

Global and European setting

World economic activity

Global economy likely to have grown significantly in the second quarter, ...

The impression of strengthened global economic activity has been confirmed. Global economic output is likely to have risen significantly in the second quarter of 2017, and the most recent data indicate that the dip in growth at the beginning of the year was less severe than originally estimated. Furthermore, initial data for individual advanced economies show that fixed capital formation continued to expand in the second quarter after increasing sharply in the previous quarter. Investment therefore seems to have recovered from last year's lull. Households also increased their consumer spending more markedly again in the second quarter in price-adjusted terms after they had been somewhat more reticent in the first quarter, probably owing to the surge in energy prices.¹

The global growth profile is likely to have been more balanced not only in terms of demand components, but also across countries. In the United States, in particular, real gross domestic product (GDP) saw sharper growth after a rather weak start to the year. The pace of growth picked up considerably in Japan. In addition, economic activity in the euro area remained buoyant in the second quarter. China and other important emerging market economies also continued to experience relatively favourable economic conditions. However, economic output in the United Kingdom was subdued, growing at approximately the same rate as in the first quarter of the year.

... supported by a fairly broad base of countries

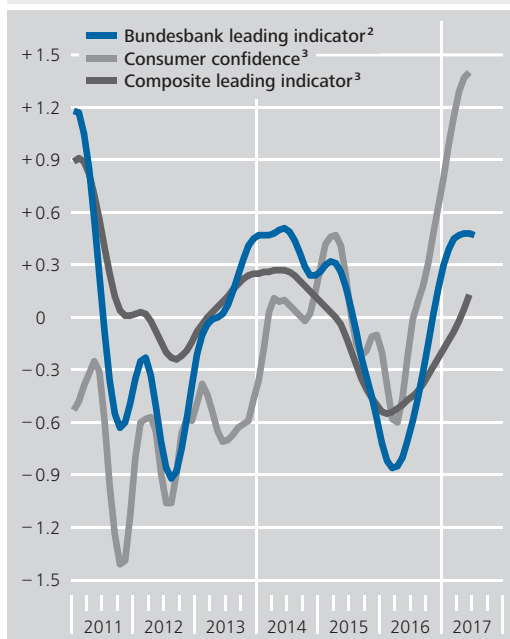
Backing up the impression that global economic activity has strengthened, the global growth projection published by the International Monetary Fund (IMF) in July 2017 confirmed the projections made in its April World Economic Outlook. Aggregated on the basis of purchasing power parity exchange rates, global economic output is still expected to grow by 3½% both this year and next. However, contrasting adjustments to the projections for individual economies have been made. Given the upbeat state of the economy, slightly stronger growth is now expected – not least for China and the euro area. By contrast, the IMF significantly lowered its projections for the United States. Considering the subdued start to the year, a slight reduction for 2017 was expected here in any case.² The significant revision for 2018 is because the IMF expects the fiscal policy stance in the United States to be less expansionary than it did in its April report.

IMF confirms growth projections

A key factor here is likely to have been that the US government and Congress appear to have made very little progress in implementing key

Selected short-term indicators for international economic activity

Monthly, standardised¹



Sources: OECD, Haver Analytics and Bundesbank calculations.
¹ Based on the mean value and the standard deviation since January 2003. ² For the global economy. ³ OECD indicators (amplitude adjusted) for the OECD area and six other major economies.

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¹ See Deutsche Bundesbank, Energy prices and private consumption, Monthly Report, February 2017, pp 13-15.
² See Deutsche Bundesbank, Global and European setting, Monthly Report, May 2017, pp 10-11.

Barely any progress on important initiatives in the United States

economic policy initiatives so far. Although a number of measures have been taken in the area of deregulation, the healthcare reform has foundered for the time being. Plans for a comprehensive tax reform have also stalled. The absence of such a reform would deprive the US economy of a short to medium-term stimulus.³ Nevertheless, by dropping proposals for a border adjustment tax, one risk for international trade and thus for the world economy appears to have been averted. Even so, protectionist tendencies in general continue to pose a downside risk to the global economy.⁴ Furthermore, geopolitical threats have recently become more prominent again.

Underlying pace of global economic activity appears stable

The underlying pace of global economic activity is unlikely to change substantially during the third quarter. The global purchasing managers' indices (PMIs) for July continued to show marked growth in manufacturing and other sectors. Although alternative indicators even suggest another quickening of pace in the short term, the Bundesbank's leading indicator, which has signalled a cyclical improvement in the world economy since June 2016, has not risen further over the past few months.⁵

