German balance of payments in 2015

The German economy's current account surplus rose very strongly again in 2015, mainly due to a higher positive balance on cross-border trade in goods and services. It is likely that the foreign trade surplus, in particular, was strongly boosted by the short-term effects of lower prices for internationally traded commodities – most notably the steep drop in crude oil prices – and the depreciating euro. The lower commodity prices had a dampening effect on nominal imports, although the expected consequences of the pronounced shifts in income between producer countries and consumer countries have not yet become clearly apparent. In the medium term, the substantial revenue shortfalls sustained by the main commodity-producing countries will pose risks to German firms' export chances, whereas low commodity prices should simultaneously further strengthen Germany's underlying domestic growth dynamics. The current account surplus, which amounted to 8½% of gross domestic product in 2015, therefore only provides a snapshot picture of the evolving situation.

German exports increased perceptibly in 2015 as a whole, despite slackening in the second half of the year. Significantly more goods were exported to the United States, the United Kingdom, Switzerland and to central and east European EU countries outside the euro area. German enterprises also benefited from the pick-up in economic activity in large parts of the euro area. Stronger growth in traditionally important sales markets more than offset weaker momentum in exports to emerging market economies of late compared with past years. Exports to China reflected the slowdown in Chinese growth, while sales to Russia fell again very steeply owing to the further deterioration in the country's economic situation and the international sanctions.

Germany's financial account with the rest of the world was influenced last year by the low-interest-rate environment and the Eurosystem's large-scale purchases of securities for monetary policy reasons under the quantitative easing programme. On balance, Germany recorded net capital exports of €232 billion, which was slightly down on the 2014 level. Portfolio investment flows were heavily influenced by the sell-off of domestic debt securities by foreign investors; some of these securities were acquired by the Bundesbank as part of the expanded asset purchase programme. German investors also showed reduced interest in foreign securities. Direct investment likewise saw capital outflows as German businesses continued to expand their international links significantly on balance. By contrast, other investment recorded net capital imports, with both enterprises and households and monetary financial institutions recording capital inflows. The Bundesbank's external position expanded in 2015 owing to a considerable rise in Germany's TARGET2 balance. Asset purchases by the Eurosystem played a key role in this.

Current account

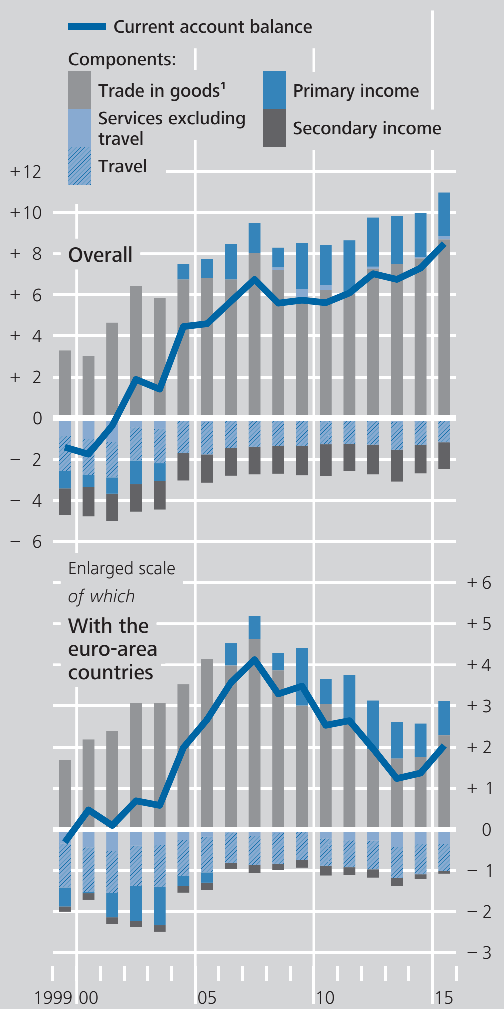
Underlying trends in the current account

Further very sharp rise in current account surplus in 2015

The German economy's current account surplus rose very sharply in 2015 to €257 billion, or 8½% of gross domestic product (GDP). At €44 billion, the year-on-year increase recorded during 2015 was twice as high as in 2014 (+€22½ billion). On the one hand, this was because the value of the goods exported by German enterprises rose considerably more than the total value of the goods imported by Germany. On the other hand, the deficit on services narrowed distinctly, due largely to the considerable rise in revenue from industrial services and the decline in foreign travel expenditure. The surplus from cross-border investment income went up moderately in 2015, which, given the renewed steep increase in net external assets in 2015, indicates that income yields had a dampening effect. The traditional deficit in the secondary income account declined somewhat.

Germany's current account

As a percentage of GDP



1 Special trade according to the official foreign trade statistics, including supplementary trade items, which also contain freight and insurance costs as a deduction from imports.

Deutsche Bundesbank

Much cheaper commodities and euro depreciation main short-run factors

The increase in the current account surplus over the past two years to a new record high in post-war German history was caused primarily by the short-run effects of the pronounced changes in the external setting. Thus world market prices for crude oil, industrial commodities and food, beverages and tobacco have fallen dramatically since mid-2014. This noticeably dampened the overall value of goods imports because Germany mostly imports its energy inputs as well as a wide range of other important raw materials and agricultural goods. Between the second quarter of 2014 and the second quarter of 2015, the euro depreciated very strongly against the US dollar. While this partly offset the price fall in imported commodities denominated in US dollars, it lifted the trade balance by a larger margin by improving the sales prospects for German products in markets outside the euro area, especially as the euro also lost value during this period against other major currencies such as the pound, the renminbi and, later on, the Swiss franc. Simulations indicate that the expansion of the surplus in trade in goods and services seen in 2014 and 2015 was due chiefly to the short-term effects of the drop in crude oil prices and the euro's depreciation (for further details, see the box on pages 39 to 41).

Income shifts between commodity-producing and consuming countries could dampen trade surplus in the medium term

The exchange rate changes may be expected to have a knock-on effect in the near future. However, countervailing forces to Germany's export surplus are likely to gain the upper hand at least in the medium term. For example, the plummeting prices of crude oil and other internationally traded commodities, notwithstand-

The impact of the steep fall in oil prices and the euro depreciation on the expansion of Germany's current account surplus in 2014 and 2015

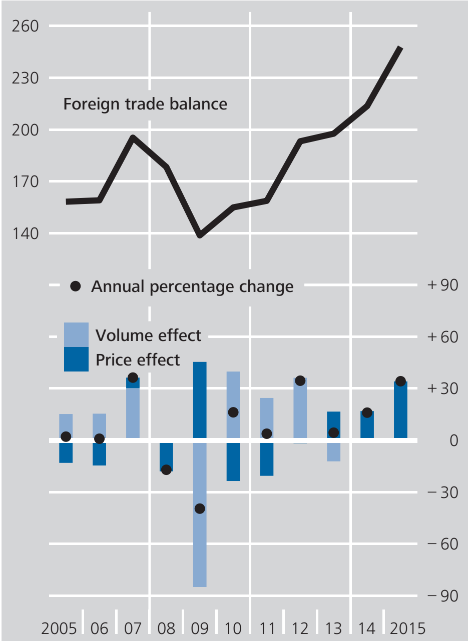
For many years now, the exceptionally high current account surplus has been at the centre of economic policy discussion concerning the possible existence of macroeconomic imbalances in Germany. Two key determinants can be held responsible for the renewed very sharp expansion of the surplus that has occurred over the past two years, these being the plummeting prices of internationally traded commodities (especially crude oil) and the depreciation of the euro exchange rate, both of which represent changes in the external environment. However, this period was also characterised by intensified domestic growth momentum, largely on the back of buoyant consumption activity. On the one hand, this was prompted by home-grown factors such as the positive labour market situation and marked wage growth. On the other hand, gains in real income also played a role in connection with the fall in oil prices. This illustrates that it is wise to heed how factors interact in this context.

