

KIEL INSTITUTE **ECONOMIC OUTLOOK**

German Economy Summer 2021

Finalized June 17, 2021



No. 80 (2021 | Q2)

*Martin Ademmer, Joscha Beckmann, Jens Boysen-Hogrefe,
Salomon Fiedler, Dominik Groll, Nils Jannsen, Stefan Kooths
und Saskia Meuchelböck*

PRONOUNCED PRICE PRESSURES

Martin Ademmer, Joscha Beckmann, Jens Boysen-Hogrefe, Salomon Fiedler, Dominik Groll, Nils Jannsen, Stefan Kooths und Saskia Meuchelböck

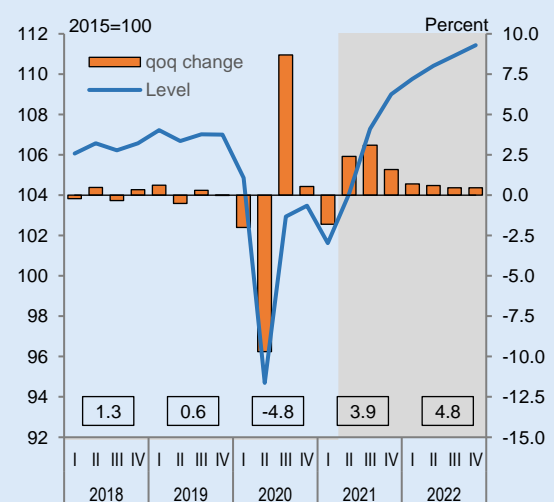
The German economy is picking up speed again. After the resurgence of the Covid-19 pandemic interrupted the economic recovery in the winter, GDP will expand at a fast pace in the further course of the year and exceed its pre-crisis level. With the removal of the pandemic-related restrictions activity will rebound, especially in those areas that have been particularly impaired. Retail trade and contact-intensive services in particular are likely to benefit from the rebound in private household consumption. For the time being, however, the recovery in the manufacturing industry will be delayed. The strong global economic rebound has created multi-layered supply bottlenecks that are noticeably hampering production. Despite the very good order situation, production in the manufacturing industry will therefore probably return only gradually to its recovery path in the second half of the year, provided that the supply bottlenecks gradually ease. Price pressures have also intensified as a result of the supply bottlenecks, especially in view of the strong momentum in the global economy. Thus, prices for raw materials, intermediate goods and transport services have recently increased strongly. All in all, GDP is expected to grow by 3.9 percent this year and by 4.8 percent in 2022. Consumer price inflation will pick up to 2.6 percent this year, followed by around 2 percent in 2022.

GDP will continue its recovery at a high pace. As the restrictions on economic activity are being eased, GDP will increase strongly after a pandemic-related setback in the winter (Figure 1). Activity will rebound especially in those sectors that were previously particularly impaired such as retail trade and contact-intensive services.

However, supply bottlenecks curb the recovery in the manufacturing sector.

While incoming orders have already exceeded their pre-crisis level by 10 percent in view of the rebound in global demand, industrial production has fallen by 2.5 percent since the beginning of the year and was still 5 percent below its pre-crisis level in April. Supply bottlenecks are likely to be a main driver of this gap. A record level of more than 40 percent of firms in the manufacturing industry reported production constraints due to a shortage in raw materials or inputs in April. The quantitative impact of supply bottlenecks is difficult to assess, not least because such bottlenecks have rarely had a significant impact on production in the past. The effect can be quantitatively narrowed down by estimating a “normal” level of industrial production on the basis of the long-term correlation between production and new orders. According to our estimates, industrial production in April was more than 10 percent below the level that would have been expected in view of the development of orders (Figure 2). Half of this gap arose since the beginning of the year. Attributing this development to the supply bottlenecks and assuming that the results are comparable for industrial production and gross value added, gross value added in manufacturing was depressed by about 2 percent in the first quarter due to the supply

Figure 1:
Gross domestic product



Quarterly data: Volumes, seasonally and calendar adjusted.
Annual data (boxes): Volumes, change in percent.

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

bottlenecks. If they persist until the middle of the year – which seems plausible – gross value added would be depressed by another 2.5 percent.

As soon as the supply bottlenecks ease, production in the manufacturing sector will receive an additional boost. On the one hand, production will then permanently return to its normal level, which would be expected in view of new orders. Since the beginning of the year alone a catch-up potential for gross value added of 4.5 percent has accumulated in the manufacturing sector – i.e., gross value added would increase by 4.5 percent more than new orders. On the other hand, the backlog of orders that has accumulated in the meantime due to low production will then be worked off, thus temporarily increasing production even more. For our forecast, we assume that the supply bottlenecks will gradually ease in the second half of the year, implying that the upside potential in production will be realized only gradually.

Table 1:

Key indicators

	2019	2020	2021	2022
Gross domestic product (GDP), price-adjusted	0.6	-4.8	3.9	4.8
Gross domestic product, deflator	2.2	1.6	2.2	1.7
Consumer prices	1.4	0.5	2.6	1.9
Labor productivity (per hour worked)	-0.0	-0.0	2.0	0.9
Employment (1000 persons)	45,268	44,818	44,804	45,565
Unemployment rate (percent)	5.0	5.9	5.8	5.3
<i>in relation to nominal GDP</i>				
Public sector net lending	1.5	-4.5	-4.9	-1.4
Gross public debt	59.7	69.7	70.2	66.6
Current account balance	7.2	7.3	6.9	6.4

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: Kiel Institute forecast.

While the recovery in goods trade is temporarily hampered by bottlenecks in production, services trade will catch up as travel restrictions are lifted. Exports expanded quite strongly at the beginning of the year, albeit at a much slower pace than in the second half of last year. The UK's withdrawal from the European Union as of January 1st counteracted a stronger increase, with nominal goods exports plummeting at the start of the year. In addition, production bottlenecks prevented a stronger increase in goods exports. Thus, export volumes are not keeping up with orders from abroad and supply shortages are likely to remain a burdening factor for the time being. As these frictions ease over the course of the year, exports are expected to pick up again at a faster pace, especially as the rise in global investment activity should stimulate growth. Overall, we expect exports to increase by 11.2 percent in 2021. After this catch-up process they will rise at a slower rate, resulting in a growth rate of 5.8 percent for 2022. On the import side, services are lagging behind goods in the recovery process. In the first quarter, imports increased very strongly despite the weakness in domestic absorption. Imports of goods have already exceeded their pre-crisis level and will continue to rise as the domestic economy recovers. At the same time, imports of services in the first quarter were still around 20 percent below their pre-crisis level. With travel restrictions being lifted, they are likely to expand strongly over the summer. Following this recovery, the overall pace of imports is slowing. Imports will rise by 10.9 percent in the current year and by 7.1 percent in 2022. Export and import prices increased significantly in the first quarter, as prices of raw materials, intermediate goods, and freight rates accelerated. Overall, we expect the terms of trade to deteriorate by 1.6 percent in the current year and by 0.5 percent in 2022.

Inflation is currently driven by one-off effects. In May the consumer price index rose by 2.5 percent year-on-year. In the wake of the rebound in oil prices, energy prices increased at a particularly quick pace of 10 percent. Besides such base effects, other special factors such as the introduction of the carbon tax at the beginning of the year also had an impact. Furthermore, the clash of supply-side shortages with an unleashed demand as pandemic-related restrictions are eased is likely to drive prices in certain markets. These capacity bottlenecks are also reflected in the recent sharp rise in prices for

imports, intermediate goods, and transport services. From July onwards, the temporary reduction of value added taxes in the second half of 2020 will also become visible in annual inflation rates, which as a result may approach 4 percent in individual months in the later course of the year. All in all, we expect consumer prices to rise by 2.6 percent in 2021. Without the major one-off effects driving prices this year, inflation is likely to be somewhat lower in 2022 at 1.9 percent. This forecast assumes that private households spend only a limited share of the excess savings they have accumulated during the shutdowns. If a higher share were to be spent, price pressures could increase in light of limited capacities particularly in some service sectors, constituting an upside risk for our inflation forecast.

Private consumer spending is rapidly catching up to its pre-crisis level as pandemic-related measures are eased. In the winter, private consumer spending fell by more than 7 percent. However, given the duration of the shutdown measures, which mainly affected parts of the retail sector as well as some contact-intensive service industries, the decline was rather mild compared with the second quarter of 2020 when similar measures had been implemented. Thus, private consumption in the first quarter was around 3 percent above the low point of last year. As the shutdown measures are eased further, private consumer spending will pick up noticeably in the summer and is expected to exceed its pre-crisis level. Although there was a significant decline in retail sales in April due to the temporary tightening of the shutdown measures, they were still at the average level of the first quarter. We assume that in May they will have already exceeded the level of March again - this is also indicated by mobility data on German city centers - and will continue to increase thereafter. The recovery in other particularly affected sectors, such as the hotel and restaurant industry, is likely to be slightly delayed and will have a stronger impact in the third quarter. Against this background, we expect private consumer spending to grow by 2.4 percent this year. The strength of the recovery will become more visible in 2022, with an expected growth rate of 8.2 percent.

