# German balance of payments in 2017

*The German economy's current account surplus declined further to 8% of nominal gross domestic product (GDP) in 2017 in a continuation of the development observed in the previous year which has now left the surplus perceptibly short of the record level of 9% seen back in 2015. In absolute terms, the surplus came in at €262½ billion, which is well down on the figures for the two previous years but still far in excess of the 6% of GDP threshold set by the European Commission to prevent and correct macroeconomic imbalances. Looking at the sub-accounts, 2017 was the first year since 2009 in which the goods trade surplus stopped expanding. This was largely down to terms of trade effects relating to the increase in the cost of internationally traded commodities as well as the continued strength of domestic demand and the resulting high demand for imports. The rosy demand conditions worldwide meant that the slight appreciation of the euro on an annual average was almost of no consequence. Viewed in terms of the domestic savings and investment decisions made, last year's decline in the current account surplus as a share of GDP was attributable to the increase in business and household investment activity on the back of a strongly expanding German economy.*

*Germany's financial account last year was likewise influenced by the recovery in global activity; furthermore, the persistently accommodative monetary policy in the euro area contributed to cross-border portfolio adjustments. At €275½ billion, net capital exports were slightly up on their 2016 level. Continued purchases of assets for monetary policy purposes drove down the volume of German debt securities held by non-resident investors and led to sustained domestic demand for foreign securities. The Eurosystem's asset purchase operations were likewise the driving force behind the further expansion of the Bundesbank's TARGET2 claims, while commercial banks' stock of external liabilities also picked up. Direct investment flows worldwide receded, but German enterprises once again stepped up their direct investment operations. Germany also proved to be a popular destination for inbound foreign direct investment. In both directions, euro area countries were the main partner countries.*

# Current account

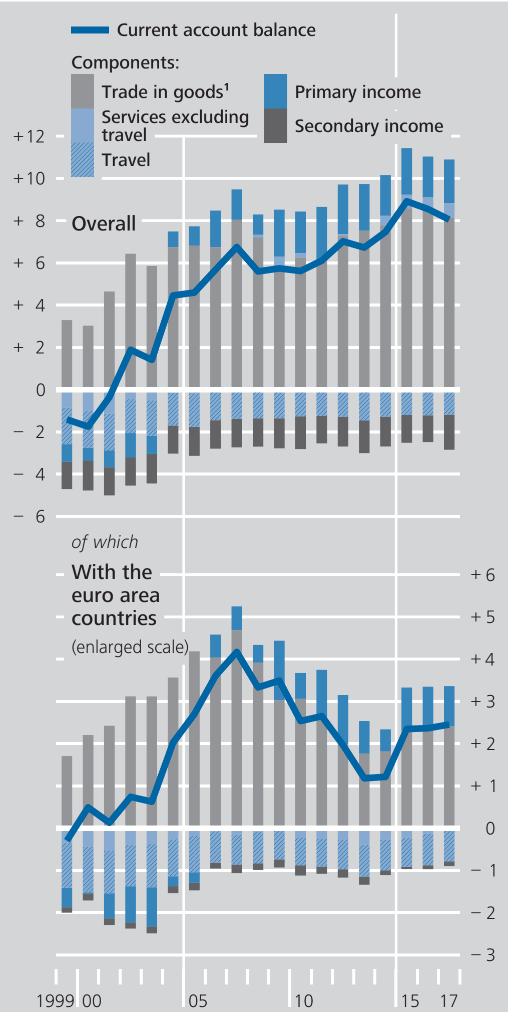
## Underlying trends in the current account

*Current account surplus as a share of GDP down again slightly*

Germany's current account surplus declined to €262½ billion in 2017, dropping by ½ percentage point to 8% of nominal gross domestic product (GDP), which is perceptibly lower than the record level of 9% seen in 2015. The surplus nonetheless persisted well above the 6% of GDP threshold set by the European Commission to prevent and correct macroeconomic imbalances. In the in-depth review that was consequently required as part of the 2018 European Semester, the European Commission identified Germany as once again having macroeconomic imbalances.[1]

**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.

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*Deterioration in terms of trade cancels out vibrant exports growth*

While the current account surplus declined in absolute terms, there were contrasting developments in the individual sub-accounts. Unlike in the previous years, the goods account surplus did not increase in 2017. This was largely due to the deterioration in the terms of trade, which cancelled out the strong increase – in volume terms – in the goods trade balance brought about by the vibrant exports growth. By contrast, the deficit in the services account narrowed slightly. In the primary income account, the surplus bounced back from its dip last year. Given the strong growth in Germany's external assets and liabilities in 2017, yields on both assets and liabilities are likely to have contracted further. As for the secondary income account, the shortfall was widened distinctly by one-off effects on the expenditure side resulting from private unilateral transfers to the rest of the world.

*Global setting expansionary despite stronger euro and higher commodity prices*

The world economy's cyclical recovery in 2017 created a very favourable global setting for German enterprises. The broad regional upward trend was accompanied by more vigorous investment, above all in the advanced economies. Furthermore, data from the International Monetary Fund (IMF) show that world trade accelerated distinctly after last year's lull. Economic activity in Germany, meanwhile, is likely to have been dampened slightly by a number of price factors, two of which – the brighter global economic outlook, and the agreement reached by the Organization of the Petroleum Exporting Countries (OPEC) with other major oil-producing countries at the end of 2016 to curb the output of crude oil – sent the oil price sharply higher.[2] A barrel of Brent

1 See: European Commission, Country Report Germany 2018, which includes an in-depth review on the prevention and correction of macroeconomic imbalances, Brussels, 7 March 2018.
2 See also Deutsche Bundesbank, Supply-side influences on the price of oil, Monthly Report, August 2017, p 12.

crude cost an average of US$54 in 2017 – one-quarter more than in the previous year. Headwinds also came from the stronger euro, the nominal effective exchange rate of which against the currencies of the euro area's 38 most important trading partners (the EER-38 group) in 2017 was up by an average of around 2% on the year. The euro gained ground against the pound sterling and the Japanese yen in particular, but it also appreciated against the US dollar and the Swiss franc. These headwinds slightly worsened the German economy's price competitiveness.

*Goods exports and imports very lively*

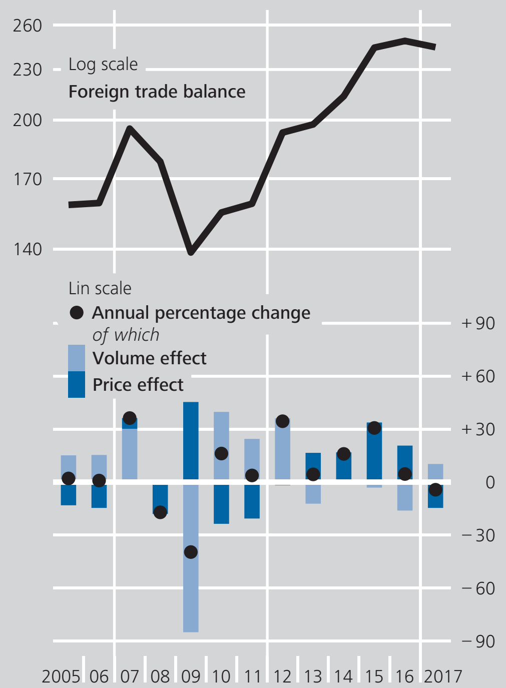
Goods exports, stimulated by vibrant external demand, bounced back from last year's breather to register considerable gains. Imports were likewise well up on the previous year, partly as a result of the current boom in the German economy. Major sources of stimulus were the brisk demand for intermediate goods to meet the strong upturn in industrial output, the pick-up in investment activity as well as lively household consumption. With import prices returning to a robust growth path in 2017 for the first time in five years on the back of the increase in oil and industrial commodity prices, imports outpaced exports in nominal terms. The real data, however, show that the growth of goods exports outstripped the upturn in goods imports. In net terms, the surplus-reducing price effect slightly overshadowed the positive volume effect, leaving the foreign trade balance in the reporting year €4 billion down at €244½ billion.

*Surplus with non-euro area countries narrower*

An analysis of the current account surplus from a regional perspective reveals that the surplus was slightly larger with other euro area countries and significantly lower with non-euro area countries. As a share of nominal GDP, the surplus with non-euro area countries contracted by ¾ percentage point to 5½%; with other euro area countries it came to just under 2½%. The drop in the current account surplus with non-euro area countries came as a result of a wider deficit in the secondary income account and a narrower goods account surplus.

