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German Economy Winter 2019 - German economy overcomes slowdown only gradually

Kiel Institute Economic Outlook, No. 62

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KIEL INSTITUTE ECONOMIC OUTLOOK

German EconomyWinter 2019

Finalized December 11, 2019

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No. 62 (2019 | Q4)

Jens Boysen-Hogrefe, Salomon Fiedler, Dominik Groll, Nils Jannsen, Stefan Kooths, Saskia Mösle, and Ulrich Stolzenburg



GERMAN ECONOMY OVERCOMES SLOWDOWN ONLY GRADUALLY

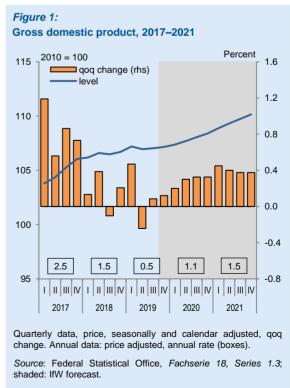
Jens Boysen-Hogrefe, Salomon Fiedler, Dominik Groll, Nils Jannsen, Stefan Kooths, Saskia Mösle, and Ulrich Stolzenburg

The German economy is recovering only gradually. After a weak summer half-year, gross domestic product will hardly do more than stagnate in the final quarter of this year. Economic activity still provides two contrasting pictures. The main reason for the ongoing downturn, which began last year, is the significant decline in industrial production. This has been caused mainly by the high levels of economic uncertainty weighing on global investment which has had a particularly negative impact on the German economy due to its specialization in the production of capital goods. By now, the investment climate has deteriorated in Germany as well. As a result, companies are likely to significantly reduce their investment activity in the coming quarters. Weak industrial activity is also increasingly affecting the industry-related service sectors. In contrast, the consumer-related service sectors continue to expand. Despite the fact that employment growth has slowed considerably, disposable income of private households continues to rise significantly. In addition to wage increases that continue to be quite strong, numerous income-increasing fiscal policy measures are contributing to this development. The construction industry is still booming, not least due to the continuing favorable financing conditions. Over the course of the coming year, overall production should gradually pick up again supported by the slight recovery in the global economy. At 1.1 percent, GDP growth in 2020 is likely to be much higher than in the current year, where an increase by 0.5 percent is expected. However, the higher growth rate is primarily due to the higher number of working days. The surpluses of public budgets will decline significantly: While spending will continue to expand strongly, revenues will be noticeably burdened by the weak economy. After the record surplus of over 60 billion euros in 2018, we expect a slight deficit in 2021.

Consumer price inflation continues to be moderate. Over the past three months, overall inflation has been quite weak; according to preliminary figures, the consumer price index in November stood just 1.1 percent above its value one year ago. This was mainly due to the weakness of energy and food prices. Excluding these two volatile components, inflation was 1.6 percent. Thus, the underlying dynamics of consumer prices are un-

changed. Overall, we anticipate an inflation rate of 1.4 percent for the current year, followed by 1.5 and 1.6 percent in 2020 and 2021, respectively.

There will be no interest rate hikes by the ECB throughout the forecast period. In September, the ECB announced a set of new measures in an attempt to provide additional monetary accommodation. These include a reduction of the deposit rate to -0.5 percent, restarting outright net asset purchases at a pace of €20 bn per month, extending the





maturity of future TLTRO tranches to two years, and adjusting the forward guidance in a way that pushes an end to the asset purchases as well as interest rate hikes further into the future. The ECB also introduced a two-tier system which exempts a certain share of banks' excess reserves from negative interest rates. Against this background, financing conditions should remain very favorable in the coming years.

German foreign trade defies the slowdown in global industrial production temporarily. In the third quarter, exports increased noticeably but did not quite compensate for the decline in the previous quarter. In the current quarter, they are set to expand at a similar pace, as indicated by the exports of goods in October. Other leading indicators show a mixed picture: while there are cautious signs of stabilization, they are still well below their long-run averages. Against this backdrop, exports are unlikely to maintain the rather high pace of the second half of the year at the beginning of 2020. Over the remaining forecast horizon, exports will therefore expand moderately and will only gradually pick up speed again, in line with the muted but ongoing expansion in German export markets and accelerating global trade. German imports remained largely unchanged for the second consecutive quarter. For the fourth quarter, monthly data on goods imports and higher export activity suggest a pick-up despite the weak domestic economy. Over the remaining forecast horizon, imports will initially expand at low rates—albeit more strongly than exports—due to the weak dynamics of investment and exports, and will gain momentum only slowly.

Private consumption remains robust despite a weaker labor market. We expect gross wages and salaries to expand in the next two years by 3.4 percent (2020) and 3.2 percent (2021), respectively, i.e. considerably lower rates than in the current year (4.5 percent) due to the weaker labor market. However, several income-increasing fiscal policy measures will stimulate disposable income of private households. For example, the partial abolition of the "Solidaritätszuschlag" in 2021 will increase disposable income by about 0.5 percent. Moreover, property and entrepreneurial income of private households is set to slightly increase in the next two years due to the stabilizing economy, after a decline of about 2 percent in this year. Overall, disposable income of private households is expected to increase by 2.8 percent in the next year and 3.3 percent in 2021 after having increased by 3.1 percent in this year. Given that inflation and the savings rate will remain roughly at the level of this year, private consumption will increase by 1.5 percent both in this year and next year, followed by 1.7 percent in 2021.

Firms will temporarily reduce investment activities. The investment climate has deteriorated noticeably in recent quarters. In addition to the gloomy sales prospects in Germany and abroad, the continuously high level of global economic uncertainty is also a contributing factor. Already in the second quarter of this year, firms significantly reduced their capital expenditure on machinery and equipment. In the third quarter, anticipation effects resulting from the second stage of the Worldwide Harmonized Light Vehicle Test Procedure (WLTP 2) for passenger cars, which came into effect in September, may have contributed to the slight increase. The development in private investment was overshadowed in the summer half-year by the large fluctuations in public investment in machinery and equipment (which accounted for around 7 percent of total investment in plant and equipment in 2018), with the result that overall investment in machinery and equipment fell sharply in the third quarter after a slight increase in the second quarter. For the current quarter, leading indicators, such as domestic sales of capital goods manufacturers in October, point to a sharp decline in business investment. The decline in domestic incoming orders suggests that the weakness will stretch into the coming year. Against this backdrop, investment in machinery and equipment is expected to decline by about



3 percent in next year after a slight increase this year. For construction investments and other investments by firms, we expect them to follow this trend, albeit with less accentuation as usual.

Labor costs have not been as high relative to labor productivity and prices since the early 2000s. Wage growth is expected to weaken slightly. Current collective agreements indicate a deceleration of negotiated wages and salaries in 2020. Moreover, in light of the current recession in the manufacturing sector, the upcoming negotiations in the important metal and electrical industry in spring are likely to fix lower wage increases, as has already been the case recently in the chemical industry. We expect total negotiated wages and salaries to rise by 2.5 percent and 2.3 percent in 2020 and 2021, respectively, after an increase of 3.0 percent this year. Gross wages and salaries per employee are expected to rise a bit faster, as labor market tightness remains an issue in large parts of the economy despite the economic downturn. We forecast wage increases of 2.8 percent and 2.6 percent in 2020 and 2021. Although wage growth weakens slightly, labor costs are no longer stimulating labor demand. As labor productivity has stagnated in the past two years, unit labor costs have increased considerably faster than before, and faster than domestic prices. Real unit labor costs have now reached a level last seen at the beginning of the 2000s. As a result, labor demand will turn out to be fairly weaker than in much of the recent past.

Employment continues to rise, albeit at a much slower pace than before. Employment growth decelerated considerably at the beginning of 2019, but seems to have stabilized in recent months. The number of vacancies has continued to fall, but remains at a fairly high level. While firms in the manufacturing sector plan to reduce their staff in upcoming months, firms in the construction sector and in the service sector still plan to increase their workforce. We expect employment to rise further in 2020 and 2021, although at a much slower pace than in recent years. On the one hand, real unit labor costs no longer stimulate labor demand. On the other hand, labor supply shortages are set to intensify due to the ageing of the population.

The fiscal surplus declined in 2019 due to the expansionary stance of fiscal policy and slowing revenues. The recession in the manufacturing sector has put corporate tax revenues under pressure. However, the dampening effect of the downswing has not been very severe yet due to still robust wage and employment growth that led to substantially higher social security contributions and wage tax revenues. In sum, revenues increased at a smaller pace than in the record year 2018. On the expenditure side, public investment and consumption have increased strongly driven by policy measures of the federal government and by past surpluses at the level of municipalities and federal states. Further, pension payments increase rapidly due to the good labour market conditions of the previous years and due to the extended consideration of times in parental leave. In sum, the surplus will shrink, but will remain at a relatively high level.

In 2020 and 2021, fiscal policy will remain expansionary and the surplus vanishes. Expenditures will expand at a similar rate as in the previous year. Fiscal policy will take additional measures, e.g. introduction of a basic pension scheme and expenditures in the field of climate policy. Other measures already in place will trigger additional expenditures as well. Since the economic downturn will affect wages, revenues from social security contributions will expand with lower rates and the growth of tax revenues will stay subdued. However, in 2020 the surplus will still be sizeable. In 2021 the "Solidaritätszuschlag" on income taxes will be partially abolished leading to lower revenues of about €10 bn. The fiscal consequences of the economic downturn and the impact of fiscal policy measures will lead to a further deterioration of the budget balance. For 2021, we expect a more or less balanced budget. This also holds for the structural balance.



