

# KIEL INSTITUTE **ECONOMIC OUTLOOK**

## **German Economy** Spring 2019

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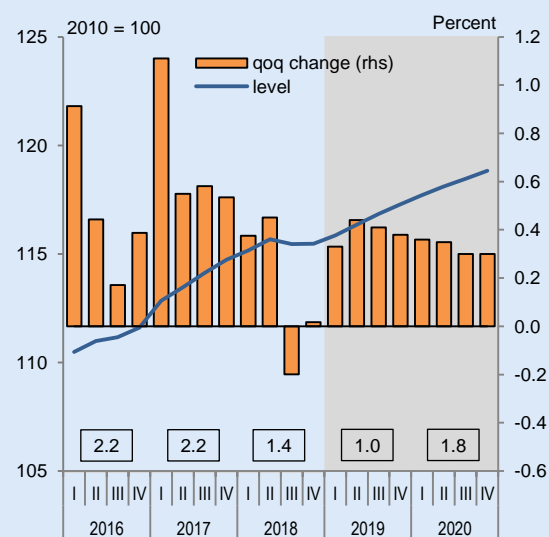
## GERMAN ECONOMY COOLS DOWN

*Martin Ademmer, Jens Boysen-Hogrefe, Salomon Fiedler, Dominik Groll, Nils Jannsen, Stefan Kooths, and Galina Potjagailo*

The German economy has lost speed. After an extremely high economic momentum until the middle of last year, production stalled noticeably. Temporary stress factors such as the problems of automobile manufacturers with the new vehicle certification standard (WLTP) and the low water levels of the Rhine river contributed substantially to this development. However, even disregarding those factors, economic dynamics have slowed down. By putting a strain on exports, the external economic environment, which is characterized by pronounced political uncertainty, has also contributed to darkening Germany's economic outlook. Furthermore, capacity bottlenecks seem to hinder production. The proportion of companies complaining about production disruptions due to shortages in skilled labor as well as in material and equipment has stood at unusually high levels for some time now. Against this background, we have revised downward our forecast for GDP growth for the current year by 0.8 percentage points; it now stands at 1.0 percent. With the expiration of the temporarily burdening factors, economic momentum is expected to pick up again. Household consumption will increase more quickly due to rapidly rising disposable incomes. Companies are planning to further increase employment, and effective earnings are likely to grow at above-average rates given the shortage on the labor market. In addition, there will be noticeable reductions in taxes and social contributions and increases in public spending. For the year 2020, we expect a GDP growth rate of 1.8 percent. However, this acceleration primarily stems from the significantly higher number of working days; the economic trend continues to face downwards. Public budget surpluses will be reduced significantly, arriving at a structurally balanced budget by 2020.

**Temporary factors were a major drag on GDP growth in the second half of 2018, but the overall economic environment has weakened as well.** In the second half of 2018 GDP basically stagnated (Figure 1). This came as a surprise as GDP had been increasing vividly in the quarters before. Leading indicators pointed to a lower momentum of the German economy, but not to a full stop in growth. A significant part of the stagnation of GDP can be explained by temporary factors.<sup>1</sup> Problems with the new WLTP standard had a negative impact on GDP growth in the third quarter of about 0.5 percentage points, as production plunged by about 7 percent in July

**Figure 1:**  
Gross domestic product, 2016–2020



Quarterly data, price, seasonally and calendar adjusted, qoq change. Annual data: price adjusted, annual rate (boxes).

Source: Federal Statistical Office, *Fachserie 18, Series 1.3*; shaded: IfW forecast.

<sup>1</sup> For a detailed analysis of the extent to which special factors in Germany weighed on industrial production in the last year compared to an international panel of countries, see Ademmer and Jannsen: [IfW-Box 2019.3](#) (available in German language only).

and has not fully recovered since.<sup>2</sup> Moreover, limited transportation of important producer goods due to low water levels of the Rhine river dampened GDP growth by 0.2 percentage points in the third quarter and by 0.1 percentage points in the fourth quarter according to our estimates.<sup>3</sup> Finally, a plunge in production of pharmaceuticals (production of a blockbuster drug was permanently stopped) may have subtracted another 0.2 percentage points of GDP growth in the fourth quarter. Thus, even though these estimates are surrounded by some uncertainty, large parts of the deceleration in GDP growth in the third and the fourth quarter can be explained by these temporary effects. The dampening effects of these temporary factors have started to fade out since the turn of the year. Still, we do not expect GDP to return to the high momentum of the last years, given that the overall economic environment has also deteriorated. Business expectations have already been falling for more than a year in the face of a more fragile international environment. Beyond that, a historically high percentage of firms report that their production is limited due to difficulties in hiring new staff and equipment shortages. For these reasons, we expect GDP growth to decelerate in comparison to the years between 2014 and 2017.

#### **CPI inflation shifted downwards a little.**

After consumer prices rose by more than two percent as recently as November, inflation has since weakened markedly and came in at 1.6 percent in February. This was mainly due to the energy component: while energy prices rose at a very fast clip until November, they have decreased noticeably since then. In addition to that, according to the schedule introducing a new base year for the CPI statistic every five years, at the turn of the year the consumer basket was adjusted. Because consumers tend to reduce purchases of those goods which exhibit relatively fast price increases over time (and correspondingly increase purchases of goods whose prices increase relatively slowly), inflation rates after such adjustments will generally be lower than those calculated using the original basket. Thus, inflation rates for the individual months of 2018 were about 0.2 percent lower under

the new weighing scheme. Insofar as recent price trends in the different components persist, reported inflation will also be lower in the near future. Against the backdrop of persisting but somewhat declining overutilization of production capacities and a weaker increase in energy prices primarily in the current year, we expect inflation to come in at 1.5 and 1.7 percent in 2019 and 2020, respectively (Table 1).

#### **The ECB announced additional expansionary measures.**

There will be a further series of TLTROs between September 2019 and March 2021 which will provide loans with a maturity of two years. Furthermore, Eurosystem credit operations will be conducted as fixed rate full allotment tenders at least until March 2021. As for the Asset Purchase Programme, repayments from maturing securities will be reinvested for an extended period of time beyond an eventual ECB interest rate increase. Such a rate hike will not take place in 2019, and we expect it to happen in the second half of 2020 at the earliest. Financing conditions should continue to be accommodative throughout the forecast period. We expect yields on 10-year German government bonds to rise only marginally, from 0.1 percent today to 0.4 percent at the end of 2020.

#### **German foreign trade decelerates, despite catch-up effects after temporary headwinds.**

After a decline in the third quarter, German exports grew at a restrained pace in the fourth quarter of 2018. Much of the weakness was due to the above-mentioned temporary obstacles that persisted until the end of the year. But a slowdown in German export markets and heightened policy uncertainty related to looming trade conflicts also weighed on export activity. At the beginning of 2019, exports are set to gain some momentum. Monthly data on nominal exports of goods predicts a pronounced increase in the first quarter, in line with catch-up effects commonly occurring after temporary disruptions. However, soft indicators weakened further over the last months, falling below their historical averages. Over the remaining forecast horizon, exports will increase only moderately, in line with the decelerated, but solid expansion in German export markets, as well as slight tailwinds from a gradual improvement in price competitiveness. German imports expanded strongly over the summer semester, but slowed down at the end of the year, most likely because of the previous build-up in inventories of imported goods. In the first

<sup>2</sup> See Janssen 2019: [IfW-Box 2019.3](#) (available in German language only).

<sup>3</sup> For a detailed analysis of the economic impact of the low water level in the Rhine River, see the Ademmer et al. 2018: [IfW-Box 2018.17](#) (available in German language only)

**Table 1:**  
Key indicators, 2017–2020

	2017	2018	2019	2020
Gross domestic product (GDP), price-adjusted	2.2	1.4	1.0	1.8
Gross domestic product, deflator	1.5	1.9	2.3	2.1
Consumer prices	1.5	1.7	1.5	1.8
Labor productivity (per hour worked)	0.9	-0.0	-0.1	1.0
Employment (1,000 persons)	44,269	44,838	45,291	45,618
Unemployment rate (percent)	5.7	5.2	4.8	4.6
in relation to nominal GDP				
Public sector net lending	1.0	1.7	1.2	0.7
Gross public debt	63.9	59.9	56.7	54.1
Current account balance	8.0	7.4	7.2	7.2

GDP, consumer prices, labor productivity: percentage change on previous year; unemployment rate: as defined by the Federal Employment Agency.

Source: Federal Statistical Office, *Fachserie 18, Series 1.2*; Federal Employment Agency, *Monthly Bulletin*; Federal Employment Agency, *Employment Statistics*; shaded: IfW forecast.

quarter of this year, imports are set to expand strongly, as indicated by nominal imports of goods in January. For the remaining forecast period, we expect imports to grow at a vivid, but decelerating pace, in line with the dynamics of business investment, private consumption, and exporters' demand for intermediate goods.

**Private consumption will accelerate again after weak growth in 2018.** Last year private consumption increased by only 1 percent (2017: 1.8 percent), even though wages and salaries were still expanding at high rates due to the good shape of the labor market. The weak growth in private consumption was in line with the savings rate rising by more than 0.5 percentage points. Numerous underlying factors can lead to an increase of the savings rate, and they are difficult to disentangle. Moreover, the savings rate is subject to large revisions. In our forecast, we therefore assume that the savings rate will remain at its seasonally adjusted level of 10.9 percent in the fourth quarter of 2018. Therefore, going forward, the ongoing strong increases in wages and salaries will be reflected more strongly in private consumption. On top of that, several measures of the government (e.g., adjustments of the income tax, lower social security contributions, and increasing transfer payments in the pension system) will boost disposable income of private households in the forecast period. We expect these measures to increase disposable income by about 0.5 percentage points in both 2019 and 2020. Against this backdrop, private consumption will increase by 1.5 percent this year and by 1.8 percent next year.

**Business investment will moderate while construction investment continues to boom.** We expect business investment to decelerate in the forecast period mainly due to the worsening in business expectations and the high uncertainty that arises from the international policy environment. However, business survey data indicate that firms still plan to increase their investment, probably with capacity utilization still being considerably above normal levels as one important underlying reason. Meanwhile, the construction sector continues to boom as many supportive factors, such as stimulating financing conditions, the need for additional living space, and the favorable public budget situation, are still in place. Even though capacity utilization in the construction sector has somewhat declined recently, it is still close to historical highs and capacity bottlenecks still represent the main limiting factor for construction investment at the moment. We therefore expect construction investment to increase basically with the rate at which construction firms increase their capacities.

