



German Economy

Winter 2014

Kiel Institute Economic Outlook No. 2 (2014|Q4)

German Economy Gains Momentum

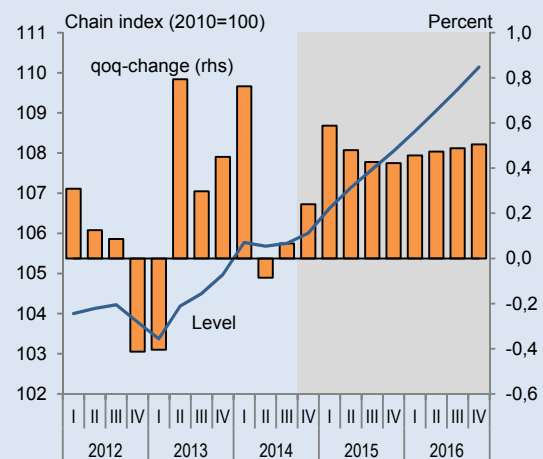
Jens Boysen-Hogrefe, Dominik Groll, Nils Jannsen and Stefan Kooths

The German economy is regaining momentum. GDP is forecast to increase by 1.7 percent in 2015 and 1.9 percent in 2016. Initially, the acceleration in economic growth will be driven in particular by private consumption thanks to a sharp increase in income and higher purchasing power as a result of a marked oil price decline. In the course of time, investment spending will add to economic momentum on the back of favorable financing conditions and strong upward cyclical forces. German exports have experienced a robust trend, notwithstanding a challenging global environment. Furthermore, the terms of trade will also improve significantly as a result of lower oil prices in the year to come. Employment growth will initially continue to decelerate. Low consumer price inflation is almost exclusively due to a strong fall in energy prices rather than deflationary trends, which are visible nowhere in Germany. Public finances will continue to generate a surplus. The introduction of economic stimulus programs would be counterproductive from an economic stability point of view as production capacities are fully utilized. On the contrary, there is a risk of overheating in the medium term, which will call for a timely response from policymakers.

In future, the Kiel Institute for the World Economy will be publishing its business cycle forecasts as part of the new series titled "Kiel Institute Economic Outlook." As always, we will present analyses on economic development in the world, in the euro area and in Germany four times a year. The main reports containing extensive commentaries will be released in the spring and autumn. These will be augmented by brief reports in summer and winter as concise summaries of the core statements and reflecting essential revisions in relation to the last main report published from time to time. An extensive data attachment (pp. 6) also provides a detailed insight into the calculations of the completely restated quarterly forecasts within the brief reports released.

Economic activity in Germany is regaining significant momentum. Following a six-month period of economic stagnation, expansionary forces are gaining strength. Initially, these forces are essentially based on a strong temporary boost to private consumption. In the course of the coming year, cyclical expansionary forces and still extremely favorable financing conditions will increasingly stimulate investment activity. Accelerating global economic growth will provide additional support to exports. In the fourth quarter of this year, production is likely to expand significantly, even though leading economic indicators still paint a mixed picture. Following an increase in economic activity of 1.5 percent in the current year, we expect the German economy to expand by 1.7 percent in 2015 and by 1.9 percent in the

Figure 1:
Gross domestic product, 2012–2016



Quarterly data, volumes, seasonally and working-day adjusted.

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

year thereafter. Consequently, production capacity utilization will rise over the entire forecast horizon. As the economic expansion will essentially rely on domestic forces, import growth is expected to gain momentum. Overall, the current account surplus is likely to remain at 7.5 percent of gross domestic product.

Private household purchasing power benefits from rising nominal incomes, receiving a massive short-term boost by the sharp drop in oil prices. Private household disposable income growth will accelerate in the year to come (from 2.7 percent in 2014 to 3.7 percent), with all income sources contributing to faster growth. Net wages and salaries are expected to increase by 4.4 percent next year (following an increase of 3.7 percent in 2014) on the back of an ongoing robust labor market, mainly driven by faster wage growth. This is the result of minimum wage legislation, which will improve low-wage incomes, albeit at the expense of jobs. As early as the second half of 2014, significantly higher monetary social benefits (retirement payments to mothers, retirement at 63) have had a tangible impact on beneficiaries' incomes, a trend that will continue next year (increase of 3.8 percent following 2.7 percent this year). Beyond that, private household purchasing power is being boosted by the massive decline in crude oil prices. A sharp increase in nominal incomes at the turn of the year 2014/2015 will translate into a similar

increase in real incomes as prices of consumer goods are more or less stagnating. While private households are likely to spend this oil price related increase in purchasing power over time only, thus temporarily raising their savings rate, in the fourth quarter of this year private consumption growth will probably accelerate sharply compared to already elevated levels in the summer months. This forecast is based on a real constant oil price at the current level (70 US-dollar per barrel). Consequently, the resulting positive effects on purchasing power will have an impact well into the year to come. In the second half of the forecast period, the extremely favorable conditions for private consumption are likely to weaken. While corporate income and investment income growth will probably accelerate over the course of the economic upturn, we expect wage and salary as well as transfer income growth to weaken somewhat, while positive purchasing power effects of the most recent oil price decline will run out as well. All in all, we expect private consumption to grow at a very high rate of 2.8 percent (following 1.3 percent in the current year), theoretically almost absorbing the full production increase of the year. Following this distinctively high rate—with the annualised rate being boosted by 1.3 percentage points because of a statistical overhang—the growth rate will drop to a more moderate level of 1.7 percent in the year thereafter.

Table 1:
Key indicators, 2013–2016

	2013	2014	2015	2016
Gross domestic product (GDP), price-adjusted	0.1	1.5	1.7	1.9
Gross domestic product, deflator	2.1	1.9	2.0	2.3
Consumer prices	1.5	1.0	0.8	1.9
Labor productivity (per hour worked)	0.4	0.1	0.8	1.2
Employment (1,000 persons)	42,033	42,281	42,651	42,916
Unemployment rate (percent)	6.9	6.7	6.6	6.4
<i>In relation to nominal GDP</i>				
Public sector net lending	0.1	0.5	0.2	0.3
Gross public debt	76.4	73.3	70.0	66.6
Current account balance	6.8	7.5	7.6	7.4

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: IfW forecast.

The upswing in investment activity is gradually gaining speed and will turn into the key driver of economic growth in the second half of the forecast period.

A year ago we were forecasting investment activity to recover this year, but the recovery stopped in the second half of 2014. Most recently, spending on equipment was even in decline. Apparently, investor confidence has been severely impacted in the recent past by geopolitical crises and the still lingering euro area crisis, contributing to a stop-and-go pattern in the previous quarters. However, conditions for another recovery attempt are still in place. Financing conditions for the corporate sector remain extremely favorable, and industrial capacity utilization has seen a marked rise over the past two years. Since mid-2014 it has reached a level exceeding the normal utilization rate. Accordingly, cyclical expansion forces argue in favor of a pick-up in investment activity as well. Furthermore, negative sentiment has apparently bottomed out, while new orders have recently pointed to a future improvement as well. On the whole, we expect corporate investment activity to gain momentum and expand by 4.3 percent (2015) and 8.1 percent (2016), following 3.7 percent growth this year. Conditions for growth in housing construction are in place as well, with mortgage rates at historic lows and persistent supply gaps in evidence. However, leading indicators have recently pointed to a slowdown in housing construction. Deteriorating sentiment with respect to general economic conditions has potentially impacted developers' willingness to invest. In line with corporate investment activity trends, we expect the current restraint to turn into more revitalized activity, with housing construction expanding by 3.1 percent this year, by 2.3 percent in 2015 and by 4.6 percent in 2016.