Private households have increased their savings considerably since the beginning of the pandemic, mainly due to limited consumption possibilities. An open question is, how much of the purchasing power that private households have accumulated during the pandemic will be used for additional private consumption. Compared with a scenario in which the savings rate would have remained at its pre-crisis level, the combined accumulated purchasing power last year and this year amounts to 200 billion euros or 10 percent of disposable income. For our forecast we assume that the savings rate in 2022 will fall only slightly (0.5 percentage points) below its pre-crisis level, implying that only a small part of the built-up savings will be spent on private consumption.

Business investment is recovering at a record pace. Business investment did not collapse in the winter as during the first wave of the pandemic. Instead it slightly expanded despite the intensified pandemic situation. In view of the strong economic recovery at home and abroad, investment activity is likely to pick up noticeably. The potential for recovery is particularly high in investment in machinery and equipment which is still about 10 percent below its pre-crisis level. All in all, we expect equipment investment to return to its pre-crisis level around the middle of next year - and thus relatively fast compared with recoveries from previous crises. A strong recovery is supported by the fact that economic activity in many sectors will quickly return to normal levels when the pandemic recedes. Domestic orders for capital goods, for example, have recently been above their pre-crisis level. In the short-term, supply bottlenecks are likely to weigh on investment, in line with weak domestic sales and production of capital goods of manufacturers in April. We assume this effect to be temporary and expect that investment will pick up noticeably in the second half of the year. The recovery could be slowed down if companies hold back on investments for the time being because the pandemic has eroded their equity base. However, the sectors particularly affected are only responsible for a smaller share of corporate investment. All in all, we see business investment to increase by 4.3 percent this year and by 5.2 percent next year, after a decline of 6.2 percent last year.

While collectively agreed earnings will increase only moderately, effectively-paid gross wages and salaries will recover dynamically. At 1.6 percent, growth of collectively agreed earnings will be weaker this year than in the previous year, having already slowed to 2.2 percent last year (2019: 2.9

percent). The pick-up in economic activity will be reflected in collective wage agreements with a substantial time lag. For 2022, we expect a moderate acceleration to 1.9 percent. Total effective earnings (gross wages and salaries per employee) will increase by 3.7 percent (2021) and 3.8 percent (2022), significantly more than collectively agreed earnings, after having stagnated last year. The latter was due to the massive expansion of short-time work. In the first quarter of the current year, effective earnings were again dampened by increased short-time work. As the economic recovery resumes in the second quarter, short-time work will decline rapidly and effective earnings will recover dynamically as a result. An additional factor creating wage pressure is the fact that labor shortages have become increasingly important again. In the second quarter, the share of companies in the manufacturing sector complaining about labor shortages as a limiting factor to production was already above pre-crisis levels and thus above the historical average (European Business Survey of the European Commission).

Employment will recover noticeably in the second half of this year. Following an increase from November to February, short-time work fell in March by a substantial 20 percent to 2.6 million persons, with an average loss of working time of 56 percent. Both the notifications of short-time work received by the employment agencies and the ifo Institute's estimate according to its monthly business survey point to a further reduction in short-time work in April and May. The economic recovery will initially be realized via a strong increase in working hours, as short-time work is reduced and other pandemic-related work absences (particularly those caused by school and daycare closures) disappear. Thereafter, in the second half of the year, the recovery in employment will also gain momentum. According to the ifo employment barometer, companies' willingness to hire has already increased sharply since February – both in the manufacturing and services sectors – and is now at a level last seen two years ago. The number of job vacancies has risen significantly and the assessment of local employment agencies' regarding the development of employment in the short term have also improved rapidly in recent months. While the annual average for 2021 is still expected to show a slight year-on-year decline of around 10,000 people, following the slump of 450,000 people in 2020, there will be a strong increase of 760,000 people in 2022. As employment recovers, unemployment will decline. The average unemployment rate in 2021 is likely to be 5.8 percent, roughly the same level as last year. It will then fall to 5.3 percent in 2022.

The budget deficit increases further in 2021. Various government expenditures remain elevated, especially in the first half of the year. Expenditures for company grants and for vaccinations and tests will even be higher this year than in 2020. Furthermore, some of the payments this year are due to government programs to compensate shutdown measures in November and December 2020. In addition, revenue dynamics are impaired, since the upswing paused due to high infections and the accompanying shutdown measures at the beginning of the year. Overall, we expect the public deficit to be about 175 bn Euros (4.9 percent relative to GDP) this year. In 2022, the public budget will still be in deficit. The economic upswing will be accompanied by strongly increasing revenues. Expenditure for short-time work and especially company grants will drop sharply and government consumption will decrease. However, several measures of the stimulus packages will still lead to additional expenditures in 2022. In sum, there will remain a substantial deficit of 52 bn Euros (1.4 percent relative to GDP).

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	19
10. The German economy.....	20
11. National accounts	21

1. Leading indicators

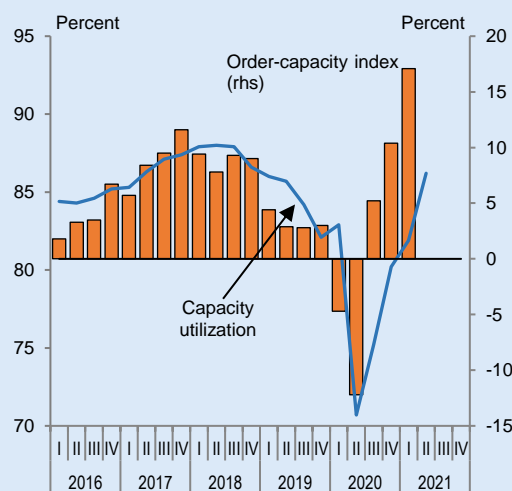
Figure 1.1:
Leading indicators,



Monthly data, seasonally adjusted.

Source: Deutsche Bundesbank, *Seasonally Adjusted Business Statistics*; ifo, *Konjunkturperspektiven*; Kiel Institute calculations.

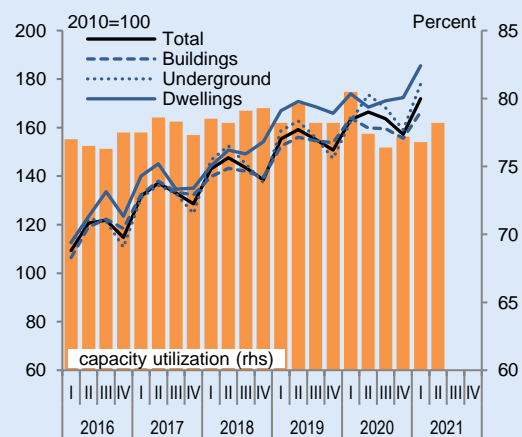
Figure 1.2:
Capacity utilization



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

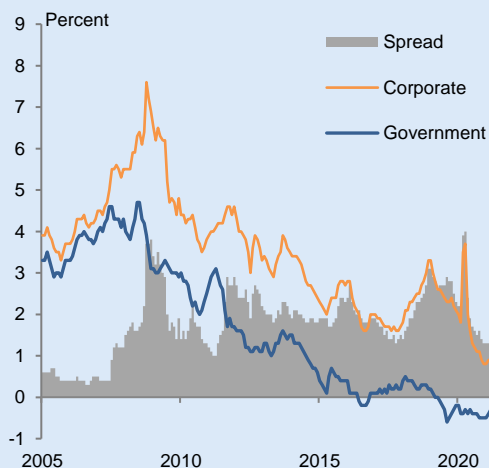


Quarterly data. Capacity utilization (deviation from normal level): seasonally adjusted; order stocks: price, seasonally and working-day adjusted.

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

2. Monetary conditions and prices

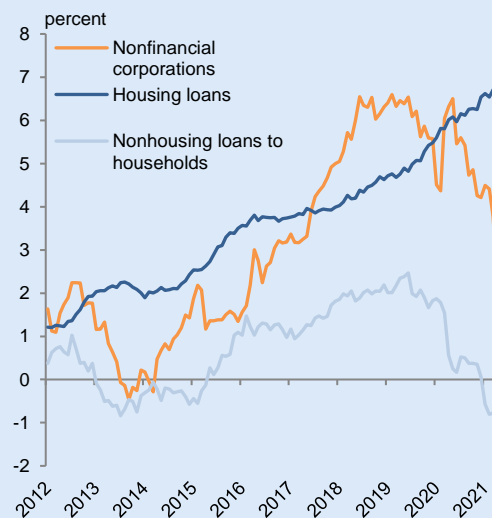
Figure 2.1:
Bond yields



Monthly data, average maturities above three years.

Source: Deutsche Bundesbank, *Monthly Reports*; Kiel Institute calculations.

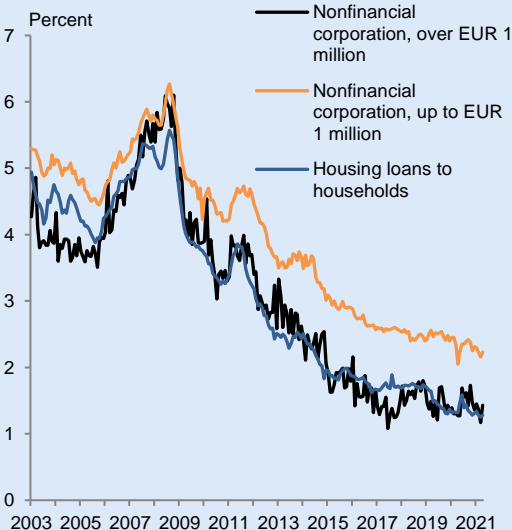
Figure 2.3:
Sum of loans



Change compared to one year ago; Monthly data.

