

## Outlook for the German economy – macroeconomic projections for 2011 and 2012

The economic recovery of the German economy took a major step forward in 2010. With growth at an estimated 3.6%, it has been possible to recover a substantial part of the crisis-induced decline in output from 2009, when real gross domestic product (GDP) shrank by 4.7%. Assuming a largely disruption-free expansion of the global economy, it may be expected that the upturn in the German economy will continue in the next two years at rates of 2.0% and 1.5% respectively. The pre-crisis level of GDP will thus be matched again towards the end of 2011, and overall production capacity will have returned to a normal level of utilisation.

The most important mainstay of Germany's economic recovery is buoyant demand for the products of domestic industry on the world markets. It is especially helpful that exporters have been focusing more on the South and East Asian emerging market economies recently and are now benefiting to a major extent from the very dynamic upswing in that region. These external impulses are also having a greater impact on domestic activity; corporate investment is likely to increase sharply, since expansion is increasingly becoming a motive for investment alongside replacement. Private consumption is receiving a boost from the positive development in the labour market – the unemployment figure could fall below three million by 2012 – and from rising rates of pay. Housing construction is benefiting from historically low interest rates. Furthermore, the domestic economy is likely to be boosted by the extremely high level of optimism apparent in both corporate and consumer surveys. All things considered, the way in which the German economy has coped with the (in terms of its direct impact) severest economic crisis of the post-war era shows that the reform efforts and measures to introduce greater flexibility over the past decade were not in vain.

The rate of consumer price increase will go up from an estimated 1.1% in the current year to possibly 1.7% in 2011, but, given the assumed quite flat path of oil prices, will not accelerate further in 2012. If energy is excluded, the rate of inflation is likely to increase steadily for cyclical reasons from 0.7% in 2010 to 1.5% in 2012.

## Initial situation

*Upward risks have materialised*

The upward risks identified in the forecast published in June 2010 of a more rapid economic recovery – higher growth in the global economy and in world trade as well as larger gains in market shares for German enterprises – have materialised more quickly and more strongly than was expected at the time. With a seasonally and calendar-adjusted increase in GDP of 2.3% on the quarter, considerable progress was made in the catching-up process in the second quarter of 2010. In the third quarter, too, overall economic growth, at 0.7%, was significantly stronger than projected in the spring. Furthermore, the Federal Statistical Office has now revised GDP growth in the first quarter of 2010 upwards to 0.6%. Based on the current data situation, GDP growth of 3.6% (calendar-adjusted 3.5%) therefore seems probable for the year as a whole, compared with a decline of 4.7% in 2009. The June projection anticipated an increase of no more than 1.9%.

*Export opportunities seized*

The very dynamic expansion of the global economy and of world trade was key to the surprisingly rapid recovery of the German economy. With an increase of probably 4¾%, global growth this year has further exceeded the already high expectations of the June projection. With an increase of nearly 12%, world trade is likely to almost entirely offset the sharp decline in 2009, and German exports, with an estimated increase of almost 15%, should nearly make good the crisis-induced losses. The rapid recovery of domestic exports was not hindered either by

the fact that German enterprises' traditional sales markets, with growth at 9½%, were clearly lagging behind growth in world trade. First, the German economy benefited from the fact that high-quality capital goods and consumer durables were again in greater demand.

Above all, however, German enterprises successfully stepped up their export efforts in the South and East Asian emerging markets (including China and India). In value terms, exports of goods to these countries in the first three quarters of 2010 were almost 45% up on their comparable pre-crisis level (the first three quarters of 2007), compared with a decline of more than 5% in overall exports to other regions of the world. In trade with China, exports were up almost 80%, in fact. In the first three quarters of the current year, 10½% of German exports were to the South and East Asian emerging market economies, compared with only 7% in 2007. Motor vehicles and machinery were in particular demand, as were computers, electronic and optical products, chemical products and electrical equipment.

In the wake of the export boom, there was an extremely dynamic increase in enterprises' spending on new machinery and equipment, even though such expenditure was still a long way from matching its pre-crisis level. Similarly, there was a perceptible rise in private consumer spending despite the accelerated purchases of motor vehicles in 2009. A domestic component of growth was thus added to the external component. Both together were reflected in a sharp increase in imports.

