

Economic conditions in Germany

Macroeconomic situation

German economy sees dip in growth in 2018 Q1

Having expanded at a very robust pace in the preceding quarters, aggregate activity in Germany grew at a considerably slower pace in the first quarter of the current year. According to the Federal Statistical Office's flash estimate, real gross domestic product (GDP) was 0.3% up on the final quarter of 2017 in seasonally and calendar-adjusted terms. One-off effects were partly responsible for the slower pace of growth. For instance, economic activity was probably inhibited by the extremely high number of working hours lost due to illness. Moreover, the declines in exports and government consumption are likely to remain temporary, and it can therefore be expected that the economy in Germany will continue to thrive. That said, the underlying cyclical trend may well have decelerated earlier than expected to a pace of expansion that is now only slightly above potential growth. This would lead to a slower increase in the existing high level of aggregate capacity utilisation. Although the labour market continued to develop extremely positively and the orders situation in industry is still very good, new orders were returning to a more normal level towards the end of the period under review and enterprises' optimism regarding their business expectations has been declining for some time now.

No contribution to growth from industry; exports on the decline

Industry made no significant contribution to aggregate growth in the first quarter of 2018 and therefore did not act as a driver of the economy. Declining exports are likely to have been the main factor in this context. Similarly, the construction sector, which was experiencing capacity shortages, was apparently unable to step up its output despite demand being at a high level. In contrast to subdued growth in manufacturing, however, the business-related services sectors continued on their upward path. On the demand side, exports were no longer playing their role as the main driving

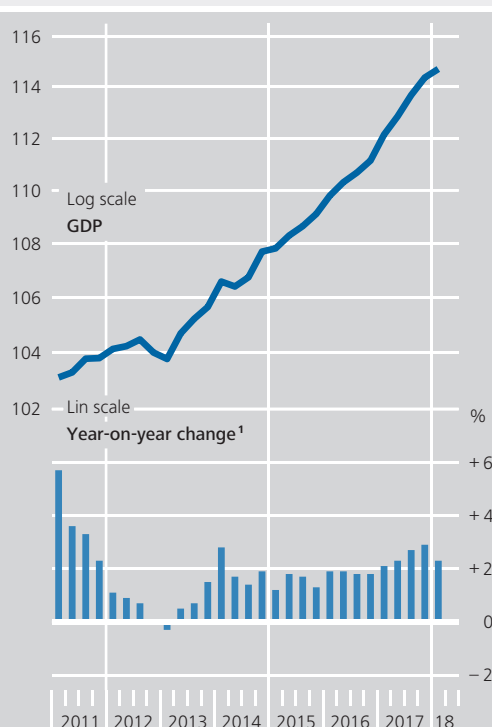
force. Instead, the more modest growth in economic activity was underpinned by investment and private consumption, the latter picking up again following a lull in the second half of 2017.

In real terms, German firms' export business declined significantly in the first quarter of 2018. This is likely to be due mainly to a countermovement to the very strong export growth at the end of 2017. According to the figures available up to February, demand for German products fell sharply, particularly in non-euro area countries. This was especially true of exports to the United States and the United Kingdom. Exports to the south and east Asian emerging market economies, Japan and the OPEC countries also showed a considerable decline, however. By contrast, exports to central and eastern European countries as well as busi-

Exports clearly down on prior-quarter level

Overall output

2010 = 100, price and seasonally adjusted



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



ness with China declined only slightly, and exports of goods to the newly industrialised economies in Asia even posted a significant increase in terms of value. Trade with the Russian Federation continued on its recent upward trend path in line with its economic recovery.

Enterprises' propensity to invest still high

Despite weaker industrial activity, firms are likely to have continued stepping up their investment in new machinery and equipment after the turn of the year. Capital goods imports fell steeply, although this was probably more than offset by substantially higher domestic sales by German capital goods manufacturers. Strong increases in sales were re-

corded in particular by the mechanical engineering sector, motor vehicle manufacturers and producers of computers, electronic and optical products. In line with this, industrial enterprises, at least in some cases, probably became less reluctant to renew their motor vehicle fleets. This is indicated by the number of commercial motor vehicle registrations, which went up again following a downturn in the second half of 2017.

Construction investment is likely to have clearly exceeded its prior-quarter level. The figures on turnover in the main construction sector available up to February indicate an increase, above all, in investment in private housing construction and in commercial buildings. Investment in public construction was probably also expanded.

Construction investment likely to have increased significantly

Following the period of weak growth in the second half of 2017, private consumption in the first quarter of 2018 is again likely to have made a marked contribution to aggregate growth. The strong increase in the number of new car registrations by households indicates that motor vehicle traders recorded substantial sales growth. Hotel and restaurant services were also buoyant, while activity in the retail trade sector proved to be more subdued. There was a sharp drop in sales in online and mail order trade as well as in sales of textiles, clothing and footwear at retail outlets. Sales of DIY and home improvement goods also fell sharply. This is likely to have been due to the unfavourable weather conditions in February and March.

Private consumption back on expansionary course

Against the backdrop of declining exports and rather subdued domestic demand, imports were somewhat down in the first quarter of 2018. While – according to the figures available up to February – fewer goods were imported from the euro area, demand for products from non-euro area countries remained on an upward trajectory. There was strong growth in imports from the United States in particular. Japanese products were also in greater demand on the German market. Imports from

Decline in imports

China and the south and east Asian emerging markets, on the other hand, declined considerably. British manufacturers also suffered a steep drop in sales in Germany. The sharp rise in oil prices at the turn of the year was probably the main driving force behind the growth in terms of the value of imports from Russia and the OPEC countries.