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

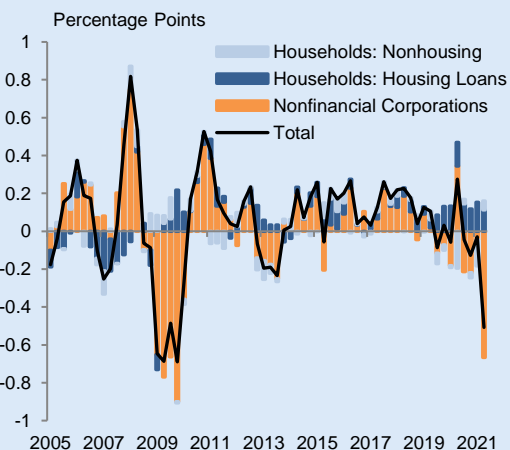
Figure 2.2:
Loan interest



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

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

Figure 2.4:
Credit impulse

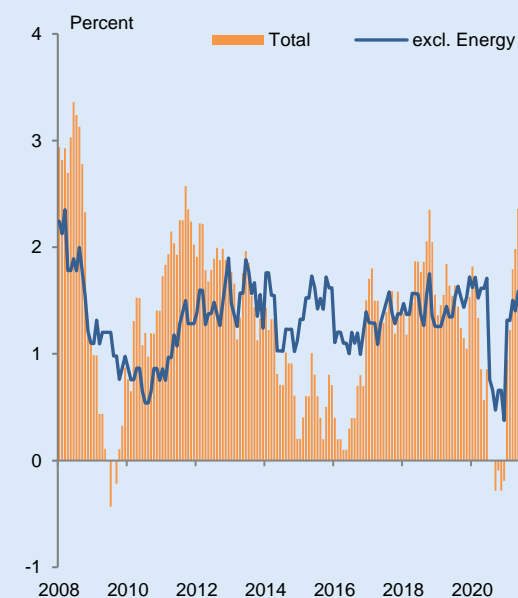


Quarterly data, most recent quarter based on first month; calculations follow Biggs et al. (2009), *Credit and economic recovery*, DNB Working Paper 218, De Nederlandsche Bank, Amsterdam.

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

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

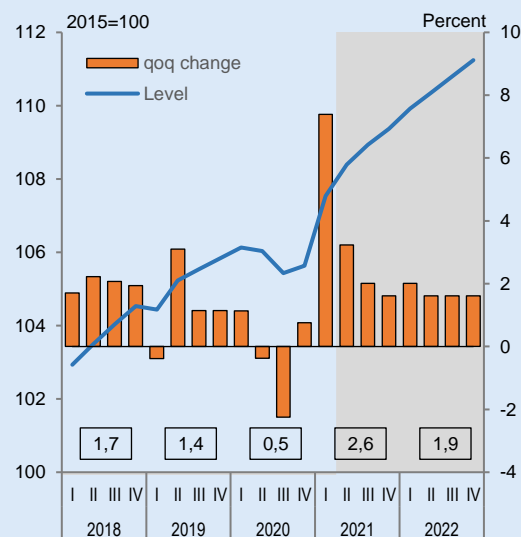
Figure 2.5:
Consumer prices



Monthly data; year-on-year change.

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

Figure 2.6:
Consumer price index



Quarterly data: seasonally adjusted; qoq change: annualized. Annual data (boxes): Volumes, change in percent.

Source: Federal Statistical Office, *Fachserie 17, Series 7*; shaded: Kiel Institute forecast.

Table 2.1:
Projections and assumptions on the international environment

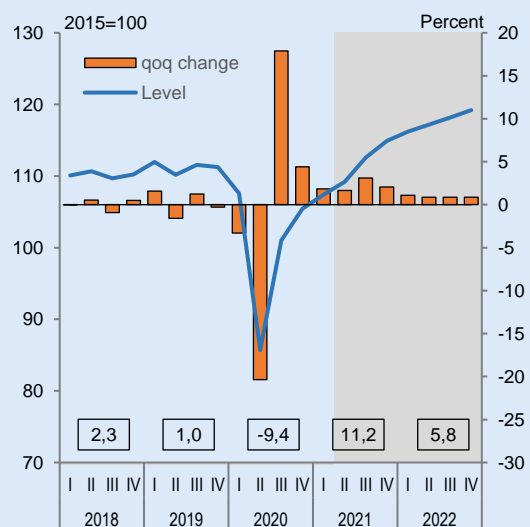
	2017				2018				2019				2020			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
ECB key interest rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Long-term interest rate	0.10	-0.10	-0.50	-0.40	-0.40	-0.40	-0.50	-0.60	-0.40	-0.30	-0.20	-0.20	-0.20	-0.20	-0.10	-0.10
US-dollar/euro exchange rate	1.14	1.12	1.11	1.11	1.10	1.10	1.17	1.19	1.21	1.21	1.22	1.22	1.22	1.22	1.22	1.22
Price competitiveness	89.7	89.5	89.4	88.9	88.9	90.3	90.8	90.8	91.6	91.7	91.6	91.4	91.4	91.3	91.3	91.2
Export markets	0.7	0.6	0.4	0.3	-3.0	-9.3	10.1	0.5	0.3	1.7	1.9	1.2	0.8	0.6	0.6	0.6
Oil price	63.2	68.9	61.9	63.4	50.5	29.4	43.0	44.3	60.8	68.1	71.2	71.6	71.9	72.3	72.7	73.0

ECB key interest rate: main refinancing operations; long-term interest rate on 9–10 year bonds; price competitiveness: against 60 trading partners, based on consumer price inflation; 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*; Kiel Institute calculations; shaded: Kiel Institute forecast or assumption.

3. External trade

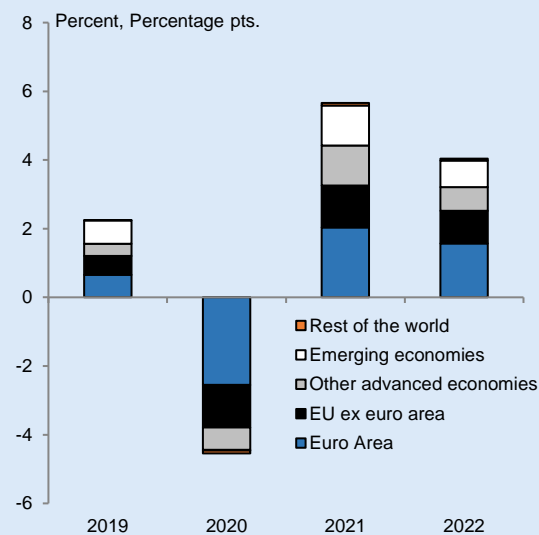
Figure 3.1:
Exports



Quarterly data: Volumes, seasonally and calendar adjusted.
Annual data (boxes): Volumes, change in percent.

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

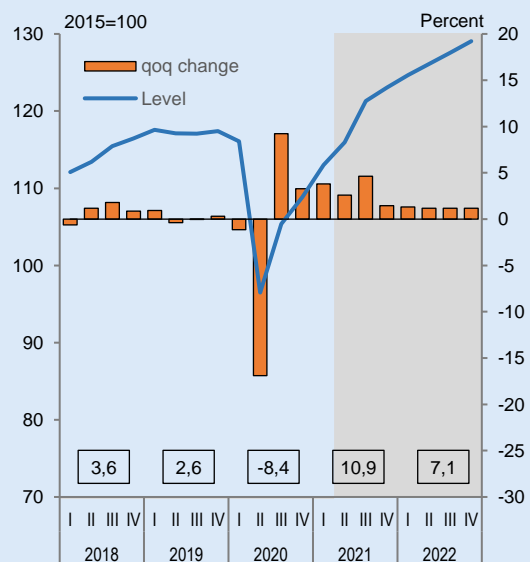
Figure 3.3:
German export markets



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

Source: Federal Statistical Office, *Fachserie 7 Series 1*; national sources; Kiel Institute calculations and forecast.

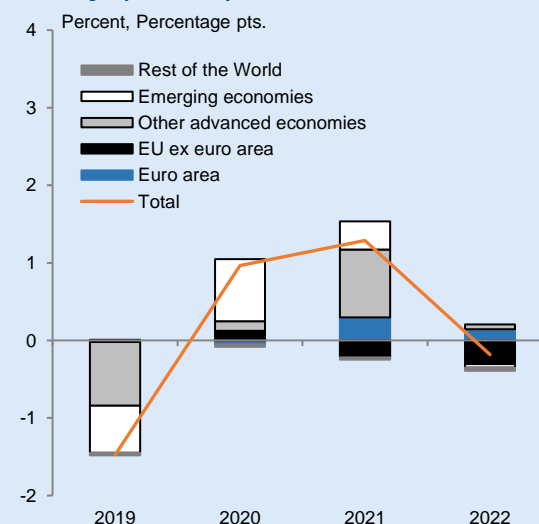
Figure 3.2:
Imports



Quarterly data: Volumes, seasonally and calendar adjusted.
Annual data (boxes): Volumes, change in percent.