Table 1: Key indicators, 2018–2021

	2018	2019	2020	2021
Gross domestic product (GDP), price-adjusted	1.5	0.5	1.1	1.5
Gross domestic product, deflator	1.5	2.0	1.9	1.8
Consumer prices	1.7	1.4	1.5	1.6
Labor productivity (per hour worked)	0.3	-0.1	0.3	1.2
Employment (1,000 persons)	44,854	45,253	45,488	45,719
Unemployment rate (percent)	5.2	5.0	4.9	4.9
in relation to nominal GDP				
Public sector net lending	1.9	1.5	0.7	-0.0
Gross public debt	61.7	58.7	56.2	54.7
Current account balance	7.4	7.7	7.9	7.5

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.



Data annex

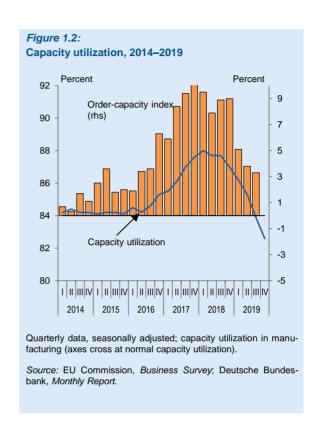
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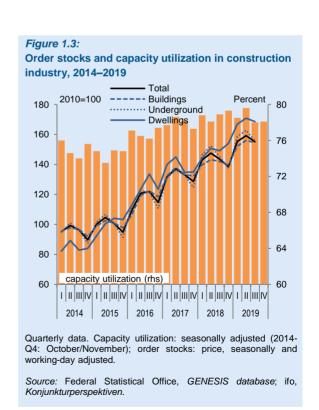
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1. Leading indicators

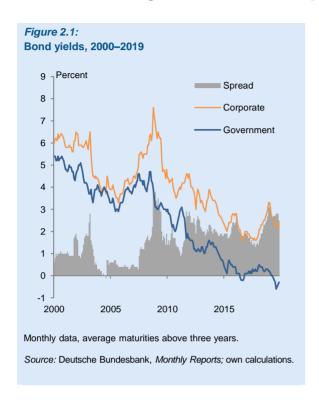
Figure 1.1: Leading indicators, 2011-2019 Incoming orders in manufacturing 120 Total 115 From abroad 110 105 100 95 90 85 2011 2012 2013 2014 2015 2016 2017 2018 2019 Production 2015=100 120 115 Construction 110 105 100 95 90 85 2011 2012 2013 2014 2015 2016 2017 2018 2019 Business climate 2005=100 120 Situation 115 Expectations 110 105 100 95 90 85 2011 2012 2013 2014 2015 2016 2017 2018 2019 Monthly data, seasonally adjusted. Source: Deutsche Bundesbank, Saisonbereinigte Wirtschaftszahlen; ifo, Konjunkturperspektiven; own calculations

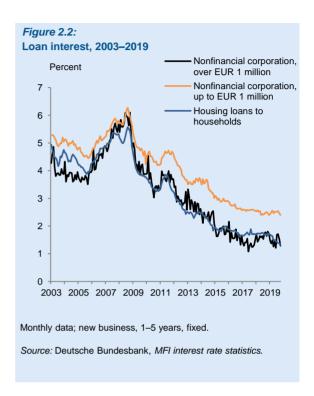






2. Monetary conditions and prices







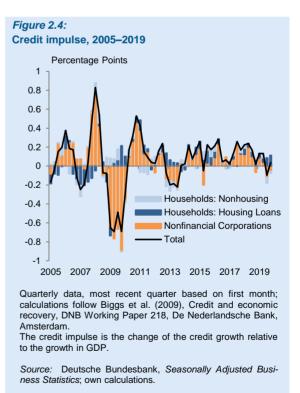




Figure 2.6: Consumer prices, 2008-2019 Total excl. Energy (base year 2015) -- excl. Energy (base year 2010) 3 2 0 -1 2008 2010 2012 2016 2018 2014 Monthly data; year-on-year change. After the introduction of the new base year 2015, the Statistisches Bundesamt has not yet published all new time series for the period before 2015. We therefore fall back on the old data for that Source: Deutsche Bundesbank, Time series databases; own calculations.

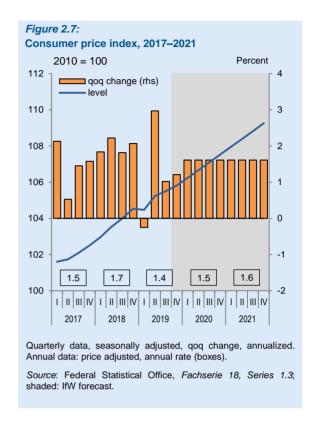


Table 2.1: Projections and assumptions on the international environment, 2018–2021

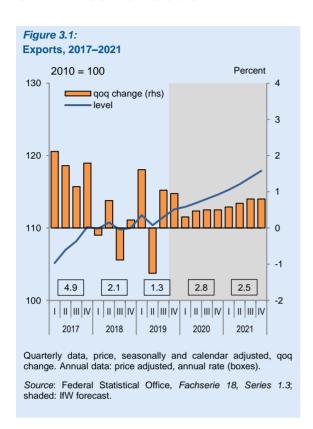
		201	8			20	19			20	20			20	21	
	ı	Ш	Ш	IV	- 1	Ш	Ш	IV	- 1	Ш	Ш	IV	- 1	П	Ш	IV
ECB key interest rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Long-term interest rate	0.6	0.5	0.4	0.4	0.1	-0.1	-0.5	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2
US-dollar/euro exchange rate	1.23	1.19	1.16	1.14	1.14	1.12	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Price competitive- ness Export markets Oil price	90.1 0.7 66.9	90.2 0.6 74.5	90.8 0.5 75.1	90.5 0.5 68.8	89.3 0.6 63.2	89.5 0.5 68.9	0.5	88.9 0.5 61.6	0.5	88.6 0.5 62.2	88.5 0.5 62.6	0.5	88.1 0.6 63.2	87.9 0.6 63.5	87.8 0.6 63.8	87.6 0.6 64.1

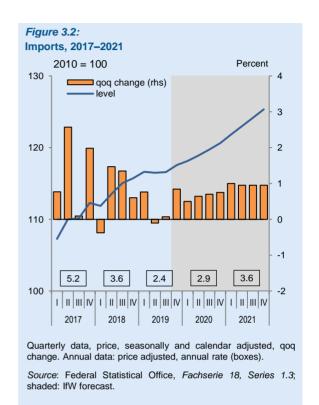
ECB key interest rate: main refinancing operations; long-term interest rate on 9–10 year bonds; price competitiveness: against 36 trading partners, based on the deflators of total sales, index: 1991:I = 100, increasing values indicate deterioration of price competitiveness; export markets: GDP growth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

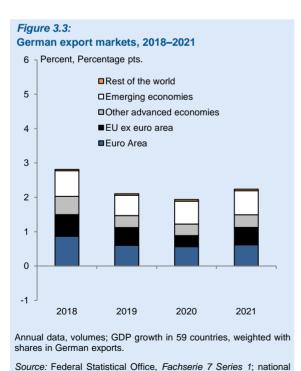
Source: ECB, Monthly Bulletin; Deutsche Bundesbank, Monthly Bulletin; IMF, International Financial Statistics; own calculations; shaded: IfW forecast or assumption.



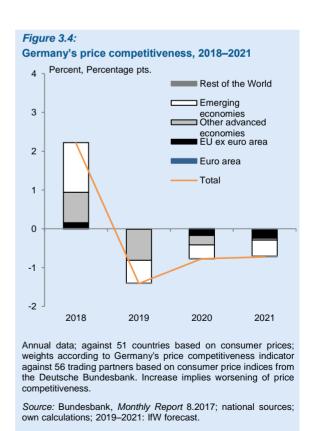
3. External trade



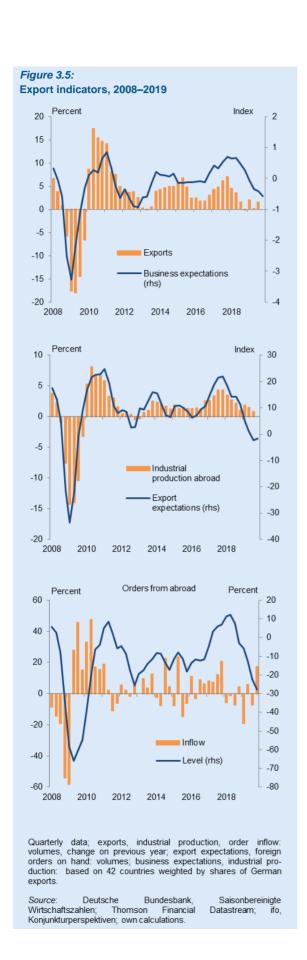


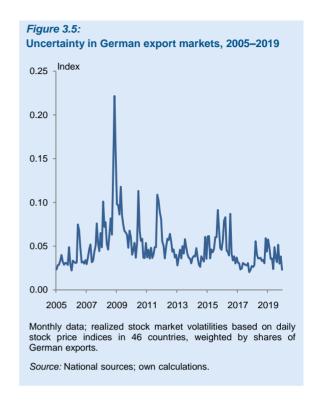


sources; own calculations; 2019-2020: IfW forecast.