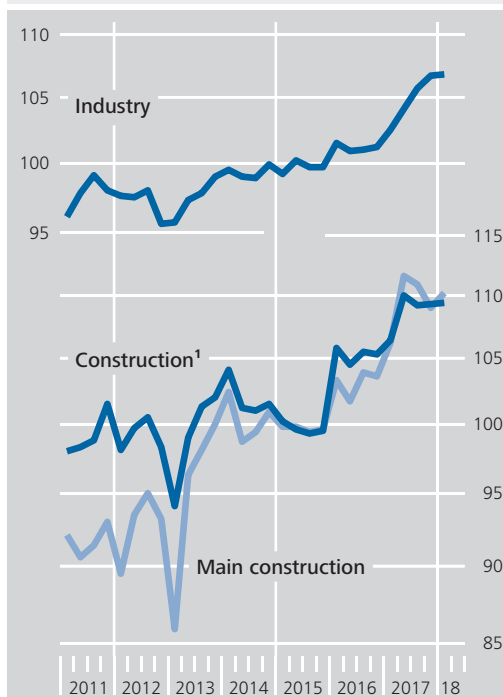
■ Sectoral trends

Industry lacking further stimulus

Following the strong expansion in industrial production in Germany in the second half of last year, output in the first quarter of 2018 persisted at the previous quarter's level in seasonally adjusted terms (see page 50 for further information on the changeover to a new software tool for seasonal adjustment of the official statistics). The extremely high number of working days lost due to illness in the winter months along with the existing tight staffing levels in some cases is likely to have led to losses of production in industry, as well as in other sectors of the economy. Against this backdrop, developments in the individual industrial sectors were quite mixed. Above all, the overall decline in intermediate goods output had a dampening impact, with manufacturers of chemical products, in particular, cutting back their output substantially. The manufacture of basic metals was also down on the high level of the previous quarter. Although there was a marginal increase in the manufacture of capital goods, the overall positive result was mainly attributable to motor vehicle production, which tends to be quite susceptible to fluctuations. This suggests that strike-related production losses in the run-up to the collective wage agreement in the metalworking and electrical engineering industries, which are likely to have contributed to the sharp decline in February, were at least partially offset over the quarter as a whole. Output in the consumer goods industry expanded strongly, however. Nevertheless, the upturn in this sector was also due to strong growth in just one branch of industry, namely the manufacture of pharmaceutical

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

products. In contrast to the other sectors, the particularly strong flu epidemic this year could have given a boost to demand in the first quarter.

According to the Ifo Institute, there was a slight decline in the capacity utilisation of tangible fixed assets in manufacturing. While output was stagnating, production capacities were probably being expanded further on the back of an ongoing high level of investment activity on the part of enterprises. The decline in capacity utilisation was broadly based across sectors.

Slight decline in industrial capacity utilisation

In the construction sector, too, output in the first quarter of 2018 remained at the level of the previous quarter in seasonally adjusted terms. This means that the subdued growth that has been persisting for almost a year was still ongoing. While output in the main construction sector saw a steep increase, it contracted significantly in the finishing trades. In

Construction sector probably still at full capacity

Gradual changeover to JDemetra+ software for seasonal adjustment of the official statistics

The Bundesbank is currently phasing in JDemetra+ as its new software tool for the seasonal adjustment of official economic indicators in Germany.¹ JDemetra+ is thus replacing Census X-12-ARIMA (version 0.2.8), which was the program used previously. JDemetra+ is a user-friendly open source software tool which contains both the X-12-ARIMA method² developed by the US Census Bureau and the TRAMO/SEATS method³ promoted by Banco de España. The methods most widely used internationally and recommended for seasonal adjustment in Europe are thus both available in this software.⁴ Its modular implementation means that JDemetra+ can be easily enhanced and adapted.

The National Bank of Belgium and the Bundesbank are responsible for developing and maintaining JDemetra+ in line with the recommendations of the European Statistical System and the European System of Central Banks. It is also used by the European Central Bank, Eurostat and many of the national statistics offices and central banks in the European Union.⁵

The approach applied at present with Census X-12-ARIMA will initially be retained by the Bundesbank in JDemetra+. The new software has benefits in terms of its graphical user interface and its multiple new diagnostics for statistical quality assurance.⁶ Looking ahead, the changeover to JDemetra+ will make it possible to extend the scope of application to higher-frequency data, such as weekly or daily data.⁷ Moreover, the inclusion of the ARIMA model-based approach, which was carried over from TRAMO/SEATS, could further improve the quality of the adjusted data.⁸

In connection with JDemetra+ a number of software plug-ins used in the official German statistics are being made available by the Bundesbank to other users free of charge. This allows, for example, the aggregation and disaggregation of chain indices, the calculation of mathematical contributions to growth and the centring of regressors for the purposes of calendar adjustment.⁹

¹ In collaboration with the Federal Statistical Office, the indices for orders received by industry and the stock of orders in industry as well as the indices of output in the production sector were already adjusted using the new software in April and May 2018, respectively. These will be followed in stages by the other monthly indicators, such as the current account and the monetary indicators. Jointly with the Federal Employment Agency, the changeover to the new seasonal adjustment software for their labour market indicators is scheduled for the second half of 2018. The changeover to JDemetra+ for the seasonal adjustment of the national accounts is planned to be implemented along with the major revision scheduled for the summer of 2019.