**Price and volume effects on the German foreign trade balance***

€ billion




Source of unadjusted figures: Federal Statistical Office. * Decomposed using the Shapley-Siegel index.
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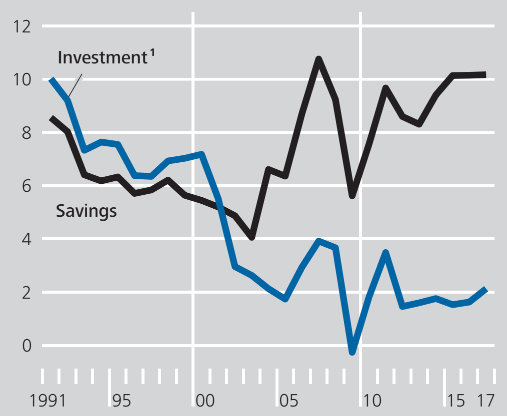
*Investment picks up; aggregate savings remain unchanged*

Germany's current account surplus can also be seen as the outcome of the investment and savings decisions made by the country's general government, households and enterprises. Viewed from this particular angle, the decline in Germany's current account surplus as a share of GDP in 2017 can be explained by an upturn in investment activity spurred by the robust upswing in the German economy. This upturn was primarily attributable to brisker business investment and another increase in private residential investment. Aggregate savings as a percentage of GDP, on the other hand, saw little change in 2017, even if the individual sectors did not always move in the same direction. Net general government lending climbed again last year on the back of robust activity and low interest rates. The strong rise in non-financial corporations' savings since the beginning of the 2000s fell back significantly in 2017, in particular because the enterprises paid out almost all their additional profits and made unusually

**Aggregate savings and investment**

As a percentage of GDP




Source: Federal Statistical Office. **1** Gross investment less consumption.
Deutsche Bundesbank

high other current transfers.[3] On balance, net lending/net borrowing, which includes not just investment and savings but capital transfers as well, receded sharply in the non-financial corporate sector and recorded a minor gain in the general government sector.

## Goods flows and balance of trade

*Strong expansion in foreign trade*

German foreign trade activity gained significant traction in 2017, with exports benefiting as the global economic upswing took hold. On balance, price-adjusted goods exports grew by 4¼%, after 1¾% in 2016. The pace of this growth was faster still in nominal terms due to the sign reversal in the path of foreign trade prices. Manufacturers abroad reaped considerable benefits from the surge in German domestic demand. Additional stimulus for imports came from the faster growth of exports which, just like machinery and equipment investment, have a high import content. Goods imports expanded at much the same robust pace as exports from a price-adjusted perspective. In value terms, imports rose by 8¼%, outpacing exports on account of the stronger overall price increase recorded above all by energy and products at the upstream stages of the production process. As a result, the foreign trade surplus shrank for the first time since 2009, falling by €4 billion to €244½ billion.

*Exports to EU countries surge higher, …*

Goods exports to EU and non-EU countries in 2017 improved significantly on the year after a distinctly weaker showing one year earlier. As far as exports to EU countries are concerned, business with the central and east European member states outside the euro area fared particularly well, as they had done in previous years. There was also a surge in exports to the euro area, partly due to a strengthening of growth across the bloc. Exports to all of Germany's main trading partners picked up strongly, with deliveries to the Netherlands gaining the most ground. Trade with the smaller euro area countries, above all Ireland and Finland, generally increased at a robust pace as well. By contrast, there was another distinct drop in the value of exports to the United Kingdom. The substantial appreciation of the euro against the pound sterling is also likely to have had a dampening effect here. Other headwinds for exports to the UK might have included the spring increase in motor vehicle tax on new vehicles and its negative impact on car imports.

*… as do those to non-EU countries*

2017 was the first year in quite some time in which the growth of exports to non-EU countries in value terms was back on track with that to the EU. German exports to emerging market economies were particularly gratifying. In Russia, sales of German products bounced back markedly after a four-year spell that had mostly seen declines. Exports to China likewise made exceptionally strong advances as the Chinese economy experienced a cyclical upswing. Similarly, there was considerable growth in exports to south and east Asian emerging market economies. Exports to industrial countries outside the EU were brisk as well. German firms substantially boosted their exports to Switzerland and Japan. Sales to the United States bounced back strongly from last year's marked lull. The growth in exports to the newly industrialised

**3** See also the box on pp 20-22.

economies in Asia was below par. Sales to the OPEC countries, meanwhile, contracted significantly. The multi-year low in oil prices also probably curbed these countries' ability to recycle petrodollars.

*Surge in demand for broad array of export goods*

German exporters in all economic sectors benefited from the surge in external demand. Sales of consumer and intermediate goods shot higher, expanding by 8% and 6¾%, respectively, in price-adjusted terms. And with investment activity gradually picking up around the world, exporters of machinery and equipment put last year's subdued growth behind them to record very substantial gains. Tailwinds came not just in the form of the strong upswing in global industrial activity; the increase in world market prices for commodities also buoyed spending on machinery and equipment in commodity-exporting countries. Manufacturers of machinery and equipment considerably increased their exports in price-adjusted terms. Exports of computers, electronic and optical products as well as electrical equipment likewise registered very strong gains. Growth in exports of motor vehicles and motor vehicle parts, meanwhile, fell short of the average pace of aggregate goods exports – as it had in the previous year – and also failed to match the rates of increase recorded in 2014 and 2015, which were both very successful years for the automotive industry. One factor at play here was the persistently flat growth of sales in the major UK and US export markets, which in 2016 had each accounted for roughly one-eighth of German car exports.

*Demand for broad range of import goods*

The brisk consumption and investment activity in Germany and, indirectly, the growth in exports as well also made itself felt on a broad array of goods imports from abroad. Imports of consumer, capital and intermediate goods surged at an exceptionally robust pace of more than 7% in price-adjusted terms. Particularly strong gains were again registered by foreign exporters of pharmaceutical products and of motor vehicles and motor vehicle parts. Furthermore, the brisker demand for machinery

## Foreign trade by region

%

| Country/ group of countries | Percentage share | Annual percentage change | | |
|---|---|---|---|---|
| | 2017 | 2015 | 2016 | 2017 |
| **Exports** | | | | |
| Euro area | 36.9 | 4.9 | 1.6 | 7.0 |
| Other EU countries | 21.7 | 10.1 | 2.3 | 5.1 |
| *of which* | | | | |
| United Kingdom | 6.6 | 12.4 | − 3.5 | − 1.8 |
| Central and east European EU countries[1] | 11.6 | 9.8 | 5.2 | 9.4 |
| Switzerland | 4.2 | 6.2 | 2.2 | 7.7 |
| Russia | 2.0 | − 25.9 | − 0.6 | 20.2 |
| United States | 8.7 | 18.6 | − 6.1 | 4.4 |
| Japan | 1.5 | 0.3 | 7.9 | 6.7 |
| Newly industrialised economies in Asia[2] | 3.0 | 8.8 | 1.4 | 1.9 |
| China | 6.7 | − 4.1 | 6.7 | 13.3 |
| South and east Asian emerging market economies[3] | 2.2 | 4.5 | 1.4 | 10.0 |
| OPEC | 2.4 | 8.3 | − 5.6 | − 11.8 |
| All countries | 100.0 | 6.2 | 0.9 | 6.2 |
| **Imports** | | | | |
| Euro area | 36.9 | 1.7 | 0.6 | 6.4 |
| Other EU countries | 20.2 | 5.7 | 3.1 | 8.6 |
| *of which* | | | | |
| United Kingdom | 3.6 | − 0.3 | − 7.2 | 4.2 |
| Central and east European EU countries[1] | 13.9 | 9.2 | 6.8 | 10.0 |
| Switzerland | 4.4 | 6.8 | 4.3 | 4.1 |
| Russia | 3.0 | − 21.5 | − 12.0 | 18.7 |
| United States | 5.9 | 22.4 | − 3.7 | 5.3 |
| Japan | 2.2 | 6.2 | 8.6 | 4.5 |
| Newly industrialised economies in Asia[2] | 2.8 | 8.3 | − 0.9 | 22.6 |
| China | 9.7 | 15.2 | 2.4 | 6.7 |
| South and east Asian emerging market economies[3] | 3.9 | 14.5 | 4.4 | 11.5 |
| OPEC | 0.9 | − 31.7 | − 17.8 | 39.3 |
| All countries | 100.0 | 4.3 | 0.6 | 8.3 |

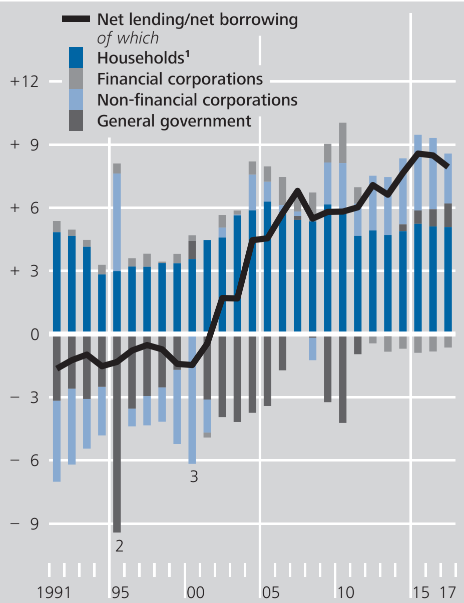
1 Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania. 2 Hong Kong, Singapore, South Korea, Taiwan. 3 India, Indonesia, Malaysia, Philippines, Thailand, Vietnam.
Deutsche Bundesbank

## The savings of non-financial corporations in Germany

The high level of savings among Germany's corporate sector has become a topic of economic policy debate in recent years. For more than a decade now, German non-financial corporations have, as a whole, been net lenders. The increase in net lending by corporations since the turn of the millennium has been driven primarily by an increase in the formation of savings, while there has been only a slight decline in net investment relative to gross value added. The resulting change in the financing structure of non-financial corporations could impact the transmission of monetary policy.[1] Furthermore, it is suspected that growing corporate savings have contributed to the current high level of Germany's current account surplus, which by definition corresponds to the difference between aggregate savings and aggregate investment.[2]

**Net lending/net borrowing in Germany by sector**

As a percentage of GDP




1 Including non-profit institutions serving households. 2 One-off effect largely due to the assumption of the Treuhand agency's debt by general government. 3 One-off effect from the auction of UMTS licences.