Outlook for private consumption

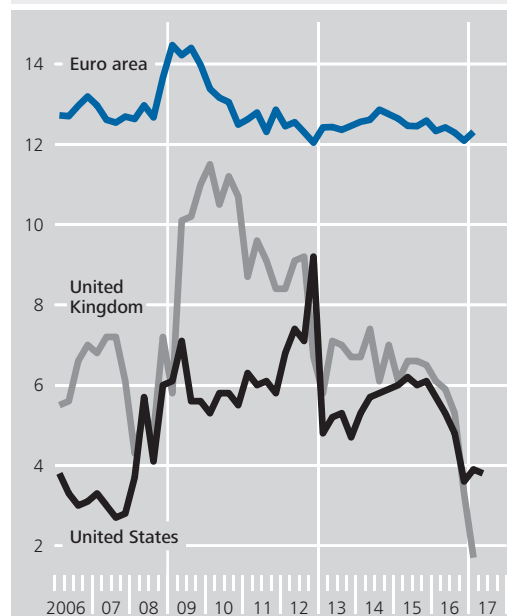
Furthermore, saving rates among households in the United States and the United Kingdom recently contracted significantly. Although these data are frequently revised,⁶ they nonetheless raise questions as to the sustainability of consumption growth. The situation on some sales markets for new motor vehicles, in particular, appears rather tense. For instance, according to the Bundesbank's calculations, the seasonally adjusted sales figures among the industrialised countries in June were just over 4% lower than at the end of 2016.⁷

Commodity prices steadier again

Given the stable global economy, information from the supply side continued to shape developments in the crude oil market during the reporting period (see also the box on page 12). The rise in oil production in Libya, Nigeria and the United States, in particular, meant that the price of Brent oil had fallen significantly until

Households' saving rates* in selected economic areas

As a percentage, quarterly, seasonally adjusted



Sources: Eurostat, national statistics, Haver Analytics and Bundesbank calculations. * Saving by households (including non-profit institutions serving households) in relation to disposable income. For the euro area and the UK, gross saving and gross disposable income, incorporating changes to net capital in pension funds in each case.

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June 2017 before picking up again in July. Reasons for the turnaround probably include, not least, Saudi Arabia's announcement of its intention to take additional measures to curtail its supply after the OPEC countries and other major oil-producing countries had agreed to extend their production cutbacks back at the end of May. As this report went to press, the

³ However, it is less clear what the implications would be for the economic outlook of the country's trading partners. See Deutsche Bundesbank, The macroeconomic impact of tax reform plans in the United States, Monthly Report, May 2017, pp 12-13.

⁴ See Deutsche Bundesbank, The danger posed to the global economy by protectionist tendencies, Monthly Report, July 2017, pp 77-91.

⁵ See also Deutsche Bundesbank, Constructing a new leading indicator for the global economy, Monthly Report, May 2010, pp 18-19.

⁶ In its latest annual revision, for instance, the Bureau of Economic Analysis adjusted the saving rate in the United States for the first quarter of 2017 downwards from 5.1% to 3.9%. According to these data, it stood at 3.6% in the final quarter of 2016, its lowest level since the end of 2007.

⁷ For more information on this calculation, see also Deutsche Bundesbank, Developments in global car sales and implications for the world economy, Monthly Report, November 2015, pp 12-14.

Supply-side influences on the price of oil

At the end of 2016, the Organization of the Petroleum Exporting Countries (OPEC) reached an agreement with other major oil-producing countries to curb crude oil production. Against this background, the price of oil initially rose significantly. However, after a longer period of sideways movement, prices began to trend downwards again in March 2017. In July, the spot price for a barrel of Brent crude oil was just under US\$50 – roughly as much as it had been before the agreement. This box highlights factors that are likely to have played a role in limiting the extent and duration of the rise in oil prices.

Comparing the US Energy Information Administration's (EIA) current assessment with the pre-OPEC decision projection (November 2016), year-on-year growth in overall OPEC crude oil production from January to April 2017 was down by an average 1¼ million barrels per day.¹ This correlates with information indicating that the agreements on curbing production were largely adhered to.² As of May, however, OPEC output rose and, in July, its year-on-year growth fell short of the projection by only 0.6 million barrels per day. This was due mainly to considerable increases in production in Nigeria and, in particular, in Libya.³ Furthermore, the EIA figures suggest

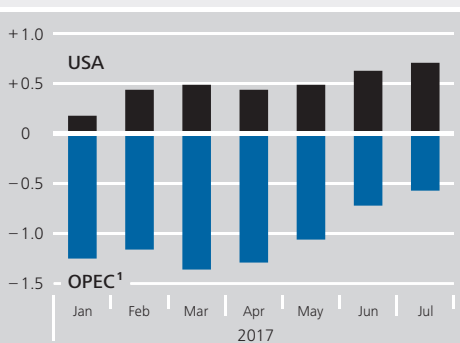
that Saudi Arabia stepped up its production in June and July, and may have breached the designated upper limit. Consequently, OPEC as a whole clearly missed its production target.

In terms of global oil supply, however, it is not only OPEC output that needs to be taken into account. The price increase at the end of 2016 boosted the recovery in non-conventional production in the USA. According to the latest EIA estimate, in the first seven months of 2017, the year-on-year growth in US production exceeded the November 2016 projection by an average 0.5 million barrels per day, and even by as much as 0.7 million barrels per day in July. This meant that, ultimately, additional US output more than compensated for the only moderate drop in OPEC production.