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

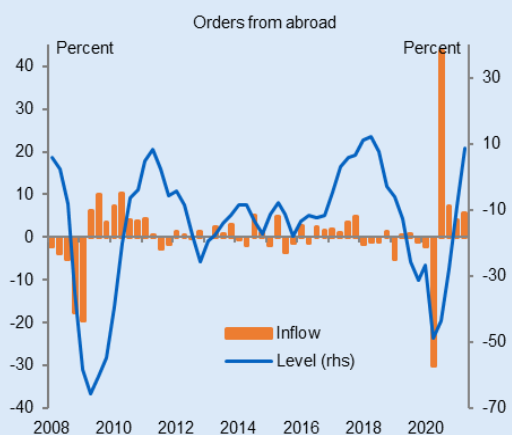
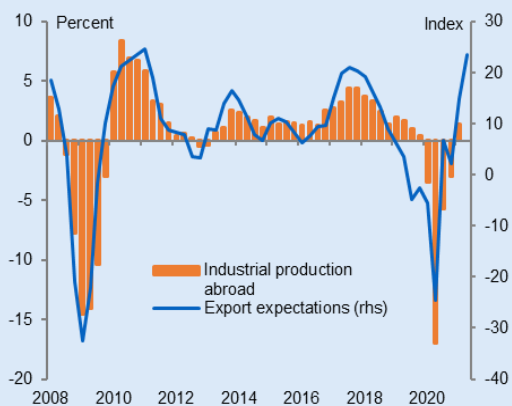
Figure 3.4:
Germany's price competitiveness



Annual data; vis-à-vis 55 countries based on consumer prices; weights according to Germany's price competitiveness indicator vis-à-vis 61 trading partners based on consumer price indices from the Deutsche Bundesbank. Increase reflects worsening of price competitiveness.

Source: Bundesbank, *Monthly Report 8.2020*; national sources; Kiel Institute calculations and forecast.

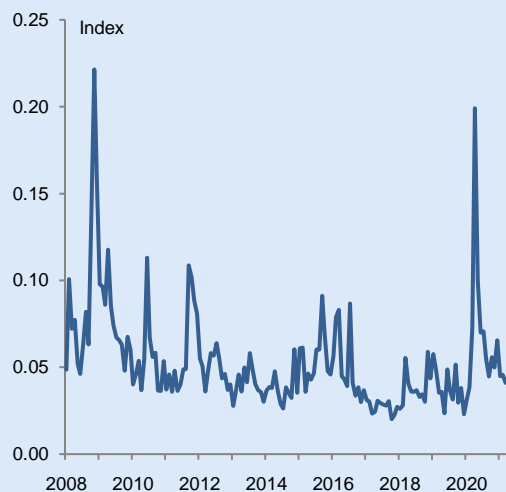
Figure 3.5:
Export indicators



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

Source: Deutsche Bundesbank; Thomson Reuters Datastream; ifo, *Konjunkturperspektiven*; Kiel Institute calculations.

Figure 3.6:
Uncertainty in German export markets

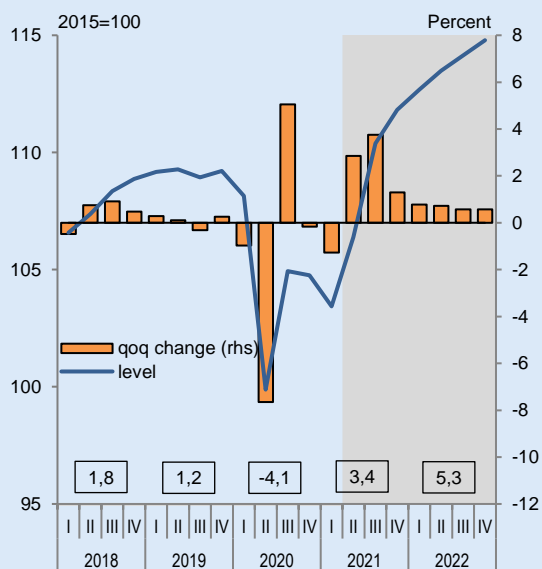


Monthly data; realized stock market volatilities based on daily stock price indices in 46 countries, weighted by shares of German exports. Last value: 11.06.2021.

Source: National sources; Kiel Institute calculations.

4. Domestic expenditure

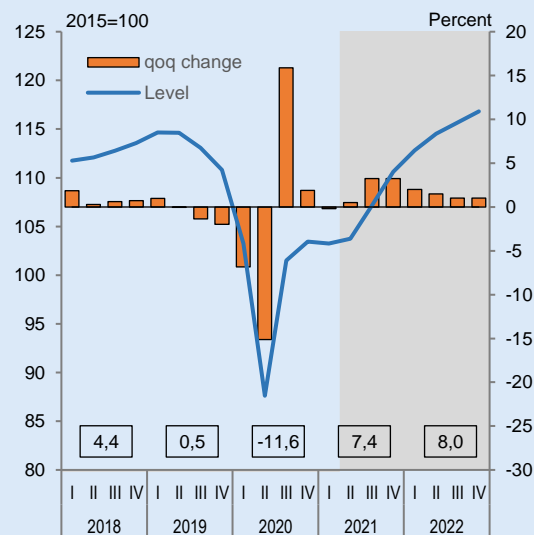
Figure 4.1:
Domestic expenditure



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

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

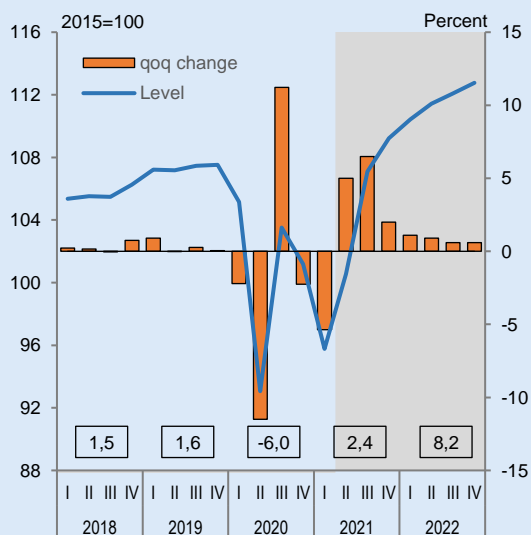
Figure 4.3:
M&E investments



Quarterly data: Volumes, seasonally and calendar adjusted. Annual data (boxes): Volumes, change in percent.

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

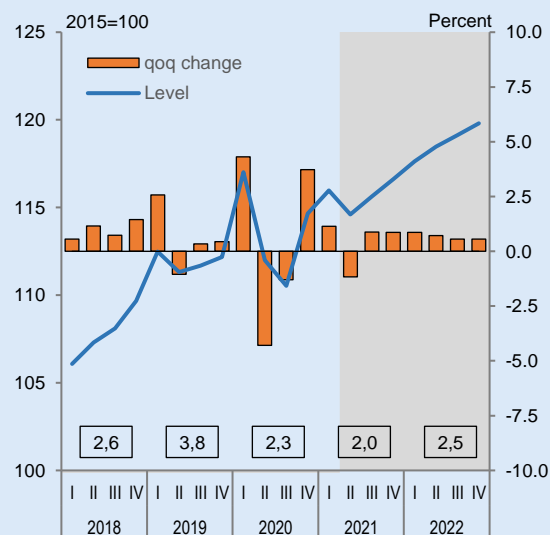
Figure 4.2:
Private consumption



Quarterly data: Volumes, seasonally and calendar adjusted. Annual data (boxes): Volumes, change in percent.

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

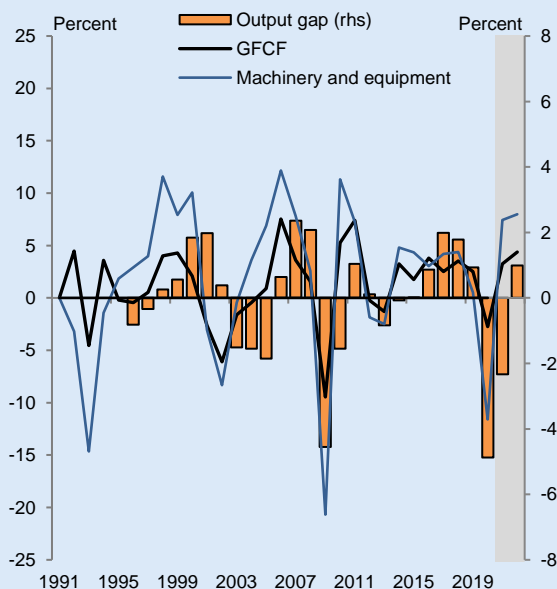
Figure 4.4:
Construction



Quarterly data: Volumes, seasonally and calendar adjusted. Annual data (boxes): Volumes, change in percent.