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The relative scale of the strong formation of savings by German enterprises becomes clear when compared with the formation of savings by the other domestic sectors and by enterprises in the rest of the euro area and the European Union (EU). Moreover, a breakdown of the components of corporate savings in the national accounts can indicate which factors were behind enterprises' increased saving efforts in recent years.

### Contributions by sector to aggregate net lending/net borrowing

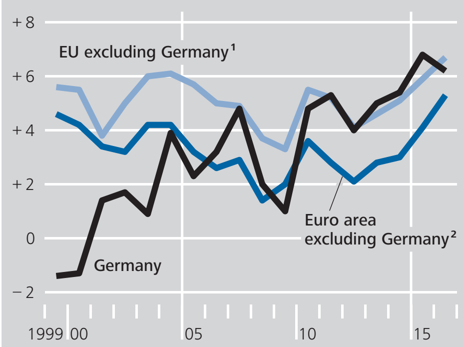
Net lending by the German economy to the rest of the world has increased sharply since the beginning of the last decade. Whereas Germany was a net borrower in the period 1991 to 2000, when net borrowing was 1¼% of GDP on average, it has been a net lender since 2011, with net lending rising to over 6% of GDP.[3] While the biggest contribution to aggregate net lending in the past two decades has, as usual, been made by households, their net lending has remained virtually unchanged since the start of the millennium. The bulk of the increase in aggregate net lending, by contrast, was attrib-

1 See Deutsche Bundesbank, Developments in corporate financing in the euro area since the financial and economic crisis, Monthly Report, January 2018, pp 53-71.
2 Broken down by domestic sector, this can be attributed to the contributions made by financial corporations, non-financial corporations, households and non-profit institutions serving households, and general government. Net lending/net borrowing by these sectors, which includes the difference between savings and investment as well as capital transfers, reflects the arithmetic contribution of these sectors to aggregate net lending/net borrowing, which, in turn, approximately corresponds to the current account balance.
3 Small discrepancies between the current account balance, including the capital transfers balance, and the net lending/net borrowing position are attributable to the partial use of different statistical sources, varying methods of calculation and the fact that the revision method applied to the two sets of figures is not identical.

utable to net lending by non-financial corporations. The sharp reduction in net borrowing by general government, which gave way to net lending in 2014, also contributed to the currently very high level of aggregate net lending.

**Net savings of non-financial corporations***

As a percentage of their gross value added




Source: Eurostat and Bundesbank calculations. * Weighting according to the gross value added of non-financial corporations in the respective countries. 1 Excluding Croatia, Cyprus, Hungary, Malta, and Romania. 2 Excluding Malta and Cyprus.

Deutsche Bundesbank

### Corporate savings in Germany compared with other European countries

At the beginning of the last decade, corporate savings[4] in Germany relative to the corporate sector's gross value added was markedly below the average rate in the rest of the euro area and the EU.[5] While a strong upward trend was observed in corporate savings in Germany up until 2007, the average saving rate of non-financial corporations in other countries followed a downward trend during this time. As a result, the saving rates converged sharply. From the end of the 2000s onwards, the saving rates of non-financial corporations in Germany and the other countries of the EU and the euro area changed more or less uniformly. While the upward trend in Germany continued – except for the interruption during the Great Recession of 2008-2009 – there was a shift in the saving behaviour of non-financial enterprises in the other countries, where net saving increased. It is likely that catch-up effects played a role in these countries following the period of decline in corporate savings prior to the crisis. In Germany, savings of German corporations reached their most recent peak in 2015. Since then, they have receded somewhat. As a result, the average saving rate of enterprises in the rest of the euro area, which was somewhat lower than in Germany in the period after 2010, is now again on a par with the rate in Germany.

### Components of corporate savings

The upward trend in corporate savings in Germany since 1999 (in relation to the corporate sector's gross value added) is, in this period, primarily attributable to the declining contribution of employee compensation as a share of total expenditure, lower interest costs, and the subdued distribution of corporate profits.

The individual factors' directional impact on corporate savings (ie whether they caused savings to rise or fall) is not always the same in the period before the 2007-2008 financial crisis as it is in the period thereafter. For example, in the period up to 2007, wage moderation in Germany led to a clear decline in the contribution of employee compensation to expenditure and thus had a positive impact on corporate savings. By contrast, the somewhat higher wage growth seen since then has dampened corporate savings. Furthermore, the fall since 2007 in the distributed income of corpor-

4 In the national accounts, corporate sector net savings are defined as retained earnings after the deduction of taxes and the addition of net transfers. In the case of gross savings, consumption of fixed capital is also taken into account. The figures presented in this box are net figures.
5 For the aggregation of data for the other countries in the euro area and the EU, data are weighted according to the gross value added of the non-financial corporations of the respective countries. For reasons of consistency, only countries for which data are available for the entire period of 1999 to 2016 are included in the calculation. Croatia, Cyprus, Hungary, Malta and Romania are therefore not taken into account.

**Change in the savings of non-financial corporations in Germany***

As a percentage of their gross value added

| Item | 1999 to 2017 | 1999 to 2007 | 2007 to 2017 |
|---|---|---|---|
| Consumption of fixed capital | 0.4 | 0.1 | 0.3 |
| Compensation of employees | 2.4 | 5.9 | – 3.6 |
| Interest received | 0.6 | 1.7 | – 1.1 |
| Distributed income of corporations received | 0.9 | 1.7 | – 0.8 |
| Reinvested earnings on foreign direct investment received | 0.9 | 1.4 | – 0.5 |
| Interest paid | 2.5 | 0.5 | 2.0 |
| Distributed income of corporations paid | 1.0 | – 6.1 | 7.1 |
| Reinvested earnings on foreign direct investment paid | – 0.6 | – 0.2 | – 0.4 |
| Other factors | – 2.5 | – 1.9 | – 0.6 |
| Net savings | 5.6 | 3.2 | 2.4 |

* Three-year averages are used for the start and end values of each period to smooth possible cyclical effects. In each case, the start year and end year constitute the final year of the respective three-year period.
Deutsche Bundesbank

ations relative to their gross value added has been the main factor behind the increase in corporate savings in Germany in this period. By contrast, in the previous period, the distributed income of corporations had a dampening effect on savings as a result of improved corporate profitability. The contribution of declining interest costs, meanwhile, has been greatest in the period of expansionary monetary policy measures since the start of the financial crisis.

and equipment in Germany sparked a sharp upturn in purchases of traditional capital goods, such as machinery, from foreign manufacturers. Imports of computers, electronic and optical products likewise picked up strongly. There was also a very substantial increase indeed, in value terms, in imports of energy products, though the bulk of this can be put down to price effects – in volume terms, the growth was relatively small.