² See DF Findley, BC Monsell, WR Bell, MC Otto and BC Chen (1998), *New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program*, *Journal of Business and Economic Statistics*, 16, pp 127-177; D Ladiray and B Quenneville (2001), *Seasonal Adjustment with the X-11 Method*, Volume 158 of *Lecture Notes in Statistics*, New York, Springer.

³ *Time Series Regression with ARIMA Noise, Missing Observations and Outliers and Signal Extraction in ARIMA Time Series*. For further information, see V Gómez, A Maravall (2001), *Seasonal Adjustment and Signal Extraction in Economic Time Series*, Chapter 8, in D Peña, GC Tiao and RS Tsay (eds), *A Course in Time Series Analysis*, New York, J Wiley and Sons.

⁴ See Eurostat (2015), *ESS Guidelines on Seasonal Adjustment*, ISSN 2315-0815, section 3.1.

⁵ See Eurostat and European Central Bank (2015), *Note to the attention of the members of the ESS and ESCB*, Ref Ares(2015)241738.

⁶ JDemetra+ contains, inter alia, additional tests for identifying seasonality, residual seasonality and residual calendar effects as well as the description of the stability of the model.

⁷ See Deutsche Bundesbank, *Seasonal adjustment of daily data*, *Monthly Report*, March 2018, p 40.

⁸ See K Weibel (2016), *A data-driven selection of an appropriate seasonal adjustment approach*, *Deutsche Bundesbank Discussion Paper*, 7/2016.

⁹ For further information, see <https://www.bundesbank.de/Redaktion/EN/Standardartikel/Statistics/jdemetra.html?nsc=true&https=1>

the main construction sector, it was building construction that flourished in particular, whereas activity in the civil engineering sector showed a marked decline. On the whole, the economic indicators for the construction sector are continuing to paint the picture of a sector working at full capacity. According to the Ifo Institute, capacity utilisation in the main construction sector reached a record level. The percentage of firms affected by staff shortages as well as the reach of the order books remained only marginally below their peak levels. The fact that weak demand is probably not behind the largely stagnant construction output is also shown by construction prices, which, after the turn of the year, were going up, at over 4%, even more strongly than before.

Significant overall expansion of activity in the services sector

On the whole, economic activity in the services sectors is likely to have increased markedly in the first quarter of 2018. This is suggested in particular by real wholesale sales, which continued on their upward trajectory despite the subdued growth in industry. A boost was probably also provided by the motor vehicle trade, which benefited from the high demand for motor vehicles in both the private and the commercial sectors. Furthermore, there was a strong expansion in business activity in the hotel and restaurant sector. By contrast, enterprises in the retail trade sector (excluding the motor vehicle trade) suffered a significant setback in their business. However, enterprises in the other service sectors are likely to have enjoyed higher turnover. This is indicated by the Ifo Institute's excellent assessment of the business situation in this economic sector.

■ Labour market

Labour market situation and outlook very favourable

Conditions in Germany's labour market continued to improve at the beginning of 2018. Employment increased very substantially in the first quarter of the year owing to the continued exceptionally strong growth in employment subject to social security contributions. Moreover, the fall in exclusively low-paid part-time

employment was less pronounced than in the previous quarters. Self-employment is still on the decline, however. Unemployment fell quite rapidly in the first quarter, probably because the dampening effect of the increasing number of refugees registered as unemployed had run its course. The supply of job vacancies in the reporting quarter grew at a far slower pace than it had done previously, and other leading indicators also deteriorated somewhat towards the end of the period under review. The outlook is nonetheless still very upbeat.

The number of persons in work in Germany in the first quarter of 2018 showed a somewhat stronger rise than in the previous quarters. Total employment went up by 196,000 persons, or 0.4%, after adjustment for seasonal variations. This accelerated growth is primarily attributable to the rise towards the end of the year and in January. In February and March, by contrast, enterprises were more cautious with regard to the number of new staff they hired, although special factors may also have played a part in this. The fact that the development is nevertheless very favourable overall is due solely to the increase in employment subject to social security contributions. According to initial estimates by the Federal Employment Agency (BA), January and February already saw a 0.6% increase in the number of jobs compared with the average of the fourth quarter of 2017.