The monetary environment in Germany remains highly expansionary. Financing conditions for companies and private households, which had been very favorable for several years, have improved yet again in the course of 2014. Interest rates on loans as well as corporate bond yields are both at historic lows. In the course of 2014, commercial bank

lending to the nonfinancial sector has gradually increased. Lending in the field of housing construction has grown by a particularly high rate. This trend is likely to continue over the forecast period, which is why the expansionary monetary policy is likely to be increasingly reflected in credit aggregates.

German exports have proved to be robust in a difficult global environment.

Following a strong increase by 2 percent in the third quarter, we expect the speed of expansion to temporarily slow down slightly. On the one hand, the strong oil price drop stimulates the economies of key importing countries. On the other, exports to oil-exporting countries (with 10 percent of German exports going to the 15 biggest oil-exporting countries) will suffer. Because of the acceleration in global economic growth (Gern et al. 2014), export growth will pick up significantly during the forecast period, rising by 6.4 percent in 2015 and 6.5 percent in 2016, compared to 4.1 percent in 2014. Because of a strong domestic economy, we expect imports to grow slightly faster than exports at about 8 percent in both forecast years. Theoretically, this will result in a negative contribution to growth by net exports equivalent to 0.3 percentage points (2015) and 0.2 percentage points (2016).

The terms of trade will improve significantly once again in the coming year because of the oil price decline.

In 2015, import prices are likely to drop by more than 2 percent after having fallen by about 1.5 percent in the current year. While German exporters will probably pass on lower energy prices to buyers to some extent, we still expect the terms of trade to improve by 1.6 percent in the coming year, after a rise of 1.8 percent in 2014.

Weak consumer price inflation is almost exclusively a result of falling energy prices.

While the price increase in nearly all sub-components of the consumer price index is accelerating, falling energy prices are exerting strong downward pressure on inflation. In November, annual inflation slowed to 0.6 percent. Consumer price inflation is likely to

accelerate moderately over the course of the forecast period as underlying price momentum will probably have a gradually increasing impact on consumer prices, supported by more vibrant economic activity. Unlike the trends witnessed for consumer price inflation, the increase in the GDP deflator has hardly weakened lately. This reflects a strong demand pull for domestic production contributions, proving that beyond special effects there are no deflationary trends in evidence in Germany.

Employment growth will initially continue to decelerate. Employment growth has slowed noticeably because of a phase of economic weakness that began in the spring of this year. This trend is likely to continue until mid-2015. Later on in the course of the forecast period, employment growth will gain momentum, underpinned by reaccelerating economic growth. Overall, we expect employment to increase by 265,000 persons (2015) and 320,000 persons (2016). Employment would grow at a faster pace without the introduction of the minimum wage. The negative employment effect as a result of the introduction of the minimum wage will not be felt right away early in the coming year but will gradually develop over time.

Labor costs increase at a faster pace because of the minimum wage introduction. The introduction of the minimum wage as of 1 January 2015 will cause wage and salary inflation to accelerate compared to this year, notwithstanding temporary exceptions for certain sectors and negotiated wages. We expect gross wages and salaries per employee to grow by 3.7 percent in 2015, which would be the highest increase in about twenty years. Nevertheless, the ratio of real labor costs to productivity will remain at a favorable level in a long-term comparison.

Fiscal balances will remain in positive territory. However, the fiscal surplus will fall significantly in 2015 compared to the current year, when the surplus reached an exceptionally high level. This is a result of an expansionary fiscal policy, high spending growth for social benefits in kind and the discontinuation of

special effects; this is because the Deutsche Bundesbank will transfer a substantially lower amount to the federal government and because income from voluntary disclosures of tax fraud is likely to decline markedly. In 2016, better economic momentum should result in a modest improvement in the fiscal balance. While central, state, and local government fiscal surpluses are likely to remain at the current year's levels in the next two years, the social security funds surplus will turn into a deficit because of falling contribution rates, spending programs, such as retirement payments to mothers and retirement at age 63, and strong growth in healthcare spending. Gross public debt will fall in the years 2015 and 2016. Apart from fiscal surpluses, this is the result of liability reduction related to bad banks. In addition, the social security funds will initially finance deficits through the release of reserves, which is why their deficits will not increase the level of new debt by the corresponding amount.

There is no reason to implement economic stimulus programs. However, growth policies are required to facilitate higher non-inflationary economic growth rates. The German economy is currently operating close to normal capacity utilization. This is supported by economic surveys for most parts of the manufacturing sector. Furthermore, estimates of the production potential and the current labour market situation indicate that the German output gap has virtually been closed. Accordingly, the potential for noninflationary economic expansion is confined to the potential growth rate, which we estimate at an annual 1 1/4 percent over the forecast period. An economic expansion beyond this rate would raise capacity utilization further, pushing the German economy into a boom stage. Assuming that economic stability is to be taken seriously as an economic policy target, there currently is no reason for policymakers to stimulate the economy. This is particularly true as the German economy remains exposed to an extremely expansionary monetary environment. The risk of an economic boom in Germany driven by monetary conditions remains real and is far bigger than the downside risk, notwithstanding the recent stop-

and-go pattern in economic growth. Economic performance can only be improved in a sustainable way by implementing structural economic reforms aimed at enhancing the market system's growth potential. Investments only have a positive effect on growth if they contribute directly or indirectly to the production

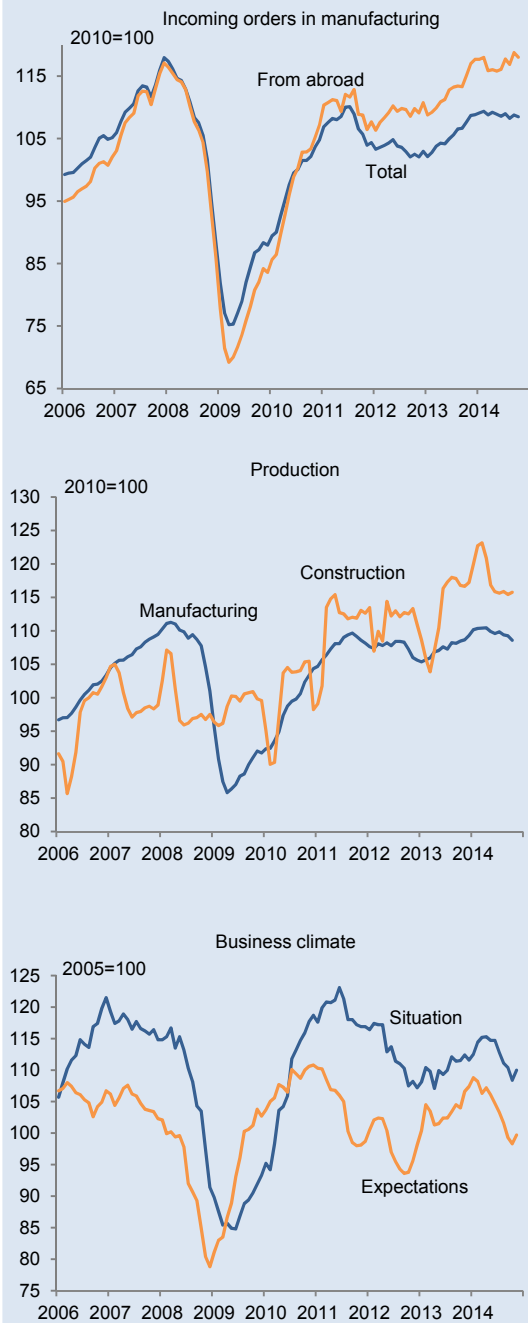
of consumer goods appreciated in the future. Therefore, government programs to promote investments are not adequate *per se* to tackle the much-cited problem of low economic growth in Germany (Kooths 2014).