**Wage growth remains high, employment growth weakens.** Negotiated wages and salaries are expected to increase by 2.6 percent in 2019, after 2.8 percent in 2018. The slight deceleration is only temporary and primarily due to the collective labor agreements in manufacturing and construction, which were fixed last year and imply smaller pay raises for the current year. In 2020, we expect total negotiated wages and salaries to rise by 2.9 percent. Due to the sustained tightness on the labor market, which will prevail despite the slow-down in economic

activity, effectively paid gross wages and salaries continue to rise faster than negotiated wages and salaries throughout the entire forecast period; we expect increases of 3.0 percent in 2019 and 3.3 percent in 2020. Since German reunification, rates above 3 percent were recorded only in 1992/1993 and in 2011. As labor productivity has faltered last year and probably will continue its weakness this year as well, unit labor costs are rising considerably. As a result, the ratio between unit labor costs and prices deteriorates, dampening the demand for labor. Employment growth has already declined in the second half of 2018 in line with the economic slow-down. Against this background, and given that leading labor market indicators have stagnated or even deteriorated slightly, we view the extremely strong employment increase in January as a temporary exceptional phenomenon. We expect employment growth to decelerate further in the course of 2019 and 2020 due to both weaker economic activity and intensifying labor-supply restrictions in light of the ageing population and smaller gains from migration. All in all, unemployment will shrink further, albeit at decreasing rates.

**After a record high in 2018, the fiscal surplus will decline in 2019 mainly due to the expansionary stance of fiscal policy.**

Various measures will affect the budget of the federal government and the social insurance system, including substantial pension increases, and some income tax reductions. In addition, payments to the EU will rise markedly. Since surpluses were high in previous years, municipalities and federal states are likely to increase public investment and consumption. On the other hand, interest payments are set to decline further, and payments due to the resolution of the HSH Nordbank do no longer weigh on budgets. Due to the good performance of the labor market, the downswing puts only mild pressure on government budgets. In sum, the surplus will shrink, but will remain at a high level.

**Fiscal policy will continue to be expansionary in 2020, but the fiscal impulse will be smaller.**

Interest payments will decline more slowly, while expenditures for public consumption and investment expand at rates similar to those in the previous year. The surplus deteriorates further and the structural budget balance will be close to zero.

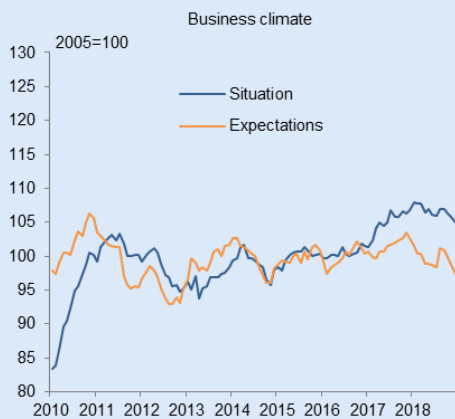
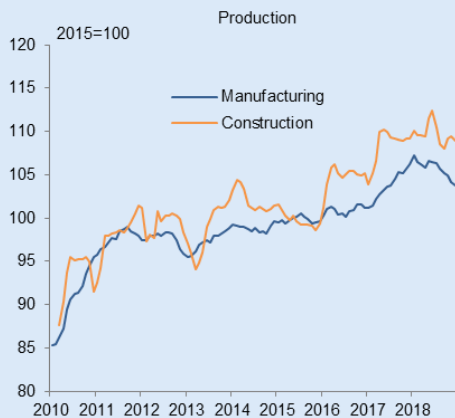
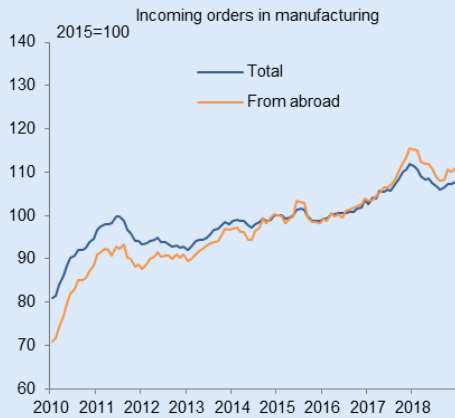
## Data annex

# Contents

1. Leading indicators .....	7
2. Monetary conditions and prices .....	8
3. External trade.....	10
4. Domestic expenditure.....	12
5. Industries.....	14
6. Wages.....	15
7. Employment.....	16
8. Public finances.....	17
9. GDP and its components .....	18
10. The German economy, 2015–2018 .....	20
11. National accounts .....	21

## 1. Leading indicators

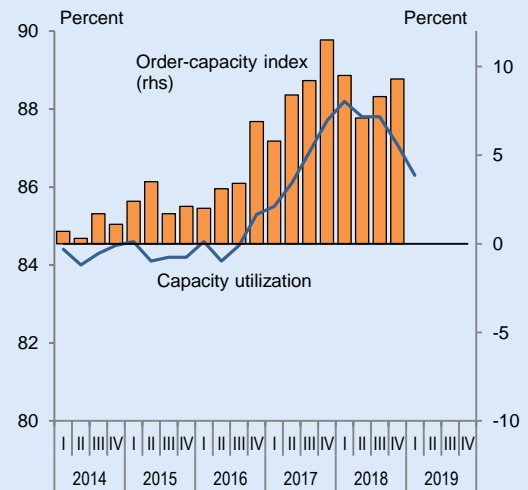
**Figure 1.1:**  
Leading indicators, 2010–2019



Monthly data, seasonally adjusted; incoming orders in manufacturing and production: 3-month moving average.

Source: Deutsche Bundesbank, *Saisonbereinigte Wirtschaftszahlen*; ifo, *Konjunkturperspektiven*; own calculations.

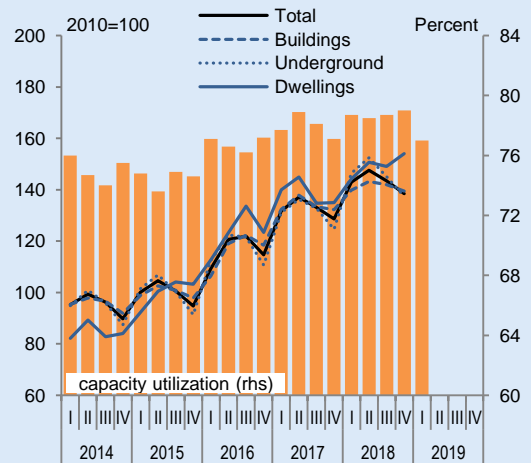
**Figure 1.2:**  
Capacity utilization, 2014–2019



Quarterly data, seasonally adjusted; capacity utilization in manufacturing (axes cross at normal capacity utilization).

Source: EU Commission, *Business Survey*; Deutsche Bundesbank, *Monthly Report*.

**Figure 1.3:**  
Order stocks and capacity utilization in construction industry, 2014–2019

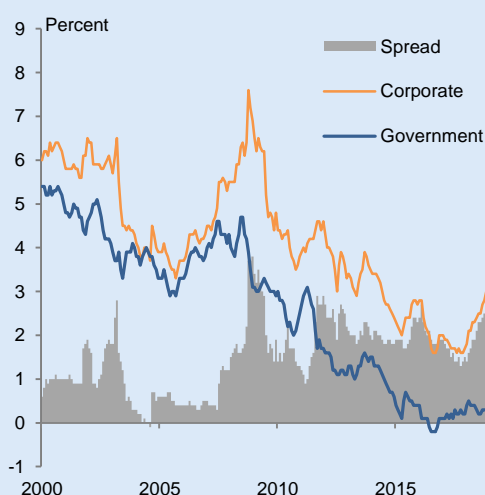


Quarterly data. Capacity utilization: seasonally adjusted (last observation: 2-months average); order stocks: price, seasonally and working-day adjusted.

Source: Federal Statistical Office, *GENESIS database*; ifo, *Konjunkturperspektiven*.

## 2. Monetary conditions and prices

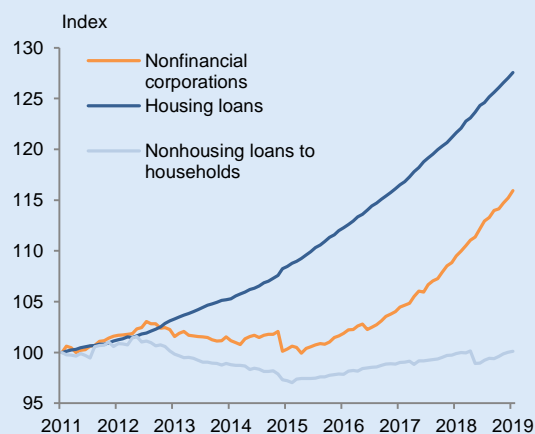
**Figure 2.1:**  
Bond yields, 2000–2019



Monthly data, average maturities above three years.

Source: Deutsche Bundesbank, *Monthly Reports*; own calculations.

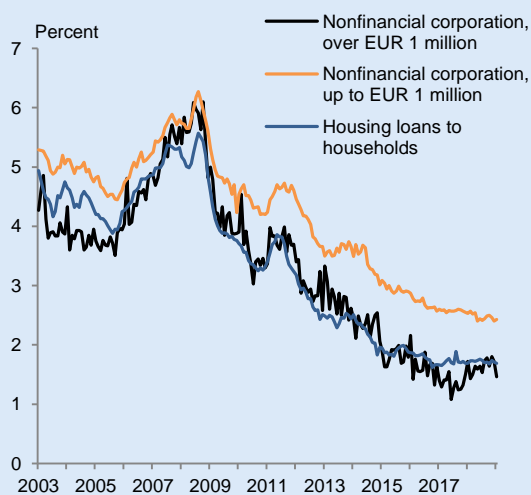
**Figure 2.3:**  
Sum of loans, 2011–2019



Index: Jan 2011=100; Monthly data.

Source: Deutsche Bundesbank, *Seasonally Adjusted Business Statistics*.

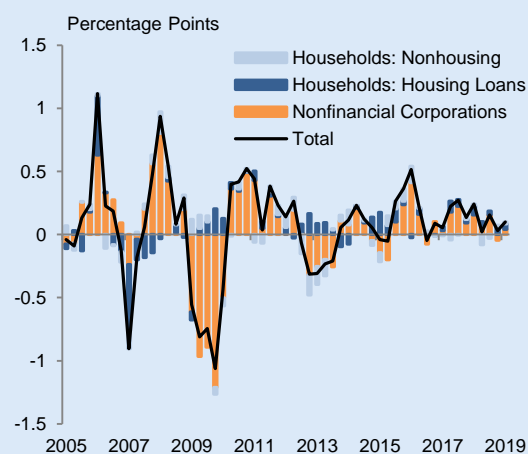
**Figure 2.2:**  
Loan interest rates, 2003–2019



Monthly data; new business, 1–5 years, fixed.