The current account balance reflects a multitude of influences delivered via a range of different transmission channels. It makes analytical sense to quantify individual aspects, not least in terms of evaluating the magnitude and timing of these effects. At the same time, such information should be considered in the overall context and it is useful when making an assessment to gauge whether any changes in the determinants are of a temporary or permanent nature. From a theoretical perspective, temporary shocks should not permanently affect the size of the current account balance.[1]

An initial descriptive insight can be obtained from breaking down changes in the German foreign trade balance into price and volume effects. While terms-of-trade effects do not seem to diminish or expand the surplus in the long term, mathematically the increase in the foreign trade balance over the past two years can be attributed almost entirely to ongoing improvements in the real terms of trade. Moreover, in macroeconomic terms, price effects have consistently favoured additional net revenue from foreign trade activity during the past three years. Conversely, in terms of volume, allowance may have been made for a

Price and volume effects on the German foreign trade balance*

€ billion



Source of unadjusted figures: Federal Statistical Office.
* Decomposed using the Shapley-Siegel index.
Deutsche Bundesbank

1 See M Obstfeld and K Rogoff (1995), The intertemporal approach to the current account, in G M Grossman and K Rogoff (eds), Handbook of International Economics, Edition 1, Vol 3, Chapter 34, pp 1731-1799.

small decline in the German foreign trade balance.

Simulations using the Bundesbank's macroeconometric model go one step further.[2] Here, it is possible to quantify the individual contributions of the drop in oil prices and the euro depreciation to the change in the German surplus on the basis of cross-border trade in goods and services, taking account of price transmission mechanisms and the consequences for the domestic economy. To this end, actual developments are compared with scenarios where from mid-2014 onwards crude oil prices and exchange rates are extrapolated in line with that factor's average level over the previous six quarters.

Up to and including the second quarter of 2014, crude oil had been trading at a relatively constant price level of around US$110 per barrel (Brent crude). During the course of the subsequent drop in prices, which was mainly fuelled by increased production, crude oil prices declined by just under 30% by the fourth quarter of 2014 and by a total of 60% by the final quarter of 2015, compared with their starting level. Meanwhile, given the expectations of a continued accommodative monetary policy stance and the measures decided by the ECB Governing Council in December 2014, the euro depreciated sharply, both in bilateral terms against the US dollar and in nominal effective terms.[3] Starting at a rate of US$1.3 for one euro, the bilateral exchange rate sank by more than 5% by the end of 2014, and by just under 20% by the end of 2015, not least on account of the sharp depreciation in the first quarter of that year. Measured against the currencies of the euro area's 19 most important trading partners, the euro lost just under 10% of its value by the end of 2015.

According to the results of the simulation calculations, the two examined factors actually only played a fairly minor role in the rise in the current account surplus from 6¾% to 7¼% of gross domestic product (GDP) in 2014. Mathematically, the contribution made to this increase by falling oil prices taken in isolation was one-tenth of a percentage point. Compared with the outcome of the decomposition, aside from the broader reference to goods and services flows, it is noteworthy that the calculations made for the simulations did not factor in the effects of the fall in the price of non-energy-generating commodities, which was also substantial.[4] Bearing in mind the time lags that arise with exchange rate changes, it is in fact hardly surprising that the depreciation of the euro had no significant impact on the expansion of the current account balance in 2014.

By contrast, in 2015 the two external factors in question had a strong expansionary effect overall, with falling oil prices making a contribution of ¾ of a percentage point and the euro depreciation ¼ of a percentage point to the rise in the current account balance from a level of 7¼% to 8½% of GDP. First and foremost, falling oil prices lead to cheaper oil imports and are less inclined to boost the size of demand as German energy imports exhibit a relatively small degree of price elasticity.[5] On the one

2 The macroeconometric model is a key instrument for generating the projection baseline and is used for accompanying simulation calculations. It is a traditional macro model with Keynesian properties in the short term and neoclassical properties in the long term. The estimates of the behavioural equations are updated on the basis of seasonally adjusted quarterly data at six-month intervals.
3 Strictly speaking, the euro had already depreciated slightly in the second quarter of 2014. To aid comparison, the hypothetical scenarios both for the price of oil and for the exchange rate are analysed on a uniform basis from the third quarter of 2014 onwards.
4 This is also indicated by evidence that only one-fifth of the improvement in the real terms of trade witnessed in 2014 can be attributed to the modelled shocks.
5 In the Bundesbank's macro model, German energy imports are estimated as having a price elasticity of 0.2 to 0.3.

Impact of falling oil prices and the euro depreciation since mid-2014 on key external indicators

Indicator	Year	Change2	Simulated impact of the modelled external factors1		
			Total	Falling oil prices	Euro depreciation
Current account balance as a percentage of GDP	2014	0.6	0.1	0.1	0.0
	2015	1.2	1.0	0.7	0.3
Real terms of trade3	2014	1.5	0.3	0.5	– 0.2
	2015	2.7	0.8	2.5	– 1.7
Exports (price-adjusted)3	2014	4.0	0.1	0.0	0.0
	2015	5.4	1.6	0.3	1.3
Imports (price-adjusted)3	2014	3.7	0.0	0.1	– 0.1
	2015	5.8	– 0.1	0.7	– 0.8

1 In percentage points. 2 In percentage points for the current account balance (as a percentage of GDP), but otherwise as a percentage. 3 Goods and services (national accounts data).
Deutsche Bundesbank

hand, the depreciation of the euro stimulates exports. On the other hand, it results in import substitution and, according to the simulation findings for 2015, the restraining influence of this substitution virtually offsets the import-augmenting effect of the additionally boosted domestic economic activity caused by lower crude oil prices. Beside the direct effects on German external trade, account is also taken of spillover effects arising from the stimulation of exports in other euro-area countries. These effects accounted for just over one-tenth of the estimated contribution of the euro depreciation in 2015.

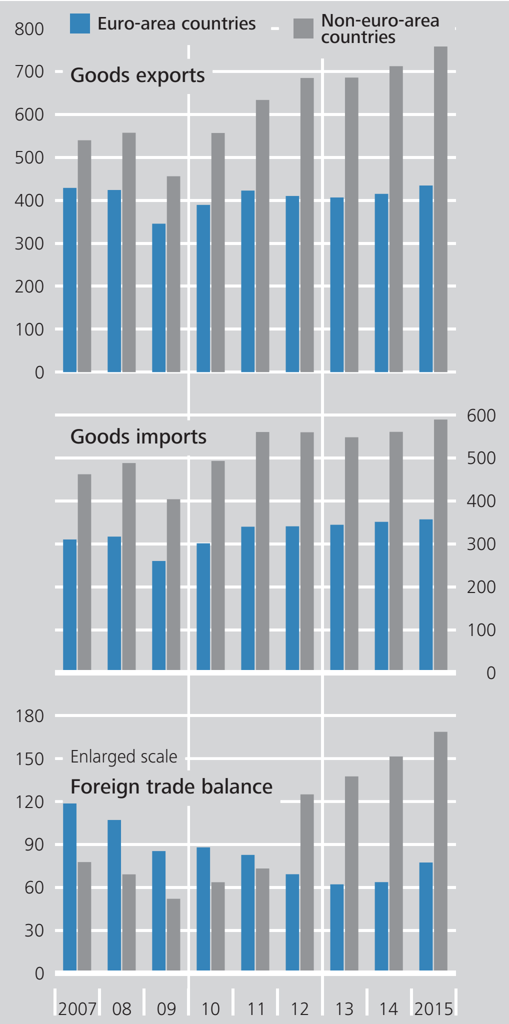
The results are consistent with comparable simulations conducted by the European Commission.[6] Nevertheless, there are some uncertainties that merit consideration. First, the estimates depend on the model specification. In the case of the oil price simulation, for instance, account is taken of the fact that, since the mineral oil tax is charged as a volume-based tax, the effects of oil price changes hinge on the starting price. Conversely, no attention is paid to the originally non-linear effects of the oil price on macroeconomic activity, which would seem likely, especially given the magnitude of the shock. With respect to the shock to the nominal effective euro exchange rate, it should be noted that the extent of currency depreciation can vary depending on the size of the group of countries under examination. The estimated contribution of the euro depreciation is therefore likely to be somewhat smaller when compared with the currencies of Germany's 39 most important trading partners.

Second, the model simulations present the effects of isolated shocks, ie none of the other model-exogenous variables react to changes in the external setting. In this context, the fact that, in particular, no account is taken of any interaction between falling oil prices or the euro depreciation and the expansion of German exporters' sales markets outside the euro area is no major shortcoming in view of the short simulation period under examination. Greater caution is warranted when interpreting the results for the current year and beyond. Nevertheless, it is likely that the effects of the exchange rate movements had not yet had their full impact by the end of 2015.

6 See European Commission, Oil price and exchange rate effects on the German current account balance, in Country report Germany 2016, Including an in-depth review on the prevention and correction of macroeconomic imbalances, Commission Staff Working Document, 26 February 2016, pp 22-23.

