Outlook for the German economy – macroeconomic projections for 2019 and 2020 and an outlook for 2021

The German economy is likely to continue to boom over the projection horizon. The most recent damper in the third quarter of 2018 was probably largely caused by temporary supply-side difficulties in the automotive sector and is likely to be quickly resolved. However, it is probable that aggregate capacity utilisation, which is already at a high level, will increase only slightly further in the coming years: gross domestic product (GDP) is projected to grow at a marginally faster pace than potential output, the growth rate of which is also in decline. In this context, demographic trends play a key role. On the supply side, they will restrict further growth in employment and thereby contribute to increasing shortages on the labour market. On the demand side, they will depress the need for housing as well as enterprises' propensity to invest. The fact that domestic demand will nevertheless remain brisk is due to private consumption. It will be supported not only by strong wage growth, but also, in 2019 in particular, by expansionary fiscal policy. Furthermore, it is assumed that external economic conditions will be stable. Exports, the underlying trend of which is currently subdued, should again grow more in line with the moderate expansion of sales markets over the medium term.

In such a scenario, real GDP could rise by around 1½% per year in calendar-adjusted terms. However, the relatively stable annual average growth rates mask the fact that quarterly growth rates over the course of 2019 will be, on average, considerably higher than in 2018 and then drop off again somewhat.

Measured by the Harmonised Index of Consumer Prices (HICP), inflation will initially fall from 1.9% in 2018 to 1.4% in 2019, before reaching 1.8% again in 2020 and 2021. The main reason for the swing from 2018 to 2019 is prices for energy and food. While they have risen sharply in 2018, they will only see limited growth next year. This masks the fact that, against the background of high aggregate capacity utilisation and considerable growth in unit labour costs, the prices of other goods and services are increasing at an accelerated pace. Excluding energy and food, the inflation rate is therefore likely to climb from 1.2% this year to 1.8% in 2020. In 2021, it could reach 2.0%.

Public finances will continue to benefit from very favourable framework conditions over the projection horizon. The general government surplus could amount to around 2% of GDP in 2018. In the future, it will probably diminish considerably again since fiscal policy will be eased. The debt ratio is likely to stand at nearly 60% at the end of 2018 and then continue to fall.

Compared with the June 2018 projection, it is now expected that German economic growth will be only marginally higher than potential output growth in the coming year. The inflation forecast for 2019 was revised markedly downwards, mainly due to the changed outlook for energy prices. For economic growth and, to a lesser extent, for the rate of inflation, it is downside risks that predominate as things stand today.

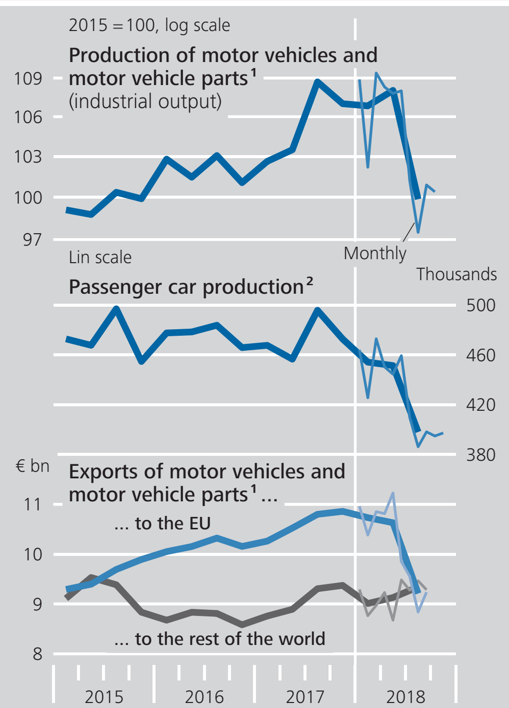
Economic outlook[1]

German economy saw only little growth in Q2 and Q3 2018, mainly due to one-off effects …

In the second and third quarters of 2018, the German economy saw only very subdued growth. Adjusted for seasonal and calendar effects, real GDP rose by a total of just 0.3% during these quarters. It thus fell well short of the expectations expressed in the June projection.[2] The main reason for this was the 0.2% drop in economic output in the third quarter, which was largely due to a significant, temporary one-off effect in the automotive sector. However, the underlying cyclical trend was also muted. There were extensive production losses in the automotive industry as a result of considerable problems relating to the introduction of a new EU-wide standard for measuring exhaust emissions.[3] The subsequent downturn in automobile exports contributed to the fact that exports remained broadly stagnant throughout the second and third quarters of 2018. Even without this one-off effect, exports saw only subdued growth. Furthermore, private consumption, which had so far been a key mainstay of the economic upswing, did not make any additional gains overall despite the favourable developments on the labour market. By contrast, a positive impact on demand came mainly from housing investment, which remained highly dynamic, and commercial investment, which continued to rise.

Automotive industry

Seasonally and calendar adjusted



1 Source of the unadjusted figures: Federal Statistical Office. **2** Source of the unadjusted figures: German Association of the Automotive Industry (VDA).

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… but fairly strong growth expected again in Q4 2018 and Q1 2019

A fairly strong rise in GDP is expected again in the fourth quarter of 2018 and the first quarter of 2019. The problems in the automotive sector should gradually be overcome, and both the production and exports of automobiles will return to normal levels. Although a meaningful recovery of the production losses in the third quarter is not assumed, this countermovement will boost GDP growth in both the final quarter of this year as well as the first quarter of next year. This countermovement masks the fact that the underlying cyclical trend is likely to remain fairly subdued in the fourth quarter of 2018 and the first quarter of 2019 as well. This is indicated by the business expectations amongst enterprises, which were only cautiously optimistic of late. The main reason for the subdued prospective underlying trend dynamics is the just moderate growth in exports – adjusted for rebound effects from the anticipated recovery in automotive exports. By contrast, housing investment is expected to once again make significant gains. Furthermore, private consumption should again see strong growth due to the exceptionally good labour market situation as well as additional stimuli arising from fiscal measures that will come into effect at the start of 2019.

1 This projection for Germany was completed on 28 November 2018. It was incorporated into the projection for the euro area published by the ECB on 13 December 2018.
2 See Deutsche Bundesbank, Outlook for the German economy – macroeconomic projections for 2018 and 2019 and an outlook for 2020, Monthly Report, June 2018, pp. 13-27.
3 Based on a simple, rough calculation, it is estimated that this could have depressed GDP growth by 0.4 percentage point in the third quarter (excluding effects on other sectors). For more information, see Deutsche Bundesbank, The German economy, Monthly Report, November 2018, pp. 44-53.

Slight slowdown in economic growth over the medium term

Over the further course of 2019, it is expected that the momentum of the German economy, and the underlying trend dynamics, will firm again. Alongside robust domestic economic activity, this will be ensured by exports, which – even after the rebound effects in the automotive sector have abated – are likely to rise roughly in line with the moderate expansion of German exporters' sales markets. Over the rest of the projection horizon, economic growth will slow down slightly. Demographic trends play a key role in this. On the supply side, the existing shortages on the labour market will become more severe, which will restrict growth potential. This will be especially pronounced in the construction sector, which is already operating at close to full capacity at present. On the demand side, demographic trends are leading to waning growth in the need for housing. Housing investment, which is currently continuing to surge, will therefore lose a distinct amount of momentum. Due to the increasingly short supply of labour, commercial investment is likely to experience only comparatively subdued growth over the entire projection horizon. The fact that domestic demand will nevertheless remain high in the coming two years is due to private consumption. Supported by lower oil prices, it should return to its old strength following the dip this year. The tight conditions on the labour market will lead to robust wage growth. Moreover, consumers will benefit from expansionary fiscal policy, particularly in 2019.