*Broad regional growth in imports*

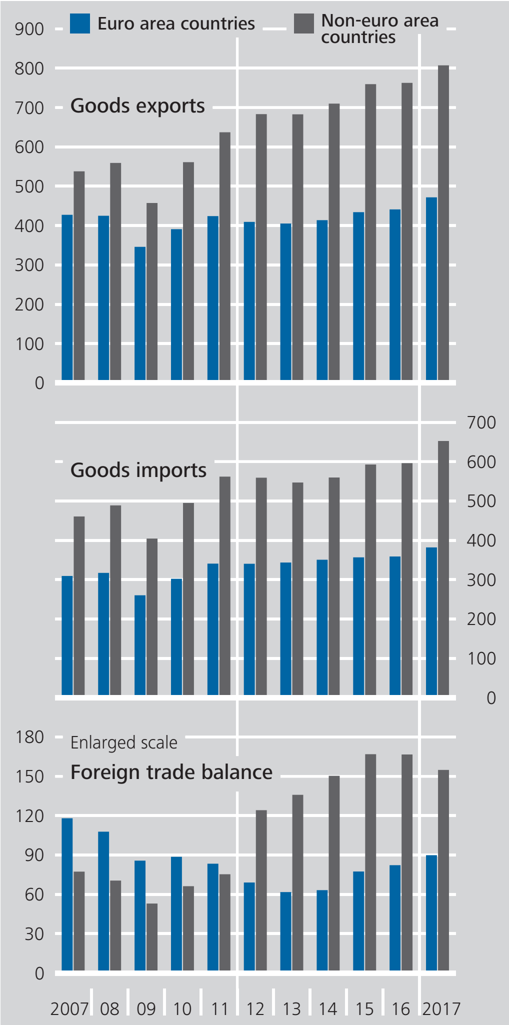
From a regional perspective, there was an unusually robust increase in nominal imports from both EU and non-EU countries. As in the previous year, the upturn in imports from central and east European EU countries outside the euro area was relatively strong. Imports from the United Kingdom, meanwhile, posted noteworthy gains, after declining for a number of years. Manufacturers in euro area countries benefited considerably from Germany's cyclically-induced increasing demand for imports. Price-adjusted growth in imports was not quite as lively as it had been in 2016, but this was largely due to the decline posted by other transport equipment.[4] Disregarding this item, the main euro trading partners stepped up their deliveries to German customers quite substantially, with imports from Spain and the Netherlands growing notably on balance. The majority of the smaller countries also increased their exports to Germany significantly, with the exception of Greece. Furthermore, there was a surge in imports from countries which are major suppliers of energy products, such as Russia and the OPEC states, though to a very great extent, this increase was driven by higher energy product prices. There was another sharp upturn in imports from the United States, after a weaker showing, and from Switzerland.

4 The other transport equipment item largely includes ships and boats, railway locomotives and rolling stock, but its chief components are air and spacecraft. Since the latter are also manufactured under a joint European arrangement, they are a particular driver of bilateral foreign trade flows for the countries involved.

South and east Asian countries, China and Japan also saw their exports to Germany climb strongly, with the newly industrialised countries ranking among the most successful exporters. In addition, that region's emerging market economies in particular significantly expanded their deliveries to Germany.

Germany's foreign trade within and outside the euro area

€ billion




Source: Federal Statistical Office.
Deutsche Bundesbank

## Breakdown of invisibles

*Reduced deficit in services account*

Germany's service business with the rest of the world usually records a deficit, which amounted to €16 billion in 2017. This was €4 billion lower than in the previous year. The main reason for this was that, against the backdrop of strong economic activity around the world, revenues from abroad rose more sharply than residents' expenditure on services provided by non-residents.

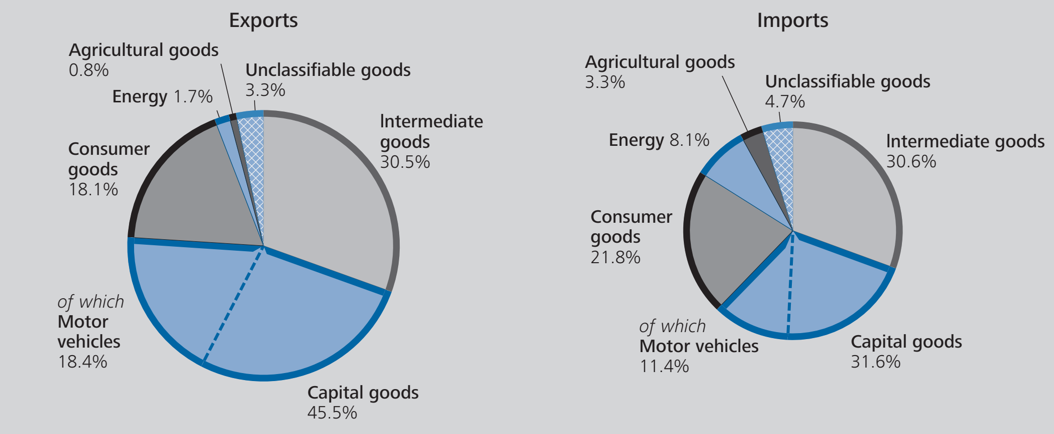
*Strong momentum in cross-border commercial and business services*

The individual sub-items of the services account shifted only moderately compared to 2016. Nonetheless, within trade in services, contributions from business-related sectors and sectors oriented to economic activity rose by an above-average amount on both the revenue and expenditure sides. In the year under review, the traditionally very high sales of German enterprises in international transport business saw very strong growth in line with the cyclical trend. This narrowed the deficit in this sub-account, which has been running a deficit for many years now, as income grew faster than expenditure. Some knowledge-based services also reported disproportionately high growth in international trade, which resulted in a slight improvement in the sub-accounts in the areas of research and development as well as use of intellectual property. In the cases of manufacturing services as well as technical and other services, there was a lack of momentum on the revenue side, causing the balances to worsen somewhat. As in 2016, cross-border sales in professional and management services, which saw strong growth a few years ago, rose only slightly, notwithstanding a slight reduction in the deficit. These services also include commercial services, which have recorded a deficit in the current account for a long time.

*No growth in financial services, moderate growth rates in foreign travel*

In 2017, service sectors with only indirect links to the production sector grew very little or not at all compared to the previous year. In the year under review, cross-border insurance and financial services were less in demand than in 2016 – from Germany's perspective, the surpluses generated grew by a small amount. In the culture and leisure sector, a one-off effect at the end of 2017 led to a surplus instead of the slightly negative result that would have normally been expected. The largest balance sheet item within services – the deficit in the

Foreign trade by selected categories of goods in 2017




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

balance of cross-border travel – rose only marginally to just under €39 billion. This is due to the fact that the expenditure of German residents abroad rose to a somewhat greater extent than residents' revenues from non-residents' travel. On the expenditure side, there was marked growth in both expenditure on private travel – not least as a result of the large increases in residents' income over the past few years – as well as on business travel. This particularly benefited Spain, Greece, Austria, some east European EU member states as well as Asian destinations.

*Investment income surplus grows considerably*

Germany accumulated a surplus of just over €67 billion from cross-border primary income in 2017. The year-on-year increase of €6½ billion offset the decline seen in 2016. The balance sheet is dominated by property incomes, which rose to just under €69 billion in net terms in 2017. Both higher income as well as lower expenditure contributed to the improved result. Germany's net external asset position also increased further in the year under review, with a positive accumulation effect making an impact. This was counteracted by the fact that the yield level was again slightly lower overall compared to the previous year. In contrast to 2016, yields on liabilities fell somewhat more sharply than yields on assets last year, which resulted in a more favourable yield differential for Germany.[5] The improved assets and liabilities account was due largely to increased income from direct investment, which, according to current data, was not transferred to Germany, but remained abroad. Both the revenue and expenditure sides in cross-border portfolio investment of residents were down, with net income from the German perspective rising significantly. On the other hand, the net interest income position deteriorated considerably, as expenditure was higher and revenue lower than in the previous year.

*Deficit in secondary income rises sharply due to one-off effects*

In 2017, the deficit in the balance of cross-border secondary income reached a value of more than €54 billion, exceeding the €40 billion deficit of 2016 by a significant margin. This increase is attributable to one-off effects from private unilateral transfers to the rest of the world. Personal transfers to the rest of the world – which mainly comprised remittances – also increased according to provisional figures. The scale of these payments as well as the increase are, however, relatively small. Moreover, in comparison to 2016, there were only limited movements both in terms of additional private income as well as expenditure in the secondary

5 For details of the underlying trend, see 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.

income account, with hardly any change in the balance. Insurance premiums and settlements of balances by German reinsurers were predominant here. By contrast, the balance of government current transfers improved, as transfers to international institutions without direct reciprocation – which include, amongst others, contributions to the EU budget – decreased slightly. In 2017, transfers from the rest of the world to general government remained largely unchanged compared to the previous year.