Contents

1. Leading indicators	7
2. Monetary conditions and prices	8
3. External trade	10
4. Domestic expenditure	11
5. Wages	13
6. Employment	14
7. Public finances	15
8. GDP and its components	16
9. National accounts	17

1. Leading indicators

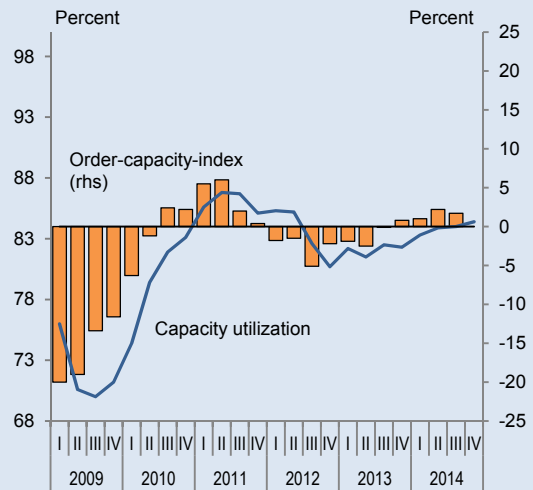
Figure 1.1:
Leading indicators, 2006–2014



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

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

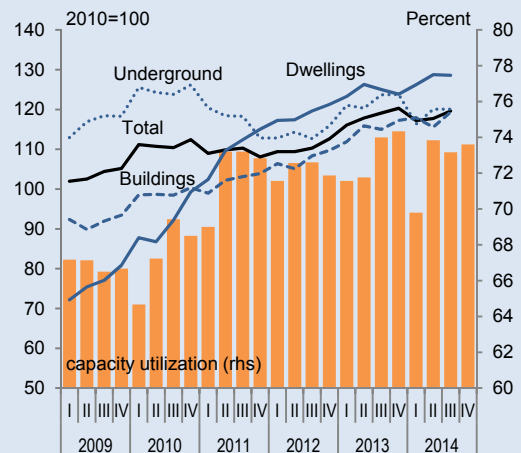
Figure 1.2:
Capacity utilization, 2009–2014



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, 2009–2014

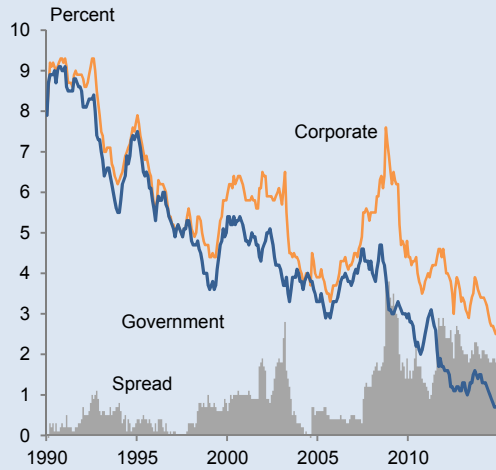


Quarterly data. Capacity utilization: seasonally adjusted (2014-Q4: october/november); Order stocks: price, seasonally and working-day adjusted.

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

2. Monetary conditions and prices

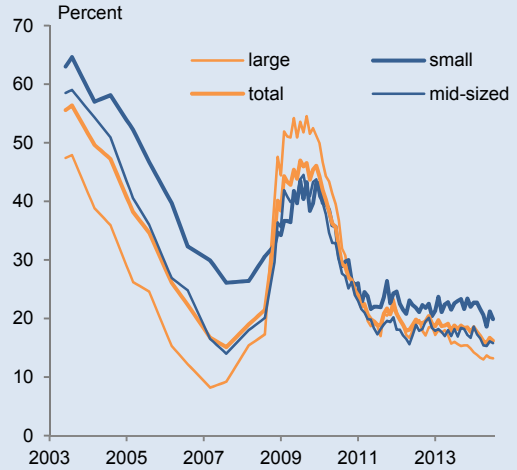
Figure 2.1:
Bond yields, 1990–2014



Monthly data, corporate bonds: maturing within 3 years; government bonds: maturing within 5 years.

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

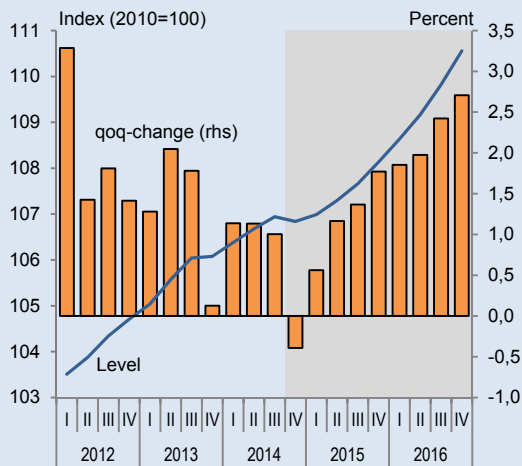
Figure 2.2:
Credit constraints by firm size, 2003–2014



Monthly data since November 2008; share of firms assessing that credit access is restrictive.

Source: ifo, *Credit Constraint Indicator*.

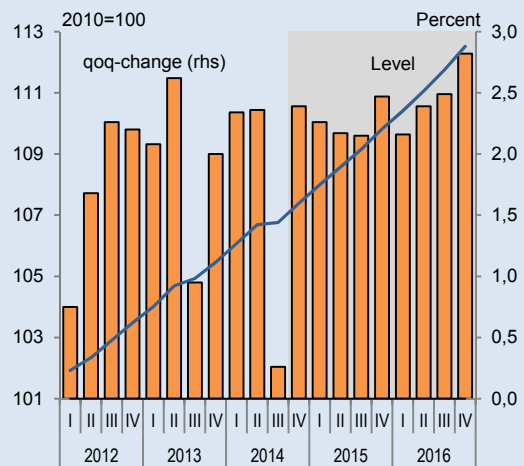
Figure 2.3:
Consumer prices, 2012–2016



Quarterly data, seasonally adjusted, annualized.

Source: Deutsche Bundesbank, *Monthly Report*; shaded: IFW forecast.

Figure 2.4:
GDP deflator, 2012–2016



Quarterly data, seasonally and working-day adjusted, annualized.

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

Table 2.1:
Projections and assumptions on the international environment, 2013–2016

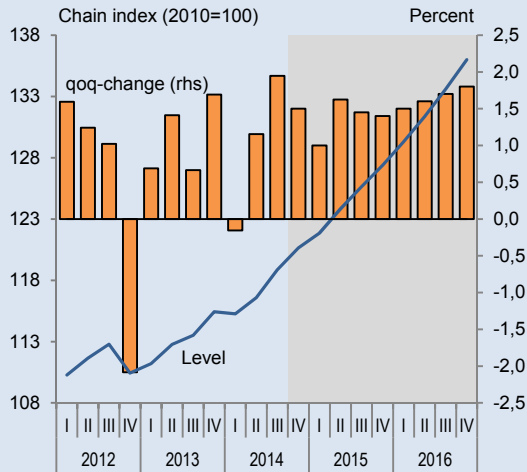
	2013				2014				2015				2016			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
ECB key interest rate	0.75	0.60	0.50	0.40	0.25	0.23	0.10	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Long-term interest rate	1.5	1.4	1.8	1.8	1.7	1.4	1.0	1.1	1.1	1.3	1.5	1.7	1.9	2.1	2.3	2.5
US-dollar/euro exchange rate	1.30	1.32	1.33	1.37	1.38	1.36	1.29	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Price competitiveness	86.0	86.3	86.5	87.3	87.9	87.9	87.0	86.0	86.0	86.0	85.8	85.7	85.6	85.5	85.5	85.5
Export markets	0.2	0.5	0.5	0.6	0.3	0.5	0.6	0.5	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7
Oil price	113.0	103.1	110.3	109.6	108.2	110.0	103.0	77.3	70.0	70.4	70.7	71.1	71.4	71.8	72.1	72.5

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

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

3. External trade

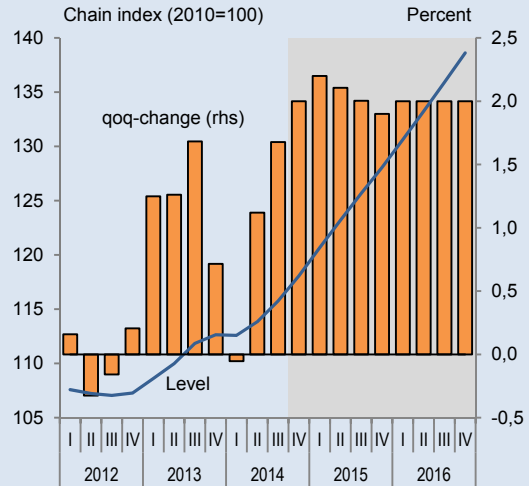
Figure 3.1:
Exports, 2012–2016



Quarterly data, volumes, seasonally and working-day adjusted.

