

The German economy

Macroeconomic situation

German economy stagnated in Q4 2018

The German economy cooled further in the final quarter of 2018. According to the Federal Statistical Office's flash estimate, after seasonal and calendar adjustment, real gross domestic product (GDP) in the final quarter of 2018 remained at the same level as in the previous quarter, in which there had been a 0.2% decline due chiefly to a one-off effect in the automotive sector. In calendar-adjusted terms, the figure was 0.6% up on the year. The economy's failure to gain additional momentum following the setback in the third quarter was mainly the result of persistently weak industrial activity. For instance, it took considerably longer than initially expected to overcome production stoppages in the automotive sector, which were linked to the new EU-wide standard for measuring exhaust emissions. In addition, output in

other industrial sectors was scaled back. The construction sector, which is operating at close to full capacity, is unlikely to have generated any additional stimulus. By contrast, commercial services are expected to have buoyed economic output in the final quarter of 2018. Aggregate capacity utilisation showed a further decline, but is probably still well above its longer-term average.

Although exports of goods in the fourth quarter offset the preceding quarter's decline, they did not create any additional momentum. Together with enterprises' gloomier expectations, this is likely to have weighed down business investment, which probably expanded only slightly at most. Despite robust employment growth and accelerating earnings growth, private consumption, too, remained largely listless; a sharp increase in prices, especially for energy products, may have dampened consumer appetite. And, finally, inventory changes are likely to have had a negative impact, as there had been an exceptionally strong build-up of inventories around the middle of the year. Government consumption, by contrast, is likely to have seen a further marked expansion.

Weak demand impulses

Overall output

2010 = 100, price and seasonally adjusted



Source of unadjusted figures: Federal Statistical Office. 1 Only calendar adjusted.
 Deutsche Bundesbank

German exports of goods rose perceptibly in real terms in the final quarter of 2018. However, this only meant that they largely made good the decline of the third quarter, which was driven mainly by the large-scale losses of production in the automotive industry. Apart from certain bounce-back effects in the case of motor vehicle exports, the statistical information available up to November shows that only intermediate goods saw an increase in international sales. In regional terms, export growth was driven chiefly by demand from non-euro area countries. Deliveries to euro area countries, by contrast, experienced only moderate growth. With regard to sales to non-euro area countries, German enterprises reported a substantial increase for the United Kingdom, al-

Exports reverse decline of previous quarter

though this did come after an extremely sharp drop in the third quarter. Motor vehicle exports are likely to be the key factor behind this volatility. Business with Russia and the South and East Asian emerging market economies also expanded sharply in terms of value. More goods were likewise exported to China, the United States and to central and eastern European countries. Demand for German products from Japan and the newly industrialised Asian economies, meanwhile, dropped considerably.

Investment activity remains muted

Business investment in machinery and equipment is likely to have grown slightly in the fourth quarter of 2018. Investment activity is being dampened by the marked slowdown in manufacturing, as is reflected in capacity utilisation which has been falling for some time, and the gloomier outlook for the economy. For instance, manufacturers of capital goods – excluding the auto industry – were able to boost domestic sales only to some extent in value terms. The automotive industry did record a sharp rise in domestic sales; even so, commercial vehicle registrations were still down considerably on the previous quarter, in which front-loading and a very high number of registrations by dealers themselves had, however, played a considerable part. The fact that fewer capital goods were imported had a dampening effect, however.

Construction investment remains on the up

Construction investment in the final quarter of 2018 continued its upward trend, as is indicated by the data – available up to November – for sales in the main construction sector, which showed a substantial rise again in the reporting period. Whereas investment in commercial buildings is likely to have remained buoyant, private housing investment is likely to have expanded at a noticeably slower pace.

Private consumption likely only slightly higher at year-end

Households' consumption probably showed no more than moderate growth in the final quarter of 2018. This is suggested mainly by retail sales, which – including the preliminary, very weak figures for December – were only marginally higher than in the third quarter in price-

Foreign trade

Seasonally adjusted, quarterly

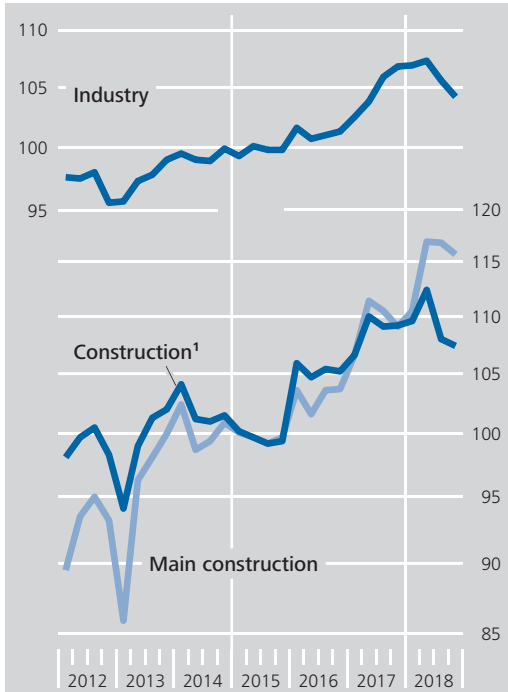


Source of unadjusted figures: Federal Statistical Office. ¹ Adjusted using the price indices for foreign trade.
 Deutsche Bundesbank

adjusted terms. Online and mail order sales provided the main positive stimuli in retail. By contrast, high street demand for textiles, apparel, shoes and leather goods was down compared with the third quarter. Consumer demand for IT and telecommunications equipment was also lower in the reporting period. Passenger car sales recovered somewhat. Although registrations of brand new cars in the final three months of last year were lower than in the preceding quarter, the number of vehicles registered by dealers themselves in the third quarter was exceptionally high. This suggests that some private demand was probably