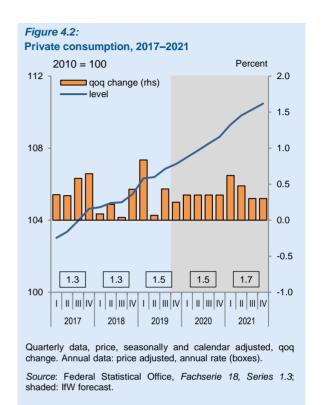




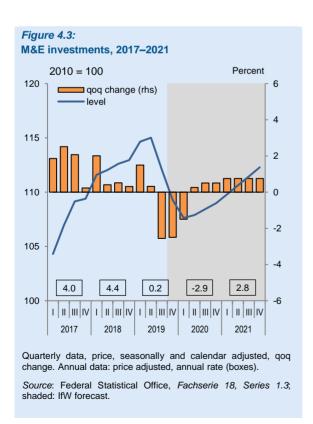


4. **Domestic expenditure**









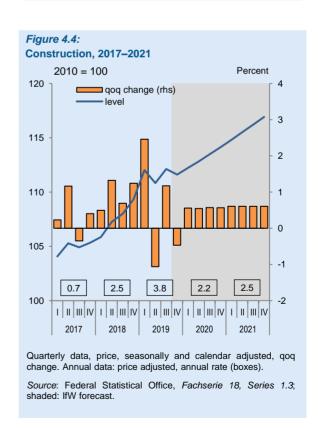


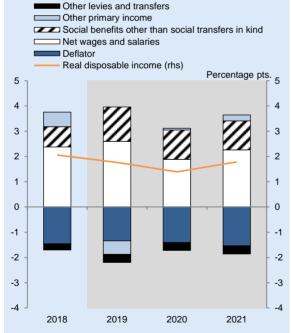


Figure 4.5: Investment cycles, 1991-2021 Output gap (rhs) Percent 6 25 -GFCF Machinery and equipment 20 4 15 10 2 5 0 0 -5 -2 -10 -15 -4 -20 21.9 -25 -6 1995 1999 2003 2007 2011 2015 2019 1991

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.

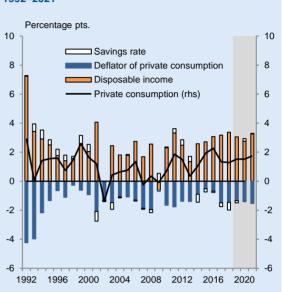
Figure 4.7:
Contributions to changes in real disposable income, 2018–2021



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.

Figure 4.6:
Contributions to change in private consumption, 1992–2021



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.

Table 4.1:
Gross fixed capital formation, 2018–2021

	2018	2019	2020	2021
Total	3.5	2.3	0.3	2.5
Corporate investment	3.6	1.2	-1.1	2.3
Machinery and				
equipment	4.4	0.2	-2.9	2.8
Construction				
(nondwellings)	0.6	2.3	0.6	1.6
Other	4.3	2.3	1.0	2.2
Dwellings	3.0	4.0	2.2	2.6
Public (nondwellings)	4.3	6.0	5.2	4.3
Memorandum item:				
Construction	2.5	3.8	2.2	2.5

Volumes; change over previous year in percent.

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



Industries 5.

Table 5.1:

		2019			2020	
	II	III	IV	I	II	Ш
			nally and ca on-quarter	,	,	
Gross domestic product	-0.2	0.1	0.1	0.2	0.3	0.3
Gross value added	-0.3	-0.1	0.1	0.2	0.3	0.3
Industry excluding construction	-1.5	-1.3	-1.2	0.1	0.2	0.2
Manufacturing	-1.3	-1.1	-1.2	0.1	0.2	0.2
Construction	-0.8	2.0	-0.2	0.8	0.5	0.5
Trade, transport, accommodation, and food services	-0.6	-0.1	0.3	0.3	0.3	0.4
Information and communication	0.6	1.4	1.3	0.8	0.8	0.8
Financial and insurance services	1.0	0.5	0.6	0.2	0.2	0.2
Real estate activities	0.3	0.2	8.0	0.5	0.5	0.5
Business services	-0.1	-0.2	0.0	0.0	0.3	0.4
Public services, education, health	0.5	0.4	0.7	0.2	0.2	0.3
Other services	0.3	-0.3	0.1	0.1	0.2	0.2

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



6. Wages

Figure 6.1:
Real unit labor costs, 1991–2021

106
102
100
Average (1991–2018)
98
96

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

1991 1995 1999 2003 2007 2011 2015 2019

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

Table 6.1: Wages and productivity, 2018–2021

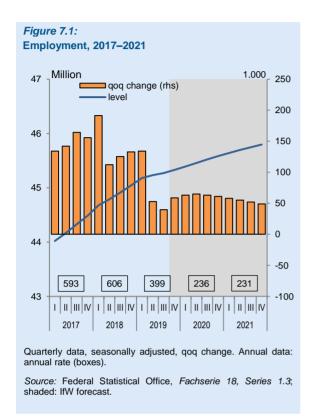
	2018	2019	2020	2021
Per hour				
Negotiated wages	2.9	3.0	2.5	2.3
Gross wages and				
salaries	3.0	3.3	2.3	2.6
Wage drift	0.1	0.4	-0.2	0.2
Compensation of				
employees	2.7	3.5	2.0	2.5
Labor productivity	0.3	-0.1	0.3	1.2
Unit labor costs	2.4	3.6	1.7	1.3
Unit labor costs (real)	0.9	1.6	-0.2	-0.5
Per capita				
Negotiated wages	2.9	3.0	2.5	2.3
Gross wages and				
salaries	3.2	3.1	2.8	2.6
Wage drift	0.3	0.2	0.3	0.2
Compensation of				
employees	2.9	3.4	2.5	2.4
Labor productivity	0.2	-0.4	0.6	1.0
Unit labor costs	2.7	3.8	1.9	1.4
Unit labor costs (real)	1.2	1.8	0.0	-0.4

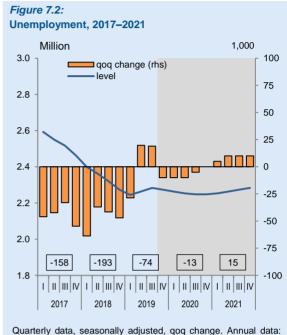
Change over previous year in percent; wage drift: difference between change of negotiated wages and change of gross wages and salaries in percentage points; labor productivity: real GDP per hour or per capita; unit labor costs: compensation of employees (per hour or per capita) in relation to labor productivity;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



7. **Employment**





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

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

Table 7.1: Employment, 2017-2021 (1,000 persons)

	2017	2018	2019	2020	2021
Hours worked (domestic concept, million hours)	61,564	62,344	62,727	63,235	63,456
Persons in employment (domestic concept)	44,248	44,854	45,253	45,488	45,719
Self-employed	4,273	4,224	4,158	4,095	4,048
Employees (domestic concept)	39,976	40,631	41,094	41,393	41,671
Employees subject to social security contributions	32,234	32,964	33,515	33,836	34,174
Minijobs	4,742	4,671	4,588	4,532	4,472
Net commuting	121	144	156	159	159
Persons in employment (national concept)	44,127	44,710	45,097	45,329	45,560
Employees (national concept)	39,855	40,486	40,939	41,234	41,513
Unemployed persons (registered)	2,533	2,340	2,266	2,253	2,268
Unemployment rate (registered; percent)	5.7	5.2	5.0	4.9	4.9
Unemployment rate (ILO; percent)	3.5	3.2	2.9	2.7	2.6

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, 2017–2021 (€ bn)