In the light of weakening prices over recent months, OPEC – especially Saudi Arabia – has made efforts to restrict supply even further.⁴ In addition, there have been signs that the lower price level has dampened oil industry activity in the USA.⁵ Overall, there is much to suggest that particularly US producers respond relatively swiftly to price signals and thereby serve as flexible “marginal providers,” contributing to stabilising oil prices in both an upwards and a downwards direction.⁶

Deviation in crude oil production from the November 2016 EIA projection*

Millions of barrels per day



Sources: US Energy Information Administration (EIA) and Bundesbank calculations. * Deviation and projection in terms of year-on-year change. ¹ Based on current membership. Deutsche Bundesbank

¹ The group of countries is defined on the basis of current OPEC membership. Owing to level revisions, year-on-year growth is used as a reference.

² Saudi Arabia reduced its output to a greater extent than planned, thereby balancing out failures to curb production elsewhere, such as in Iraq.

³ Neither of these two OPEC members was subject to the agreement on curbing production.

⁴ Among other things, the duration of the production cutbacks was extended to March 2018, and Saudi Arabia announced short-term export reductions.

⁵ In particular, the rise in the number of active oil drilling installations in the USA has levelled out.

⁶ See also Deutsche Bundesbank, Causes of the fall in oil prices, Monthly Report, February 2015, pp 16-17.

spot price for a barrel of Brent crude oil was US\$51, while forward premiums were roughly as low as in mid-May. The prices of other commodities picked up again at the beginning of the second half of the year.

Moderate increase in consumer prices

The price of the basket of consumer goods barely increased over the second quarter in the industrialised countries, mainly owing to declining energy prices. Furthermore, base effects stemming from a marked rise in energy prices in the second quarter of 2016 helped to reduce the annual rate of change in consumer prices from 1.8% in March to 1.4% in June. Although inflation in the industrialised countries was therefore moderate, it was nonetheless significantly higher than in the previous two years. Inflation excluding energy and food changed only slightly in the second quarter, amounting to 1.4% in June, or 1.6% if Japan is factored out.

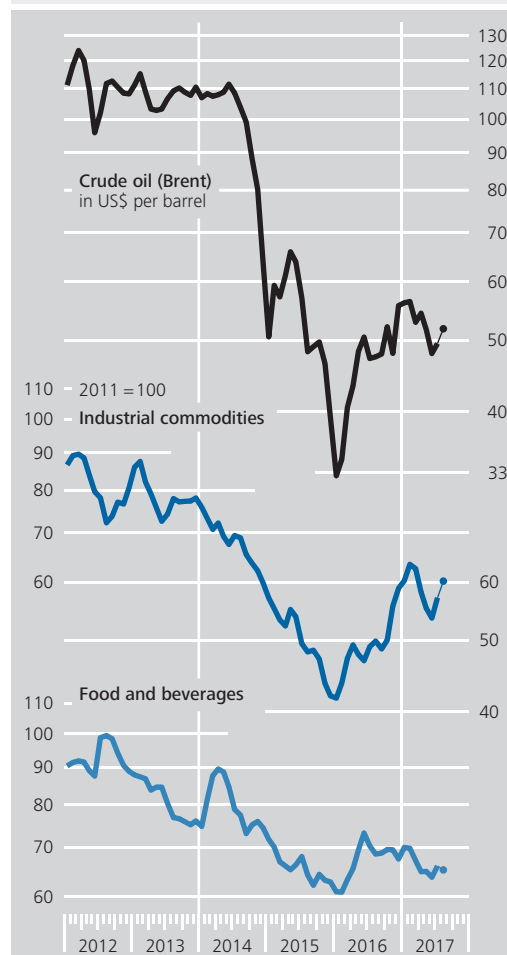
Selected emerging market economies

Stable economic growth in China

According to the official estimate, real GDP in China was up by 6.9% on the year in the second quarter of 2017. The Chinese economy thus maintained the fairly brisk pace of growth seen since the beginning of the year. On the one hand, economic activity was driven by private consumer demand. According to surveys, consumer sentiment was exceptionally good in the light of solid growth in nominal incomes and the favourable labour market situation. Added to this, consumer prices in June rose by a mere 1.5% on the year. However, the passenger car segment did not benefit from the strong appetite for consumption, not least because some of the tax relief schemes for small cars had been withdrawn at the beginning of the year. From next year onwards, these incentives are to be phased out entirely. On the other hand, in addition to consumption, the continued boom in the housing market provided an important boost to growth. Between January and June 2017, floor space sold and con-

World market prices for crude oil, industrial commodities and food and beverages

US dollar basis, monthly averages, log scale



Sources: Thomson Reuters and HWWI. • Latest figures: average of 1 to 11 August 2017, or 1 to 17 August 2017 for crude oil.

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struction starts were up by one-seventh on the year in each case. The steep rise in real estate prices continued in many places. This price increase has recently shown a noticeable slow-down only in a few major towns and cities in which local authorities are attempting to discourage speculative purchases.