## Financial transactions

### Portfolio investment

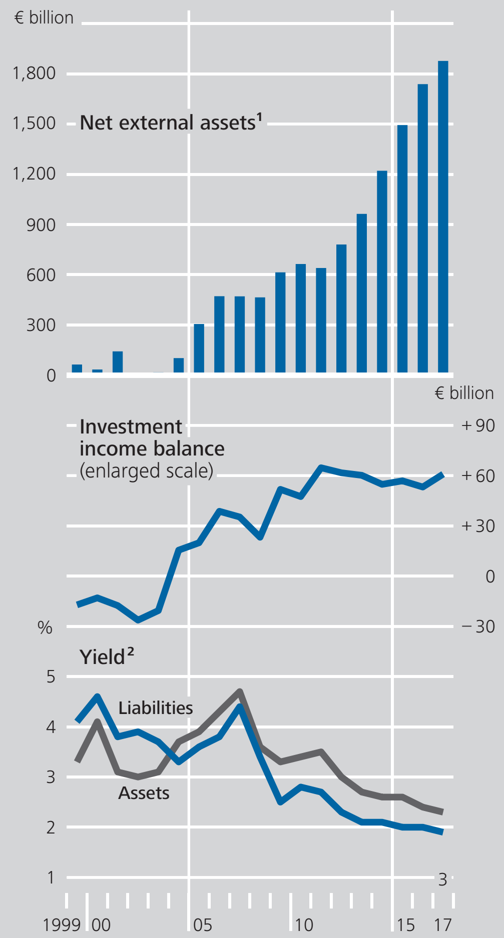
*Continuing capital exports in portfolio investment*

At €200 billion in 2017, there were once again high net capital exports in portfolio investment (2016: €206½ billion). As in the previous year, the balance was driven in roughly equal measure by the strong demand for foreign securities from German investors and the decline in German securities holdings in foreign portfolios.

*High demand for foreign mutual fund shares …*

In the past year, German investors purchased €105 billion worth of foreign securities. This was concentrated on mutual fund shares (€47½ billion) with broad investment focuses that tend to be demanded mainly by institutional investors. Furthermore, German investors also purchased foreign shares. At €14 billion, the volume of these purchases was, however, somewhat lower than in the previous two years. This may have had something to do with the appreciation of the euro, which had a negative impact on returns from investments outside of the euro area when converted into euro. In the case of mutual fund shares, the regional focus was on the euro area, especially Luxembourg, where a large proportion of the companies that sell funds in Germany are based. The regional classification of the acquired mutual fund shares, however, does not provide any indication of the investors' actual investment targets. The acquired shares originated mainly from countries outside of the euro area. The major investment targets were the United Kingdom and Japan.

**Key indicators of the cross-border investment income balance**




**1** Direct, portofolio and other investment and reserve assets. Excluding financial derivatives. **2** Yields shown in terms of investment income/expenditure as a percentage of the annual average level of the international investment position (IIP). **3** For the IIP as at the end of 2017 Q3.

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*… while demand for foreign debt securities falls slightly*

The demand for foreign interest-bearing securities in 2017 was slightly lower than in the previous year. German investors acquired €47 billion of foreign bonds, while they disposed of money market instruments in net terms (€3½ billion). As in previous years, German investors focused on long-term debt securities issued outside of the euro area (€43½ billion). Once again, bonds from the United States were in particular demand. However, at €9 billion, the acquisition volume was lower than in the preceding years, while interest in bonds from

## Major items of the balance of payments

€ billion

| Item | 2015r | 2016r | 2017r |
|---|---|---|---|
| I Current account | + 271.4 | + 268.8 | + 262.7 |
| 1 Goods[1] | + 261.1 | + 268.0 | + 265.6 |
| Exports (fob) | 1,179.1 | 1,192.1 | 1,270.2 |
| Imports (fob) | 918.0 | 924.1 | 1,004.6 |
| *Memo item* | | | |
| Foreign trade[2] | + 244.3 | + 248.9 | + 244.6 |
| Exports (fob) | 1,193.6 | 1,203.8 | 1,279.0 |
| Imports (cif) | 949.2 | 954.9 | 1,034.4 |
| 2 Services[3] | − 16.9 | − 19.9 | − 16.1 |
| *of which* | | | |
| Travel | − 36.6 | − 38.2 | − 38.8 |
| 3 Primary income | + 67.2 | + 60.6 | + 67.4 |
| *of which* | | | |
| Investment income | + 66.0 | + 60.9 | + 68.6 |
| 4 Secondary income | − 40.0 | − 39.9 | − 54.1 |
| II Capital account | + 0.5 | + 3.5 | − 0.3 |
| III Financial account balance[4] | + 239.4 | + 257.7 | + 275.7 |
| 1 Direct investment | + 67.5 | + 31.2 | + 42.2 |
| 2 Portfolio investment | + 192.9 | + 206.7 | + 200.2 |
| 3 Financial derivatives[5] | + 26.0 | + 32.5 | + 8.9 |
| 4 Other investment[6] | − 44.8 | − 14.4 | + 25.6 |
| 5 Reserve assets | − 2.2 | + 1.7 | − 1.3 |
| IV Errors and omissions[7] | − 32.5 | − 14.6 | + 13.3 |

**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** Statistical errors and omissions, resulting from the difference between the balance on the financial account and the balances on the current account and the capital account.
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Japan and China rose sharply. The shift to bonds from countries outside of the euro area was, however, not accompanied by an additional shift in demand towards foreign currency bonds. While the proportion of bonds denominated in foreign currency was still fairly high by historical standards, German investors increasingly acquired bonds denominated in euro – even outside of the euro area. Given the low level of interest rates, it appears that many enterprises from non-euro area countries are continuing to take the opportunity to issue euro-denominated bonds. In the case of money market instruments, investors disposed of instruments that had been issued in the euro area and – to a lesser extent – purchased short-dated bonds from outside the euro area in net terms.

*Net sales of German bonds by foreign investors*

In the reverse direction, foreign investors made net sales of German portfolio assets amounting to €95 billion. Non-residents mainly sold public sector debt securities, primarily due to the Eurosystem's expanded asset purchase programme (APP). However, at €65½ billion, net sales of German government bonds were significantly lower than in the previous year (2016: €116 billion). The reduction in purchase volumes within the APP in April 2017 is likely to have played a role here. Furthermore, a slight recovery in the yields of Federal bonds (Bunds) was observed.[6] Despite positive net issuances, non-resident investors also disposed of private bonds totalling €5½ billion, which almost exclusively comprised corporate bonds.

*Net capital imports of money market instruments*

In 2017, non-residents purchased German money market instruments from private issuers totalling €1 billion. In contrast, short-term public debt securities were disposed of in large volumes. Sales and redemptions in this respect amounted to €21 billion. International investors disposed of these instruments, especially in the first few months of last year, when the

**6** Over the course of the year, yields on ten-year Bunds rose by 5 basis points to 0.3% on average in December 2017.

short-term yields on German government bonds fell below -0.9% for a time.

*Holdings decrease mainly within the euro area*

It is worth noting that investors from the euro area made net sales of German debt securities, while investors from outside the euro area increased their holdings.[7] This held true both for short and longer-term securities as well as for debt securities issued by the public sector and private issuers. There was again high demand from the United Kingdom, which plays an exceptional role due to London's status as an international financial centre.

*Net capital exports in dividend-bearing securities*

There were also net capital exports in the other segments of German portfolio investment. Foreign holders sold both German shares (€1 billion) as well as investment fund units (€3½ billion). As was the case in debt securities, investors from the euro area reduced their exposure, while investors from outside the euro area – particularly from the United Kingdom – acquired German shares.[8]

*German portfolio investment also affected by APP in 2017*

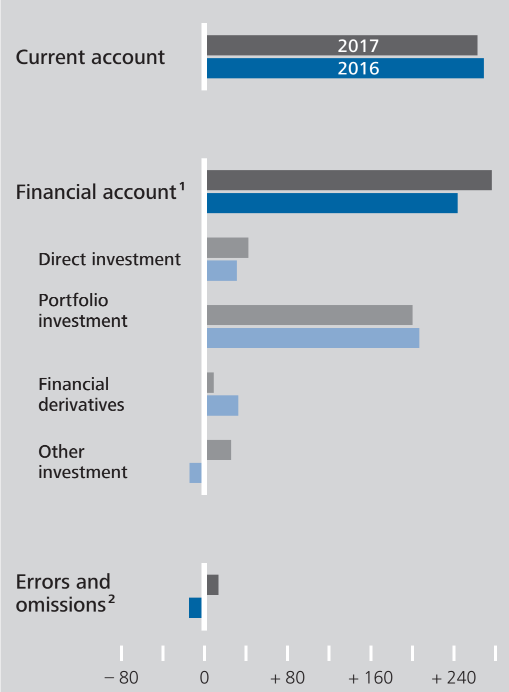
As in the previous two years, German portfolio investment was shaped by the Eurosystem's asset purchase programme in 2017, too. In addition, the robust state of the global economy as well as decreasing uncertainty meant that investors began to build up something of an appetite for risk again. As a direct effect of the APP, the Bundesbank's purchases led to a reduction in German external liabilities in the form of debt securities, thereby resulting in capital exports in this segment. Indirect effects arose from portfolio rebalancing by German investors, who reduced their exposure to domestic fixed-income securities in favour of foreign, dividend-bearing portfolio assets.