Germany's foreign trade within and outside the euro area

€ billion



Source of unadjusted figures: Federal Statistical Office.
Deutsche Bundesbank

ing excessive swings in both directions that frequently occur in speculative markets, may indicate that the long-term price paths of these goods will not be as steep as expected a few years ago.[1] The price corrections are leading to significant income losses in the main producer countries which, together with the slowdown in these countries' growth rates, will tend to curb the export opportunities for German firms, which are often well positioned in these sales markets. At the same time, lower commodity prices strengthen Germany's domestic growth dynamics. As well as boosting domestic demand, a prolonged reduction in the price level would also be expected to create supply and capacity effects. This could well lead to increased corporate investment and higher demand for intermediate goods. These are components that may be assumed to have a relatively high import intensity, also in comparison to private consumption.

Higher surplus vis-à-vis both non-euro-area states and euro-area countries

Given the significant contribution of the much cheaper commodity prices and the depreciating euro to explaining the increase in the current account balance, it is not surprising that Germany's surplus vis-à-vis non-euro-area countries rose further. In 2015, the income generated in Germany's current account from transactions with countries outside the euro area exceeded the corresponding expenditure by €194 billion, or 6½% of GDP. The balance vis-à-vis the euro-area states, which after peaking in 2007 slumped during the next six years from 4¼% to 1¼% of GDP in the wake of the financial and sovereign debt crisis as well as the resulting structural adjustment processes, rose again noticeably over the past two years; in 2015, a positive difference of 2% of GDP was posted. Economic activity in many euro-area partner countries strengthened, boosting demand for German products. Exporters were aided not only by the fact that in these countries the distribution structures are firmly established and customers are familiar with product features, but also because price competitiveness has not suffered appreciably under the marked growth of unit labour costs in Germany. Accordingly, although the indicator based on the deflators of total sales shows a deterioration compared with 2012, Germany's competitive position has remained better than the long-run average.

1 This inference is based on the logic that, partly owing to the sharp rise in the price of crude oil over the last decade, producers have sought new sources of crude oil and developed corresponding extraction technologies (such as fracking). The resulting increase in the supply of generally profitably extractable crude oil deposits will probably have a dampening effect on the long-run price path of crude oil. See also Deutsche Bundesbank, The drop in oil prices: its causes and its consequences, Monthly Report, February 2016, pp 13-15.

Goods flows and balance of trade

Very dynamic foreign trade growth in 2015 as a whole

German foreign trade grew very dynamically overall in 2015 despite weakening in the second half of the year. Nominal goods exports were up by 6½% on average over the year compared with 2014. In real terms, the increase in exports amounted to 5½%. Goods imports rose by 4¼% in nominal terms. However, price effects caused by the decline in world market prices on the commodities markets, especially for crude oil, have been restraining German import expenditure since 2012. In real terms, Germany's goods imports expanded by an estimated 7% in the period under review. As a result, the foreign trade surplus grew by €34 billion to reach a new record high of €247½ billion. In purely mathematical terms, however, the further expansion of Germany's foreign trade balance over the last three years was due almost entirely to improvements in the terms of trade; in fact, there was a moderate decline in terms of volume.

Particularly strong increase in exports to the EU, …

Foreign trade with countries in the European Union (EU) expanded relatively dynamically, as was also the case in 2014. Exports to EU countries outside the euro area, in particular, showed above-average growth. Sales to central and east European EU countries went up by one-tenth, for instance, while exports to the United Kingdom rose by as much as one-eighth. Furthermore, trade with the euro area picked up significantly in 2015. Exports rose by 5% on the back of the economic recovery, mainly due to the revival in the sales of new cars and growing investment in the euro area. Pent-up demand was met in these areas, especially in the (former) programme countries with the exception of Greece. Demand for German goods also rose very steeply in the Netherlands and Italy. Growth in exports to France and Austria, by contrast, was comparatively small.

Earnings from exports to countries outside the European Union were 5½% higher in 2015 than in 2014, when exports had increased only

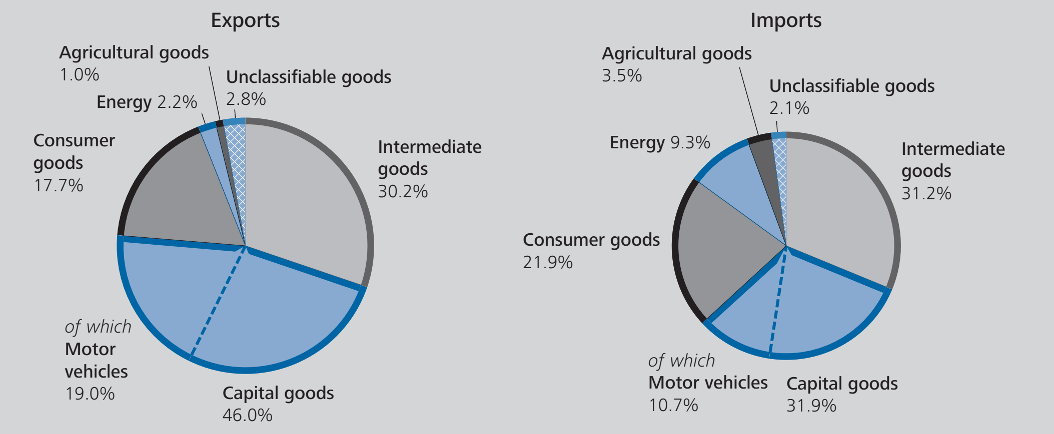
Foreign trade by region

%

Country/ group of countries	Percentage share	Annual percentage change		
	2015	2013	2014	2015
Exports				
Euro area	36.4	− 1.0	2.1	5.2
Other EU countries	21.6	1.4	10.1	10.2
of which				
United Kingdom	7.5	0.6	11.1	12.8
Central and east European EU countries 1	10.8	1.9	11.3	9.6
Switzerland	4.1	− 4.1	− 1.5	6.6
Russia	1.8	− 6.0	− 18.4	− 25.5
United States	9.5	2.7	7.4	18.7
Japan	1.4	− 0.4	− 1.0	0.7
Newly industrialised economies in Asia 2	3.2	1.8	7.4	9.1
China	6.0	0.2	11.1	− 4.2
South and east Asian emerging market economies 3	2.1	− 6.6	− 0.1	4.6
OPEC	3.0	3.0	8.5	9.0
All countries	100.0	− 0.4	3.3	6.4
Imports				
Euro area	37.7	0.9	2.1	2.0
Other EU countries	19.6	2.5	6.2	5.5
of which				
United Kingdom	4.0	− 4.8	− 2.3	− 0.7
Central and east European EU countries 1	12.9	5.9	10.7	8.9
Switzerland	4.5	1.4	2.8	8.3
Russia	3.1	− 3.6	− 7.1	− 22.3
United States	6.3	− 4.9	1.3	20.5
Japan	2.1	− 11.0	− 2.5	6.5
Newly industrialised economies in Asia 2	2.5	− 3.4	3.7	8.1
China	9.7	− 5.1	7.1	14.7
South and east Asian emerging market economies 3	3.6	1.5	6.7	14.0
OPEC	0.9	− 5.8	− 24.9	− 32.6
All countries	100.0	− 1.0	2.2	4.2

1 Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania. **2** Hong Kong, Singapore, South Korea, Taiwan. **3** India, Indonesia, Malaysia, Philippines, Thailand, Vietnam.
Deutsche Bundesbank

Foreign trade by selected categories of goods in 2015



Source of unadjusted figures: Federal Statistical Office. Deviations from 100% due to rounding.
Deutsche Bundesbank

...... as well to the USA and Switzerland, but reduction in business with China and Russia

moderately. Given the muted pace of overall global economic growth, this may have owed something to the euro's depreciation since the beginning of 2014. Another factor is that economic activity in traditionally important extra-European sales market was relatively buoyant. Strong stimuli came from the United States, in particular, which became Germany's foremost export partner as a result. Prior to this France had been the biggest importer of German goods for more than 50 years without a break. Exports to other advanced economies such as Switzerland and the newly industrialised economies in Asia were also brisk, while deliveries of goods to Japan continued to stagnate at their 2012 level. Exports to China in 2015 were down on the year for the first time in 20 years owing to the deceleration in growth there. Sanctions and the ongoing recession in Russia meant that German sales to that country decreased for the third consecutive year, this time by just over one-quarter. By contrast, exports to the south and east Asian emerging market economies made a significant positive contribution to growth. Furthermore, exports to the OPEC member states increased substantially in 2015, as they had done in 2014; the appreciably restricted leeway for petrodollar recycling of late does not seem to have had an impact so far.