Output in industry and in construction

2015 = 100, seasonally adjusted, quarterly, log scale



Source of unadjusted figures: Federal Statistical Office. ¹ Main construction sector and finishing trades.
 Deutsche Bundesbank

■ Sectoral trends

Industrial output declined sharply in the fourth quarter of 2018, which meant that the downward movement of the third quarter continued virtually unabated. In seasonally adjusted terms, output was down by 1¼% on the quarter. One major reason why the decline was so large was a one-off factor in the pharmaceutical industry, where production was suddenly cut back by more than one-fifth after undergoing a steady and sharp expansion in the preceding months. Meanwhile, positive impulses came from the automotive sector, which gradually recovered from its output losses in the third quarter due to difficulties switching to the new worldwide harmonised light vehicles test procedure (WLTP) (see also the box on pp. 47 f.). However, even excluding these two sectors and their exceptional movements, industrial output showed a marked fall (-¾%). This decline was relatively broad-based across sectors. For example, mechanical engineering and manufacturers of computers, electronic and optical products all recorded a significant drop in output.

Output weakness in industry continues

satisfied by the sale of these vehicles at a later date.

Import demand unchanged

Given subdued aggregate demand, German imports of goods in the final quarter of 2018 are likely to have remained unchanged on the quarter in real terms. It should be noted that imports had risen sharply during the summer months despite the decline in aggregate output. A not insignificant portion of these imports was probably used to restock inventories, which likely further dampened demand for foreign products in the quarter under review. In a regional breakdown, there was less demand in Germany mainly for products from euro area partner countries. Non-euro area producers, meanwhile, benefited from significantly higher sales in Germany.

In line with weak industrial output, ifo Institute data also show a further fall in capacity utilisation of tangible fixed assets in manufacturing in the fourth quarter of 2018. Capacity utilisation in all major sectors of industry fell, with the intermediate and consumer goods industries being hardest hit. Manufacturers of capital goods, meanwhile, reported no more than a slight dip in capacity utilisation; however, capacity utilisation had already dropped sharply in the third quarter as a result of the problems experienced by the car industry in connection with WLTP. Nonetheless, utilisation of tangible fixed assets in the industrial sector as a whole remains well above its longer-term average.

Capacity utilisation in the industrial sector continues to decline

Seasonally adjusted construction output in the fourth quarter of 2018 (-½%) did not quite match the level of the previous quarter. Construction activity declined in both the main construction sector and the finishing trades, though the decrease in the main construction

Construction output lower

The weakness of German motor vehicle production in the second half of 2018

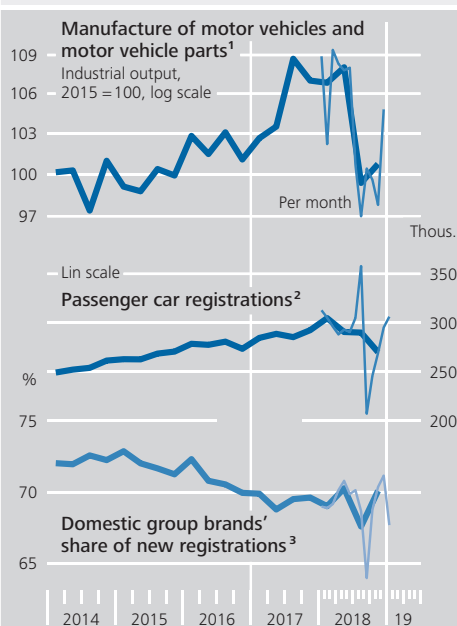
The German automotive industry experienced considerable output losses in the second half of 2018. In the third quarter, production of motor vehicles and motor vehicle parts fell by 8% on the quarter in seasonally adjusted terms. Although output did rise again somewhat (+1¼%) in the fourth quarter of last year, figures were still far short of the high level recorded in the second quarter. It would seem reasonable to assume that the decline in production is related to the introduction of a new emissions test, the Worldwide harmonised Light Vehicles Test Procedure (WLTP), which has been in place in the European Union for new motor vehicle registrations since September 2018.¹ Numerous models evidently could not be certified under this new standard on time. The unexpectedly hesitant recovery in output in the closing months of last year gave rise to fears, however, that besides these temporary supply-side production bottlenecks, a persistent drop in demand might have played a substantial part in the slump in production. This weakness in demand could be of domestic origin, for example on account of the growing number of court-imposed bans on older diesel vehicles in cities with particularly high emissions levels. A general loss of confidence in the German automotive industry might also have been partly responsible. However, the weak demand could also be

of a largely foreign origin, for instance because Chinese consumers' interest in German cars is waning.