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

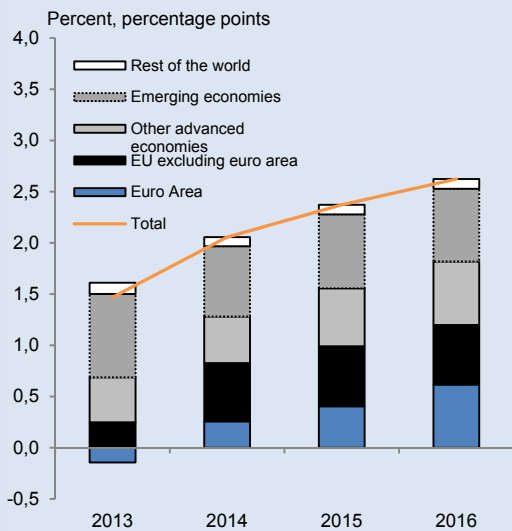
Figure 3.2:
Imports, 2012–2016



Quarterly data, volumes, seasonally and working-day adjusted.

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

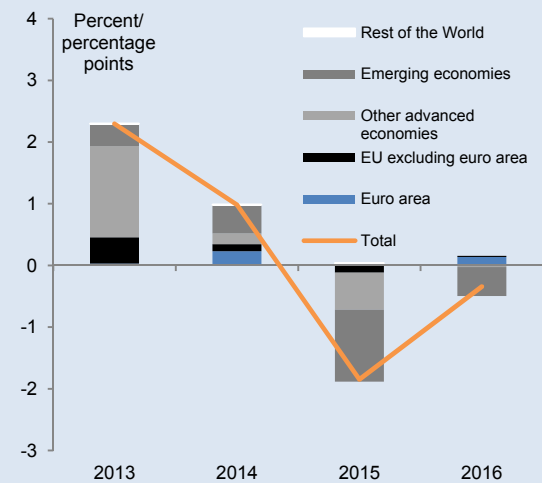
Figure 3.3:
German export markets, 2013–2016



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

Source: Federal Statistical Office; national sources; 2014–2016: IfW forecast.

Figure 3.4:
Germany's price competitiveness, 2013–2016

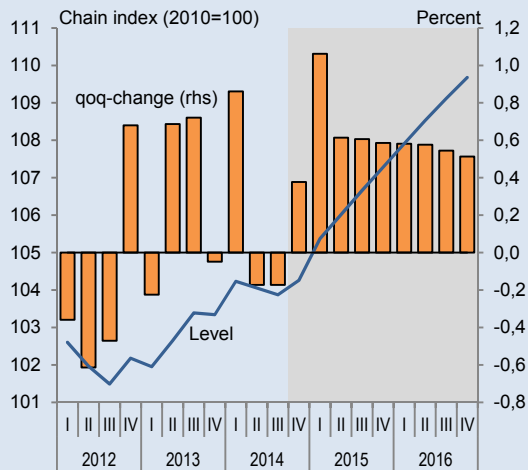


Annual data; Against 56 countries based on consumer prices; Weights according to Germany's price competitiveness indicator against 56 trading partners based on consumer price indices of the Deutsche Bundesbank.

Source: Deutsche Bundesbank; national sources; 2014–2016: IfW forecast.

4. Domestic expenditure

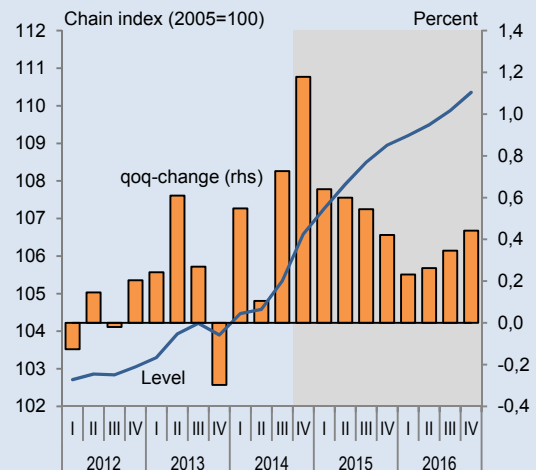
Figure 4.1:
Domestic expenditure, 2012–2016



Quarterly data, volumes, seasonally and working-day adjusted.

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

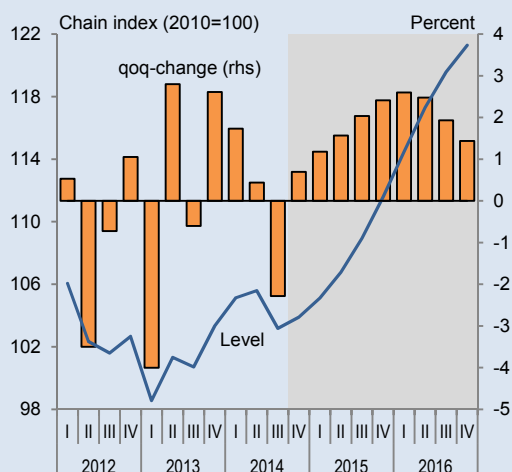
Figure 4.2:
Private consumption, 2012–2016



Quarterly data, volumes, seasonally and working-day adjusted.

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

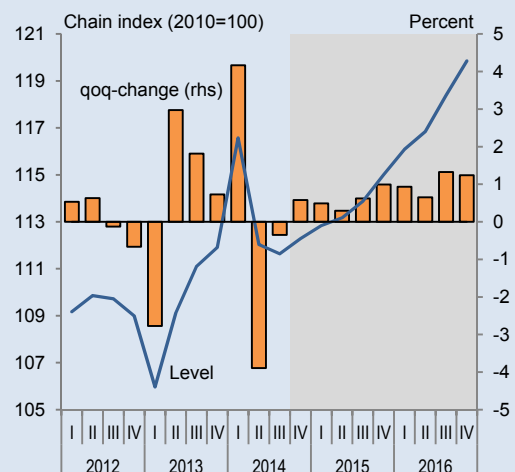
Figure 4.3:
M & E investment, 2012–2016



Quarterly data, volumes, seasonally and working-day adjusted.

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

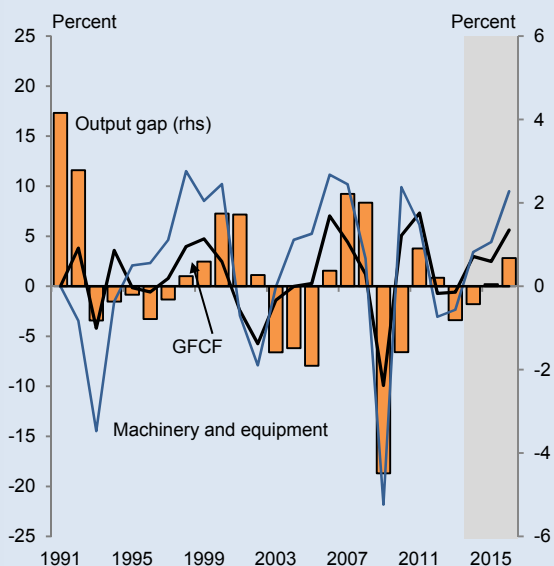
Figure 4.4:
Constructions, 2012–2016



Quarterly data, volumes, seasonally and working-day adjusted.