Source: Deutsche Bundesbank, *MFI interest rate statistics*.

**Figure 2.4:**  
Credit impulse, 2005–2019



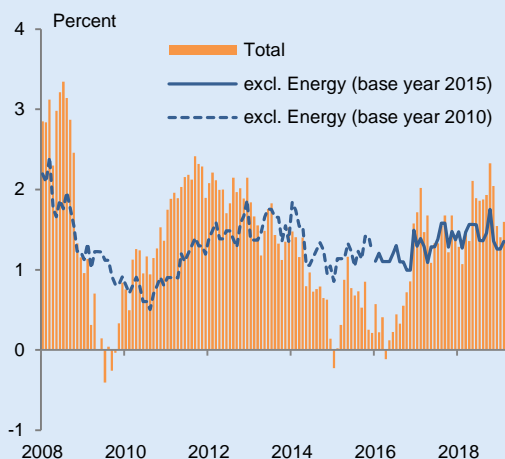
Quarterly data, most recent quarter based on first month; calculations follow Biggs et al. (2009), *Credit and economic recovery*, DNB Working Paper 218, De Nederlandsche Bank, Amsterdam.

The credit impulse is the change of the credit growth relative to the growth in GDP.

Source: Deutsche Bundesbank, *Seasonally Adjusted Business Statistics*; own calculations.



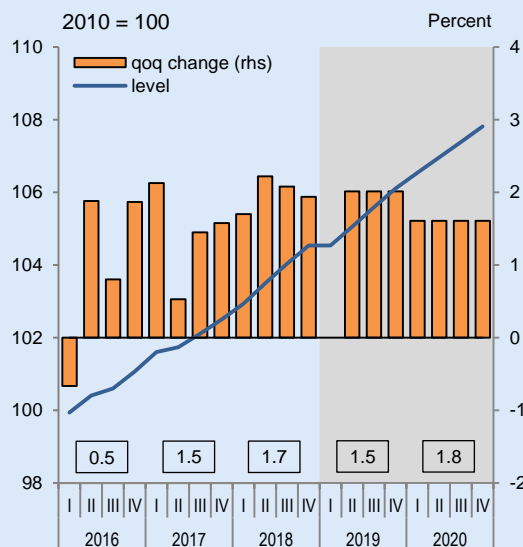
**Figure 2.5:**  
Consumer prices, 2008–2019



Monthly data; year-on-year change.  
After the introduction of the new base year 2015, the Statistisches Bundesamt has not yet published all new time series for the period before 2015. We therefore fall back on the old data for that period of time.

Source: Deutsche Bundesbank, *Time series databases*; own calculations.

**Figure 2.6:**  
Consumer price index, 2016–2020



Quarterly data, seasonally adjusted, qoq change, annualized. Annual data: price adjusted, annual rate (boxes).

Source: Federal Statistical Office, *Fachserie 18, Series 1.3*; shaded: IfW forecast.

**Table 2.1:**  
Projections and assumptions on the international environment, 2017–2020

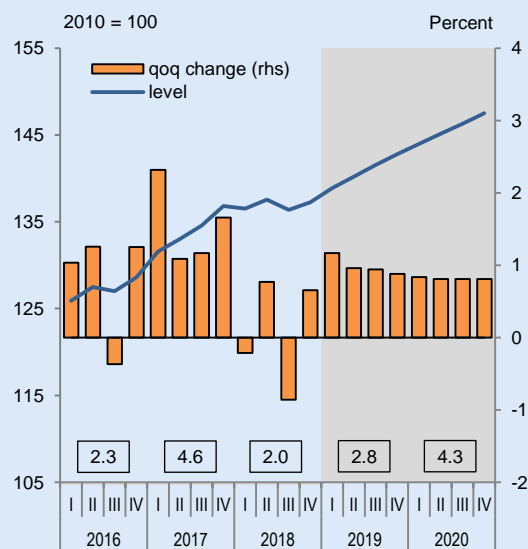
	2017				2018				2019				2020			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
ECB key interest rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25
Long-term interest rate	0.3	0.3	0.4	0.4	0.6	0.5	0.4	0.4	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.4
US-dollar/euro exchange rate	1.07	1.10	1.18	1.18	1.23	1.19	1.16	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Price competitiveness	86.3	86.9	89.0	89.1	89.5	89.4	90.2	90.0	89.3	89.1	89.0	88.9	88.8	88.9	89.0	89.1
Export markets	0.79	0.85	0.78	0.78	0.68	0.68	0.55	0.44	0.55	0.55	0.54	0.53	0.52	0.52	0.52	0.52
Oil price	53.6	49.6	52.1	61.4	66.9	74.5	75.1	68.8	63.0	66.2	66.6	66.9	67.2	67.6	67.9	68.2

ECB key interest rate: main refinancing operations; long-term interest rate on 9–10 year bonds; price competitiveness: against 36 trading partners, based on the deflators of total sales, index: 1991:I = 100, increasing values indicate deterioration of price competitiveness; export markets: GDP growth in 41 countries, weighted with shares in German exports, change over previous quarter. Oil Price: US-Dollar per barrel North Sea Brent.

Source: ECB, *Monthly Bulletin*; Deutsche Bundesbank, *Monthly Bulletin*; IMF, *International Financial Statistics*; own calculations; shaded: IfW forecast or assumption.

### 3. External trade

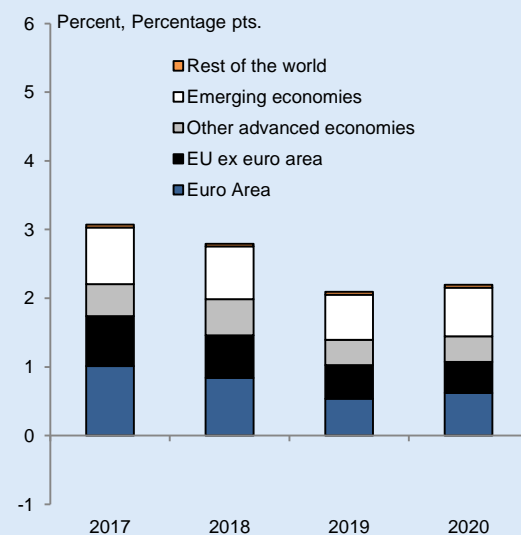
**Figure 3.1:**  
Exports, 2016–2020



Quarterly data, price, seasonally and calendar adjusted, qoq change. Annual data: price adjusted, annual rate (boxes).

Source: Federal Statistical Office, *Fachserie 18, Series 1.3*; shaded: IFW forecast.

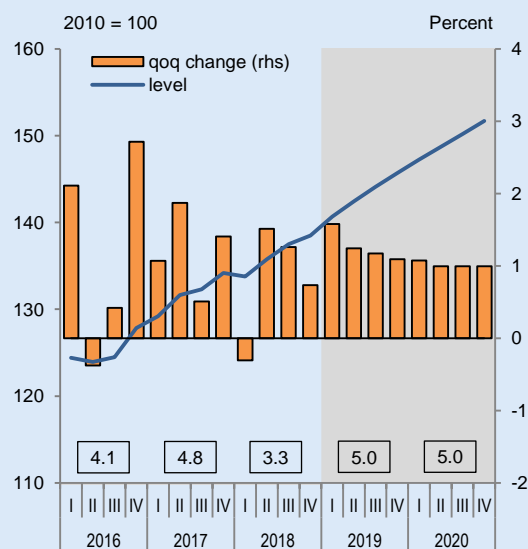
**Figure 3.3:**  
German export markets, 2017–2020



Annual data, volumes; GDP growth in 59 countries, weighted with shares in German exports.

Source: Federal Statistical Office, *Fachserie 7 Series 1*; national sources; own calculations; 2019–2020: IFW forecast.

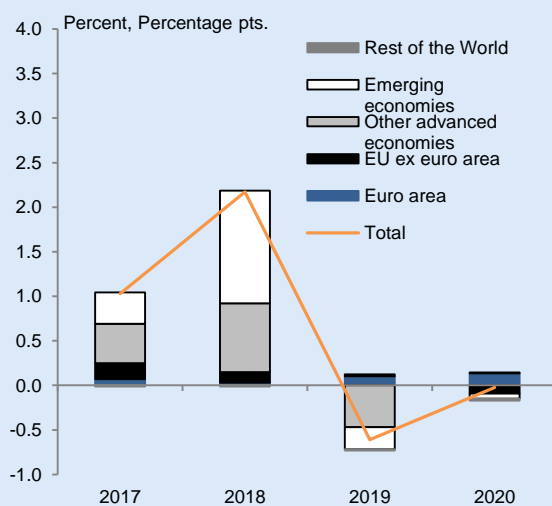
**Figure 3.2:**  
Imports, 2016–2020



Quarterly data, price, seasonally and calendar adjusted, qoq change. Annual data: price adjusted, annual rate (boxes).

Source: Federal Statistical Office, *Fachserie 18, Series 1.3*; shaded: IfW forecast.