*Domestic activity benefiting from export boom*

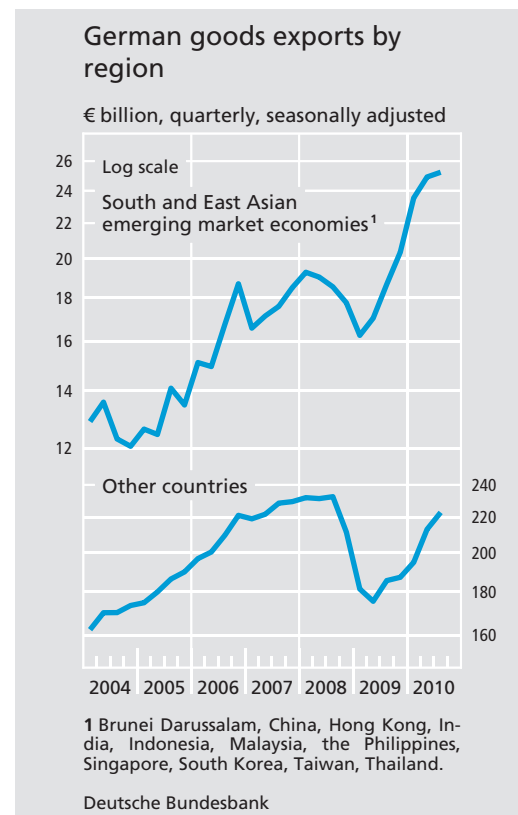
In 2010 as a whole, the percentage increase in imports is likely to be only slightly behind growth in exports.

*Further improvement in the labour market situation*

Another reason why German enterprises were so successful in exploiting the sales opportunities that opened up for them was that they largely retained their skilled and experienced staff during the crisis. Although this entailed losses of profitability in the short term, these were kept within limits by a reduction in paid working hours. Along with the sharp cyclical pick-up, there was, first, a marked increase in average working hours again. Second, enterprises also recruited more staff. A considerable part of this took place through temporary employment agencies, but core workforces were increased even in manufacturing. In 2010 as a whole, the number of persons in work is likely to have gone up by ½%, whereas a stagnation was expected in the June projection, not least owing to lower figures for the first few months of the year, which have now been revised upwards. The unemployment figure in the current year, at 3.2 million, is likely to be almost 100,000 lower than initially forecast.

*Accelerated wage rise*

It is becoming apparent that wages are now increasing distinctly more sharply after the crisis, which was characterised by moderation. In the particularly cyclically sensitive steel industry, the social partners have already agreed on a sharp rise in remuneration. Furthermore, workers in many sectors of the economy are benefiting from the fact that actual earnings are returning to normal levels along with the reduction in short-time working and other crisis-induced cutbacks in work-



ing hours. In seasonally adjusted terms, gross wages and salaries per employee in the third quarter of 2010 were 2.9% higher than their pre-crisis level in the first quarter of 2008; a much slower recovery was anticipated in the June projection.

As expected, consumer prices have continued their moderate upward movement over the past few months, although the year-on-year increase in the third quarter, at 1.2%, was a little weaker than predicted. This mainly has to do with crude oil prices in the third quarter having remained below the expectation derived from forward prices as well as the fact that the euro has become stronger against the US dollar. Even if energy is excluded, however, the rate of price increase was somewhat lower than previously assumed.

*Inflation somewhat weaker than expected*

## Underlying conditions<sup>1</sup>

*Slowdown and normalisation of global growth ...*

There are clear signs that global economic growth has slowed down following the impressive catching-up process in late 2009 and early 2010. First, this is unsurprising insofar as much of the crisis-induced decline in output in the industrial countries has now been recovered and given the easing of the temporary expansionary demand effects generated by inventory building and by catching up on deferred replacement investment, which is typical of recoveries in their early stages. Second, economic policy measures were taken in a number of emerging markets to prevent the economies overheating. Third, various negative factors persist, such as instabilities in the financial system and the precarious situation of public finances in a number of industrial countries. Nevertheless, it is assumed in the baseline scenario that global economic growth will begin to pick up again from spring 2011 and could amount to 4¼% in 2012. Over the period as a whole, the pace of expansion in the emerging market economies should be significantly higher than in the industrial countries. This may be explained, for one thing, by the greater underlying dynamics in the emerging markets due to structural catching-up processes and, for another, by the cited negative factors in some industrial countries.

*... also determines developments in sales markets*

In line with global growth, the expansion in world trade is likely to slow down perceptibly at first to around 7% in 2011, but then pick up again somewhat. Owing to the regional growth differential, especially to the detriment of the euro area, Germany's traditional

sales markets will expand in both years by no more than 6%.

The euro has appreciated perceptibly against the US dollar since the June round of projections. In the period that is relevant to the derivation of the exchange rate assumption, the euro stood at US\$1.39, compared with US\$1.26 in the June forecast. This corresponds to an appreciation of the euro by 10¼%. The US dollar has also depreciated against third currencies, however. The effective exchange rate of the euro, which is relevant to foreign trade, therefore went up by only just over 3%.