Economic activity in India weakened distinctly in the first quarter of 2017, the latest for which national accounts data are available. Year-on-year growth in real GDP fell from 7.0% in the last quarter of 2016 to 6.1%. Negative effects stemming from the cash reform of November 2016 may have played a role here because the

Cyclical fluctuations in India

growth rate of private consumption, in particular, fell considerably. Now that the cash supply has returned to normal, growth is likely to have picked up again in the quarter just ended. At the current end, however, concerns about the economy have emerged once again. These were mainly attributable to short-term burdens caused by the introduction of a nationwide value added tax on 1 July, which replaces a large number of indirect taxes. Against this background, consumer price inflation rose markedly. In July, the annual rate of inflation stood at 2.4%, having previously fallen to its lowest level since the general consumer price index (CPI) was introduced in 2011. In the medium to long term, meanwhile, this simplification of the tax system is expected to significantly boost economic development, particularly the creation of a single market within India. The Reserve Bank of India lowered its monetary policy rates slightly at the beginning of August 2017.

*Weak recovery
in Brazil*

After a long, deep recession, economic output in Brazil grew fairly strongly in the first quarter of 2017, rising by a seasonally adjusted 1.0% on the previous period. This was primarily down to significant growth in exports. However, this momentum probably did not continue into the second quarter. So far, domestic demand appears to have remained weak, one potential reason being the currently very difficult labour market situation. The unemployment rate still stood at 13.0% in June, despite having dipped slightly over the past few months. Meanwhile, consumer price inflation declined further. The rate of inflation fell to 2.7% in July. At the beginning of 2016, it had still been above 10%. The central bank used the resulting monetary policy leeway to make a number of significant cuts to its policy rates.

*Russian
economy gains
traction*

In the quarter just ended, Russia's real GDP was up by 2.5% on the year according to a provisional estimate by the Russian Federal State Statistics Service. This compares with an increase of 0.5% in the first quarter of 2017. There are thus mounting signs that the Russian

economy has regained momentum following the severe recession. In the first half of 2017, goods imports, which had declined sharply during the economic crisis, showed a year-on-year increase of just over one-quarter on a US dollar basis. This benefited euro area exports, in particular. Consumer price inflation remained subdued by Russian standards, standing at 3.9% in July.

United States

According to an initial estimate, real GDP in the United States expanded by a seasonally adjusted 0.6% in the second quarter of 2017 compared with the first quarter, thus picking up in pace again distinctly. Overall, the US economy showed moderate growth in the first half of the year, matching the underlying pace since the beginning of the upturn in the summer of 2009.⁸ On the one hand, the most recent acceleration was largely due to the fact that inventories were no longer a drag on overall economic developments and gross fixed capital formation continued to increase. On the other, households recently increased their consumption again fairly sharply following the moderate increase in the previous quarter. Nevertheless, in price-adjusted terms, they substantially cut back their spending on new cars again.⁹ Although sales of new cars have stabilised again over the last few months, dealers' strong purchasing incentives continued to shape the market in July. Households benefited from the continuous rise in employment; the unemployment rate fell to a cyclical low of 4.3% in July 2017. Furthermore, inflation calculated on the basis of the consumer price index went down, falling from 2.7% in February to 1.7% in July. Against the background of the progress already made and still expected in

*Fairly strong
private
consumption
growth*

⁸ See Deutsche Bundesbank, The US economy in the current economic upturn, Monthly Report, April 2013, pp 15-37.

⁹ See Deutsche Bundesbank, The importance of the automobile market to the US economy, Monthly Report, May 2016, pp 18-19.

terms of its monetary policy objectives, the US Federal Reserve raised its policy rate again and announced that it plans to begin a process to normalise its balance sheet.

Japan

Significantly faster growth

The pace of growth in the Japanese economy picked up significantly in the second quarter. A provisional estimate shows that real GDP grew by 1% on the quarter after adjustment for seasonal factors. The acceleration of growth was driven by a clear increase in domestic demand. In particular, gross fixed capital formation rose substantially. In parallel with this, imports expanded distinctly again. Exports, on the other hand, were slightly lower, which meant that foreign trade dampened aggregate growth in arithmetical terms. Although the unemployment rate remained extremely low in the second quarter, at 2.9%, and employment continued to climb fairly strongly, there were almost no signs of an increase in domestic inflationary pressures. Inflation in the basket of household goods excluding energy and food stayed in negative territory in June. Against this backdrop, the Japanese central bank kept its monetary policy on an expansionary track.

United Kingdom

Aggregate growth remains subdued

Aggregate economic growth in the United Kingdom remained muted in the second quarter of 2017. After adjustment for the usual seasonal variations, real GDP in the second quarter was up by 0.3% on the previous period, in which it had risen by only 0.2%. In contrast to the winter months, production in the construction and manufacturing sectors declined recently. Growth in the important services sector distinctly gathered pace, however, especially in consumption-driven areas. After a considerable setback, real retail sales returned to the level reached in the fourth quarter of last year, which is consistent with a revival of private consumption. However, the number of new passenger

car registrations slumped when vehicle tax was reformed. As before, the labour market was extremely robust, with the unemployment rate falling to its lowest level in 42 years in the quarter ended (4.4%). The inflation rate as measured by the Harmonised Index of Consumer Prices (HICP) dropped to 2.6% in July, after peaking at 2.9% in May. The Bank of England kept its monetary policy loose over the reporting period.