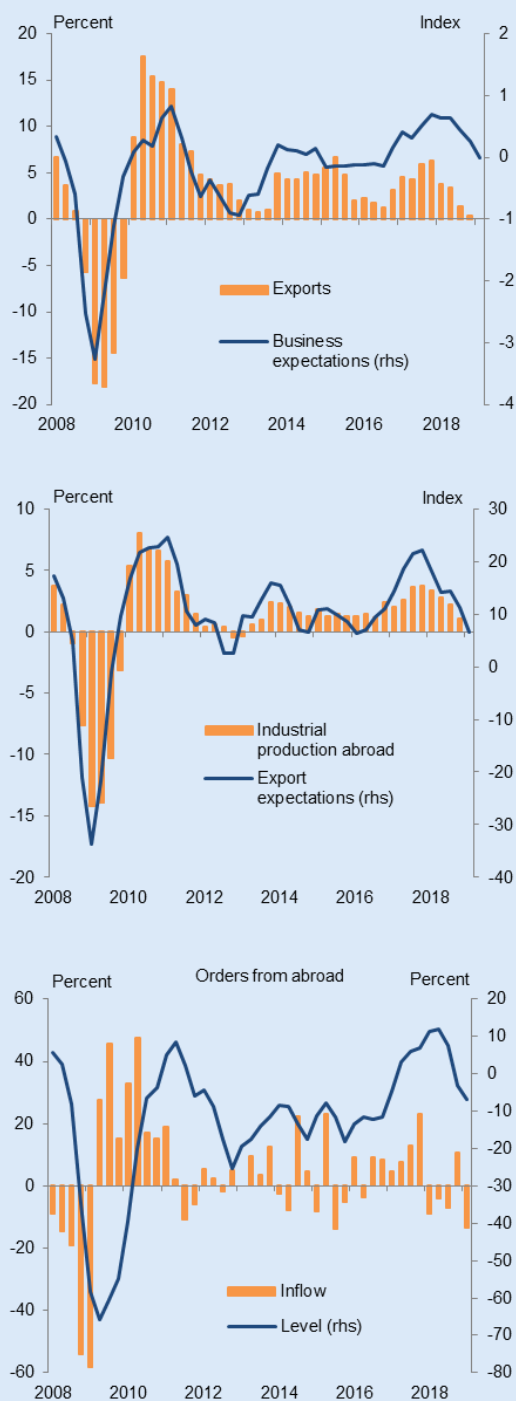
**Figure 3.4:**  
Germany's price competitiveness, 2017–2020



Annual data; against 51 countries based on consumer prices; weights according to Germany's price competitiveness indicator against 56 trading partners based on consumer price indices from the Deutsche Bundesbank. Increase implies worsening of price competitiveness.

Source: Bundesbank, *Monthly Report 8.2017*; national sources; own calculations; 2017–2019: IfW forecast.

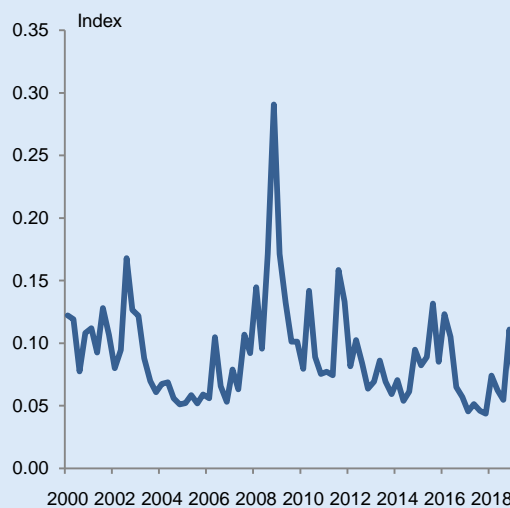
**Figure 3.5:**  
Export indicators, 2008–2019



Quarterly data; exports, industrial production, order inflow: volumes, change on previous year; export expectations, foreign orders on hand: volumes; business expectations, industrial production: based on 42 countries weighted by shares of German exports.

Source: Deutsche Bundesbank, *Saisonbereinigte Wirtschaftszahlen*; Thomson Financial Datastream; ifo, *Konjunkturperspektiven*; own calculations.

**Figure 3.6:**  
Uncertainty in German export markets, 2000–2019

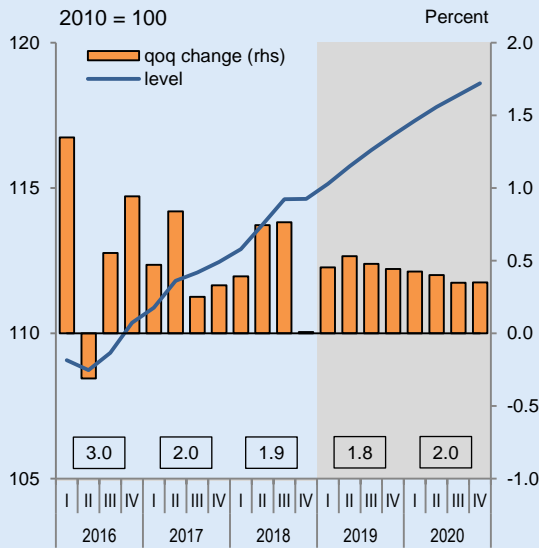


Quarterly data; uncertainty index based on stock market volatilities in 46 countries, weighted by shares of German exports.

Source: National sources; own calculations.

## 4. Domestic expenditure

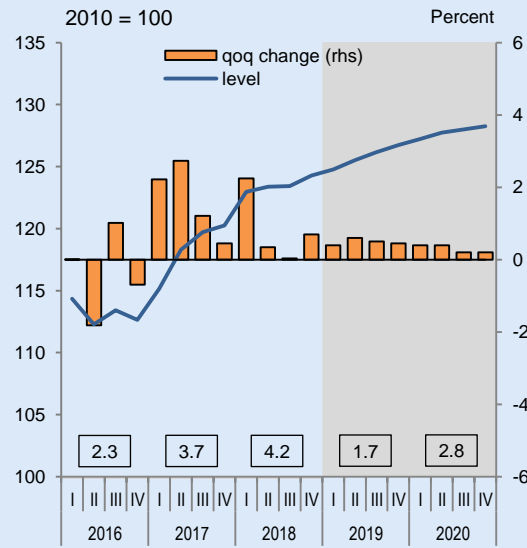
**Figure 4.1:**  
Domestic expenditure, 2016–2020



Quarterly data, price, seasonally and calendar adjusted, qoq change. Annual data: price adjusted, annual rate (boxes).

Source: Federal Statistical Office, *Fachserie 18, Series 1.3*; shaded: IfW forecast.

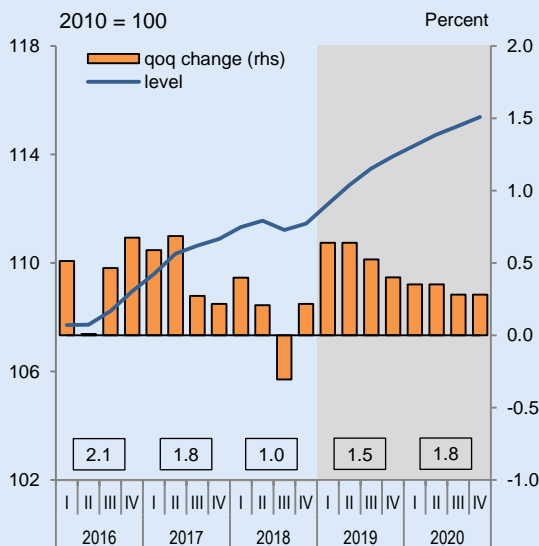
**Figure 4.3:**  
M&E investments, 2016–2020



Quarterly data, price, seasonally and calendar adjusted, qoq change. Annual data: price adjusted, annual rate (boxes).

Source: Federal Statistical Office, *Fachserie 18, Series 1.3*; shaded: IfW forecast.

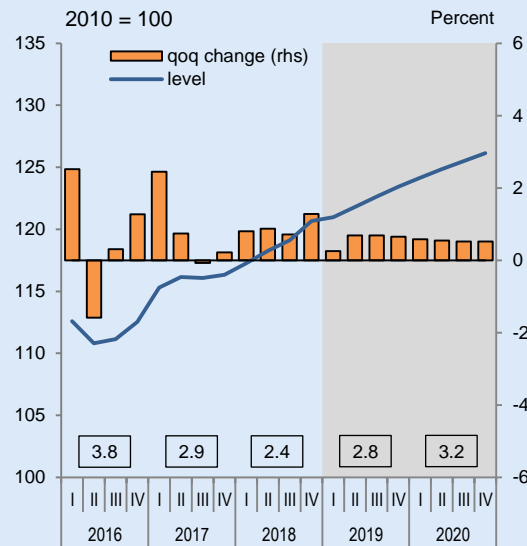
**Figure 4.2:**  
Private consumption, 2016–2020



Quarterly data, price, seasonally and calendar adjusted, qoq change. Annual data: price adjusted, annual rate (boxes).

Source: Federal Statistical Office, *Fachserie 18, Series 1.3*; shaded: IfW forecast.

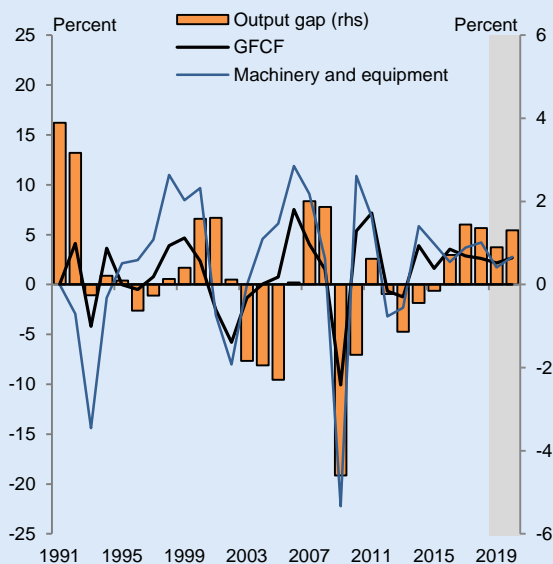
**Figure 4.4:**  
Construction, 2016–2020



Quarterly data, price, seasonally and calendar adjusted, qoq change. Annual data: price adjusted, annual rate (boxes).

Source: Federal Statistical Office, *Fachserie 18, Series 1.3*; shaded: IfW forecast.

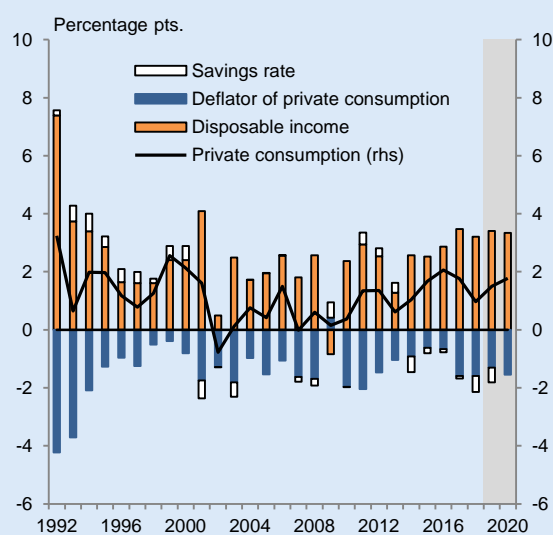
**Figure 4.5:**  
Investment cycles, 1991–2020



Annual data; GFCF, machinery and equipment: volumes, change on previous year; output gap: in percent of potential output, estimation taken from medium-run projection.