That said, developments in new passenger car registrations as a key economic indicator of domestic demand for cars does point to WLTP-related bottlenecks as the main reason for the slump in output. After these problems, demand for passenger cars had already largely recovered by the end of 2018 (see chart below). In December, the monthly vehicle registration figures bounced back to the level prior to the drop.² Although registration numbers for individual car makers show that the share of domestic group brands fell quite substantially during the third quarter, it did outpace the third-quarter figure by the end of the year. Thus, the market share held by domestic group brands

Output in the automotive industry and passenger car registrations in Germany

Seasonally adjusted, quarterly averages



¹ See, for example, M. Kallweit and N. Jannsen, Auswirkungen des neuen WLTP-Prüfverfahrens, Wirtschaftsdienst 2018/11, pp. 831-832.

² Registrations peaked in August 2018 because motor vehicle traders increased the number of one-day registrations of vehicles. This enabled them to sell brand new vehicles as used cars in the following months under old registration rules. The sharp slump in new registrations in September 2018 could have been due to both WLTP-related delivery problems and the increase in motor tax connected with the new emissions test procedure. See, for example, Deutsche Bundesbank, Monthly Report, November 2018, p. 46.

¹ Source of unadjusted figures: Federal Statistical Office. ² Source of unadjusted figures: German Association of the Automotive Industry (VDA). ³ Source: Bundesbank calculations. Deutsche Bundesbank

German exports of motor vehicles and motor vehicle parts

€ billion, nominal, quarterly totals, seasonally adjusted



Sources of unadjusted figures: Federal Statistical Office; Bundesbank calculations and seasonal adjustment. ¹ Quarterly adjusted data.

Deutsche Bundesbank

continued the slight recovery that has been ongoing for just under two years.³ At first, their share of the market receded significantly after the emissions scandal broke in the late summer of 2015.

Developments in German automotive exports also point to WLTP-related supply constraints as the main reason for the latest dip in production in this sector. In the third quarter of 2018, the value of exported motor vehicles and motor vehicle parts dropped heavily by 5¾% from the preceding quarter after seasonal adjustment. This was primarily attributable to exports of motor vehicles to the EU, i.e. to those countries which introduced the new emissions standard at the same time as Germany (see the above chart). By contrast, weak domestic demand should not impact on car exports. And in the case of a general fall in foreign demand, motor vehicle exports should be dampened fairly evenly across the board (with exports to China potentially being particularly affected). Whereas exports to the European Union saw an especially sharp decline, plunging by 12¾%, exports to non-EU countries rose in value terms by 1¾%. In this period, supplies of motor vehicles and motor vehicle parts to China climbed by as much as 3½%.

Looking at the passenger car output levels of individual German brands, it is striking that the overall decline in motor vehicle production was chiefly driven by the stoppages at one German manufacturer. This ties in with data from the ADAC (German Automobile Association) about certification times of various models with respect to the Euro 6d TEMP or 6d emissions standards, and suggests that the introduction of the WLTP was the main reason for the production losses.⁴ The ADAC's data show that it was the same German manufacturer that had its model range certified much later than other groups.

In summary, the indicators analysed in these comments primarily point to difficulties related to the introduction of the new WLTP standard for measuring exhaust emissions as the explanation for the drop in motor vehicle output in the second half of 2018. Although, according to data of the VDA (German Association of the Automotive Industry), the seasonally adjusted number of cars produced in January 2019 fell sharply once again, this renewed slump was probably mainly due to strike action at an engine plant in Hungary. However, the large discrepancy between the most recent production figures and the new orders received by the automotive sector – which in the fourth quarter of 2018 were up by a hefty 10¼% on the previous quarter in seasonally adjusted terms – suggests that this setback is probably only temporary.

³ The renewed decline in January 2019 is primarily related to the production stoppages caused by the strike at an engine plant in Hungary, for which reason the decline is also likely to be only temporary.

⁴ As at year-end (December 2018), a total of around 1,300 models of different manufacturers were involved. See ADAC (2018), Pkw-Modelle mit der Abgasnorm Euro 6d-TEMP, https://www.adac.de/infotestrat/umwelt-und-innovation/abgas/modelle_mit_euro_6d_temp/

sector was somewhat more pronounced, which was primarily due to a substantial cut-back in building construction. At the same time, the economic indicators do not suggest that the construction boom in Germany is coming to an end. According to the ifo Institute, capacity utilisation in the main construction sector remained exceptionally high. The same applies to the reach of orders in this sector. Moreover, a significant percentage of construction firms still say that staff shortages are a major factor hampering production. This suggests that the construction sector is still operating at close to full capacity.

Services sector is likely to have grown perceptibly on the whole

Looking at the services sectors, the overall picture was fairly positive in the final quarter of 2018. Although retailers were able to increase their sales only slightly in real terms, price-adjusted sales in the wholesale trade showed a substantial rise. Added to this was a further marked increase in motor vehicle sales, which had been dampened in the third quarter by one-off effects in connection with the new emissions testing procedure. Business activity in the other services sectors is also likely to have been quite favourable. According to the ifo Institute, business expectations in this sector were lowered markedly; even so, they remained at a very elevated level.