New EU member states

In the new EU member states (EU-6),¹⁰ robust economic growth was sustained in the second quarter of 2017. Brisk industrial activity, in particular, provided key impetus in many places. Labour market conditions continued to improve in the second quarter. The unemployment rate in this group of countries fell to 5.0% in seasonally adjusted terms, thus reaching a new low since the transition period. At the same time, the number of vacancies rose, especially in the services sector. In this setting, average wages and salaries increased considerably according to national data. In the first quarter of 2017, the year-on-year increase came to 4.1% in Poland, 5.3% in the Czech Republic, and 11.1% in Hungary, where the minimum wage was raised substantially at the start of the year. Since then, wage growth appears to have accelerated further. Annual consumer price inflation as measured by the HICP was nonetheless subdued in the second quarter, at 1.5% as an average for this group. The inflation rate excluding energy and unprocessed food picked up from 0.9% in the first quarter to 1.2%. The Czech National Bank raised its monetary policy rate slightly in early August.

Upturn continues

¹⁰ This group comprises the non-euro area countries that have joined the EU since 2004, ie Poland, the Czech Republic, Hungary, Bulgaria, Romania and Croatia.



which was accompanied by greater export opportunities. This is not always clear from the traditional breakdown of growth into the arithmetical contributions of the expenditure components, because imports are fully netted against exports (see the box on pages 18 to 20).

Growth stimuli are likely to have emanated from export business again in the second quarter of 2017. At any rate, the foreign trade data reveal a marked increase in revenue from exports of goods to non-euro area countries. This export growth seems to have been driven mainly by demand from European countries outside the euro area, while in the two previous quarters it was also fuelled by demand from Asia and the United States. Exports are likely to have risen markedly in real terms as well, because price effects were insignificant. Expenditure on imports of goods from non-euro area countries was virtually unchanged in the second quarter. At the same time, import prices fell fairly steeply, resulting in a significant increase in real terms. This suggests that domestic growth forces are robust in the euro area. Intra-trade also saw brisk growth, in line with this.

Foreign demand still buoyant

Macroeconomic trends in the euro area

Marked economic growth

The economic upswing is continuing in the euro area. As in the fourth quarter of 2016 and first quarter of 2017, economic output increased significantly in the second quarter, and the positive sentiment among households and enterprises promises a continuation of the upturn. In the second quarter of 2017, Eurostat data show that real GDP rose by a seasonally adjusted 0.6% on the previous quarter,¹¹ which represented a year-on-year increase of 2.2%. Economic growth was again broadly based across the various countries and expenditure components.

Economic importance of exports

Domestic demand in the euro area has revived considerably in the past few years. However, the acceleration of aggregate growth since mid-2016 was probably attributable, in particular, to the strengthening of global activity,

Industrial activity was a particular beneficiary of the dynamic foreign demand. After a first-quarter growth hiatus, industrial output picked up in the second quarter, rising by 1.2% on the previous period in seasonally adjusted terms, with this expansion being broadly based across sectors.

Industrial activity gathers pace

¹¹ The growth rate for the two preceding quarters was revised when the Irish GDP figures were published. The GDP growth rate for the first quarter is now 0.5% instead of 0.6%, while the rate for the fourth quarter of 2016 is the reverse, namely 0.6% instead of 0.5%. The reason for this is that real GDP in Ireland declined by 2.6% in the first quarter, according to an initial estimate of the Irish statistical office, after a revised increase of 5.8% (previously 2.5%) in the preceding quarter. Ireland's GDP growth rates have been very volatile and susceptible to revision for some time due to the activities of multinationals. See also Deutsche Bundesbank, The revision of the euro-area national accounts for 2015, Monthly Report, November 2016, pp 16-17.

Private consumption somewhat brisker

The economic indicators show that growth in private consumption was probably somewhat stronger in the second quarter of 2017 than in the previous quarters. Growth in retail sales accelerated significantly in both seasonally and price-adjusted terms. New passenger car registrations recorded a decent increase, albeit a weaker one than in the first quarter. The strong appetite for consumption was supported by the ongoing brightening of consumer confidence, which is down to growing economic optimism. The sustained labour market recovery and weakening inflation are also likely to have boosted the propensity to purchase.

Investment still on upward track

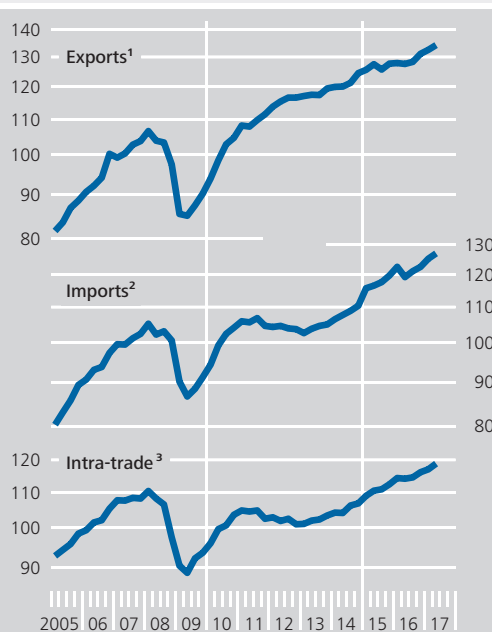
Investment probably continued to pick up.¹² It appears that more machinery and equipment was acquired, and there was probably an increase in construction investment, too. Production of capital goods was stepped up distinctly in the second quarter, at any rate. Second-quarter construction activity was up by 1.2% on the first quarter, after seasonal adjustment.

