year. This means that the medium-term growth outlook (adjusted for cyclical factors) is now assessed less favourably than in previous projections. The downward revision is due to the major revision of the national accounts data in the summer of 2014, which now record considerably lower productivity growth for the last few years than the initial data. This and the effect of the new economic policy measure allowing long-term contributors to the statutory pension insurance scheme to retire prematurely at the age of 63 on a full pension - which entered into force this year and will tend to worsen the German economy's supply conditions - imply a perceptible downward revision of annual potential growth of 1/4 percentage point compared with the 2013 estimate.1

Over the forecast horizon, the path of potential output is not steeper than on average since the middle of the last decade, despite the currently high immigration figures. The net immigration recorded since the beginning of this decade is actually more than offsetting the demographically induced decline in the working-age population. However, the ageing of the population is becoming increasingly relevant for the potential labour force as an ever greater proportion of the population is entering age cohorts that are characterised by a below-average labour force participation rate, despite perceptible increases in recent years.² The foreseeable drain on the labour supply resulting from the option to retire prematurely at 63 on a full pension, and the increased influx of refugees and asylum seekers are additional reasons why labour force participation makes no positive contribution to potential growth over the projection horizon, in contrast to the situation that prevailed for many years in the past.

Structural unemployment has fallen substantially due to far-reaching labour market and social reforms undertaken during the past decade.³ The impact of these reforms on potential output has largely tailed off, however.⁴ The statutory general minimum wage is an encroachment on longstanding pay negotiation structures, the longer-term effects of which are determined by a range of factors that are difficult to estimate (eq pass-through on prices, interaction with regulations on marginal employment, the role of the minimum wage commission). The pay increases triggered by the minimum wage, which are likely to be substantial for some low-skilled jobs, and will presumably also place upward pressure on wage groups above the minimum wage level via the incentive effect, nevertheless harbour employment risks. Calculating the medium-term growth trend on a cautious basis, a rise in the structural unemployment rate could be assumed, with an associated

¹ The June 2014 projection already highlighted the risks that the new economic policy measures pose for the expected medium-term growth trend; see Deutsche Bundesbank, Outlook for the German economy – macroeconomic projections for 2014 and 2015 and an outlook for 2016, particularly p 17. In June, the possible impact of the policy measures on potential output was estimated for the general minimum wage during the ongoing legislative process and for the full pension at 63 without any data on the expected take-up rate.

² See T A Knetsch, K Sonderhof and W Kempe (2014), Potential labour force in full-time equivalents: measurement, projection and applications, Deutsche Bundesbank Discussion Paper No 26/2013.

³ See Deutsche Bundesbank, The macroeconomic impact of labour market reforms in Germany, Monthly Report, January 2014, pp 34-36.

⁴ Changes in structural unemployment are reflected with inverted signs in the changes in the trend employment rate, ie in the ratio of employed persons to the potential labour force.

Growth in potential output

Year-on-year percentage change/growth contribution in percentage points

	2008 to 2010	2011 to 2013	2014 to 2016	2017 to 2019
Potential output	1.1	1.1	1.1	1.0
Total factor productivity	0.4	0.3	0.6	0.6
Capital	0.5	0.4	0.4	0.5
Labour	0.2	0.4	0.1	- 0.1
Working time	0.0	- 0.1	- 0.1	0.0
Employment rate	0.1	0.1	0.0	- 0.1
Labour force participation	0.3	0.2	0.0	0.0
Working-age population	- 0.2	0.2	0.2	0.0
of which Net immigration	0.0	0.4	0.5	0.3
Deutsche Bundesbank				

dampening of potential growth during the transitional period. However, during the period up to 2016, the impact of the minimum wage on potential output should be negligible in quantitative terms.

By contrast, the full pension at 63 will already have a considerable impact in 2014 and 2015. According to current estimates, the two policy measures will entail a loss in the level of potential output of just over 1/2% up until 2016. This takes into consideration the fact that the shortage of experienced workers and increases in labour costs can have repercussions for investment plans and decisions on production locations. Although the estimation is generally subject to considerable uncertainty, the size of the loss appears plausible, not least because it focuses almost exclusively on the impact of the full pension at 63. Factors determining the impact of this measure on potential growth are comparatively robust (eg the size of age cohorts and the number of potential beneficiaries), and initial reports indicate a very high take-up rate. From today's perspective, the level loss in potential output could almost double by 2020. This is due, on the one hand, to growing age cohorts entitled to early retirement. On the other hand, the dampening effect of the

minimum wage is also likely to be exerting its full impact by then.⁵

Trend growth in total factor productivity (TFP) was recently no higher than during the period in which many low-skilled workers (re)entered the labour market. Immigrants can often only fully unfold their capabilities with a time delay owing to a settling-in phase, initial employment below their qualification level and language barriers. This implies a corresponding catch-up process in future years, which should contribute to stronger TFP growth in the medium term.