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

Figure 4.5:
Investment cycles, 1991–2016



Annual data; GFCF (Gross Fixed Capital Formation), machinery and equipment: volumes, change on previous year; output gap: in percent of potential output.

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

Table 4.1:
Gross fixed capital formation, 2013–2016

	2013	2014	2015	2016
Total	-0.6	3.0	2.5	5.5
Corporate investment	-1.3	2.9	3.0	6.4
Machinery and equipment	-2.4	3.4	4.4	9.5
Construction (non-dwellings)	-2.1	3.6	0.8	3.3
Other	1.3	1.2	2.2	3.3
Dwellings	0.6	3.1	2.3	4.6
Public (nondwellings)	1.6	3.7	-1.9	0.8
<i>Memorandum item:</i>				
Construction	-0.1	3.3	1.4	3.7

Volumes; change over previous year in percent.

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

5. Wages

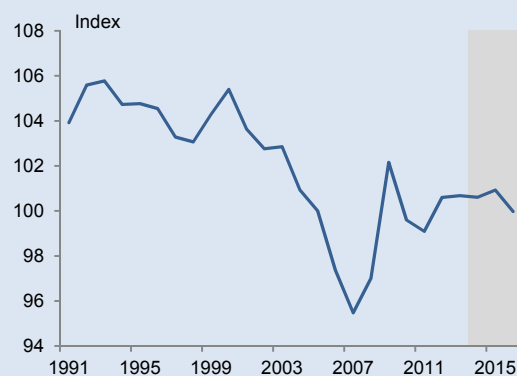
Table 5.1:
Wages and productivity, 2013–2016

	2013	2014	2015	2016
<i>Per hour</i>				
Negotiated wages	2.4	3.1	2.7	2.9
Gross wages and salaries	2.8	2.1	3.3	2.6
Wage drift	0.4	-1.0	0.7	-0.3
Compensation of employees	2.6	1.9	3.2	2.6
Labor productivity	0.4	0.1	0.8	1.2
Unit labor costs	2.2	1.8	2.4	1.3
Unit labor costs (real)	0.1	-0.1	0.3	-1.0
<i>Per capita</i>				
Negotiated wages	2.5	3.1	2.7	2.9
Gross wages and salaries	2.1	2.7	3.7	2.8
Wage drift	-0.4	-0.3	1.0	-0.1
Compensation of employees	1.9	2.6	3.6	2.7
Labor productivity	-0.5	0.6	1.1	1.2
Unit labor costs	2.4	1.9	2.5	1.5
Unit labor costs (real)	0.3	0.1	0.4	-0.9

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.

Figure 5.1:
Real unit labor costs, 1991–2016



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

Source: Federal Employment Agency, *Fachserie 18, Series 1.2*; shaded: IfW forecast.

6. Employment

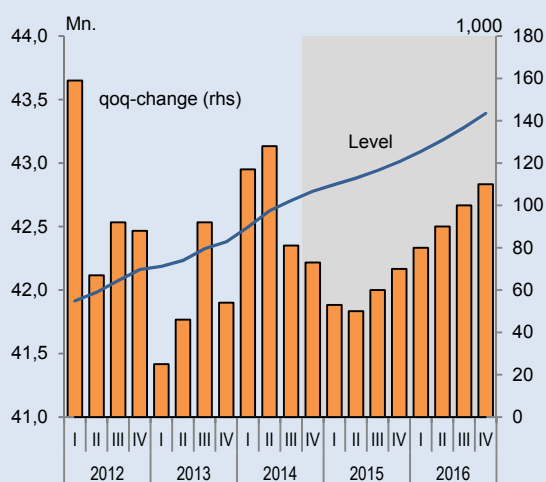
Table 6.1:
Employment, 2012–2016 (1,000 persons)

	2012	2013	2014	2015	2016
Hours worked (domestic concept, mn. hours)	57,763	57,608	58,427	58,953	59,381
Persons in employment (domestic concept)	42,033	42,281	42,651	42,916	43,236
Self-employed	4,544	4,457	4,416	4,426	4,458
Employees (domestic concept)	37,489	37,824	38,235	38,491	38,778
Employees subject to social security contributions	29,361	29,728	30,223	30,573	30,935
Minijobs	4,981	5,018	5,006	4,986	4,926
Net commuting	54	56	55	54	54
Persons in employment (national concept)	41,979	42,225	42,597	42,863	43,183
Employees (national concept)	37,435	37,768	38,180	38,437	38,725
Unemployed persons (registered)	2,897	2,950	2,897	2,883	2,819
Unemployment rate (registered; percent)	6.8	6.9	6.7	6.6	6.4
Unemployment rate (ILO; percent)	5.2	5.1	4.8	4.8	4.5

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: IfW forecast.

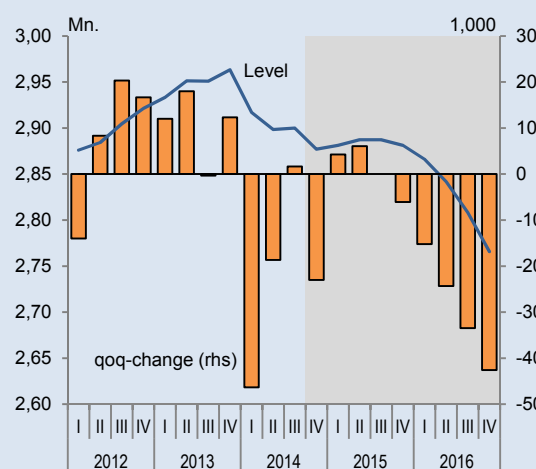
Figure 6.1:
Employment, 2012–2016



Quarterly data, seasonally adjusted.

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

Figure 6.2:
Unemployment, 2012–2016



Quarterly data, seasonally adjusted.

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

7. Public finances

Table 7.1:
Revenues and expenditures of the general government 2012–2016 (bn. euro)

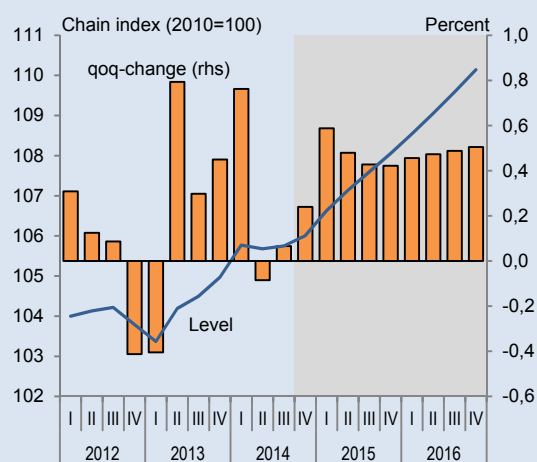
	2012	2013	2014	2015	2016
Revenues	1,217.8	1,249.4	1,290.7	1,329.2	1,376.4
➤ relative to GDP	44.3	44.5	44.4	44.0	43.6
Taxes	619.8	637.9	657.1	677.1	702.4
➤ relative to GDP	22.5	22.7	22.6	22.4	22.2
Social contributions	454.3	465.4	481.6	502.2	521.1
➤ relative to GDP	16.5	16.6	16.6	16.6	16.5
Other revenues	143.8	146.2	152.0	149.8	152.9
➤ relative to GDP	5.2	5.2	5.2	5.0	4.8
Expenditures	1,215.2	1,245.3	1,276.3	1,321.1	1,366.5
➤ relative to GDP	44.2	44.3	43.9	43.7	43.3
Compensation of employees	212.7	217.6	224.3	231.3	238.6
Intermediate consumption	126.5	131.5	136.6	142.2	148.5
Social transfers in kind	215.8	226.9	239.5	254.1	267.9
Gross capital formation	62.1	62.8	64.0	64.1	66.2
Capital transfers	63.2	56.3	50.5	48.3	48.0
Social benefits	429.7	439.9	451.8	468.3	483.2
Subsidies	24.4	24.7	25.7	26.0	26.4
Other current transfers	54.5	62.0	63.1	65.8	67.1
Other capital transfers and investment grants	27.7	24.8	21.9	22.1	21.8
Other expenditures	-1.3	-1.3	-1.2	-1.2	-1.2
Net lending/net borrowing	2.6	4.2	14.4	8.1	9.9
➤ relative to GDP	0.1	0.1	0.5	0.3	0.3
Revenues of central, state, and local governments	793.9	811.3	836.8	855.9	885.4
Net of transfers from social security funds	789.3	810.2	835.7	854.8	884.3
Transfers from social security funds	4.6	1.0	1.1	1.1	1.1
Expenditures of central, state, and local governments	809.6	813.2	825.9	847.1	874.5
Net of transfers to social security funds	699.0	712.4	723.0	741.8	764.3
Transfers to social security funds	110.6	100.8	102.9	105.3	110.1
Net lending/net borrowing central, state, and local government	-15.7	-1.9	10.9	8.7	10.9
Revenues of social security funds	539.2	540.1	557.9	579.7	602.2
Net of transfers from central, state, and local governments	428.6	439.2	455.0	474.4	492.1
Expenditures of social security funds	520.9	534.0	554.4	580.4	603.2
Net of transfers to central, state, and local governments	516.3	532.9	553.3	579.3	602.2
Net lending/net borrowing social security funds	18.3	6.1	3.6	-0.7	-1.0