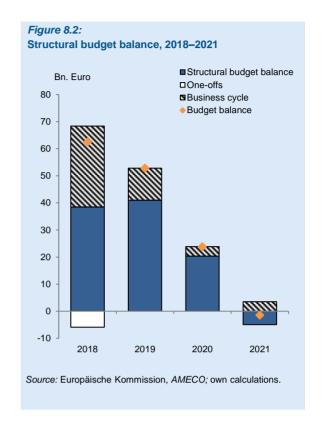
	2017	2018	2019	2020	2021
Revenues	1,481.7	1,552.9	1,607.5	1,649.3	1,690.8
> relative to GDP	45.7	46.4	46.9	46.7	46.3
Taxes	766.6	800.9	825.0	846.6	864.3
> relative to GDP	23.6	23.9	24.1	24.0	23.7
Social contributions	549.5	572.5	597.9	614.5	633.4
> relative to GDP	16.9	17.1	17.4	17.4	17.3
Other revenues	165.7	179.5	184.6	188.2	193.0
> relative to GDP	5.1	5.4	5.4	5.3	5.3
Expenditures	1,441.4	1,490.5	1,554.3	1,625.0	1,692.5
> relative to GDP	44.4	44.6	45.3	46.0	46.4
Compensation of employees	250.0	259.3	269.2	278.4	286.6
Intermediate consumption	162.9	169.4	179.0	187.8	196.1
Social transfers in kind	278.3	285.9	298.2	311.4	322.6
Gross capital formation	71.9	78.4	85.5	91.1	98.7
Capital transfers	34.3	31.7	29.0	27.2	26.1
Social benefits	506.6	520.2	545.4	567.7	590.2
Subsidies	27.9	29.6	30.8	32.4	34.4
Other current transfers	67.0	74.9	80.2	88.3	93.4
Other capital transfers and investment grants	44.0	42.2	38.1	41.8	45.4
Other expenditures	-1.6	-1.3	-1.3	-1.3	-1.3
Net lending/net borrowing	40.3	62.4	53.1	24.3	-1.7
> relative to GDP	1.2	1.9	1.5	0.7	0.0
Revenues of central, state, and local					
governments	961.2	1,010.5	1,040.8	1,067.1	1,090.5
Net of transfers from social security funds	960.1	1,009.3	1,039.7	1,066.0	1,089.3
Transfers from social security funds	1.1	1.1	1.1	1.1	1.2
Expenditures of central, state, and local					
governments	931.9	963.9	999.8	1,046.1	1,093.2
Net of transfers to social security funds	816.7	845.6	877.1	919.5	960.7
Transfers to social security funds	115.2	118.3	122.7	126.7	132.5
Net lending/net borrowing central, state, and local government	29.3	46.6	41.1	21.0	-2.7
· ·					
Revenues of social security funds Net of transfers from central, state, and local	636.9	661.9	690.5	710.0	733.9
governments	521.6	543.6	567.8	583.3	601.5
			678.4	706.7	
Expenditures of social security funds Net of transfers to central, state, and local	625.9	646.1	0/0.4	100.7	733.0
governments	624.8	644.9	677.3	705.6	731.8
Net lending/net borrowing social security					
funds	11.0	15.9	12.0	3.3	1.0

Sums may deviate due to rounding.

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



Figure 8.1: Government gross debt, 2019-2021 Percent 3,000 100 ■Debt crisis □Financial market crisis 90 Other debt 2,500 80 ♦ In relation to GDP (rhs) 70 2,000 60 1,500 50 40 1,000 30 20 500 10 0 0 2019 2020 2021 Debt crisis: Liabilities due to first Greece adjustment programme, deposits at the ESM, guarantees for EFSF credits. Financial market crisis: Liabilitites due to bank rescue packages. Source: Deutsche Bundesbank, Monatsbericht; BMF, Monatsbericht; own calculations and forecasts.





9. GDP and its components

Table 9.1: Quarterly data, 2019–2021

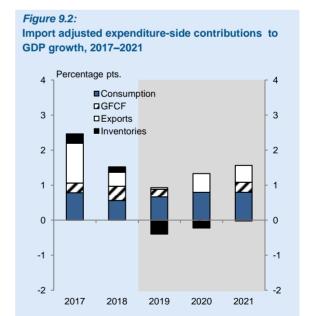
		20	19			20	20			20	21	
	- 1	II	Ш	IV	I	II	III	IV	1	II	Ш	IV
Gross domestic product	0.5	-0.2	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4
Private consumption	0.8	0.1	0.4	0.2	0.3	0.3	0.3	0.3	0.6	0.5	0.3	0.3
Government consumption	0.6	0.6	0.8	0.7	0.6	0.6	0.6	0.4	0.4	0.4	0.6	0.5
Machinery and equipment	1.5	0.3	-2.6	-2.5	-1.5	0.3	0.5	0.5	0.7	0.7	0.7	0.7
Constructions	2.5	-1.1	1.2	-0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Other investment	-0.6	0.9	1.0	-0.5	0.0	0.2	0.5	0.5	0.6	0.6	0.6	0.6
Change in inventories	-0.9	0.2	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic expenditure	0.0	0.3	-0.4	0.0	0.3	0.4	0.4	0.4	0.6	0.5	0.4	0.4
Exports	1.6	-1.3	1.0	1.0	0.3	0.5	0.5	0.5	0.6	0.7	0.8	0.8
Imports	0.8	-0.1	0.1	0.8	0.5	0.6	0.7	0.7	1.0	0.9	0.9	0.9
Net exports	0.5	-0.6	0.5	0.1	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0
Employment (domestic)	45,179	45,232	45,271	45,330	45,393	45,458	45,521	45,582	45,640	45,695	45,747	45,796
Unemployment (registered)	2,244	2,264	2,283	2,273	2,263	2,253	2,248	2,248	2,253	2,263	2,273	2,283

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.

GDP: volumes, change over previous year. Point forecasts: orange lines. Forecast intervalls greay 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 fourth quarter 1994–2018.

Source: Own calculations.



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: IfW forecast.



10. The German economy, 2018–2021

	2018	2018	2019	2020	2021
	€bn	Change	e over prev	ious year i	n percent
GDP (constant prices)		1.5	0.5	1.1	1.5
Private consumption expenditure		1.3	1.5	1.5	1.7
Public consumption expenditure		1.4	2.1	2.4	1.9
Total fixed investment		3.5	2.3	0.3	2.5
Machinery and equipment		4.4	0.2	-2.9	2.8
Construction		2.5	3.8	2.2	2.5
Other equipment		4.3	2.3	1.0	2.2
Changes in stocks		0.3	-0.8	-0.4	0.0
Domestic Demand		2.1	1.0	1.0	1.9
Exports		2.1	1.3	2.8	2.5
Imports		3.6	2.4	2.9	3.6
Net exports		-0.4	-0.4	0.1	-0.3
GDP (current prices)	3,344.4	3.1	2.5	3.0	3.3
Private consumption expenditure	1,743.7	2.8	2.9	2.9	3.3
Public consumption expenditure	665.6	3.3	4.3	4.4	3.7
Total fixed investment	707.7	6.3	5.2	2.6	4.9
Machinery and equipment	235.3	4.9	1.3	-2.3	3.3
Construction	344.3	7.3	8.3	5.7	6.2
Other equipment	128.1	5.9	3.9	2.6	3.9
Changes in stocks (€ bn)		21.3	-9.6	-22.8	-24.7
Domestic Demand	3,138.3	4.1	2.7	2.8	3.7
Exports	1,585.8	3.1	2.0	3.4	3.4
Imports	1,379.7	5.5	2.3	3.0	4.2
Net exports (€ bn)		206.1	205.9	219.2	214.6
Gross national income	3,437.9	3.3	2.7	3.0	3.4
Deflator of GDP		1.5	2.0	1.9	1.8
Private consumption expenditure		1.5	1.3	1.4	1.5
Public consumption expenditure		1.8	2.1	2.0	1.7
Investment in machinery and equipment		0.5	1.0	0.6	0.5
Investment in construction		4.7	4.4	3.5	3.6
Investment in other equipment		1.6	1.6	1.6	1.6
Exports		0.9	0.7	0.6	8.0
Imports		1.8	-0.1	0.1	0.7
Addendum: Consumer prices		1.7	1.4	1.5	1.6
Income distribution					
National income	2,503.1	3.0	2.2	2.8	3.3
Employment income	1,771.3	4.5	4.6	3.2	3.1
in percent of national income		70.8	72.4	72.7	72.5
Entrepreneurial and property income	731.8	-0.5	-3.5	1.7	4.0
Disposable income of private households	1,898.5	3.5	3.1	2.8	3.3
Savings rate		11.0	11.1	10.9	10.9
Wages and salaries	1,460.9	4.8	4.5	3.4	3.2
Wage per hour		3.0	3.3	2.3	2.6
Unit labor costs		2.4	3.6	1.7	1.3
Productivity per hour		0.3	-0.1	0.3	1.2
Unemployment (1,000)		2,340	2,266	2,253	2,268
Rate of unemployment (percent)		5.2	5.0	4.9	4.9
Total employment (1,000)		44,854	45,253	45,488	45,719
Public sector budget balance (€ bn)		62.4	53.1	24.3	-1.7
Public sector budget balance (in percent of GDP)		1.9	1.5	0.7	-0.0
Public debts (in percent)		61.7	58.7	56.2	54.7

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	Account	2

Forecast period: 2019 to 202	

	2019	2020	2020	2020 2021		2019		2020	
	2019		2021	H1	H2	H1	H2		
1. Production									
Change over the same period of the preceding year in %									
Persons in employment	0.9	0.5	0.5	1.1	0.7	0.5	0.6		
Hours worked	0.6	0.8	0.3	0.7	0.6	0.5	1.1		
Hours worked by person in employment	- 0.3	0.3	- 0.2	- 0.4	- 0.1	0.0	0.6		
Labor productivity 1	- 0.1	0.3	1.2	- 0.2	0.1	0.1	0.4		
Gross domestic product, price-adjusted	0.5	1.1	1.5	0.4	0.6	0.6	1.6		