Finally, the revised estimate of potential output took into account the fact that research and development expenditures were reclassified as fixed capital formation in this year's major revision of the national accounts.⁶ A large part of the level shift in the aggregate capital stock can be attributed to the expanded reporting of intangible fixed

⁵ With regard to future adjustments to the minimum wage, it is assumed here that the recommendations of the minimum wage commission will – in line with statutory requirements – be based on past negotiated pay increases.

⁶ 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.

assets. For calculating potential output, however, the trend of capital services used in the production process is relevant,⁷ and the conceptual change has had no significant impact on this. Capital services expand moderately during the projection horizon. Given the demographically induced unfavourable outlook for the potential labour force, this indicates that the complementarity between the two primary factors of production has a significant influence. In any case, there are no signs of a marked rise in fixed capital formation in the longer run, which could be due, for instance, to enterprises stepping up capital deepening in light of increasing labour shortages and the resulting shifts in relative factor prices.

The estimate of potential output presented above is in line with the results of the German Council of Economic Experts and the Joint Economic Forecast with regard to

Nevertheless, given the higher share of civilwar refugees and asylum seekers, immigration is unlikely, at least in the short term, to swell the labour market to the same extent as in previous years.¹²

Impact of the general minimum wage on employment confined to certain segments The wage increases triggered by the introduction of a general statutory minimum wage will probably place a burden on the demand for labour in low-paid jobs and reduce employment opportunities for low-skilled workers. Those employed in part-time casual work ("minijobs") are likely to be affected most. Many casual workers will reduce the average number of hours they work in order to stay below the monthly income threshold of €450 that qualifies for preferential treatment in terms of social security contributions. Thus, despite a potentially sharp fall in the total hours worked in this sector, the number of persons working in lowincome, part-time jobs will probably not fall by much. There could be a partial substitution of casual workers by workers subject to social segrowth in aggregate potential output for the period between 2014 and 2016. Also in line with the downward revision presented here, the economic research institutions likewise state that they have lowered their estimates compared with previous calculations. The German Federal Government and the European Commission currently estimate potential growth over the forecast horizon at just over 11/4% per year.

7 In the estimation of potential output, the services that are generated by the capital used in the production process in a given year are measured by weighting the available capital stocks, broken down by asset type, according to their user costs. See Deutsche Bundesbank, The changeover in capital measurement for potential output estimations, Monthly Report, April 2012, pp 16-18, and T A Knetsch (2013), A user cost approach to capital measurement in aggregate production functions, Deutsche Bundesbank Discussion Paper No 01/2012.

curity contributions. Another possibility, however, is a shift towards other atypical forms of employment or a switch from regular activities to the shadow economy.

The level of unemployment is likely to change little over the forecast horizon. The number of unemployed persons registered in the statutory unemployment insurance system has moved closer to its frictional lower bound.¹³ Furthermore, the reduction in structural unemploy-

Unemployment virtually unchanged

¹² The number of initial applications for political asylum has risen faster than overall (net) immigration in recent years. Whereas asylum seekers accounted for just under one-fifth of net immigrants in 2012, this ratio has probably risen to almost one-third in the meantime. This share is expected to rise again slightly in the coming years.

¹³ Weber (Das Ziel der Vollbeschäftigung in Deutschland: Fern, aber erreichbar, IAB Kurzbericht 15/2014) estimates the minimum frictional unemployment rate at just under 2½%. This matches the share of unemployed persons registered in the statutory unemployment insurance scheme. While not all insures in the statutory unemployment insurance scheme have been out of work for just a short period of time, and not all welfare recipients capable of working are long-term unemployed, the respective exceptions probably cancel each other out.

ment brought about by labour market reforms over the past decade has probably largely petered out. The latest labour-market policy measures are more likely to hinder a further decline in unemployment. The unemployment rate as defined by the Federal Employment Agency could consequently persist at around 6.7%, while the unemployment rate as calculated according to international conventions could rise slightly from 5.1% in 2014 to 5.2% in both 2015 and 2016 owing to the introduction of the minimum wage.¹⁴