Sums may deviate due to rounding.

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

8. GDP and its components

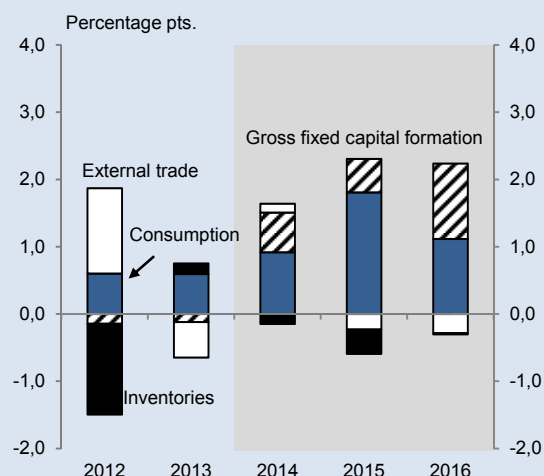
Figure 8.1:
Gross domestic product, 2012–2016



Quarterly data, volumes, seasonally and working-day adjusted.

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

Figure 8.2:
Expenditure-side contributions to GDP growth, 2012–2016



Annual data; price-adjusted, Lundberg components.

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

Table 8.1:
Quarterly data, 2014–2016

	2014				2015				2016			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Gross domestic product	0.8	-0.1	0.1	0.2	0.6	0.5	0.4	0.4	0.5	0.5	0.5	0.5
Private consumption	0.5	0.1	0.7	1.2	0.6	0.6	0.5	0.4	0.2	0.3	0.4	0.5
Government consumption	0.2	0.4	0.6	-0.1	0.3	0.5	0.6	0.0	0.0	0.4	0.5	0.1
Machinery and equipment	1.7	0.4	-2.3	0.7	1.2	1.6	2.0	2.4	2.6	2.5	1.9	1.4
Constructions	4.2	-3.9	-0.3	0.6	0.5	0.3	0.6	1.0	1.3	-0.1	1.3	1.2
Other investment	0.7	0.1	0.2	0.4	0.6	0.7	0.8	0.8	0.8	0.9	0.8	0.7
Change in inventories	-0.1	0.0	-0.5	-0.4	0.5	0.0	-0.1	0.0	0.0	0.1	-0.1	0.0
Domestic expenditure	0.9	-0.2	-0.2	0.4	1.1	0.6	0.6	0.6	0.5	0.6	0.5	0.6
Exports	-0.2	1.2	1.9	1.5	1.0	1.3	1.5	1.5	1.6	1.6	1.7	1.7
Imports	-0.1	1.1	1.7	2.0	2.2	1.8	1.9	2.0	2.0	2.0	2.0	2.0
Net exports	0.0	0.1	0.2	-0.1	-0.4	-0.1	-0.1	-0.1	0.0	-0.1	0.0	0.0
Employment (domestic)	42,476	42,581	42,705	42,778	42,831	42,881	42,941	43,011	43,091	43,181	43,281	43,391
Unemployment (registered)	2,917	2,898	2,900	2,877	2,881	2,887	2,887	2,881	2,866	2,842	2,808	2,766

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.

9. National accounts

Forecast period: 2014 to 2016

	2013	2014	2015	2016	2014		2015		2016	
					H1	H2	H1	H2	H1	H2

1. Production

Change on the same period of the preceding year in %

Persons in employment	0.6	0.9	0.6	0.7	0.8	0.9	0.7	0.5	0.7	0.8
Hours worked	-0.3	1.4	0.9	0.7	1.6	1.2	0.3	1.5	1.5	0.0
Hours worked by person in employment	-0.9	0.5	0.3	0.0	0.8	0.3	-0.4	0.9	0.8	-0.8
Labor productivity ¹	0.4	0.1	0.8	1.2	0.2	0.0	0.9	0.8	0.8	1.6
Gross domestic product, price-adjusted	0.1	1.5	1.7	1.9	1.8	1.2	1.2	2.3	2.3	1.6

2. Use of gross domestic product at current prices

a) EUR bn.

Consumption expenditure	2 112.7	2 170.2	2 251.7	2 331.6	1 054.9	1 115.2	1 094.8	1 157.0	1 135.4	1 196.2
Private households ²	1 571.5	1 607.7	1 665.1	1 721.3	782.2	825.6	810.3	854.8	839.4	881.9
Government	541.2	562.4	586.7	610.3	272.8	289.7	284.5	302.2	296.0	314.3
Gross fixed capital formation	555.8	578.5	602.1	648.4	279.1	299.4	283.5	318.6	307.6	340.9
Machinery and equipment	177.9	183.7	192.6	212.4	88.2	95.5	89.2	103.4	99.3	113.1
Construction	279.2	292.7	302.9	323.4	141.3	151.4	142.8	160.1	153.8	169.6
Other products	98.8	102.1	106.6	112.6	49.6	52.5	51.5	55.1	54.4	58.2
Changes in inventories ³	-22.3	-33.2	-38.4	-39.7	-0.7	-32.5	-10.0	-28.4	-11.4	-28.3
Domestic expenditure	2 646.2	2 715.5	2 815.5	2 940.3	1 333.4	1 382.1	1 368.2	1 447.2	1 431.6	1 508.8
Net exports	163.3	188.9	198.8	204.3	95.4	93.5	103.1	95.8	107.9	96.5
Exports	1 280.1	1 331.1	1 410.2	1 507.7	650.6	680.5	688.6	721.7	736.7	771.0
Imports	1 116.9	1 142.2	1 211.3	1 303.4	555.2	587.1	585.4	625.9	628.8	674.6
Gross domestic product	2 809.5	2 904.4	3 014.3	3 144.7	1 428.8	1 475.6	1 471.3	1 543.0	1 539.4	1 605.2

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

Consumption expenditure	2.5	2.7	3.8	3.5	2.5	3.0	3.8	3.7	3.7	3.4
Private households ²	2.1	2.3	3.6	3.4	2.0	2.6	3.6	3.5	3.6	3.2
Government	3.8	3.9	4.3	4.0	3.9	4.0	4.3	4.3	4.0	4.0
Gross fixed capital formation	0.8	4.1	4.1	7.7	6.1	2.3	1.6	6.4	8.5	7.0
Machinery and equipment	-2.1	3.3	4.8	10.3	5.0	1.7	1.0	8.3	11.4	9.3
Construction	1.9	4.9	3.5	6.8	7.8	2.2	1.1	5.7	7.7	5.9
Other products	3.3	3.3	4.4	5.6	3.2	3.4	3.9	5.0	5.7	5.6
Domestic expenditure	2.2	2.6	3.7	4.4	3.3	2.0	2.6	4.7	4.6	4.3
Exports	1.4	4.0	5.9	6.9	2.9	5.1	5.8	6.0	7.0	6.8
Imports	1.4	2.3	6.0	7.6	1.6	2.9	5.5	6.6	7.4	7.8
Gross domestic product	2.2	3.4	3.8	4.3	3.8	3.0	3.0	4.6	4.6	4.0

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

a) EUR bn.