Strong employment growth

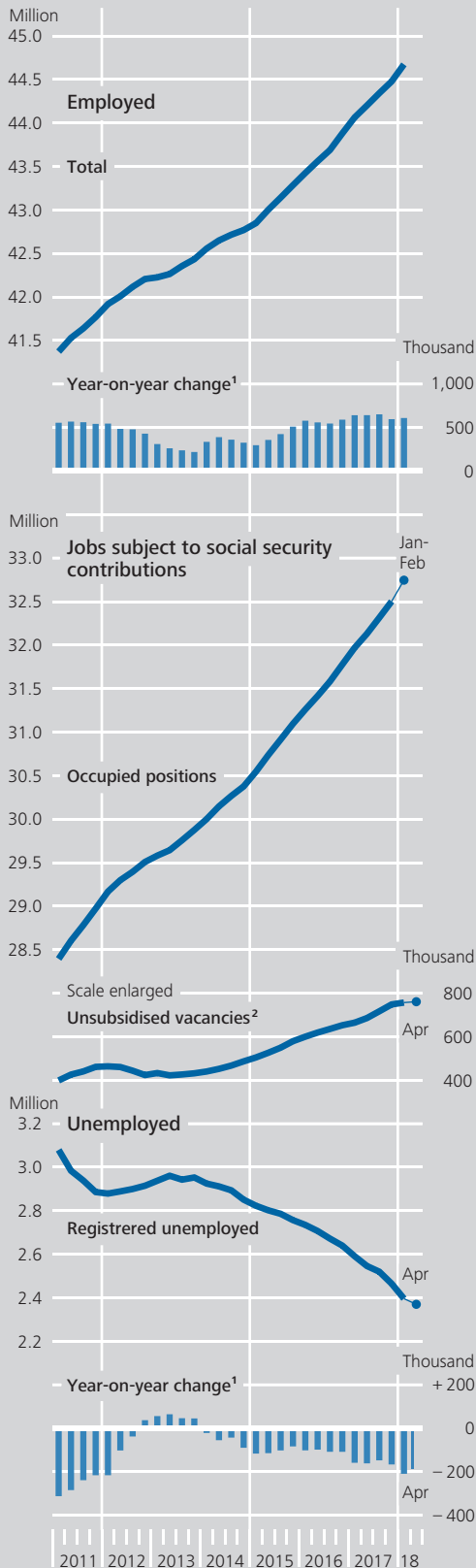
From a sectoral perspective, the faster pace of employment growth in both manufacturing and construction is particularly striking when compared with the previous quarters. In addition to the high level of demand, the mild weather at the beginning of the first quarter could have played a role in this respect.¹ Employment continued to grow at an above-average rate, including in the areas of business-related services, logistics and the information and communication sector. A large number of

Employment growth broadly based

¹ Data on employment subject to social security contributions in March, in which the weather was unfavourable in a long-term comparison, are not yet available.

Labour market

Seasonally adjusted, quarterly



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

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new positions subject to social security contributions were also created in the health and social care sector and in the retail trade. By contrast, there was no growth this time in temporary agency employment or in the finance and insurance sector.

In February 2018, 773,000 more positions subject to social security contributions were filled than in the same month last year. Half of the newly created positions were taken up by German nationals and half by foreign nationals. Job growth was possibly driven, first, by immigration and, second, by a higher labour force participation rate of German nationals. Since 2004, in particular, there has been a significant rise in the participation rate of all persons aged between 15 and 74 in Germany – a common age category used internationally in order to also take account of the not insignificant share of the working population aged over 65. At 69.5%, it is now on a level comparable to Scandinavia, the Netherlands and the United Kingdom, making it one of the highest in the EU.² The labour force participation rate among older persons and women showed a particularly sharp increase. These are two groups of individuals which have a greater preference for part-time working arrangements. Accordingly, the importance of part-time work has increased considerably in recent decades across all regular jobs subject to social security contributions.³ As much as 45% of employment growth over the past 12 months was due to part-time positions subject to social security contributions. The reasons for the development of part-time working in Germany in comparison with France are explained in the box text on pages 54 to 56.

Labour supply boosted by immigration and higher labour force participation rate

Registered unemployment showed a very clear fall in the first quarter in seasonally adjusted terms. Taking the average of the reporting

Further decline in unemployment

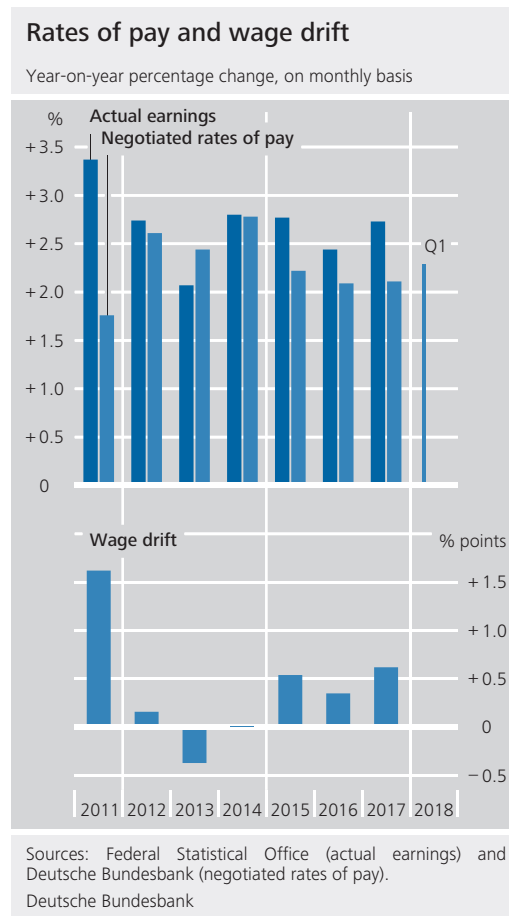
2 According to Eurostat data based on Labour Force Surveys of the individual EU member states.

3 At the same time, the number of involuntary part-time employees, who are unable to find a full-time position on the labour market, has fallen sharply in line with the favourable development in unemployment.

period, the decline, at 70,000 persons, was also distinctly stronger than in the preceding quarters. However, due to rounding, the unemployment rate contracted by only 0.1 percentage point compared with the average of the fourth quarter of 2017. Although there was a relatively small decline in unemployment in April, the unemployment rate fell further to 5.3%. The favourable development in the first quarter lowered the number of unemployed persons receiving the basic welfare allowance as well as of those registered in the statutory insurance system. In the latter, the current figure for unemployed persons was exceptionally low, at 800,000, and further reductions are likely to become increasingly difficult to achieve. The average length of time for which unemployed persons claim insurance benefits (SGB III) is now less than three months.