Labour costs and prices

2014 pay round settlements increasingly marked by cautiousness The projected increase in negotiated wages takes account of all the collective agreements concluded in the past years and extrapolates them at the end of their contractual term in the light of the macroeconomic framework, current wage demands and sector-specific features. In the 2014 pay round, there were initially settlements with steep wage increases. As the pay round progressed, the settlements were increasingly marked by cautiousness. This was reflected, especially in the second half of 2014, in longer contractual periods, zero months and lump-sum payments as well as comparatively low negotiated rates. Based on an average achievement rate of around onehalf, the trade unions' current demands for the forthcoming wage negotiations in the metalworking industry (+51/2%) and in the chemicals industry (+4% to +5%) would suggest settlements with an annual volume of less than 3%. Trade unions are therefore continuing to refrain from demanding excessive wage increases so as not to jeopardise well-paid jobs at firms that face international competition. In several services sectors, intensified competitive conditions and structural adjustments are reducing profit margins and are consequently diminishing the prospect of high pay rises. As defined in the Bundesbank's negotiated pay rate statistics, the increase in negotiated pay rates calculated from the wage settlements concluded to date and the extrapolated past wage settlements

Negotiated pay rates, actual earnings and compensation of employees

Year-on-year percentage change, monthly basis



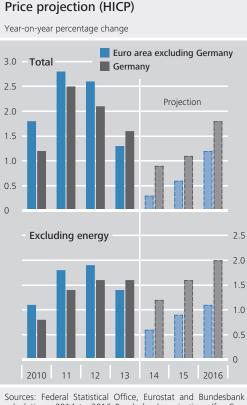
projections. **1** Pursuant to the Bundesbank's negotiated wage index. Deutsche Bundesbank

amounts to just over 3% for the current year, around 21/2% for 2015 and just under 3% for 2016. Compared with the June projection, this corresponds to a slight downward revision of the increase in negotiated wages across the entire forecast horizon.

The general statutory minimum wage, which will apply from 1 January 2015, will directly impact the Bundesbank's negotiated pay rate statistics only in exceptional cases. This is because the Bundesbank's statistics are usually based on an agreed basic pay rate, which presupposes completing vocational training and having several years of professional experience, whereas the minimum wage predominantly affects segments with lower qualification requirements. Nevertheless, the introduction of a minimum wage is likely to strengthen the rise in actual earnings, especially in the coming year, but also in 2016. The possibility of being able to retire on a full pension at 63, which will cause the labour supply to contract, could add-

Wage drift driven by minimum wage

¹⁴ The minimum wage will presumably affect "mini-jobs" in particular. However, casual part-time workers employed in "mini-jobs" may concurrently be registered as unemployed and therefore be included in the unemployment rate according to the national definition. If they lose their "mini-job", there is no change in their status according to the national definition. According to international conventions, by contrast, their status changes from "employed" to "unemployed".



calculations. 2014 to 2016 Bundesbank projections (for Germany) and calculations based on Eurosystem projections (for the euro area excluding Germany). Deutsche Bundesbank

itionally contribute to a positive wage drift. The high level of net immigration, by contrast, will have a countervailing effect. Changes to the social security contribution rates will also push up labour costs slightly in 2015 on balance. On the whole, the rise in labour costs - measured in terms of compensation per employee could go up from 2.6% to 3.0% in the forecast period.

Slight rise in The slightly stronger rise in labour costs could result in a moderate increase in domestically generated inflation - as measured by the GDP deflator - from 1.9% in 2014 to 2.0% in 2016. Given the merely gradual pick-up in economic growth, firms' profit margins are likely to be compressed initially by the minimum wagerelated cost surge before recovering again slightly under better economic conditions.

domestic

inflation

The increased upward pressure stemming from the domestic economy will make itself felt more strongly at the consumer level. Other de-

terminants are also playing a role in this context, however. Food prices will decline initially owing to an abundant supply. The price trend for food should, however, return to normal again next year. The prices of industrial goods (excluding energy) are likely to gradually feel the effects of the depreciating euro. It is not yet clear what impact the "mid-season sales", which are visible in the official statistics for the first time this year, will have in the coming years.¹⁵ The prices of services are expected to pick up again. The new general minimum wage will also be a contributing factor here. Furthermore, the price reductions for package holidays owing to adjustment-related price cuts in a number of European holiday destinations will probably not be quite as pronounced as in the current year. Rents are also expected to go up at a faster pace. There are a growing number of reports which suggest that the upward trend in rents for new lettings is levelling off. However, given that rents for existing lettings, which predominate in the HICP, follow rents for new lettings with a time-lag, further upward price pressure may be expected for the time being. The overall rate of price increase (excluding energy) could climb from 1.2% in the current year to 2.0% in 2016.