Consumption expenditure	2 007.7	2 032.3	2 081.4	2 112.5	993.8	1 038.5	1 018.6	1 062.9	1 037.4	1 075.2
Private households ²	1 500.7	1 519.8	1 562.7	1 588.7	740.5	779.3	762.2	800.5	778.4	810.3
Government	507.0	512.5	519.0	524.3	253.2	259.3	256.4	262.6	259.1	265.2
Gross fixed capital formation	527.5	543.2	556.7	588.0	262.3	280.9	262.7	294.0	279.6	308.4
Machinery and equipment	175.3	181.3	189.3	207.3	86.6	94.6	87.3	102.0	96.6	110.6
Construction	258.4	267.0	270.6	281.3	129.3	137.7	128.3	142.3	134.5	146.8
Other products	93.6	94.7	96.9	100.1	46.2	48.5	47.0	49.9	48.6	51.5
Domestic expenditure	2 509.5	2 540.4	2 598.8	2 660.6	1 255.2	1 285.3	1 273.8	1 325.0	1 308.6	1 352.0
Exports	1 229.1	1 280.1	1 361.7	1 450.3	626.2	654.0	664.1	697.7	710.5	739.8
Imports	1 056.3	1 097.7	1 191.5	1 290.2	531.5	566.2	572.3	619.2	622.6	667.6
Gross domestic product	2 681.5	2 721.6	2 768.2	2 821.8	1 349.3	1 372.3	1 364.9	1 403.3	1 396.3	1 425.4

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

Consumption expenditure	0.8	1.2	2.4	1.5	0.9	1.6	2.5	2.3	1.8	1.2
Private households ²	0.8	1.3	2.8	1.7	0.9	1.7	2.9	2.7	2.1	1.2
Government	0.7	1.1	1.3	1.0	0.9	1.2	1.3	1.3	1.1	1.0
Gross fixed capital formation	-0.6	3.0	2.5	5.6	4.9	1.2	0.2	4.7	6.4	4.9
Machinery and equipment	-2.4	3.4	4.4	9.5	5.1	1.9	0.8	7.7	10.7	8.5
Construction	-0.1	3.3	1.4	3.9	6.2	0.7	-0.8	3.4	4.9	3.1
Other products	1.3	1.2	2.2	3.3	1.2	1.3	1.7	2.8	3.4	3.3
Domestic expenditure	0.7	1.2	2.3	2.4	1.8	0.7	1.5	3.1	2.7	2.0
Exports	1.6	4.1	6.4	6.5	3.3	4.9	6.1	6.7	7.0	6.0
Imports	3.1	3.9	8.5	8.3	3.5	4.3	7.7	9.4	8.8	7.8
Gross domestic product	0.1	1.5	1.7	1.9	1.8	1.2	1.2	2.3	2.3	1.6

National Accounts (cont.)

Forecast period: 2014 to 2016

	2013	2014	2015	2016	2014		2015		2016	
					H1	H2	H1	H2	H1	H2
4. Deflators (2010=100)										
Change on the same period of the preceding year in %										
Private consumption ²	1.2	1.0	0.7	1.7	1.1	0.9	0.6	0.8	1.4	1.9
Government consumption	3.1	2.8	3.0	3.0	2.9	2.7	3.0	3.0	3.0	3.0
Gross fixed capital formation	1.4	1.1	1.5	2.0	1.1	1.0	1.4	1.7	1.9	2.0
Machinery and equipment	0.2	-0.1	0.4	0.8	0.0	-0.2	0.2	0.5	0.7	0.8
Construction	2.0	1.5	2.1	2.7	1.5	1.5	1.9	2.3	2.7	2.8
Exports	-0.2	-0.2	-0.4	0.4	-0.4	0.1	-0.2	-0.6	0.0	0.8
Imports	-1.6	-1.6	-2.3	-0.6	-1.8	-1.3	-2.1	-2.5	-1.3	0.0
Gross domestic product	2.1	1.9	2.0	2.3	1.9	1.8	1.8	2.3	2.3	2.4

5. National income

a) EUR bn.

Primary income of private households ²	2 011.7	2 065.8	2 141.2	2 218.5	1 014.4	1 051.4	1 047.7	1 093.5	1 088.5	1 130.0
Employers social contributions	262.8	270.3	280.3	288.6	131.2	139.1	135.6	144.6	140.4	148.2
Gross wages and salaries	1 165.5	1 210.4	1 263.3	1 307.9	577.3	633.0	600.0	663.3	623.3	684.6
Other primary income ⁴	583.4	585.1	597.6	622.0	305.8	279.3	312.1	285.5	324.8	297.3
Primary income of other sectors	368.1	394.9	417.1	454.7	183.5	211.4	186.6	230.5	206.7	248.0
Net national income	2 379.8	2 460.6	2 558.3	2 673.2	1 197.9	1 262.7	1 234.3	1 324.0	1 295.2	1 378.1
Consumption of fixed capital	502.1	512.5	526.5	543.6	255.0	257.5	261.7	264.8	269.5	274.1
Gross national income	2 881.9	2 973.1	3 084.8	3 216.9	1 452.9	1 520.2	1 496.0	1 588.8	1 564.7	1 652.1
memorandum item:										
Net national income (factor costs)	2 099.9	2 173.3	2 263.6	2 370.1	1 055.3	1 118.0	1 089.1	1 174.5	1 146.0	1 224.2
Property and entrepreneurial income	671.6	692.6	720.0	773.6	346.7	345.9	353.5	366.5	382.2	391.4
Compensation of employees	1 428.3	1 480.7	1 543.6	1 596.5	708.6	772.1	735.6	808.0	763.7	832.8

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

Primary income of private households ²	2.1	2.7	3.7	3.6	2.6	2.8	3.3	4.0	3.9	3.3
Employers social contributions	1.9	2.9	3.7	3.0	3.1	2.7	3.4	4.0	3.5	2.5
Gross wages and salaries	3.0	3.8	4.4	3.5	3.9	3.8	3.9	4.8	3.9	3.2
... per employee	2.1	2.7	3.7	2.8	2.9	2.6	3.1	4.2	3.2	2.4
Other primary income ⁴	0.6	0.3	2.1	4.1	-0.1	0.7	2.1	2.2	4.0	4.1
Primary income of other sectors	1.8	7.3	5.6	9.0	9.8	5.2	1.7	9.0	10.8	7.6
Net national income	2.1	3.4	4.0	4.5	3.6	3.2	3.0	4.8	4.9	4.1
Consumption of fixed capital	2.3	2.1	2.7	3.3	2.0	2.1	2.6	2.8	3.0	3.5
Gross national income	2.1	3.2	3.8	4.3	3.3	3.0	3.0	4.5	4.6	4.0
memorandum item:										
Net national income (factor costs)	2.2	3.5	4.2	4.7	3.7	3.3	3.2	5.1	5.2	4.2
Property and entrepreneurial income	0.9	3.1	4.0	7.4	3.6	2.6	2.0	6.0	8.1	6.8
Compensation of employees	2.8	3.7	4.2	3.4	3.8	3.6	3.8	4.6	3.8	3.1

6. Disposable income of private households ²

a) EUR bn.