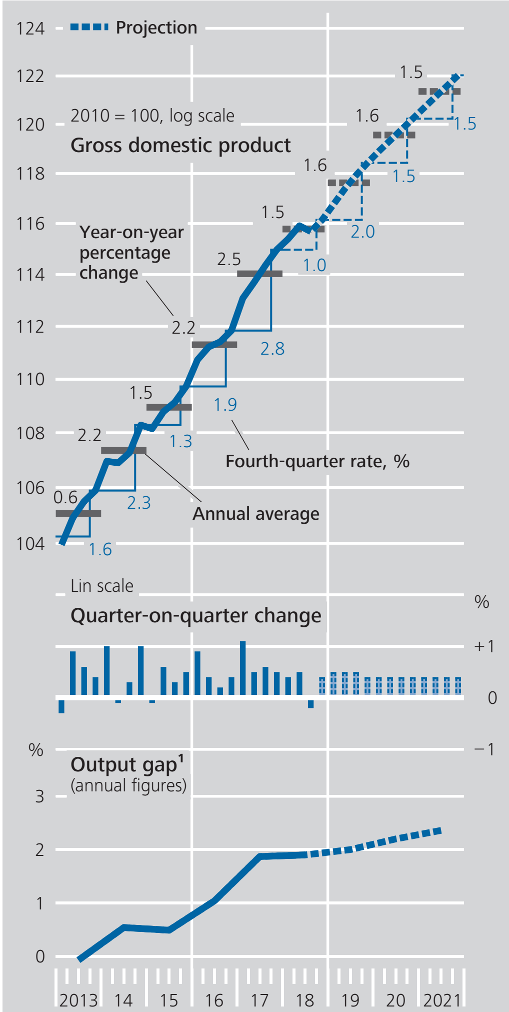
Economic growth likely to be markedly weaker in 2018 and 2019 than in June projection

Overall, this paints a picture of an ongoing, but only minimally stronger economic boom. After an increase of 1.5% this year, calendar-adjusted real GDP should rise at a somewhat higher pace in 2019 and 2020, supported by expansionary fiscal policy. In 2021, the pace of growth could fall back slightly to 1.5%.[4] However, the fairly uniform average annual growth rates

4 Unadjusted for calendar effects, the growth rate will be considerably higher in 2020 at 2.0% due to the greater number of working days compared with the previous year. In the other years, such calendar effects will have no impact.

Aggregate output and output gap

Price, seasonally and calendar adjusted



Sources: Federal Statistical Office and Bundesbank calculations. 2018 to 2021 Bundesbank projections. **1** Deviation of GDP from estimated potential output.
Deutsche Bundesbank

Technical components of the GDP growth projection

% or percentage points

Item	2018	2019	2020	2021
Statistical carry-over at the end of the previous year[1]	0.8	0.3	0.7	0.6
Fourth-quarter rate[2]	1.0	2.0	1.5	1.5
Average annual GDP growth rate, calendar adjusted	1.5	1.6	1.6	1.5
Calendar effect[3]	0.0	0.0	0.4	0.0
Average annual GDP growth rate[4]	1.5	1.6	2.0	1.5

Sources: Federal Statistical Office; 2018 to 2021 Bundesbank projections. **1** Seasonally and calendar-adjusted index level in the fourth quarter of the previous year in relation to the calendar-adjusted quarterly average of the previous year. **2** Annual rate of change in the fourth quarter, seasonally and calendar adjusted. **3** As a percentage of GDP. **4** Discrepancies in the totals are due to rounding.
Deutsche Bundesbank

Revisions since the June 2018 projection

Year-on-year percentage change

Item	2018	2019	2020
GDP (real, calendar adjusted)			
Projection from December 2018	1.5	1.6	1.6
Projection from June 2018	2.0	1.9	1.6
Difference in percentage points	− 0.5	− 0.3	0.0
Harmonised Index of Consumer Prices			
Projection from December 2018	1.9	1.4	1.8
Projection from June 2018	1.8	1.7	1.8
Difference in percentage points	0.1	− 0.3	0.0

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Manufacturing sector

Seasonally and calendar adjusted

Sources of the unadjusted figures: Federal Statistical Office and the ifo Institute. **1** Balance of positive and negative business survey responses.

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mask the varying dynamics over the course of the year. The 2018 full-year rate, which is not influenced by the large carry-over from the previous year, will come out considerably lower than the annual average growth rate due to the downturn in the third quarter. By contrast, when viewed over the entire year, the full-year growth rate for 2019 will be markedly higher (see the table on p. 17). This means that distinctly lower annual average GDP growth than in the June 2018 projection is estimated for 2018 and 2019 (see the adjacent table). The main reason for this downward revision is the unexpected dip in the third quarter of 2018, which will continue to dampen the annual average GDP growth rate in 2019 due to the smaller statistical carry-over. In both years, developments in the sales markets of German exporters are now estimated to be less favourable. The fiscal measures to promote growth, which were also factored into the projection, are unable to compensate for this.

High level of aggregate capacity utilisation set to rise slightly further

According to this projection, the German economy will grow at a somewhat faster pace than potential output in every year of the projection horizon. The potential growth rate for 2018 and 2019 is estimated at 1.5%. Subsequently, as the potential labour supply will hardly increase due to demographic trends, it is likely to decline to 1.3% in 2021. The level of aggregate capacity utilisation, which is already high at present, will therefore rise slightly further over the projection horizon.

Moderate growth in exports

Germany's exports were still experiencing a lull in the second and third quarters after having risen strongly up to the end of 2017. They thus fell well short of the expectations expressed in the June projection. Whilst exports to the United States and to the majority of Asian countries rebounded in the second and third quarters from a weak start to the year, exports to the United Kingdom, above all, declined considerably. Alongside only moderately increasing foreign demand, the temporary supply bottleneck in the automotive industry resulting from difficulties in implementing the new

Underlying conditions for macroeconomic projections

This projection is based on assumptions made by Eurosystem experts about the global economy, exchange rates, commodity prices and interest rates. The assumptions are based on information available as at 21 November 2018. The assumptions regarding economic activity in the euro area are derived from projections made by the national central banks of the euro area countries.[1] These incorporate all fiscal policy measures which have been either adopted or adequately specified and are likely to be implemented.