Based on the technical assumptions for crude oil prices and exchange rates, a sharp decline is projected to be followed by a slight increase in prices for refined petroleum products (especially fuel and heating oil). Gas and heating prices usually follow these price movements with a certain time-lag and a reduced amplitude. However, the relationship between gas and heating oil prices has loosened over the past few years owing to new supply sources. For the first time in 15 years, electricity will not be hit by sharp price hikes in the coming year. This is due to the lower procurement costs of power supply companies and to the somewhat lower renewable energy (EEG) levy than in the

Moderate increase in goods prices, sharper rise in services prices

Falling energy prices

¹⁵ Alongside the traditional winter and summer sales, sales at other times of the year have, for the first time, had a noticeable impact on the consumer price statistics this year.

past year. Consumer prices are therefore likely to fall slightly, despite a further increase in grid charges. A renewed rise in electricity prices is, however, to be expected in 2016. On the whole, energy prices could fall by a further 3.0% in 2015 after declining by 1.8% this year, before potentially rising again slightly by 0.5% in 2016.

Consumer prices rising slowly on the whole Under these conditions, HICP inflation for German consumers would amount to 0.9% in the current year, 1.1% in 2015 and 1.8% in 2016. Compared with the June projection, this represents a downward revision of 0.2 percentage point for 2014, 0.4 percentage point for 2015 and 0.1 percentage point for 2016. Roughly half of these downward revisions are due to the developments on the crude oil markets between early August and mid-November, and the other half to weaker economic momentum. Despite what remains a rather subdued overall tendency in Germany, these figures would be distinctly higher than the average rate of inflation in other euro-area countries.

Public finances

Public finances remain relatively favourable this year The general government budget looks set to improve slightly this year and consequently record a further surplus (2013: +0.1% of GDP). Revenue developments are robust owing, in part, to the higher dividend from the Bundesbank. On the expenditure side, the sharp increase in pension and healthcare expenditure is making itself felt. However, interest expenditure is likely to contract again significantly, especially in light of the very favourable financing conditions, and, on the whole, a slight decline in the expenditure ratio is therefore likely.

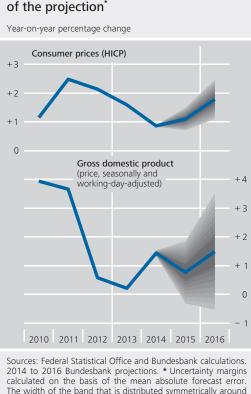
Fiscal balance set to deteriorate in 2015 and ... As things currently stand, the fiscal balance looks set to deteriorate perceptibly in the coming year and is likely to result in a (slight) deficit again. Revenue is likely to grow somewhat more slowly, mainly on account of the weaker economic momentum, whereas growth in expenditure is likely to accelerate. Growth in social security spending will probably remain high owing to the introduction of the pension benefits package in mid-2014, the expansion in long-term care benefits and the barely curbed cost pressure in the healthcare system. Furthermore, it is to be expected that central government's plans to increase expenditure on the transport infrastructure, as well as in the areas of education and research, will have a marked impact on public finances. Lower interest expenditure is likely to continue to provide a certain counterweight, however. This development could be followed by a partial reversal in 2016, leading to a balanced general government budget. In particular, the anticipated brighter economic setting will boost revenue, while no further major budgetary cost-raising measures are planned at present.

In view of the anticipated course of economic development, the impact of cyclical factors on government budgets is expected to be neutral in the current year and in 2015 and slightly positive in 2016.¹⁶ The structural balance will also be virtually balanced at the end of the forecast period, but will temporarily fall back into negative territory in 2015. This is due to a marked loosening of fiscal policy in the coming year, in other words a deterioration in the cyclically adjusted primary balance, which is partly being masked by falling interest costs. The main reason for this is the strong growth in social security expenditure with barely any change overall in contribution rates. This will result in deficits and a decline in the currently high level of reserves. Central, state and local governments could also ease their fiscal course slightly. The interest cost savings are unlikely to be used (in full) to improve the budget balance. Central government will boost its spending in those

... partly recover again in 2016

Structural deterioration in 2015 owing primarily to social security funds' dwindling reserves

¹⁶ The cyclical impact is determined using the Eurosystem's disaggregated framework. See Deutsche Bundesbank, A disaggregated framework for analysing public finances: Germany's fiscal track record between 2000 and 2005, Monthly Report, March 2006, pp 61-76. The approach used for the EU budgetary surveillance procedure and the German central government's debt brake, however, yields a distinct negative impact, so that there is a danger that the structural position is positively overestimated by a margin of around ½% of GDP.