Source: Federal Statistical Office, *Fachserie 18, Series 1.2*; own calculations; shaded: IfW forecast.

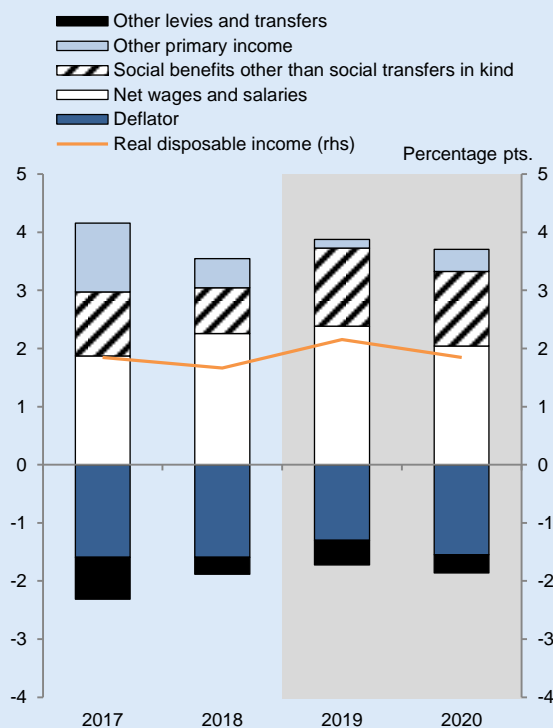
**Figure 4.6:**  
Contributions to change in private consumption, 1992–2020



Annual data; disposable income including adjustment for the change in pension entitlements.

Source: Federal Statistical Office, *Fachserie 18, Series 1.2*; own calculations, shaded: IfW forecast.

**Figure 4.7:**  
Contributions to changes in real disposable income, 2017–2020



Annual data. Other levies and transfers: Levies on social benefits, taxes on consumption and other transfers received (net); Deflator: Deflator of private consumption.

Quelle: Federal Statistical Office, *Fachserie 18, Series 1.2*; own calculations; shaded: IfW forecast.

**Table 4.1:**  
Gross fixed capital formation, 2017–2020

	2017	2018	2019	2020
Total	2.9	2.6	2.2	2.7
Corporate investment	2.9	2.3	1.5	2.0
Machinery and equipment	3.7	4.2	1.7	2.8
Construction (non-dwellings)	3.1	0.5	1.5	1.9
Other	1.3	0.4	1.2	0.9
Dwellings	3.0	2.9	3.0	3.7
Public (non-dwellings)	2.4	4.4	5.0	4.1
<i>Memorandum item:</i>				
Construction	2.9	3.0	3.0	3.2

Volumes; change over previous year in percent.

Source: Federal Statistical Office, *Fachserie 18, Series 1.2*; shaded: IfW forecast.

## 5. Industries

**Table 5.1:**  
**Gross value added for industries, 2018–2019**

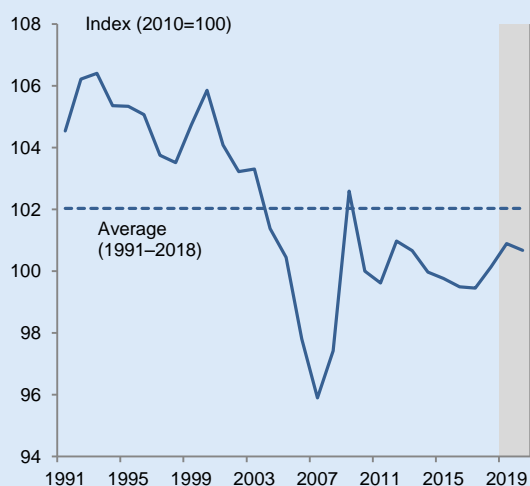
	2018		2019			
	III	IV	I	II	III	IV
	<i>Seasonally and calendar-adjusted, quarter-on-quarter change in percent</i>					
Gross domestic product	-0.2	0.0	0.3	0.4	0.4	0.4
Gross value added	-0.1	0.0	0.3	0.4	0.4	0.4
Industry excluding construction	-0.9	-1.0	0.0	0.8	0.5	0.4
Manufacturing	-1.3	-0.7	0.0	0.8	0.5	0.4
Construction	0.8	2.2	0.4	0.7	0.7	0.7
Trade, transport, accommodation, and food services	-0.4	0.4	0.7	0.6	0.6	0.5
Information and communication	1.0	0.6	0.4	0.3	0.4	0.4
Financial and insurance services	0.0	0.3	0.1	0.1	0.1	0.0
Real estate activities	0.4	0.3	0.4	0.4	0.4	0.4
Business services	-0.4	-0.4	0.2	0.3	0.4	0.4
Public services, education, health	0.6	0.4	0.3	0.3	0.3	0.3
Other services	0.0	-0.1	0.1	0.1	0.1	0.1

Quarterly data, volumes.

Source: Federal Statistical Office, *Fachserie 18, Series 1.2 and 1.3*; shaded: IfW forecast.

## 6. Wages

**Figure 6.1:**  
Real unit labor costs, 1991–2019



Yearly data; compensation of employees per hour (nominal) in relation to gross value added per hour (nominal).

Source: Federal Statistical Office, *Fachserie 18, Series 1.2*; shaded: IfW forecast.

**Table 6.1:**  
Wages and productivity, 2017–2020

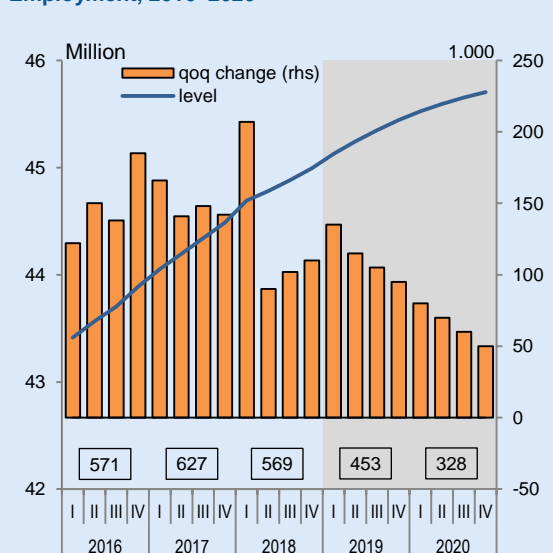
	2017	2018	2019	2020
<i>Per hour</i>				
Negotiated wages	2.2	2.7	2.6	2.9
Gross wages and salaries	2.4	2.7	3.1	3.1
Wage drift	0.3	-0.1	0.5	0.2
Compensation of employees	2.5	2.5	3.0	3.0
Labor productivity	0.9	0.0	-0.1	1.0
Unit labor costs	1.6	2.5	3.1	1.9
Unit labor costs (real)	0.1	0.6	0.8	-0.2
<i>Per capita</i>				
Negotiated wages	2.2	2.8	2.6	2.9
Gross wages and salaries	2.5	3.2	3.0	3.3
Wage drift	0.4	0.4	0.4	0.4
Compensation of employees	2.6	3.0	3.1	3.1
Labor productivity	0.7	0.1	-0.1	1.1
Unit labor costs	1.8	2.8	3.1	2.0
Unit labor costs (real)	0.3	1.0	0.8	-0.1

Change over previous year in percent; wage drift: difference between change of negotiated wages and change of gross wages and salaries in percentage points; labor productivity: real GDP per hour or per capita; unit labor costs: compensation of employees (per hour or per capita) in relation to labor productivity; unit labor costs (real): unit labor costs deflated by GDP deflator.

Source: Federal Statistical Office, *Fachserie 18, Series 1.2*; Deutsche Bundesbank, *Negotiated Pay Rate Statistics*; shaded: IfW forecast.

## 7. Employment

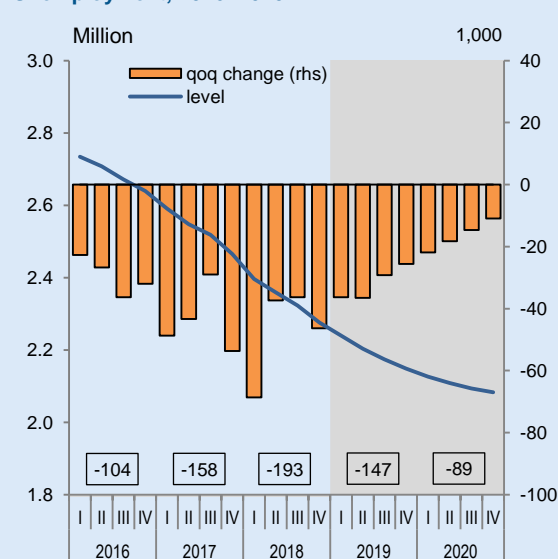
**Figure 7.1:**  
Employment, 2016–2020



Quarterly data, seasonally adjusted, qoq change. Annual data: annual rate (boxes).

Source: Federal Statistical Office, *Fachserie 18, Series 1.3*; shaded: IfW forecast.

**Figure 7.2:**  
Unemployment, 2016–2020



Quarterly data, seasonally adjusted, qoq change. Annual data: annual rate (boxes).

Source: Federal Employment Agency, *Monthly Bulletin*; shaded: IfW forecast.

**Table 7.1:**  
Employment, 2016–2020 (1,000 persons)

	2016	2017	2018	2019	2020
Hours worked (domestic concept, mn. hours)	59,476	60,222	61,095	61,720	62,227
Persons in employment (domestic concept)	43,642	44,269	44,838	45,291	45,618
Self-employed	4,334	4,294	4,218	4,164	4,136
Employees (domestic concept)	39,308	39,975	40,619	41,127	41,482
Employees subject to social security contributions	31,538	32,266	32,996	33,557	33,952
Minijobs	4,802	4,739	4,671	4,612	4,572
Net commuting	92	114	124	122	122
Persons in employment (national concept)	43,550	44,155	44,713	45,169	45,496
Employees (national concept)	39,216	39,862	40,495	41,005	41,360
Unemployed persons (registered)	2,691	2,533	2,340	2,193	2,105
Unemployment rate (registered; percent)	6.1	5.7	5.2	4.8	4.6
Unemployment rate (ILO; percent)	3.9	3.5	3.2	2.9	2.8

Self-employed: including family workers; unemployed persons (registered): definition of the Federal Employment Agency (BA).

Source: Federal Statistical Office, *Fachserie 18, Series 1.2*; Federal Employment Agency, *Monthly Bulletin*; Federal Employment Agency, *Employment Statistics*; shaded: IfW forecast.