No change in momentum for global economy and trade

The global economy (excluding the euro area) slowed down somewhat in the second and third quarters of 2018, meaning that growth fell just short of the level assumed in the June projection. The pace of expansion is expected to pick up a bit by the end of the year and then remain steady over the projection horizon. In this context, growth in advanced economies (excluding the euro area) will probably tail off a little. First, in the United States, the effects of expansionary monetary policy measures on economic growth will dissipate. Second, given the high degree of capacity utilisation already achieved in many of these countries, a cyclical slowdown is on the cards. It is likely in some countries that monetary policymakers will respond to expectations of higher inflation rates. As for the United Kingdom's withdrawal from the EU, it is assumed for the purpose of this projection that no tariffs will be introduced before the end of 2020. The assumption for 2021 is that the transition to new trade relations will have a dampening effect on economic growth in the United Kingdom.[2]

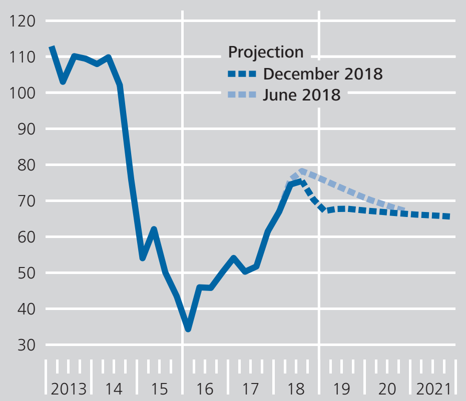
In emerging market economies (EMEs), growth is expected to accelerate again somewhat over the projection horizon after dipping over the course of this year. Here, the continued gradual economic slowdown in China will be offset by increased growth in other east Asian and commodity-exporting countries. Furthermore, economic activity in some EMEs will recover after being adversely affected by turbulence in their financial markets. All in all, the global economy (excluding the euro area and weighted by purchasing power parity) looks set to expand by 3½% per year over the next three years following growth of 3¾% this year.

Following a rise of just over 5% this year, international trade (excluding the euro area) is expected to increase in line with global economic growth between 2019 and 2021 at an unwavering rate of 3½% per year. While German exporters' sales markets expanded to a far more subdued extent than global trade in recent quarters, growth is set to rebound somewhat in the final quarter of 2018 and the first quarter of 2019, making it – over the remainder of the projection horizon, too – broadly in step with international trade developments. As a result of increased protectionist measures, expectations relating to global trade took an even harder hit compared with the June projection than those concerning global economic growth.[3]

1 The projections made by the national central banks of the euro area countries were completed on 28 November 2018.
2 For information on the implications of various scenarios for economic activity in the United Kingdom, see, for instance, Bank of England, EU withdrawal scenarios and monetary and financial stability, November 2018.
3 See Deutsche Bundesbank, The potential global economic impact of the USA-China trade dispute, Monthly Report, November 2018, pp. 11-13.

Oil price

US$ per barrel of Brent, quarterly data



Sources: Bloomberg and ECB projections.
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Major assumptions of the projection

Item	2018	2019	2020	2021
Exchange rates of the euro				
US dollar/euro	1.18	1.14	1.14	1.14
Effective[1]	117.9	117.9	117.9	117.9
Interest rates				
Three-month EURIBOR	− 0.3	− 0.3	0.0	0.3
Yield on government bonds outstanding[2]	0.4	0.5	0.7	0.9
Commodity prices				
Crude oil[3]	71.8	67.5	66.8	65.9
Other commodities[4,5]	3.0	− 1.4	4.4	4.3
German exporters' sales markets[5,6]	3.7	3.5	3.7	3.5

1 Compared with 38 currencies of major trading partners of the euro area (EER-38 group of currencies); Q1 1999 = 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** Calendar adjusted.
Deutsche Bundesbank

Technical assumptions of the projection

Uncertainty surrounding the extent of available production capacity to compensate for possible production losses in Iran and Venezuela drove up crude oil prices substantially until early October 2018. Since then, higher output by major oil producers as well as an increase in production and larger-scale stockpiling by the United States have contributed to a considerable drop in prices. The US Administration also agreed with certain countries to allow them to continue importing Iranian oil despite the entry into force of sanctions. Expectations that demand will become more subdued in future may also have played a role. The forward quotations from which these projection assumptions are derived indicate that crude oil prices will continue to fall. Based on the lower level that has now been reached, however, the annual average decline will be far less substantial – especially in 2020 – than had still been assumed in the June projection. The prices of other commodities on a US dollar basis are set to rise moderately, in line with global economic growth, over the projection horizon. However, they have fallen since the June projection was prepared, which will have a dampening effect even on next year's average rate of change.

Following its June 2018 meeting, the ECB Governing Council announced that it expects key interest rates to remain at their present levels at least through the summer of 2019 and in any case for as long as necessary. Market participants' expectations of an interest rate increase going forward were thus pushed further into the future. Ultimately, the technical interest rate assumptions for the EURIBOR and the yield on long-term German government bonds,[4] which are derived from market expectations, fall short of the expectations set out in the June projection. Starting from a very low baseline, banks' lending rates are also expected to rise only moderately over the projection horizon. The results of the economic survey conducted by the German

4 It is likely that the yields on debt securities considered safe, such as Federal securities, were also affected by safe haven flows against the backdrop of uncertainty surrounding Italian fiscal policy. See Deutsche Bundesbank, Financial markets, Monthly Reports, August 2018, pp. 38-47, and November 2018, pp. 35-43.

Chamber of Industry and Commerce (DIHK) in the autumn of 2018 show that the percentage of enterprises citing financing difficulties as a risk to their business growth has fallen to a new all-time low. Overall, highly favourable financing conditions are assumed over the projection horizon.

The stronger forward guidance concerning key interest rates in the euro area caused the euro to depreciate against the US dollar following publication of the June projection. A shift in expectations concerning future interest rate hikes by the Federal Reserve had a similar effect. Over the course of the fourth quarter, discussions about the Italian government's fiscal policy stance as well as upbeat US economic data put pressure on the single currency, causing it to depreciate further against the US dollar. The euro traded at US$1.14 in the period used for deriving the exchange rate assumptions, which was just over 3% lower than the assumptions in the June projection. Compared with 38 currencies of major trading partners of the euro area, however, there were only minor changes, as depreciation against the US dollar was offset by significant appreciation against the currencies of several EMEs.

More moderate pace of growth in the euro area

Following dynamic developments last year, economic expansion in the euro area continued at a somewhat more moderate pace in the first half of 2018. Admittedly, economic activity suffered in the third quarter due to temporary production stoppages in the German automotive industry. Economic output continued to increase in most other euro area countries, however.[5] It is assumed that the somewhat more subdued pace of growth above potential observed in the first half of the year will continue over the projection horizon. As capacity utilisation increases, sustained job creation in conjunction with significant wage rises will pave the way for solid growth in domestic demand, although labour force constraints will become more marked in some countries. Growth rates for euro area exports are expected to be in line with sales market developments.

Compared with the June projection, expected GDP growth in the euro area (excluding Germany) was, following an increase of 2.1% this year, revised downwards by around two-tenths to 1.7% for next year. As in the June projection, growth of 1.7% is expected for 2020, with the rate then potentially falling slightly to 1.5% in the following year.