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

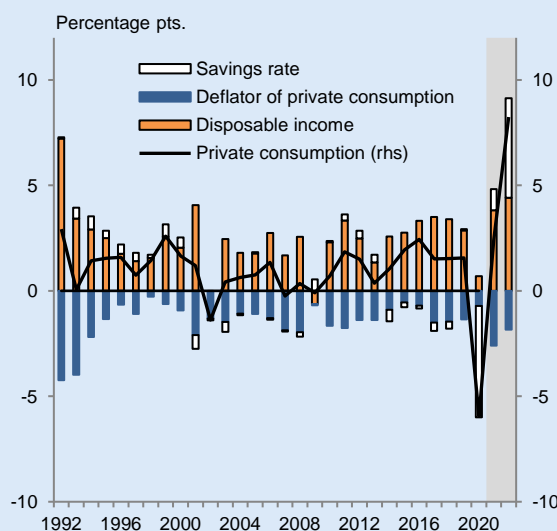
Figure 4.5:
Investment cycles



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: Kiel Institute forecast.

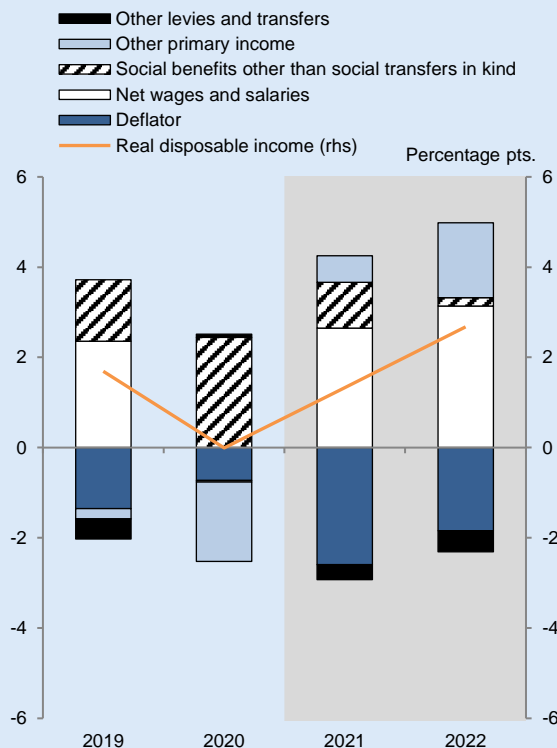
Figure 4.6:
Contributions to change in private consumption



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

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

Figure 4.7:
Contributions to changes in real disposable income,



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*; Kiel Institute calculations; shaded: Kiel Institute forecast.

Table 4.1:
Gross fixed capital formation, 2017–2020

	2019	2020	2021	2022
Total	2.5	-2.7	3.2	4.4
Corporate investment	1.5	-6.2	4.3	5.2
Machinery and equipment	0.5	-11.6	7.4	8.0
Construction (non-dwellings)	2.4	-0.3	3.2	0.8
Other	2.7	-1.1	0.0	4.0
Dwellings	4.0	3.3	1.3	3.5
Public (non-dwellings)	6.0	3.4	3.5	1.1
<i>Memorandum item:</i>				
Construction	3.8	2.3	2.0	2.5

Volumes; change over previous year in percent.

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

5. Industries

Table 5.1
Gross value added for industries

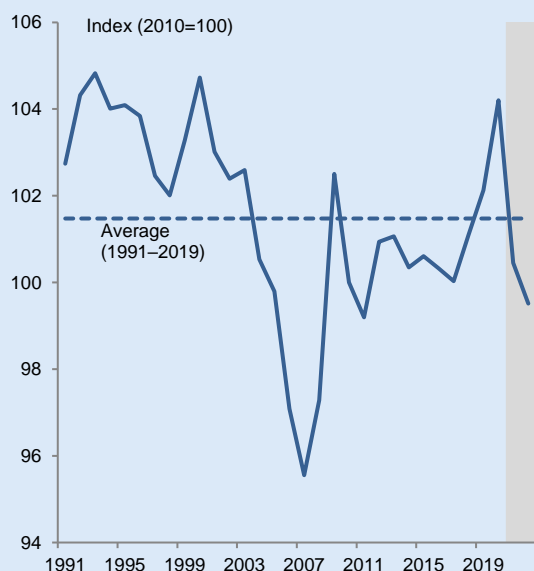
	2020		2021			
	III	IV	I	II	III	IV
	Seasonally and calendar-adjusted, q-o-q change in percent					
Gross domestic product	8.7	0.5	-1.8	2.4	3.1	1.6
Gross value added	8.3	0.5	-0.8	2.4	3.1	1.6
Industry excl. construction	13.3	6.0	0.0	0.5	2.0	3.0
Manufacturing	14.4	6.6	0.4	0.2	2.2	3.2
Construction	-3.0	9.1	-4.9	-0.5	1.5	1.0
Trade, transport, accomodation, food services	13.7	-2.3	-3.2	5.0	6.0	2.0
Information and communication	4.1	1.2	-1.1	1.0	1.5	0.5
Financial and insurance services	0.4	-1.6	1.3	0.3	0.2	0.2
Real estate activities	1.5	0.9	0.1	0.8	0.5	0.5
Business services	4.6	1.4	0.0	3.0	3.5	2.0
Public services, education, health	9.7	-3.9	-0.3	3.5	3.0	0.5
Other services	18.1	-12.2	1.3	8.0	9.5	3.0

Quarterly data, volumes.

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

6. Wages

Figure 6.1:
Real unit labor costs



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: Kiel Institute forecast.

Table 6.1:
Wages and productivity

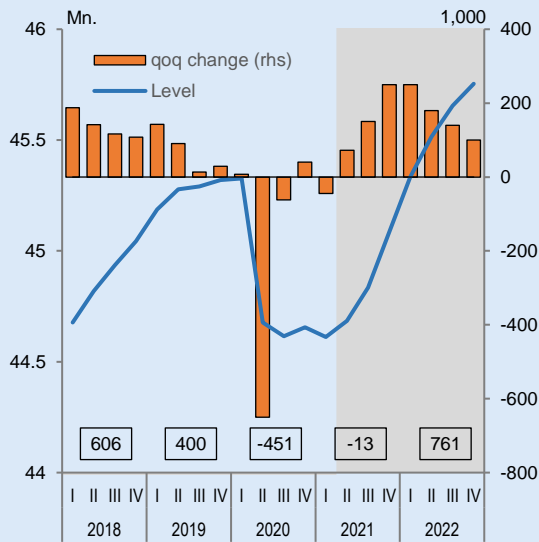
	2019	2020	2021	2022
<i>Per hour</i>				
Negotiated wages	2.9	2.2	1.6	1.9
Gross wages and salaries	3.2	3.7	1.2	1.9
Wage drift	0.3	1.6	-0.4	-0.1
Compensation of employees	3.3	4.3	0.9	1.4
Labor productivity	0.0	0.0	2.0	0.9
Unit labor costs	3.3	4.4	-1.1	0.4
Unit labor costs (real)	1.1	2.8	-3.2	-1.3
<i>Per capita</i>				
Negotiated wages	2.9	2.2	1.6	1.9
Gross wages and salaries	2.9	0.0	3.7	3.8
Wage drift	0.1	-2.2	2.1	1.9
Compensation of employees	3.0	0.6	3.4	3.4
Labor productivity	-0.3	-3.8	4.0	3.1
Unit labor costs	3.4	4.6	-0.5	0.3
Unit labor costs (real)	1.1	2.9	-2.6	-1.4

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: Kiel Institute forecast.

7. Employment

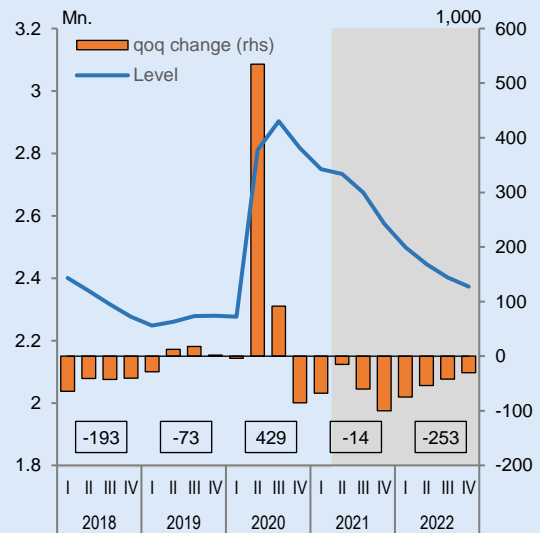
Figure 7.1:
Employment



Quarterly data: seasonally adjusted.
Annual data (boxes): yoy change in 1,000.

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

Figure 7.2:
Unemployment



Quarterly data: seasonally adjusted.
Annual data (boxes): yoy change in 1,000.

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

Table 7.1:

Employment (1,000 persons)

	2018	2019	2020	2021	2022
Hours worked (domestic concept, mn. hours)	62,229	62,596	59,632	60,789	63,112
Persons in employment (domestic concept)	44,868	45,268	44,818	44,804	45,565
Self-employed	4,224	4,152	4,012	3,861	3,895
Employees (domestic concept)	40,645	41,117	40,806	40,943	41,670
Employees subject to social security contributions	32,992	33,537	33,578	33,896	34,433
Minijobs	4,668	4,575	4,272	4,126	4,317
Net commuting	141	146	105	140	145
Persons in employment (national concept)	44,727	45,123	44,712	44,664	45,420
Employees (national concept)	40,503	40,971	40,700	40,803	41,525
Unemployed persons (registered)	2,340	2,267	2,695	2,681	2,428
Unemployment rate (registered; percent)	5.2	5.0	5.9	5.8	5.3
Unemployment rate (ILO; percent)	3.2	2.9	4.0	4.1	3.5

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: Kiel Institute forecast.