*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 €9 billion in 2017. The balance was therefore significantly lower than in the previous year (2016: €32½ billion). The capital outflows were attributable to forward contracts and options trades in roughly equal measure. Cross-border forward and futures contracts relating to electricity and gas, which are also recorded under financial derivatives, resulted in net capital imports totalling €1½ billion. Monetary financial institutions were the main domestic counterparties for cross-border financial derivatives.

**Major items of the German balance of payments**

Balances in € billion




**1** Excluding transaction-related changes in reserve assets; net capital exports: +. **2** Statistical errors and omissions.
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**7** Regional classifications in portfolio investment should always be interpreted with caution because, on the liabilities side, only direct buyers and sellers of German securities are recorded. As securities transactions are often processed via commercial banks in the international financial centres and custodians generally serve as recipients of principal payments, the registered capital flows do not always reveal the actual change in ownership. However, an evaluation of securities holdings statistics for the first three quarters of 2017 suggests that euro area residents disposed of German debt securities over the past year.
**8** Due to the lack of information about the actual owners, the caveat of limited interpretability also applies to the regional classification of cross-border transactions involving shares and mutual fund shares.

## Determinants of German cross-border portfolio investment

Compared with the current account and the financial account as a whole, the balances of individual items in the financial account are significantly more volatile, and also change their sign frequently over time. This is because, in some cases, capital flows respond very quickly to changes in (macro) economic conditions and market participants' risk assessments. As a result, it is difficult to identify clear determinants of capital flows, especially since the impact of individual factors can vary over time in both quantitative and qualitative terms.[1] In order to nonetheless be in a position to draw conclusions about the determinants, this box uses an approach which allows the estimated parameters to vary over time.

To identify which determinants drive different types of capital flow, a model with time-varying parameters is estimated using the Kalman filter and maximum likelihood.[2] Various net flows $y_t$ within the financial account are modelled on the basis of the following estimation equation:

$$y_t = \sum\nolimits_{i=0}^{n} \beta_{i,t} x_{i,t-1} + \epsilon_t, \tag{1}$$

where $x_{i,t\text{-}1}$, $i = 0,1,...,n$ describes the exogenous variables specified in the next section, including a constant ($x_{0,t} \equiv 1$). To mitigate the problem of regressor endogeneity, the exogenous variables are incorporated into the model with a one-period lag.[3] Normal distribution is assumed for the disturbance term: $\epsilon_t \sim N(0, \sigma_\epsilon^2)$. The time variation of the estimated regression coefficients $\beta_{i,t}$ is the result of a stochastic process which is described using the following equation:

$$\beta_{i,t} = \beta_{i,t\text{-}1} + \mu_{i,t}. \tag{2}$$

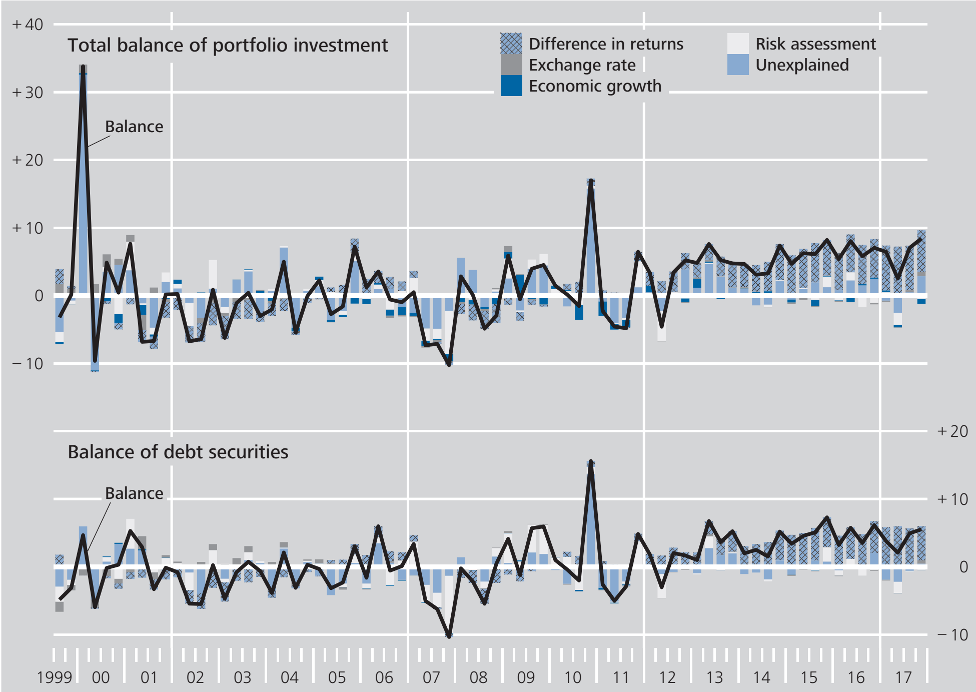
The regression coefficients thus each follow a random walk process. The disturbance term of this process is likewise subject to the normal distribution hypothesis: $\mu_{i,t} \sim N(0, \sigma_{\mu,i}^2)$; the impact of the constants in the model is not time-variable, however. Since the equation for the regression coefficients (2) is not observable, it is determined using the Kalman filter. The product $\beta_{i,t}\, x_{i,t\text{-}1}$ can then be used to determine the time-varying explanatory contribution of the individual variables driving the capital flow under consideration. This approach takes account of the different degrees of importance which market participants attach to the various variables depending on the market environment.

The approach presented here can be used to examine the impact of various macroeconomic variables on Germany's financial account. The endogenous variable $y_t$ represents either the total balance of portfolio investment or the balance of debt securities.[4] Ten-year government bond yields, economic growth, the change in the risk assessment in financial markets, and the change in the nominal effective exchange rate are inputted as exogenous variables $x_{i,t}$.[5] The literature identifies these variables

1 An overview of the literature on the determinants of capital flows can be found, inter alia, in R Koepke (2015), What drives capital flows to emerging markets? A survey of the empirical literature, Working Paper, Institute of International Finance, Washington.
2 A detailed explanation of this approach can be found, inter alia, in H Lütkepohl (2006), New introduction to multiple time series analysis, Heidelberg, Springer Verlag, pp 611 ff.
3 The results are robust to the use of simultaneous rather than lagged regressors.
4 Portfolio investment is measured as a share of nominal gross domestic product (GDP). Owing to the higher volatility of capital exports and imports, the model used here does not deliver satisfactory results for gross flows. The present analysis is therefore confined to net flows. Similarly, portfolio investment involving shares can only be explained inadequately and is omitted here.
5 Economic growth is proxied by the rate of change in industrial production. The risk assessment is based on the rate of change in the VIX volatility index, while the exchange rate variable is based on the nominal effective exchange rate against seven advanced economies.

**Determinants of German portfolio investment***

As a percentage of GDP




* Net capital exports: +.
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as important determinants of international capital flows.[6] The yields and economic growth are each calculated as deviations from the weighted average of each variable for selected advanced economies.[7]

The above chart presents the determinants of Germany's total balance of portfolio investment and its balance of debt securities. What the two graphs show is that net capital exports in both categories are driven in the first instance by differences in returns and the risk assessment in financial markets. The regression coefficients of the yields (not depicted here) have the expected significant and negative sign (ie an increase in relative yields in Germany is accompanied by net capital inflows). For the risk measure, the sign of the coefficients is undetermined *a priori*. An elevated risk assessment in global financial markets can be accompanied either by inflows or outflows of capital, which mainly depends on how investors assess the influence of uncertainty on the economies in question.[8] This explains the multiple changes in sign observed for the estimated coefficients, though statistical significance is only reached when the coefficients are negative. This last observation would suggest that Germany is regarded as a safe haven among international investors, presumably not least on account of the

6 For more information, see R Koepke (2015), op cit.
7 These countries are Canada, France, Italy, Japan, the United Kingdom and the United States. Gross domestic product figures adjusted for differences in purchasing power are used for weighting. The data are available on a quarterly basis for the period from the first quarter of 1999 to the fourth quarter of 2017. Data on industrial production in the fourth quarter of 2017 are only available for Germany and the United States. Missing data were estimated using an ARIMA process.
8 Ideally, this approach would include measures depicting the risk assessment relative to the other countries under consideration. It is apparent, however, that such measures would not deliver any meaningful results, given the high level of correlation between domestic risk proxies and a global risk index. Note also that the model with time-varying coefficients used here, in particular, is already capable of taking account of a time-varying risk assessment relative to other countries.

high importance of Federal bonds (Bunds), and that safe haven flows played at least a temporary role.