2. Use of gross domestic product at current prices

a) EUR bn.	
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a) Lorebii.							
Consumption expenditure	2 488.3	2 571.9	2 659.4	1 213.4	1 274.9	1 254.7	1 317.2
Private households ²	1 794.0	1 846.9	1 907.8	876.3	917.6	902.3	944.6
Government	694.3	725.0	751.5	337.0	357.3	352.3	372.7
Gross fixed capital formation	744.4	763.6	801.0	359.1	385.3	363.7	400.0
Machinery and equipment	238.3	232.8	240.5	115.7	122.6	110.0	122.8
Construction	372.9	394.2	418.6	180.0	192.9	188.6	205.6
Other products	133.1	136.6	141.9	63.3	69.8	65.1	71.6
Changes in inventories ³	- 9.6	- 22.8	- 24.7	7.6	- 17.2	- 6.8	- 16.0
Domestic expenditure	3 223.1	3 312.7	3 435.7	1 580.1	1 643.0	1 611.5	1 701.2
Net exports	205.9	219.2	214.6	106.7	99.2	118.4	100.8
Exports	1 617.4	1 672.8	1 729.7	803.7	813.7	825.8	847.0
Imports	1 411.5	1 453.6	1 515.1	697.0	714.5	707.5	746.1
Gross domestic product	3 429.0	3 532.0	3 650.2	1 686.8	1 742.2	1 729.9	1 802.1

Consumption expenditure	3.3	3.4	3.4	3.1	3.5	3.4	3.3
Private households ²	2.9	2.9	3.3	2.6	3.1	3.0	2.9
Government	4.3	4.4	3.7	4.1	4.5	4.6	4.3
Gross fixed capital formation	5.2	2.6	4.9	6.4	4.1	1.3	3.8
Machinery and equipment	1.3	- 2.3	3.3	3.1	- 0.3	- 5.0	0.2
Construction	8.3	5.7	6.2	9.3	7.4	4.8	6.6
Other products	3.9	2.6	3.9	4.5	3.3	2.7	2.5
Domestic expenditure	2.7	2.8	3.7	3.7	1.8	2.0	3.5
Exports	2.0	3.4	3.4	1.4	2.6	2.8	4.1
Imports	2.3	3.0	4.2	4.0	0.7	1.5	4.4
Gross domestic product	2.5	3.0	3.3	2.4	2.6	2.6	3.4

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

a) EUR bn.

Consumption expenditure	2 361.8	2 403.5	2 446.1	1 162.2	1 199.6	1 183.2	1 220.3
Private households ²	1 707.4	1 733.3	1 763.4	838.4	869.0	851.0	882.3
Government	654.3	670.0	682.6	323.7	330.6	332.1	337.9
Gross fixed capital formation	682.1	684.3	701.7	330.4	351.6	327.3	357.0
Machinery and equipment	232.0	225.3	231.5	112.6	119.3	106.3	119.0
Construction	323.9	330.9	339.2	157.4	166.5	159.5	171.4
Other products	126.0	127.2	130.0	60.3	65.7	60.9	66.3
Domestic expenditure	3 047.0	3 078.6	3 137.5	1 502.6	1 544.4	1 508.1	1 570.5
Exports	1 577.4	1 621.5	1 662.8	785.3	792.1	802.8	818.7
Imports	1 386.2	1 426.0	1 476.7	683.1	703.2	695.9	730.1
Gross domestic product	3 239.5	3 275.4	3 325.8	1 605.4	1 634.1	1 615.2	1 660.1

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

Consumption expenditure	1.7	1.8	1.8	1.4	2.0	1.8	1.7
Private households ²	1.5	1.5	1.7	1.3	1.8	1.5	1.5
Government	2.1	2.4	1.9	1.8	2.5	2.6	2.2
Gross fixed capital formation	2.3	0.3	2.5	3.2	1.5	- 1.0	1.5
Machinery and equipment	0.2	- 2.9	2.8	2.0	- 1.3	- 5.7	- 0.3
Construction	3.8	2.2	2.5	4.2	3.4	1.3	2.9
Other products	2.3	1.0	2.2	2.9	1.7	1.1	0.9
Domestic expenditure	1.0	1.0	1.9	1.7	0.3	0.4	1.7
Exports	1.3	2.8	2.5	0.2	2.4	2.2	3.4
Imports	2.4	2.9	3.6	3.1	1.8	1.9	3.8
Gross domestic product	0.5	1.1	1.5	0.4	0.6	0.6	1.6