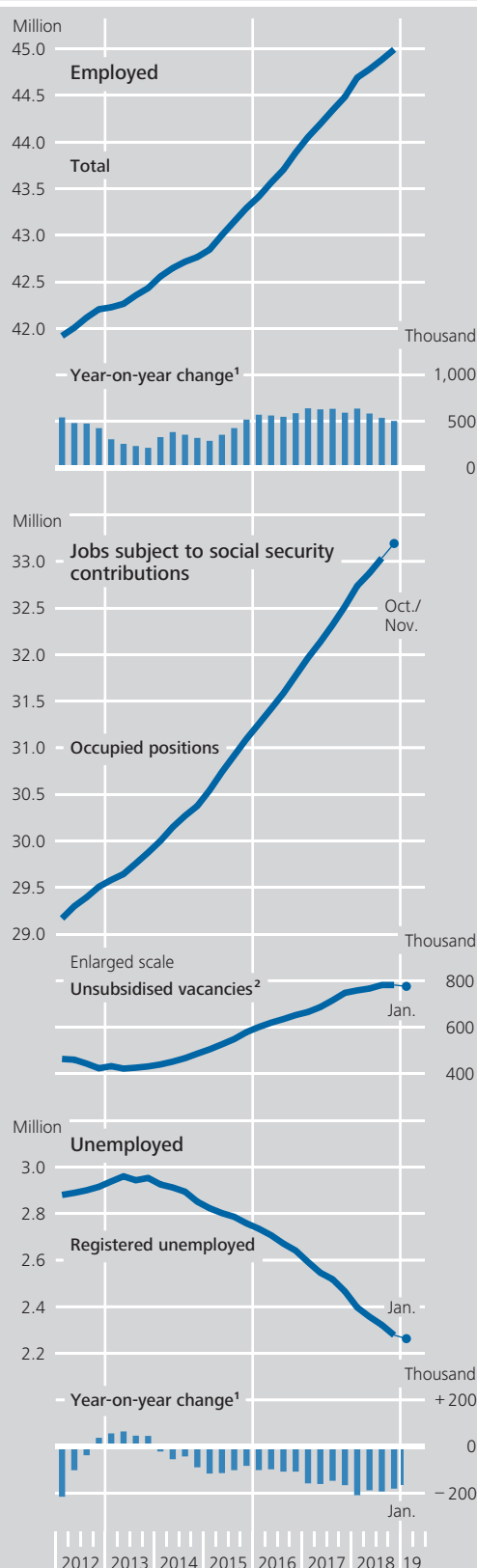
■ Labour market

Labour market in very good shape

Despite the weaker pace of economic activity, the labour market remained in very good shape at the end of 2018. The fourth quarter was marked by a sound rise in employment and a slight fall in underemployment. Employment went up primarily thanks to sustained strong growth in the number of new jobs subject to social security contributions. Unemployment fell perceptibly again in the reporting quarter. Although there was no further increase in the number of job vacancies, the figure is still very high. The muted sentiment in a number of sectors was reflected to a certain degree in the

Labour market

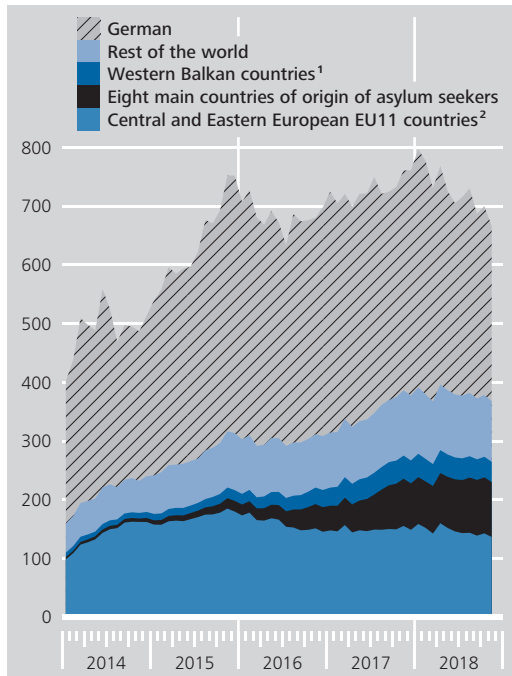
Seasonally adjusted, quarterly



Sources of unadjusted figures: Federal Statistical Office and Federal Employment Agency. **1** Not seasonally adjusted. **2** Excluding seasonal jobs and jobs located abroad.
 Deutsche Bundesbank

Nationality of employees subject to social security contributions

Thousand persons, year-on-year growth (monthly)



Source: Federal Employment Agency. **1** Serbia, Bosnia and Herzegovina, Kosovo, North Macedonia and Albania. **2** Joined in 2004.

Deutsche Bundesbank

leading indicators, although demand for labour remained expansionary overall.

Sharp rise in jobs subject to social security contributions ...

In the final quarter of 2018, seasonally adjusted domestic employment went up by 110,000 persons, or 0.2%. This is roughly in line with the increase in the third quarter. This growth was driven solely by the expansion of employment subject to social security contributions. According to the Federal Employment Agency's initial estimate, in the first two months of the reporting quarter alone such employment increased by as much as 127,000, or 0.4%, compared with the average of the third quarter. Persons in low-paid part-time employment or temporary agency employment as well as the self-employed are using the tight labour market situation to move into jobs with full social security coverage. There was a noticeable decline in the number of persons in all three alternative forms of employment.

As before, the strongest growth in jobs subject to social security contributions was seen in business services such as IT and logistics. Compared with the same month of the previous year, the increase was a hefty 5% and 4% respectively. In absolute terms, employment growth was strongest in manufacturing, business and support services (not including temporary agency workers) as well as in health and social care; growth was slightly above average in each of these three relatively large sectors. The same applies to the construction sector, which is suffering from labour shortages. In nearly all other sectors, too, more people were hired than left their jobs. Finance and insurance was the only sector in which staff numbers showed a slight fall; additionally, in temporary agency employment, the number of employees subject to social security contributions contracted sharply by more than one-tenth within the space of 12 months.