*Appreciation of the euro*

International commodity prices have now recovered their crisis-induced decline to a large extent. Following a sharp rise in 2009 and earlier in 2010, some prices are now – in US dollar terms – even higher than their level before the outbreak of the crisis. This is especially true of industrial raw materials. Despite a sharp rise in prices, other commodities, primarily crude oil, have not gone up as much. Over the forecast horizon – starting from the high level that has already been reached again – a more moderate rise in commodity prices is assumed. Owing to the carry-over effect, this nevertheless results in an annual average increase of 19% in the case of raw materials, excluding energy, for 2011. In 2012, there will then be an increase of no more than somewhat over 2%. According to

*Only moderately rising commodity prices*

<sup>1</sup> The assumptions concerning developments in global trade, exchange rates, international commodity prices and interest rates were determined by the Eurosystem's experts. They are based on the information available up to 11 November 2010. Recent exchange rate movements have therefore not been taken into consideration.

the forward prices, crude oil will go up to US\$89 in 2011 and to US\$91 in 2012, which corresponds to annual rates of change of 11½% and 2¼% respectively. The appreciation of the euro against the US dollar means that the increase in 2011 will be significantly smaller in euro terms at 6¾%. With regard to the expected level of annual average crude oil prices for 2010, there is thus no need for adjustment compared with the June projection; the projection for 2011 has been revised upwards by 6% in US dollar terms and downwards by 4¾% in euro.

*Higher short-term interest rates and lower long-term rates*

The identifiable return to normal conditions in the money market together with the improved outlook for general economic activity has led to expectations of higher interest rates in the short-term segment. While the June projection still assumed a short-term interest rate derived from market data (three-month rate for unsecured transactions on the interbank money market) of 1.1% for 2011, the figure now is 1.4%. For 2012, 1.7% is expected. By contrast, the market data for Germany give rise to downward revisions of long-term interest rates. The recent increasing uncertainty again about the soundness of public finances in a number of euro-area countries has prompted a flight into securities that are deemed to be safe. This has further depressed the yield on German Bunds. For the annual average of 2010, 2.7% is now assumed for bonds with a residual maturity of over nine years up to and including ten years, compared with 3.0% in the June projection; the figure is 2.9% for 2011 (3.4% in June) and 3.3% for 2012. Somewhat lower funding costs in the longer-term segment

### Major assumptions of the projection

Item	2009	2010	2011	2012
<b>Exchange rates of the euro</b>				
US dollar/euro	1.39	1.34	1.39	1.39
Effective <sup>1</sup>	111.7	105.1	105.9	105.9
<b>Interest rates</b>				
Three-month EURIBOR	1.2	0.8	1.4	1.7
Yield on government bonds outstanding <sup>2</sup>	3.2	2.7	2.9	3.3
<b>Commodity prices</b>				
Crude oil <sup>3</sup>	61.9	79.5	88.6	90.7
Other commodities <sup>4, 5</sup>	-23.0	40.6	19.2	2.3
German exporters' sales markets <sup>5, 6</sup>	-12.2	9.6	6.0	6.1

<sup>1</sup> Compared with the 21 most important trading partners of the euro area (EER21 group of currencies); 1999 Q1 = 100. — <sup>2</sup> Yield on German government bonds outstanding with a residual maturity of over nine and up to ten years. — <sup>3</sup> US dollars per barrel of Brent crude oil. — <sup>4</sup> In US dollars. — <sup>5</sup> Year-on-year percentage change. — <sup>6</sup> Working-day adjusted.

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than in the June projection are expected for German enterprises, although the decline is less pronounced than in the case of government bonds. According to the Bank Lending Survey, credit standards for loans to enterprises were eased somewhat in the third quarter of 2010 for the first time since the onset of the financial crisis. The Ifo Credit Constraint Indicator as well as the surveys of the German Chamber of Industry and Commerce (DIHK) also point to a certain easing. It is assumed that this development will continue over the forecast period.

In the area of public finances, the projections take into consideration all measures which have either been adopted or which have already been specified in sufficient detail and are likely to be approved. The financial impact

*Public finances in Germany*

### Technical components of the GDP growth projection

As a percentage or in percentage points

Item	2009	2010	2011	2012
Statistical carry-over at the end of the previous year <sup>1</sup>	- 2.0	0.7	1.2	0.5
Fourth-quarter rate <sup>2</sup>	- 2.0	4.1	1.4	1.9
Average annual GDP rate, working-day-adjusted	- 4.7	3.5	2.1	1.7
Calendar effect <sup>3</sup>	- 0.1	0.1	- 0.1	- 0.2
Average annual GDP growth <sup>4</sup>	- 4.7	3.6	2.0	1.5

Sources: Federal Statistical Office; 2010 to 2012 Bundesbank projections. — <sup>1</sup> 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. — <sup>2</sup> Annual rate of change in the fourth quarter, working-day-adjusted. — <sup>3</sup> As a percentage of GDP. — <sup>4</sup> Discrepancies in the totals are due to rounding.