Labour market outlook remains very favourable despite slight deterioration in some indicators

Enterprises are still planning to increase their workforce. However, at the end of the period under review, the relevant leading indicators declined slightly from their earlier peak levels. This is true of both the Ifo employment barometer, which surveys the employment plans of enterprises in industry over the coming three months, as well as the IAB labour market barometer, which collects information from employment agency managers about the expected regional development over the next three months. The Federal Employment Agency's BA-X job index has not shown any further rise since as long ago as the end of 2017. The slight decline in the inflow of new vacant positions reported to the Federal Labour Agency had a particularly dampening effect, while the number of reported vacancies was continuing to rise up to the end of the period under review owing to the increasing duration of vacancies. The production sector, in particular, reported more vacancies, with the IAB Job Vacancy Survey for the first quarter of 2018 coming to the same conclusion. The leading indicator for unemployment in the IAB labour market barometer also showed something of a contraction recently, but remained in positive territory. In line with this, the official unemployment figure



is likely to fall at a slower pace over the following months than it did in the first quarter.

Wages and prices

The rise in negotiated rates of pay in the first quarter of 2018 remained modest given the very tight situation on the labour market. It was still being shaped predominantly by the moderate wage settlements of last year's pay rounds and the low increases in remuneration from the second stage of pay rounds agreed earlier. Including additional benefits, the year-on-year increase in negotiated pay rates, at 2.3%, was somewhat stronger than in the final quarter of 2017, however. As in the preceding quarters, actual earnings are likely to have gone up distinctly more sharply.

Negotiated rates of pay moderate in the first quarter, too

The new agreements which management and labour sealed in the current pay round reflect the very positive situation on the labour market

Wage agreements so far often with higher pay rises

Part-time employment in Germany and France

In the European Union, the proportion of employed persons working part time varies considerably among the member states. In the case of employed persons aged between 30 and 54 years – a group in which employment behaviour should barely be affected by differences in the normal duration of education or options for early retirement – the proportion in part-time employment in Germany, at 27%, was 10 percentage points higher on average between 2006 and 2016, for example, than in France.¹ This difference is almost entirely

due to the part-time employment of women, with half of the women employed in Germany working reduced hours, compared with 30% in France. By contrast, there was hardly any difference in the employment behaviour of men, with 6% of employed males working part time in Germany and 5% in France.

The European labour force survey provides detailed information on the motivation behind the decision to work part time. Factors such as education or illness play only a minor role for persons aged between 30 and 54 years. A considerable proportion of women working part time (38% in France and 21% in Germany) are involuntarily working reduced hours, with the term “involuntary” meaning here that they were unable to find full-time work or that no suitable facilities were available to care for children or incapacitated adults.² In line with the less favourable labour market situation in France, a materially higher proportion of women there stated that they were unable to find full-time work. If the situation on the labour market were comparable in the two countries, involuntary part-time employment would probably be considerably lower in France, meaning that the discrepancy relative to the proportion of women working

Reasons for part-time employment*

Reason	Germany	France
Involuntary part-time employment		
Could not find a full-time job	15	32
Looking after children or incapacitated adults and suitable care facility not available or unaffordable ¹	6	6
“Voluntary” part-time employment		
Looking after children or incapacitated adults, irrespective of the care facilities offered ¹	16	34
Other (including other family or personal responsibilities)	48	22
Other reasons		
Looking after children or incapacitated adults, without mention of the role played by the care facilities offered ¹	12	0
In education or training	1	1
Own illness or disability	2	5
Total	100	100

Source: Bundesbank calculations on the basis of microdata from Eurostat (labour force survey). * Proportion of women in part-time employment aged between 30 and 54, average for 2006 to 2016. ¹ If looking after children or incapacitated adults was given as a reason for the part-time employment, respondents were asked about the role played by the care facilities offered in their decision to work part time. In Germany, the second question was quite often left unanswered. This outcome is captured in the table under “Looking after children or incapacitated adults, without mention of the role played by the care facilities offered”.

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¹ This analysis is based on an ongoing research project which uses microdata from Eurostat (2017 labour force survey). Responsibility for the conclusions drawn from these survey results does not lie with Eurostat, the European Commission or the institutions collecting the data.

² In Germany, there was quite often no response to the question about the role that the care facilities offered played in the decision to work part time. Assuming that the proportion of responses given on the importance of care facilities offered matched the proportion within the group of part-time workers who indicated looking after children or incapacitated adults as a reason for their reduced hours, this would raise the percentage of women in involuntary part-time employment in Germany to 24%.

part time in Germany would be even greater on the whole. Equal proportions of respondents in Germany and France indicated a lack of suitable facilities to care for children or incapacitated adults as the main reason for their involuntary part-time employment.³

Other reasons for part-time employment are looking after children or incapacitated adults, irrespective of the care facilities offered, as well as “other” reasons (including other family or personal responsibilities). Both categories are referred to as “voluntary” part-time employment in this box. This choice to work part time could be influenced by social norms, for instance, or financial incentives available in tax and benefit systems. For example, in both Germany and France, married couples are taxed on their combined income. With a progressive tax scale in place, this tends to reduce the attractiveness of additional work on the part of the second earner. In addition, the option in Germany of taking up exclusively low-paid part-time employment without being subject to individual income tax, while still benefiting from non-contributory co-insurance in the statutory health insurance scheme (“mini jobs”), is also likely to have an influence.