... across almost all sectors, but sharp decline in temporary employment

Demand for labour at the end of the period under review still significantly exceeded the domestic supply of labour. Although unemployment was continuing to decline and unemployed persons were active in the labour market, in arithmetical terms only 45% of the persons who took one of the 666,000 additional jobs subject to social security contributions during the past 12 months had German nationality. Labour-related immigration is substantial, albeit showing a slightly diminishing trend.¹ On the other hand, the integration of migrants in the labour market is still progressing quickly. It was possible to fill roughly one in seven of the additionally created jobs with a person from the eight main countries of origin of asylum seekers.

Immigration supports employment growth

After seasonal adjustment, registered unemployment in autumn 2018 continued its

¹ According to migration statistics published by the Federal Statistical Office, the migration balance between Germany and other countries was as high as 500,000 persons in 2016; it declined to 416,000 in 2017 and totalled 315,000 persons in the first nine months of 2018, which, when taking the seasonal pattern into account, suggests just below 400,000 for the year as a whole.

Decline in unemployment solely among persons receiving the basic welfare allowance

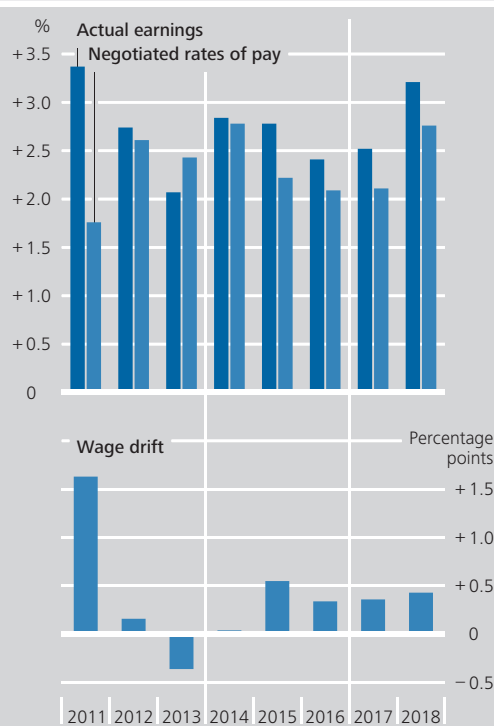
marked decline. On an average of the reporting period, there were 44,000 fewer unemployed persons than in the previous quarter. The unemployment rate fell by 0.1 percentage point to 5.0%. The decline is entirely due to a reduction in the number of unemployed persons receiving the basic welfare allowance. This is chiefly attributable to the very low probability at present of becoming unemployed over the long term and in need of assistance. There are therefore relatively few newly unemployed persons receiving the basic welfare allowance, while the prospects of such persons finding a job have improved slightly. Moreover, the number of unemployed persons claiming insurance benefits is already very low. There was barely any decline in registered unemployment in January. However, this is probably mainly due to the end of the "Social inclusion in the labour market" programme, while the number of participants on the basis of the new "Participation opportunity law" is rising only slowly. Total underemployment, which is unaffected by changes in active labour market policy, even recorded a quite significant fall in January.

Demand for labour still expansionary despite setback

According to the leading indicators, enterprises are still planning to create new jobs. Both the labour market barometer of the Institute for Employment Research (IAB) and the Federal Employment Agency's BA-X job index maintained their very high level over the past few months. The ifo employment barometer, which enquires about the recruitment plans of trade and industry over the next three months, declined markedly towards the end of the period under review. This suggests a slower rise in the demand for labour. In view of the prevailing labour shortage, it is nevertheless uncertain whether the current muted sentiment and the slower pace of economic activity will place an additional constraint on employment growth. The leading indicator for unemployment in the IAB labour market barometer was down somewhat at the end of the period under review and was only just in positive territory, which points to a decline in registered unemployment in the next three months.

Rates of pay and wage drift

Year-on-year percentage change, on monthly basis



Sources: Federal Statistical Office (actual earnings) and Deutsche Bundesbank (negotiated rates of pay).
 Deutsche Bundesbank

Wages and prices

Negotiated pay rates remained on a clear upward trajectory at the end of 2018. Including ancillary agreements, there was a year-on-year increase of 2.8% in the fourth quarter of 2018, which was on much the same scale as in the third quarter. Looking at the individual sectors, collective wage growth in the production sector (including construction) significantly outstripped growth in the services sector. The rise in actual earnings in the economy as a whole is likely to have been remarkably strong in the fourth quarter, as in the preceding three quarters.

On an annual average in 2018, negotiated pay rates were clearly up with an increase of 2.8% on the year; the rise was thus significantly higher than the 2.1% to 2.2% growth rates of the period from 2015 to 2017. The much higher new pay settlements agreed in the previous

Negotiated pay rates continue to rise significantly

Substantial growth in agreed pay rates and actual earnings in 2018



branches of industry such as the steel and chemical industries. Overall, collective negotiations will be conducted for around eight million employees. Trade unions' wage demands published so far amount to between 5½% and 6%, which is on a scale similar to last year. As in the two preceding years, the individual choices between more leisure time and the size of the pay rises are likely to have played a prominent role in some sectors. In addition, the return to parity funding of health insurance in the statutory health insurance system and the resulting surge in costs for enterprises might have a dampening effect on the size of the wage settlements. At the beginning of the year, the general statutory minimum wage was raised by 35 cents to €9.19 per hour.