A. Delfatiors (2010=109)	National Accounts (cont.) Forecast period: 2019 to 2021							
Abeliators (2010-100) Change on the same period of the preceding year in % File	·	2019	2020	2021				
Change on the same period of the preceding year in % Private consumption 1 3 1.4 1.5 1.5 1.4 1.3 1.4 1.4 1.4 Covernment consumption 2.1 2.0 1.7 2.3 2.0 1.9 2.0 2.2 2.2 Mechinery and equipment 1.0 0.6 0.5 1.0 1.0 0.7 0.7 0.4 1.0 1.0 0.6 0.5 1.0 1.0 0.7 0.7 0.4 1.0 1.0 0.6 0.5 1.0 1.0 0.7 0.4 0.6 0.5 0.5 0.0 1.0 0.0 0.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0			2020		H1	H2	H1	H2
Pixate consumption 13	· · ·							
Gross fixed capital formation 2.8 2.2 2.3 3.0 2.6 2.2 2.2 2.5 2.		1.3	1.4	1.5	1.4	1.3	1.4	1.4
Mechinery and equipment	Government consumption	2.1	2.0	1.7	2.3	2.0	1.9	2.0
Construction	· ·	_		2.3				
Exports	1 ' ' '							
Imports -0.1 -0.1 -0.7 -0.9 -1.1 -0.4 -0.6								
Second Settle product 2.0 1.9 1.8 2.0 2.0 1.9 1.8 1.8	1 '							
5. National income a) EUR bn. a) EUR bn. 2 409.3 2 470.2 2 534.1 1 188.3 1 221.1 1 220.6 1 249.6 Erriphyers social contributions 325.7 333.3 341.8 157.8 167.9 176.1 171.6 Goss wages and salaries 1 526.4 1 578.0 1 629.1 726.4 800.2 204.1 253.2 304.0 253.2 304.0 253.2 304.0 256.5 Closs wages and salaries 485.8 506.4 542.2 220.2 266.6 219.9 286.5 Net national income 2 855.1 2 976.8 3076.3 1 408.5 1 486.7 1 440.5 1 556.5 Net national income 3 52.9 7 353.6 5 379.3 1 77.4 1 605.3 1 790.1 1 526.5 1 586.5 1 791.2 1 400.5 1 740.0 2 173.0 2 174.9 2 174.9 2 174.9 2 174.9 1 60.5 1 740.0 2 174.0 2 174.0 2 174.0 2 174.0 2 174.0 2 174.0 2 174.0 2 174.0	· -							
a) EURIN. Primary income of private households * 2 409.3 2 470.2 2 534.1 1 188.3 1 221.1 1 220.6 1 249.6 Employers social contributions 325.7 333.7 341.8 157.8 167.9 162.1 171.6 Cross wages and salaries 1 526.4 1 578.0 1 629.1 1 726.4 800.0 253.2 Other primary income * 557.2 588.5 563.2 304.0 253.2 304.0 253.5 Other primary income * 6 57.2 588.5 563.2 304.0 253.2 304.0 254.5 Primary income of other sectors 488.8 506.4 542.2 20.2 266.5 Net national income 2895.1 2 976.6 30.76.3 1408.5 1 496.7 1440.5 1536.1 Consumption of lixed capital 694.5 689.9 683.0 315.9 318.6 738.3 255.8 313.3 Gross national income 3529.7 3 636.5 3 759.3 1724.4 1805.3 1769.0 1 867.5 memorandum term ** Net national income (factor costs) 2 557.8 2 500.0 2 717.9 1 240.0 1 317.8 1267.2 1 362.8 Property and entrepreneurial income 705.7 718.3 747.0 3558.8 349.9 390.7 367.6 Compensation of employees 1 852.1 1 911.7 1 970.9 884.2 967.9 916.5 995.2 b) Change over the same period of the preceding year in ** Primary income of private households ** 10 Cross wages and salaries 4.5 3.4 2.4 4.5 3 4.7 2.7 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2	·	2.0			2.0	2.0		
Employers social contributions 325.7 333.7 341.8 157.8 167.9 162.1 171.6 Cross wages and salaries 1526.4 1578.0 1629.1 172.6 1629.1 77.6 258.5 Chors primary income 557.2 558.5 563.2 304.0 253.2 304.0 254.5 Primary income 2895.1 2976.6 3076.3 1408.5 1486.7 1440.5 1536.1 Consumption of tixed capital 634.5 669.9 683.0 315.9 318.6 328.5 335.3 Cross national income 3529.7 3636.5 3759.3 1724.4 1805.3 1769.0 1867.5 Consumption of tixed capital 70.7 718.3 747.0 3258.8 349.9 380.7 3867.6 Compensation of employees 756.7 718.3 747.0 3258.8 349.9 380.7 3867.6 Compensation of employees 1852.1 1911.7 1970.9 884.2 967.9 916.5 Compensation of employees 1852.1 1911.7 1970.9 884.2 967.9 916.5 Compensation of employees 1852.1 1911.7 1970.9 884.2 967.9 916.5 Compensation of employees 1852.1 1911.7 1970.9 884.2 967.9 916.5 Compensation of employees 1852.1 1911.7 1970.9 884.2 967.9 916.5 Compensation of employees 1852.1 1911.7 1970.9 884.2 967.9 916.5 Compensation of employees 1852.1 1911.7 1970.9 884.2 967.9 916.5 Compensation of employees 1852.1 1911.7 1970.9 884.2 967.9 916.5 Compensation of employees 1852.1 1911.7 1970.9 884.2 967.9 916.5 Compensation of private households 2.0 2.4 2.4 5.3 4.7 2.7 2.2 Compensation of private households 2.0 2.8 2.8 3.3 2.7 2.8 Consumption of tixed capital 4.2 4.0 3.5 4.4 4.6 4.0 4.0 Compensation of employees 4.6 3.2 3.3 2.0 2.3 3.3 2.0 Compensation of employees 4.6 3.2 3.3 2.0 2.3 3.3 2.0 Compensation of employees 4.6 3.2 3.3 3.1 3.0 2.6 Compensation of employees 4.6 3.2 3.3 3.1 3.0 2.6 Compensation of employees 4.6 3.2 3.3 3.1 3.0 2.6 Compensation of employees 4.6 3.2 3.3 3.1 3.0 2.6 Compensation of employees 4.								
Cross wages and salaries	Primary income of private households 2	2 409.3	2 470.2	2 534.1	1 188.3	1 221.1	1 220.6	1 249.6
Chebr primary income								
Primary income of other sectors 485.8 506.4 54.2 202.2 265.6 219.9 286.5 26 136	1							
Net national income								
Consumption of fixed capital 634.5 659.9 683.0 315.9 318.6 328.5 331.3								
Scoss national income 3529.7 3 636.5 3759.3 1724.4 1 805.3 1769.0 1 807.5								
Immorrandum item: Net national income (factor costs) 2 557.8 2 630.0 2 717.9 1 240.0 1 317.8 1 267.2 1 362.8 Property and entrepreneurial income 1 852.1 1 911.7 1 970.9 355.8 349.9 350.7 367.6 Compensation of employees 1 852.1 1 911.7 1 970.9 884.2 967.9 916.5 996.2 Primary income of private households 1 852.1 1 911.7 1 970.9 884.2 967.9 916.5 996.2 Primary income of private households 2 2.5 2.6 2.8 3.3 2.7 2.3 Primary income of private households 3.0 2.5 2.6 2.8 3.3 2.7 2.2 Cross wages and salaries 4.5 3.4 3.2 4.4 4.6 3.9 2.9 per employee 3.1 2.8 2.6 3.0 3.3 3.1 2.5 Other primary income -1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Primary income of other sectors -1.0 4.2 7.1 -1.0 -0.9 -0.1 7.9 Net national income 2.3 2.8 3.3 2.2 2.5 2.3 3.3 Consumption of fixed capital 4.2 4.0 3.5 4.4 4.1 4.0 4.0 Gross national income 2.7 3.0 3.4 2.6 2.8 2.6 3.4 Property and entrepreneurial income -3.6 1.8 4.0 3.7 3.4 1.4 4.0 Romandum item: Net national income (factor costs) -3.6 1.8 4.0 3.7 3.4 1.4 5.1 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Elb th. Mass income 1 495.2 1 549.8 1613.9 716.1 779.2 745.8 804.0 Net wages and salaries 1 495.2 1 549.8 1 101.7 1 107.3 482.4 542.4 502.9 558.8 Social benefits their than social transfers in kind 605.2 626.0 651.0 300.6 300.4 314.4 315.0 Cherp primary income 557.2 588.5 563.2 304.0 253.2 304.0 255.2 304.0 Cherp primary income 505.0 -360.0 -380.0 -481.1 -45.9 -45.9 -46.5 Disposable income 1 957.5 2 012.3 2 079.1 971.0 986.4 1003.3 1012.0 Cherp primary income 567.2 588.5 563.2 304.0 253.2 304.0 254.5 Other transfers received (net) -950.0 -960.0 -980.0 -980.0	· - ·							
Property and entrepreneural income								
Dompensation of employees 1852.1 1911.7 1970.9 884.2 967.9 916.5 995.2	Net national income (factor costs)	2 557.8	2 630.0	2 717.9	1 240.0	1 317.8	1 267.2	1 362.8
b) Change over the same period of the preceding year in % Primary income of private households ² 3.0 2.5 2.6 2.8 3.3 2.7 2.3 Erripleyers social contributions 5.0 2.4 2.4 5.3 4.7 2.7 2.2 Gross wages and salaries 4.5 3.4 3.2 4.4 4.6 3.9 2.9 per employee 3.1 2.8 2.6 3.0 3.3 3.1 2.5 Other primary income 1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Primary income of other sectors1.0 4.2 7.1 -1.0 -0.9 -0.1 7.9 Net national income 2.3 2.8 3.3 2.2 2.5 2.3 3.3 Consumption of fixed capital 4.2 4.0 3.5 4.4 4.1 4.0 4.0 Gross national income 2.7 3.0 3.4 2.6 2.8 2.6 3.4 Property and entrepreneurial income 2.7 3.0 3.4 2.6 2.8 2.6 3.4 Property and entrepreneurial income 3.6 1.8 4.0 -3.7 3.4 -1.4 5.1 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Disposable income of private households ² a) EUR bn. Mass income 1 495.2 1549.8 1613.9 716.1 779.2 745.8 804.0 Net wages and salaries 1 0.24.8 1 0.61.7 1107.3 482.4 542.4 502.9 558.8 Social benefits other than social transfers in kind 605.2 628.0 651.0 300.6 304.7 312.4 315.6 Other primary income 6 557.2 558.5 563.2 304.0 253.2 304.0 254.5 Other primary income 6 1 957.5 2012.3 2079.1 971.0 986.4 1000.3 1012.0 Other primary income 1 1957.5 2012.3 2079.1 971.0 986.4 1000.3 1012.0 Consumption expenditure 1 794.0 1 846.9 1 907.8 876.3 917.6 902.3 944.6 Saving 24.0 226.7 233.4 124.1 99.9 127.8 98.9 Disposable income consumption Mass income 1 488.3 3.7 4.1 4.5 5.0 4.2 32 Saving action (%) 1.1 10.9 10.9 12.4 9.8 12.4 9.5 Di Change over the same period of the preceding year in % Mass income 48.8 3.7 4.1 4.5 5.0 4.2 3.2 Social benefits other than social transfers in kind 4.5 3.8 3.7 4.1 4.5 5.0 4.2 3.2 Saving ratio (%) 1.1 1.0 9.1 0.9 12.4 9.8 12.4 9.5 Di Change over the same period of the preceding year in % Mass income 48.8 3.7 4.1 4.5 5.0 4.2 3.2 Social benefits other than social transfers in kind 4.5 3.8 3.7 4.1 4.8 3.9 3.6 Social benefits other than social transfers in kind 4.5 3.8 3.7 4.1 4.8 3.9 3.6 Social benefits other than social transfers in kind 4.5 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
Primary income of private households	Compensation of employees	1 852.1	1 911.7	1 970.9	884.2	967.9	916.5	995.2
Employers social contributions	b) Change over the same period of the preceding year in	%						
Gross wages and salaries			2.5	2.6	2.8	3.3	2.7	2.3
per employee 3.1 2.8 2.6 3.0 3.3 3.1 2.5 Cher primary income 4 -1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Cher primary income 6 other sectors -1.0 4.2 7.1 -1.0 -0.9 -0.1 7.9 Net national income 2.3 2.8 3.3 2.2 2.5 2.3 3.3 Cher primary income of fixed capital 4.2 4.0 3.5 4.4 4.1 4.0 4.0 4.0 Gross national income 2.7 3.0 3.4 2.6 2.8 2.6 3.4 memorandum item: Net national income 2.7 3.0 3.4 2.6 2.8 2.6 3.4 4.0 4.0 4.0 Gross national income 2.7 3.0 3.4 2.6 2.8 2.6 3.4 Memorandum item: Net national income (factor costs) 2.2 2.8 3.3 2.0 2.3 2.2 3.4 Property and entrepreneurial income 3.6 1.8 4.0 -3.7 -3.4 -1.4 5.1 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 DELVA	Employers social contributions	5.0	2.4	2.4	5.3	4.7	2.7	2.2
Other primary income of other sectors -1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Primary income of other sectors -1.0 4.2 7.1 -1.0 -0.9 -0.1 7.9 Net national income 2.3 2.8 3.3 2.2 2.5 2.3 3.3 Consumption of fixed capital 4.2 4.0 3.5 4.4 4.1 4.0 4.0 Gross national income 2.7 3.0 3.4 2.6 2.8 2.6 3.4 Met national income (factor costs) 2.2 2.8 3.3 2.0 2.3 2.2 3.4 Property and entrepreneurial income -3.6 1.8 4.0 -3.7 -3.4 -1.4 5.1 2.8 4.6 3.2 3.1 4.5 4.6 3.7 2.8 5. Disposable income of private households ** a) EUR bn. ** **	Gross wages and salaries	4.5	3.4	3.2	4.4	4.6	3.9	2.9