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of tax measures included in the next two years is limited on balance. There will be significantly more receipts from social contributions in 2011, especially as a result of the increase in the general contribution rate to the statutory health insurance scheme. On the expenditure side, it is assumed that the additional spending due to the fiscal stimulus packages will gradually cease to be a factor from 2011 onwards. The financial effects of a number of further measures (such as the 2011 health reform and in education policy) will, to a large extent, offset each other. The adopted government support measures for financial institutions (in particular, the establishment of resolution agencies for HRE and WestLB) and for Greece<sup>2</sup> will, as far as it is possible to tell at present, be reflected mainly in the level of sovereign debt from 2010.<sup>3</sup>

### Cyclical outlook<sup>4</sup>

Following the extremely vigorous recovery in the first three quarters of 2010, the pace of economic activity in Germany is likely to become slower for a time. It is true that the sentiment indicators derived from the Ifo and DIHK corporate surveys show a high degree of optimism concerning the medium-term outlook for the German economy, and the recruitment of additional labour as well as buoyant investment activity are likewise evidence of upward expectations for the future. Nevertheless, the inflow of industrial orders has slowed down perceptibly recently and the pace of expansion in industrial output has also eased off markedly in the past few months, albeit with some volatility. This suggests that growth in the final quarter of 2010 and the first quarter of 2011 could be more moderate in line with the outlook for the world economy. Following this, however, stronger external impulses should make themselves felt again and also be accompanied by resurgent domestic activity.

*Underlying trends*

According to the present projection, economic growth over the four quarters of the year will therefore decelerate from 4.1% in 2010 to 1.4% in 2011, before going up to 1.9% in 2012. A considerable statistical carry-over – the difference between the year-end figure and the annual average – means

*Annual profile of economic growth*

<sup>2</sup> Aid for Ireland had not yet been agreed when this projection was completed and is therefore not included.

<sup>3</sup> See also Deutsche Bundesbank, Effects of the interventions to support financial institutions and euro-area countries on the Maastricht deficit and debt level, Monthly Report, October 2010, pp 76-77.

<sup>4</sup> The projection presented here was completed on 19 November 2010.

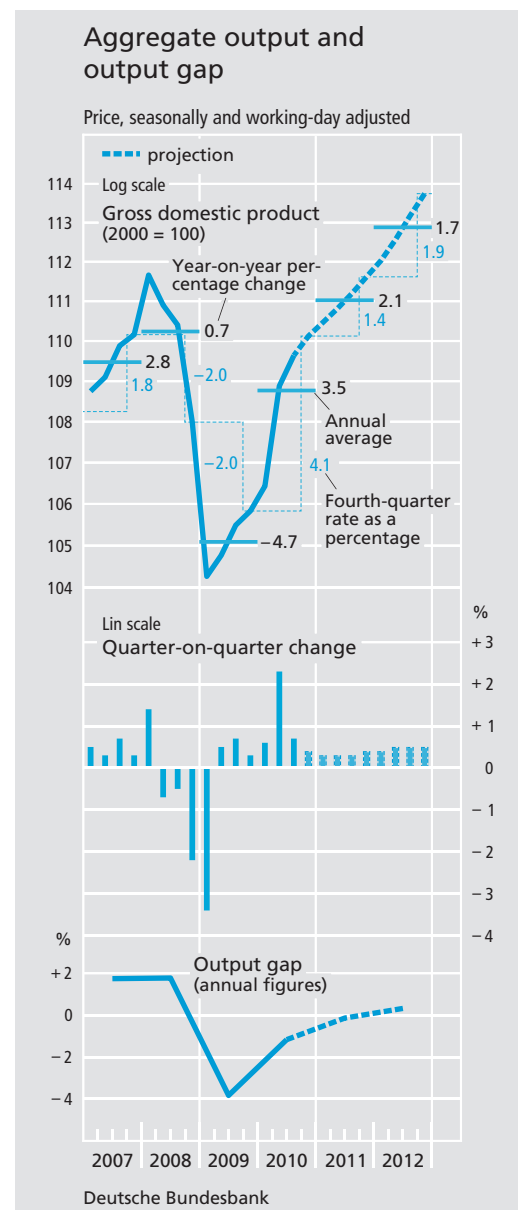
that the average annual rate of growth will be higher for 2011, at 2.0%, than in 2012, at 1.5% (calendar-adjusted 2.1% and 1.7% respectively). In comparison with the June projection, this leads to a 0.6 percentage point upward revision of economic growth in 2011. This is due almost entirely to a larger statistical carry-over and thus to the pace of economic activity in 2010, which had been considerably underestimated earlier.

*Potential growth and output gap*

With this assumed growth profile, the German economy will match the pre-crisis (2008 Q1) level of overall output towards the end of 2011. Around this time, the overall output gap – which widened considerably as a result of the crisis – is likely to close. However, potential growth of merely ¾% is assumed for 2009 and 2010, mainly because of subdued investment owing to the crisis. This is likely to increase to 1% by 2012. A much faster rate of expansion in potential output would require an additional activation of the domestic labour force potential and a greater inflow of foreign workers, which might be accompanied by greater fixed capital formation. This is, however, no more an intrinsic part of the baseline scenario than additional productivity gains that might be triggered by more training and skilling or boosts to innovation.