Differences in returns led to net capital inflows in portfolio investment in Germany during the first five years of the monetary union and between 2007 and 2009. Yields were relatively high in Germany compared with other industrialised countries in both periods. Particularly following the onset of the global financial crisis, when the non-standard monetary policy measures conducted in the United States and the United Kingdom were exerting pressure on long-term interest rates there, Germany recorded capital inflows in portfolio investment. Since 2012, yields in Germany have been comparatively low, which, viewed in isolation, has resulted in capital outflows. The Eurosystem's expanded asset purchase programme, in particular, has been accompanied by a significant decline in yields in the euro area. Consequently, the negative differences in returns compared with other industrialised countries resulted in a further significant increase in German net capital exports in portfolio investment.

Changes in the risk assessment in financial markets mainly seem to have a bearing during spells of heightened uncertainty. In the 2007-08 period, when the global financial crisis came to a head, non-resident investors appear to have viewed Germany as a safe haven. The second half of 2009, when stability began to return to the global economy, saw the resurgent confidence in global financial markets trigger net capital outflows, primarily in the case of debt securities. At present, there are no signs that changes in the risk assessment in global financial markets are exerting a significant influence on German net capital exports, and the same was true during the first eight years of monetary union.

Changes in the exchange rate only had a bearing on the model during the early years of the monetary union. Currency appreciation in this period was accompanied by net capital exports in total portfolio investment, but tended to be associated with net capital imports in the case of debt securities. During this spell, it seems that the possibility of generating (quick) exchange rate gains was a stronger motive for holders of shares than it was for holders of debt securities. This correlation disappeared in later years, however.

Differences in economic growth, meanwhile, played a less prominent role. For German net capital exports recorded in portfolio investment, growth differentials in industrial production were only of relevance during the first half of the observation period. In the estimate for total portfolio investment, the regression coefficient for growth in industrial production during this period was significantly negative, an observation which is also in line with the expected sign. By contrast, in the estimate for debt securities, demand for which is probably driven less by growth factors than it is for shares, the coefficient proved to be not significantly different from zero.

The strong capital inflows observed in the first quarter of 2000 and the fourth quarter of 2010 cannot be explained by the model. Both of these episodes were characterised by special factors. In spring 2000 there was a major takeover in the mobile telephony sector, which saw portfolio investments being reduced in favour of foreign direct investment. The outflows of debt securities recorded in the fourth quarter of 2010, meanwhile, can be traced back to the newly established resolution agencies, to which parts of the foreign business operations of two German banking groups were transferred.[9]

**9** See also Deutsche Bundesbank, The German balance of payments in 2000, Monthly Report, March 2001, pp 59-71; and Deutsche Bundesbank, The German balance of payments for 2010, Monthly Report, March 2011, pp 17-36.

## Direct investment

*International direct investment flows slip despite buoyant global economy*

Despite the buoyant global economy and the recovery in global trade, international direct investment flows in 2017 were once again down on the year. This development was mainly attributable to the marked decline in direct investment in the United States and the United Kingdom, which itself resulted from special factors in both countries. For its part, the United States recorded unusually low net inflows from offshore financial centres such as Bermuda, or from Ireland. The decline may have been prompted by the prospect of US tax reforms, which were duly given the green light at the end of 2017. These reforms envisage considerable tax breaks in return for the repatriation of American direct investment firms' retained earnings held abroad and the relocation of corporate premises back to the United States. The long-term effects of the tax reform on the United States' direct investment relationships were not yet foreseeable in the reporting year.[9] By contrast, the year-on-year comparison for the United Kingdom was distorted by a number of large-scale corporate takeovers in 2016, which led to an above-average level of direct investment activity at the time. Therefore, the decline seen in 2017 should not automatically be attributed to the United Kingdom's decision to end its membership of the European Union. Direct investment in emerging market economies and developing economies increased somewhat in 2017, with countries in Asia and South America receiving most of the higher inflows. On balance, however, estimates for 2017 presented by the United Nations Conference on Trade and Development (UNCTAD) suggest that the volume of global direct investment transactions decreased by around 16% to US$1.5 trillion in year-on-year terms.

9 See UNCTAD, Global Investment Trends Monitor No 28, January 2018; and UNCTAD, Global Investment Trends Monitor No 29, Special Edition: Tax reforms in the United States: Implications for International Investment, February 2018.

### Financial account

€ billion

| Item | 2015r | 2016r | 2017r |
|---|---|---|---|
| Financial account balance[1] | + 239.4 | + 257.7 | + 275.7 |
| 1 Direct investment | + 67.5 | + 31.2 | + 42.2 |
| Domestic investment abroad[2] | + 116.1 | + 83.0 | + 111.8 |
| Foreign investment in the reporting country[2] | + 48.6 | + 51.8 | + 69.5 |
| 2 Portfolio investment | + 192.9 | + 206.7 | + 200.2 |
| Domestic investment in foreign securities[2] | + 124.1 | + 98.2 | + 105.2 |
| Shares[3] | + 19.7 | + 17.3 | + 14.0 |
| Investment fund shares[4] | + 35.8 | + 36.1 | + 47.7 |
| Long-term debt securities[5] | + 74.3 | + 51.0 | + 47.1 |
| Short-term debt securities[6] | − 5.7 | − 6.2 | − 3.7 |
| Foreign investment in domestic securities[2] | − 68.8 | − 108.5 | − 95.0 |
| Shares[3] | + 10.6 | + 0.3 | − 1.1 |
| Investment fund shares | + 7.4 | − 6.9 | − 3.4 |
| Long-term debt securities[5] | − 96.0 | − 97.3 | − 70.6 |
| Short-term debt securities[6] | + 9.3 | − 4.6 | − 19.9 |
| 3 Financial derivatives[7] | + 26.0 | + 32.5 | + 8.9 |
| 4 Other investment[8] | − 44.8 | − 14.4 | + 25.6 |
| Monetary financial institutions[9] | − 49.1 | − 68.1 | − 38.5 |
| Long-term | + 16.7 | + 39.2 | + 12.1 |
| Short-term | − 65.9 | − 107.3 | − 50.6 |
| Enterprises and households[10] | − 33.5 | − 10.0 | − 13.8 |
| Long-term | − 3.9 | − 6.9 | − 6.7 |
| Short-term | − 29.7 | − 3.1 | − 7.1 |
| General government | − 1.1 | + 4.0 | + 1.2 |
| Long-term | − 3.6 | − 2.9 | − 0.4 |
| Short-term | + 2.5 | + 7.0 | + 1.6 |
| Bundesbank | + 39.0 | + 59.6 | + 76.8 |
| 5 Reserve assets | − 2.2 | + 1.7 | − 1.3 |

**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.
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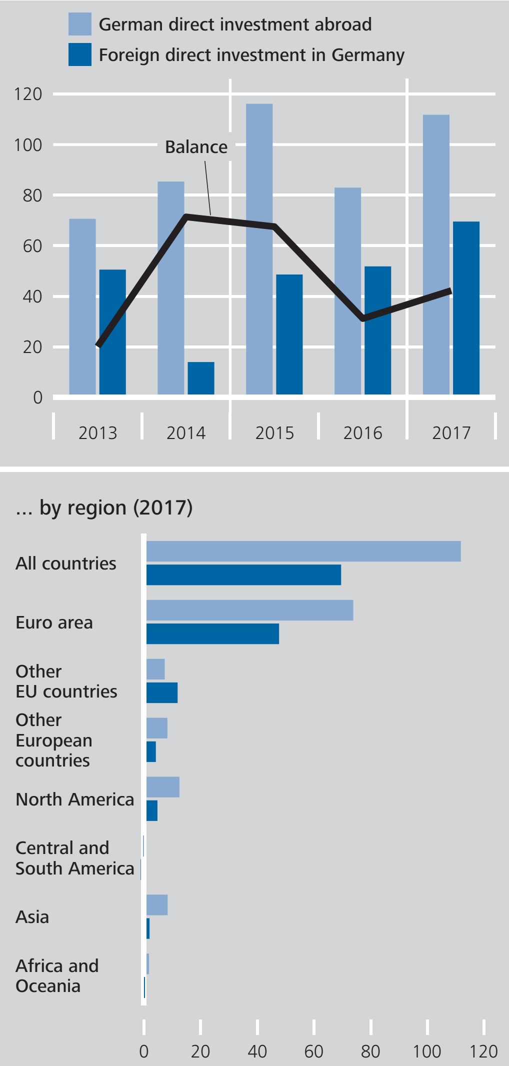
Direct investment

€ billion

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*Growing international capital links in Germany*

In contrast to the reduced overall volume of direct investment recorded across the advanced economies, Germany again exhibited an increase in cross-border capital links amongst affiliated enterprises. This was expressed in the form of intensive foreign direct investment by domestic enterprises as well as a strong inflow of foreign capital to company offices located in Germany.