Primary income of other sectors	1							
Net national income 2.3 2.8 3.3 2.2 2.5 2.3 3.3 2.6 2.5 2.3 3.3 2.5 2.5 2.5 2.3 3.3 2.5								
Consumption of fixed capital 4.2 4.0 3.5 4.4 4.1 4.0 4.0								
Cross national income 2.7 3.0 3.4 2.6 2.8 2.6 3.4 memorandum item Net national income (factor costs) 2.2 2.8 3.3 2.0 2.3 2.2 3.4 Property and entrepreneurial income 4.6 3.2 3.1 4.5 4.6 3.7 2.8 3.5 2.0 2.3 2.2 3.4 Property and entrepreneurial income 4.6 3.2 3.1 4.5 4.6 3.7 2.8 3.5 2.8 3.5 3.5 3.5 3.5 3.5 3.5 3.6 3.4 3.4 3.4 3.4 3.4 3.5								
Met national income (factor costs) 2.2 2.8 3.3 2.0 2.3 2.2 3.4 Property and entrepreneurial income -3.6 1.8 4.0 -3.7 -3.4 -1.4 5.1 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Compensation of employees 4.8 1.613.9 716.1 779.2 745.8 804.0 Net wages and salaries 1.024.8 1.061.7 1.107.3 482.4 542.4 502.9 558.8 Social benefits other than social transfers in kind 605.2 628.0 651.0 300.6 304.7 312.4 315.6 Less: Levies on social benefits, 134.8 139.9 144.4 66.9 67.9 69.5 70.4 Latace on consumption 1.044.4 66.9 67.9 69.5 70.4 Compensation of employees 1.024.8 1.061.7 1.07.3 482.4 542.4 502.9 558.8 Compensation of employees 1.024.8 1.004.7 1.004.7 1.004.7 1.004.7 Compensation of employees 1.004.8 1.004.7 1.004.7 1.004.7 1.004.7 Co	·							
Net national income (factor costs) 2.2 2.8 3.3 2.0 2.3 2.2 3.4 Property and entrepreneurial income 4.6 3.2 3.1 4.5 4.6 3.7 2.8 Source 2.8 3.3 4.5 4.6 3.7 2.8 Source 3.1 4.5 4.6 3.7 3.4 Source 4.8 1613.9 716.1 779.2 745.8 804.0 Source 4.8 1061.7 1107.3 482.4 542.4 502.9 558.8 Social benefits other than social transfers in kind 605.2 628.0 651.0 300.6 304.7 312.4 315.6 Iess: Levies on social benefits, 134.8 139.9 144.4 66.9 67.9 69.5 70.4 taxes on consumption 4.8 139.9 144.4 66.9 67.9 69.5 70.4 taxes on consumption expenditure 557.2 558.5 563.2 304.0 253.2 304.0 254.5 Other transfers received (net) * -95.0 -96.0 -98.0 -49.1 -45.9 -49.5 -46.5 Disposable income 1957.5 2012.3 2079.1 971.0 986.4 1000.3 1012.0 Change in pension entitlements 60.5 61.3 62.2 29.4 31.1 29.8 31.5 Consumption expenditure 1794.0 1846.9 1907.8 876.3 917.6 902.3 944.6 Saving 224.0 226.7 233.4 124.1 99.9 127.8 98.9 Saving ratio (%) * 11.1 10.9 10.9 10.9 12.4 9.8 12.4 9.5 Disposable income 4.8 3.7 4.1 4.5 5.0 4.2 3.2 Net wages and salaries 5.1 3.6 4.3 4.9 5.2 4.3 3.0 Social benefits other than social transfers in kind 4.5 3.8 3.7 4.1 4.8 3.9 3.6 Iess:			0.0	0.1	2.0	2.0	2.0	0.1
Property and entrepreneurial income		2.2	2.8	3.3	2.0	2.3	2.2	3.4
6. Disposable income of private households 2 a) EUR bn. Mass income	1							
a) EUR bn. Mass income 1 495.2 1 549.8 1 613.9 716.1 779.2 745.8 804.0 Net w ages and salaries 1 024.8 1 061.7 1 107.3 482.4 542.4 502.9 558.8 Social benefits other than social transfers in kind 605.2 628.0 651.0 300.6 304.7 312.4 315.6 less: Levies on social benefits, 1 34.8 139.9 144.4 66.9 67.9 69.5 70.4 taxes on consumption Other primary income 4 557.2 558.5 563.2 304.0 253.2 304.0 254.5 Other transfers received (net) 5 -95.0 -96.0 -98.0 -49.1 -45.9 -49.5 -46.5 Disposable income 1 957.5 2 012.3 2 079.1 971.0 986.4 1000.3 1012.0 Change in pension entitlements 60.5 61.3 62.2 29.4 31.1 29.8 31.5 Consumption expenditure 1 794.0 1 846.9 1 907.8 876.3 917.6 902.3 944.6 Saving 224.0 226.7 233.4 124.1 99.9 127.8 98.9 Saving ratio (%) 6 11.1 10.9 10.9 12.4 9.8 12.4 9.5 b) Change over the same period of the preceding year in 6 4.8 3.7 4.1 4.5 5.0 4.2 3.2 Mass income 4.8 3.7 4.1 4.5 5.0 4.2 3.2 Mass income 4.8 3.7 4.1 4.5 5.0 4.2 3.2 Net w ages and salaries 5.1 3.6 4.3 4.9 5.2 4.3 3.0 Social benefits other than social transfers in kind 4.5 3.8 3.7 4.1 4.8 3.9 3.6 less: Levies on social benefits, 5.7 3.8 3.2 5.8 5.7 3.9 3.6 less: Levies on social benefits, 5.7 3.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Disposable income 2.9 2.9 3.3 2.6 3.1 3.0 2.9	Compensation of employees	4.6	3.2	3.1	4.5	4.6	3.7	2.8
Mass income								
Net wages and salaries 1 024.8 1 061.7 1 107.3 482.4 542.4 502.9 558.8		1 405 2	1 540 0	1 612 0	716 1	770.0	7/5 0	904.0
Social benefits other than social transfers in kind less: Levies on social benefits, taxes on consumption								
less: Levies on social benefits, taxes on consumption 134.8 139.9 144.4 66.9 67.9 69.5 70.4 124.8 139.9 144.4 66.9 67.9 69.5 70.4 124.8 139.9 144.4 66.9 67.9 69.5 70.4 124.8 139.9 125.5	1 "							
taxes on consumption Other primary income 4 Other primary income 4 Other primary income 4 Other primary income 4 Other transfers received (net) 6 Other primary income 1 957.5 2 012.3 2 079.1 971.0 986.4 1 000.3 1 012.0 Change in pension entitlements 60.5 61.3 62.2 29.4 31.1 29.8 31.5 Consumption expenditure 1 794.0 1 846.9 1 907.8 876.3 917.6 902.3 944.6 Saving 224.0 226.7 233.4 124.1 99.9 127.8 98.9 Saving ratio (%) 6 11.1 1 0.9 1 0.9 1 12.4 9.8 1 12.4 9.5 b) Change over the same period of the preceding year in 7 Mass income 1 4.8 1 3.7 1 4.1 1 4.5 1 5.0 1 4.2 3.2 Net wages and salaries 5 1 3.6 4 .3 4 .9 5 2 4.3 3 .0 Social benefits other than social transfers in kind 4 .5 3 .8 3 .7 4 .1 4 .8 3 .9 3 .6 less: Levies on social benefits, 5 .7 3 .8 3 .2 5 .8 5 .7 3 .9 3 .6 Less: Levies on consumption Other primary income 4 - 1.8 0 .2 0 .8 - 2.0 - 1.6 0 .0 0 .5 Disposable income 2 .9 2 .9 3 .3 2 .6 3 .1 3 .0 2 .9								
Other primary income 4 Other transfers received (net) 6 Other transfers network for the same period of the preceding transfers in kind for the preceding year in 7 Other primary income 1 Other primary income 2 Other primary income 3 Other primary income 4 Other primary income 3 Other primary income 4 Other primary inco	· ·							-
Disposable income		557.2	558.5		304.0	253.2	304.0	254.5
Change in pension entitlements 60.5 61.3 62.2 29.4 31.1 29.8 31.5 Consumption expenditure 1 794.0 1 846.9 1 907.8 876.3 917.6 902.3 944.6 Saving 224.0 226.7 233.4 124.1 99.9 127.8 98.9 Saving ratio (%) ° 11.1 10.9 10.9 12.4 9.8 12.4 9.5 b) Change over the same period of the preceding year in % Mass income 4.8 3.7 4.1 4.5 5.0 4.2 3.2 Net wages and salaries 5.1 3.6 4.3 4.9 5.2 4.3 3.0 Social benefits other than social transfers in kind 4.5 3.8 3.7 4.1 4.8 3.9 3.6 less: Levies on social benefits, 5.7 3.8 3.2 5.8 5.7 3.9 3.6 taxes on consumption -1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Disposable income <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Consumption expenditure 1794.0 1846.9 1907.8 876.3 917.6 902.3 944.6 Saving 224.0 226.7 233.4 124.1 99.9 127.8 98.9 Saving ratio (%) s 11.1 10.9 10.9 12.4 9.8 12.4 9.5 b) Change over the same period of the preceding year in % Mass income 14.8 3.7 4.1 4.5 5.0 4.2 3.2 Net wages and salaries 15.1 3.6 4.3 4.9 5.2 4.3 3.0 Social benefits other than social transfers in kind 15.7 3.8 3.7 4.1 4.8 3.9 3.6 less: Levies on social benefits, 5.7 3.8 3.2 5.8 5.7 3.9 3.6 taxes on consumption 15.5 5.7 5.8 5.7 5.9 3.6 Consumption 2.9 2.9 3.3 2.6 3.1 3.0 2.9	1 .							
Saving 224.0 226.7 233.4 124.1 99.9 127.8 98.9	Change in pension entitlements	60.5	61.3	62.2	29.4	31.1	29.8	31.5
Saving ratio (%) ° 11.1 10.9 10.9 12.4 9.8 12.4 9.5 b) Change over the same period of the preceding year in % Mass income 4.8 3.7 4.1 4.5 5.0 4.2 3.2 Net wages and salaries 5.1 3.6 4.3 4.9 5.2 4.3 3.0 Social benefits other than social transfers in kind 4.5 3.8 3.7 4.1 4.8 3.9 3.6 less: Levies on social benefits, taxes on consumption 5.7 3.8 3.2 5.8 5.7 3.9 3.6 Other primary income 4 -1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Disposable income 3.1 2.8 3.3 2.7 3.5 3.0 2.6 Consumption expenditure 2.9 2.9 3.3 2.6 3.1 3.0 2.9	Consumption expenditure	1 794.0		1 907.8	876.3	917.6	902.3	944.6
b) Change over the same period of the preceding year in % Mass income	Saving	224.0	226.7	233.4	124.1	99.9	127.8	98.9
Mass income 4.8 3.7 4.1 4.5 5.0 4.2 3.2 Net wages and salaries 5.1 3.6 4.3 4.9 5.2 4.3 3.0 Social benefits other than social transfers in kind less: Levies on social benefits, taxes on social benefits, taxes on consumption 5.7 3.8 3.2 5.8 5.7 3.9 3.6 Other primary income 4 -1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Disposable income 3.1 2.8 3.3 2.7 3.5 3.0 2.6 Consumption expenditure 2.9 2.9 3.3 2.6 3.1 3.0 2.9	Saving ratio (%) °	11.1	10.9	10.9	12.4	9.8	12.4	9.5
Mass income 4.8 3.7 4.1 4.5 5.0 4.2 3.2 Net wages and salaries 5.1 3.6 4.3 4.9 5.2 4.3 3.0 Social benefits other than social transfers in kind less: Levies on social benefits, taxes on social benefits, taxes on consumption 5.7 3.8 3.2 5.8 5.7 3.9 3.6 Other primary income 4 -1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Disposable income 3.1 2.8 3.3 2.7 3.5 3.0 2.6 Consumption expenditure 2.9 2.9 3.3 2.6 3.1 3.0 2.9	b) Change over the same period of the preceding year in	%						
Net w ages and salaries 5.1 3.6 4.3 4.9 5.2 4.3 3.0 Social benefits other than social transfers in kind less: Levies on social benefits, taxes on consumption 5.7 3.8 3.2 5.8 5.7 3.9 3.6 Other primary income 4 -1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Disposable income 3.1 2.8 3.3 2.7 3.5 3.0 2.6 Consumption expenditure 2.9 2.9 3.3 2.6 3.1 3.0 2.9			3.7	4.1	4.5	5.0	4.2	3.2
less: Levies on social benefits, taxes on consumption 5.7 3.8 3.2 5.8 5.7 3.9 3.6 Other primary income 4 -1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Disposable income 3.1 2.8 3.3 2.7 3.5 3.0 2.6 Consumption expenditure 2.9 2.9 3.3 2.6 3.1 3.0 2.9	Net wages and salaries			4.3				
taxes on consumption -1.8 0.2 0.8 -2.0 -1.6 0.0 0.5 Disposable income 3.1 2.8 3.3 2.7 3.5 3.0 2.6 Consumption expenditure 2.9 2.9 3.3 2.6 3.1 3.0 2.9				3.7		4.8		3.6
Other primary income 4 - 1.8 0.2 0.8 - 2.0 - 1.6 0.0 0.5 Disposable income 3.1 2.8 3.3 2.7 3.5 3.0 2.6 Consumption expenditure 2.9 2.9 3.3 2.6 3.1 3.0 2.9	1	5.7	3.8	3.2	5.8	5.7	3.9	3.6
Disposable income 3.1 2.8 3.3 2.7 3.5 3.0 2.6 Consumption expenditure 2.9 2.9 3.3 2.6 3.1 3.0 2.9	· ·							
Consumption expenditure 2.9 2.9 3.3 2.6 3.1 3.0 2.9								
	uisposable income	3.1	2.8	3.3	2.7	3.5	3.0	2.6
Saving 4.4 1.2 3.0 2.6 6.8 3.0 - 1.0		2.9	2.9	3.3	2.6	3.1	3.0	
	Saving	4.4	1.2	3.0	2.6	6.8	3.0	- 1.0