Baseline and uncertainty margins

2014 to 2016 Bundesbank projections. * Uncertainty margins calculated on the basis of the mean absolute forecast error. The width of the band that is distributed symmetrically around the most probable value equals double the mean absolute forecast error. Deutsche Bundesbank

areas regarded as having priority. Whereas those state governments which still have a remaining need for consolidation are doing so only slowly, state and local governments with surpluses in their budgets might perceptibly step up, not least, their investment expenditure.

Debt ratio declining, but still well above 60% in 2016, too The debt ratio could fall clearly below 70% by 2016, but is still likely to remain well above the 60% ceiling (2013: 76.9%). The decline is due chiefly to nominal GDP growth in the denominator. Furthermore, the claims and thus also the liabilities of government-owned bad banks should be reduced further. The assistance loans granted to euro-area countries and the transfers to the European Stability Mechanism are again pushing up debt this year.

Risk assessment

Between the time that this projection was finalised and the cut-off date for this projection report, Brent futures have declined across the entire maturity range, falling by an average of 11%.¹⁷ This is due primarily to the fact that OPEC does not appear to be performing its price-stabilising role at present and is refraining from reducing its production guotas. A reduction in crude oil prices on this scale could potentially have considerable macroeconomic implications. It would directly reduce the cost of living for households and also companies' production costs, thereby freeing up funds for other purposes. The decline in oil prices therefore suggests the need for a downward revision of the inflation forecast and an upward revision of the GDP growth forecast. If crude oil prices remain at this subdued level for an extended period of time, the forecast of the HICP rate would, according to model calculations, have to be revised downwards by 0.4 percentage point for the coming year. The inflation rate could also be somewhat weaker this year and also in 2016, although the effect would be much less pronounced. Looking at economic growth, both 2015 and 2016 could expect to see positive effects of 0.1 to 0.2 percentage point. The benefits for the German economy could be even greater if the fall in oil prices has a correspondingly marked stimulating effect on the global economy.

As in June, the present projection assumes that world trade is picking up momentum again and that the economic recovery in the euro area is gaining in strength. The expectations have been lowered significantly compared to the June projection, however, with the result that potential downside risks no longer appear to be quite so dominant. Even so, the heightened geopolitical tensions continue to present a significant risk. Furthermore, there is still the danger of abrupt adjustment processes stemming Marked decline in crude oil prices since completion of forecast

External risks to economic growth

¹⁷ This figure was as high as 14% in the first few months of the forecast horizon, but then fell again.

from the financial markets in a number of the emerging market economies. And lastly, the nascent recovery in the euro area is still fragile and needs to be bolstered further by economic policy reform measures. Should the path of exports, which was derived from the assumptions about sales market growth, prove to be too optimistic, this would also have implications for investment in the corporate sector.

Domestic risks to economic growth Despite the significant forecast errors in the second and third quarters of this year, it is assumed that investment in residential housing construction will increase significantly over the forecast period. This presupposes, among other things, that rising immigration will trigger additional demand for housing and that the intervention by legislators in the housing market is not deterring private investors. By contrast, private consumption could pick up somewhat more strongly if, in the light of the ageing population and low real interest rates, people show a higher preference for current consumption.

Price projectionA distinction needs to be drawn between ex-
ternal and domestic risks also with respect to
the price projection. This first raises the ques-
tion of whether the only slight upward path in
crude oil prices, from an already depressed
level, derived from forward prices is consistent

with a scenario of robust global economic growth. A slightly steeper path for crude oil prices could raise the HICP rate, especially in 2016. This also holds true in the event of a further depreciation of the euro, which could result from the implementation of the announced monetary policy measures, on the one hand, and the emerging normalisation of the monetary policy stance in the United States, on the other. Thus, the HICP rate appears to be faced with upside risks from the external setting, especially for 2016. The very depressed price trend in the euro area has also left a distinct mark on consumer prices in Germany of late. This trend could continue to a greater extent than assumed in this forecast and would constitute a downward risk. The degree to which price inflation is being driven domestically is dictated primarily by the extent of shortages in the labour market and the related wage dynamics. The influx of immigrants has so far been easing the supply shortages on the German labour market, and both the increase in wages as well as domestically generated inflation appear to be somewhat weaker than previously anticipated. This trend could continue for quite some time to come. The new general statutory minimum wage could, however, also make a greater contribution to price inflation than assumed in this forecast.

Deutsche Bundesbank Monthly Report December 2014 20