The determinants of women’s “voluntary” part-time employment in place of full-time employment in both countries can be investigated in more detail using microdata from the labour force survey. According to estimations in the logistic regressions, a higher level of education reduces the probability of part-time employment in both countries. Married women are more likely to work part time than single women, with the correlation being stronger in Germany. This is consistent with the expectations resulting from the analysis of the tax systems. In Germany, in particular, the percentage burden of taxes and social security contributions

Results of the country-specific logistic regressions^o

Variables	Germany	France
Level of education (reference = mean: upper-secondary and post-secondary, non-tertiary)		
High: tertiary	- 0.117***	- 0.012***
Low: below primary, primary and lower-secondary	0.050***	0.026***
Marital status (reference = single)		
Married	0.202***	0.071***
Age of youngest child in years (reference = no child under 25 living in the same household)		
< 1 year	0.097***	0.188***
1 to 2 years	0.372***	0.262***
3 to 6 years	0.368***	0.126***
7 to 14 years	0.271***	0.075***
15 to 24 years	0.159***	0.030***
Two or more children	0.094***	0.092***
Unemployment rate (as a percentage)	- 0.011***	- 0.005***
Percentage of employed women working part time	0.011***	0.008***
Observations	284,049	546,026

^o Average marginal effect on the estimated probability of women being in “voluntary” part-time employment. Unemployment rates and the proportion of women working part time are regional and year-dependent and relate to the age group of 15 to 64 years. Further regressors: dummy variable for widowed/divorced, dummy variables for age in years (30 to 34, 35 to 39, ...), year (2006, ..., 2016) and sector. *** Statistically significant at the 1% level.

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rises for married couples if the spouse with the lower income increases their hours worked.⁴ However, a separate estimation reveals that a person’s marital status has a considerably weaker impact in eastern Germany (including Berlin) than in western Ger-

³ The share might be even greater in Germany, as 12% of women working part time cited looking after children or incapacitated adults as a reason for their reduced hours, without mentioning the role played by the care facilities offered. In France, a considerably larger portion of public funds go toward childcare than in Germany; in 2013, public expenditure on childcare as a percentage of GDP was 1.3% in France, compared with 0.6% in Germany (source: OECD Family Database).

⁴ See OECD (2016), PF1.4: Neutrality of tax-benefit systems, OECD Family Database, http://www.oecd.org/els/soc/PF1_4_Neutrality_of_tax_benefit_systems.pdf

many. This difference within the same tax system is an indication that, alongside financial incentives, the social environment may play a role.⁵ Another sign of this is the fact that women are more likely to choose part-time employment if it is already more prevalent among working women.⁶

As the number of children increases, so too does the probability of a woman being in “voluntary” part-time employment. Additional estimations show that a large proportion of women with children under the age of one year temporarily give up employment altogether. The part-time effect is at its highest when the youngest child is between one and three years old. The marginal impact of the age of the youngest child is considerably greater in Germany than in France,⁷ which is consistent with the longer tradition of infants and children being placed in public childcare facilities there.⁸

The labour market situation could also influence a person’s decision to work part time. If regional and year-dependent unemployment rates are included in the estimations, it is evident that higher unemployment levels are associated with a reduced tendency to “voluntarily” work part time. One explanation for this could be that an unfavourable labour market poses a risk of lower household income, and thus the desire to work full time is likely to increase.

The results for both countries, which were estimated separately, show that marital status and the existence of economically dependent children have a stronger influence on women’s decision to work part time in Germany than they do in France. However, the effects outlined relate to different samples. For this reason, a logit model, in which the explanatory variables are interacted with a country dummy, is used for both countries to examine in more detail the dif-

ferences between the countries in the probability of “voluntary” part-time employment in place of full-time employment for various groups. After taking into account discrepancies in education, marital status and age, number and age of children, regional and year-dependent labour market conditions, regional and year-dependent part-time employment of women, years of observation and economic sectors, single women are found to have a slightly greater tendency to be in part-time employment in France than in Germany. By contrast, this tendency is visibly weaker among married women in France compared with Germany. Among women not living with children in the same household, estimated part-time employment rates are relatively similar in both countries. By contrast, the probability of part-time employment is higher for women with children in Germany than in France, with the difference particularly pronounced when the youngest child is between the ages of three and fifteen.

Overall, the results suggest that the current economic and social environments play an important role in households’ decisions regarding the labour supply in Germany and France.

⁵ Fernández and Fogli (2009) demonstrate that culture – defined in their study as the distribution of preferences and beliefs – plays a role in the participation of women in the labour market. See R Fernández and A Fogli (2009), Culture: an empirical investigation of beliefs, work, and fertility, *American Economic Journal: Macroeconomics*, 1 (1), pp 146-177. For an overview of the literature on the effect of culture on economic outcomes, see R Fernández (2011), Chapter 11 – Does culture matter?, in *Handbook of Social Economics*, Vol 1, Elsevier, pp 481-510.

⁶ When individuals base their choices on the behaviour of others in their peer group, this is referred to as a “peer effect”.

⁷ The results for eastern Germany, on the other hand, lie somewhere between those of western Germany and France in this respect.