National Accounts (cont.) Forecast period: 2019 to 2021							
	2019	2020	2020 2021 2019		2020		
	2019	2020	2021	H1	H2	H1	H2
7. Revenue and expenditure by general governme	n t 7						
a) EUR bn.	iii. *						
Revenue							
Taxes	825.0	846.6	864.3	415.6	409.4	426.1	420.6
Social contributions	597.9	614.5	633.4	289.7	308.1	298.6	315.9
Property income	21.2	20.8	20.4	13.2	8.0	13.0	7.8
Other current transfers	23.9	22.9	23.3	11.3	12.6	10.9	12.0
Capital transfers	12.5	12.8	13.1	5.3	7.2	5.5	7.3
Sales	12.3	131.5	136.1	59.3	67.5	61.6	69.9
Other subsidies	0.2	0.2	0.2	0.1	07.5	01.0	09.9
Total	1 607.5	1 649.3	1 690.8	794.5	813.0	815.7	833.6
lotai	1 007.5	1 049.5	1 030.0	734.5	013.0	013.7	000.0
Expenditure							
Intermediate consumption 8	477.4	499.5	519.0	229.8	247.6	240.7	258.7
Compensation of employees	269.2	278.4	286.6	129.3	139.9	133.7	144.6
Property income (interest)	29.0	27.2	26.1	14.8	14.2	13.9	13.3
Subsidies	30.8	32.4	34.4	14.2	16.5	14.9	17.5
Social benefits	545.4	567.7	590.2	270.8	274.7	282.3	285.3
Other current transfers	80.2	88.3	93.4	39.0	41.2	43.7	44.6
Capital transfers	38.1	41.8	45.4	13.3	24.8	15.0	26.7
Gross capital formation	85.5	91.1	98.7	37.8	47.7	39.1	52.0
Net acquisitions of non-produced non-financial assets	- 1.3	- 1.3	- 1.3	- 0.5	- 0.8	- 0.5	- 0.8
Total	1 554.3	1 625.0	1 692.5	748.4	805.9	782.9	842.1
Total	1 004.0	1 020.0	1 032.5	740.4	000.0	702.5	042.1
Net lending	53.1	24.3	- 1.7	46.1	7.0	32.8	- 8.6
b) Change over the same period of the preceding year in	%						
Revenue	70						
Taxes	3.0	2.6	2.1	2.8	3.2	2.5	2.7
Social contributions	4.4	2.8	3.1	4.6	4.3	3.1	2.5
Property income	- 0.5	- 1.8	- 1.8	1.5	- 3.5	- 1.6	- 2.2
Other current transfers	- 3.5	- 3.9	1.6	- 2.4	- 4.4	- 3.1	- 4.7
Capital transfers	- 4.6	2.2	2.3	- 4.3	- 4.9	2.5	2.0
Sales	5.6	3.7	3.5	6.8	4.5	3.9	3.5
Other subsidies	- 9.5	0.0	0.0	- 24.4	3.1	0.0	0.0
Total	3.5	2.6	2.5	3.6	3.5	2.7	2.5
E							
Expenditure	4.0	4.0	2.0	4.7	4.0	4.0	4 -
Intermediate consumption ⁸	4.8	4.6	3.9	4.7	4.9	4.8	4.5
Compensation of employees	3.8	3.4	3.0	4.0	3.7	3.4	3.4
Property income (interest)	- 8.5	- 6.2	- 4.0	- 8.7	- 8.3	- 6.1	- 6.3
Subsidies	4.0	5.3	6.1	2.4	5.5	4.4	6.1
Social benefits	4.9	4.1	4.0	4.4	5.3	4.3	3.9
Other current transfers	7.1	10.1	5.8	6.6	7.5	12.1	8.1
Capital transfers	- 9.8	9.7	8.6	2.6	- 15.3	13.2	7.8
Gross capital formation	9.2	6.5	8.3	13.4	6.0	3.4	9.0

- 0.6

4.3

0.0

4.5

0.0

4.2

- 6.9

4.6

4.5

4.0

0.0

4.6

0.0

4.5

Total

Net acquisitions of non-produced non-financial assets

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

¹ Price-adjusted gross domestic product per hour w orked.

Incl. nonprofit institutions serving households.
 Incl. acquisitions less disposals of valuables.

⁴ Operating surplus/mixed income, net property income

⁵ Received less payed other current transfers.

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

 $[\]sp{7}$ Central, regional, local and social security funds.

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