Fiscal policy expansionary, particularly next year

The fiscal policy measures taken into account will have an expansionary effect over the next three years, especially in 2019. This is due in large part to the measures specified under the Federal Government's coalition agreement.[6] First and foremost, there are plans to spend more on pensions, healthcare and long-term care. In addition, central, state and local government intend to raise spending on childcare, education, transport infrastructure, domestic security and defence. Factoring in these measures, taxes and social contributions will decline only slightly in relation to GDP. For example, income tax cuts will be covered by add-

5 See also Deutsche Bundesbank, Global and European setting, Monthly Report, November 2018, pp. 10-21.
6 Most of the priority measures contained in the coalition agreement are taken into account in the projection. However, the planned partial abolition of the solidarity surcharge, in particular, had not been sufficiently fleshed out to be included (revenue shortfalls in the order of €10 billion per year are estimated).

itional revenue from progressive taxation. Furthermore, the changes to social contributions will, all in all, have a minimal impact on the government budget. The rise in the contribution rate to the public long-term care insurance scheme will broadly offset the reduction in the contribution rate to the unemployment insurance scheme (change of 0.5 percentage point respectively). On average, a slight decrease in supplementary contribution rates is assumed for the health insurance institutions next year. Members of the statutory health insurance scheme will see their contributions go down due to the return to equal financing by employer and employee. However, enterprises, the various levels of government and the statutory pension insurance scheme will pay correspondingly higher contributions.

standard for measuring exhaust emissions was a key factor behind the weak export momentum. This led to a slump in exports of motor vehicles to other EU countries in the third quarter of the year. These problems should gradually be overcome, meaning that a rebound effect is to be expected in the final quarter of 2018 and the first quarter of 2019.[5] However, excluding this normalisation effect, the underlying trend should remain relatively subdued to begin with. The effective exchange rate of the euro, which has recently stabilised at a fairly high level, could have a temporary dampening effect on export growth. New industrial orders from abroad have also shown a trend decline in the past few months. In addition, the export expectations of both the ifo Institute and the DIHK have dropped. Germany's exports and their underlying trend dynamic are expected to resume their strong growth over the remainder of the coming year. Then, as in the two years thereafter, they are likely to increase almost in line with German exporters' sales markets, which are seeing moderate growth (see the section on the international environment on p. 19 ff.). Outside the euro area, German exporters are likely to retain their market share over the projection horizon.[6] Germany's exports to the euro area, by contrast, are expected to lag behind growth in the export sales markets. Here, Germany is losing price competitiveness on account of its unit labour costs, which are rising significantly more strongly than those of other euro area countries.

Business investment continuing to increase only moderately

In spite of flagging foreign demand and turbulence in the German automotive sector, the upturn in business investment continued into the

5 See also Deutsche Bundesbank, The German economy, Monthly Report, November 2018, pp. 44-53.
6 This probably also applies to the sales markets in China, where German industry, which is strongly geared to capital goods, has so far been remarkably resilient despite the structural realignment away from investment-driven economic growth towards consumption-fuelled growth. See Deutsche Bundesbank, The realignment of the Chinese economy and its global implications, Monthly Report, July 2018, pp. 39-56.

second and third quarters of 2018. However, expansion lagged far behind the expectations expressed in the June projection. In light of the German economy's advanced position in the business cycle coupled with exceptionally favourable financing terms by historical standards, the level of commercial investment activity can only be classed as moderate.[7] A further significant increase in global aggregate demand over the projection horizon, as well as the associated pressure on already-high levels of production capacity utilisation, suggest that a further rise in business investment could be on the cards. The propensity of enterprises to invest has been comparatively low of late; this could, however, be related to the unfavourable demographic trends that would trigger a flatter potential growth path in the German economy.[8] A further subdued expansion of business investment can therefore still be anticipated.

Growth in housing investment slowing down

Strong demand for housing and sharply rising prices continue to shape the housing market. At the same time, construction prices are increasing substantially, which is consistent with the overall picture of high capacity utilisation in the construction industry. The sector is nonetheless still faring remarkably well in terms of expanding production, in spite of the tight labour market. Indeed, housing investment in the second and third quarters of 2018 was considerably more buoyant than had been assumed in the June projection. It is, however, assumed that the rate of housing investment expansion will slow later on in the projection horizon. This view is corroborated by the fact that, on the supply side, it is becoming increasingly difficult to recruit skilled labour and consequently to continue expanding capacity at the same pace as before. On the demand side, the demographically driven future decline in the number of newly established households will increasingly lessen growth in demand for housing. The fall in Germany's native-born population as well as the expected dip in immigration levels will be contributory factors here. Mortgage rates, assumed to be trending slightly upwards, are also likely to be a drag of sorts.

Business situation and expectations

2015 = 100, seasonally and calendar adjusted, log scale

Source: ifo Institute. **1** For the next six months.
Deutsche Bundesbank

The favourable labour market developments and related positive income prospects for households will not entirely offset these dampening influences on housing demand. Real housing investment will thus see increasingly moderate growth in the coming years.

Government investment expected to continue expanding significantly

Growth in government investment is set to markedly outstrip GDP growth over the projection horizon. It is assumed that additional funds will be earmarked, in particular, for transport infrastructure, childcare facilities and schools. The healthy fiscal situation of many state and local governments is having a positive impact. By contrast, administrative planning bottle-

7 This impression is reinforced by the fact that, following the revision to the national accounts carried out in August 2018, the commercial investment ratio was markedly lower last year, and thus also at the current end, than previously reported.

8 For more on the correlations between the ageing of society and commercial fixed asset formation in the context of neoclassical growth theory, see Deutsche Bundesbank, A reference value for business investment in Germany, April 2017, pp. 44-46. Survey results indicate that labour supply shortfalls have already been constraining commercial investment for some time. In this vein, in corporate surveys conducted in 2017 by the Cologne Institute for Economic Research (Institut der deutschen Wirtschaft, IW), 49% of the surveyed enterprises indicated that a shortage of skilled labour represented an obstacle to investment – this figure had stood at 33% in 2014. See H. Bardt and M. Grömling (2017), Hausgemachte Investitionshemmnisse, IW-Kurzberichte 78. For over two years already, surveys conducted by the DIHK have identified a shortage of skilled labour as the greatest risk to business activity.

Key figures of the macroeconomic projection

Year-on-year percentage change, calendar adjusted[1]

Item	2017	2018	2019	2020
GDP (real)	2.5	1.5	1.6	1.6
GDP (real, unadjusted)	2.2	1.5	1.6	2.0
Components of real GDP				
Private consumption	2.0	1.1	2.0	2.0
Memo item: Saving ratio	9.9	10.3	10.5	10.4
Government consumption	1.6	1.1	2.6	2.0
Gross fixed capital formation	3.6	3.1	2.7	2.5
Business investment[2]	3.2	2.3	2.5	2.5
Private investment in housing construction	3.6	4.1	3.2	2.2
Exports	5.3	2.2	2.9	3.4
Imports	5.3	3.4	4.7	4.7
Memo item: Current account balance[3]	8.0	7.6	7.1	6.8
Contributions to GDP growth[4]				
Domestic final demand	2.1	1.4	2.1	2.0
Changes in inventories	− 0.1	0.4	0.0	0.0
Exports	2.4	1.0	1.4	1.6
Imports	− 2.0	− 1.3	− 1.9	− 2.0
Labour market				
Total number of hours worked[5]	1.7	1.5	1.0	0.7
Employed persons[5]	1.4	1.3	0.8	0.5
Unemployed persons[6]	2.5	2.3	2.2	2.1
Unemployment rate[7]	5.7	5.2	4.8	4.5
Memo item: ILO unemployment rate[8]	3.8	3.4	3.1	2.9
Wages and wage costs				
Negotiated pay rates[9]	2.1	2.8	2.8	2.8
Gross wages and salaries per employee	2.5	3.1	3.1	3.3
Compensation per employee	2.6	2.9	3.3	3.2
Real GDP per employed person	1.0	0.2	0.8	1.2
Unit labour costs[10]	1.5	2.7	2.5	2.1
Memo item: GDP deflator	1.5	1.9	2.2	2.4
Consumer prices[11]	1.7	1.9	1.4	1.8
Excluding energy	1.6	1.5	1.5	1.9
Energy component	3.1	4.9	0.6	1.2
Excluding energy and food	1.3	1.2	1.6	1.8
Food component	2.7	2.6	0.9	2.1

Sources: Federal Statistical Office; Federal Employment Agency; Eurostat; 2018 to 2020 Bundesbank projections. **1** If calendar effects present. For unadjusted data see the table on p. 31. **2** Private non-residential fixed capital formation. **3** As a percentage of nominal GDP. **4** In arithmetical terms, in percentage points. Discrepancies in the totals are due to rounding. **5** Domestic concept. **6** In millions of persons (Federal Employment Agency definition). **7** As a percentage of the civilian labour force. **8** Internationally standardised as per ILO definition, Eurostat differentiation. **9** Monthly basis (pursuant to the Bundesbank's negotiated wage index). **10** Ratio of domestic compensation per employee to real GDP per employed person. **11** Harmonised Index of Consumer Prices (HICP), unadjusted figures.