In the final quarter of 2018, consumer prices (HICP) continued their distinct rise from the third quarter, going up by 0.6% in seasonally adjusted terms. Energy became considerably more expensive despite the marked decline in crude oil prices. Increased transport costs resulting from the low water level of the Rhine and other rivers probably played a key role in this respect. By contrast, food prices, which had also risen significantly prior to this, largely came to a standstill. Prices for other goods, which had gone up sharply in the third quarter, accelerated further. Prices for clothing and footwear, in particular, were raised considerably. Other industrial goods excluding energy saw above-average price increases, as in the previous quarter. An additional factor behind this was that the import of these goods was continuing to become more expensive owing to the sustained depreciation of the euro against the US dollar; this led to quite significant mark-ups in domestic industrial producer prices. Finally, prices for services were continuing to rise moderately, although there were marginal price reductions in the important area of travel services. Annual HICP inflation, at 2.1% on an average of the quarter, was just as strong as in the third quarter, but dropped to 1.7% in December, as lower crude oil prices

Consumer prices climbed steeply in Q4 2018 ...

year were gradually coming into effect, while smaller incremental wage increases from older wage agreements were progressively becoming less important. Given largely positive economic activity and continuing labour market shortages, actual earnings showed a noticeably strong rate of growth at 3.2% last year according to the first preliminary annual result, which was also higher than the growth rates in the years before. At around ½ percentage point, wage drift was up strongly.

This year's pay round mainly covers services sectors such as the public sector of the Federal states, trade and financing, as well as individual

Housing prices in Germany in 2018

Housing prices rose sharply again last year with price increases on a broad front regionally. While there was something of an easing of the still very strong upward pressure on the prices of housing in German towns and cities, residential property prices outside the urban areas were going up at a faster pace than in the years before. The expansion in the supply of housing is likely to have exceeded its heightened level of the previous year and to have now reached a considerable scale, but – given growing interest in housing outside towns and cities – has failed to keep pace with the continuing strong demand. While price dynamics, from a macroeconomic perspective, were largely consistent with developments in the supply and demand-side variables, housing prices in towns and cities were still well above the level that appears justified by the longer-term economic and demographic determinants.¹

The increase in the price index of the Association of German Pfandbrief Banks (*Verband deutscher Pfandbriefbanken, vdp*) for owner-occupied housing was considerably stronger last year, at 7¾%, than in 2017 (+5¾%). On an average of the first three quarters of 2018, the house price index of the Federal Statistical Office, with a year-on-year growth of 5½%, likewise shows a higher rate of increase than in the previous year. Hypoport AG's Europace house price index (EPX) indicates a 6¾% increase in housing prices in Germany in 2018, which was also larger than in the year before.

In German towns and cities overall, upward pressure on the prices of housing eased somewhat in 2018 after a number of years when the rates were increasing. The rate of price increase was nevertheless clearly higher than in Germany as a whole. According to figures based on bulwiengesa AG data, prices for urban residential real estate went up by 8½%, which was an in-

crease on much the same scale as on an average of the previous three years.² The same goes for the price dynamics of housing in seven big cities with an average price rise of 9½% in 2018.³ In both the cities overall and the sub-sector of the big cities, owner-occupied apartments continued to generate the strongest impulses, even though price dynamics in this hitherto extremely attractive segment weakened slightly. Housing prices in urban areas increased noticeably more strongly in 2018 than in previous years, however. In view of what is now the extremely high price level for owner-occupied apartments and houses in towns and cities, the fact that part of the demand for housing shifted to the surrounding areas and that prices were tending to increase more strongly there is consistent with the overall picture.

Developments in rents for apartments also support the finding that demand for housing has become broader in regional terms. Price adjustment pressure decreased somewhat on the urban rental housing markets. Figures based on bulwiengesa AG data indicate that the increase in rents for new lettings in towns and cities in 2018, at 3¾%, was clearly down on the previous year's rate of growth and below the annual average rate for the previous three years. In the seven big cities, the increase in rents for new tenancies, at 4%, was also much more moderate than in 2017 – a year that marked a peak in rent rises in the current boom in