⁸ See J Fagnani (2012), Recent reforms in childcare and family policies in France and Germany: what was at stake?, *Children and Youth Services Review*, 34 (3), pp 509-516.

to a greater extent and, in many instances, provide for significantly higher wage increases than in the two preceding years. Even so, in several sectors such as the metal-working and electrical engineering industries, the increases enter into force only after a number of months with no pay rise. The agreements for central and local government and for the metal-working and electrical engineering industries which, measured by the number of persons employed, will affect the largest number of employees in this year's wage round, will see wages go up in annualised terms from around 3% to 3¼%. The rise is thus significantly higher than the figure of around 2½% in both cases in the earlier agreements of 2016. What is also striking is the extremely long duration of the wage agreements – at 30 and 27 months, respectively – which has been a feature of recent settlements in other sectors, such as Deutsche Telekom, Deutsche Post and Volkswagen. The pay settlement proposed by the mediator for the main construction sector likewise provides for a long duration of 26 months, besides boosting pay levels considerably. The wage demands of the trade unions for the forthcoming negotiations in the chemicals industry, the painting and varnishing trade and the regional hotel and catering trade amount to 6% over a term of 12 months. In the wage negotiations that have already been concluded, there were some sectors in which the social partners attached particular importance to options allowing workers greater flexibility in aligning their working time arrangements with their individual circumstances.

Core Harmonised Index of Consumer Prices inflation shows clear increase again in the reporting period

Consumer prices (HICP) rose fairly steeply again at the beginning of the year. In a quarter-on-quarter comparison, they went up by 0.4%, although there were shifts in the components driving this development. Whereas inflation in the fourth quarter of last year was driven mainly by energy and food prices, the upward movements in the prices of these goods eased noticeably in the first quarter of the current year. Excluding these two components, the rate of price increase was, by contrast, well

Import, export, producer and consumer prices

2010 = 100, seasonally adjusted, quarterly



Source of unadjusted figures: Federal Statistical Office. **1** Producer price index for industrial products in domestic sales. **2** Harmonised Index of Consumer Prices. **3** Not seasonally adjusted.

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into positive territory again following a temporary dip at the end of 2017. This was largely attributable to services, where prices accelerated much more strongly in the first quarter of the year – partly because Easter fell early this year. In services, there was a reversal of the earlier weak price trend in travel services, and the reductions in premiums for motor vehicle insurance of the fourth quarter of 2017 no longer had a dampening impact and were, in fact, completely offset again in some cases.⁴ In add-

⁴ See Deutsche Bundesbank, The volatility of the traditional core inflation rate in Germany, Monthly Report, November 2017, pp 49-51.

ition, rents were being raised somewhat more strongly. The rate of price increase for non-energy industrial goods prices remained weak, however. One likely factor in this is that import prices were falling quite noticeably up to the end of last year owing to the appreciation of the euro, and this was now having a lagged impact on consumer prices. Headline HICP inflation nonetheless fell from 1.6% to 1.3%⁵ on the year owing to the perceptible rise in energy and food prices at the beginning of 2017. By contrast, the rate excluding energy and food products went up from 1.2% to 1.3%, partly because the price-dampening impact of the reform of long-term care in January 2017 was no longer influencing the year-on-year rate.

Increase in consumer prices in April mainly due to energy

In April, consumer prices rose again overall by a seasonally adjusted 0.1%. This was mainly due to higher prices for energy on the back of the steep rise in crude oil prices, although prices for food and rents were up somewhat, too. By contrast, other services became distinctly cheaper, chiefly as a result of price reductions for travel services. Prices for non-energy industrial goods barely changed. Annual headline HICP inflation went down from 1.5% to 1.4% and, excluding energy and food, from 1.3% to 1.0%.⁶ One factor in this was that the Easter holidays fell in April last year but partly in March this year.

Increasing price pressure expected not just in energy

In the coming months, the headline rate is likely to register a distinctly higher level, mainly on account of a marked rise in crude oil prices. Excluding energy, higher domestic wage pressure will probably begin to emerge more clearly, as the impact of the earlier appreciation of the euro, which is mostly apparent in non-energy industrial goods, is likely to have largely run its course. Import prices, which are in line with these goods at the consumer level, have not shown any further fall since the beginning of the year, while consumer prices were showing a slight upward tendency at the industrial producer level.

■ Orders received and outlook

Following the dip in growth during the first quarter, the German economy is likely to expand more strongly again in the second quarter of 2018. The one-off impact of the exceptionally severe outbreak of influenza, which probably had a dampening impact on economic activity in the first quarter, is coming to an end, and government consumption is also set to rise again. Moreover, the orders situation in industry remains very favourable despite a recent drop in incoming orders. Similarly, short-term production expectations have not fallen any further according to the Ifo Institute, but have risen somewhat, and exports are likely to have bounced back from their lull. As a result, manufacturing, in particular, could re-emerge as a major driver of economic activity. With utilisation of tangible fixed assets in manufacturing entrenched at a high level and sales prospects looking favourable overall, enterprises are likely to further expand their investment in machinery and equipment. Buoyed by positive labour market dynamics and accelerating wage growth, private consumption is also likely to rise distinctly. Nonetheless, the less optimistic sentiment among businesses at the end of the period under review, in particular, suggests that economic activity is unlikely to match last year's high growth rates overall.

Stronger growth again in second quarter

Sentiment in the German economy failed to match last year's pursuit of record levels and deteriorated again somewhat. The Ifo business climate index was published for the German economy as a whole for the first time in April – it used to cover only trade and industry (manufacturing, main construction sector, wholesale and retail trade) – and contracted for the fifth consecutive month. While less optimistic expectations were initially the main reason for this decline, the assessment of the business situation was also no longer quite as favourable at the end of the period under review. The

German economy less optimistic

⁵ Annual headline CPI inflation fell from 1.7% to 1.5%.