8. Public finances

Table 8.1:

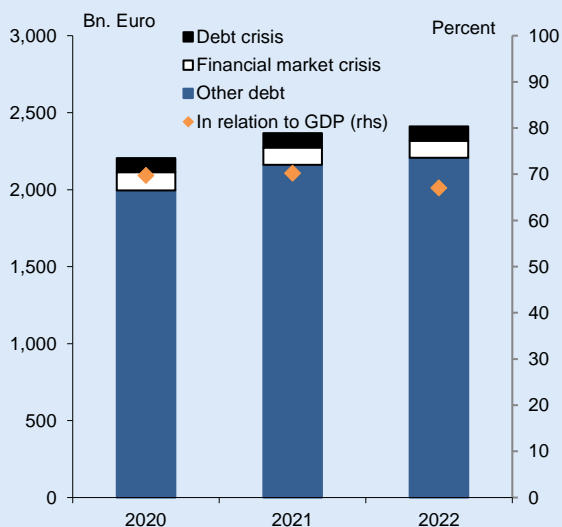
Revenues and expenditures of the general government (bn. Euro)

	2018	2019	2020	2021	2022
Revenues	1,553.8	1,610.6	1,563.1	1,634.8	1,739.2
→relative to GDP	46.3	46.7	46.9	46.1	46.2
Taxes	801.2	827.1	771.4	813.3	873.6
→relative to GDP	23.9	24.0	23.1	23.0	23.2
Social contributions	572.6	597.5	607.1	632.0	660.8
→relative to GDP	17.1	17.3	18.2	17.8	17.6
Other revenues	180.1	186.0	184.7	189.6	204.8
→relative to GDP	5.4	5.4	5.5	5.4	5.4
Expenditures	1,492.2	1,558.1	1,712.3	1,810.0	1,791.0
→relative to GDP	44.5	45.2	51.3	51.1	47.6
Compensation of employees	259.6	271.5	283.7	292.2	299.3
Intermediate consumption	173.4	181.9	209.3	220.8	207.1
Social transfers in kind	285.7	300.4	311.2	327.5	343.3
Gross capital formation	78.7	86.2	92.3	93.2	98.5
Capital transfers	31.1	27.5	22.2	20.1	18.5
Social benefits	520.3	545.4	593.0	612.6	615.9
Subsidies	29.5	30.8	71.0	93.6	53.0
Other current transfers	70.8	74.2	82.6	91.7	95.1
Other capital transfers and investment grants	44.1	41.0	47.7	59.1	61.0
Other expenditures	-1.3	-1.2	-1.2	-1.2	-1.2
Net lending/ net borrowing	61.6	52.5	-149.2	-175.2	-51.8
→relative to GDP	1.8	1.5	-4.5	-4.9	-1.4
Revenues of central, state, and local governments	1,011.4	1,044.5	999.1	1,044.0	1,113.7
Net of transfers from social security funds	1,010.3	1,043.4	998.0	1,042.8	1,112.6
Transfers from social security funds	1.1	1.1	1.1	1.2	1.2
Expenditures of central, state, and local governments	965.8	1,000.7	1,114.1	1,207.9	1,158.2
Net of transfers to social security funds	847.5	878.0	972.7	1,046.6	1,014.5
Transfers to social security funds	118.3	122.7	141.4	161.3	143.7
Net lending/ net borrowing central, state, and local governments	45.6	43.8	-115.0	-163.9	-44.4
Revenues of social security funds	661.9	690.0	716.7	760.4	770.6
Net of transfers from central, state, and local governments	543.6	567.2	575.3	599.1	626.9
Expenditures of social security funds	645.9	681.3	750.9	770.3	775.7
Net of transfers to central, state, and local governments	644.7	680.2	749.7	769.2	774.5
Net lending/ net borrowing social security funds	16.0	8.7	-34.2	-9.9	-5.1

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

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

Figure 8.1:
Government gross debt

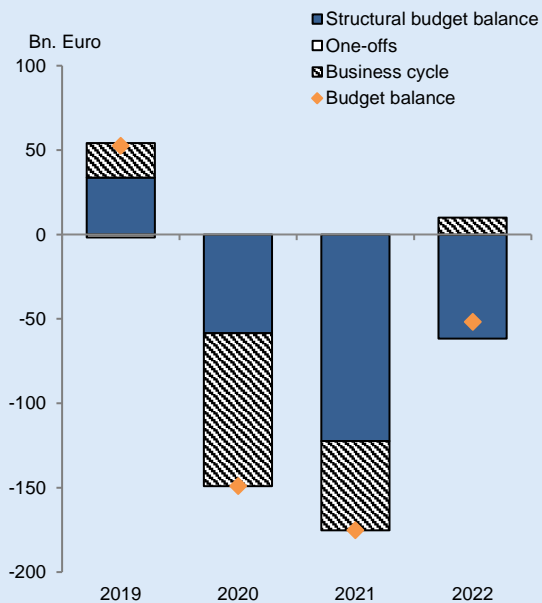


Debt crisis: Liabilities due to first Greece adjustment programme, deposits at the ESM, guarantees for EFSF credits.

Financial market crisis: Liabilities due to bank rescue packages.

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

Figure 8.2:
Structural budget balance



Source: Europäische Kommission, AMECO; Kiel Institute calculations and forecast.

9. GDP and its components

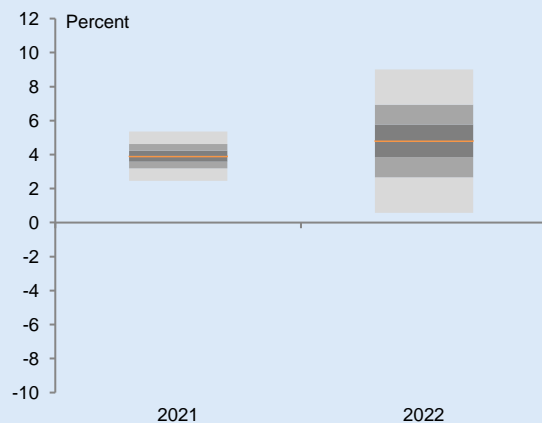
Table 9.1:
Quarterly data

	2018				2019				2020			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Gross domestic product	-2.0	-9.7	8.7	0.5	-1.8	2.4	3.1	1.6	0.7	0.6	0.5	0.5
Private consumption	-2.2	-11.5	11.2	-2.3	-5.4	5.0	6.5	2.0	1.1	0.9	0.6	0.6
Government consumption	1.1	1.3	1.0	0.1	0.2	1.4	-0.5	-0.9	-0.5	0.0	0.3	0.4
Machinery and equipment	-6.8	-15.1	15.9	1.9	-0.2	0.5	3.3	3.3	2.0	1.5	1.0	1.0
Constructions	4.3	-4.3	-1.3	3.7	1.1	-1.2	0.9	0.9	0.9	0.7	0.6	0.6
Other investment	-2.5	0.2	0.9	0.1	-1.6	0.5	1.0	1.0	1.0	1.0	1.0	1.0
Change in inventories	0.1	-0.1	-1.9	0.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic expenditure	-1.0	-7.6	5.1	-0.2	-1.3	2.9	3.8	1.3	0.8	0.7	0.6	0.6
Exports	-3.3	-20.4	17.9	4.4	1.8	1.7	3.1	2.1	1.1	0.9	0.9	0.9
Imports	-1.1	-16.9	9.2	3.3	3.8	2.6	4.6	1.4	1.3	1.2	1.2	1.2
Net exports	-1.1	-2.4	3.8	0.7	-0.6	-0.3	-0.4	0.4	0.0	-0.1	-0.1	-0.1
Employment (domestic)	45,328	44,677	44,615	44,656	44,612	44,684	44,834	45,084	45,334	45,514	45,654	45,754
Unemployment (registered)	2,276	2,811	2,903	2,817	2,749	2,734	2,674	2,574	2,499	2,445	2,403	2,373

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: Kiel Institute forecast.

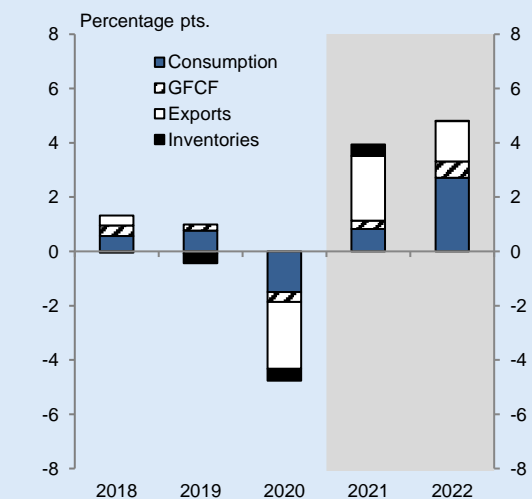
Figure 9.1:
Forecast intervals for GDP growth



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 second quarter 1994–2020.

Source: Kiel Institute calculations.

Figure 9.2:
Import adjusted expenditure-side contributions to GDP growth



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).