*Rising exports as a precondition for economic growth*

Economic growth in Germany is underpinned to a very major extent by export demand. German industry has now become integrated into the international division of labour on such a large scale that a domestic surge in demand alone, at least in the short term, cannot generate any major cyclical stimuli.



Rather, a considerable part of the additional demand would be focused on imports. Conversely, positive stimuli from the world economy have an impact far beyond the export industry. The upturn in domestic activity in 2010 is therefore likely to be due predominantly to the strong export performance. Without the massive improvement in exports, there would have been no such increase in investment or private consumption, and the

labour market situation would not have taken such a turn for the better either.

*Slackening  
export growth*

Since German exports grew much more quickly than the export markets in 2010, more subdued growth is expected for the next two years. This is based on the assumption that the export growth of 2010 cannot be repeated, particularly in the South and East Asian region. In 2011, exports are expected to rise largely in line with weaker growth in the sales markets; in 2012, it is likely to be slightly lower as capacity utilisation increases and costs rise. Exports of goods and services could swell by 7½% on an annual average for 2011, partly due to a statistical carry-over from 2010. A year later, this scenario yields a figure of +5½%.

*Sharply higher  
investment*

The unexpected speed and strength of the German economic recovery has added urgency to catching up on investment in replacements that was deferred during the crisis. Moreover, with capacity utilisation on the increase, the issue of capacity expansion is becoming more important again. Positive economic developments mean that numerous enterprises have sufficient capital or can often borrow on favourable conditions. A sustained revival in investment activity is therefore expected in Germany. Following an estimated increase of more than 9% this year, acquisitions of machinery and equipment are likely to rise by almost 6% in price-adjusted terms over the next two years. Housing construction will benefit from historically low funding costs and the lack of profitable and, at the same time, safe alternative investment options. Only public investment is

likely to drop sharply over the next two years, following considerable growth in the preceding years, as economic stimulus programmes are phased out and local governments face a strained budgetary situation. The overall volume of gross fixed capital formation could therefore increase by just 4% in 2011 and 2% in 2012 despite buoyant growth in the private sector.

Overall, inventories, which enterprises had run down appreciably during the crisis, are likely to have been restocked from the middle of last year onwards. Inventories should now, on the whole, be back to normal levels. Consequently, they are likely to make a slightly negative contribution to growth in 2011, after a pronounced positive contribution this year. In 2012, inventory changes are expected to have a neutral effect on overall economic growth.

*Inventory  
changes*

Private consumption could have risen in real terms in 2010 – despite the fact that car purchases were brought forward to 2009 to benefit from the car scrappage scheme. Extremely positive household sentiment as a result of the improved labour market situation and the prospect of sharply higher labour income indicates that the upward tendency for private consumption will continue, with growth rates of 1½% in both 2011 and 2012. Households' savings ratio, which is likely to rise slightly this year after falling sharply in 2009, should subsequently slip somewhat. That would spell the end of the trend increase in the savings ratio seen over the past decade. This forecast is based on the consideration that at the current level

*Significant  
increase in  
private  
consumption*



of the savings ratio, provisions for old age are broadly adequate, and the precautionary motive should play less of a role, not least given the favourable labour market outlook.

*Dynamic imports, net trade contribution on the decline*

Imports are likely to pick up sharply, partly because of the high import content of German exports and partly as a result of the marked revival of the domestic economy. The percentage of imported goods is fairly high, especially in investment in machinery and equipment in the corporate sector. This also applies – albeit with some qualifications – to household consumption. By contrast, the percentage of imported goods is comparatively low in public investment and private construction investment. While imports could therefore rise in line with exports in percentage terms in 2011, import growth, at 6%, is likely to slightly outpace export growth in 2012. The external contribution to GDP growth could total +0.4 percentage point next year, and be neutral thereafter. However, it should not be inferred from this mechanical analysis of the balances that 2012 will see an upturn which can be sustained without any impetus from the global economy. In an economy as specialised in the production of high-quality and durable goods as Germany's, domestic and external components are inextricably linked.