Mass income	1 175.6	1 216.3	1 267.4	1 305.4	584.1	632.1	608.6	658.8	627.3	678.1
Net wages and salaries	777.2	806.2	841.6	865.9	380.3	425.9	395.0	446.6	408.1	457.8
Social benefits other than social transfers in kind	492.1	505.3	524.6	541.6	251.1	254.2	263.2	261.4	270.1	271.5
less: Levies on social benefits, taxes on consumption	93.7	95.2	98.9	102.1	47.3	47.9	49.6	49.3	50.9	51.2
Other primary income ⁴	583.4	585.1	597.6	622.0	305.8	279.3	312.1	285.5	324.8	297.3
Other transfers received (net) ⁵	-77.7	-75.1	-74.8	-80.7	-38.2	-36.9	-36.4	-38.4	-39.6	-41.2
Disposable income	1 681.3	1 726.3	1 790.2	1 846.6	851.8	874.5	884.3	905.8	912.5	934.2
Change in pension entitlements	47.2	48.2	49.2	50.2	23.8	24.4	24.3	24.9	24.8	25.4
Consumption expenditure	1 571.5	1 607.7	1 665.1	1 721.3	782.2	825.6	810.3	854.8	839.4	881.9
Saving	157.0	166.8	174.3	175.6	93.4	73.3	98.3	75.9	97.9	77.7
Saving ratio (%) ⁶	9.1	9.4	9.5	9.3	10.7	8.2	10.8	8.2	10.4	8.1

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

Mass income	2.6	3.5	4.2	3.0	3.0	3.9	4.2	4.2	3.1	2.9
Net wages and salaries	2.8	3.7	4.4	2.9	3.7	3.8	3.9	4.9	3.3	2.5
Social benefits other than social transfers in kind	2.4	2.7	3.8	3.2	1.4	4.0	4.8	2.8	2.6	3.9
less: Levies on social benefits, taxes on consumption	2.9	1.6	3.9	3.2	0.2	3.0	4.9	2.8	2.6	3.9
Other primary income ⁴	0.6	0.3	2.1	4.1	-0.1	0.7	2.1	2.2	4.0	4.1
Disposable income	1.8	2.7	3.7	3.2	2.1	3.2	3.8	3.6	3.2	3.1
Consumption expenditure	2.1	2.3	3.6	3.4	2.0	2.6	3.6	3.5	3.6	3.2
Saving	-1.6	6.3	4.5	0.7	3.2	10.4	5.2	3.5	-0.5	2.3

National Accounts (cont.)

Forecast period: 2014 to 2016

	2013	2014	2015	2016	2014		2015		2016	
					H1	H2	H1	H2	H1	H2

7. Revenue and expenditure by general government¹

a) EUR bn.

Revenue										
Taxes	637.9	657.1	676.5	701.9	330.7	326.4	337.9	338.6	351.0	350.9
Social contributions	465.4	481.6	501.6	520.6	233.7	247.9	242.8	258.8	252.5	268.1
Property income	21.3	23.0	18.0	16.1	14.7	8.3	10.6	7.4	9.6	6.5
Other current transfers	18.4	18.0	17.8	17.8	8.8	9.2	8.7	9.2	8.7	9.2
Capital transfers	10.4	10.4	9.0	9.1	4.9	5.5	4.3	4.7	4.4	4.7
Sales	95.8	100.4	104.7	109.6	46.7	53.7	48.7	56.0	51.0	58.6
Other subsidies	0.3	0.3	0.3	0.3	0.1	0.2	0.1	0.2	0.1	0.2
Total	1 249.4	1 290.7	1 327.9	1 375.4	639.6	651.1	653.0	674.9	677.2	698.2
Expenditure										
Intermediate consumption ²	358.5	376.2	396.3	416.4	180.5	195.7	190.1	206.2	199.8	216.7
Compensation of employees	217.6	224.3	231.3	238.6	107.5	116.8	110.9	120.4	114.4	124.2
Property income (interest)	56.3	50.5	48.3	48.0	25.5	25.0	24.2	24.0	23.9	24.0
Subsidies	24.7	25.7	26.0	26.4	12.9	12.9	12.9	13.1	13.1	13.3
Social benefits	439.9	451.8	468.3	483.2	224.8	227.0	235.2	233.2	241.0	242.2
Other current transfers	62.0	63.1	65.8	67.1	35.1	28.0	36.5	29.3	37.2	29.9
Capital transfers	24.8	21.9	22.1	21.8	8.5	13.4	8.7	13.4	8.5	13.3
Gross capital formation	62.8	64.0	64.1	66.2	28.1	35.8	27.8	36.3	28.6	37.6
Net acquisitions of non-produced non-financial asset	- 1.4	- 1.2	- 1.2	- 1.2	- 0.6	- 0.6	- 0.6	- 0.6	- 0.6	- 0.6
Total	1 245.3	1 276.3	1 321.1	1 366.5	622.3	654.0	645.8	675.3	665.9	700.6
Net lending	4.2	14.4	6.8	8.9	17.3	- 2.9	7.3	- 0.5	11.3	- 2.4

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

Revenue										
Taxes	2.9	3.0	2.9	3.8	3.4	2.7	2.2	3.7	3.9	3.6
Social contributions	2.4	3.5	4.2	3.8	3.4	3.6	3.9	4.4	4.0	3.6
Property income	- 2.7	8.1	- 21.7	- 10.6	25.3	- 12.8	- 27.8	- 11.0	- 9.6	- 11.9
Other current transfers	0.4	- 2.6	- 0.7	0.0	- 1.1	- 4.0	- 1.5	0.0	0.0	0.0
Capital transfers	- 5.9	- 0.3	- 13.3	1.2	2.2	- 2.5	- 11.6	- 14.8	1.3	1.1
Sales	4.1	4.8	4.3	4.7	4.5	5.1	4.2	4.3	4.7	4.7
Other subsidies	- 27.0	- 7.1	0.0	0.0	- 8.8	- 5.9	0.0	0.0	0.0	0.0
Total	2.6	3.3	2.9	3.6	3.8	2.8	2.1	3.6	3.7	3.5
Expenditure										
Intermediate consumption ²	4.7	4.9	5.4	5.1	4.7	5.2	5.4	5.3	5.1	5.1
Compensation of employees	2.3	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Property income (interest)	- 10.8	- 10.4	- 4.4	- 0.6	- 12.3	- 8.3	- 4.8	- 4.0	- 1.2	0.0
Subsidies	1.4	4.2	1.0	1.5	7.0	1.6	0.5	1.5	1.5	1.5
Social benefits	2.4	2.7	3.7	3.2	1.4	4.0	4.6	2.7	2.5	3.9
Other current transfers	13.8	1.8	4.3	2.0	4.1	- 1.0	4.1	4.5	2.0	2.0
Capital transfers	- 10.4	- 11.8	0.9	- 1.4	- 23.2	- 2.5	2.2	0.2	- 2.3	- 0.8
Gross capital formation	1.0	1.9	0.3	3.3	13.6	- 5.8	- 1.1	1.4	2.9	3.6
Net acquisitions of non-produced non-financial asset	- 0.1	- 11.5	0.0	0.0	- 9.1	- 13.8	0.0	0.0	0.0	0.0
Total	2.5	2.5	3.5	3.4	2.3	2.7	3.8	3.3	3.1	3.7

¹ Price-adjusted gross domestic product per hour worked.² Incl. non-profit institutions serving households.³ Incl. acquisitions less disposals of valuables.⁴ Operating surplus/mixed income, net property income⁵ 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*; own calculations.

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