Deutsche Bundesbank

necks, a lack of land for new building projects and capacity constraints in the construction sector will probably continue to have a restrictive effect. The latter will also cause construction prices to continue their steep climb over the projection horizon.

Gross fixed capital formation losing momentum

Following what was already a comparatively subdued rise in 2018, gross fixed capital formation is set to lose further momentum overall in the next two years. This is chiefly on account of the considerably decreased growth rates in housing investment. In 2021, gross fixed capital formation could see an even weaker increase, as things currently stand.

Private consumption weak of late, …

Although households enjoyed a considerably higher amount of real disposable income in the second and third quarters of last year, their spending level remained virtually unchanged in real terms. The household saving ratio thus increased significantly more strongly than was forecast in the June projection. This was mainly attributable to the marked decline in private consumption in the third quarter, to which unexpected one-off factors contributed. Alongside the hot and dry weather, which resulted in a slump in clothing sales in the retail trade sector, for instance, difficulties in the automotive industry are also likely to have played a role here. As a case in point, the new standard for measuring exhaust emissions, which has been mandatory since the beginning of September, was not certified in good time in the case of many different makes of car, which may have delayed motor vehicle purchases. Furthermore, the increasing number of bans already imposed and other threatened bans on diesel vehicles with high emissions levels in particularly congested cities may have unsettled consumers. Some potential car buyers probably decided to bide their time. These reservations could persist somewhat longer.

… but a major mainstay of growth in the projection horizon

Soon, however, in view of consumer sentiment, which remains upbeat, private consumption should again rise strongly overall. This should also continue throughout the projection horizon. Private consumption is even expected to gain in importance as a key mainstay of growth. One indication of this is the high underlying trend dynamic of households' real disposable income, expected to dip only slightly over the projection horizon, created by favourable labour market developments. Although employment growth has gradually been slowing, earnings have risen consistently, even after adjustment for inflation. Moreover, especially next year, an additional impetus will come from various fiscal measures providing relief for employees in particular. However, a considerable portion of the especially strong income growth expected in 2019 will probably be set aside as "rainy day" provisions. For the same reason, an increased saving ratio is also likely over the projection horizon.

Government consumption set to grow more strongly again from 2019

Real government consumption has lagged behind GDP growth in 2018.[9] One factor behind this is that the refugee expenditure captured here is declining further, exerting a dampening effect. Over the next few years, though, government consumption is expected to increase more strongly once again in view of the planned fiscal loosening and the favourable general government fiscal situation. Aside from tangible goods purchases, a significant expansion of healthcare and long-term care benefits, as well as of personnel expenditure, is expected.

Buoyant import growth increasingly driven by domestic demand

Imports saw very lively growth in the second and third quarters of 2018, having fallen somewhat at the beginning of the year. Unusually strong stockpiling contributed to this; however, inventories should already normalise again before long. Imports are expected to rise steeply over the projection horizon. Whilst in the past few years exports have strongly influenced import growth, domestic demand will increasingly become a driving force over the projection horizon. Moreover, the German economy's interconnectedness with its trading partners is likely to expand further. The share of aggregate demand which is satisfied, either directly by imports or indirectly through intermediate goods, is therefore expected to continue to climb. Trading partners within the euro area, in particular, are set to capitalise on buoyant German imports, not least because they stand to become still more price competitive than their competitors in other countries.

Current account surplus declining markedly

The high current account surplus has dropped perceptibly this year on account of weak exports and increased commodity prices. The appreciation of the euro, which, taken in isolation, brings down import costs, does not provide a sufficient counterbalance. The current account surplus is likely to decline further in the coming years, chiefly due to volume effects in the trade balance. Due to dynamic domestic demand, real imports will increase considerably more strongly relative to the moderate real growth in exports. Taken in isolation, however, price effects increase the trade surplus – the terms of trade will probably improve, because export prices are rising more strongly than those of imports. The latter are primarily being depressed by crude oil prices, which are assumed to be falling. It is assumed that the balances for primary and secondary income will not change substantially all together. Overall, the current account balance could decline markedly to 6.8% of GDP by 2020.

Labour market

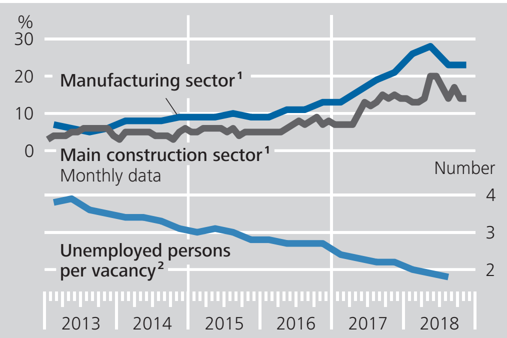
Further rise in employment and falling unemployment in the second and third quarters …

The positive labour market developments continued in the second and third quarters. Employment growth, at +220,000 people in seasonally adjusted terms, was roughly in line with the expectations expressed in the June projection. By contrast, the total number of hours worked in the latest two quarters rose somewhat stronger than anticipated. Registered unemployment fell perceptibly in the last six months, in line with projections.

9 On account of the relatively strong rise in the government consumption deflator, nominal government consumption, by contrast, will rise more or less in sync with nominal GDP.

Labour shortages

Quarterly data, seasonally adjusted



1 Percentage of firms reporting that their output is being hampered by a labour shortage. Source of unadjusted figures: ifo Institute. 2 Persons registered as unemployed according to Federal Employment Agency data divided by the aggregate supply of jobs as determined by the Institute for Employment Research (IAB).

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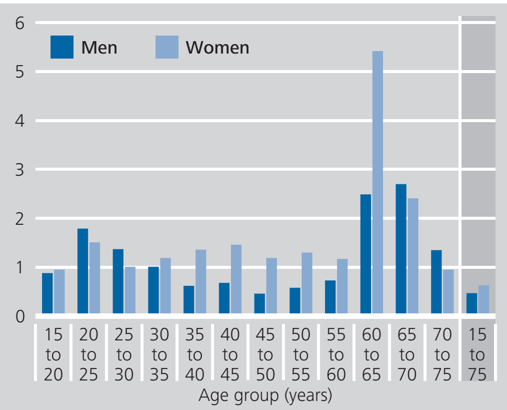
Labour force participation 2021 versus 2017 by age and gender*

Change in percentage points



* Bundesbank assumptions.

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… and set to continue in the next few months

The solid increase in employment is likely to continue over the next few months. Leading indicators of employment growth remain fairly positive, though there are mounting signs of labour shortages. Registered unemployment is likely to continue to decline slightly in line with pretty lively demand for labour.