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

10. The German economy

Tabelle 9:

The German economy

	2019	2019	2020	2021	2022
	Bn. Euro	Change over previous year in percent			
Use of gross domestic product, price-adjusted					
GDP		0.6	-4.8	3.9	4.8
Private consumption expenditure		1.6	-6.0	2.4	8.2
Public consumption expenditure		2.7	3.7	1.7	-0.8
Total fixed investment		2.5	-2.7	3.2	4.4
Machinery and equipment		0.5	-11.6	7.4	8.0
Construction		3.8	2.3	2.0	2.5
Other equipment		2.7	-1.1	0.0	4.0
Changes in stocks		-0.7	-0.9	0.9	0.0
Domestic Demand		1.2	-4.1	3.4	5.3
Exports		1.0	-9.4	11.2	5.8
Imports		2.6	-8.4	10.9	7.1
Net exports		-0.6	-0.9	0.7	-0.2
Use of gross domestic product at current prices					
GDP	3,449.1	2.8	-3.3	6.2	6.6
Private consumption expenditure	1,806.9	2.9	-5.3	5.1	10.2
Public consumption expenditure	704.5	5.1	7.1	4.6	0.3
Total fixed investment	748.0	5.5	-1.3	6.0	7.5
Machinery and equipment	240.1	1.9	-10.4	8.7	9.7
Construction	373.7	8.4	4.0	6.1	6.8
Other equipment	134.2	4.2	0.3	1.4	5.9
Changes in stocks (€ bn.)		-10.3	-61.7	-29.5	-30.2
Domestic Demand	3,249.1	3.1	-3.3	6.3	7.3
Exports	1,617.4	1.7	-9.7	15.0	7.9
Imports	1,417.4	2.4	-10.6	16.7	9.6
Net exports (€ bn.)		199.9	193.5	202.1	192.1
Gross national income	3,542.8	2.8	-3.2	6.0	6.5
Deflators					
GDP		2.2	1.6	2.2	1.7
Private consumption expenditure		1.4	0.7	2.6	1.8
Public consumption expenditure		2.3	3.3	2.9	1.1
Investment in machinery and equipment		1.4	1.3	1.2	1.6
Investment in construction		4.4	1.7	4.0	4.2
Investment in other equipment		1.4	1.4	1.4	1.9
Exports		0.8	-0.4	3.5	1.9
Imports		-0.1	-2.4	5.2	2.4
Addendum: Consumer prices		1.4	0.5	2.6	1.9
Income distribution					
Net national income (factor costs)	2,564.1	2.2	-2.5	6.8	5.1
Compensation of employees	1,845.9	4.2	-0.1	3.8	5.2
in percent of national income		72.0	73.7	71.6	71.7
Property and entrepreneurial income	718.2	-2.7	-8.4	15.2	4.7
Disposable income	1,969.8	3.0	0.7	3.9	4.5
Savings rate		10.9	16.2	15.2	10.4
Wages and salaries	1,521.6	4.1	-0.7	4.0	5.6
Wage per hour		3.2	3.7	1.2	1.9
Unit labor costs		3.3	4.4	-1.1	0.4
Productivity per hour		0.0	0.0	2.0	0.9
Unemployment (1,000)		2,266.7	2,695.4	2,681.0	2,428.2
Rate of unemployment (percent)		5.0	5.9	5.8	5.3
Total employment (1,000)		45,268.3	44,817.7	44,804.3	45,564.8
Public sector budget balance					
Public sector budget balance (€ bn.)		52.5	-149.2	-175.2	-51.8
Public sector budget balance (in percent of GDP)		1.5	-4.5	-4.9	-1.4
Public debts (in percent)		59.7	69.7	70.2	66.6

Change in stocks, net exports: Lundberg-component (contribution to GDP growth); employment, unemployment: as defined by the Federal Employment Agency (BA); public debts: in relation to GDP.

Source: Federal Statistical Office, Fachserie 18, Series 1.2; shaded: Kiel Institute forecast.

11. National accounts

National Accounts

Forecast period: 2021 to 2022

	2020	2021	2022	2021		2022	
				H1	H2	H1	H2

1. Production

Change over the same period of the preceding year in %

Persons in employment	- 1.0	0.0	1.7	- 0.8	0.7	1.7	1.7
Hours worked	- 4.7	1.9	3.8	0.1	3.7	6.2	1.7
Hours worked by person in employment	- 3.8	2.0	2.1	0.9	3.0	4.4	0.0
Labor productivity ¹	0.0	2.0	0.9	3.0	1.0	1.0	0.8
Gross domestic product, price-adjusted	- 4.8	3.9	4.8	3.1	4.8	7.3	2.5

2. Use of gross domestic product at current prices

a) EUR bn.

Consumption expenditure	2 466.0	2 587.5	2 773.9	1 225.0	1 362.5	1 350.2	1 423.6
Private households ²	1 711.6	1 798.4	1 982.3	839.2	959.1	965.0	1 017.3
Government	754.4	789.1	791.5	385.8	403.4	385.2	406.3
Gross fixed capital formation	738.4	782.7	841.6	369.7	413.0	401.2	440.3
Machinery and equipment	215.1	233.8	256.5	107.9	125.9	121.1	135.4
Construction	388.8	412.4	440.5	197.7	214.7	212.5	228.0
Other products	134.6	136.5	144.5	64.1	72.4	67.6	76.9
Changes in inventories ³	- 61.7	- 29.5	- 30.2	- 7.8	- 21.7	- 9.5	- 20.7
Domestic expenditure	3 142.7	3 340.7	3 585.2	1 586.9	1 753.8	1 742.0	1 843.3
Net exports	193.5	202.1	192.1	114.1	88.0	107.0	85.1
Exports	1 460.1	1 679.7	1 812.3	807.0	872.7	896.3	916.0
Imports	1 266.7	1 477.6	1 620.2	692.9	784.7	789.2	831.0
Gross domestic product	3 336.2	3 542.8	3 777.4	1 701.0	1 841.8	1 849.0	1 928.4

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

Consumption expenditure	- 1.8	4.9	7.2	2.4	7.3	10.2	4.5
Private households ²	- 5.3	5.1	10.2	0.8	9.1	15.0	6.1
Government	7.1	4.6	0.3	6.1	3.2	- 0.1	0.7
Gross fixed capital formation	- 1.3	6.0	7.5	4.7	7.2	8.5	6.6
Machinery and equipment	- 10.4	8.7	9.7	10.1	7.5	12.3	7.5
Construction	4.0	6.1	6.8	3.2	8.9	7.5	6.2
Other products	0.3	1.4	5.9	0.8	1.9	5.5	6.3
Domestic expenditure	- 3.3	6.3	7.3	3.2	9.3	9.8	5.1
Exports	- 9.7	15.0	7.9	14.6	15.4	11.1	5.0
Imports	- 10.6	16.7	9.6	11.5	21.7	13.9	5.9
Gross domestic product	- 3.3	6.2	6.6	5.0	7.3	8.7	4.7

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

a) EUR bn.

Consumption expenditure	2 296.9	2 347.3	2 476.2	1 119.2	1 228.1	1 216.4	1 259.8
Private households ²	1 616.6	1 655.7	1 792.1	775.3	880.4	878.2	913.9
Government	679.2	690.7	685.4	342.8	347.9	338.7	346.6
Gross fixed capital formation	665.4	687.0	717.0	326.7	360.2	343.7	373.3
Machinery and equipment	206.1	221.5	239.2	102.5	119.0	113.1	126.1
Construction	332.2	338.9	347.3	164.1	174.8	168.8	178.5
Other products	124.9	124.9	129.9	59.0	65.9	61.2	68.7
Domestic expenditure	2 924.8	3 024.2	3 183.9	1 445.1	1 579.1	1 560.8	1 623.2
Exports	1 426.3	1 585.5	1 678.1	770.6	814.9	832.6	845.5
Imports	1 274.6	1 413.8	1 513.7	673.4	740.4	739.5	774.2
Gross domestic product	3 078.3	3 199.7	3 353.2	1 543.2	1 656.5	1 655.6	1 697.6

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

Consumption expenditure	- 3.2	2.2	5.5	0.1	4.2	8.7	2.6
Private households ²	- 6.0	2.4	8.2	- 1.1	5.7	13.3	3.8
Government	3.7	1.7	- 0.8	2.6	0.8	- 1.2	- 0.4
Gross fixed capital formation	- 2.7	3.2	4.4	2.9	3.5	5.2	3.6
Machinery and equipment	- 11.6	7.4	8.0	9.0	6.2	10.4	5.9
Construction	2.3	2.0	2.5	1.0	3.1	2.9	2.1
Other products	- 1.1	0.0	4.0	- 0.5	0.5	3.7	4.2
Domestic expenditure	- 4.1	3.4	5.3	0.7	6.0	8.0	2.8
Exports	- 9.4	11.2	5.8	12.2	10.2	8.0	3.8
Imports	- 8.4	10.9	7.1	7.7	14.1	9.8	4.6
Gross domestic product	- 4.8	3.9	4.8	3.1	4.8	7.3	2.5

National Accounts (cont.)