*Current account surplus just under 5% of GDP*

Germany's current account surplus is likely to have fallen slightly again this year to just under 5% – as measured against nominal gross domestic product. No major changes are expected over the forecast horizon. Although lower anticipated net new government borrowing should, seen in isolation, lift

## Key figures of the macroeconomic projection

### Year-on-year percentage change

Item	2009	2010	2011	2012
GDP (real)	- 4.7	3.6	2.0	1.5
GDP (working-day-adjusted)	- 4.7	3.5	2.1	1.7
Components of real GDP				
Private consumption	- 0.2	0.5	1.4	1.4
Government consumption	2.9	2.3	1.5	1.3
Gross fixed capital formation	- 10.1	6.6	3.8	2.1
Exports	- 14.3	14.7	7.6	5.4
Imports	- 9.4	14.1	7.6	6.0
Contributions to GDP growth 1				
Domestic final demand	- 1.5	1.9	1.8	1.5
Changes in inventories	- 0.3	0.8	- 0.2	0.0
Net exports	- 2.9	1.0	0.4	0.0
Labour market				
Total number of hours worked 2	- 2.5	2.7	1.0	0.1
Persons employed 2	0.0	0.5	0.6	0.6
Unemployed persons 3	3.4	3.2	3.1	2.9
Unemployment rate 4	8.2	7.7	7.3	6.9
Unit labour costs 5				
Compensation per employee	0.2	2.3	2.3	2.4
Real GDP per person employed	- 4.7	3.1	1.4	0.9
Consumer prices 6				
Excluding energy	1.1	0.7	1.1	1.5
Energy component	- 5.4	3.9	6.2	2.0

Sources: Federal Statistical Office; Federal Employment Agency; 2010 to 2012 Bundesbank projections. — 1 In percentage points. — 2 Domestic concept. — 3 In millions of persons (Federal Employment Agency definition). — 4 As a percentage of the civilian labour force. — 5 Ratio of domestic compensation per employee to real GDP per person employed. — 6 Harmonised Index of Consumer Prices (HICP).

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the current account surplus, buoyant private investment has the opposite effect. Furthermore, corporate earnings are not expected to grow quite as fast as during the period immediately preceding the crisis, and no further increase in households' savings ratio is anticipated.

*Changing  
labour market  
conditions*

The forecast for the labour market takes into consideration the fact that any restrictions on the free movement of labour that are still in place for a number of central and east European EU member states will be lifted from May 2011. Account has, moreover, been taken of two circumstances. First, German national service will be suspended from the summer of 2011 onwards; second, two cohorts of high school graduates will hit the labour market in some federal states, as the number of years needed to gain Germany's university-entrance diploma, or *Abitur*, has been reduced to 12 (from previously 13) in some German states. While it is assumed that, over the forecast horizon, the free movement of workers will be reflected mainly in a larger flow of cross-border commuters to Germany, the suspension of national service and the double *Abitur* cohorts will boost the domestic labour force. This will temporarily counter the underlying negative demographic trend. In addition, the labour market participation of older workers will increase further. Overall, the projection is based on the assumption that the changes in the domestic labour force and the net increase in cross-border commuters will add up to a positive number over the forecast horizon. While this will help prevent labour shortages, it could also slightly slow the reduction in unemployment in the short term.

Leading labour market indicators such as the Ifo employment barometer and the Federal Employment Agency's BA-X index for non-government-assisted jobs currently indicate that enterprises' willingness to hire is strong. The quarterly surveys conducted by the Institute for Employment Research (IAB) on job vacancies in the economy as a whole and the corporate surveys conducted by the German Chamber of Industry and Commerce (DIHK) on personnel planning paint a similar picture. Economic developments mean additional labour requirements are shifting from the social services to industry and associated sectors. There are, however, still working time reserves in these fields, and candidates must, in some instances, meet higher requirements than in some service sectors. Employment growth is therefore likely to slow quarter-on-quarter. It could, however, subsequently pick up again in line with overall economic growth. A pronounced statistical carry-over means average employment growth in 2011 will nevertheless be roughly as high as in 2012, at just over ½%. Unemployment is likely to drop largely in line with employment trends, although the slight increase in labour supply will act as a brake. On an annual average, the unemployment figure could total 3.1 million in 2011 and 2.9 million in 2012. The unemployment rate would therefore work out at 7.3% and 6.9% respectively.

*Rising employ-  
ment, lower  
unemployment*

### Labour costs and price outlook

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The increase in negotiated wages is likely to accelerate gradually as a result of the positive overall economic developments in general

*Wage growth  
accelerating*

and the labour market situation in particular. On an annual average for 2011, growth on a monthly basis could, at 1.5%, nonetheless roughly match this year's low level of 1.6%. This is because contracts that were concluded during the crisis and remain in force into 2011 often included one-off payments in 2010. In 2012, negotiated rates of pay could grow at a faster rate of +2.2%. By contrast, effective monthly earnings should rise by 2.4% in both years of the forecast horizon, after 2.2% this year. This can be attributed, first, to the normalisation of working hours, which may, depending on the nature of the preceding reduction in working hours, be associated with rising monthly compensation. Moreover, a number of enterprises in the metal-working and electrical engineering industries are, in 2011, likely to avail themselves of an option in the collective wage agreement, whereby the pay rise that was originally scheduled for April can, in the event of positive economic developments, be brought forward to February. Additionally, a number of enterprises have announced extensive bonus payments in order to allow employees to have a greater share in the unexpectedly rapid economic recovery than was envisaged in existing wage agreements.