Labour market tightness will increase in the medium term

In a growing number of industries and professions, employment is no longer being constrained by demand, but rather by the supply of qualified labour. These labour market tensions will intensify over the projection horizon, notwithstanding the fact that expectations regarding GDP growth have been lowered relative to the June projection. The demographic ageing of the population is increasingly shrinking the labour supply. In addition, a considerable number of hitherto economically inactive resident persons have recently entered the labour force; however, like immigration, this source of labour will increasingly dry up.[10]

Limited potential for high labour force participation rate to rise any further

Germany's labour force participation rate has risen considerably since 2004 and has now reached a very high level even by international standards. Similarly high growth will therefore probably no longer be possible in the future. In addition, a negative age structure is having a dampening effect. The progressive ageing of the population means that the number of prime-agers with the highest activity rates is declining while the number of older persons who tend to have a comparatively low participation rate is increasing. The overall labour force participation rate will nonetheless rise slightly according to this projection as the participation rate is assumed to grow notably in all age groups. The greatest potential is among the group of those aged between 60 and 70 years. Labour force participation among women of prime age is also likely to continue to rise as childcare infrastructure in Germany is expanded further. Another factor is the increasing labour market integration of the refugees who fled to Germany in 2015 and 2016, who were disproportionately young and male and therefore tend to have a high propensity to participate in the labour force.

Immigration gradually declining, but nonetheless considerable

Net immigration to Germany has fallen considerably in the last two years. And in the first half of 2018, it dropped slightly again, according to information provided by the Federal Statistical Office. With economic conditions in the EU immigrants' main countries of origin improving all the time and demographic change having an increasing impact there, too, a gradual decline in net immigration from the EU is anticipated

10 See also Deutsche Bundesbank, Demographic change, immigration and the potential output of the German economy, Monthly Report, April 2017, pp. 35-47.

over the projection period despite high demand from Germany. Higher immigration from non-EU states could have a stabilising effect; it is, however, not yet as high as immigration from EU countries. The projection forecasts net immigration totalling 400,000 persons for the current year. This is the lowest figure since 2012, but is still considerable. In the following years, immigration is likely to remain strong despite continuing to decline gradually.

Increase in total hours worked will be dampened considerably in the medium term; unemployment to decline further

All in all, the growth of the labour force will roughly halve every year of the projection period from just under 1% in 2018. As labour demand will rise stably, the number of registered unemployed will decline further. By 2020, the unemployment rate could drop to 4½%, and it is likely to remain on a downward trajectory even in the year after that. In addition, the fact that average working hours per employee have already been rising since the beginning of 2017 is likely to help mitigate supply constraints. In step with unemployment, the number of those involuntarily working part-time has already dropped in recent years. Moreover, the trend towards greater working time autonomy and the further expansion of childcare infrastructure are expected to cause a rise in average working hours of those persons working part-time voluntarily, in particular. There is, moreover, likely to be an increase in the number of overtime hours worked as a result of shortages of skilled labour. Overall, growth in the number of hours worked will nonetheless be curbed significantly by the sharply slowing rise in the labour force over the projection horizon.

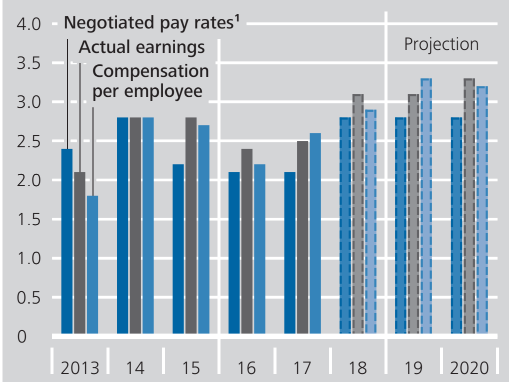
Labour costs and prices

Noticeably higher wage agreements this year …

Negotiated wages have been rising considerably more strongly this year than in the past three years.[11] The main factors are the clear tightening of the domestic labour market in conjunction with the strong economy. Employers and employees in major sectors of the economy such as the metal-working and electrical engineering industry, the main construction industry and the chemicals industry therefore agreed perceptibly higher wage increases in this year’s wage round than in the previous negotiated wage adjustment. The agreements, which will run for more than two years in some cases, specify large wage increases at the beginning of the agreement, but often markedly lower phased increases in the later stages.

Negotiated pay rates, actual earnings and compensation of employees

Year-on-year percentage change, monthly basis



Sources: Federal Statistical Office. 2018 to 2020 Bundesbank projections. **1** According to the Bundesbank's negotiated wage index.
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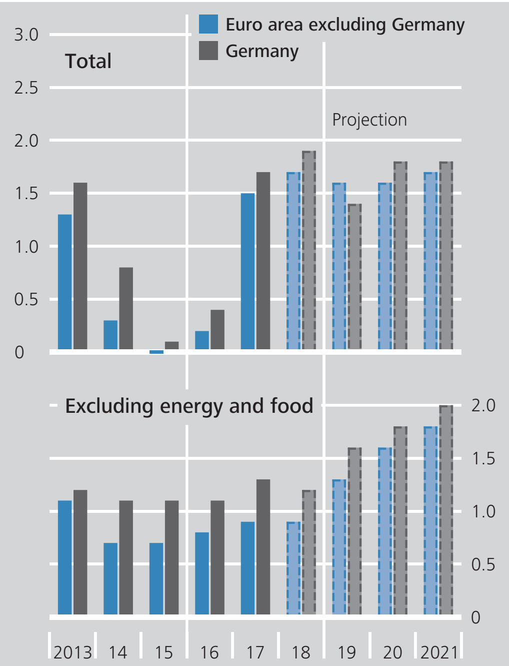
… and also in 2019 and 2020; initially masked in annual growth rates by low phased increases

With economic growth still above potential and given pronounced labour market tightness, even higher wage rises are likely in future negotiated wage agreements in the years covered by the projection than in 2018. The fact that the phased wage increases that will enter into force in the next two years based on the collective agreements reached in this year’s wage round are low (or wholly absent) will, however, dampen average growth rates. Negotiated wages will therefore rise no faster in 2019 and 2020, at 2.8% in each case, than in 2018.[12] In 2021, the dampening effect of the phased wage increases from existing contracts

11 See Deutsche Bundesbank, Wage growth in Germany: assessment and determinants of recent developments, Monthly Report, April 2018, pp. 13-27.
12 All past pay agreements included in the Bundesbank’s negotiated pay rate statistics (around 500 collective wage agreements and regulations on civil servant pay) are factored into the projections of negotiated wage increases and extrapolated beyond their contractual term, taking into account the overall economic situation and industry-specific features.

Price projection (HICP)*

Year-on-year percentage change



Sources: Federal Statistical Office, Eurostat and Bundesbank calculations. 2018 to 2021 Bundesbank projections (for Germany) and calculations based on Eurosystem projections (for the euro area excluding Germany). * Based on the Harmonised Index of Consumer Prices.

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will cease, and annual average growth in negotiated wages should accelerate considerably.