## 8. Public finances

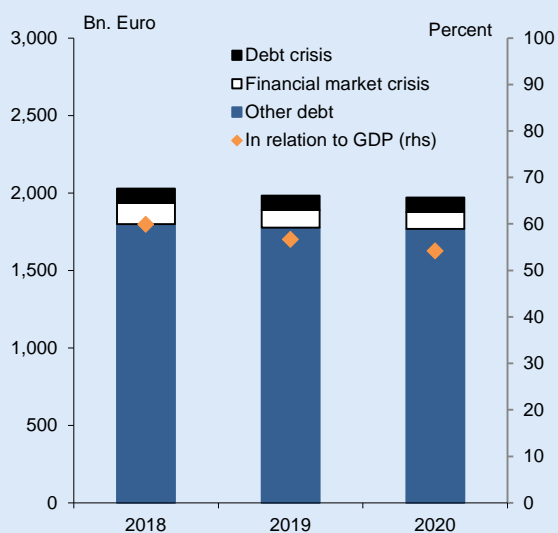
**Table 8.1:**  
Revenues and expenditures of the general government, 2016–2020 (bn. euro)

	2016	2017	2018	2019	2020
<b>Revenues</b>	<b>1,415.5</b>	<b>1,473.8</b>	<b>1,543.6</b>	<b>1,592.9</b>	<b>1,646.4</b>
→relative to GDP	44.8	45.0	45.6	45.5	45.3
Taxes	731.7	766.4	801.0	825.3	851.7
→relative to GDP	23.2	23.4	23.7	23.6	23.4
Social contributions	523.9	548.6	571.7	595.2	619.2
→relative to GDP	16.6	16.7	16.9	17.0	17.0
Other revenues	159.9	158.9	170.8	172.3	175.5
→relative to GDP	5.1	4.8	5.0	4.9	4.8
<b>Expenditures</b>	<b>1,386.8</b>	<b>1,439.8</b>	<b>1,485.5</b>	<b>1,551.5</b>	<b>1,620.0</b>
→relative to GDP	43.9	43.9	43.9	44.3	44.5
Compensation of employees	237.8	246.7	256.3	265.8	275.4
Intermediate consumption	150.1	156.3	161.8	168.7	175.7
Social transfers in kind	268.4	278.4	286.1	298.4	312.2
Gross capital formation	68.2	72.4	78.1	84.7	90.9
Capital transfers	37.4	33.8	31.0	29.7	29.0
Social benefits	486.8	506.1	520.3	545.8	571.0
Subsidies	28.0	28.4	28.9	29.9	31.0
Other current transfers	75.5	75.2	83.0	91.4	95.5
Other capital transfers and investment grants	35.6	43.9	41.2	38.4	40.6
Other expenditures	-1.3	-1.6	-1.4	-1.4	-1.4
<b>Net lending/ net borrowing</b>	<b>28.7</b>	<b>34.0</b>	<b>58.0</b>	<b>41.4</b>	<b>26.3</b>
→relative to GDP	0.9	1.0	1.7	1.2	0.7
<b>Revenues of central, state, and local governments</b>	<b>919.8</b>	<b>954.2</b>	<b>1001.7</b>	<b>1028.3</b>	<b>1058.6</b>
Net of transfers from social security funds	918.7	953.1	1,000.6	1,027.2	1,057.5
Transfers from social security funds	1.1	1.1	1.1	1.1	1.1
<b>Expenditures of central, state, and local governments</b>	<b>899.2</b>	<b>930.3</b>	<b>958.6</b>	<b>996.3</b>	<b>1,039.5</b>
Net of transfers to social security funds	789.0	815.1	840.3	873.9	909.2
Transfers to social security funds	110.3	115.1	118.3	122.3	130.3
<b>Net lending/ net borrowing central, state, and local governments</b>	<b>20.5</b>	<b>23.9</b>	<b>43.1</b>	<b>32.0</b>	<b>19.1</b>
<b>Revenues of social security funds</b>	<b>607.1</b>	<b>635.9</b>	<b>661.4</b>	<b>688.1</b>	<b>719.2</b>
Net of transfers from central, state, and local governments	496.8	520.8	543.0	565.7	588.9
<b>Expenditures of social security funds</b>	<b>598.9</b>	<b>625.8</b>	<b>646.4</b>	<b>678.7</b>	<b>712.0</b>
Net of transfers to central, state, and local governments	597.8	624.7	645.3	677.6	710.9
<b>Net lending/ net borrowing social security funds</b>	<b>8.2</b>	<b>10.1</b>	<b>14.9</b>	<b>9.4</b>	<b>7.2</b>

Sums may deviate due to rounding. Relative to GDP in per cent.

Source: Federal Statistical Office, *internal worksheet*, shaded: IfW forecast.

**Figure 8.1:**  
Government gross debt, 2018–2020

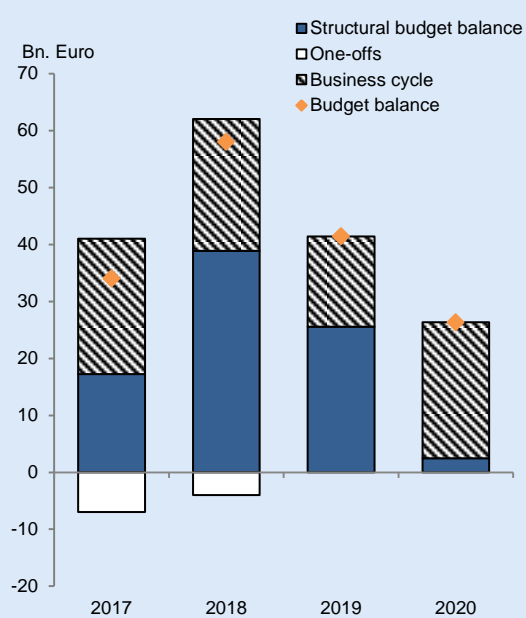


Debt crisis: Liabilities due to first Greece adjustment programme, deposits at the ESM, guarantees for EFSF credits.

Financial market crisis: Liabilities due to bank rescue packages.

Source: Deutsche Bundesbank, *Monatsbericht*; BMF, *Monatsbericht*; own calculations and forecasts.

**Figure 8.2:**  
Structural budget balance, 2017–2020



Source: Europäische Kommission, *AMECO*; own calculations.

## 9. GDP and its components

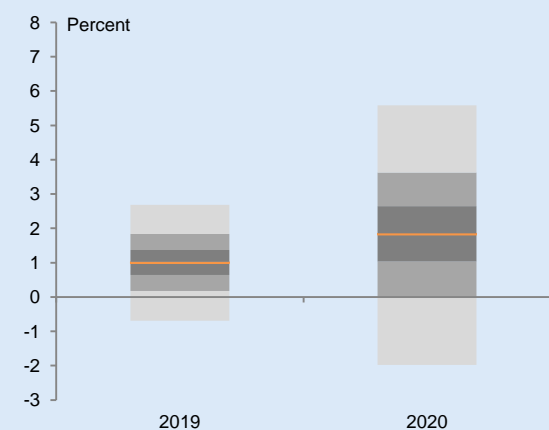
**Table 9.1:**  
Quarterly data, 2018–2020

	2018				2019				2020			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Gross domestic product	0.4	0.5	-0.2	0.0	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3
Private consumption	0.4	0.2	-0.3	0.2	0.6	0.6	0.5	0.4	0.4	0.4	0.3	0.3
Government consumption	-0.4	0.8	-0.3	1.6	0.1	0.3	0.3	0.7	0.6	0.5	0.4	0.3
Machinery and equipment	2.2	0.3	0.0	0.7	0.4	0.6	0.5	0.5	0.4	0.4	0.2	0.2
Constructions	0.8	0.9	0.7	1.3	0.3	0.7	0.7	0.7	0.6	0.6	0.5	0.5
Other investment	-0.5	0.3	0.2	0.5	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2
Change in inventories	0.0	0.3	0.9	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic expenditure	0.4	0.7	0.8	0.0	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3
Exports	-0.2	0.8	-0.9	0.7	1.2	1.0	0.9	0.9	0.8	0.8	0.8	0.8
Imports	-0.3	1.5	1.3	0.7	1.6	1.2	1.2	1.1	1.1	1.0	1.0	1.0
Net exports	0.0	-0.2	-0.9	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Employment (domestic)	44,686	44,779	44,885	45,004	45,129	45,244	45,349	45,444	45,524	45,594	45,654	45,704
Unemployment (registered)	2,396	2,359	2,323	2,276	2,240	2,204	2,174	2,149	2,127	2,109	2,094	2,083

Volumes, seasonally and working-day adjusted. Change on previous quarter in percent; change in inventories, net exports: Lundberg component (contribution to GDP growth); employment, unemployment: seasonally adjusted, 1,000 persons; unemployment: as defined by the Federal Employment Agency (BA).

Source: Federal Statistical Office, *Fachserie 18, Series 1.3*; Federal Employment Agency, *Monthly Bulletin*; shaded: IfW forecast.

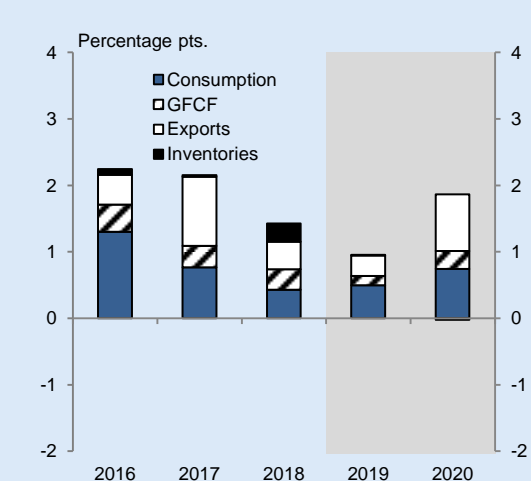
**Figure 9.1:**  
Forecast intervals for GDP growth, 2019–2020



GDP: volumes, change over previous year. Point forecasts: orange lines. Forecast intervals gray shaded areas with confidence levels of 33, 66, and 95 percent. Confidence levels calculated based on historical forecast errors of the Kiel Institute in the first quarter 1994–2017.

Source: Own calculations.

**Figure 9.2:**  
Import adjusted expenditure-side contributions to GDP growth, 2016–2020



Annual data; price-adjusted, growth contribution of each expenditure component adjusted by import content; import content is estimated based on input/output tables; see Kooths and Stolzenburg (2018): <https://archiv.wirtschaftsdienst.eu/jahr/2018/3/zur-exportabhaengigkeit-der-deutschen-konjunktur/>.