Growth in exports of all major categories of goods

Earnings from exports rose in all major categories of goods in 2015. Consumer goods recorded the largest increase again, due mainly to dynamic sales growth in pharmaceutical products, which have come to play a more important role in German exports over the past few years thanks chiefly to flourishing sales markets in the United States, the United Kingdom and the Netherlands. Exports of capital goods also expanded strongly during the period under observation. Despite a slide in car sales to China, automotive exports again made a comparatively large contribution to this growth as German vehicle manufacturers achieved higher sales, in particular, in the United States, the United Kingdom and the euro-area countries. Even when looking at the quarterly pattern, no visible dip is discernible in Germany's automobile exports overall in 2015 in the wake of the Volkswagen group's emissions scandal. Turnover of computer, electronic and optical products also showed significant growth, while exports of machinery recorded only a small rise.

Rise in imports also broadly based

Buoyant domestic demand in Germany led to a broadly based rise in imports in all major categories of goods. The favourable labour market situation and the accompanying large increase in real disposable income were reflected in considerable growth in imports of consumer goods. In addition, Germany once again imported significantly more capital goods in 2015. For one thing, this was due to rapid growth in import expenditure on vehicles, which is presumably related both to cross-border value chains with central and eastern European countries and to higher relative prices in the wake of the depreciating euro, especially against the US dollar. For another thing, the increase in domestic investment in machinery and equipment was mirrored in considerably higher imports of machines, computers, electronic and optical products in 2015. By contrast, nominal energy imports decreased by one-fifth owing to falling oil prices, which significantly slowed the overall increase in import expenditure. In real terms, however, energy imports are likely to have risen noticeably in 2015 following the extremely mild winter in 2014.

Euro-area suppliers benefited less strongly than non-euro-area exporters from rise in imports

As in 2014, suppliers from euro-area countries only moderately increased their sales in Germany. Exporters from outside the euro area, on the other hand, benefited more from Germany's brisker domestic demand. By contrast, the decline in energy imports from Russia and the OPEC member states accelerated distinctly. Imports from these countries dropped by a further one-fifth and one-third, respectively, from their already low prior-year levels. Imports from the United Kingdom remained lacklustre. In contrast to this, imports from Switzerland, Japan and the United States recorded sharp increases in 2015 following faltering growth in the previous year, with sales from the USA rising by as much as one-fifth.[2] Chinese products continued to be in brisk demand. Led by motor vehicles, import payments to central and eastern European countries expanded very strongly, just as they had done in the past years. Imports from the newly industrialised Asian countries and the south and east Asian emerging market economies likewise went up in 2015.

Only small rise in merchanting surplus amid dynamic business activity

The contribution of goods trade to the current account rose by €36½ billion and thus by a somewhat larger margin than foreign trade. The surplus for 2015 came to €263 billion.[3] The value of goods purchased and sold in merchanting transactions has risen sharply over the last few years owing to the growing international cross-holdings of German multinationals. For instance, merchanting trade in motor vehicles, which makes up just under half of the gross amounts, recorded significant growth in both receipts and expenditure in 2015. Overall, the surplus from merchanting trade went up only slightly to €22½ billion.

Breakdown of invisibles

Large rise in service exports cuts service deficit

Germany's cross-border services balance, which traditionally posts a large deficit, stood at minus €30 billion in 2015. This was €5 billion smaller than the 2014 deficit. The improvement was due chiefly to the substantial rise in income, which exceeded the increase in expenditure on services provided by non-residents. The particularly dynamic growth in exports of services to non-euro-area countries is likely to stem, on the one hand, from the favourable economic situation in major recipient countries of industrial services (such as the United States and the United Kingdom). In addition, exchange rate effects may also have had an impact.

Improvement due mainly to some industrial services

There was higher foreign demand for IT services from German suppliers, in particular, in 2015 than in 2014. An increase was likewise registered in income from intellectual property licences as well as from research and development. Germany is recording sizeable surpluses

2 The sharp increase in nominal imports from the United States and Switzerland may have been due partly to the fact that, in the case of contractually fixed selling prices in US dollars or Swiss francs, the import price of the goods went up simply on account of currency translation. Another conceivable factor is that demand for particular goods from these countries is relatively inelastic, at least in the short term.
3 Trade in goods differs from foreign trade in that there are additions and subtractions on both the export and import side which are caused by goods flows to and from warehouses and cross-border commission processing. A second difference is that imports do not include the costs of transport and insurance from the supplier's border to the border with Germany (known as cif import costs), but do take into account net income from merchanting trade and transactions involving non-monetary gold.

in areas such as these, in which the international division of labour is gaining ground. There were improvements, too, in the balance of maintenance and repair services. The fact that this sub-account tends to show a deficit should be seen in the context of German goods exporters' warranty obligations, particularly those of car manufacturers. Professional and management consultancy services – also including commercial services, which have recorded a deficit for a long time – commissions, technical services and other services continued to show marked deficits. The deficit in the cross-border exchange of transport services contracted slightly in 2015 after having expanded in the past few years.

Fall in foreign travel spending

Residents spent 2% less on foreign travel in 2015 than in 2014. This marks the first decline since the crisis year of 2009. The substantial income increases evidently did not lead to an increase in travel abroad. The breakdown of foreign travel by country suggests that the depreciation of the euro played at least some part in this. Hence expenditure on travel to Switzerland fell by one-third in 2015, while spending on trips to the United States was down by just over one-fifth. Destinations in Asia, by contrast, proved more popular. A slight rise in revenue coupled with lower spending trimmed the deficit in the travel sub-account from €37½ billion in 2014 to €35½ billion in the year under review.

Surplus from investment income static

Germany accumulated a surplus of €63½ billion from cross-border primary income in 2015. This item largely comprises net receipts from investment income, which increased by just €2 billion last year. Given the ongoing strong expansion of Germany's net foreign assets, the rather moderate growth suggests that returns had a dampening effect. On the one hand, this reflects a further fall in the general yield level. On the other hand, current data indicate a continuing normalisation, as already observed in 2013 and 2014, of the yield spread between assets and liabilities after it had widened starkly in favour of German net investment in the aftermath of the financial and sovereign debt crisis.[4] The increase in income stemmed from higher receipts from direct investment and portfolio investment, while interest income fell, as it has done in recent years. On the expenditure side, direct investment and portfolio investment by non-residents caused only slightly higher outlays, and interest expenditure fell again noticeably.

Slightly smaller deficit from secondary income

The secondary income balance closed in 2015 with a deficit of €39½ billion. This was slightly smaller than the figure recorded in 2014. The perceptible rise in transfers to the rest of the world was due to a sizeable increase in private-sector transfers. By contrast, government transfers to international institutions which are not directly reciprocated – including contributions to the EU budget – fell slightly. Private-sector receipts likewise increased; the bulk of these are insurance premiums paid to German reinsurers. Transfers to the government sector from the rest of the world were only marginally higher in 2015 than in 2014.

Financial transactions

Underlying trends in financial transactions

Net capital exports affected by low-interest-rate environment and asset purchase programme

In 2015, Germany's current account surplus was mirrored by high net capital exports (€232 billion).[5] This was chiefly attributable to portfolio investment, which was mainly shaped by the low-interest-rate environment and the large volumes of securities purchased for monetary policy purposes under the quantitative easing (QE) programme. In light of the low and in part negative bond yields in Germany, foreign investors offloaded German fixed-income securities on a large scale on balance, but increased

4 See also Deutsche Bundesbank, Effects on the cross-border investment income balance: asset accumulation, portfolio shifts and changes in yields, Monthly Report, March 2015, pp 81-85.
5 The balancing item "errors and omissions" came to -€25 billion in 2015, having stood at €30½ billion in the 2014 balance of payments.

their demand for domestic equities. Resident investors showed less interest in foreign securities in 2015 compared with 2014. Given lower yields, they notably bought fewer debt securities. By contrast, they invested to a greater extent in foreign shares. Direct investment also saw capital outflows as German businesses continued to expand their international investment on balance. Conversely, Germany recorded net capital imports in other investment. Here, enterprises and households as well as monetary financial institutions recorded inflows of funds. The Bundesbank posted a strong increase in its TARGET2 receivables, which were mirrored by higher deposits from foreign investors.