Positive, gradually rising wage drift

With labour shortages increasing, actual earnings are likely to rise even more than negotiated wages over the period covered by the projection – as has been the case for some years now. Factors contributing to this positive wage drift are that employees' average working hours are expected to rise as are compensation components that exceed collectively agreed rates and performance-based bonuses for staff. Next year, it is likely to be somewhat dampened by the return to full joint financing of the statutory health insurance. The higher labour costs this will entail could cause enterprises to be slower to expand wages and benefits that exceed wage agreements. In 2020, by contrast, the comparatively moderate annual average increases in negotiated wages suggest a particularly large wage drift. From a macroeconomic perspective, the increases in the statutory minimum wage in 2019 and 2020 are expected to exert only very little upward pressure on average wages.

Stronger wage growth causing sharp rise in unit labour costs

As for actual earnings, compensation per employee, which additionally contains employers' social security contributions, will rise sharply over the projection horizon. The return to full joint financing of the statutory health insurance will be reflected in a one-off spike in the cost of labour in 2019. The cut to the contribution rate to unemployment insurance and the simultaneous increase in the contribution rate to the public long-term care insurance scheme at the beginning of 2019 will largely cancel each other out. Growth in unit labour costs, which is accelerating considerably this year, not least as a result of weak productivity growth,[13] is likely to slow as productivity growth is expected to recover fairly rapidly. Nonetheless, it is likely to remain strong throughout the projection horizon.

Domestic inflation strong and rising as measured by the GDP deflator

The recent spike in unit labour costs was reflected only partially in domestic inflation as measured by the GDP deflator, because it was associated with perceptibly lower profit margins at the macroeconomic level. However, the expected normalisation of the growth of unit labour costs and the good economic conditions throughout the projection horizon suggest that enterprises will gradually increasingly pass on rising labour costs to consumers. This should allow margins to recover to a large extent. As a result, growth in the GDP deflator will accelerate considerably over the projection horizon. One key reason for the strong domestic inflation is the booming construction sector, where already very high price momentum is initially expected to accelerate yet further.

Consumer prices rose considerably in the second and third quarters of 2018. Having initially been consistent with the expectations ex-

13 Weak productivity growth reflects the fact that economic output is expanding distinctly more slowly than in 2017 – in part because of the recent temporary production stoppages in the automotive industry – whilst employment is not losing much momentum.

Consumer price inflation stronger than expected in the second and third quarters

pressed in the June projection, they rose unexpectedly sharply from September onwards. In November, the Harmonised Index of Consumer Prices (HICP) rose 2.2% on the year, 0.4 percentage point more than forecast in the June projection. This was largely attributable to the surprisingly steep increase in energy prices. Food prices also rose much faster than anticipated. This is likely in part the result of the exceptionally hot and dry weather, which was reflected in higher agricultural producer prices. Inflation excluding the volatile energy and food components (the core rate) was slightly lower than anticipated, however. Services prices, in particular, rose more slowly than projected. This was the result, amongst other things, of the partial abolition of fees for day care facilities for small children in a number of federal states in August, which had a fairly strong impact in terms of dampening prices. However, the increase in rents and prices for other services was also slightly smaller than expected. By contrast, prices for industrial goods excluding energy rose more sharply than forecast in June despite hefty rebates on clothing. This can probably be attributed in part to the depreciation of the euro against the US dollar and the perceptible inflation that this is likely to have caused for imports, which are frequently invoiced in US dollars.

Domestic price pressures likely to increase significantly …

According to this projection, the core rate will increase significantly from 1.2% this year to 1.8% in 2020, and may even go up further still in 2021.[14] The high – and rising – degree of aggregate capacity utilisation as well as persistently strong growth in unit labour costs are likely to accelerate the increase in the price of goods (excluding energy and food) and services in the coming years. Higher import prices will also push up prices.[15]

… but price of energy to stay more or less put

However, the price of energy, which is still currently making a major contribution to the headline inflation rate, is likely to edge up only slightly over the projection horizon. Assumptions attribute this to falling crude oil prices. In 2019, food prices are set to temporarily rise at only a moderate rate as it is assumed that agricultural producer prices will stop adding to cost pressure. However, in 2020, sharp wage growth will make an impact in this area, too.

Headline rate at end of projection horizon near current year's level despite much weaker rise in energy prices

With regard to headline inflation, two opposing trends are apparent. While core inflation is set to rise, on the one hand, there is an assumption that crude oil prices will fall, on the other. According to this projection, HICP headline inflation will initially fall from 1.9% in 2018 to 1.4% in 2019 due to the sharp slowdown in energy price inflation, before then returning to 1.8% in 2020, due especially to growth in the core rate. Headline inflation could well stay put in 2021.

Public finances

Government budget considerably improved in 2018, even compared with already positive results for 2017

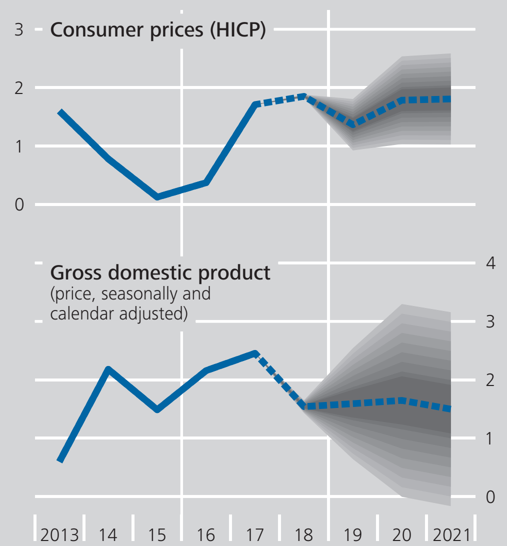
In 2018, the general government surplus will rise significantly from an already high level of 1% of GDP in 2017 and may even attain around 2% of GDP. This improvement has been driven by dynamic growth in social contributions and above all taxes, where growth even outpaced that of the macroeconomic reference variables. On the expenditure side, there is no nuclear fuel tax repayment to be made, unlike in 2017. A further decline in unemployment and falling interest expenditure are also providing relief. Overall, despite the greater uptake of guarantees by HSH Nordbank, expenditure has been rising at only a moderate pace. The structural (i.e. after adjustment for cyclical and specific one-off effects) surplus is also likely to increase again.

14 On average for 2018, the upturn has thus been interrupted, partly due to one-off effects. However, the core rate was already back up somewhat of late, despite having been dampened temporarily in November by a fall in package holiday prices.

15 The proposed infrastructure levy will still raise the core rate in 2020 slightly despite the compensating motor vehicle tax relief for residents. The HICP is based on the domestic concept, which means that domestic expenditure by non-residents is included in the basket of goods and is taken into account when measuring inflation.

Baseline and uncertainty margins of the projection*

Annual data, year-on-year percentage change



Sources: Federal Statistical Office and Bundesbank calculations. 2018 to 2021 Bundesbank projections. * Uncertainty margins calculated on the basis of the empirical forecast errors. The width of the band distributed symmetrically around the most probable value equals double the mean absolute forecast error for 2018 to 2020. For 2021, the value for 2020 is multiplied by a factor derived from the estimation of a time series model which captures the development of the uncertainty margins over the projection horizon.

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Expansionary fiscal policy to cut surplus distinctly in the baseline in the coming years

A marked decline in the surplus is projected for next year. In the years thereafter, after factoring in the corresponding measures (see p. 21), it will then slip only slightly to around 1¼% of GDP. Public finances will continue to reap the benefits of a healthy economy, falling interest expenditure and the end of burdens from privatising HSH Nordbank. However, strains elsewhere will have a greater impact. The social security funds as well as the various levels of government will notably increase spending on many areas. The agreed tax cuts will also weigh on public finances. However, they will not diminish the structural revenue ratio by much due, not least, to tax progression.