*High level of German direct investment abroad*

In 2017, German direct investment saw net capital exports amounting to €42 billion (2016: €31 billion). This increase was attributable to the higher level of German direct investment abroad which, at €112 billion, expanded by more than one-third compared with 2016. Domestic companies bolstered their participating interests in foreign subsidiaries by €71 billion, partly by means of re-invested earnings, ie undistributed profits.[10] In net terms, intra-group credit transactions entailed the allocation of €40½ billion in funds, with a particular focus on long-term loans to subsidiaries abroad. Trade credits awarded to affiliated companies were, on the other hand, mainly short-term in nature.

*Distribution and sales key motive for foreign investment*

Direct investment relationships, which tend to be more long-term in nature, may be driven by a variety of motives. The Association of German Chambers of Commerce and Industry (DIHK) annually surveys its member firms in the manufacturing sector concerning the strategic objectives they pursue in terms of planned participating interests abroad. In 2017, as in previous years, just under half of all enterprises cited the setting up or expansion of sales and customer services as their main reason for investing abroad, followed by focusing on foreign production sites in order to access markets and, finally, cutting costs.[11] It is worth noting that the cost factor has gained in importance with regard to investing in the euro area. Mentioned in 26% of all cases, this aspect was more frequently cited as a key motivating factor for this region than on average for all countries (24%).

*Key area of focus in financial and insurance services*

In disaggregated terms, almost all sectors of the German economy boosted their equity capital abroad, with financial and insurance services leading the way, closely followed by providers of professional and technical services. Each of these two sectors accounted for almost one-third of decipherable net transfers used to

**10** According to figures provided by Thomson Reuters, €25 billion net of these credits were accounted for by corporate takeovers of companies domiciled abroad and previously under foreign ownership. The time at which mergers and acquisitions are captured in the balance of payments can, however, differ from that recorded by Thomson Reuters, with the result that the reported figures are not directly comparable.
**11** See DIHK Survey, Foreign investments in manufacturing industry, spring 2017.

augment equity capital.[12] Within the manufacturing sector, the automotive industry was the main beneficiary, followed by the chemicals industry.

*More than half of German direct investment benefitted EU partner countries*

In regional terms, direct investment from German enterprises focused on other EU member states and the euro area in particular. Around two-thirds of German foreign investment was concentrated on euro area countries, with the financial centres of Luxembourg and the Netherlands having an especially large impact on the regional classification.[13] Among the remaining EU countries, the United Kingdom – despite its upcoming exit from the EU – was the main country of destination for German direct investment. In the case of the rest of the world, the United States and China dominated as destinations for German direct investment.

*Increased foreign direct investment in Germany*

In the past year, foreign investors provided their group enterprises domiciled in Germany with additional funds totalling €69½ billion. This represented a year-on-year increase of more than 30% and was significantly above the average of the last ten years. The direct investment funds coming into Germany mainly comprised credit transactions, which totalled €45½ billion, with financial credit issued by foreign subsidiaries to German parents making a particular contribution. These reverse flows, which had already played a major role in the previous year, are often the result of capital market transactions involving German enterprises' financing subsidiaries, whereby securities are issued abroad and the proceeds are forwarded to the parent companies in Germany. Alongside this "backwards investment", a notable amount of financial credit was also issued to affiliated enterprises. By contrast, foreign parent enterprises tended to provide their German subsidiaries with additional funds in the form of equity capital, amounting to €24 billion in net terms. Here – as in the opposite direction – reinvested earnings were also of significance, contributing almost one third of this amount.

*Distribution also in focus*

In recent years, foreign direct investment enterprises in Germany consistently focused their activities on distribution, followed by production (including research and development), and commercial services.[14] Disaggregated by domestic economic sector, foreign equity capital in the past year (excluding reinvested earnings) focused on providers of professional or technical services, vehicle manufacturers, as well as investment in the transport and logistics sector. By contrast, a considerable volume of equity capital was withdrawn from the finance and insurance sector.

*High volume of direct investment funds from the Netherlands*

As was the case in the opposite direction, other EU countries – especially euro area partner countries – were the primary countries of origin of foreign direct investment in Germany. German enterprises received high volumes of direct investment funds from the Netherlands in particular. Outside of the EU, the United States and Switzerland were major direct investors from Germany's perspective. By contrast, according to regional information in the German balance of payments, the People's Republic of China, which is regarded in economic policy circles as an increasingly key player in corporate takeovers, reduced its exposure in Germany mainly by withdrawing short-term loans. However, it is also possible that Chinese investors participated in the German market via third countries.

## Other investment

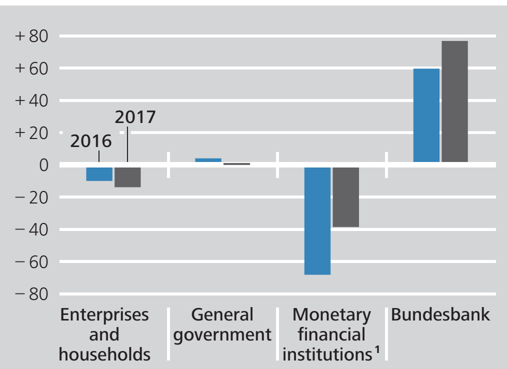
*Net capital exports in other investment …*

Other investment, comprising financial and trade credits (where these do not constitute a part of direct investment) as well as bank de-

**12** Reinvested earnings cannot be assigned to individual economic sectors and were therefore not taken into account when making this calculation.
**13** These countries are major holding locations for internationally active enterprises. As the balance of payments only captures the immediate counterparties of cross-border transactions, it is not possible to identify where the transferred funds are ultimately invested.
**14** See Germany Trade and Invest, FDI Reporting 2016.

**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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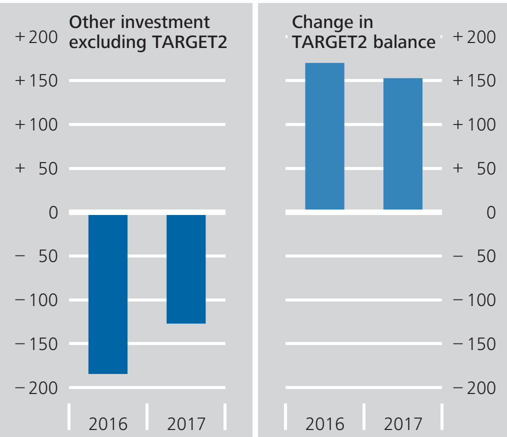
**Impact of TARGET2 on other investment**

€ billion




* Netto-Kapitalexport: +.

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posits and other assets, resulted in net capital exports of €25½ billion in 2017.

*… driven by increase in Bundesbank's net external assets*

The main reason for the outflows of funds was the increase in the Bundesbank's net external assets, which grew by €77 billion. The reason for this was a further increase in the TARGET2 claims vis-à-vis the European Central Bank (+€152½ billion), which, as was the case in the previous year, was ultimately due to the Eurosystem's asset purchase programme (APP).[15] At the same time, however, the Bundesbank's liabilities to non-residents also increased. These include fixed-term deposits of non-Eurosystem central banks accepted as part of the Bundesbank's central bank services, which are then invested in the money market.

*Inflows of funds in the banking system …*

Unlike the Bundesbank, the commercial banking sector recorded inflows of funds (€38½ billion). First, German banks reduced their deposits with monetary financial institutions abroad to a greater extent than they provided additional loans to foreign non-banks. Second, foreign commercial banks – including those domiciled outside of the euro area – increased their deposits with credit institutions domiciled in Germany. One-off effects arising from the asset purchase programme are likely to have played a part in this regard, as securities sales to the Eurosystem by foreign investors are often processed via commercial banks licenced in Germany.[16]

*… and in the case of non-banks*

Non-banks also received net inflows of funds from abroad over the past year (€12½ billion). At €14 billion, net capital imports by enterprises and individuals were of particular significance here. These were due to additional uptake of financial credits abroad. Public institutions, by contrast, made net reductions in their issuance of cross-border financial credits and decreased their deposits with foreign banks. At the same time, they also repaid financial credits taken out abroad, which resulted in slight capital exports being recorded (€1 billion).

## Reserve assets

*Transactions cause slight decline in reserve assets*

As a result of transactions, the Bundesbank's reserve assets fell by €1½ billion in 2017. This was mainly due to the reduction in the reserve position at the International Monetary Fund.

**15** The Bundesbank's TARGET2 claims rise when other Eurosystem central banks purchase securities as part of the APP but the sale proceeds are credited to the counterparty using an account with a commercial bank in Germany. See Deutsche Bundesbank, German balance of payments in 2016, Monthly Report, March 2017, pp 15-31.
**16** In this case, the deposits of foreign commercial banks were a counterpart to the Bundesbank's increased TARGET2 claims.

*Balance sheet adjustments also have negative impact*

The reserve asset 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 additional decline of €7½ billion. This was due to the lower price of gold as well as lower valuations of the remaining reserve assets. All in all, the balance sheet value of Germany's reserve assets fell by €9 billion in 2017, standing at €167 billion as at 31 December 2017.