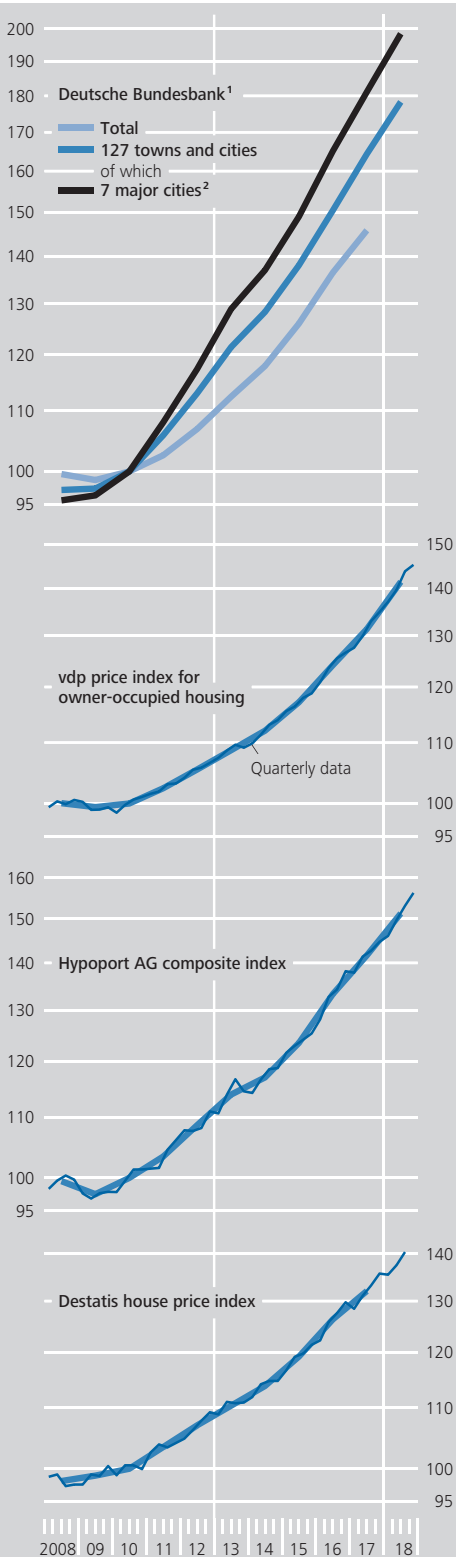
¹ These comments relate to how price developments in the housing market are to be seen in the context of the real economy. For an assessment from a financial stability perspective, it is also necessary to take a look at developments in lending and credit standards in housing funding. See Deutsche Bundesbank. Financial Stability Review, November 2018.

² The data for towns and cities overall are based on information provided by bulwiengesa AG on prices in 127 German towns and cities.

³ The seven big cities are Berlin, Cologne, Düsseldorf, Frankfurt am Main, Hamburg, Munich and Stuttgart.

Price indices for housing

2010 = 100, annual data, log scale



¹ Weighted by transaction. Bundesbank calculations based on price data provided by bulwiengesa AG. ² Berlin, Cologne, Düsseldorf, Frankfurt am Main, Hamburg, Munich, Stuttgart.
 Deutsche Bundesbank

demand on the housing market. In line with price developments in owner-occupied housing, rents outside the urban areas were accelerating. According to the vdp data on new lettings in multiple-family houses in Germany as a whole, rent adjustments, at 4¾%, were significantly stronger than in the previous year.

Last year, too, much of the ongoing strong housing demand was due to households' positive outlook for incomes and the extremely favourable labour market conditions. Added to this was the fact that the average rate of interest on mortgage loans in 2018, at 1.9%, was only slightly up on its prior-year level. As in 2017, adjusted for the expected rate of inflation in Germany over the longer term, no more than extremely low interest costs were charged on average for acquiring housing. Even so, rates of interest on mortgage loans – which remained virtually unchanged since 2016 – are unlikely to have continued generating any additional price-driving impulse in the reporting year through relief for households when purchasing residential property. As the macroeconomic price-to-income ratio showed a marked rise in 2018 compared with the previous year, households' average interest burden from new loans taken up for house purchase is also likely to have increased as a share of disposable income.⁴

The housing supply continued to expand in the reporting year. The number of completed dwellings in 2018 is likely to have been up on the year again, although it was probably still below the level reached on an average of the period since German reunification.⁵ Building permits last year are un-

⁴ See the Deutsche Bundesbank's system of indicators for the German residential property market at <https://www.bundesbank.de/en/statistics/enterprises-and-households/system-of-indicators-for-the-german-residential-property-market>

⁵ On an average of the period from 1990 to 2017, some 330,000 dwellings were completed. This admittedly includes the overshooting construction activity in the preceding housing boom in the mid-1990s, which increases the reference figure in arithmetical terms.

likely to have exceeded the previous year's level of around 350,000 units. This might be connected with the increasing lack of land available for building in the regions which are in particular demand. According to Federal Statistical Office figures, prices of building land continued to rise sharply at 7¾% in the first half of 2018. Moreover, capacity utilisation in the construction sector was very high in the reporting year. Construction prices went up considerably by 4.4% and thus significantly more sharply than construction costs. Construction firms, given the extremely good orders situation in the sector, were evidently able to expand their margins substantially.

Last year, too, the overall price dynamics of housing in Germany are likely to have been largely a reflection of developments in housing supply and demand. According to current estimates, which also incorporate revised figures for the regionally specific explanatory factors, upward price deviations

in the towns and cities were still between 15% and 30%.⁶ Further standard indicators for assessing housing price developments likewise point to ongoing marked price exaggerations in the urban housing markets. For example, the price-rent ratio for apartments in towns and cities increased again in the reporting year and was more than 20% above its multi-year mean since reunification; in the seven big cities it was 30% higher.