Growth regionally broadly based

The upturn in the second quarter of 2017 was also broadly based across the various countries. In France, real GDP rose for the third consecutive quarter by a seasonally adjusted 0.5% on the previous period. Growth was fuelled mainly by exports, which experienced a major lift after a weak preceding quarter. Private consumption and investment saw only sluggish increases, by contrast. The weak growth in investment is likely to be connected with the lapsing of special depreciation in April. Imports registered a sideways movement, probably in connection with significant destocking. The Italian economy also built on the previous quarter's pace of growth in the second quarter. Real GDP rose by 0.4% in the second quarter, probably driven by exports and investment in machinery and equipment. Private consumption and construction investment tended to be slack, despite a further improvement in the labour market. In Spain, the robust upswing continued at a slightly higher pace, with GDP seeing a second-quarter increase of 0.9% on the previous quarter. The strong rise in real retail sales suggests

Euro area trade in goods

2010 = 100, quarterly data, price and seasonally adjusted, log scale



Sources: Eurostat and Bundesbank calculations. **1** Extra-euro area exports price adjusted using the producer price index for extra-euro area exports. **2** Extra-euro area imports price adjusted using the price index for extra-euro area imports. **3** Intra-euro area exports price adjusted using the producer price index for intra-euro area exports.

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that consumption was a key factor. Added impetus came from foreign business, whereas investment seems to have lost some momentum. Very significant GDP growth was also recorded in the Netherlands, Latvia, Austria, Cyprus and Slovakia. Lithuania experienced robust growth. In Belgium, economic output rose distinctly, while in Portugal real GDP expanded only slightly, after having risen substantially in the previous quarters. In Finland, output came down from its sharply higher first-quarter level.

In keeping with the economic upturn, the improvement in the labour market situation continued. The standardised unemployment rate fell to 9.1% up to June, compared with 10.1%

Steady decline in unemployment

¹² According to Eurostat, gross fixed capital formation in the euro area decreased in the first quarter by a seasonally adjusted 0.5% compared with the previous quarter, in which it had risen by 1.4%. However, this decline is largely driven by one-off developments in the Irish national accounts figures. For the euro area excluding Ireland, there was an increase in gross fixed capital formation of 1.3%, compared with 0.9% in the fourth quarter of 2016.

The importance of external and domestic stimuli for the economic upturn in the euro area

The euro area economy has now been experiencing an upturn for more than four years.¹ While the recovery was initially very moderate, it accelerated over the past year, as measured by seasonally adjusted quarterly growth in gross domestic product (GDP). Over time, however, the strength of the upwards movement has varied, as has the relative importance of the factors driving it. At the beginning of the economic improvement in the second and third quarters of 2013, capital formation and private consumption picked up. Moreover, restocking of inventories increased. Exports rose almost continuously, even in the crisis year of 2012, with growth accelerating further in 2014. Faced with weakness of the world economy in the second half of 2015, export momentum subsequently flattened, while imports continued to grow strongly on the back of sturdy domestic activity. Exports did not pick up again until the latter part of 2016/early 2017. Private consumption gathered strength at the end of 2014, supported by the drop in oil prices. As a result, real GDP was, at last count, just under 8% up on its low from the first quarter of 2013 and 4% higher than it was at the beginning of 2008, before the crisis hit.

The importance of individual drivers for the economic upturn in the euro area can be illustrated by a statistical breakdown of economic growth into the contributions made by the expenditure-side components of GDP.² In a first, traditional approach, domestic drivers are measured based on the contributions that the expenditure components of private consumption, government consumption and capital formation make to growth. The difference between exports and imports is interpreted as net exports.³ According to this depiction, the eco-

nomical recovery in the euro area over the past few years has been supported by the revival in domestic demand. Between 2013 and 2016, it contributed an average of 1 percentage point a year to GDP growth. Half of this rise was attributable to private consumption, which appears to be the main driving force behind the upturn. In this representation, foreign trade supported economic growth considerably during the crisis, but its contribution was actually even slightly negative in the following years.

In this traditional approach, imports are fully netted against exports. This may overstate the contribution of domestic factors in that all demand components do, in fact, contain a certain import share,⁴ which can be estimated. Alternatively, imports can therefore be distributed roughly across the other expenditure components in order to model the cyclical drivers.⁵

This is based on the input-output tables (IO tables) published by Eurostat.⁶ Alongside the output data for the various sectors and their contribution to the expenditure-side

¹ Although real gross domestic product (GDP) declined slightly by 0.2% in full year 2013, GDP has risen continuously since the second quarter of 2013.