Portfolio investment

Higher capital exports from portfolio investment, …

In portfolio investment, which often clearly reflects developments in the international financial markets, net capital exports amounted to €199 billion in 2015, compared with €137½ billion in 2014. This increase was mainly attributable to a turnaround in foreign demand for German securities. While non-resident investors purchased German securities on balance in 2014, they sold German portfolio assets in 2015.

… driven mainly by divestment of German government bonds

Non-resident investors mainly sold longer-term debt securities (€98 billion, compared with purchases to the tune of €15 billion in 2014). A major contributory factor in this is likely to have been the expanded asset purchase programme (EAPP). Under this programme, the Eurosystem purchases mainly European government bonds; as a result, their yields fell sharply, especially at the beginning of 2015 and again in the second half of the year following a brief counterswing in the second quarter. For prolonged spells German federal bonds (Bunds) recorded negative yields for maturities of up to seven years. Against this background, foreign investors divested themselves of German government bonds – especially in the first few months following the launch of the EAPP purchases in

Major items of the balance of payments

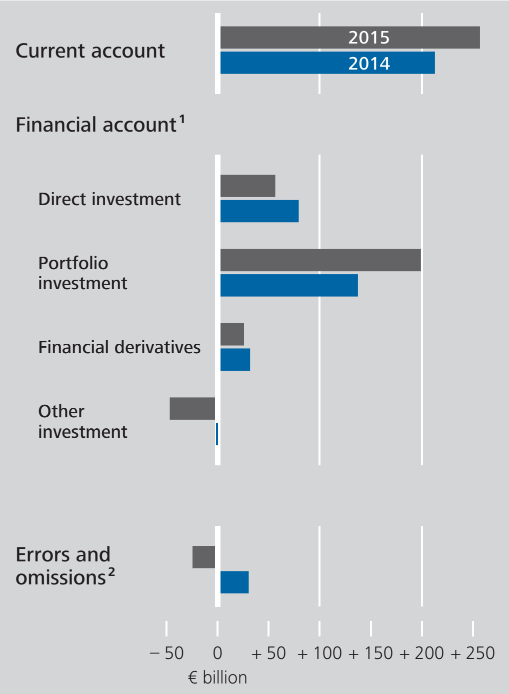
€ billion

Item	2013 r	2014 r	2015 r
I Current account	+ 190.4	+ 212.9	+ 257.0
1 Goods[1]	+ 211.6	+ 226.5	+ 263.0
Exports (fob)	1,079.8	1,114.8	1,179.6
Imports (fob)	868.2	888.3	916.6
Memo item			
Foreign trade[2]	+ 197.6	+ 213.6	+ 247.7
Exports (fob)	1,088.0	1,123.7	1,195.9
Imports (cif)	890.4	910.1	948.2
2 Services[3]	− 43.2	− 35.4	− 30.2
of which			
Travel	− 37.7	− 37.7	− 35.6
3 Primary income	+ 65.8	+ 62.4	+ 63.7
of which			
Investment income	+ 64.0	+ 61.3	+ 63.4
4 Secondary income	− 43.8	− 40.7	− 39.5
II Capital account	− 0.6	+ 1.1	− 0.2
III Balance on financial account[4]	+ 218.9	+ 244.4	+ 232.2
1 Direct investment	+ 21.6	+ 79.4	+ 56.4
2 Portfolio investment	+ 160.5	+ 137.4	+ 199.1
3 Financial derivatives[5]	+ 23.9	+ 31.8	+ 25.8
4 Other investment[6]	+ 11.9	− 1.6	− 47.0
5 Reserve assets[7]	+ 0.8	− 2.6	− 2.2
IV Errors and omissions[8]	+ 29.1	+ 30.4	− 24.7

1 Excluding freight and insurance costs of foreign trade. **2** Special trade according to the official foreign trade statistics (source: Federal Statistical Office). **3** Including freight and insurance costs of foreign trade. **4** Increase in net external position: + / decrease in net external position: -. **5** Balance of transactions arising from options and financial futures contracts as well as employee stock options. **6** Includes in particular loans and trade credits as well as currency and deposits. **7** Excluding allocation of special drawing rights and excluding changes due to value adjustments. **8** Statistical errors and omissions, resulting from the difference between the balance on the financial account and the balances on the current and the capital account.
Deutsche Bundesbank

Major items of the German balance of payments

Balances



1 Excluding transaction-related changes in reserve assets; net capital exports: +. **2** Statistical errors and omissions.
Deutsche Bundesbank

March 2015 – and sold bonds and notes worth €79 billion net over the year as a whole. The Bundesbank is likely to have acquired a considerable proportion of these assets. As well as investors from Europe, Chinese bondholders also noticeably reduced their stocks of German government bonds in 2015. However, monetary policy motives also probably played a large role in these sales.

Net capital exports of longer-term private-sector bonds …

The trend towards the sale of long-term bonds issued by the private sector seen in previous years continued. Non-resident investors sold German private-sector debt securities for €19 billion (2014: €14 billion). Besides lower yields and Pfandbrief purchases under the EAPP, this may also have been due to net redemptions by private issuers. In particular, the outstanding volume of bank debt securities continued to decline. By contrast, domestic enterprises took advantage of the favourable financing conditions in 2015 to further increase their capital market debt, including to non-residents.

… but net capital imports of money market paper …

By comparison, holdings of domestic money market paper in foreign investors' portfolios rose by €7 billion in 2015. Non-resident investors solely purchased securities issued by the private sector (€20½ billion) whereas, as in the preceding two years, they sold government paper on balance (€13½ billion), which was not particularly attractive as the yields were clearly in negative territory.

… and German shares

Foreign demand for German shares also picked up again in 2015. On the back of higher turnover than in the previous year, inflows of funds amounted to €10½ billion in 2015 (2014: €5 billion). This was reflected in addition in the relatively good share price performance of German stocks in comparison to foreign equities. Demand from the rest of the world for domestic investment fund units reversed. While non-resident investors had reduced their shares in German mutual funds by €5 billion in 2014, capital imports of €5½ billion were recorded in 2015.

Fall in German investors' demand for foreign debt securities

In the reverse direction, German investors acquired foreign securities worth €124 billion net in 2015, which constituted a year-on-year decrease (2014: €149 billion). Long-term debt securities are traditionally the most popular form of cross-border investment by domestic investors in this context. German investors purchased foreign bonds worth €74 billion last year. While their holdings of euro-denominated bonds increased less strongly than in the preceding years, they stepped up their investment in foreign currency bonds, with bonds denominated in US dollar and pound sterling being particularly sought after. Asymmetries in the monetary policy stance of the currency areas in question may well have been a factor in this. Whereas the bond purchase programmes in the United Kingdom and the United States had already come to an end before the start of 2015, and the Federal Reserve raised interest rates in December 2015 for the first time since the crisis, the Eurosystem decided to introduce several additional monetary easing measures. In the foreign exchange markets, this resulted in exchange rate shifts to the detriment of the euro.

Sales of foreign money market paper

Given the very low (and sometimes negative) yields on European short-dated bonds, domestic investors sold off foreign money market paper on balance last year (€5 billion). Their interest in short-term debt securities issued in other currency areas was not sufficient to compensate for their sales of money market paper from European countries.

High demand for foreign shares

By contrast, there was a significant rise in domestic investors' demand for foreign shares. Overall, they purchased €19½ billion worth of them. This is presumably attributable to general portfolio shifts from fixed-income assets to dividend-bearing paper. Domestic investors recorded a strong increase in their holdings of shares issued by euro-area member states as well as by the Anglo-Saxon countries.

Drop in net purchases of foreign investment fund units

Furthermore, they supplemented their indirect investment in securities through foreign investment funds, namely in the amount of €35½ billion (2014: €41½ billion). In almost all cases, this took the form of purchasing mutual fund shares from other euro-area countries, where the majority of investment funds selling shares in Germany are based.

Net capital exports of financial derivatives

Financial derivatives (which are aggregated to form a single item in the balance of payments) recorded net capital exports of €26 billion in 2015 (2014: €32 billion). Forward and futures contracts accounted for three-quarters of the net capital exports, while the remaining quarter was mainly attributable to options. Forward and futures contracts relating to electricity and gas played only a minor role in the reporting year. Credit institutions and other financial intermediaries were the main domestic counterparties for cross-border financial derivatives.