The buoyant economic situation is likely to mean the wage drift is positive in 2012, too, if the rise in negotiated wages remains comparatively moderate – as assumed in this projection. As planned changes to employers' social contributions should be almost fully offset by a suspension of insolvency benefit contributions, enterprises' wage costs per employee could increase by 2.3% and 2.4%

respectively over the forecast horizon. Assuming productivity rises by 1.4% in 2011 and 0.9% in 2012 – the higher rate for 2011 can be explained by working-time effects, this would equate to an increase in unit labour costs of 0.9% and 1.5% respectively, after an estimated decline of 0.8% in 2010.

Profit margins should widen only slightly in future following the clear recovery in the current year, which means that the GDP deflator would increase from 0.5% in 2010 to 0.9% in 2011 and 1.6% in 2012. The appreciable 5.2% rise in unit labour costs in 2009 as a result of the crisis and the associated sharp compression of profit margins would therefore not be reversed anytime soon. However, the cost-earnings ratio is likely to have been exceptionally good just before the crisis. Moreover, during and after the crisis, the structure of the economy and consequently also of employment shifted somewhat towards the tertiary sector, and within that sector to non-capital-intensive services which means that the wage share is structurally higher.

Over the forecast horizon, consumer price inflation – as measured by the annual HICP rate – is likely initially to pick up slightly before easing off again somewhat. On an annual average, the rate of inflation could work out at 1.7% in 2011 and 1.6% in 2012. Energy prices could rise by more than 6% on an annual average in 2011 as a result, first, of the delayed response of gas prices to higher heating oil prices and, second, of a sharp electricity price hike at the beginning of the year, which is related to measures to promote

*Profit margins  
and domestic  
inflation*

*Consumer  
prices affected  
by crude oil  
prices and  
cyclical factors*



wind and solar energy. On top of that, there is a carry-over effect from price hikes in the second half of 2010. In 2012, energy price inflation is likely to moderate appreciably to 2%, when the flat crude oil price path on which the projection is based materialises. With regard to food, higher stock exchange prices for several agricultural products are expected to increase inflation, but this effect should be limited. The other components (goods excluding energy, and services), by contrast, should increasingly reflect the economic pick-up. This forecast is therefore based on a fairly steady increase in the rate of inflation excluding energy of 0.7% in 2010, 1.1% in 2011 and 1.5% in 2012.

## Public finances<sup>5</sup>

The deficit ratio is likely to swell to roughly 3½% this year, after 3% in 2009. This is well below earlier forecasts, however, mainly as a result of the unexpectedly favourable macro-economic developments. Budget relief as a result of the improved cyclical situation<sup>6</sup> and one-off effects (proceeds from the radio frequency auction, higher insolvency benefit contributions) mask a considerable structural deterioration. The lagged effect of the economic stimulus packages agreed until mid-2009, the additional measures taken following the change of government in 2009 and the greater tax deductibility of insurance contributions, in particular, are raising the general government deficit. Moreover, healthcare spending has risen considerably again – as in the previous years. Overall, the revenue ratio is likely to fall significantly given large-scale tax relief and a macroeconomic growth structure that is unfavourable for public finances. The expenditure ratio is expected to fall owing to the economic recovery and here mainly owing to the higher denominator. The cyclically-adjusted expenditure ratio, by contrast, is still rising slightly. The debt ratio will

*Deficit ratio  
3½% in 2010*

<sup>5</sup> The financial development of general government is described here as defined in the national accounts; this definition is also used largely as the basis for the fiscal reference values of the FEU Treaty (also known as the Maastricht criteria). For a more detailed analysis for general government as well as central, state and local government levels and the social security funds, see Deutsche Bundesbank, Monthly Report, November 2010.

<sup>6</sup> The cyclically-induced decline in the deficit is much lower than suggested by strong GDP growth, as key macroeconomic variables for general government revenues have shown disproportionately slow growth this year. In subsequent years, the growth structure will be largely neutral in fiscal terms. See also Deutsche Bundesbank, Germany in the financial and economic crisis – Fiscal policy, Monthly Report, October 2010, pp 72-73.