⁶ These figures are based on updated results of a regionally differentiated estimation model. They refer to an estimated fundamental residential property price, which is conceptually based on the sustainable components of economic and sociodemographic variables. See F. Kajuth, T. Knetsch and N. Pinkwart, Assessing House Prices in Germany: Evidence from a Regional Dataset, *Journal of European Real Estate Research*, Vol. 9 No 3, pp. 286-307, 2016. Regionally differentiated price data for 2018 were available at the time of publication only for urban districts. The estimates on which the current figures for overvaluations are based refer to the reference period until 2017; district-specific price information for Germany as a whole is currently available up to that date.

were partially passed on to consumers.² Excluding energy and food, the average rate of inflation in the final quarter of the year went up from 1.1% to 1.3%. According to provisional figures, consumer prices (HICP) in January 2019 were 1.7% higher than in the same month of 2018³.

Owing to continuing steep increases in energy and food prices and somewhat stronger dynamics in prices for services, inflation on an average of 2018, at 1.9%, was, in fact, slightly higher than in the year before when a figure of 1.7% had been recorded. Although the core inflation rate, i.e. the rise in consumer prices excluding energy and food, was, at 1.2%, above its longer-term average in line with the overutilisation of aggregate production capacity, it did not show any further increase on the year. Price-dampening effects, such as the partial abolition of childcare centre fees, the appreciation of the euro, which lasted into spring, and substantial reductions on clothing and shoes,

also played a part in this context. The rise in housing rents continued at an unchanged pace (for developments in housing prices in 2018, see the box on pp. 53 ff.).

■ Order books and outlook

The underlying cyclical trend is probably also still subdued after the start of the new year. For instance, the decline in new manufacturing orders, aside from the automotive sector, indicates that industrial activity will barely pick up momentum again during the first quarter. This is also suggested by the much gloomier business expectations in major economic sectors, as is indicated in surveys conducted by the ifo

Underlying cyclical trend likely to remain subdued for time being

² The CPI rate went up in the fourth quarter from +2.1% to +2.2%.

³ The CPI figure was +1.4%. On account of the change-over in the consumer price index base year from 2010 to 2015 and the associated revisions, more precise information on price developments in January 2019 will not be available until the end of February.

... and were again up more sharply on average in 2018

Demand for industrial goods and construction services

Volumes, 2015 = 100, seasonally adjusted, quarterly data



Source of the unadjusted figures: Federal Statistical Office.
 1 Only calendar-adjusted.
 Deutsche Bundesbank

Institute and the German Chambers of Industry and Commerce (DIHK). This will probably curb the propensity to invest. A large number of factors are weighing on business sentiment at present. These include uncertainty relating to Brexit, political developments in some euro area countries and the continued smouldering trade conflict between the United States and China. However, there are no indications that the slowdown will lead to a downturn. For one thing, some of the negative one-off factors from the third quarter of last year are resolving themselves. Looking at the automotive industry, for instance, following a downturn in summer, there are signs of at least a gradual return to normal activity in motor vehicle production and exports. For another thing, the still very favourable labour market situation and strong wage growth suggest that private consumption is picking up again and, unlike in the second half of 2018, counterbalancing the dampening effects. Further support will be provided by the fiscal measures introduced at the start of 2019.

Sentiment in the German economy became much gloomier at the turn of 2018-19. According to surveys by the ifo Institute and the German Chambers of Industry and Commerce (DIHK), this downward slide was due to a marked deterioration in business expectations. Confidence fell on a broad front, meaning that enterprises in all the major sectors of the economy were looking to the future with less optimism. By contrast, the assessment of the business situation showed no more than a minor deterioration. According to the ifo Institute, short-term expectations for manufacturing output were also defying the pessimistic sentiment. This contrasted with a further decline in both short-term export expectations as surveyed by the ifo Institute as well as export expectations for the next 12 months as shown by the DIHK survey, which meant they were below their respective long-term average.

Stronger deterioration in sentiment

Industrial orders were up slightly in the final quarter of 2018. A significant role was played

Sharp decline in inflow of orders excluding the automotive sector

by the automotive sector, which had suffered a significant decline, mainly in export orders, in the third quarter and was now experiencing quite substantial order growth. This was especially the case for export orders, but the sector also reported sharp growth in domestic orders. By contrast, the orders situation deteriorated significantly in the other sectors of industry and also on a broad front. In line with this, ifo Institute surveys reveal a distinctly worse assessment of the backlog of manufacturing orders, although the figures were still clearly above the multi-year average despite the downgrading.

Construction boom continues

The boom in the construction sector is likely to have continued at the beginning of 2019. This is indicated by the ongoing excellent orders situation in the sector. New orders received by the main construction sector on an average of October and November 2018 – data are available up to this time – showed a substantial increase compared with the third quarter. In line with this, enterprises reported that the reach of their orders books was still at an exceptionally high level, with them having been, for some

time now, only slightly below their peak up to this point in time. Given the high level of capacity utilisation in the main construction sector and the considerable shortage of suitably skilled workers, it is nevertheless not very likely that the construction sector will be able to step up its output perceptibly in the short term.

The conditions are in place for private consumption – which was tending to weakness in the second half of 2018 – to expand at a faster pace again in the first quarter of 2019. Alongside the ongoing favourable employment growth and substantial pay rises, additional stimulus is being provided by various fiscal measures which entered into force at the start of 2019 and give relief, in particular, to employees. This positive situation is reflected in consumer sentiment. The consumer climate index calculated by the Gesellschaft für Konsumforschung (GfK) has thus risen somewhat from an already very high level. Consumers' income expectations also showed a clear rise, reaching a level last recorded in the third quarter of 2017.

Additional impetus for private consumption