² The analysis covers the euro area excluding Ireland. This is because the Irish data are distorted by the transactions of multinationals. Euro area economic momentum is clearer when Ireland is excluded. See also Deutsche Bundesbank, The revision of the euro-area national accounts for 2015, Monthly Report, November 2016, pp 16-17.

³ Using an expenditure-side calculation, GDP equates to domestic demand plus exports, minus imports.

⁴ See also European Central Bank, Assessing the recent impulse from the external sector to euro area activity, Monthly Report, June 2005, pp 53-55.

⁵ See also H Kranendonk and J Verbruggen, Decomposition of GDP growth in some European countries and the United States, *De Economist*, 2008, 156(3), pp 295-306.

⁶ See symmetric input-output table in Eurostat's database (<http://ec.europa.eu/eurostat/data/database>).

GDP components, the IO tables also present intermediate consumption and imports from countries outside the euro area. This allows the import shares of GDP components to be estimated for the euro area.⁷ It becomes evident that the import share in exports⁸ is highest at around 30%, followed by gross fixed capital formation at approximately 20%,⁹ private consumption at 15% and government consumption at 6%.¹⁰ For all components, the import share increases over time, reflecting growing external trade links with countries outside the euro area.

The shares derived from the IO tables can be used to calculate approximate data on the contribution to growth made by individ-

7 See M Bussière, G Callegari, F Ghironi, G Sestieri and N Yamano, Estimating trade elasticities: demand composition and the trade collapse of 2008-2009, *American Economic Journal: Macroeconomics*, 2013, 5(3), pp 118-151.

8 Extra-euro area exports.

9 Data for individual countries suggest that the share of imports in investment in machinery and equipment is much higher than for construction investment. This is partly because construction work undertaken in a given country by foreign firms is considered part of the domestic product and is not classed as an import.

10 As the import share of changes in inventories cannot be calculated, a percentage of 50% is assumed.

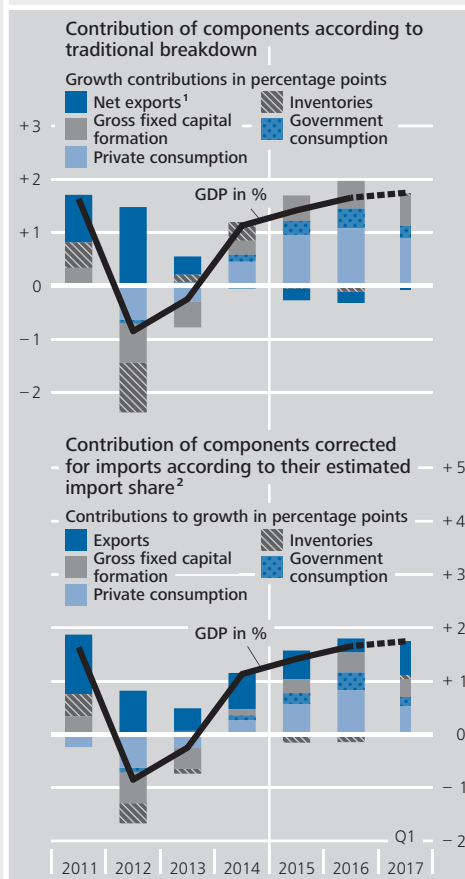
11 The contributions which the GDP components make to growth are determined in a two-stage procedure. In a first step, the import shares are used to calculate the adjusted GDP components. The sum of imports determined in this way may, however, differ from actual imports as a result of various inaccuracies. For example, IO tables are currently only available up to 2014, and older IO tables do not always incorporate data revisions in a timely fashion. In a second step, the resulting residuals are therefore allocated to expenditure components in line with the shares of the relevant imports in calculated total imports. See H Kranendonk and J Verbruggen, 2008, op cit.

12 No price-adjusted data on extra-euro area trade is, as yet, published in the national accounts for the euro area. As an approximation, the balance-of-payments data on exports and imports of goods and services, which only measure extra-euro area trade, were adjusted using the export and/or import deflator from the national accounts.

13 Certain difficulties arise in this decomposition, particularly in the intra-year analysis, as sudden bursts in imports often go hand in hand with greater stockpiling, and vice versa. If this is the case, the approximate allocation of imports to the components in the above-described manner may be misleading. Annual data and annual growth rates are therefore used here.

GDP growth in the euro area and contributions of components*

Year-on-year change



Sources: Eurostat and Bundesbank calculations. * Excluding Ireland. 1 Net exports are defined as exports minus imports. 2 Data for 2015 to 2017 based on import shares of 2014. The breakdown takes into account only trade flows between the euro area and non-euro-area countries.