Direct investment

Rise in global direct investment

In a global environment of moderate growth and given various country-specific determinants, international direct investment flows rose significantly in 2015. According to preliminary estimates by the United Nations Conference on Trade and Development (UNCTAD), cross-border direct investment rose more sharply in 2015 than it has done in any other year since the outbreak of the financial crisis.[6] The estimated aggregate total of US$1.7 trillion would represent a year-on-year rise of 36%. However, there were marked regional disparities in the direction and intensity of foreign investment. The increase was driven, in particular, by a sharp inflow of funds to advanced economies, which saw almost a twofold rise in inbound foreign direct investment (FDI) compared with 2014. The growing number of cross-border mergers and acquisitions (M&A) also played a major role in this context. In an environment of low interest rates and high liquid assets, it would seem that many multinational enterprises pursued a strategy of growth through purchases. Direct investors were also strongly attracted again in 2015 to Asian emerging market economies, where FDI flows were up by 15½% on the year and accounted for around one-third of global direct investment. By contrast, foreign investors showed little interest in 2015 in emerging market economies or transforming economies in other regions. Especially commodity-exporting countries such as Russia, Brazil and Australia recorded sharp falls in their inflows of funds from the rest of the world.

German FDI showing net capital exports

The special role that EU countries and the United States played in global direct investment flows last year, according to UNCTAD estimates, was also reflected in Germany's direct investment relationships with the rest of the world. Germany's direct investment in 2015 resulted in net capital exports to the tune of

6 See UNCTAD, Global Investment Trends Monitor, No 22, 20 January 2016.

Financial account

€ billion

Item	2013 r	2014 r	2015 r
Financial account balance[1]	+ 218.9	+ 244.4	+ 232.2
1 Direct investment	+ 21.6	+ 79.4	+ 56.4
Domestic investment abroad[2]	+ 68.7	+ 85.7	+ 98.0
Foreign investment in the reporting country[2]	+ 47.1	+ 6.2	+ 41.6
2 Portfolio investment	+ 160.5	+ 137.4	+ 199.1
Domestic investment in foreign securities[2]	+ 140.4	+ 149.0	+ 124.1
Shares[3]	+ 18.9	+ 12.4	+ 19.7
Investment fund shares[4]	+ 32.4	+ 41.3	+ 35.5
Long-term debt securities[5]	+ 84.5	+ 95.8	+ 73.9
Short-term debt securities[6]	+ 4.5	− 0.5	− 5.0
Foreign investment in domestic securities[2]	− 20.2	+ 11.6	− 75.0
Shares[3]	+ 4.9	+ 5.1	+ 10.3
Investment fund shares	+ 6.1	− 5.2	+ 5.5
Long-term debt securities[5]	− 8.3	+ 14.8	− 98.0
Short-term debt securities[6]	− 22.9	− 3.2	+ 7.2
3 Financial derivatives[7]	+ 23.9	+ 31.8	+ 25.8
4 Other investment[8]	+ 11.9	− 1.6	− 47.0
Monetary financial institutions[9]	+ 101.4	+ 43.8	− 48.9
Long-term	− 34.0	+ 35.7	+ 16.7
Short-term	+ 135.4	+ 8.1	− 65.6
Enterprises and households[10]	+ 23.3	− 24.3	− 27.8
Long-term	+ 20.2	+ 4.1	− 2.7
Short-term	+ 3.1	− 28.4	− 25.1
General government	+ 9.9	+ 22.8	− 0.8
Long-term	+ 6.7	+ 0.5	− 3.8
Short-term	+ 3.2	+ 22.2	+ 2.9
Bundesbank	− 122.6	− 43.9	+ 30.5
5 Reserve assets[11]	+ 0.8	− 2.6	− 2.2

1 Increase in net external position: + / decrease in net external position: -. **2** Increase: +. **3** Including participation certificates. **4** Including reinvestment of earnings. **5** Long-term: original maturity of more than one year or unlimited. **6** Short-term: original maturity of up to one year. **7** Balance of transactions arising from options and financial futures contracts as well as employee stock options. **8** Includes in particular loans and trade credits as well as currency and deposits. **9** Excluding the Bundesbank. **10** Includes the following sectors: financial corporations (excluding monetary financial institutions) as well as non-financial corporations, households and non-profit institutions serving households. **11** Excluding allocation of special drawing rights and excluding changes due to value adjustments.

Deutsche Bundesbank

€56½ billion. This was attributable to intensive investment abroad by domestic enterprises, although substantial funds simultaneously flowed into Germany in the shape of direct investment. The topping-up of equity capital played a major role in Germany's cross-border transactions in 2015.

German outbound FDI remains at high level

At €98 billion, direct investment abroad by domestic enterprises once again clearly exceeded the already high prior-year figure of €85½ billion. German firms primarily invested in foreign equity stakes (€69½ billion).[7] German cross-border equity holdings were substantially boosted both by new investments and the reinvestment of profits generated abroad. These transactions can partly be attributed to the aforementioned M&A-based corporate growth strategy for 2015, but the building and expansion of production sites was also a significant factor. Domestic enterprises provided funds abroad in the amount of €28½ billion via intragroup credit transactions. This constitutes an increase of just over €9 billion compared with 2014 and was also a rather large rise in a multiyear view. German parent companies, in particular, granted their foreign subsidiaries (predominantly short-term) loans. With regard to Germany's external assets, just over one-fifth of all German claims on the rest of the world stem from direct investment. This share has fluctuated only slightly over the last 15 years.

DIHK survey reveals strategic aims of German FDI

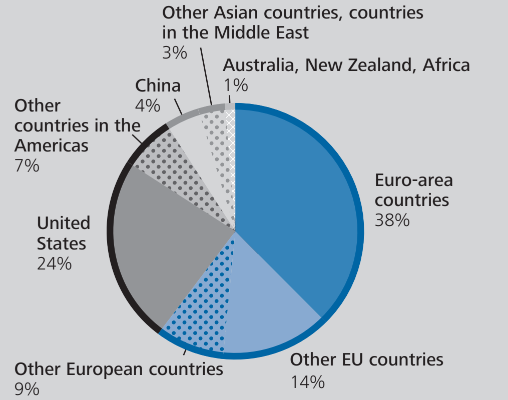
In terms of the fairly long-term nature of their direct investment abroad, German enterprises are pursuing various strategic objectives. According to the German Chambers of Commerce and Industry (DIHK) survey of member firms from the manufacturing sector, the most important reason for investing abroad in 2015 was

7 This is supported by data from Thomson One (Thomson Reuters), which indicate that, at €54 billion, the level of German firms' cross-border M&A transactions in 2015 was on a par with the prior-year figure. However, the number of transactions fell by just under one-quarter to 82, which points to a greater average volume per transaction. This relates to completed M&A deals in which the purchaser owns 10% or more of the shares in the target enterprise after the transaction.

setting up sales and customer services (this was the case for 46% of the surveyed enterprises).[8] Furthermore, investing in foreign production sites in order to access markets (response given by 31% of the companies) remained a key factor in 2015. In addition, more enterprises than in previous years (23%) stated that they invest in production abroad on cost grounds. According to the survey, many firms consider that the trend in German labour costs is posing a risk to their profitability. However, electricity prices in Germany are also given as a persistent reason for seeking cheaper production facilities abroad. Moreover, the shortage of skilled labour as well as the overall economic policy setting were listed as factors by many enterprises.

German foreign direct investment* broken down by target region in 2015

Percentage shares



* Transactions according to the balance of payments statistics.
Deutsche Bundesbank

Regional structure: Europe and USA main outbound FDI targets

Given this strategic motivation, German firms invest globally across multiple countries in all regions. However, their direct investment relationships with other EU countries are particularly intense. First, these constitute important sales markets for German products, and, second, the production processes within Europe are often interlinked across borders. In 2015, more than half of German outbound direct investment flowed to this group of countries. Looking at the individual target countries, the increase in German equity capital was particularly strong in Luxembourg (€10 billion), the Netherlands (€8½ billion) and the United Kingdom (€3 billion). Outside of Europe, too, domestic enterprises provided their foreign companies with more equity capital. This was the case in the United States (€17½ billion) and China (€4 billion), in particular. Just under one-third of all new cross-border equity investments were made by financial and insurance service providers. Another third of new investments were attributable to enterprises in the manufacturing sector, first and foremost suppliers in the automotive industry. And just under one-third was invested by companies that provide professional and technical services.