Source: OECD, Input Output Database; Federal Statistical Office, *Fachserie 18, Series 1.2*; shaded: IfW forecast.

## 10. The German economy, 2017–2020

	2017	2017	2018	2019	2020
	€ bn.	Change over previous year in percent			
GDP (constant prices)		2.2	1.4	1.0	1.8
Private consumption expenditure		1.8	1.0	1.5	1.8
Public consumption expenditure		1.6	1.0	1.9	2.0
Total fixed investment		2.9	2.6	2.2	2.7
Machinery and equipment		3.7	4.2	1.7	2.8
Construction		2.9	2.4	2.8	3.2
Other equipment		1.3	0.4	1.2	0.9
Changes in stocks		0.0	0.5	0.0	0.0
Domestic Demand		2.0	1.9	1.8	2.0
Exports		4.6	2.0	2.8	4.3
Imports		4.8	3.3	5.0	5.0
Net exports		0.3	-0.4	-0.7	0.0
GDP (current prices)	3,277.3	3.7	3.3	3.3	4.0
Private consumption expenditure	1,732.2	3.4	2.6	2.8	3.3
Public consumption expenditure	638.9	3.8	3.6	4.5	4.5
Total fixed investment	665.7	5.0	5.6	5.6	5.7
Machinery and equipment	215.2	4.2	4.9	3.0	3.3
Construction	326.6	6.4	7.3	8.1	8.3
Other equipment	123.9	2.9	2.6	3.2	2.7
Changes in stocks (€ bn.)		-7.2	14.6	15.0	14.0
Domestic Demand	3,029.5	4.0	4.2	3.8	4.1
Exports	1,541.9	6.3	3.1	3.4	5.0
Imports	1,294.1	7.6	5.2	4.5	5.3
Net exports (€ bn.)		247.8	229.2	221.8	228.3
Gross national income	3,346.3	3.8	3.3	3.4	4.0
Deflator of GDP					
Private consumption expenditure		1.5	1.9	2.3	2.1
Public consumption expenditure		1.6	1.6	1.3	1.5
Investment in machinery and equipment		2.2	2.6	2.5	2.4
Investment in construction		0.5	0.6	1.3	0.6
Investment in other equipment		3.3	4.8	5.1	4.9
Exports		1.5	2.2	2.0	1.8
Imports		1.6	1.1	0.5	0.7
<i>Addendum: Consumer prices</i>		2.6	1.8	-0.5	0.3
Income distribution		1.5	1.7	1.5	1.8
National income	2,456.4	3.9	3.1	3.1	4.1
Employment income	1,668.8	4.2	4.6	4.3	4.0
in percent of national income		67.9	69.0	69.8	69.8
Entrepreneurial and property income	787.6	3.3	-0.3	0.4	4.1
Disposable income of private households	1,869.9	3.4	3.3	3.5	3.4
Savings rate		9.9	10.4	10.9	10.9
Wages and salaries	1,366.6	4.2	4.8	4.3	4.1
Wage per hour		2.4	2.7	3.1	3.1
Unit labor costs		1.6	2.5	3.1	1.9
Productivity per hour		0.9	0.0	-0.1	1.0
Unemployment (1,000)		2,532.8	2,340.1	2,193.1	2,104.6
Rate of unemployment (percent)		5.7	5.2	4.8	4.6
Total employment (1,000)		44,268.8	44,837.7	45,290.8	45,618.3
Public sector budget balance (€ bn.)		34.0	58.0	41.4	26.3
Public sector budget balance (in percent of GDP)		1.0	1.7	1.2	0.7
Public debts (in percent)		63.9	59.9	56.7	54.1

Change in stocks, net exports: contribution to GDP growth.

Source: Federal Statistical Office, *Fachserie 18, Series 1.2*; shaded: IfW forecast.

## 11. National accounts

### National Accounts

Forecast period: 2019 to 2020

	2018	2019	2020	2018		2019	
				H1	H2	H1	H2

#### 1. Production

Change over the same period of the preceding year in %

Persons in employment	1.3	1.0	0.7	1.4	1.2	1.0	1.0
Hours worked	1.4	1.0	0.8	1.4	1.5	1.0	1.1
Hours worked by person in employment	0.2	0.0	0.1	0.0	0.3	- 0.1	0.1
Labor productivity <sup>1</sup>	0.0	- 0.1	1.0	0.5	- 0.5	- 0.6	0.4
<b>Gross domestic product, price-adjusted</b>	<b>1.4</b>	<b>1.0</b>	<b>1.8</b>	<b>1.9</b>	<b>1.0</b>	<b>0.4</b>	<b>1.5</b>

#### 2. Use of gross domestic product at current prices

a) EUR bn.

Consumption expenditure	2 438.9	2 518.6	2 611.1	1 193.9	1 245.0	1 226.3	1 292.2
Private households <sup>2</sup>	1 776.7	1 826.7	1 887.9	873.2	903.4	891.4	935.4
Government	662.2	691.8	723.2	320.6	341.5	335.0	356.9
Gross fixed capital formation	703.3	742.4	784.9	337.9	365.3	355.8	386.5
Machinery and equipment	225.7	232.5	240.2	107.9	117.7	110.5	122.0
Construction	350.5	378.7	410.0	168.0	182.4	181.4	197.3
Other products	127.1	131.2	134.7	62.0	65.2	64.0	67.2
Changes in inventories <sup>3</sup>	14.6	15.0	14.0	8.7	5.9	16.5	- 1.5
Domestic expenditure	3 156.8	3 276.0	3 409.9	1 540.6	1 616.2	1 598.7	1 677.3
Net exports	229.2	221.8	228.3	131.3	97.9	117.6	104.2
Exports	1 590.2	1 643.9	1 726.3	791.8	798.4	810.3	833.6
Imports	1 360.9	1 422.1	1 498.1	660.5	700.5	692.7	729.4
<b>Gross domestic product</b>	<b>3 386.0</b>	<b>3 497.8</b>	<b>3 638.2</b>	<b>1 671.8</b>	<b>1 714.2</b>	<b>1 716.3</b>	<b>1 781.5</b>

b) Change over the same period of the preceding year in %

Consumption expenditure	2.9	3.3	3.7	3.0	2.7	2.7	3.8
Private households <sup>2</sup>	2.6	2.8	3.3	2.9	2.3	2.1	3.5
Government	3.6	4.5	4.5	3.5	3.8	4.5	4.5
Gross fixed capital formation	5.6	5.6	5.7	5.3	6.0	5.3	5.8
Machinery and equipment	4.9	3.0	3.3	5.6	4.2	2.4	3.6
Construction	7.3	8.1	8.3	6.1	8.5	8.0	8.1
Other products	2.6	3.2	2.7	2.6	2.7	3.2	3.2
Domestic expenditure	4.2	3.8	4.1	3.7	4.7	3.8	3.8
Exports	3.1	3.4	5.0	3.8	2.5	2.3	4.4
Imports	5.2	4.5	5.3	3.8	6.5	4.9	4.1
<b>Gross domestic product</b>	<b>3.3</b>	<b>3.3</b>	<b>4.0</b>	<b>3.7</b>	<b>2.9</b>	<b>2.7</b>	<b>3.9</b>

#### 3. Use of gross domestic product, price-adjusted (chain-linked, 2010=100)

a) EUR bn.

Consumption expenditure	2 179.3	2 214.6	2 255.5	1 075.2	1 104.1	1 087.1	1 127.5
Private households <sup>2</sup>	1 610.1	1 634.2	1 663.2	794.4	815.7	800.6	833.6
Government	568.7	579.8	591.6	280.5	288.2	286.1	293.7
Gross fixed capital formation	608.3	621.4	638.0	294.2	314.0	299.6	321.8
Machinery and equipment	216.3	220.0	226.1	103.4	112.9	104.4	115.7
Construction	280.7	288.6	297.9	136.3	144.4	139.8	148.7
Other products	112.1	113.4	114.4	54.9	57.2	55.5	57.9
Domestic expenditure	2 785.3	2 834.2	2 890.2	1 374.6	1 410.6	1 397.9	1 436.3
Exports	1 486.9	1 529.0	1 595.1	744.4	742.5	754.4	774.6
Imports	1 299.9	1 365.0	1 433.7	635.1	664.8	664.6	700.4
<b>Gross domestic product</b>	<b>2 974.2</b>	<b>3 002.6</b>	<b>3 057.8</b>	<b>1 483.8</b>	<b>1 490.4</b>	<b>1 489.1</b>	<b>1 513.5</b>

b) Change over the same period of the preceding year in %

Consumption expenditure	1.0	1.6	1.8	1.2	0.8	1.1	2.1
Private households <sup>2</sup>	1.0	1.5	1.8	1.3	0.6	0.8	2.2
Government	1.0	1.9	2.0	0.9	1.2	2.0	1.9
Gross fixed capital formation	2.6	2.2	2.7	2.5	2.7	1.8	2.5
Machinery and equipment	4.2	1.7	2.8	5.1	3.4	0.9	2.4
Construction	2.4	2.8	3.2	1.6	3.1	2.6	3.0
Other products	0.4	1.2	0.9	0.4	0.4	1.2	1.1
Domestic expenditure	1.9	1.8	2.0	1.7	2.2	1.7	1.8
Exports	2.0	2.8	4.3	3.2	0.8	1.3	4.3
Imports	3.3	5.0	5.0	3.1	3.5	4.6	5.4
<b>Gross domestic product</b>	<b>1.4</b>	<b>1.0</b>	<b>1.8</b>	<b>1.9</b>	<b>1.0</b>	<b>0.4</b>	<b>1.5</b>

**National Accounts (cont.)**

Forecast period: 2019 to 2020

	2018	2019	2020	2018		2019	
				H1	H2	H1	H2

**4. Deflators (2010=100)**

Change on the same period of the preceding year in %

Private consumption <sup>2</sup>	1.6	1.3	1.5	1.5	1.7	1.3	1.3
Government consumption	2.6	2.5	2.4	2.6	2.6	2.4	2.5
Gross fixed capital formation	3.0	3.3	3.0	2.7	3.2	3.4	3.3
Machinery and equipment	0.6	1.3	0.6	0.4	0.8	1.4	1.2
Construction	4.8	5.1	4.9	4.4	5.2	5.2	5.0
Exports	1.1	0.5	0.7	0.5	1.7	1.0	0.1
Imports	1.8	- 0.5	0.3	0.7	2.9	0.2	- 1.2
<b>Gross domestic product</b>	<b>1.9</b>	<b>2.3</b>	<b>2.1</b>	<b>1.8</b>	<b>1.9</b>	<b>2.3</b>	<b>2.3</b>

**5. National income**

a) EUR bn.