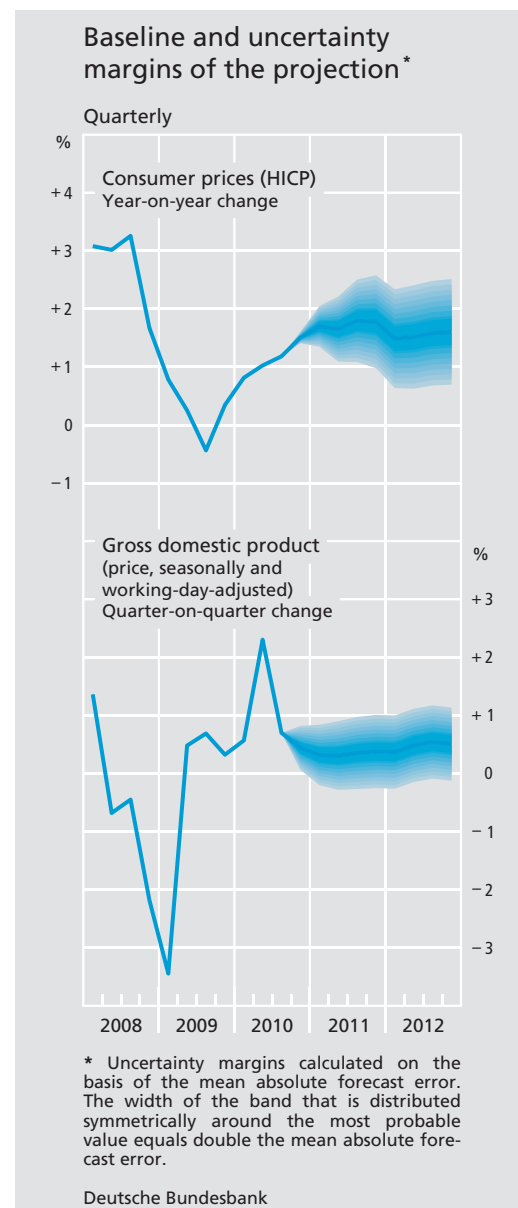
probably leap to well over 80% from the already very high level of 73.4% in 2009. This can be attributed mainly to the risk assets that the government sector assumed when resolution agencies for parts of WestLB and HRE were set up.

*Improvement in 2011 given positive economic developments and muted spending growth*

Next year, the general government deficit could come down to 2½% of GDP if current plans are implemented. Although the one-off relief mentioned above will no longer be a factor, the impact of the economic cycle should continue to be positive. Moreover, various measures to stimulate the economy will gradually be phased out, and local government, in particular, is likely to sharply curtail its investment spending. In addition, the Federal government's consolidation efforts will start to take effect. Furthermore, contribution rates to the statutory health insurance scheme and Federal Employment Agency are to be raised, while the healthcare reform will place a damper on rising healthcare spending, and labour market spending is also structurally set to decline further. Overall, the revenue ratio is unlikely to change much, while the expenditure ratio could fall appreciably given the muted spending developments currently in the pipeline and the expected ongoing economic recovery.

*Public finances to recover further in 2012 if course is held*

Public finances could continue to improve in 2012 provided policymakers stick to the austerity course they have set. The economic cycle is likely to provide further relief, albeit less than in the preceding year. The strain imposed by the economic stabilisation measures is easing further, and it looks as



though the structural improvements on the labour market could continue. In addition, pensions growth will be muted if the non-implemented pension cuts are deducted from future increases as planned. This, coupled with stringent budget management, could further noticeably lower the expenditure ratio, while the revenue ratio remains largely unchanged. Overall, deficit developments since the beginning of the

financial crisis are therefore much better than initially anticipated. The debt ratio has risen dramatically, however, and despite falling deficits, it is unlikely to decline perceptibly before 2012.

### Risk assessment

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#### *Real economic risk profile*

The baseline scenario used in the present projection assumes that the global economy will develop smoothly on the whole. In 2010, German enterprises made very good use of the sales opportunities this afforded them and achieved considerable market share gains, which more than offset the losses sustained during the recession period. It cannot be ruled out that German enterprises will manage not only to consolidate the market positions they have won, but that they will even be able to expand them. In that case, export growth in the baseline forecast would be somewhat too low, although this would be conditional on the availability of additional qualified manpower. This requirement could be satisfied by recruiting more staff from abroad than in past years. If Germany's attractiveness to immigrants increased significantly, the estimate of potential growth underlying this estimate would also have to be reconsidered.

On the other hand, the idea that the global economy and global trade will, for the most part, expand steadily over three years is fairly optimistic in view of continued uncertainty on the financial markets, not least given the fragile public finance situation in a number of industrial countries. Moreover, economic overheating in several emerging market economies could result in crises. The events of the latter part of 2008 and early 2009 impressively demonstrated how quickly and seriously confidence shocks can impair global trade, and how dependent Germany is on exports owing to its economic structure.

As regards price stability, the main risks relate to the international commodity markets. Given the fairly pronounced global growth that has been assumed and its presumed regional distribution, crude oil and other commodity prices could well rise more sharply. That would have a direct impact on energy and food prices. Although the wage increase within Germany could also be slightly higher than anticipated in this projection, this would not have a negative impact on prices until towards the end of the forecast horizon. Downside risks for prices would materialise particularly if real economic developments were to take a less favourable path than assumed in the baseline scenario.

#### *Risks to price stability*