Through intra-group credit transactions, German parent companies granted subsidiaries in other EU countries loans in the amount of €15 billion. Outside of Europe, they granted additional loans to their US branches, in particular (€4 billion). Overall, while German outbound FDI in 2015 was broadly based in regional terms, there was a clear focus on advanced economies.

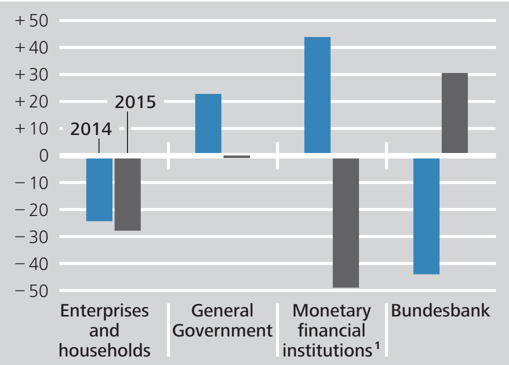
Inbound FDI stronger

Non-resident investors stepped up their involvement in Germany again in 2015, following very restrained foreign direct investment in Germany in 2014. Foreign investors provided German enterprises with funds amounting to €41½ billion last year. Specifically, they provided German enterprises with additional equity capital of €18½ billion. Furthermore, enterprises in Germany received €23 billion in funds through intra-group credit. Loans accounted for the lion's share, primarily in the form of reverse flows by which a subsidiary domiciled abroad grants a loan to a direct investor in the home country.[9] The data probably also partly reflect a type of maturity transformation, whereby German enterprises repaid long-term loans previously granted by subsidiaries, while at the same time taking up new short-term loans from them.

8 See DIHK Survey – Foreign Investments in Manufacturing Industry, spring 2015.
9 Financing vehicles domiciled abroad frequently pass on proceeds from securities issuance to their parent companies in Germany in this way.

Other investment* broken down by sector

Balances in € billion



* Includes in particular loans and trade credits as well as currency and deposits; net capital exports: +. **1** Excluding the Bundesbank.

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Biggest investors came from EU and USA

The close cross-border links of corporate groups within Europe are also reflected in the regional structure of foreign direct investors in Germany. Around 60% of the inflows in 2015 stemmed from EU countries. Especially large contributions were made by the United Kingdom (€7 billion), the Netherlands (€6 billion) and Austria (€4½ billion). Swiss investors also substantially expanded their interest in Germany (€6 billion). Enterprises headquartered in the United States upped their presence in Germany last year on a particularly large scale, with direct investment totalling €11½ billion. On the one hand, they provided additional equity capital to German enterprises, and, on the other, they above all increased their lending to affiliated enterprises in Germany – this also primarily took the form of loans granted by US subsidiaries to their parent companies in Germany. The international investment position data show that in the third quarter of 2015 just under one-fifth of all German liabilities to the rest of the world resulted from inbound FDI.

Other investment

Net capital imports in other investment …

Other investment, comprising loans and trade credits (where these do not constitute direct investment) as well as bank deposits and other assets, saw net capital imports of €47 billion in 2015.

… driven by net inflows of funds to enterprises and households …

Non-banks received foreign funds worth €28½ billion net last year. This was almost exclusively due to transactions by enterprises and households. They ran down their balances with foreign banks (€13 billion) and took up more loans abroad (€10½ billion). By contrast, inbound and outbound transactions by general government roughly balanced each other out over the year in net terms. On the one hand, public institutions reduced their unsecuritised liabilities to foreign creditors. On the other hand, they scaled back both their claims arising from long-term loans and their bank deposits abroad.

… as well as to banks

In the banking system as a whole, the net inflows of funds amounted to €18½ billion. This was attributable to the net capital imports of monetary financial institutions (excluding the Bundesbank) in the amount of €49 billion. German credit institutions primarily reduced their interbank loans to the rest of the world. Conversely – albeit to a lesser extent – foreign depositors also decreased their deposits at German credit institutions. The Bundesbank's external position rose by €30½ billion in 2015 on account of transactions. This was predominantly driven by higher claims within the TARGET2 payment system (€123½ billion). The increase in the Bundesbank's TARGET2 balance is likely to be connected in part to the Eurosystem's asset purchase programmes that were launched in autumn 2014 and spring 2015 (see the box on pages 53 to 55). This was set against a significant rise in the Bundesbank's external liabilities (by €93 billion), which was due to foreign investors – particularly the European Stability Mechanism – increasing their deposits. Moreover, inflows of funds arose from cross-border transactions involving euro banknotes.[10]

10 For information on how transactions involving banknotes are recorded in the balance of payments, see Deutsche Bundesbank, Recording euro currency in the balance of payments and the international investment position, Monthly Report, March 2015, pp 91-93.

The impact of Eurosystem securities purchases on the TARGET2 balances

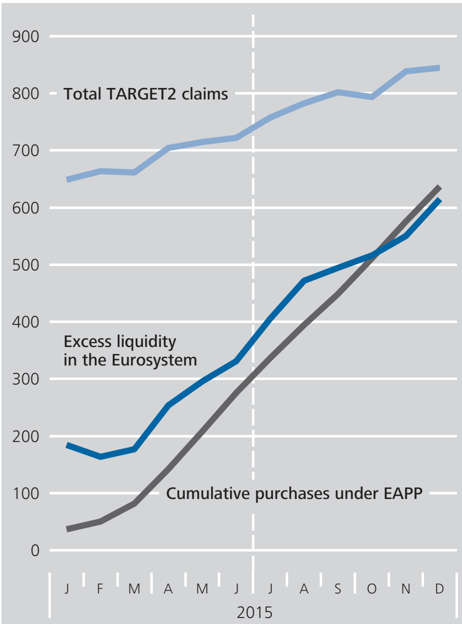
In March 2015, the Eurosystem expanded its existing purchase programmes for asset-backed securities (ABSPP) and covered bonds (CBPP3) that had been up and running since the autumn of 2014 through the addition of a public sector purchase programme (PSPP). The purpose of this new programme is to purchase bonds issued by euro-area central governments as well as by agencies and supranational European institutions.[1] These purchases are made by national central banks (NCBs), in line with their respective stakes in the capital of the ECB, and by the ECB itself. The total purchase volume of the expanded asset purchase programme (EAPP) amounted to roughly €60 billion per month in 2015, with the PSPP thus far accounting for the bulk of acquisitions at around 85% of this total.

Liquidity provision via the various purchase programmes has elevated the amount of excess liquidity in the Eurosystem (see the adjacent chart). At the same time, the sum total of TARGET2 claims/TARGET2 liabilities in the Eurosystem has risen sharply again (up by €200 billion in the course of 2015). It is therefore reasonable to assume that the recorded increase in the TARGET2 balances might be connected with the EAPP.

The impact of the aforementioned purchase programmes on the TARGET2 balances can be subdivided into direct and indirect effects. A direct effect is triggered whenever an NCB buys securities from a commercial bank participating in TARGET2 via another NCB and the liquidity amount is credited on a cross-border basis. The direct effect of EAPP transactions on the TARGET2 balance of a given NCB is the product of the difference between that central bank's own purchases from banks outside its borders (ie banks with a TARGET2 account in countries abroad) and sales made by domestic banks (ie banks with a domestic TARGET2 account) to foreign central banks belonging to the Eurosystem. The manner in which the counterparty is linked to TARGET2 can thus determine the direct effects of EAPP on the TARGET2 balance. This is particularly of significance because credit institutions domiciled outside the euro area participate in TARGET2 via a Eurosystem NCB,[2] not