⁶ Annual CPI inflation held steady at +1.6%.

deterioration was broadly based and affected the manufacturing sector, the wholesale and retail trade, as well as the services sector (excluding trade). Only the business climate in the main construction sector saw an improvement, climbing again to the record level achieved last year. However, the declining optimism of German enterprises overall is to be viewed in the context of the business climate currently still being at a far above-average level at present. Especially with regard to the expectations component, fundamental concerns about adverse effects on world trade due to increasing protectionism, as well as the current geopolitical tensions, may have dampened optimism among economic agents.

Steep fall in new orders

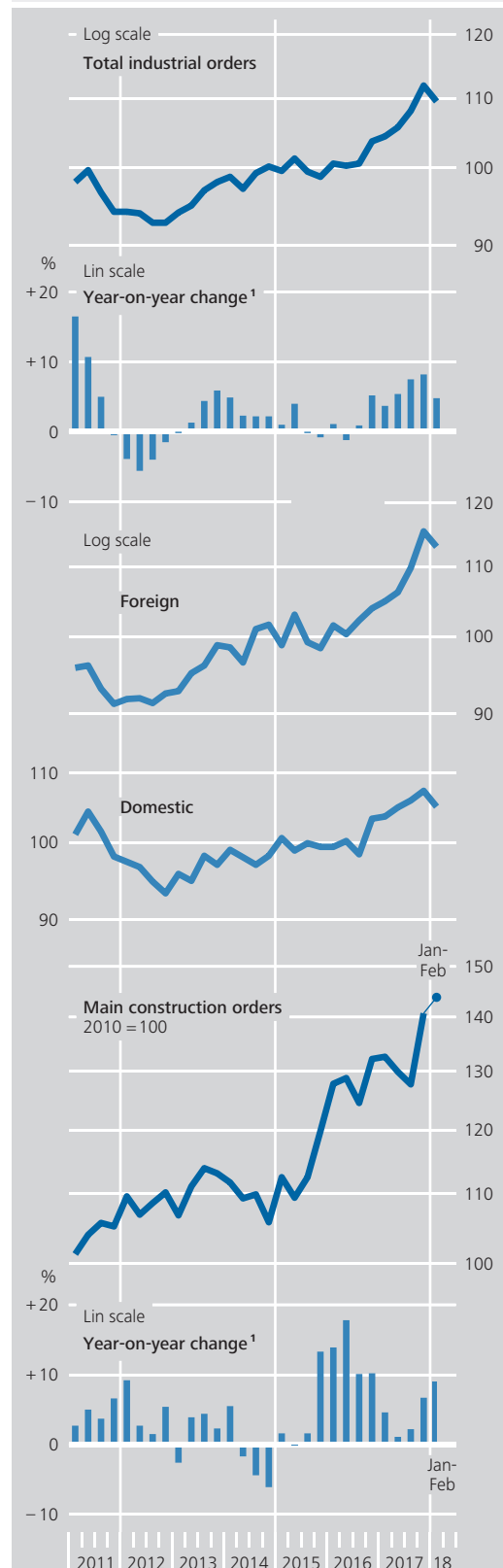
Industrial orders fell steeply in the first quarter of 2018. In regional terms, fewer new orders were received, in particular, from Germany and non-euro area countries. By contrast, the inflow of orders from the euro area increased slightly. However, here there was a particularly large percentage of major orders for other transport equipment, which often go into production only with a considerable time lag. If such orders are not included, new orders showed a sharp decline, too. Broken down by sector, the slump was likewise quite widely spread. All things considered, the decline in orders should still be seen against the backdrop of the extremely substantial inflow of orders in the second half of the previous year. The order backlog in March was significantly up on the level of the previous quarter, however. According to surveys carried out by the Ifo Institute, the reach of the order books remains at an exceptionally high level, despite a slight decline. The orders situation in industry can thus still be considered as very positive.

Only moderate growth in output expected despite construction boom

The construction boom in Germany is likely to continue in the second quarter of 2018. Demand for construction work is still at a high level. After seasonal adjustment, new orders in the main construction sector in January and February – the most recent months for which

Demand for industrial goods and construction work

Volume, 2015 = 100, seasonally adjusted, quarterly



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

statistics are available – showed a further rise on the already exceptionally robust final quarter of 2017. According to the Ifo Institute, the assessment of the business situation in this sector reached a new all-time high, and the expectations of construction firms have increased recently, too. That said, the construction sector is likely to see only moderate growth in output. The main reason for this is that construction firms are still facing significant capacity constraints. As in the preceding months, along with the considerable shortage of staff, the fact that the level of equipment utilisation is much higher than average is making it difficult to step up output.

Private consumption is likely to continue its role as a major driver of growth in the second quarter. The situation and short-term outlook on the labour market both still look favourable despite the dip in growth after the turn of the year. Moreover, the latest pay agreements are likely to give an additional boost to households' disposable income. Although consumer sentiment showed a slight deterioration according to the consumer climate index compiled by the market research institution Gesellschaft für Konsumforschung (GfK), the index remains at an extremely high level. This is also true of consumers' economic and income expectations, which went down somewhat of late.

Private consumption remains an important driver of growth