Primary income of private households <sup>2</sup>	2 356.6	2 435.2	2 516.1	1 166.1	1 190.5	1 202.2	1 233.0
Employers social contributions	313.5	328.0	339.5	151.6	161.9	158.5	169.5
Gross wages and salaries	1 432.5	1 493.7	1 555.6	682.9	749.6	711.3	782.3
Other primary income <sup>4</sup>	610.5	613.5	621.0	331.6	279.0	332.4	281.1
Primary income of other sectors	501.8	511.3	545.6	234.3	267.5	230.6	280.7
<b>Net national income</b>	<b>2 858.3</b>	<b>2 946.5</b>	<b>3 061.7</b>	<b>1 400.4</b>	<b>1 458.0</b>	<b>1 432.8</b>	<b>1 513.7</b>
Consumption of fixed capital	600.0	628.2	657.8	296.8	303.2	310.7	317.5
<b>Gross national income</b>	<b>3 458.4</b>	<b>3 574.7</b>	<b>3 719.5</b>	<b>1 697.2</b>	<b>1 761.2</b>	<b>1 743.6</b>	<b>1 831.1</b>
memorandum item:							
Net national income (factor costs)	2 531.3	2 610.3	2 716.3	1 237.1	1 294.2	1 265.0	1 345.3
Property and entrepreneurial income	785.3	788.6	821.1	402.6	382.7	395.2	393.4
Compensation of employees	1 746.0	1 821.7	1 895.1	834.5	911.5	869.8	951.9

b) Change over the same period of the preceding year in %

Primary income of private households <sup>2</sup>	3.8	3.3	3.3	4.2	3.4	3.1	3.6
Employers social contributions	3.8	4.6	3.5	3.6	3.9	4.5	4.7
Gross wages and salaries	4.8	4.3	4.1	4.8	4.8	4.2	4.4
... per employee	3.2	3.0	3.3	3.1	3.3	2.8	3.1
Other primary income <sup>4</sup>	1.6	0.5	1.2	3.4	- 0.5	0.2	0.7
Primary income of other sectors	- 0.3	1.9	6.7	0.0	- 0.6	- 1.6	4.9
<b>Net national income</b>	<b>3.1</b>	<b>3.1</b>	<b>3.9</b>	<b>3.5</b>	<b>2.6</b>	<b>2.3</b>	<b>3.8</b>
Consumption of fixed capital	4.7	4.7	4.7	4.5	4.9	4.7	4.7
<b>Gross national income</b>	<b>3.3</b>	<b>3.4</b>	<b>4.0</b>	<b>3.7</b>	<b>3.0</b>	<b>2.7</b>	<b>4.0</b>
memorandum item:							
Net national income (factor costs)	3.1	3.1	4.1	3.6	2.5	2.3	3.9
Property and entrepreneurial income	- 0.3	0.4	4.1	1.6	- 2.2	- 1.8	2.8
Compensation of employees	4.6	4.3	4.0	4.6	4.7	4.2	4.4

**6. Disposable income of private households <sup>2</sup>**

a) EUR bn.

Mass income	1 400.9	1 468.0	1 530.3	673.7	727.2	705.1	762.9
Net wages and salaries	945.2	991.2	1 032.0	446.0	499.2	466.9	524.2
Social benefits other than social transfers in kind	579.9	605.9	631.6	289.4	290.5	302.3	303.6
less: Levies on social benefits, taxes on consumption	124.2	129.1	133.2	61.7	62.5	64.1	65.0
Other primary income <sup>4</sup>	610.5	613.5	621.0	331.6	279.0	332.4	281.1
Other transfers received (net) <sup>5</sup>	- 80.7	- 83.9	- 86.1	- 42.3	- 38.4	- 43.0	- 41.0
<b>Disposable income</b>	<b>1 930.8</b>	<b>1 997.5</b>	<b>2 065.2</b>	<b>963.0</b>	<b>967.8</b>	<b>994.5</b>	<b>1 003.0</b>
Change in pension entitlements	52.8	53.6	54.4	26.1	26.7	26.5	27.1
Consumption expenditure	1 776.7	1 826.7	1 887.9	873.2	903.4	891.4	935.4
Saving	206.9	224.4	231.7	115.8	91.1	129.6	94.7
Saving ratio (%) <sup>6</sup>	10.4	10.9	10.9	11.7	9.2	12.7	9.2

b) Change over the same period of the preceding year in %

Mass income	3.9	4.8	4.2	3.8	4.0	4.7	4.9
Net wages and salaries	4.7	4.9	4.1	4.7	4.7	4.7	5.0
Social benefits other than social transfers in kind	2.6	4.5	4.2	2.4	2.8	4.4	4.5
less: Levies on social benefits, taxes on consumption	3.1	4.0	3.2	3.0	3.2	3.9	4.0
Other primary income <sup>4</sup>	1.6	0.5	1.2	3.4	- 0.5	0.2	0.7
<b>Disposable income</b>	<b>3.3</b>	<b>3.5</b>	<b>3.4</b>	<b>3.4</b>	<b>3.1</b>	<b>3.3</b>	<b>3.6</b>
Change in pension entitlements							
Consumption expenditure	2.6	2.8	3.3	2.9	2.3	2.1	3.5
Saving	9.0	8.4	3.3	7.3	11.2	11.9	4.0

**National Accounts (cont.)**

Forecast period: 2019 to 2020

	2018	2019	2020	2018		2019	
				H1	H2	H1	H2

**7. Revenue and expenditure by general government <sup>1</sup>**

a) EUR bn.

Revenue							
Taxes	801.0	825.3	851.7	404.4	396.6	414.7	410.6
Social contributions	571.7	595.2	619.2	276.7	295.0	288.0	307.2
Property income	18.4	18.7	18.5	11.4	7.0	11.8	6.9
Other current transfers	25.2	23.8	24.2	11.6	13.6	10.8	13.0
Capital transfers	13.0	12.0	12.0	5.5	7.5	5.5	6.5
Sales	114.0	117.6	120.6	54.1	60.0	55.9	61.7
Other subsidies	0.2	0.2	0.2	0.1	0.1	0.1	0.1
<b>Total</b>	<b>1 543.6</b>	<b>1 592.9</b>	<b>1 646.4</b>	<b>763.8</b>	<b>779.7</b>	<b>786.8</b>	<b>806.1</b>
Expenditure							
Intermediate consumption <sup>2</sup>	448.1	467.3	488.0	215.9	232.2	225.0	242.2
Compensation of employees	256.3	265.8	275.4	123.1	133.2	127.6	138.2
Property income (interest)	31.0	29.7	29.0	15.8	15.1	15.1	14.5
Subsidies	28.9	29.9	31.0	13.8	15.1	14.2	15.7
Social benefits	520.3	545.8	571.0	259.8	260.6	272.4	273.5
Other current transfers	83.0	91.4	95.5	40.6	42.4	44.7	46.6
Capital transfers	41.2	38.4	40.6	13.2	28.0	14.2	24.2
Gross capital formation	78.1	84.7	90.9	34.0	44.2	36.4	48.3
Net acquisitions of non-produced non-financial assets	- 1.4	- 1.4	- 1.4	- 0.6	- 0.9	- 0.6	- 0.9
<b>Total</b>	<b>1 485.5</b>	<b>1 551.5</b>	<b>1 620.0</b>	<b>715.6</b>	<b>770.0</b>	<b>749.1</b>	<b>802.4</b>
<b>Net lending</b>	<b>58.0</b>	<b>41.4</b>	<b>26.3</b>	<b>48.2</b>	<b>9.8</b>	<b>37.7</b>	<b>3.7</b>

b) Change over the same period of the preceding year in %

Revenue							
Taxes	4.5	3.0	3.2	5.4	3.6	2.5	3.5
Social contributions	4.2	4.1	4.0	4.1	4.3	4.1	4.2
Property income	16.1	1.4	- 1.2	32.1	- 3.1	3.3	- 1.6
Other current transfers	15.7	- 5.5	1.7	18.2	13.7	- 6.9	- 4.2
Capital transfers	27.6	- 7.7	0.0	14.6	39.2	0.0	- 13.4
Sales	2.9	3.2	2.5	3.0	2.8	3.4	2.9
Other subsidies	- 9.0	0.0	0.0	- 4.4	- 12.7	0.0	0.0
<b>Total</b>	<b>4.7</b>	<b>3.2</b>	<b>3.4</b>	<b>5.3</b>	<b>4.2</b>	<b>3.0</b>	<b>3.4</b>
Expenditure							
Intermediate consumption <sup>2</sup>	3.1	4.3	4.4	2.9	3.2	4.2	4.3
Compensation of employees	3.9	3.7	3.6	4.1	3.7	3.6	3.8
Property income (interest)	- 8.5	- 4.2	- 2.2	- 10.5	- 6.2	- 4.4	- 4.0
Subsidies	1.9	3.5	3.8	- 0.6	4.4	3.0	4.0
Social benefits	2.8	4.9	4.6	2.6	3.1	4.9	4.9
Other current transfers	10.3	10.1	4.5	2.0	19.8	10.2	10.0
Capital transfers	- 6.1	- 6.8	5.7	- 40.4	28.8	7.4	- 13.6
Gross capital formation	7.9	8.4	7.4	9.1	6.9	7.3	9.3
Net acquisitions of non-produced non-financial assets	- 9.6	0.0	0.0	- 9.9	- 9.4	0.0	0.0
<b>Total</b>	<b>3.2</b>	<b>4.4</b>	<b>4.4</b>	<b>1.4</b>	<b>4.8</b>	<b>4.7</b>	<b>4.2</b>

<sup>1</sup> Price-adjusted gross domestic product per hour worked.

<sup>2</sup> Incl. nonprofit institutions serving households.

<sup>3</sup> Incl. acquisitions less disposals of valuables.

<sup>4</sup> Operating surplus/mixed income, net property income

<sup>5</sup> Received less payed other current transfers.

<sup>6</sup> Savings in percent of disposable income (incl. change in pension entitlements).

<sup>7</sup> Central, regional, local and social security funds.

<sup>8</sup> Incl. social transfers in kind and other production taxes.

Source: Federal Statistical Office, *Fachserie 18: National Accounts*; own calculations.