Excess liquidity, cumulative EAPP purchases* and total TARGET2 claims**

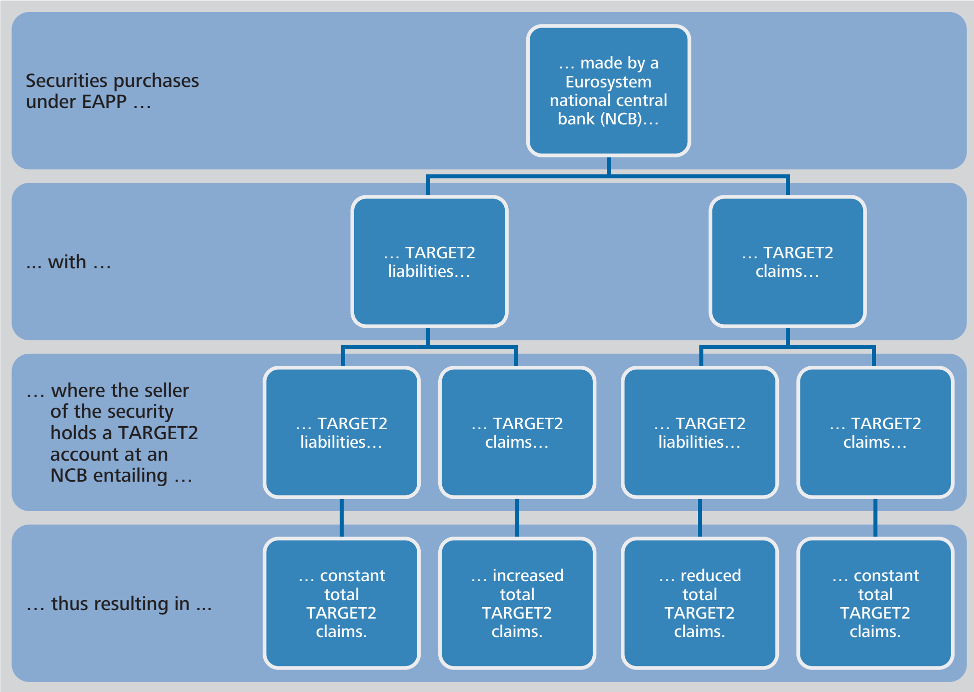
€ billion, monthly averages



Source: ECB and Bundesbank calculations. * Expanded asset purchase programme. ** Sum total of all positive TARGET2 balances in the Eurosystem.
Deutsche Bundesbank

1 In December 2015, the ECB Governing Council decided to extend this to include regional and local government bonds.
2 Credit institutions domiciled in the European Economic Area (EEA) or operating a branch in this area can maintain their own TARGET2 account with a Eurosystem NCB (an arrangement referred to as direct participation). Institutions not domiciled in the euro area and/or without a branch in this area can participate in TARGET2 via other direct participants (known as addressable BIC holders).

Direct impact of EAPP* on total TARGET2 claims**



* Expanded asset purchase programme. ** Sum total of all positive Eurosystem TARGET2 balances.
Deutsche Bundesbank

least in the case of major international banks operating in the City of London.

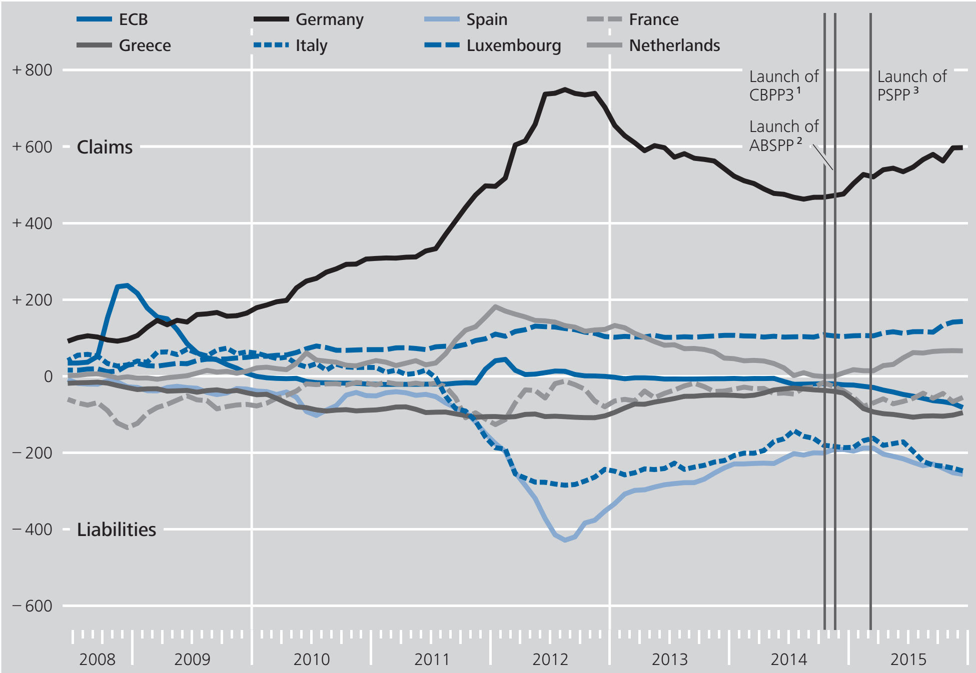
Since international commercial banks also participate in TARGET2 via the Bundesbank, inflows to accounts held at the Bundesbank are generated whenever other Eurosystem NCBs purchase securities from these banks. Viewed in isolation, such structural inflows cause the Bundesbank's TARGET2 claims to swell. In the case of cross-border transactions, any changes to total TARGET2 claims in the Eurosystem hinge on the existing TARGET2 positions of the NCBs involved in the transaction (see the chart above).

One EAPP-induced indirect effect on the TARGET2 balances arises when the additional liquidity gained from that programme is redistributed across borders in a second-round effect. This occurs on a frequent basis, also through intra-group transactions on the part of international banks. Needless to say, a raft of other (cross-border) dealings likewise affect the TARGET2 balances. While monthly purchases in 2015 stood at roughly €60 billion, TARGET2 turnover came to €1.9 trillion per day. It is for this reason that TARGET2 balances demonstrate a perceptibly higher degree of volatility compared with the steady (cumulative) increase in purchases under EAPP (see chart on page 53).

The path followed by the TARGET2 balances of individual central banks is heterogeneous (see the the chart on page 55). Looking at the ECB, the launch of the EAPP has meant that TARGET2 liabilities are created during settlement. This stems from the fact that the ECB purchases securities for its own account and yet credit institutions do

Selected TARGET2 balances in the Eurosystem

€ billion, monthly averages



Source: ECB. **1** Third covered bond purchase programme. **2** Asset-backed securities purchase programme. **3** Public sector purchase programme.

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not hold accounts with the ECB.[3] The ECB counterparties' accounts to which the liquidity is credited are maintained by NCBs. Hence, each purchase of a security by the ECB automatically results in a "cross-border" transaction, thus increasing the ECB's TARGET2 liabilities (see the chart above).[4]

In 2015, there was an upturn in TARGET2 liabilities, especially in Spain and Italy, whereas in Germany, the Netherlands and Luxembourg there was a rise in TARGET2 claims. Overall, from a long-term perspective, the phase of decreasing TARGET2 claims/liabilities that persisted up to around the beginning of 2015 has since been replaced by a shift back towards rising TARGET2 claims/liabilities (see the chart above). However, aside from the influence of the EAPP described above, the increase in the first six months of 2015 was also attributable to the escalation of the financial stress situation in Greece at that time, which was then defused in the summer of 2015 with the introduction of capital controls and agreement on an additional assistance package.

3 The ECB's role in managing accounts in TARGET2 is essentially limited to other pan-European payment systems operated by the private sector (notably EURO1 and CLS) where inpayments and outpayments mutually offset one another, therefore avoiding a build-up of TARGET2 balances at the ECB. The ECB can inter alia maintain accounts for other central banks as well as European and international organisations, but may not do so for credit institutions (ECB Governing Council's decision ECB/2007/7).
4 The extent to which this induces an expansion of the sum total TARGET2 claims/TARGET2 liabilities depends on whether the NCB used for settling the transaction itself has a negative or a positive TARGET2 balance (see the chart on page 54).

Reserve assets

Transactions trigger decline in reserve assets

Transaction-related changes in the reserve assets are shown as a separate item in the balance of payments. In 2015, they fell by €2 billion. The decline was due, in particular, to a change in the reserve position with the International Monetary Fund.

But balance sheet adjustments had positive impact

The international reserve holdings are also influenced by balance sheet adjustments which, in line with internationally agreed accounting standards, are not recognised in the balance of payments. The end-of-year revaluation of the reserve assets at market prices resulted in an increase of €3 billion in 2015. This was mainly due to valuation gains arising from the appreciation of the US dollar against the euro. These were reflected in the foreign reserves, in particular. By contrast, the value of German gold holdings fell owing to the drop in the price of gold during the course of 2015. All in all, Germany's reserve assets rose by €1 billion in balance sheet terms in 2015; at the cut-off date of 31 December 2015, they amounted to €159½ billion.