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ual GDP expenditure components after adjusting for imports.¹¹ It should be noted that whereas the traditional breakdown also nets the contributions to growth of imports and exports between the individual euro area member states (intra-trade), this breakdown takes into account only extra-euro area trade in line with the IO tables.¹²

This produces a modified picture as compared with the traditional breakdown.¹³ From this perspective, too, domestic forces substantially supported economic growth in the euro area. However, the focus moved to domestic demand relatively late. Taking

into account the import shares of the individual components, GDP growth was mainly driven by exports up until the middle of 2015. Only in the second half of 2015 did domestic demand take over as the main driver. The acceleration in growth in the final quarter of 2016/first quarter of 2017 was, however, again driven by exports. This is also likely to be clearly reflected in the calculation of contributions to growth for 2017, whereas the picture for 2016 was still characterised by the weakness in global trade, which lasted up until mid-2016.¹⁴

The alternative breakdown of growth is less precise in arithmetical terms and requires additional assumptions as compared with the traditional approach. However, it does make clearer the important role of external demand for economic developments. Nonetheless, both approaches suggest that overall economic growth in the euro area

in recent years has been increasingly driven by domestic demand. However, neither the traditional nor the modified statistical breakdown can replace model-based analyses of supply and demand-side drivers of economic growth.

¹⁴ See Deutsche Bundesbank, Recent trends in world trade in goods, Monthly Report, March 2016, pp 23-24.

one year earlier. By broader measures, too, the labour market slack continued to decrease in the first quarter.¹³ At approximately two million people, or 1.5%, the year-on-year increase in employment again significantly exceeded the decline in unemployment by around one million people. Despite the improved labour market situation, wage growth remained subdued. In the first quarter of 2017, labour costs increased by 1.3% year-on-year on an hourly basis. Gross wages per employee went up by 1.5% over the same period.

As measured by the HICP, consumer prices in the euro area were up slightly in the second quarter, rising by a seasonally adjusted 0.1% quarter-on-quarter, following a large increase of 0.6% in the first quarter. Prices for energy and unprocessed food fell fairly significantly as a result of lower crude oil prices and the improved weather conditions, but the prices of processed food and services rose substantially (by 0.7% and 0.6%, respectively). Consumers

had to pay much the same amounts as in the previous quarter for non-energy industrial goods. Annual HICP inflation declined from the first quarter by 0.3 percentage point to 1.5%. This was partly due to the aforementioned dampening baseline effect relating to energy prices.

Annual HICP inflation excluding energy and food, on the other hand, saw a marked recovery to 1.1% in the second quarter, after having stood at 0.8% in the three quarters before. This was not just because of Easter shifting from March in 2016 to April in 2017; even looking at the average of the first two quarters, which is unaffected by this shift, there is an increase on the second half of 2016. Nevertheless, the core inflation rate, as this definition of inflation is termed, was still lower in the euro area than in

... whereas core rate quite significantly higher

Inflation in energy and unprocessed food prices weaker in Q2 than at the start of the year, ...

¹³ For more details on broader measures of underutilisation of capacity in the euro area, see Deutsche Bundesbank, Labour market slack in the euro area, Monthly Report, May 2017, pp 19-20.

Germany (at 1.4%). This is chiefly due to persistently weaker inflation in the prices of non-energy industrial goods in the euro area excluding Germany. By contrast, services prices saw fairly similar developments in Germany and the rest of the euro area.

Inflation rate unchanged in July

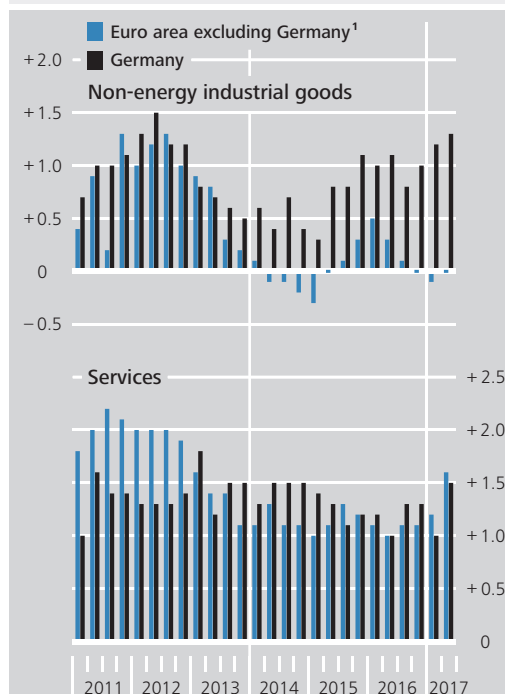
In July 2017, HICP inflation in the euro area stood at 1.3%, as in June. HICP inflation excluding energy and food, however, rose slightly to 1.2%. This was down to a combination of slightly higher price rises for non-energy industrial goods and a persistently higher inflation rate for services.

Economic growth probably robust in Q3, too

The unabatedly positive sentiment among businesses and households suggests that the economic upturn in the euro area will continue. Although the Purchasing Managers' Index for the economy as a whole fell in July for the second time in a row, it still exceeds the expansion threshold by a very clear margin. The European Commission's indicator of business and consumer sentiment maintained its high level. The surveys indicate a high degree of optimism in the retail trade sector and among consumers, in particular. The economic expansion in the euro area is likely to benefit from internal and external stimuli in the third quarter as well.

Increase in consumer prices* in the euro area and in Germany

Year-on-year percentage change, quarterly data



* Harmonised Index of Consumer Prices. 1 Bundesbank calculations.
 Deutsche Bundesbank

These stimuli include favourable financing terms, the continually improving labour market situation and strengthened global economic activity.