Forecast period: 2021 to 2022

	2020	2021	2022	2021		2022	
				H1	H2	H1	H2
4. Deflators (2010=100)							
Change on the same period of the preceding year in %							
Private consumption ²	0.7	2.6	1.8	2.0	3.2	1.5	2.2
Government consumption	3.3	2.9	1.1	3.3	2.4	1.1	1.1
Gross fixed capital formation	1.5	2.7	3.0	1.7	3.5	3.2	2.9
Machinery and equipment	1.3	1.2	1.6	1.0	1.3	1.7	1.5
Construction	1.7	4.0	4.2	2.2	5.6	4.5	4.0
Exports	-0.4	3.5	1.9	2.2	4.7	2.8	1.2
Imports	-2.4	5.2	2.4	3.5	6.7	3.7	1.3
Gross domestic product	1.6	2.2	1.7	1.9	2.4	1.3	2.2

5. National income

a) EUR bn.

Primary income of private households ²	2 387.4	2 468.5	2 602.8	1 211.4	1 257.1	1 288.2	1 314.6
Employers social contributions	332.0	341.3	352.8	165.8	175.5	170.6	182.2
Gross wages and salaries	1 511.5	1 571.7	1 660.2	743.3	828.3	791.2	869.0
Other primary income ⁴	543.9	555.6	589.9	302.3	253.3	326.5	263.4
Primary income of other sectors	386.1	486.8	557.6	192.3	294.5	247.1	310.5
Net national income	2 773.5	2 955.3	3 160.4	1 403.7	1 551.6	1 535.3	1 625.1
Consumption of fixed capital	657.7	681.1	711.7	337.7	343.4	352.9	358.8
Gross national income	3 431.2	3 636.4	3 872.2	1 741.4	1 895.0	1 888.2	1 983.9
memorandum item:							
Net national income (factor costs)	2 501.1	2 670.5	2 806.2	1 278.2	1 392.3	1 359.6	1 446.6
Property and entrepreneurial income	657.5	757.6	793.2	369.1	388.5	397.8	395.4
Compensation of employees	1 843.6	1 912.9	2 013.0	909.1	1 003.8	961.8	1 051.2

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

Primary income of private households ²	-1.5	3.4	5.4	2.4	4.4	6.3	4.6
Employers social contributions	2.4	2.8	3.4	2.6	2.9	2.9	3.8
Gross wages and salaries	-0.7	4.0	5.6	3.1	4.7	6.4	4.9
... per employee	0.0	3.7	3.8	3.6	3.7	4.5	3.2
Other primary income ⁴	-6.0	2.2	6.2	0.4	4.3	8.0	4.0
Primary income of other sectors	-19.3	26.1	14.5	30.0	23.7	28.5	5.4
Net national income	-4.5	6.6	6.9	5.4	7.6	9.4	4.7
Consumption of fixed capital	2.8	3.6	4.5	2.6	4.5	4.5	4.5
Gross national income	-3.2	6.0	6.5	4.9	7.0	8.4	4.7
memorandum item:							
Net national income (factor costs)	-2.5	6.8	5.1	7.0	6.6	6.4	3.9
Property and entrepreneurial income	-8.4	15.2	4.7	18.2	12.5	7.8	1.8
Compensation of employees	-0.1	3.8	5.2	3.1	4.4	5.8	4.7

6. Disposable income of private households ²

a) EUR bn.

Mass income	1 533.6	1 598.3	1 663.9	767.0	831.3	796.2	867.7
Net wages and salaries	1 019.5	1 072.1	1 136.8	501.5	570.7	536.6	600.2
Social benefits other than social transfers in kind	654.4	674.5	678.3	340.0	334.5	334.1	344.1
less: Levies on social benefits, taxes on consumption	140.3	148.3	151.1	74.5	73.8	74.5	76.7
Other primary income ⁴	543.9	555.6	589.9	302.3	253.3	326.5	263.4
Other transfers received (net) ⁵	-93.5	-92.2	-99.0	-44.2	-48.0	-47.3	-51.8
Disposable income	1 983.9	2 061.7	2 154.8	1 025.1	1 036.6	1 075.4	1 079.4
Change in pension entitlements	57.4	57.8	58.3	28.2	29.6	28.4	29.9
Consumption expenditure	1 711.6	1 798.4	1 982.3	839.2	959.1	965.0	1 017.3
Saving	329.7	321.2	230.7	214.1	107.1	138.8	92.0
Saving ratio (%) ⁶	16.2	15.2	10.4	20.3	10.0	12.6	8.3

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

Mass income	2.8	4.2	4.1	4.6	3.9	3.8	4.4
Net wages and salaries	-0.1	5.2	6.0	4.5	5.8	7.0	5.2
Social benefits other than social transfers in kind	7.9	3.1	0.6	5.4	0.8	-1.7	2.9
less: Levies on social benefits, taxes on consumption	3.6	5.7	1.9	7.8	3.6	0.0	3.8
Other primary income ⁴	-6.0	2.2	6.2	0.4	4.3	8.0	4.0
Disposable income	0.7	3.9	4.5	3.8	4.0	4.9	4.1
Consumption expenditure	-5.3	5.1	10.2	0.8	9.1	15.0	6.1
Saving	49.7	-2.6	-28.2	16.8	-26.9	-35.2	-14.1

National Accounts (cont.)

Forecast period: 2021 to 2022

	2020	2021	2022	2021		2022	
				H1	H2	H1	H2
7. Revenue and expenditure by general government ⁷							
a) EUR bn.							
Revenue							
Taxes	771.4	813.3	873.6	397.0	416.3	433.5	440.1
Social contributions	607.1	632.0	660.8	305.9	326.1	318.9	341.9
Property income	19.5	14.8	14.4	7.2	7.6	7.0	7.4
Other current transfers	24.1	25.8	27.3	11.3	14.5	12.0	15.3
Capital transfers	15.4	18.3	22.8	7.7	10.6	10.0	12.8
Sales	125.6	130.5	140.2	58.8	71.7	63.9	76.3
Other subsidies	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total	1 563.1	1 634.8	1 739.2	787.9	846.9	845.2	894.0
Expenditure							
Intermediate consumption ⁸	520.9	548.7	550.8	264.8	283.9	263.8	286.9
Compensation of employees	283.7	292.2	299.3	140.2	152.0	144.1	155.3
Property income (interest)	22.2	20.1	18.5	10.7	9.4	9.9	8.6
Subsidies	71.0	93.6	53.0	55.1	38.5	25.7	27.3
Social benefits	593.0	612.6	615.9	309.1	303.5	303.0	312.9
Other current transfers	82.6	91.7	95.1	44.2	47.5	45.8	49.3
Capital transfers	47.7	59.1	61.0	22.6	36.5	23.6	37.4
Gross capital formation	92.3	93.2	98.5	40.4	52.8	42.1	56.4
Net acquisitions of non-produced non-financial assets	- 1.2	- 1.2	- 1.2	- 0.5	- 0.7	- 0.5	- 0.7
Total	1 712.3	1 810.0	1 791.0	886.7	923.3	857.6	933.4
Net lending	- 149.2	- 175.2	- 51.8	- 98.8	- 76.4	- 12.4	- 39.4

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

Revenue							
Taxes	- 6.7	5.4	7.4	2.3	8.6	9.2	5.7
Social contributions	1.6	4.1	4.6	3.7	4.5	4.2	4.9
Property income	- 11.3	- 23.9	- 2.7	- 38.3	- 2.5	- 2.9	- 2.5
Other current transfers	- 4.3	7.1	5.7	0.4	12.9	6.3	5.2
Capital transfers	11.7	19.3	24.3	10.1	27.0	29.4	20.6
Sales	0.6	3.9	7.4	1.5	6.0	8.6	6.5
Other subsidies	- 14.0	- 4.1	0.0	- 10.3	0.0	0.0	0.0
Total	- 2.9	4.6	6.4	2.2	6.9	7.3	5.6
Expenditure							
Intermediate consumption ⁸	7.9	5.3	0.4	6.9	3.9	- 0.4	1.1
Compensation of employees	4.5	3.0	2.4	3.0	3.0	2.7	2.1
Property income (interest)	- 19.0	- 9.5	- 7.9	- 8.6	- 10.5	- 7.5	- 8.5
Subsidies	130.5	31.9	- 43.3	47.8	14.2	- 53.3	- 29.1
Social benefits	8.7	3.3	0.5	5.9	0.8	- 2.0	3.1
Other current transfers	11.3	11.1	3.7	10.7	11.4	3.7	3.7
Capital transfers	16.3	23.9	3.4	28.1	21.4	4.5	2.7
Gross capital formation	7.2	1.0	5.6	- 1.5	3.0	4.2	6.7
Net acquisitions of non-produced non-financial assets	0.0	1.0	0.0	2.4	0.0	0.0	0.0
Total	9.9	5.7	- 1.1	7.7	3.8	- 3.3	1.1

¹ Price-adjusted gross domestic product per hour worked.

² Incl. nonprofit institutions serving households.

³ Incl. acquisitions less disposals of valuables.

⁴ Operating surplus/mixed income, net property income

⁵ Received less paid other current transfers.

⁶ Savings in percent of disposable income (incl. change in pension entitlements).

⁷ Central, regional, local and social security funds.

⁸ Incl. social transfers in kind and other production taxes.

Source: Federal Statistical Office, *Fachserie 18: National Accounts*; Kiel Institute calculations and forecasts.