Sharper decline in surplus logical given proposed additional fiscal easing

In comparison with the baseline of this projection, the Federal Government agreed to a more substantial easing of fiscal policy, without specifying in greater detail what shape this may take. The coalition agreement thus contains not only additional priority projects, such as a partial abolition of the solidarity surcharge, but also envisages making use of any additional financial leeway. Such leeway does indeed exist in the baseline, which still reports clear structural surpluses and swelling reserves. Overall, state and local government would likewise post relatively high surpluses. It thus appears logical to take further measures and bring down the surpluses by a greater amount.

Debt ratio still on downward path

The debt ratio is likely to decline rapidly over the entire projection horizon. It may fall below the reference value of 60% agreed in the EU in 2018 already (end-2017: 63.9%) – for the first time since 2002 – aided by both budget surpluses recorded by the various levels of government and increasing nominal GDP growth in the ratio's denominator. Furthermore, government-owned bad banks are expected to continue deleveraging their portfolios and repaying debt.

Risk assessment

Overall, risks for economic growth and – to lesser extent – the inflation rate, too, skewed to the downside

The projection presented here outlines the most probable macroeconomic scenario for the German economy from today's perspective under the assumptions given. However, uncertainty relating to the macroeconomic outlook is high, although it has tended to ease somewhat since the June projection. Various developments that are not included in the baseline scenario may cause actual economic activity and consumer prices to differ from the projections. Overall, the downside risks for economic growth and – to a lesser extent – for the inflation rate, which still stem above all from the external environment, are higher than the possibility of greater growth momentum and price dynamics resulting, in particular, from the fact that fiscal policy in Germany is likely to follow an even more expansionary course.

Downside risks for economic activity from international environment

The debate started by the United States on future international trade relations has not intensified any further of late. In fact, there have been a number of signs of easing tensions in recent months in the form of new trade agreements. However, there is still an elevated risk of growing protectionism worldwide which could perceptibly impair Germany's export-oriented economy. The threat of a disorderly Brexit has not been averted, either. If the United Kingdom were to withdraw from the European Union without a transitional phase and a free trade agreement, this would cause severe disruptions to the financial sector and the real economy. In addition, economic activity in Germany would face further downside risks arising from the international environment should geopolitical tensions intensify in regions such as the Middle East. Moreover, uncertainty in connection with the direction of the Italian government's fiscal and European policy could lead to turmoil on the financial markets and hamper real economic growth. This could have a negative impact on the banking system and trigger contagion in other euro area countries.

Downside domestic risks in automotive industry more than offset by likelihood of even more expansionary fiscal policy

With regard to the domestic economy, the opportunities for greater economic growth would appear to outweigh the risks at this point. There is a certain risk that the problems experienced by the German automotive industry in adjusting to the new procedure for measuring emissions may last for longer than expected. It is also possible that continuing discussions about banning older diesel vehicles in several German cities, for instance, may have curbed demand for motor vehicles to a greater degree than assumed here. However, the information currently available suggests that such a scenario is not very probable. It is more likely that fiscal policy will provide added impetus. Not all of the Federal Government's fiscal policy intentions have yet been factored into the projection. In addition, both the current position of Germany's general government, as well as the medium-term outlook, are so favourable that additional expansionary measures do indeed look likely.

The price of crude oil on the spot market as well as the related forward quotations have been rather volatile over the past few weeks. The assumed path of future crude oil prices will

Key figures of the macroeconomic projection – non-calendar adjusted

Year-on-year percentage change

Item	2017	2018	2019	2020
GDP (real)	2.2	1.5	1.6	2.0
GDP (real, calendar adjusted)	2.5	1.5	1.6	1.6
Components of real GDP				
Private consumption	1.8	1.2	1.9	2.2
Memo item: Saving ratio	9.9	10.3	10.5	10.4
Government consumption	1.6	1.1	2.6	2.0
Gross fixed capital formation	2.9	3.0	2.7	3.3
Business investment[1]	2.6	2.2	2.4	3.4
Private investment in housing construction	2.8	4.0	3.2	3.0
Exports	4.6	2.0	2.9	4.2
Imports	4.8	3.3	4.7	5.4
Memo item: Current account balance[2]	8.0	7.6	7.0	6.8
Contributions to GDP growth[3]				
Domestic final demand	1.8	1.4	2.1	2.3
Changes in inventories	0.1	0.4	0.0	0.0
Exports	2.1	0.9	1.3	2.0
Imports	– 1.8	– 1.3	– 1.9	– 2.2
Labour market				
Total number of hours worked[4]	1.3	1.4	1.0	1.4
Employed persons[4]	1.4	1.3	0.8	0.5
Unemployed persons[5]	2.5	2.3	2.2	2.1
Unemployment rate[6]	5.7	5.2	4.8	4.5
Memo item: ILO unemployment rate[7]	3.8	3.4	3.1	2.9
Wages and wage costs				
Negotiated pay rates[8]	2.1	2.8	2.8	2.8
Gross wages and salaries per employee	2.5	3.1	3.1	3.3
Compensation per employee	2.6	2.9	3.3	3.2
Real GDP per employed person	0.7	0.2	0.8	1.5
Unit labour costs[9]	1.8	2.7	2.5	1.7
Memo item: GDP deflator	1.5	1.9	2.2	2.4
Consumer prices[10]	1.7	1.9	1.4	1.8
Excluding energy	1.6	1.5	1.5	1.9
Energy component	3.1	4.9	0.6	1.2
Excluding energy and food	1.3	1.2	1.6	1.8
Food component	2.7	2.6	0.9	2.1

Sources: Federal Statistical Office; Federal Employment Agency; Eurostat; 2018 to 2020 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** Internationally standardised as per ILO definition, Eurostat differentiation. **8** Monthly basis (pursuant to the Bundesbank's negotiated wage index). **9** Ratio of domestic compensation per employee to real GDP per employed person. **10** Harmonised Index of Consumer Prices (HICP).

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Given oil price, risks for 2019 skewed to the downside, but balanced after that

have a major impact on the consumer price projection in particular. The price of crude oil has fallen significantly (see p. 20) since the date on which the assumptions for the projection were made. Thus, at present, risks for the inflation rate are skewed to the downside, for 2019 in particular. But aside from these short-term developments, upside and downside risks are currently broadly balanced. On the one hand, sharper US sanctions on Iran and political tension in major oil-producing countries, such as Venezuela, could push up the price of crude oil. On the other hand, risks of a weaker global economy suggest that the price may come down.

Risks for headline inflation, too, slightly to the downside

Risks for the expected headline rate of inflation, too, are slightly to the downside. Higher tariffs are likely to temporarily exert additional upward pressure on inflation. The more expansionary stance of fiscal policy Germany is expected to take is another factor which could well put additional upward pressure on prices. However, weaker global or domestic demand for goods would continue to ease the rate of inflation beyond the dampening effect on the oil price. One final source of considerable uncertainty for the statistically measured inflation rate will be the transition to a new weighting scheme for the HICP in 2019. This will particularly affect major components of the consumer price index, such as rents and package holidays, where the transition will mean methodological changes in the measurement of prices. However, it is currently not clear whether these statistical changes will have a positive or a negative impact.